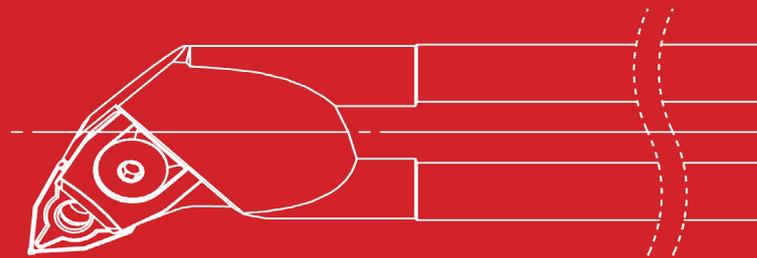
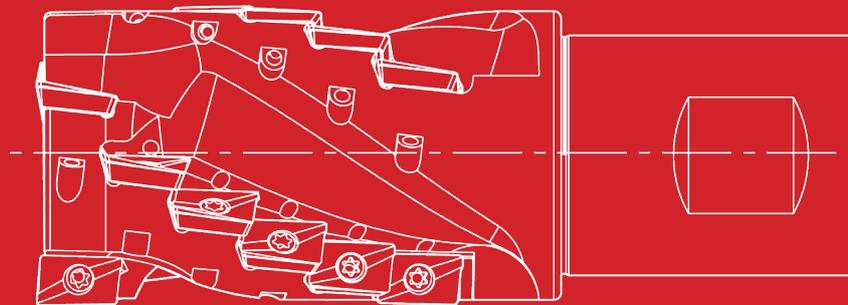


# TIZ IMPLEMENTS GREEN LINE 2023

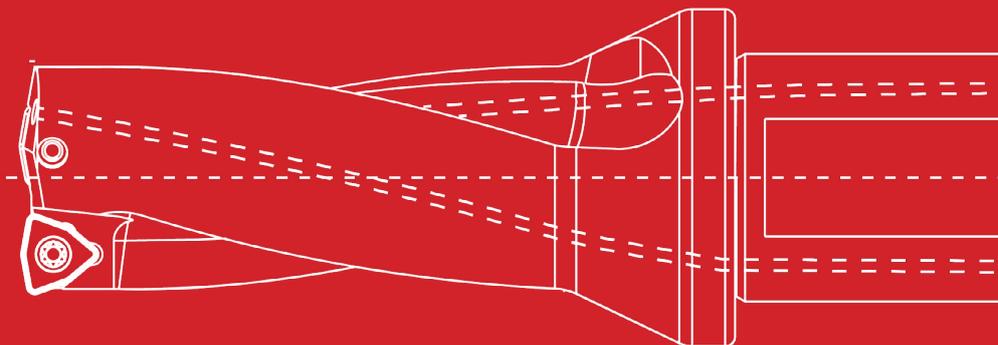
**TURNING**  
TOCZENIE



**THREAD TURNING**  
TOCZENIE GWINTÓW

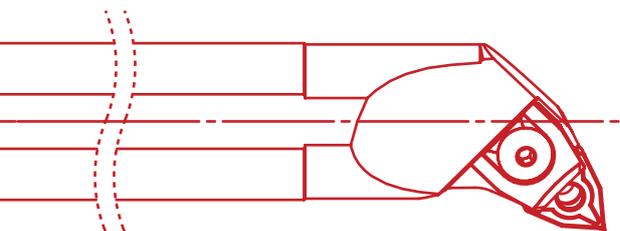


**MILLING**  
FREZOWANIE



**DRILLING**  
WIERCENIE

**GROOVING**  
ROWKOWANIE



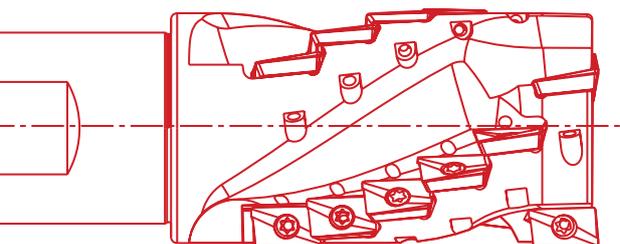
**TURNING**  
TOCZENIE

PAGE 5



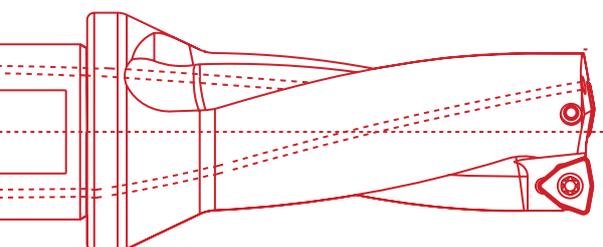
**THREAD TURNING**  
TOCZENIE GWINTÓW

PAGE 91



**MILLING**  
FREZOWANIE

PAGE 120



**DRILLING**  
WIERCENIE

PAGE 160

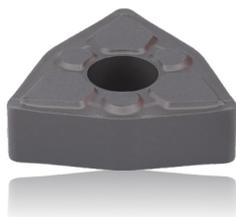


**GROOVING**  
ROWKOWANIE

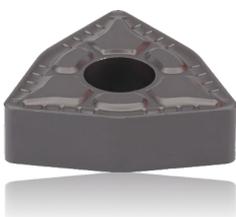
PAGE 176

CHIP BREAKERS APPLICATION AREA ZASTOSOWANIE ŁAMACZY WIÓRÓW

CF  
FOR FINISHING



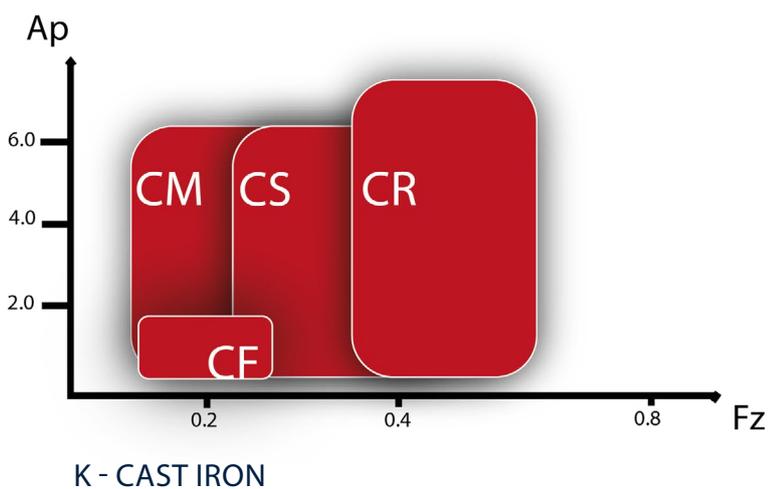
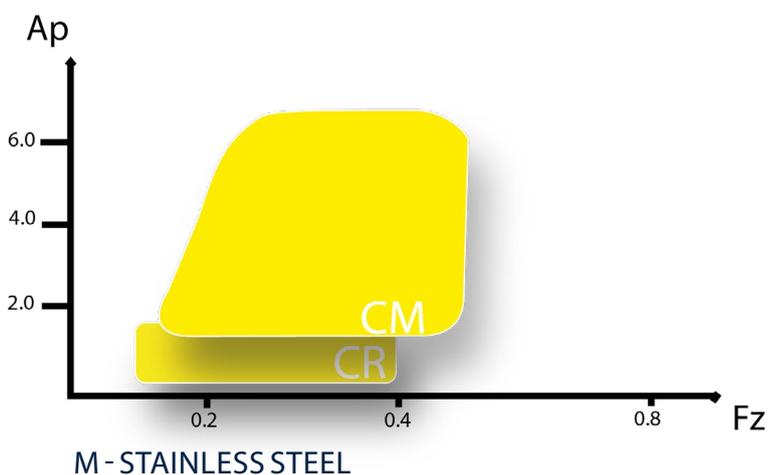
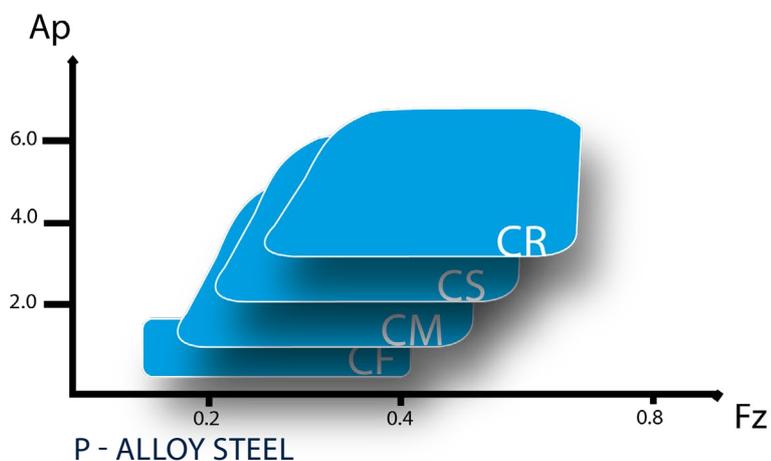
CM  
FOR MEDIUM



CR  
FOR ROUGH



CS  
FOR GENERAL



**GRADES APPLICATION AREA ZASTOSOWANIE GATUNKÓW**
**TURNING TOCZENIE**

P STEEL STAL						M STAINLESS STEEL STAL NIERDZENA						K CAST IRON ZELIWO						N ALUMINIUM ALUMINIUM		S HEAT RESISTENT/ TITANIUM ALLOYS ODPORNE NA CIEPLO/ STOPY TYTANU						
P01	P10	P20	P25	P30	P40	P50	M01	M10	M20	M25	M30	M40	M50	K01	K10	K15	K20	K30	K40	N10	N40	S10	S20	S30	S40	
	P3200															P3200										
	P3100							P3100								P3100										
	P1025														P2315											
	P1125																									
	P3125																									
	P1225														P2115											
	P3340							P3340							P2215											
														PK01						PK01		PK01				

**THREAD TURNING TOCZENIE GWINTÓW**

P STEEL STAL				M STAINLESS STEEL STAL NIERDZENA				K CAST IRON ZELIWO				N ALUMINIUM ALUMINIUM				S HEAT RESISTENT/ TITANIUM ALLOYS ODPORNE NA CIEPLO/ STOPY TYTANU				H HARDENED MATERIALS STAL HARTOWANA						
P10	P20	P25	P30	P40	M10	M20	M25	M30	M40	K10	K15	K20	K30	K40	N10	N20	N30	N40	S10	S20	S30	S40	H10	H20	H30	H40
	P508						P508					P508				P508							P508			
	P509						P509					P509				P509				P509				P509		
											P511					P511				P511						
	P3200																									
	P3100						P3100					P3100														

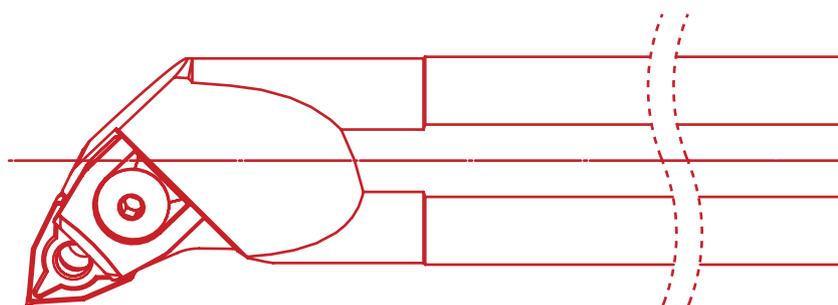
**MILLING FREZOWANIE**

P STEEL STAL						M STAINLESS STEEL STAL NIERDZENA						K CAST IRON ZELIWO						S HEAT RESISTENT/ TITANIUM ALLOYS ODPORNE NA CIEPLO/ STOPY TYTANU							
P01	P10	P20	P25	P30	P40	P50	M01	M10	M20	M25	M30	M40	M50	K01	K10	K15	K20	K30	K40	S10	S20	S30	S40		
	P3200																P3200								
	P3100							P3100									P3100								
		P3300															P3300								
	P3350							P3350									P3350								
	P3340							P3340																	
																P2115									
	P3250							P3250									P3250								
	P1025																								
	P1125																								
	P3035							P3035									P3035								
					P3029							P3029											P3029		

**DRILLING WIERCENIE**

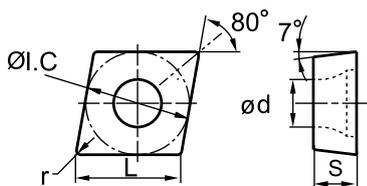
P STEEL STAL						M STAINLESS STEEL STAL NIERDZENA						K CAST IRON ZELIWO						S HEAT RESISTENT/ TITANIUM ALLOYS ODPORNE NA CIEPLO/ STOPY TYTANU					
P01	P10	P20	P25	P30	P40	P50	M01	M10	M20	M25	M30	M40	M50	K01	K10	K15	K20	K30	K40	S10	S20	S30	S40
	P3200																P3200						
	P3350							P3350									P3350						
	P3250							P3250									P3250						

# TURNING TOCZENIE



POSITIVE INSERTS PŁYTKI DODATNIE

CC



P	●	●	●	●	●	●			●	
M		●							●	
K	●	●					⊕	●		●
N									●	
S									●	
H										●

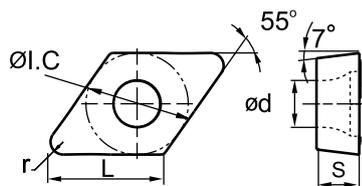
CCMT	L	I.C.	S	d
06	02	6.4	6.35	2.38
09	T3	9.7	9.525	3.97
12	04	12.9	12.7	4.76

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		CVD						PK01		
					P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215		P3340	
	ROUGHING ZGRUBNA	CCMT060204-CR	0.40	0.5-3.0	0.5-3.0										
	CCMT060208-CR	0.80	0.5-3.0	0.5-3.0											
	CCMT09T304-CR	0.40	0.2-4.0	0.05-0.30	●		●								
	CCMT09T308-CR	0.80	1-4	0.12-0.35	●	●	●	●		●	●	●			
	CCMT120408-CR	0.80	1.2-4.8	0.14-0.42	●		●	●			●	●			
	CCMT1204012-CR	1.20	1.2-4.8	0.14-0.42							●				
	MEDIUM ŚREDNIA	CCMT060204-CM	0.40	0.2-2.4	0.06-0.17	●	●	●	●		●	●	●		
	CCMT060208-CM	0.80	0.2-2.4	0.06-0.17	●	●	●	●		●	●	●			
	CCMT09T302-CM	0.20	0.25-3.00	0.08-0.23	●	●	●	●		●					
	CCMT09T304-CM	0.40	0.25-3.00	0.08-0.23	●	●	●	●		●	●	●			
	CCMT09T308-CM	0.80	0.5-3.0	0.1-0.3	●	●	●	●		●	●	●			
	CCMT09T312-CM	1.20	0.5-3.0	0.1-0.3		●				●	●				
	CCMT120404-CM	0.40	0.3-3.6	0.09-0.27	●	●	●	●		●	●				
	CCMT120408-CM	0.80	0.6-3.6	0.12-0.36	●	●	●	●		●	●	●			
CCMT120412-CM	1.20	0.72-3.60	0.14-0.43		●		●		●	●	●				
	FINISHING WYKONCZENOWA	CCMT060202-CF	0.20	0.1-1.7	0.05-0.17	●	●		●		●				
	CCMT060204-CF	0.40	0.1-1.7	0.05-0.17	●	●	●	●		●	●	●			
	CCMT09T302-CF	0.20	0.11-2.00	0.06-0.23	●	●	●	●		●					
	CCMT09T304-CF	0.40	0.11-2.00	0.06-0.23	●	●	●	●		●	●	●			
	CCMT09T308-CF	0.80	0.15-2.00	0.08-0.30	●	●		●			●	●			
	CCMT120404-CF	0.40	0.14-2.40	0.07-0.27	●	●		●							
	FOR ALUMINIUM DO ALUMINIUM	CCGX060202-CAH	0.20	0.3-3.0	0.05-0.15										●
	CCGX060204-CAH	0.40	0.5-3.0	0.1-0.3											●
	CCGX09T302-CAH	0.20	0.4-5.0	0.05-0.15											●
	CCGX09T304-CAH	0.40	0.5-5.0	0.1-0.3											●
	CCGX09T308-CAH	0.80	0.5-5.0	0.15-0.60											●
	CCGX120408-CAH	0.80	0.5-7.0	0.15-0.60											●
	FOR ALUMINIUM DO ALUMINIUM	CCGX060202-CS	0.20	0.3-3.0	0.05-0.15										●
	CCGX060204-CS	0.40	0.5-3.0	0.1-0.3											●
	CCGX060208-CS	0.80	0.6-3.0	0.15-0.40											●
	CCGX09T304-CS	0.40	0.5-5.0	0.1-0.3											●
	CCGX09T308-CS	0.80	0.5-5.0	0.15-0.60											●
	CCGX120404-CS	0.40	0.5-7.0	0.1-0.3											●
	CCGX120408-CS	0.80	0.5-7.0	0.15-0.60											●

POSITIVE INSERTS PŁYTKI DODATNIE

DC



P	●	●	●	●	●	●							
M	●	●										●	
K	●	●						⊕	●			●	
N												●	
S												●	
H												●	

DC**	L	I.C.	S	d	
07	02	7.8	6.35	2.38	2.8
11	T3	11.6	9.525	3.97	4.4

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

a<sub>p</sub>

f<sub>z</sub>

			PVD				CVD						
			P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215	P3340	PK01	
	ROUGHING ZGRUBNA	DCMT070208-CR											
		DCMT11T304-CR	●	●		●		●		●			
		DCMT11T308-CR							●		●		
		DCMT11T312-CR		●					●				

ROUGHING  
ZGRUBNA

	MEDIUM ŚREDNIA	DCMT070204-CM	●	●	●	●		●	●	●		
		DCMT070208-CM	●	●	●	●		●	●	●		
		DCMT11T302-CM	●	●	●	●		●				
		DCMT11T304-CM	●	●	●	●		●	●	●		
		DCMT11T308-CM	●	●	●	●	●		●	●		
		DCMT11T312-CM		●	●				●	●		
		DCMT150404-CM			●				●			

MEDIUM  
ŚREDNIA

	FINISHING WYKONCZENOWA	DCMT070202-CF	●	●	●	●		●				
		DCMT070204-CF	●	●	●	●		●	●	●		
		DCMT11T304-CF	●	●	●	●		●	●	●		
		DCMT11T308-CF		●		●						

FINISHING  
WYKONCZENOWA

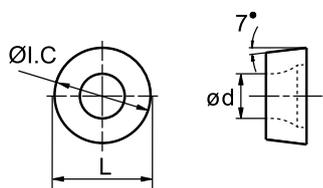
	FOR ALUMINIUM DO ALUMINIUM	DCGX070202-CAH										●
		DCGX070204-CAH										●
		DCGX11T302-CAH										●
		DCGX11T304-CAH										●
		DCGX11T308-CAH										●

FOR ALUMINIUM  
DO ALUMINIUM

	FOR ALUMINIUM DO ALUMINIUM	DCGX070204-CS										●
		DCGX070208-CS										●
		DCGX11T304-CS										●

FOR ALUMINIUM  
DO ALUMINIUM

RC



P	●	●	●	●	●							
M	●	●									●	
K	●	●						⊕				
N												
S												
H												

RCMX	D	L	S	
16	06	3.36	16	6.35
20	06	6.50	20	6.35
25	07	7.2	25	7.94
32	09	10.2	32	9.52

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

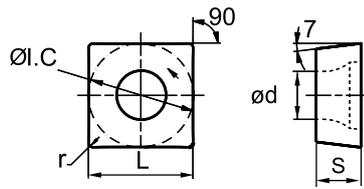
DESCRIPTION  
OZNACZENIE

			PVD			CVD					
			P3100	P3200	P3350	P0125	P1125	P1225	P2115	P3340	P3125
	MEDIUM ŚREDNIA	RCMX1606CS				●	●				
		RCMX2006CS	●			●	●	●	●		
		RCMX2507CS	●			●	●	●	●	●	
		RCMX3209CS		●		●	●	●	●	●	●

MEDIUM  
ŚREDNIA

POSITIVE INSERTS PŁYTKI DODATNIE

SC



P	●	●	●	●	●				
M	●	●							
K	●	●					⊕	●	●
N									●
S									●
H									

SCMT	L	I.C.	S	d	
09	t3	9,525	9,525	3,97	4,4
12	04	12,7	12,7	4,76	5,56

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r a<sub>p</sub> f<sub>z</sub>

	PVD			CVD					PK01	-
	P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215		

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki



ROUGHING  
ZGRUBNA

SCMT120404-CR	0.4	0.5-4.0	0.05-0.50										
SCMT120408-CR	0.8	1.2-4.8	0.14-0.42								●		
SCMT120412-CR	1.2	1.44-4.80	0.17-0.50								●		



MEDIUM  
ŚREDNIA

SCMT09T304-CM	0.4	0.25-3.00	0.08-0.23	●	●	●	●		●	●	●		
SCMT09T308-CM	0.8	0.5-3.0	0.1-0.3	●	●	●	●		●	●	●		
SCMT120404-CM	0.4	0.3-3.6	0.09-0.27	●	●	●	●		●	●	●		
SCMT120408-CM	0.8	0.6-3.6	0.12-0.36	●	●	●	●		●	●	●		
SCMT120412-CM	1.2	0.72-3.60	0.14-0.43		●		●		●	●	●		



FINISHING  
WYKONCZENOWA

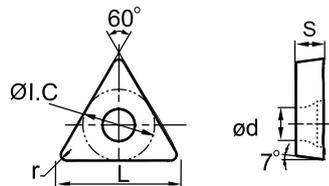
SCMT09T304-CF	0.4	0.11-2.00	0.05-0.23		●	●	●		●		●		
SCMT09T308-CF	0.8	0.15-2.00	0.05-0.30				●						



FOR ALUMINIUM  
DO ALUMINIUM

SCGX09T302-CS	0.2	0.5-4.0	0.05-0.15										●
SCGX09T304-CS	0.4	0.5-4.0	0.1-0.3										●
SCGX09T308-CS	0.8	0.5-4.0	0.15-0.60										●
SCGX120404-CS	0.4	0.5-4.0	0.15-0.60										●
SCGX120408-CS	0.8	0.5-5.0	0.15-0.60										●

TC



P	●	●	●	●		●				
M	●	●								
K	●	●						⊕	●	●
N										●
S										●
H										

TCMT	L	I.C.	S	d	
09	02	9,6	5,56	2,38	2,5
11	02	11	6,35	2,38	2,8
16	T3	16,5	9,525	3,97	4,4
22	04	22	12,5	4,76	5,5

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r a<sub>p</sub> f<sub>z</sub>

	PVD			CVD					PK01	-
	P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215		

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki



ROUGHING  
ZGRUBNA

TCMT110204-CR	0.40	0.5-3.0	0.1-0.4						●				
TCMT110208-CR	0.80	1-4	0.1-0.5								●		
TCMT16T304-CR	0.40	0.5-4.0	0.1-0.4				●						
TCMT16T308-CR	0.80	1-4	0.12-0.35				●		●				

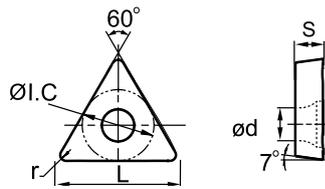


MEDIUM  
ŚREDNIA

TCMT090204-CM	0.40	0.19-2.25	0.06-0.17	●	●	●	●		●	●	●		
TCMT090208-CM	0.80	0.38-2.25	0.08-0.23		●	●	●		●	●	●		
TCMT110204-CM	0.40	0.2-2.7	0.07-0.20	●	●	●	●		●	●	●		
TCMT110208-CM	0.80	0.5-2.7	0.1-0.3	●	●	●	●		●	●	●		
TCMT16T304-CM	0.40	0.25-3.00	0.08-0.23	●	●	●	●		●	●	●		
TCMT16T308-CM	0.80	0.5-3.0	0.1-0.3	●	●	●	●		●	●	●		
TCMT16T312-CM	1.20	0.6-3.0	0.12-0.36		●	●	●		●		●		
TCMT220408-CM	0.80	1.2-4.8	0.14-0.42		●	●	●		●		●		

POSITIVE INSERTS PŁYTKI DODATNIE

TC



P	●	●	●	●	●						
M	●	●									
K	●	●						⊕	●	●	
N										●	
S										●	
H											

TCMT	L	I.C.	S	d	
09	02	9,6	5,56	2,38	2,5
11	02	11	6,35	2,38	2,8
16	T3	16,5	9,525	3,97	4,4
22	04	22	12,5	4,76	5,5

● Ideal machining conditions  
 ● Normal machining conditions  
 ⊕ Normalne warunki obróbki  
 ⊕ Unfavourable machining conditions  
 ⊕ Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

		PVD		CVD							
		P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215	PK01	
FINISHING WYKONCZENOWA	TCMT090204-CF	●	●	●	●		●				
	TCMT110202-CF	●	●		●		●				
	TCMT110204-CF	●	●	●	●		●	●	●		
	TCMT16T304-CF	●	●	●	●		●	●	●		
	TCMT16T308-CF				●						
FOR ALUMINIUM DO ALUMINIUM	TCGX110204-CAH									●	
	TCGX110208-CAH									●	
	TCGX16T304-CAH									●	
	TCGX16T308-CAH									●	
FOR ALUMINIUM DO ALUMINIUM	TCGX110204-CS									●	



FINISHING  
WYKONCZENOWA

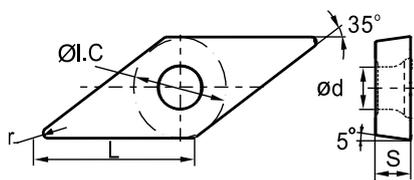


FOR ALUMINIUM  
DO ALUMINIUM



FOR ALUMINIUM  
DO ALUMINIUM

VB



P	●	●	●	●	●						
M	●	●									
K	●	●						⊕	●	●	
N											
S											
H											

VB**	L	I.C.	S	d	
11	02	11	6,35	2,38	2,8
16	04	16,5	9,525	4,76	4,4

● Ideal machining conditions  
 ● Normal machining conditions  
 ⊕ Normalne warunki obróbki  
 ⊕ Unfavourable machining conditions  
 ⊕ Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

		PVD		CVD							
		P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215	P2315	
BASIC BASIC	VBMT160402		●		●		●				
	VBMT160404	●	●	●	●		●	●	●		
	VBMT160408	●	●	●	●		●	●	●		
	VBMT160412	●	●		●		●	●	●		
	VBMT160425	●	●		●						
MEDIUM ŚREDNIA	VBMT160404-CM		●	●	●		●	●			
	VBMT160408-CM	●	●	●	●		●				
FINISHING WYKONCZENOWA	VBMT110204-CF		●				●				
	VBMT110208-CF		●				●				
ROUGHING ZGRUBNA	VBMT160408-CR	●	●		●		●	●	●		
	VBMT160412-CR		●				●	●			



BASIC  
BASIC



MEDIUM  
ŚREDNIA



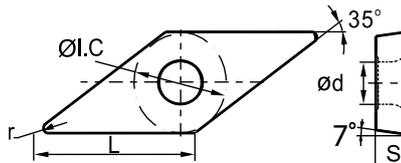
FINISHING  
WYKONCZENOWA



ROUGHING  
ZGRUBNA

POSITIVE INSERTS PŁYTKI DODATNIE

VC



P	●	●	●	●	●								
M		●											
K	●	●								●	●	●	
N												●	
S													●
H													

VC**	L	I.C.	S	d
11	03	11	6,35	3,8
16	04	16,5	9,525	4,4

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		CVD						PK01	
				P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215		
VCMT160404	0.40	0.5-5.0	0.1-0.3	●	●	●	●			●	●	●	

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki



BASIC  
BASIC

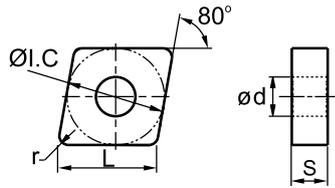


FOR ALUMINIUM  
DO ALUMINIUM

VCGX110302-CAH	0.20	0.3-3.0	0.05-0.15										●
VCGX110304-CAH	0.40	0.5-3.0	0.1-0.3										●
VCGX110308-CAH	0.80	0.5-3.0	0.15-0.60										●
VCGX160402-CAH	0.20	0.5-5.0	0.05-0.10										●
VCGX160404-CAH	0.40	0.5-5.0	0.1-0.3										●
VCGX160408-CAH	0.80	0.5-5.0	0.15-0.60										●
VCGX160412-CAH	1.20	0.5-5.0	0.15-0.80										●

NEGATIVE INSERTS PŁYTKI UJEMNE

CN



P	●	●	●	●	●	●											
M		●	●														
K	●	●													⊕	●	
N																	
S																	
H																	

CNMG	L	I.C.	S	d	
12	04	12.9	12.7	4.76	5.16
16	06	16.1	15.875	6.35	6.35
19	06	19.03	19.03	6.35	7.94

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

a<sub>p</sub>

f<sub>z</sub>

PVD

CVD

P3200

P3100

P3340

P1025

P1125

P3125

P1225

P2115

P2215



ROUGHING  
ZGRUBNA

CNMG120404	0.40	0.2-5.0	0.05-0.40	●	●			●	●			●	●
CNMG120408	0.80	0.2-5.0	0.05-0.50	●	●			●	●			●	●
CNMG120412	1.20	0.2-5.0	0.1-0.6	●	●			●	●			●	●
CNMG120416	1.60	0.2-5.0	0.10-0.65									●	●
CNMG160412	1.20	0.1-0.7	0.1-0.7						●				
CNMG160608	0.80	0.1-0.7	0.1-0.7		●				●			●	●
CNMG160612	1.20	0.1-0.7	0.1-0.7	●	●			●	●			●	●
CNMG160616	1.60	0.1-0.7	0.1-0.7	●				●	●			●	●
CNMG190608	0.80	0.1-8.0	0.1-0.7		●				●			●	●
CNMG190612	1.20	0.1-8.0	0.1-0.8		●				●			●	●
CNMG190616	1.60	0.1-8.0	0.1-1.0		●			●					●



ROUGHING  
ZGRUBNA

CNMA120404	0.40	0.2-5.0	0.05-0.40	●					●			●	●
CNMA120408	0.80	0.2-5.0	0.05-0.50									●	●
CNMA120412	1.20	0.2-5.0	0.1-0.6									●	●
CNMA120416	1.60	0.2-5.0	0.10-0.65									●	●
CNMA160608	0.80	0.2-7.0	0.1-0.5									●	●
CNMA160612	1.20	0.2-7.0	0.1-0.6									●	●
CNMA160616	1.60	0.2-7.0	0.15-0.65									●	●
CNMA160620	2.00	0.2-7.0	0.15-0.70									●	
CNMA160630	3.00	0.2-7.0	0.15-0.70		●							●	●
CNMA160650	5.00	0.2-7.0	0.15-0.70										●
CNMA1906012	1.20	0.2-8.0	0.15-0.70									●	●
CNMA1906016	1.60	0.2-8.0	0.15-0.70									●	●



ROUGHING  
ZGRUBNA

CNMG120408-CR9	0.80	2.0-7.6	0.15-0.55	●	●			●	●			●	●	●
CNMG120412-CR9	1.20	2.0-7.6	0.25-0.80		●			●	●	●		●	●	●
CNMG160608-CR9	0.80	2-10	0.35-0.80		●				●					
CNMG160612-CR9	1.20	2-10	0.35-0.80	●	●			●	●	●		●	●	●
CNMG160616-CR9	1.60	2-10	0.45-1.00		●				●	●		●	●	●
CNMG190608-CR9	0.80	2.0-11.4	0.35-1.00						●			●		
CNMG190612-CR9	1.20	2.0-11.4	0.35-1.00	●	●			●	●			●	●	●
CNMG190616-CR9	1.60	2.0-11.4	0.45-1.10	●	●			●	●			●	●	●
CNMG190624-CR9	2.40	2.0-11.4	0.45-1.10	●	●				●			●		

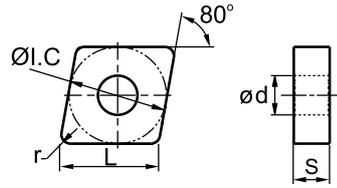


ROUGHING  
ZGRUBNA

CNMM160612-CR9	1.20	1.0-7.5	0.25-0.70					●	●					
CNMM160616-CR9	1.60	1.5-9.5	0.32-0.90					●	●			●		
CNMM190612-CR9	1.20	1-12	0.25-0.70	●				●	●			●		
CNMM190616-CR9	1.60	1.5-12.0	0.32-0.90		●			●	●	●		●	●	
CNMM190624-CR9	2.40	2-12	0.35-1.20	●	●			●	●	●		●		
CNMM250724-CR9	2.40	2.0-12.5	0.2-1.2						●					
CNMM250924-CR9	2.40	2.0-12.5	0.2-1.2	●					●			●		●

**NEGATIVE INSERTS PŁYTKI UJEMNE**

# CN



P	●	●	●	●	●	●							
M		●	●										
K	●	●									⊕	●	
N													
S													
H													

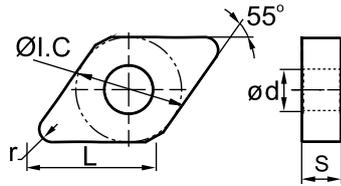
CNMG	L	I.C.	S	d	
12	04	12.9	12.7	4.76	5.16
16	06	16.1	15.875	6.35	6.35
19	06	19.03	19.03	6.35	7.94

Ideal machining conditions  
 Idealne warunki obróbki  
 Normal machining conditions  
 Normalne warunki obróbki  
 Unfavourable machining conditions  
 Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD			CVD						
					P3200	P3100	P3340	PT025	PT125	P3125	P1225	P2115	P2215	
	ROUGHING ZGRUBNA	CNMG120408-CR8	0.80	0.7-7.0	0.2-0.5							●	●	●
	CNMG120412-CR8	1.20	1-7	0.25-0.70	●							●	●	●
	CNMG120416-CR8	1.60	1-7	0.25-0.70		●						●		●
	CNMG160612-CR8	1.20	1.5-7.0	0.32-0.75									●	●
	CNMG160616-CR8	1.60	1.5-7.0	0.32-0.75									●	●
	CNMG160620-CR8	2.00	1.5-7.0	0.32-0.75									●	●
	ROUGHING ZGRUBNA	CNMM250724-CR010	2.40	2.0-12.5	0.3-1.4							●		
	CNMM250924-CR010	2.40	2.0-12.5	0.3-1.4								●		
	MEDIUM ŚREDNIA	CNMG120404-CM6	0.40	0.4-5.5	0.1-0.3	●	●		●	●	●	●	●	●
	CNMG120408-CM6	0.80	0.5-5.5	0.15-0.50	●	●		●	●	●	●	●	●	●
	CNMG120412-CM6	1.20	0.8-5.5	0.18-0.60				●	●		●	●	●	●
	CNMG120416-CM6	1.60	1.0-5.5	0.23-0.65		●			●	●	●			●
	CNMG160408-CM6	0.80	0.5-7.2	0.15-0.50		●		●	●					
	CNMG160608-CM6	0.80	0.5-7.2	0.15-0.50	●	●		●	●		●	●		
	CNMG160612-CM6	1.20	0.8-7.2	0.18-0.60	●	●		●	●		●	●		
	CNMG160616-CM6	1.60	1.0-5.5	0.23-0.65	●	●			●		●			●
	CNMG190608-CM6	0.80	0.5-8.6	0.15-0.50	●	●		●	●		●	●	●	●
	CNMG190612-CM6	1.20	0.8-8.6	0.18-0.60	●	●		●	●		●	●	●	●
	CNMG190616-CM6	1.60	1.0-8.6	0.23-0.65	●	●		●	●		●	●		
		MEDIUM ŚREDNIA	CNMG120404-CM7	0.40	0.4-5.5	0.1-0.3				●	●		●	
CNMG120408-CM7		0.80	0.5-5.5	0.15-0.50	●			●	●		●			
	MEDIUM ŚREDNIA	CNMG120404-CM3	0.40	0.5-4.0	0.05-0.30	●	●							
	CNMG120408-CM3	0.80	0.5-5.7	0.15-0.45	●	●								
	CNMG120412-CM3	1.20	0.5-5.7	0.25-0.60	●	●								
	MEDIUM ŚREDNIA	CNMG120404-CM8	0.40	0.5-4.0	0.05-0.30		●							
	CNMG120408-CM8	0.80	0.5-5.7	0.15-0.45	●	●								
	MEDIUM ŚREDNIA	CNMG120404-CM9	0.40	0.5-4.0	0.05-0.30		●		●		●	●		
	CNMG120408-CM9	0.80	0.5-5.7	0.15-0.45	●	●		●	●	●	●			
	CNMG120412-CM9	1.20	0.5-5.7	0.25-0.60	●	●		●	●	●	●			
	MEDIUM ŚREDNIA	CNMG120404-CM5	0.40	0.5-4.0	0.05-0.30	●	●					●		●
	CNMG120408-CM5	0.80	0.5-5.7	0.15-0.45	●	●			●		●	●		
	FINISHING WYKONCZENIOWA	CNMG120404-CF3	0.40	0.25-1.50	0.07-0.30		●		●	●		●	●	●
	CNMG120408-CF3	0.80	0.3-1.5	0.1-0.4		●			●		●			
	FINISHING WYKONCZENIOWA	CNMG120404-CF2	0.40	0.5-2.5	0.05-0.20	●	●							
	CNMG120408-CF2	0.80	0.5-2.5	0.05-0.25	●	●								

NEGATIVE INSERTS PŁYTKI UJEMNE

DN



P	●	●		●	●	●	●			
M		●								
K	●	●						●	●	
N										
S										
H										

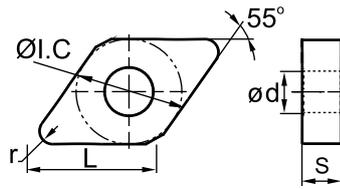
DNMG	L	I.C.	S	d	
11	04	11.6	9.525	4.76	3.81
15	04	15.5	12.7	4.76	5.16
15	06	15.5	12.7	6.35	5.16

● Ideal machining conditions  
 ● Normal machining conditions  
 ● Unfavourable machining conditions  
 ● Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD			CVD										
					P3200	P3100	P3340	P1025	P1125	P3125	P1225	P2115	P2215					
	ROUGHING ZGRUBNA	DNMG110408	0.80	0.2-6.0	0.1-0.3		●											
	DNMG150404	0.40	0.2-6.0	0.1-0.3		●												
	DNMG150408	0.80	0.2-6.0	0.1-0.3		●												
	DNMG150412	1.20	0.2-6.0	0.15-0.70														
	DNMG150604	0.40	0.2-6.0	0.1-0.3		●	●											
	DNMG150608	0.80	0.2-6.0	0.1-0.6		●	●											
	DNMG150612	1.20	0.2-6.0	0.15-0.70		●	●											
	DNMG150616	1.60	0.2-6.0	0.15-0.70		●	●											
	ROUGHING ZGRUBNA	DNMA150408	0.80	0.2-6.0	0.1-0.6											●		
	DNMA150412	1.20	0.2-6.0	0.1-0.6												●		
	DNMA150608	0.80	0.2-6.0	0.1-0.6					●							●	●	
	DNMA150612	1.20	0.2-6.0	0.15-0.70												●	●	
	DNMA150616	1.60	0.2-6.0	0.2-0.8												●	●	
	ROUGHING ZGRUBNA	DNMG150408-CR8	0.80	1-6	0.2-0.5											●	●	
	DNMG150412-CR8	1.20	1-6	0.2-0.5												●	●	
	DNMG150608-CR8	0.80	1-6	0.2-0.5												●	●	
	DNMG150612-CR8	1.20	1-6	0.25-0.70												●	●	
	DNMG150616-CR8	1.60	1-6	0.25-0.70												●	●	
	ROUGHING ZGRUBNA	DNMG150412-CR9	1.20	1-6	0.2-0.5						●	●						
	DNMG150608-CR9	0.80	1-6	0.2-0.5			●						●					
	DNMG150612-CR9	1.20	1-6	0.25-0.70		●	●						●	●	●			
	DNMG150616-CR9	1.60	1-6	0.25-0.70			●						●	●	●			
	ROUGHING ZGRUBNA	DNMM150608-CR9	0.80	0.7-6.0	0.20-0.55		●											
	DNMM150612-CR9	1.20	1-6	0.25-0.70						●	●							
	DNMM150616-CR9	1.60	1.5-6.0	0.32-0.90						●								
	MEDIUM SRĘDZIA	DNMG110404-CM3	0.40	0.5-4.4	0.05-0.30	●	●											
	DNMG110408-CM3	0.80	0.5-4.4	0.10-0.45	●	●												
	DNMG150604-CM3	0.40	0.2-6.4	0.05-0.30	●	●												
	DNMG150608-CM3	0.80	0.5-6.4	0.10-0.45	●	●												
	MEDIUM SRĘDZIA	DNMG110404-CM5	0.40	0.5-4.4	0.05-0.30	●	●									●		
	DNMG110408-CM5	0.80	0.5-4.4	0.10-0.45	●	●												
	DNMG150404-CM5	0.40	0.2-6.4	0.05-0.30	●	●												
	DNMG150408-CM5	0.80	0.5-6.4	0.10-0.45	●	●					●	●						
	DNMG150412-CM5	1.20	0.5-6.4	0.10-0.45	●	●					●	●						
	DNMG150604-CM5	0.40	0.5-6.4	0.10-0.45	●	●												
	DNMG150608-CM5	0.80	0.5-6.4	0.10-0.45	●	●							●	●				
	DNMG150612-CM5	1.20	0.5-6.4	0.10-0.45	●	●												

NEGATIVE INSERTS PŁYTKI UJEMNE

DN



P	●	●		●	●	●	●		
M		●							
K	●	●						⊕	●
N									
S									
H									

DNMG	L	I.C.	S	d
11	04	11.6	9.525	4.76
15	04	15.5	12.7	4.76
15	06	15.5	12.7	6.35

- Ideal machining conditions
- Normal machining conditions
- ⊕ Unfavourable machining conditions
- ⊕ Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

PVD

CVD

P3200

P3100

P3340

P1025

P1125

P3125

P1225

P2115

P2215

P2215

P2215

P2215



MEDIUM  
SREDNIA

DNMG110404-CM6	0.40	0.4-5.0	0.1-0.3		●			●	●					
DNMG110408-CM6	0.80	0.5-5.0	0.15-0.50	●	●			●	●		●	●	●	
DNMG110412-CM6	1.20	0.5-5.0	0.15-0.50					●	●					
DNMG150404-CM6	0.40	0.4-6.0	0.1-0.3		●			●	●		●	●		
DNMG150408-CM6	0.80	0.5-6.0	0.15-0.50		●			●	●		●	●	●	
DNMG150412-CM6	1.20	0.8-6.0	0.18-0.60					●	●		●	●		
DNMG150604-CM6	0.40	0.4-6.0	0.1-0.3	●	●			●	●		●	●	●	●
DNMG150608-CM6	0.80	0.5-6.0	0.15-0.50	●	●			●	●		●	●	●	●
DNMG150612-CM6	1.20	0.8-6.0	0.18-0.60	●	●			●	●		●	●	●	●



MEDIUM  
SREDNIA

DNMG150404-CM7	0.40	0.4-6.0	0.1-0.3					●	●					
DNMG150408-CM7	0.80	0.5-6.0	0.15-0.50	●				●	●					
DNMG150604-CM7	0.40	1-6	0.23-0.65						●		●			
DNMG150608-CM7	0.80	0.5-6.0	0.15-0.50						●		●			



FINISHING  
WYKONCZENIOWA

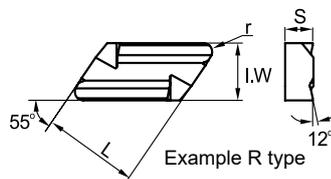
DNMG110408-CF3	0.80	0.15-2.00	0.1-0.3						●					
DNMG150404-CF3	0.40	0.15-2.00	0.08-0.25	●				●	●					
DNMG150408-CF3	0.80	0.15-2.00	0.1-0.3					●	●		●			
DNMG150604-CF3	0.40	0.8-6.0	0.18-0.60		●				●		●		●	
DNMG150608-CF3	0.80	0.15-2.00	0.1-0.3						●		●			



FINISHING  
WYKONCZENIOWA

DNMG110408-CF2	0.80	0.15-2.00	0.1-0.3						●					
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KN



P			●	●									●
M													●
K											⊕		
N													
S													
H													

KNUX	I.W	S
16	04	9.525
		4.76

- Ideal machining conditions
- Normal machining conditions
- ⊕ Unfavourable machining conditions
- ⊕ Niekorzystne warunki obróbki

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

PVD

CVD

P3200

P3100

P1025

P1125

P3125

P1225

P2115

P2215

P2215

P2215

P3340

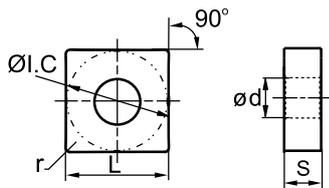


FINISHING  
WYKONCZENIOWA

KNUX160405L	0.50	0.2-6.0	0.05-0.70					●	●				●	
KNUX160405R	0.50	0.2-6.0	0.05-0.70					●	●				●	●

# NEGATIVE INSERTS PŁYTKI UJEMNE

# SN



P	●	●	●	●	●	●			
M		●							
K	●	●						●	●
N									
S									
H									

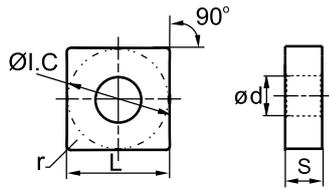
SNMG	L	I.C	S	d
12	04	12.7	12.7	4.76 5.16
15	06	15,87	15,87	6.35 6.35
19	06	19.05	19.05	6.35 7.94
25	09	25.4	25.4	6.35 9,12

● Ideal machining conditions  
 Idealne warunki obróbki  
 ● Normal machining conditions  
 Normalne warunki obróbki  
 ⊕ Unfavourable machining conditions  
 Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD				CVD				
					P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215	
	ROUGHING ZGRUBNA	SNMG120404	0.40	0.5-6.0	0.1-0.6		●	●	●		●	●	
		SNMG120408	0.80	0.5-6.0	0.1-0.6	●	●	●	●		●	●	
		SNMG120412	1.20	0.5-6.0	0.1-0.7	●	●	●	●		●	●	●
		SNMG190612	1.20	0.5-6.0	0.1-0.9				●			●	
		SNMG190616	1.60	0.5-6.0	0.1-0.9				●			●	
	ROUGHING ZGRUBNA	SNMA120408	0.80	0.5-5.0	0.1-0.5	●	●					●	●
		SNMA120412	1.20	0.5-5.0	0.2-0.7							●	●
		SNMA120416	1.60	0.5-5.0	0.2-1.0	●			●		●	●	●
		SNMA120424	2.40	0.8-7.0	0.1-0.5			●				●	●
		SNMA150612	1.20	0.8-7.0	0.2-0.7							●	●
		SNMA190616	1.60	0.8-7.0	0.3-0.8							●	●
		SNMA250924	2.40	0.8-7.0	0.3-0.8							●	
	ROUGHING ZGRUBNA	SNMG120408-CR8	0.80	0.7-7.0	0.2-0.5							●	●
		SNMG120412-CR8	1.20	1-7	0.25-0.70							●	●
		SNMG150612-CR8	1.20	1-7	0.25-0.70								●
	ROUGHING ZGRUBNA	SNMG120408-CR9	0.80	0.7-7.0	0.2-0.5		●	●	●		●		
		SNMG120412-CR9	1.20	1-7	0.25-0.70		●	●	●		●	●	●
		SNMG150612-CR9	1.20	1-8	0.25-0.70	●	●	●	●		●	●	●
		SNMG150616-CR9	1.60	1.5-8.0	0.3-0.8		●		●		●		●
		SNMG150624-CR9	2.40	1.5-8.0	0.3-0.8			●					
		SNMG190612-CR9	1.20	1-10	0.25-0.70	●	●	●	●		●	●	●
		SNMG190616-CR9	1.60	1.5-10.0	0.3-0.8	●	●	●	●		●	●	●
		SNMG190624-CR9	2.40	2-10	0.32-0.90	●	●	●	●		●		
		SNMG250616-CR9	1.60	2-15	0.4-1.2			●	●				
		SNMG250716-CR9	1.60	2-15	0.4-1.2		●		●				
		SNMG250724-CR9	2.40	2-15	0.4-1.2		●	●	●		●		
	SNMG250924-CR9	2.40	2-15	0.4-1.2		●	●	●		●	●		
	ROUGHING ZGRUBNA	SNMM150612-CR9	1.20	1-7	0.25-0.60	●	●		●		●		
		SNMM150616-CR9	1.60	1.5-9.0	0.32-0.90	●	●		●		●		
		SNMM190612-CR9	1.20	2.0-10.5	0.25-0.60			●	●		●		
		SNMM190616-CR9	1.60	2.0-10.5	0.35-0.90		●	●	●		●		
		SNMM190624-CR9	2.40	2.0-10.5	0.4-1.1		●	●	●		●	●	●
		SNMM250724-CR9	2.40	2.5-12.5	0.5-1.2		●	●	●		●	●	●
		SNMM250924-CR9	2.40	2.5-12.5	0.5-1.2	●	●		●		●		
	ROUGHING ZGRUBNA	SNMM250724-CR010	2.40	2.5-12.5	0.4-1.0			●		●			
		SNMM250924-CR010	2.40	2.5-12.5	0.5-1.2			●		●			

**NEGATIVE INSERTS PŁYTKI UJEMNE**

# SN



P	●	●	●	●	●				
M		●							
K	●	●						●	●
N									
S									
H									

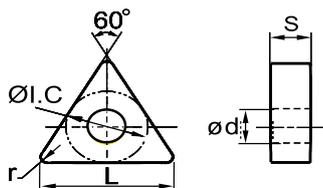
	SNMG	L	I.C	S	d
<b>12</b>	04	12.7	12.7	4.76	5.16
<b>15</b>	06	15,87	15,87	6.35	6.35
<b>19</b>	06	19.05	19.05	6.35	7.94
<b>25</b>	09	25,4	25,4	6.35	9,12

Ideal machining conditions  
 Idealne warunki obróbki  
 Normal machining conditions  
 Normalne warunki obróbki  
 Unfavourable machining conditions  
 Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		CVD					
					P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215
	SNMG120404-CM6	0.40	0.4-6.0	0.1-0.3		●	●	●		●	●	●
	SNMG120408-CM6	0.80	0.5-6.0	0.15-0.50		●	●	●		●	●	●
	SNMG120412-CM6	1.20	0.8-6.0	0.18-0.60			●	●		●	●	●
	SNMG120416-CM6	1.60	1-6	0.23-0.65			●	●				
	SNMG150608-CM6	0.80	0.7-7.5	0.14-0.50	●	●	●	●		●		●
	SNMG150612-CM6	1.20	0.8-7.5	0.18-0.60		●	●	●		●		●
	SNMG190608-CM6	0.80	1.0-7.5	0.20-0.65	●	●	●			●		●
	SNMG190612-CM6	1.20	1.0-7.5	0.20-0.65	●	●	●	●		●	●	
	SNMG190616-CM6	1.60	1-9	0.18-0.60	●	●	●	●		●	●	
	SNMG120404-CM7	0.40	0.4-6.0	0.1-0.3			●	●				
	SNMG120408-CM7	0.80	0.5-6.0	0.15-0.50		●	●	●		●		
	SNMG120412-CM7	1.20	0.8-6.0	0.18-0.60				●				
	SNMG190612-CM7	1.20	1.0-7.5	0.20-0.65			●					
	SNMG120404-CM3	0.40	0.50-6.35	0.05-0.30	●	●						
	SNMG120408-CM3	0.80	0.50-6.35	0.20-0.45	●	●						
	SNMG120412-CM3	1.20	0.50-6.35	0.25-0.60	●	●						
	SNMG150612-CM3	1.20	0.5-8.0	0.25-0.60	●	●						
	SNMG120404-CM5	0.40	0.4-6.0	0.1-0.3	●	●						
	SNMG120408-CM5	0.80	0.50-6.35	0.20-0.45	●	●				●		
	SNMG120412-CM5	1.20	0.50-6.35	0.25-0.60	●	●						
	SNMG120408-CF2	0.80	0.8-3.0	0.1-0.4	●	●						
	SNMG120404-CF3	0.40	0.5-2.5	0.1-0.25	●		●	●				

NEGATIVE INSERTS PŁYTKI UJEMNE

TN



P	●	●	●	●	●	●												
M		●	●															
K	●	●											⊕	●	●			
N																		
S																		
H																		

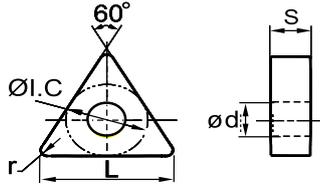
TN**	L	I.C.	S	d	
16	04	16.5	9.525	4.76	3.81
22	04	22	12.7	4.76	5.16

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD			CVD										
					P3200	P3100	P3340	P1025	P1125	P3125	P1225	P2115	P2215	P2315				
	ROUGHING ZGRUBNA	TNMG160404	0.40	0.2-4.0	0.05-0.20	●	●			●	●				●	●		
		TNMG160408	0.80	0.2-4.0	0.08-0.30	●	●			●	●				●	●		
		TNMG160412	1.20	0.2-4.0	0.1-0.4	●				●	●				●	●		
		TNMG220408	0.80	0.2-6.0	0.1-0.3	●	●			●	●				●	●		
		TNMG220412	1.20	0.2-6.0	0.1-0.3		●			●	●				●			
		TNMG220416	1.60	0.2-6.0	0.1-0.3		●			●								
	ROUGHING ZGRUBNA	TNMG160404-CR8	0.40	0.7-6.0	0.20-0.55		●											
		TNMG160408-CR8	0.80	0.7-6.0	0.20-0.55										●	●		
		TNMG160412-CR8	1.20	1-6	0.25-0.70										●	●		
		TNMG220408-CR8	0.80	1-6	0.25-0.70					●								
		TNMG220412-CR8	1.20	1-8	0.25-0.70										●	●		
		TNMG220416-CR8	1.60	1-8	0.25-0.70										●	●		
	ROUGHING ZGRUBNA	TNMG160404-CR9	0.80	0.7-6.0	0.20-0.55		●			●	●			●	●			
		TNMG160412-CR9	1.20	1-6	0.25-0.70	●	●			●	●	●		●	●	●		
		TNMG160416-CR9	1.60	1-6	0.25-0.70		●							●		●		
		TNMG220412-CR9	1.20	1-8	0.25-0.70		●			●	●			●	●	●		
		TNMG220416-CR9	1.60	1-8	0.25-0.70		●			●	●			●		●		
		MEDIUM ŚREDNIA	TNMG160404-CM6	0.40	0.4-5.0	0.1-0.3	●	●			●	●			●	●	●	
		TNMG160408-CM6	0.80	0.5-5.0	0.15-0.50	●	●			●	●	●		●	●	●		
		TNMG160412-CM6	1.20	0.8-5.0	0.18-0.60		●			●	●			●	●	●		
		TNMG160416-CM6	1.60	0.8-5.0	0.18-0.60					●				●				
		TNMG220404-CM6	0.40	0.5-6.6	0.15-0.50	●	●			●	●			●	●	●		
		TNMG220408-CM6	0.80	0.5-6.6	0.15-0.50	●	●			●	●			●	●	●		
	MEDIUM ŚREDNIA	TNMG160404-CM7	0.40	0.4-5.0	0.1-0.3		●			●	●							
		TNMG160408-CM7	0.80	0.5-5.0	0.15-0.50		●			●	●			●				
	MEDIUM ŚREDNIA	TNMG160404-CM3	0.40	0.5-4.8	0.05-0.30	●	●											
		TNMG160408-CM3	0.80	0.5-4.8	0.10-0.45	●	●									●		
		TNMG160412-CM3	1.20	0.5-4.8	0.1-0.6	●	●											
		TNMG220408-CM3	0.80	0.5-6.6	0.10-0.45	●	●											
	MEDIUM ŚREDNIA	TNMG160404-CM8	0.80	0.5-4.8	0.05-0.30	●	●											
		TNMG160408-CM8	1.20	0.5-4.8	0.10-0.45	●	●											
	MEDIUM ŚREDNIA	TNMG160404-CM9	0.40	0.5-4.8	0.05-0.30	●	●			●	●	●	●					
		TNMG160408-CM9	0.80	0.5-4.8	0.10-0.45	●	●			●	●	●	●					
		TNMG160412-CM9	1.20	0.5-4.8	0.1-0.6					●	●	●						
	MEDIUM ŚREDNIA	TNMG160404-CM5	0.40	0.4-5.0	0.1-0.3	●	●			●				●				
		TNMG160408-CM5	0.80	0.5-5.0	0.15-0.50	●	●			●	●			●				
		TNMG160412-CM5	1.20	0.8-5.0	0.18-0.60	●	●			●				●				

NEGATIVE INSERTS PŁYTKI UJEMNE

TN



P	●	●	●	●	●	●						
M	●	●										
K	●	●							⊕	●	●	
N												
S												
H												

TN**	L	I.C.	S	d	
16	04	16.5	9.525	4.76	3.81
22	04	22	12.7	4.76	5.16

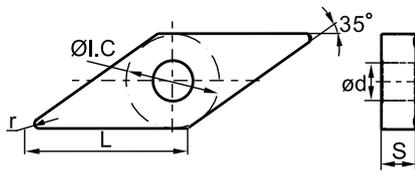
- Ideal machining conditions
- Idealne warunki obróbki
- Normal machining conditions
- Normalne warunki obróbki
- ⊕ Unfavourable machining conditions
- ⊕ Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		CVD								
					P3200	P3100	P3340	P1025	P1125	P3125	P1225	P2115	P2215	P2315	
	TNMG160404-CF2	0.40	0.1-1.5	0.05-0.30	●	●									
	TNMG160408-CF2	0.80	0.1-1.5	0.05-0.30	●	●									
	TNMG160412-CF2	1.20	0.2-2.5	0.15-0.40		●									

	TNMG160404-CF3	0.40	0.15-2.00	0.1-0.3		●			●	●	●	●	●	●	
	TNMG160408-CF3	0.80	0.15-2.00	0.1-0.3		●			●	●	●	●			
	TNMG160412-CF3	1.20	0.35-1.50	0.15-0.50						●					

	TNMA160404	0,40	0.2-4.0	0.05-0.20								●	●	●	
	TNMA160405	0,50	0.2-4.0	0.08-0.30									●		
	TNMA160408	0,80	0.2-4.0	0.08-0.30									●	●	
	TNMA160412	1,20	0.2-4.0	0.1-0.4				●					●	●	
	TNMA160416	1,60	0.5-4.0	0.05-0.50									●	●	
	TNMA220404	0,40	0.2-6.0	0.05-0.20									●		
	TNMA220405	0,50	0.2-6.0	0.05-0.20									●		
	TNMA220408	0,80	0.2-6.0	0.1-0.3									●	●	
	TNMA220412	1,20	0.2-6.0	0.1-0.4									●	●	
	TNMA220416	1,60	0.2-6.0	0.1-0.5									●	●	

VN



P	●	●	●	●	●							
M	●	●										
K	●	●									⊕	●
N												
S												
H												

VN**	L	I.C.	S	d	
16	04	16.6	9.525	4.76	3.81

- Ideal machining conditions
- Idealne warunki obróbki
- Normal machining conditions
- Normalne warunki obróbki
- ⊕ Unfavourable machining conditions
- ⊕ Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		CVD						
					P3200	P3100	P1025	P1125	P3125	P1225	P2115	P2215	
	VNMG160404	0.40	0.2-6.0	0.05-0.60	●	●	●	●		●	●	●	
	VNMG160408	0.80	0.2-6.0	0.08-0.60	●	●	●	●		●	●	●	
	VNMG160412	1.20	0.2-6.0	0.08-0.60		●	●	●		●	●	●	

	VNMG160404-CM6	0.40	0.4-4.0	0.13-0.40	●	●	●	●		●	●	●	
	VNMG160408-CM6	0.80	0.5-4.0	0.15-0.50	●	●	●	●	●	●	●	●	
	VNMG160412-CM6	1.20	0.5-4.0	0.15-0.50		●	●	●		●	●	●	

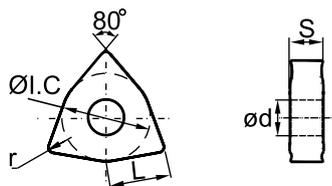
	VNMG160404-CM3	0.40	0.20-3.0	0.05-0.0	●	●				●			
	VNMG160408-CM3	0.80	0.5-4.0	0.10-0.45	●	●							

	VNMG160404-CM5	0.40	0.20-3.0	0.05-0.0	●	●		●					
	VNMG160408-CM5	0.80	0.5-4.0	0.10-0.45	●	●		●					

	VNMG160404-CF3	0.40	0.25-1.50	0.07-0.30		●	●	●		●			
	VNMG160408-CF3	0.80	0.3-1.5	0.1-0.4	●		●	●		●		●	

NEGATIVE INSERTS PŁYTKI UJEMNE

WN



P	●	●	●	●	●	●	●										
M	●	●	●														
K	●	●										⊕	●	●			
N																	
S																	
H																	

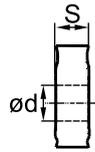
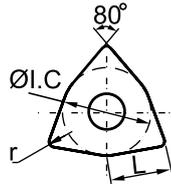
WN**	L	I.C.	S	d	
06	T3	6.5	9.525	3.97	3.81
08	04	8.7	12.7	4.76	5.16

- Ideal machining conditions
- Idealne warunki obróbki
- Normal machining conditions
- Normalne warunki obróbki
- ⊕ Unfavourable machining conditions
- ⊕ Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD			CVD									
					P3200	P3100	P3340	P1025	P1125	P3125	P1225	P2115	P2215	P2315			
	ROUGHING ZGRUBNA	WNMG080404	0.40	0.5-4.0	0.08-0.25	●	●		●	●		●	●	●			
		WNMG080408	0.80	0.5-4.0	0.15-0.30	●	●		●	●	●	●	●	●			
		WNMG080410	1.00	0.5-4.0	0.15-0.30		●										
		WNMG080412	1.20	0.5-4.0	0.15-0.30	●	●		●		●	●	●	●			
	ROUGHING ZGRUBNA	WNMA080404	0,40	0.5-4.0	0.08-0.25								●	●			
		WNMA080405	0,50	0.5-4.0	0.08-0.25								●				
		WNMA080408	0,80	0.5-4.0	0.15-0.30								●	●			
		WNMA080412	1,20	0.5-5.0	0.15-0.30								●	●			
		WNMA080416	1,60	0.5-5.0	0.2-0.5								●	●			
		WNMA080420	1,60	0.5-5.0	0.2-0.5								●				
	ROUGHING ZGRUBNA	WNMG060404-CR8	0.40	0.5-3.0	0.05-3.0		●						●	●			
		WNMG060408-CR8	0.80	0.5-3.0	0.1-0.5								●	●			
		WNMG060412-CR8	1.20	0.5-3.0	0.1-0.5		●		●				●	●			
		WNMG080404-CR8	0.40	1-4	0.05-0.30								●	●			
		WNMG080408-CR8	0.80	1-4	0.1-0.5								●	●			
		WNMG080412-CR8	1.20	1-4	0.1-0.7							●	●	●			
		WNMG080416-CR8	1.60	1-4	0.1-0.7								●				
	ROUGHING ZGRUBNA	WNMG080408-CR9	0.80	0.75-5.0	0.20-0.55	●	●		●	●		●	●	●			
		WNMG080412-CR9	1.20	1-5	0.25-0.70		●		●	●			●	●			
		WNMG080416-CR9	1.20	1-5	0.25-0.70		●		●		●		●	●			
	MEDIUM ŚREDNIA	WNMG060408-CM6	0.80	0.5-3.0	0.15-0.50	●	●		●	●		●	●				
		WNMG080404-CM6	0.40	0.4-4.0	0.12-0.40	●	●		●	●	●	●	●	●			
		WNMG080408-CM6	0.80	0.5-4.0	0.15-0.50	●	●		●	●	●	●	●	●			
		WNMG080412-CM6	1.20	0.8-4.0	0.18-0.60	●	●		●	●	●	●	●	●			
		WNMG080416-CM6	1.60	0.8-4.0	0.18-0.60				●	●		●					
	MEDIUM ŚREDNIA	WNMG060408-CM3	0.80	0.5-3.0	0.05-0.30	●	●										
		WNMG080404-CM3	0.40	1-4	0.05-0.30	●	●										
		WNMG080408-CM3	0.80	1-4	0.1-0.5	●	●										
		WNMG080412-CM3	1.20	1-4	0.1-0.7	●	●										
	MEDIUM ŚREDNIA	WNMG080404-CM7	0.40	0.5-4.0	0.1-0.4				●	●		●		●			
		WNMG080408-CM7	0.80	0.5-4.0	0.15-0.50	●			●	●		●	●				
	MEDIUM ŚREDNIA	WNMG080404-CM8	0.40	1-4	0.05-0.30		●										
		WNMG080408-CM8	0.80	1-4	0.1-0.5	●	●										

**NEGATIVE INSERTS PŁYTKI UJEMNE**

# WN



P	●	●	●	●		●								
M		●	●											
K	●	●								●	●	●		
N														
S														
H														

WN**	L	I.C.	S	d	
06	T3	6.5	9.525	3.97	3.81
08	04	8.7	12.7	4.76	5.16

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD			CVD						
					P3200	P3100	P3340	P1025	P1125	P3125	P1225	P2115	P2215	P2315
	WNMG080404-CM5	0.40	1-4	0.05-0.30	●	●		●	●		●		●	
	WNMG080408-CM5	0.80	1-4	0.1-0.5	●	●		●	●		●	●		
	WNMG080412-CM5	1.20	1-4	0.1-0.7	●	●								
	WNMG080404-CM9	0.40	1-4	0.05-0.30		●		●	●	●	●			
	WNMG080408-CM9	0.80	1-4	0.1-0.5	●	●		●	●	●	●			
	WNMG080412-CM9	1.20	1-4	0.1-0.7		●		●	●	●	●			
	WNMG080404-CF2	0.40	0.1-1.5	0.05-0.30	●	●								
	WNMG080408-CF2	0.80	0.1-1.5	0.1-0.4	●	●								
	WNMG060404-CF3	0,40	0.15-2.00	0.08-0.25	●	●		●	●			●		
	WNMG060408-CF3	0,80	0.15-2.00	0.1-0.3		●		●	●		●			
	WNMG080404-CF3	0,40	0.15-2.00	0.08-0.25	●	●		●	●		●	●	●	
	WNMG080408-CF3	0,80	0.15-2.00	0.1-0.3	●	●		●	●		●	●		
	WNMG080412-CF3	1,20	0.2-2.5	0.1-0.35							●			

TOOLHOLDER LIST LISTA NARZĘDZI

**EXTERNAL T-SYSTEM**  
ZEWNĘTRZNY T-SYSTEM

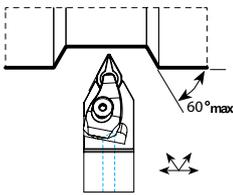
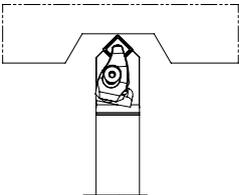
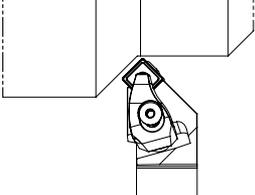
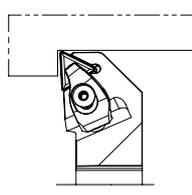
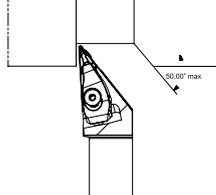
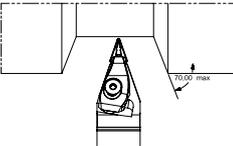
TCBN   p.29	TCKNR   p.29	TCLNR   p.29	TCMN   p.30	TCZN   p.30
TDHN   p.30	TDJN   p.31	TDNN   p.31	TSDN   p.32	TSKN   p.32
TSSN   p.31	TTEN   p.32	TTGN   p.33	TTJN   p.33	TVHN   p.33
TVJN   p.34	TVVN   p.34	TWLN   p.34		

**EXTERNAL T-SYSTEM WITH COOLING**  
ZEWNĘTRZNY T-SYSTEM Z CHŁODZENIEM

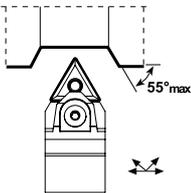
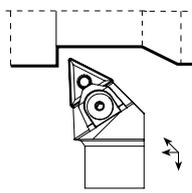
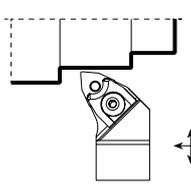
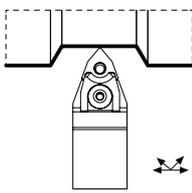
TCLN   p.35	TCBN   p.35	TCKN TCLN   p.35	TDJN   p.36	TWLN   p.36

**TOOLHOLDER LIST** LISTA NARZĘDZI

**EXTERNAL T-SYSTEM WITH COOLING**  
ZEWNĘTRZNY T-SYSTEM Z CHŁODZENIEM

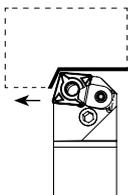
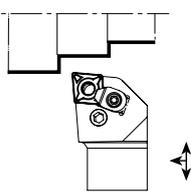
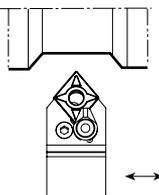
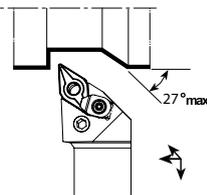
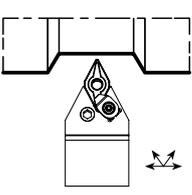
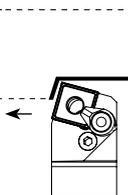
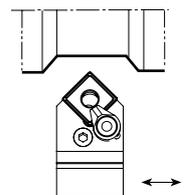
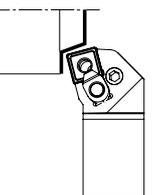
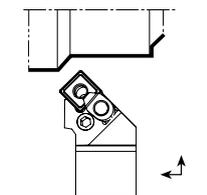
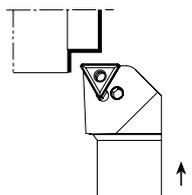
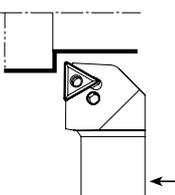
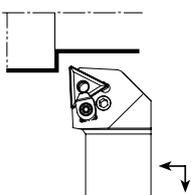
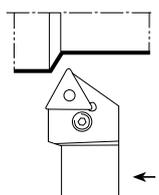
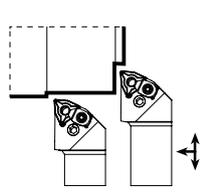
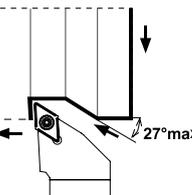
				
TDNN   p.36	TSDN   p.36	TSSN   p.37	TTJN   p.37	TVJN   p.37
				
TVNN   p.38				

**EXTERNAL M-SYSTEM**  
ZEWNĘTRZNY M-SYSTEM

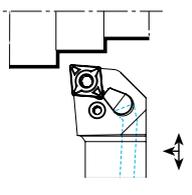
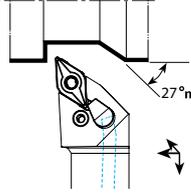
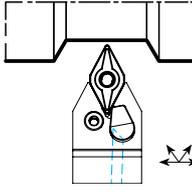
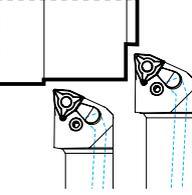
			
MTEN   p.39	MTJN   p.39	MWLN   p.39	MWMN   p.40

TOOLHOLDER LIST LISTA NARZĘDZI

**EXTERNAL P-SYSTEM**  
ZEWNĘTRZNY P-SYSTEM

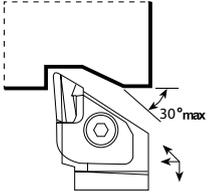
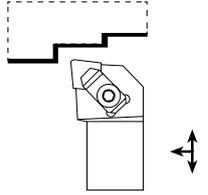
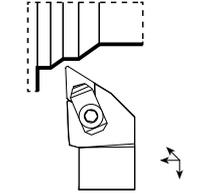
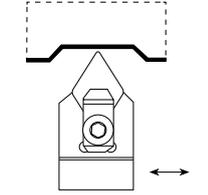
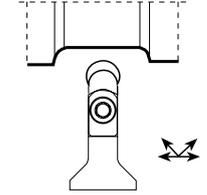
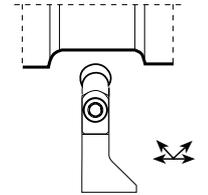
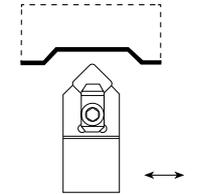
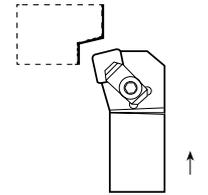
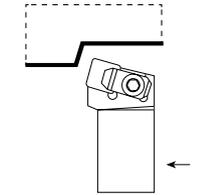
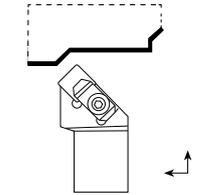
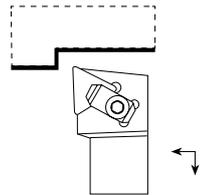
				
PCBN p.41	PCLN p.41	PCMN p.42	PDJN p.42	PDNN p.43
				
PSBN p.43	PSDN p.44	PSKN p.44	PSSN p.45	PTFN p.45
				
PTGN p.46	PTJN p.46	PTTN p.47	PWLN p.47	PDJC p.42

**EXTERNAL P-SYSTEM WITH COOLING**  
ZEWNĘTRZNY P-SYSTEM Z CHŁODZENIEM

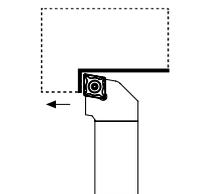
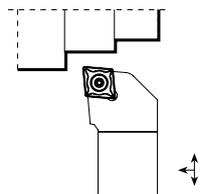
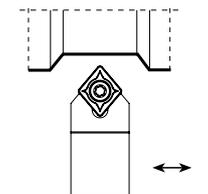
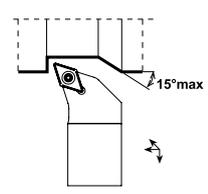
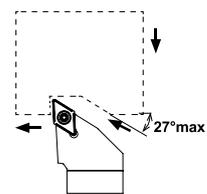
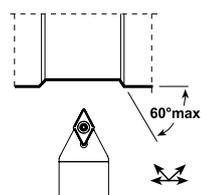
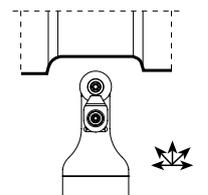
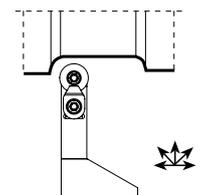
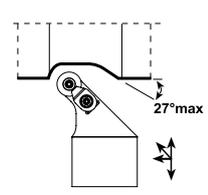
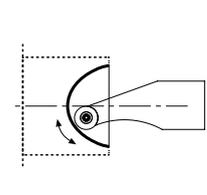
			
PCLN p.48	PDJN p.48	PDNN p.49	PWLN p.49

**TOOLHOLDER LIST LISTA NARZĘDZI**

**EXTERNAL C-SYSTEM  
ZEWNĘTRZNY C-SYSTEM**

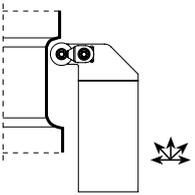
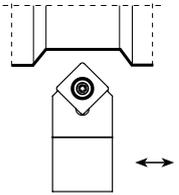
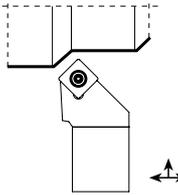
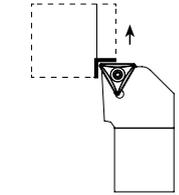
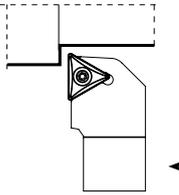
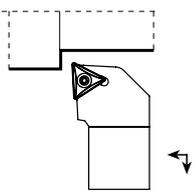
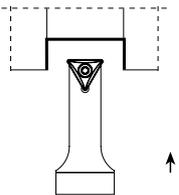
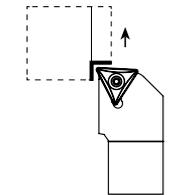
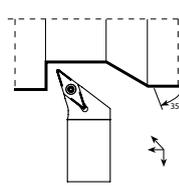
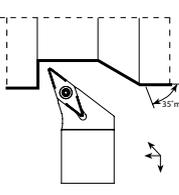
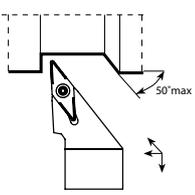
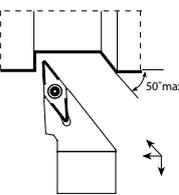
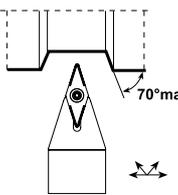
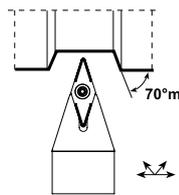
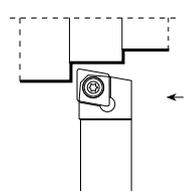
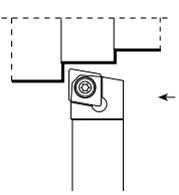
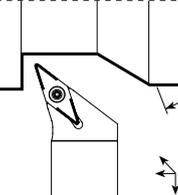
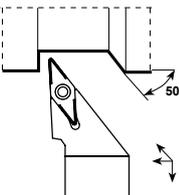
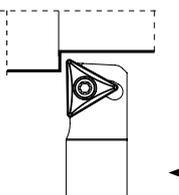
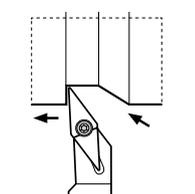
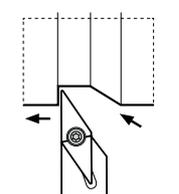
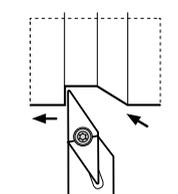
				
CKJN   p.50	CCLN   p.50	CDJN   p.50	CDNN   p.51	CRDCN   p.51
				
CRDCR/L   p.51	CSDN   p.52	CDKN   p.52	CSRN   p.52	CSSN   p.5
				
CTJN   p.53				

**EXTERNAL S-SYSTEM  
ZEWNĘTRZNY S-SYSTEM**

				
SCAC   p.54	SCLC   p.54	SCMC   p.55	SDHC   p.55	SDJC   p.56
				
SDNC   p.57	SRDCN   p.57	SRDCR/L   p.57	SRGC   p.58	SRHC   p.58

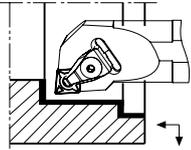
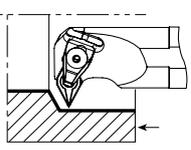
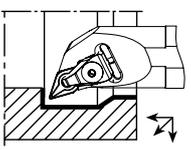
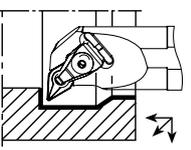
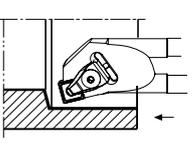
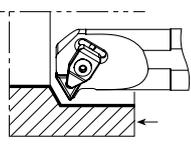
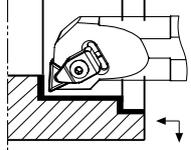
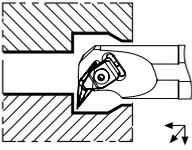
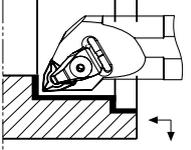
TOOLHOLDER LIST LISTA NARZĘDZI

**EXTERNAL S-SYSTEM**  
ZEWNĘTRZNY S-SYSTEM

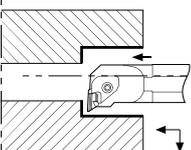
				
SRXC   p.59	SSDC   p.59	SSSC   p.59	STFC   p.60	STGC   p.60
				
STJC   p.61	STCC   p.61	STUC   p.61	SVHB   p.62	SVHC   p.62
				
SVJB   p.62	SVJC   p.63	SVVB   p.63	SVVC   p.64	
				
SCAC-S   p.64	SCLC-S   p.65	SDAC-S   p.65	SDJC-S   p.66	STGC-S   p.66
				
SVJB-S   p.67	SVAC-S   p.67	SVJC-S   p.67		

**TOOLHOLDER LIST LISTA NARZĘDZI**

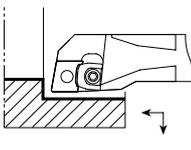
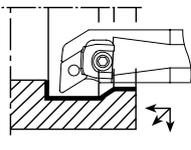
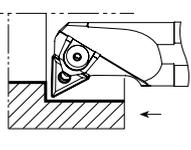
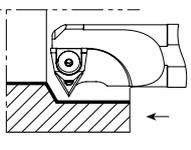
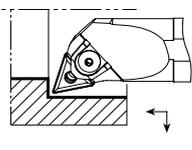
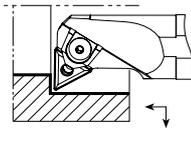
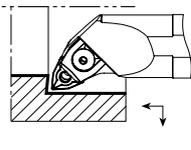
**INTERNAL T-SYSTEM**  
**WEWNĘTRZNY T-SYSTEM**

									
TCLN	p.68	TD-N	p.68	TDQN	p.68	TDUN	p.69	TSKN	p.69
									
TT-N	p.69	TTUN	p.70	TUVN	p.70	TWLN	p.70		

**INTERNAL C-SYSTEM**  
**WEWNĘTRZNY C-SYSTEM**

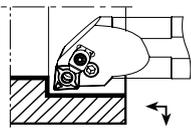
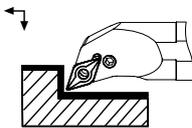
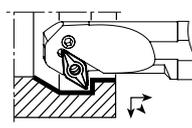
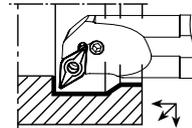
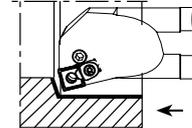
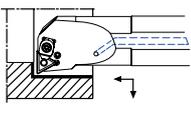
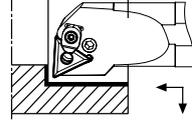
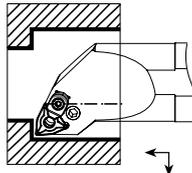
			
CKUN	p.71	CTFP	p.71

**INTERNAL M-SYSTEM**  
**WEWNĘTRZNY M-SYSTEM**

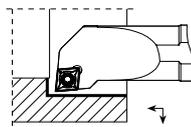
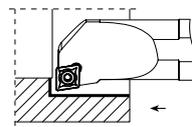
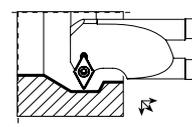
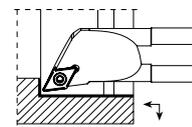
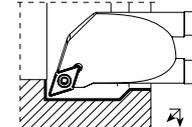
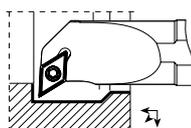
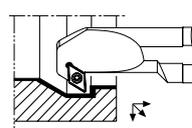
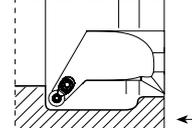
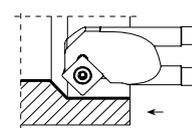
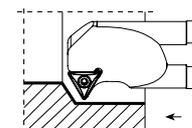
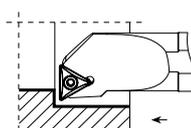
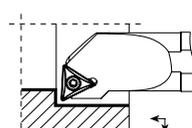
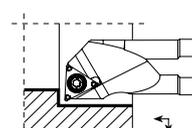
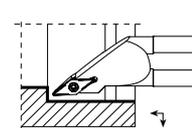
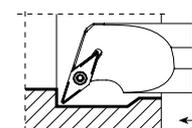
									
MCLN	p.72	MDUN	p.72	MTFN	p.72	MT-N	p.73	MTQN	p.73
									
MTUN	p.73	MWLN	p.74						

TOOLHOLDER LIST LISTA NARZĘDZI

**INTERNAL P-SYSTEM**  
WEWNĘTRZNY P-SYSTEM

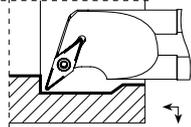
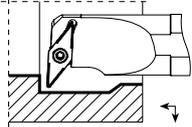
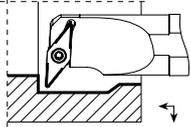
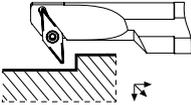
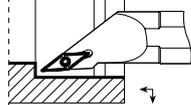
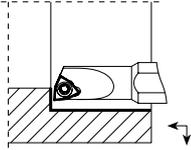
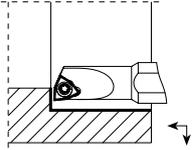
				
PCLN p.75	PDQN p.76	PDXN p.76	PDUN p.76	PSKN p.77
				
PTFN p.78	PTUN p.78	PWLN p.79		

**INTERNAL S-SYSTEM**  
WEWNĘTRZNY S-SYSTEM

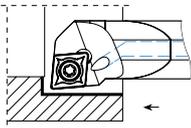
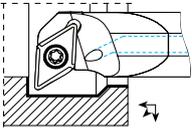
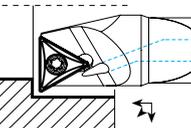
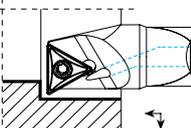
				
SCLC p.80	SCFC p.80	SD-C p.81	SDPC p.81	SDQC p.81
				
SDUC p.82	SDXC p.83	SRGC p.83	SSSC p.84	ST-C p.84
				
STFC p.85	STUC p.84	STUP p.85	SVJB p.86	SVQB p.86

**TOOLHOLDER LIST LISTA NARZĘDZI**

**INTERNAL S-SYSTEM**  
**WEWNĘTRZNY S-SYSTEM**

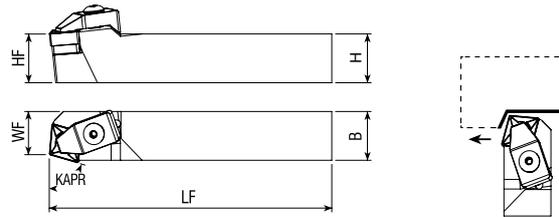
									
SVQC	p.87	SVUB	p.87	SVUC	p.87	SVXB	p.88	SVJC	p.88
									
SWLC	p.88	SWUB	p.89						

**INTERNAL S-SYSTEM WITH COOLING**  
**WEWNĘTRZNY T-SYSTEM Z CHŁODZENIEM**

							
SCLC	p.89	SDUC	p.89	STFC	p.90	STUP	p.90

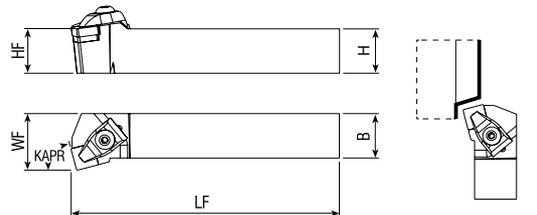
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**TCBN**



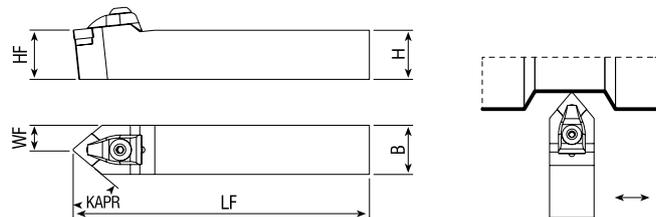
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TCBNR/L 2525 M16	25	25	150	22	CNM. 1606..	TTK04	TKV19M7x25	TTCN30002	TTV05M6x15	TS02	TBPL02	TTL054

**TCKN**



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TCKNR/L 2020 K12	20	20	125	25	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCKNR/L 2525 M12	25	25	150	32	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCKNR/L 3232 P12	32	32	170	40	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCKNR/L 2525 M16	25	25	150	32	CNM. 1606..	TTK04	TKV19M7x25	TTCN30002	TTV05M6x15	TS02	TBPL02	TTL054
TCKNR/L 3232 P16	32	32	170	40	CNM. 1606..	TTK04	TKV19M7x25	TTCN30002	TTV05M6x15	TS02	TBPL02	TTL054
TCKNR/L 2020 K12H	20	20	125	25	CNM. 1204..	ATKH-01-R ATKH-02-L	AKV-33-M6x22	AACN-3-0001	AAV-13-M5x8	AXR-01		AAL-03-3
TCKNR/L 2525 M12H	25	25	150	32	CNM. 1204..	ATKH-01-R ATKH-02-L	AKV-33-M6x22	AACN-3-0001	AAV-13-M5x8	AXR-01		AAL-03-3
TCKNR/L 3232 P12H	32	32	170	40	CNM. 1204..	ATKH-01-R ATKH-02-L	AKV-33-M6x22	AACN-3-0001	AAV-13-M5x8	AXR-01		AAL-03-3

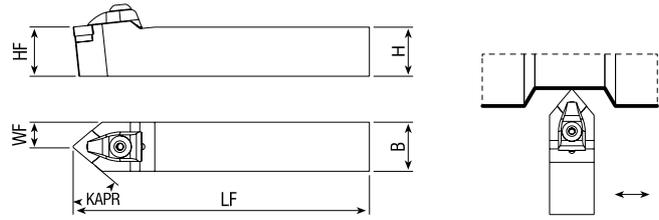
**TCLN**



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TCLNR/L 2020 K12	20	20	125	25	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCLNR/L 2525 M12	25	25	150	32	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCLNR/L 3232 P12	32	32	170	40	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCLNR/L 4040 S12	40	40	250	50	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCLNR/L 5050 S12	50	50	250	63	CNM. 1204..	TTK02	TKV30M6x22	TTCN30001	TTV02M5x12	TS01	TBPL01	TTL033
TCLNR/L 2525 M16	25	25	150	32	CNM. 1606..	TTK04	TKV19M7x25	TTCN30002	TTV05M6x15	TS02	TBPL02	TTL054
TCLNR/L 3232 P16	32	32	170	40	CNM. 1606..	TTK04	TKV19M7x25	TTCN30002	TTV05M6x15	TS02	TBPL02	TTL054

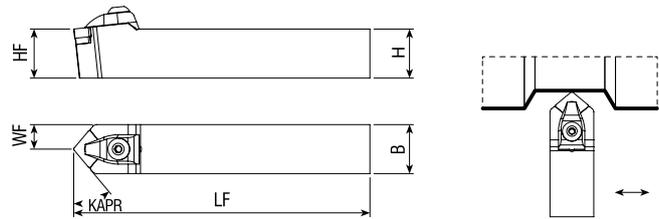
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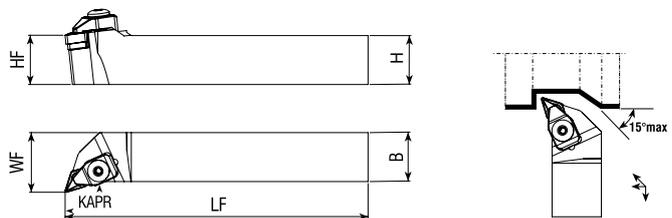
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE	CLAMP	SHIM	SHIM	RING	STAMP	ALLEN
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						ZACISK	SŁUBA	PODKŁADKA	SŁUBA			KLUCZ
						KLINOWY	ZACISKU		PODKŁADKI			IMBUSOWY
TCMNN 1616 H12	16	16	100	8	CNM. 1204..							
TCMNN 2020 K12	20	20	125	10	CNM. 1204..							
TCMNN 2525 M12	25	25	150	12,5	CNM. 1204..							
TCMNN 3232 P12	32	32	170	16	CNM. 1204..							
TCMNN 2525 M16	25	25	150	12,5	CNM. 1204..							
TCMNN 3232 P16	32	32	170	16	CNM. 1606..							
TCMNN 4040 S16	40	40	250	20	CNM. 1606..							

# TCZN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE	CLAMP	SHIM	SHIM	RING	STAMP	ALLEN
						CLAMP	SREW	PODKŁADKA	SREW	PIERSCIEN	PODKŁADKA	KEY
						ZACISK	SŁUBA	PODKŁADKA	SŁUBA			KLUCZ
						KLINOWY	ZACISKU		PODKŁADKI			IMBUSOWY
TCZNN 2020 K12	20	20	125	10	CNM. 1204..							
TCZNN 2525 M12	25	25	150	12,5	CNM. 1204..							
TCZNN 3232 P12	32	32	170	16	CNM. 1204..							
TCZNN 2525 M16	25	25	150	12,5	CNM. 1606..							
TCZNN 3232 P16	32	32	170	16	CNM. 1606..							

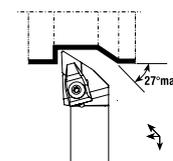
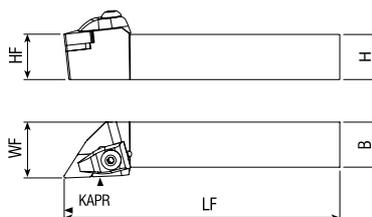
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE	CLAMP	SHIM	SHIM	RING	STAMP	ALLEN
						CLAMP	SREW	PODKŁADKA	SREW	PIERSCIEN	PODKŁADKA	KEY
						ZACISK	SŁUBA	PODKŁADKA	SŁUBA			KLUCZ
						KLINOWY	ZACISKU		PODKŁADKI			IMBUSOWY
TDHNR/L 2525 M11	25	25	150	31	DNM. 1104..					-		
TDHNR/L 2020 K15	20	20	125	25	DNM. 1104..					-		
TDHNR/L 2525 M15	25	25	150	32	DNM. 1506..							
TDHNR/L 3232 P15	32	32	170	40	DNM. 1506..							

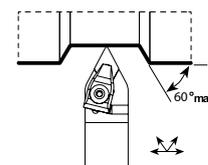
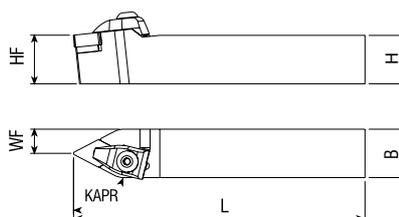
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

**TDJN**



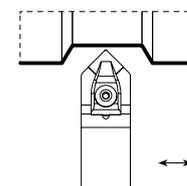
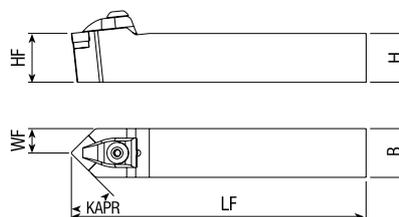
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TDJNR/L 1616 H11	16	16	100	20	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	TS01	TBPL01	TTL033
TDJNR/L 2020 K11	20	20	125	25	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	TS01	TBPL01	TTL033
TDJNR/L 2525 M11	25	25	150	32	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	TS01	TBPL01	TTL033
TDJNR/L 2020 K15	20	20	125	25	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 2525 M15	25	25	150	32	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 3232 P15	32	32	170	40	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 4040 S15	40	40	250	50	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 5050 S15	50	50	250	63	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 2020 K1504	20	20	125	25	DNM. 1504..	TTK02	TKV30M6x22	TTDN20003	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 2525 M1504	25	25	150	32	DNM. 1504..	TTK02	TKV30M6x22	TTDN20003	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 3232 P1504	32	32	170	40	DNM. 1504..	TTK02	TKV30M6x22	TTDN20003	TTV02M5x12	TS01	TBPL01	TTL033
TDJNR/L 4040 S1504	40	40	250	50	DNM. 1504..	TTK02	TKV30M6x22	TTDN20003	TTV02M5x12	TS01	TBPL01	TTL033

**TDNN**



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TDNNN 1616 H11	16	16	100	8	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	-	TBPL01	TTL033
TDNNN 2020 K11	20	20	125	10	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	-	TBPL01	TTL033
TDNNN 2525M11	25	25	150	12,5	DNM. 1104..	TTK01	TKV01M5x22	TTDN20001	TTV04M5x12	-	TBPL01	TTL033
TDNNN 2020 K15	20	20	125	10	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDNNN 2525M15	25	25	150	12,5	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDNNN 3232 P15	32	32	170	16	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDNNN 4040 S15	40	40	250	20	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
TDNNN 5050 S15	50	50	250	25	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033

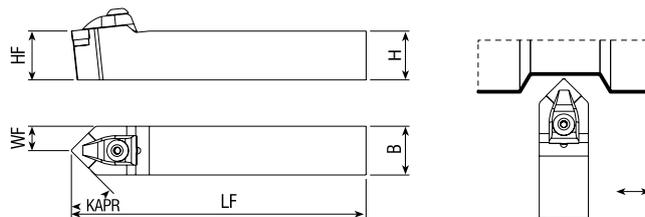
**TSSN**



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TSSNR/L 2020 K12	20	20	125	25	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSSNR/L 2525M12	25	25	150	32	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSSNR/L 3232 P12	32	32	170	40	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSSNR/L 2525 M15	25	25	150	32	SNM 1506	TTK04	TKV19M7x25	TTSN30023	TTV05M6X15	TS02	TRPL 02	TTI 054
TSSNR/L 3232 P15	32	32	170	40	SNM 1506	TTK04	TKV19M7x25	TTSN30023	TTV05M6X15	TS02	TRPL 02	TTI 054

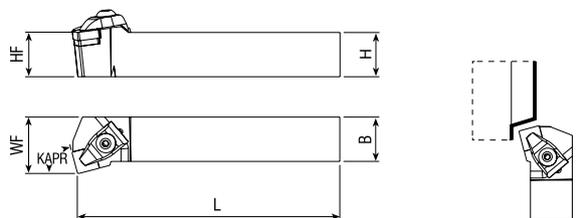
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

# TSDN



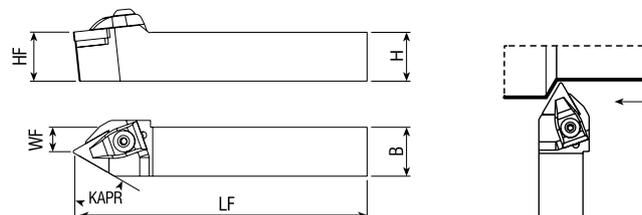
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TSDNN 1616 H12	16	16	100	8	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSDNN 2020 K12	20	20	125	10	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSDNN 2525M12	25	25	150	12,5	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSDNN 3232 P12	32	32	170	16	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSDNN 2525M15	25	25	150	12,5	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TBPL02	TTL054
TSDNN 3232 P15	32	32	170	16	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TBPL02	TTL054
TSDNN 4040 S15	40	40	250	20	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TBPL02	TTL054

# TSKN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TSKNR/L 2020 K12	20	20	125	25	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 2525 M12	25	25	150	32	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 3232 P12	32	32	170	40	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 3232 P15	32	32	170	40	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TBPL02	TTL054
TSKNR/L 2020 K12	20	20	125	25	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 2525 M12	25	25	150	32	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 3232 P12	32	32	170	40	SNM. 1204..	TTK02	TKV30M6x22	TTSN30004	TTV02M5x12	TS01	TBPL01	TTL033
TSKNR/L 2525 M15	25	25	150	32	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TRPL 02	TTI 054
TSKNR/L 3232 P15	32	32	170	40	SNM. 1506..	TTK04	TKV19M7x25	TTSN30023	TTV05M6x15	TS02	TRPL 02	TTI 054

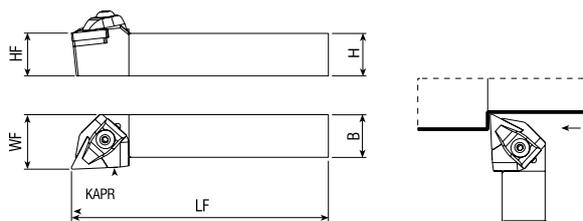
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TTENN 2020 K16	20	20	125	10	TNM. 1604..	TTK01	TKV01M5x22	TTTN20002	TTV03M5x12	-	TRPL01	TTL033
TTENN 2525 M16	25	25	150	12,5	TNM. 1604..	TTK01	TKV01M5x22	TTTN20002	TTV03M5x12	-	TRPL01	TTL033
TTENN 3232 P16	32	32	170	16	TNM. 1604..	TTK01	TKV01M5x22	TTTN20002	TTV03M5x12	-	TRPL01	TTL033
TTENN 2525 M22	25	25	150	12,5	TNM. 2204..	TTK02	TKV30M6x22	TTTN30015	TTV02M5x12	TS01	TRPL01	TTL033
TTENN 3232 P22	32	32	170	16	TNM. 2204..	TTK02	TKV30M6x22	TTTN30015	TTV02M5x12	TS01	TRPL01	TTL033
TTENN 4040 S22	40	40	250	20	TNM. 2204..	TTK02	TKV30M6x22	TTTN30015	TTV02M5x12	TS01	TRPL01	TTL033

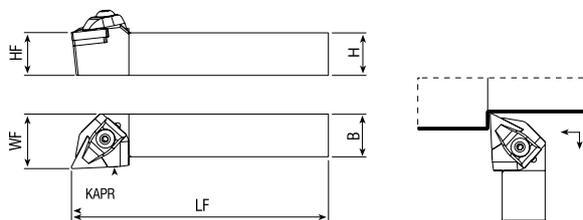
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TTGN



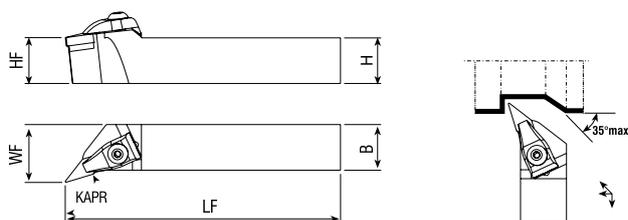
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE	CLAMP	SHIM	SHIM	RING	STAMP	ALLEN
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						ZACISK	SRUBA	PODKŁADKA	SRUBA			IMBUSOWY
						KLINOWY	ZACISKU		PODKŁADKI			
TTGNR/L 2020 K16	20	20	125	25	TNM. 1604..							
TTGNR/L 2525 M16	25	25	150	32	TNM. 1604..							
TTGNR/L 3232 P16	32	32	170	40	TNM. 1604..							
TTGNR/L 2525 M22	25	25	150	32	TNM. 2204..							
TTGNR/L 3232 P22	32	32	170	40	TNM. 2204..							
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TTJN

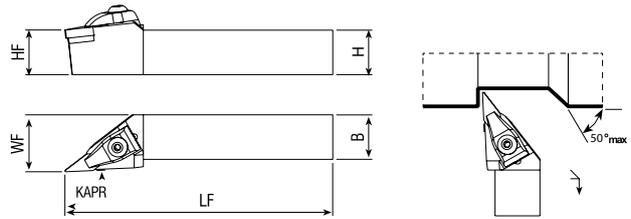


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE	CLAMP	SHIM	SHIM	RING	STAMP	ALLEN
						CLAMP	SCREW	PODKŁADKA	SCREW	PIERSIEŃ	PODKŁADKA	KEY
						ZACISK	SRUBA	PODKŁADKA	SRUBA			IMBUSOWY
						KLINOWY	ZACISKU		PODKŁADKI			
TTJNR/L 2020 K16	20	20	125	25	TNM. 1604..							
TTJNR/L 2525 M16	25	25	150	32	TNM. 1604..							
TTJNR/L 3232 P16	32	32	170	40	TNM. 1604..							
TTJNR/L 2525 M22	25	25	150	32	TNM. 2204..							
TTJNR/L 3232 P22	32	32	170	40	TNM. 2204..							
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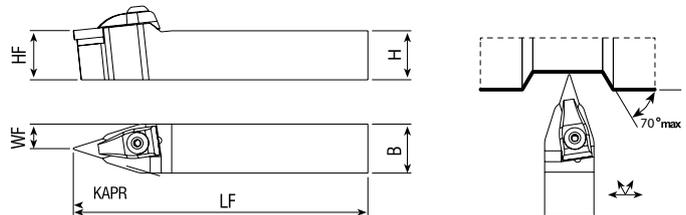
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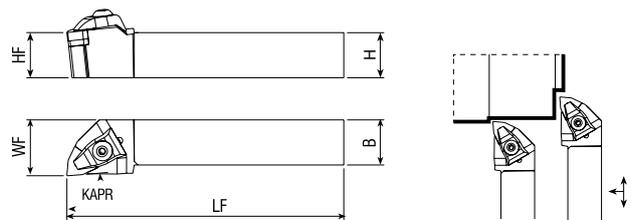
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						CLAMP	SCREW	PODKŁADKA	SCREW	PIERSIEŃ	PODKŁADKA	KEY
						ZACISK	SRUBA	PODKŁADKA	SRUBA			IMBUSOWY
						KLINOWY	ZACISKU		PODKŁADKI			
TVHNR/L 2020 K16	20	20	125	25	VNM. 1604..							
TVHNR/L 2525 M16	25	25	150	32	VNM. 1604..							
TVHNR/L 3232 P16	32	32	170	40	VNM. 1604..							

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**TVJN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TVJNR/L 2020 K16	20	20	125	25	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033
TVJNR/L 2525 M16	25	25	150	32	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033
TVJNR/L 3232 P16	32	32	170	40	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033

**TVVN**


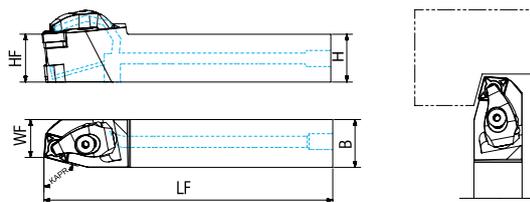
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TVVNN 2020 K16	20	20	125	10	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033
TVVNN 2525 M16	25	25	150	12.5	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033
TVVNN 3232 P16	32	32	170	16	VNM. 1604..	TTK03	TKV30M6x22	TTVN20002	TTV04M5x12	TS01	TBPL01	TTL033

**TWLN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TWLNLR/L 1616 H06	16	16	100	20	WNM. 0604..	TTK01	TKV01M5x22	TTWNSW317	TTV01M3x10	-	TBPL01	TTL033
TWLNLR/L 2020 K06	20	20	125	25	WNM. 0604..	TTK01	TKV01M5x22	TTWNSW317	TTV01M3x10	-	TBPL01	TTL033
TWLNLR/L 2525 M06	25	25	150	32	WNM. 0604..	TTK01	TKV01M5x22	TTWNSW317	TTV01M3x10	-	TBPL01	TTL033
TWLNLR/L 2020 K08	20	20	125	25	WNM. 0804..	TTK02	TKV30M6x22	TTWN30001	TTV02M5x12	TS01	TBPL01	TTL033
TWLNLR/L 2525 M08	25	25	150	32	WNM. 0804..	TTK02	TKV30M6x22	TTWN30001	TTV02M5x12	TS01	TBPL01	TTL033
TWLNLR/L 3232 P08	32	32	170	40	WNM. 0804..	TTK02	TKV30M6x22	TTWN30001	TTV02M5x12	TS01	TBPL01	TTL033
TWLNLR/L 4040 S08	40	40	250	50	WNM. 0804..	TTK02	TKV30M6x22	TTWN30001	TTV02M5x12	TS01	TBPL01	TTL033
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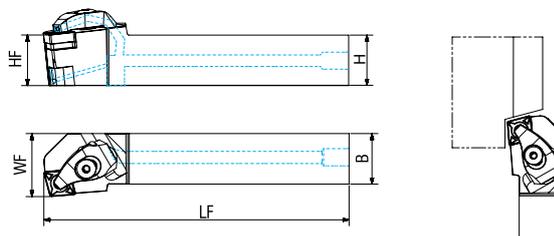
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**TCBN**



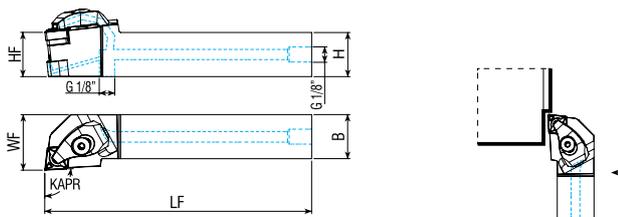
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TCBNR/L 2020 K12H	20	20	125	16	CNM. 1204..	TCCK01RTCK02L	TKV33M6x22	TTCN30001	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55
TCBNR/L 2525 M12H	25	25	150	20	CNM. 1204..	TCCK01RTCK02L	TKV33M6x22	TTCN30001	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55
TCBNR/L 3232 P12H	32	32	170	25	CNM. 1204..	TTK04	TKV33M6x22	TTCN30001	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55

**TCKN**



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERŚCIEŃ	ALLEN KEY KLUCZ IMBUSOWY	SPRING SPRĘŻYNA	THREADED PIN
TCKNR/L 2020 K12H	20	20	125	25	CNM. 1204..	TTKH01R TKH02L	TKV33M6x22	TTCN30001	TTV13M5x8	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55
TCKNR/L 2525 M12H	25	25	150	32	CNM. 1204..	TTKH01R TKH02L	TKV33M6x22	TTCN30001	TTV13M5x8	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55
TCKNR/L 3232 P12H	32	32	170	40	CNM. 1204..	TTKH01R TKH02L	TKV33M6x22	TTCN30001	TTV13M5x8	TXR01	KLERS25STWLNRO6	TKY01	2705G18x55

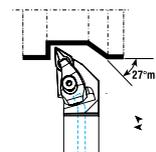
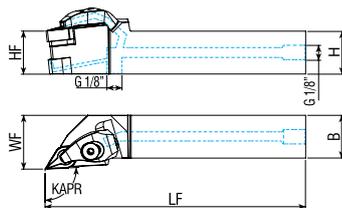
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	SPRING SPRĘŻYNA	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TCLNR/L 2020 K12H	20	20	125	25	CNM. 1204..	TTKH01R TTKH02L	TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033
TCLNR/L 2525 M12H	25	25	150	32	CNM. 1204..		TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033
TCLNR/L 3232 P12H	32	32	170	40	CNM. 1204..		TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033

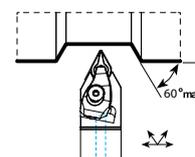
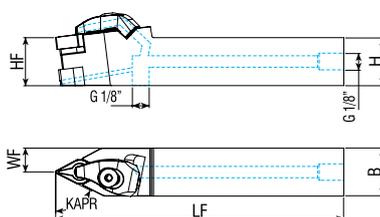
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# TDJN



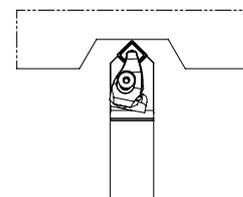
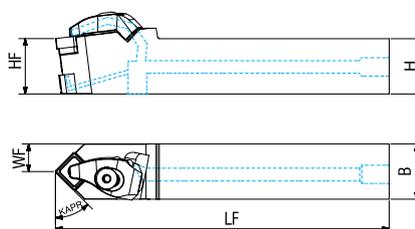
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TDJNR/L 2020 K15H	20	20	125	25	DNM. 1506..		TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033
TDJNR/L 2525 M15H	25	25	150	32	DNM. 1506..		TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033
TDJNR/L 3232 P15H	32	32	170	40	DNM. 1506..		TKV33M6x22	TTCN30001	TTV02M5x12	TKY01	TXRU1	27U5G1/8x5.5	TTL033

# TDNN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TDNN 2525 M15H	25	25	150	32	DNM. 1506..		TKV33M6x22	TTDN30001	TTV02M5x12	TKY01	TXR01	2705G1/8x5.5	TTL033

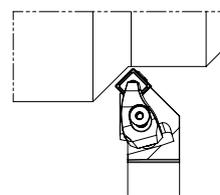
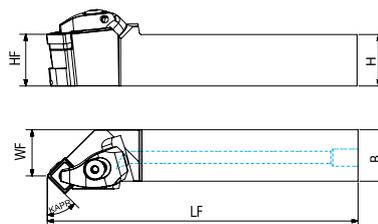
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TSDNN 2525 M12H	25	25	150	25	SNM. 1204..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	TKY01	2705G1/8x5.5
TSDNN 3232 P12H	32	32	170	16	SNM. 1204..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	TKY01	2705G1/8x5.5
TSDNN 2525 M15H	25	25	150	12,7	SNM. 1506..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	TKY01	2705G1/8x5.5
TSDNN 3232 P15H	32	32	170	16	SNM. 1506..		TKV39M7x21	TTSN30023	TTV05M6x10	TXR01	TKY01	2705G1/8x5.5
TSDNN 4040 S15H	40	40	250	20	SNM. 1506..		TKV39M7x21	TTSN30023	TTV05M6x10	TXR01	TKY01	2705G1/8x5.5

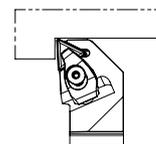
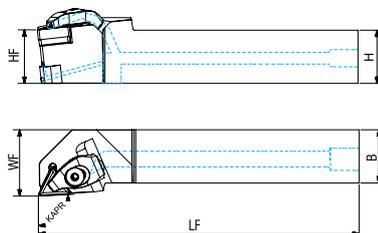
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

TSSN



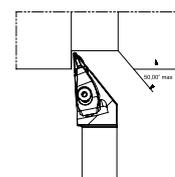
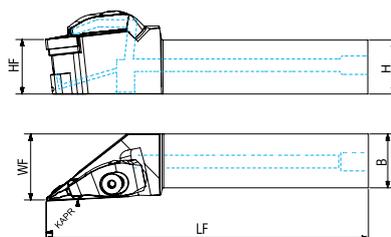
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TSSNR/L 2525 M12H	25	25	150	32	SNM. 1204..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55
TSSNR/L 3232 P12H	32	32	170	32	SNM. 1204..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55
TSSNR/L 2525 M15H	25	25	150	40	SNM. 1506..		TKV33M6x22	TTSN30004	TTV02M5x12	TXR01	TTL054mm	TKY01	2705G1/8x55
TSSNR/L 3232 P15H	32	32	170	40	SNM. 1506..		TKV39M7x21	TTSN30023	TTV05M6x10	TXR01	TTL054mm	TKY01	2705G1/8x55
TSSNR/L 4040 S15H	40	40	250	50	SNM. 1506..		TKV39M7x21	TTSN30023	TTV05M6x10	TXR01	TTL054mm	TKY01	2705G1/8x55

TTJN

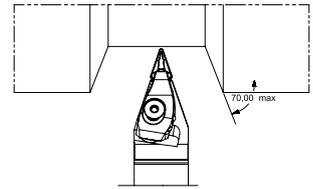
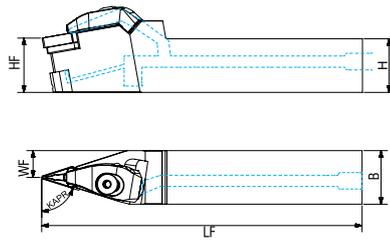


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERSCIENI	ALLEN KEY KLUCZ IMBUSOWY	SPRING SPRĘŻYNA	THREADED PIN
TTJNR/L 2525 M16H	25	25	150	32	TNM.1604		TKV37M5x18	TTTN2000	TTV03M5x12	TXR02	TTL0225mm	TKY02	2705G1/8x55
TTJNR/L 3232 P16H	32	32	170	32	TNM.1604		TKV37M5x18	TTTN2000	TTV03M5x12	TXR02	TTL0225mm	TKY02	2705G1/8x55
TTJNR/L 2525 M22H	25	25	150	40	TNM.2204		TKV33M6x22	TTTN30015	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55
TTJNR/L 3232 P22H	32	32	170	40	TNM.2204		TKV33M6x22	TTTN30015	TTV02M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55

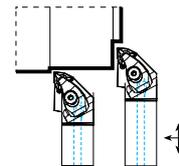
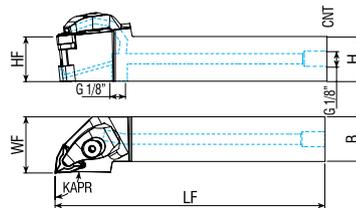
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERSCIENI	ALLEN KEY KLUCZ IMBUSOWY	SPRING SPRĘŻYNA	THREADED PIN
TVJNR/L 2020 K16-H	20	20	125	25	VNM. 1604..		TKV33M6x22	TTVN20002	TTV04M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55
TVJNR/L 2525M16-H	25	25	150	32	VNM. 1604..		TKV33M6x22	TTVN20002	TTV04M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55
TVJNR/L 3232 P16-H	32	32	170	40	VNM. 1604..		TKV33M6x22	TTVN20002	TTV04M5x12	TXR01	KLERS25STWLNRO6	TKY01	2705G1/8x55

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
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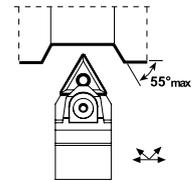
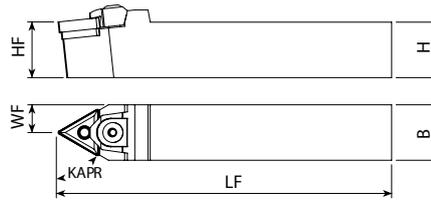
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TVVNN 2020 K16-H	20	20	125	10	VNM. 1604..	TTKH08R TTKH06L	TKV33M6x22	TTVN20002	TTV04M5x12	TXR01	KLERSZ25STWLN06	TKY01	2705G1/8x55
TVVNN 2525M16-H	25	25	150	12.5	VNM. 1604..	TTKH08R TTKH06L	TKV33M6x22	TTVN20002	TTV04M5x12	TXR01	KLERSZ25STWLN06	TKY01	2705G1/8x55

**TWLN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
TWLNLR/L 2020 K08H	20	20	125	25	WNM. 0804..	TTKH01R TTKH02L	TKV33M6x22	TTWN30001	TTV02M5x12	TKY01	TXR01	2705G1/8x5.5	TTL033
TWLNLR/L 2525 M08H	25	25	150	32	WNM. 0804..		TKV33M6x22	TTWN30001	TTV02M5x12	TKY01	TXR01	2705G1/8x5.5	TTL033
TWLNLR/L 3232 P08H	32	32	170	40	WNM. 0804..		TKV33M6x22	TTWN30001	TTV02M5x12	TKY01	TXR01	2705G1/8x5.5	TTL033

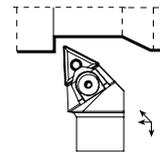
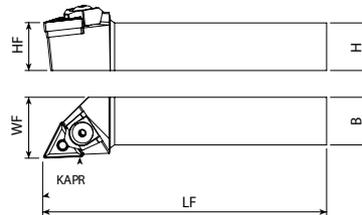
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MTEN



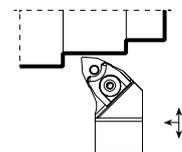
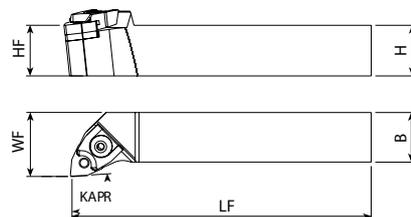
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MTENN 2020 K16	20	20	125	10	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTENN 2525 M16	25	25	150	12.5	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTENN 3232 P16	32	32	170	16	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTENN 2525 M22	25	25	150	12.5	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
MTENN 3232 P22	32	32	170	16	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
MTENN 4040 S22	40	40	250	20	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033

MTJN

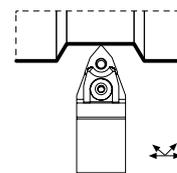
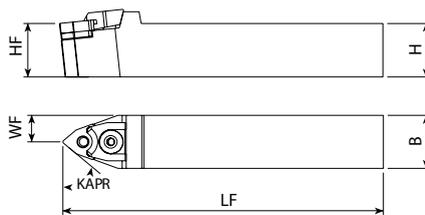


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
MTJNR/L 2020 K16	20	20	125	25	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTJNR/L 2525 M16	25	25	150	32	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTJNR/L 3232 P16	32	32	170	40	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
MTJNR/L 2525 M22	25	25	150	32	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
MTJNR/L 3232 P22	32	32	170	40	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
MTJNR/L 4040 S22	40	40	250	50	TNM. 2204..	TMK08	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033

MWLN



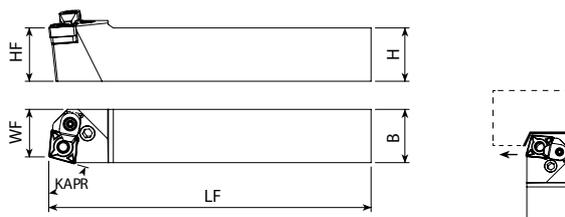
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
MWLNLR/L 1616 H06	16	16	100	20	WNM. 0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL03
MWLNLR/L 2020 K06	20	20	125	25	WNM. 0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL03
MWLNLR/L 2525 M06	25	25	150	32	WNM. 0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL03
MWLNLR/L 2020 K08	20	20	125	25	WNM. 0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL03
MWLNLR/L 2525 M08	25	25	150	32	WNM. 0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL03
MWLNLR/L 3232 P08	32	32	170	40	WNM. 0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL03

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**MWMN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
MWMNN 1616 H06	16	16	100	8	WNM.0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL033
MWMNN 2020 K06	20	20	125	10	WNM.0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL033
MWMNN 2525 M06	25	25	150	12.5	WNM.0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL033
MWMNN 2020 K08	20	20	125	10	WNM.0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL033
MWMNN 2525 M08	25	25	150	12.5	WNM.0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL033
MWMNN 3232 P08	32	32	170	16	WNM.0804..	TMK05	TKV03M6x22	TTWN30001	TPM02	TS01	TBPL01	TTL033

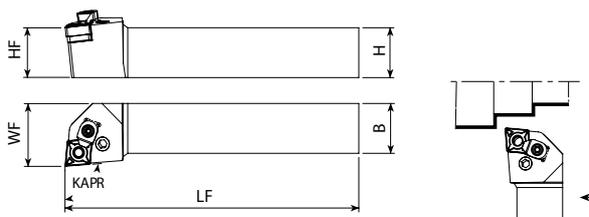
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

PCBN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPREŻYNA PODKŁADKI	ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
PCBNR/L 2020 K12C	20	20	125	17.5	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
PCBNR/L 2525 M12C	25	25	150	22.5	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
PCBNR/L 3232 P12C	32	32	170	29.5	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
PCBNR/L 2525 M16C	25	25	150	22	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
PCBNR/L 3232 P16C	32	32	170	27	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
PCBNR/L 3232 P19C	32	32	170	27	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCBNR/L 4040 S19C	40	40	250	37	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCBNR/L 4040 S25C	40	40	250	37	CNM. 2509..	TPL06	TLV06M12x36	TTCN30008	TTY05	TCK04	TKV16M6x16	TTL075
PCBNR/L 5050 S25C	50	50	250	47	CNM. 2509..	TPL06	TLV06M12x36	TTCN30008	TTY05	TCK04	TKV16M6x16	TTL075

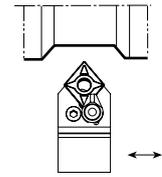
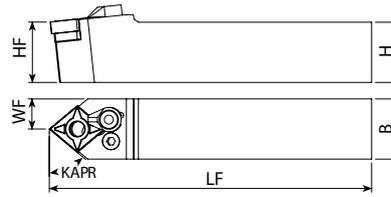
PCLN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPREŻYNA PODKŁADKI	ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
PCLNR/L 1616 H09	16	16	100	20	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
PCLNR/L 2020 K09	20	20	125	25	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
PCLNR/L 2525 M09	25	25	150	32	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
PCLNR/L 1616 H12	16	16	100	20	CNM 1204	TPL02	TLV03M8x19	TTCN30001	TTY02	-	-	TTL033
PCLNR/L 2020 K12C	20	20	125	25	CNM 1204	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCLNR/L 2525 M12C	25	25	150	32	CNM 1204	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCLNR/L 3232 P12C	32	32	170	40	CNM 1204	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCLNR/L 2525 M16C	25	25	150	32	CNM. 1606..	TPL04	TLVU4M8X22	TTCN3UUU2	TTY03	TCK09	TTV05M6x15	TTL033
PCLNR/L 3232 P16C	32	32	170	40	CNM. 1606..	TPL04	TLVU4M8X22	TTCN3UUU2	TTY03	TCK09	TTV05M6x15	TTL033
PCLNR/L 2525 M19C	25	25	150	32	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCLNR/L 3232 P19C	32	32	170	40	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCLNR/L 4040 S19C	40	40	250	50	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCLNR/L 4040 S25C	40	40	250	50	CNM. 2509..	TPL06	TLV06M12X36	TTCN30008	TTY05	TCK04	TKV16M6X16	TTL075
PCLNR/L 5050 S25C	50	50	250	60	CNM. 2509..	TPL06	TLV06M12X36	TTCN30008	TTY05	TCK04	TKV16M6X16	TTL075

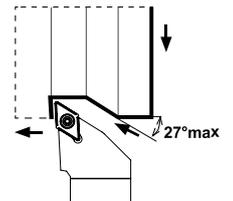
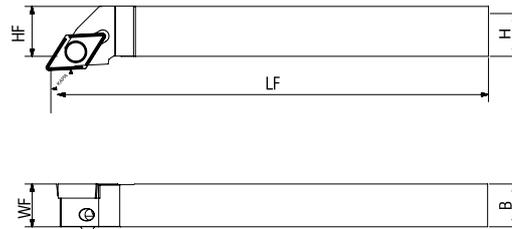
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

# PCMN



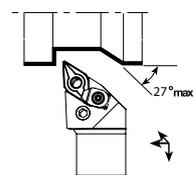
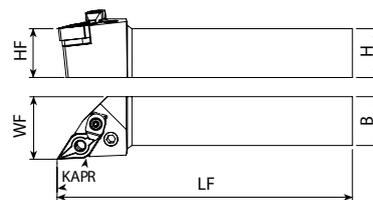
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
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PCMNN 2020 K12C	20	20	125	10	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCMNN 2525 M12C	25	25	150	12.5	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCMNN 3232 P12C	32	32	170	16	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4X11	TTL033
PCMNN 2525 M16C	25	25	150	12.5	CNM. 1606..	TPL04	TLVU4M8X22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
PCMNN 3232 P16C	32	32	170	16	CNM. 1606..	TPL04	TLVU4M8X22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
PCMNN 3232 P19C	32	32	170	16	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCMNN 4040 S19C	40	40	250	20	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCMNN 5050 S19C	50	50	250	25	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
PCMNN 4040 S25C	40	40	250	20	CNM. 2509..	TPL06	TLV06M12X36	TTCN30008	TTY05	TCK04	TKV16M6X16	TTL075

# PDJC



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SŁUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SŁUBA ZACISKU	KLUCZ IMBUSOWY
PDJCR/L 1010 K11-S	10	10	125	10	DC.T 11T3	TPL14	2802M4X8					TTL0102
PDJCR/L 1212 K11-S	12	12	125	12	DC.T 11T3	TPL14	2802M4X8					TTL0102
PDJCR/L 1616 K11-S	16	16	125	16	DC.T 11T3	TPL15	2802M4X8					TTL0102

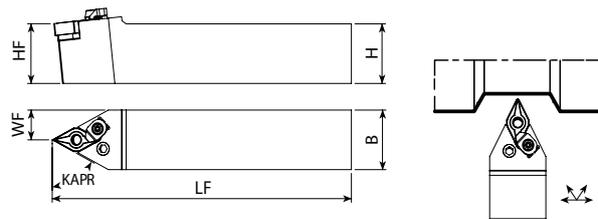
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SŁUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SŁUBA ZACISKU	KLUCZ IMBUSOWY
PDJNR/L 1616 H11	16	16	100	20	DNM. 1104..	TPL01	TLV02M6x17	TTDN20002	TTY01	-	-	TTL022.5
PDJNR/L 2020 K11	20	20	125	25	DNM. 1104..	TPL01	TLV02M6x17	TTDN20002	TTY01	-	-	TTL022.5
PDJNR/L 2525 M11	25	25	150	32	DNM. 1104..	TPL01	TLV02M6x17	TTDN20002	TTY01	-	-	TTL022.5
PDJNR/L 2020 K15C	20	20	125	25	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK04	4015M4X11	TTL033
PDJNR/L 2525 M15C	25	25	150	32	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK05	4015M4X11	TTL033
PDJNR/L 3232 P15C	32	32	170	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK05	4015M4X11	TTL033
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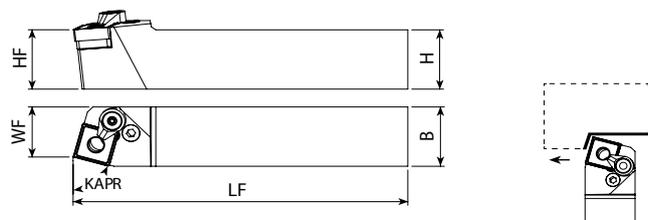
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

PDNN

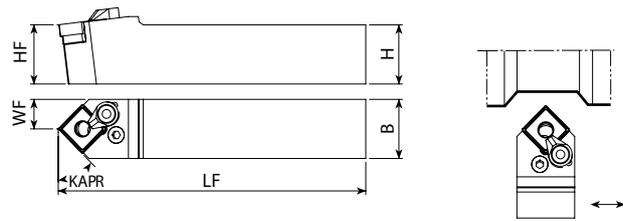


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW ŚRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
PDNNN 1616 H11	16	16	100	8	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	-	-	TTL022.5
PDNNN 2020 K11	20	20	125	10	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	-	-	TTL022.5
PDNNN 2525 M11	25	25	150	12.5	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	-	-	TTL022.5
PDNNN 2020 K15C	20	20	125	10	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK05	4015M4x11	TTL033
PDNNN 2525 M15C	25	25	150	12.5	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK05	4015M4x11	TTL033
PDNNN 3232 P15C	32	32	170	16	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TCK05	4015M4x11	TTL033

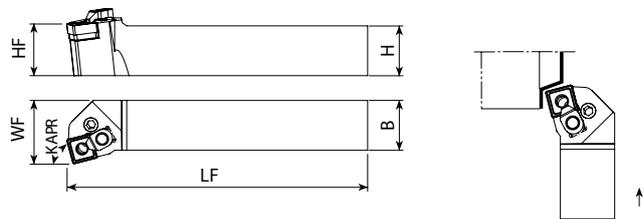
PSBN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW ŚRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
PSBNR/L 1616 H09	16	16	100	13	SNM. 0903	TPL01	TLV02M6x17	TTSN20002	TTY01	-	-	TTL022.5
PSBNR/L 2020 K09	20	20	125	17	SNM. 0903	TPL01	TLV02M6x17	TTSN20002	TTY01	-	-	TTL022.5
PSBNR/L 2020 K12	20	20	125	17	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	-	-	TTL033
PSBNR/L 2525 M12C	25	25	150	22	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4v11	TTL033
PSBNR/L 3232 P12C	32	32	170	27	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4v11	TTL033
PSBNR/L 2525 M15	25	25	150	22	SNM. 1506..	TPL04	TLV04M8V22	TTSN30023	TTY03	-	-	TTL033
PSBNR/L 3232 P15C	32	32	170	27	SNM. 1506..	TPL04	TLV04M8V22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
PSBNR/L 3232 P19C	32	32	170	27	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSBNR/L 4040 S19C	40	40	250	35	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSBNR/L 4040 S25C	40	40	250	35	SNM. 2509..	TPL06	TLV06MI2X36	TTSN30020	TTY05	TCK04	TKV06M6X16	TTL075
PSBNR/L 5050 S25C	50	50	250	43	SNM. 2509..	TPL06	TLV06MI2X36	TTSN30020	TTY05	TCK04	TKV06M6X16	TTL075

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**PSDN**


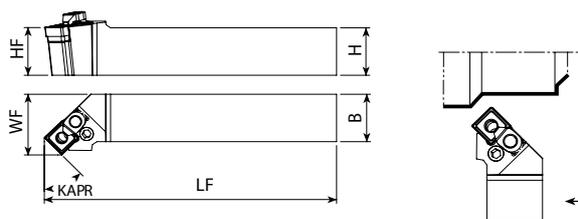
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	ŚRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	ZACISK KLINOWY	ŚRUBA ZACISKU	KLUCZ IMBUSOWY
PSDNN 1616 H09	16	16	100	8	SNM. 0903..	TPL01	TLV02M6x17	TTSN20002	TTY01	-	-	TTL022.5
PSDNN 2020 K12C	20	20	125	10	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSDNN 2525 M12C	25	25	150	12.5	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSDNN 3232 P12C	32	32	170	16	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSDNN 2020 K15	20	20	125	10	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	-	-	TTL033
PSDNN 2525 M15C	25	25	150	12.5	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
PSDNN 3232 P19C	32	32	170	16	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSDNN 4040 S19C	40	40	250	20	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSDNN 5050 S19C	50	50	250	25	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSDNN 4040 S25C	40	40	250	20	SNM. 2509..	TPL06	TLV06M12X36	TTSN30020	TTY05	TCK04	TKV16M6x16	TTL075
PSDNN 5050 S25C	50	50	250	25	SNM. 2509..	TPL06	TLV06M12X36	TTSN30020	TTY05	TCK04	TKV16M6x16	TTL075

**PSKN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	ŚRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	ZACISK KLINOWY	ŚRUBA ZACISKU	KLUCZ IMBUSOWY
PSKNR/L 2020 K09	20	20	125	25	SNM. 0903..	TPL01	TLV02M6x17	TTSN20002	TTY01	-	-	TTL022.5
PSKNR/L 2020 K12C	20	20	125	25	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSKNR/L 2525 M12C	25	25	150	32	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSKNR/L 3232 P12C	32	32	170	40	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
PSKNR/L 2525 M15C	25	25	150	32	SNM. 1506..	TPL04	TLV04M8X22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
PSKNR/L 3232 P15C	32	32	170	40	SNM. 1506..	TPL04	TLV04M8X22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
PSKNR/L 3232 P19C	32	32	170	40	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSKNR/L 4040 S19C	40	40	250	50	SNM. 1906..	TPL05	TLV05M10x27	TTSN30005	TTY04	TCK09	TTV05M6x15	TTL054
PSKNR/L 4040 S25C	40	40	250	50	SNM. 2509..	TPL06	TLV06M12X36	TTSN30020	TTY05	TCK04	TKV16M6x16	TTL075
PSKNR/L 5050 S25C	50	50	250	60	SNM. 2509..	TPL06	TLV06M12X36	TTSN30020	TTY05	TCK04	TKV16M6x16	TTL075

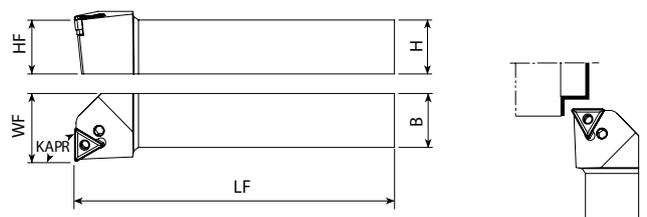
## INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

### PSSN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
PSSNR/L 1616 H09	16	16	100	20	SNM. 0903..					-	-	TTL022.5
PSSNR/L 2020 K09	20	20	125	25	SNM. 0903..					-	-	TTL022.5
PSSNR/L 2020 K12C	20	20	125	25	SNM. 1204..							TTL033
PSSNR/L 2525 M12C	25	25	150	32	SNM. 1204..							TTL033
PSSNR/L 3232 P12C	32	32	170	40	SNM. 1204..							TTL033
PSSNR/L 3232 P15C	32	32	170	40	SNM. 1506..							TTL033
PSSNR/L 3232 P19C	32	32	170	40	SNM. 1906..							TTL054
PSSNR/L 4040 S19C	40	40	250	50	SNM. 1906..							TTL054
PSSNR/L 4040 S25C	40	40	250	50	SNM. 2509..							TTL075

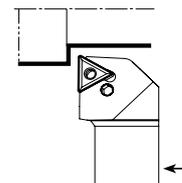
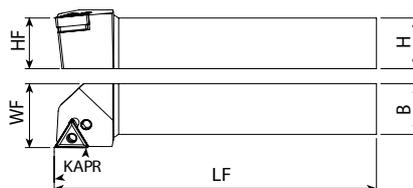
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
PTFNR/L 1616 H16	16	16	100	20	TNM. 1604..					-	-	TTL022.5
PTFNR/L 2020 K16	20	20	125	25	TNM. 1604..					-	-	TTL022.5
PTFNR/L 2525 M16	25	25	150	32	TNM. 1604..					-	-	TTL022.5
PTFNR/L 3232 P16	32	32	170	40	TNM. 1604..					-	-	TTL022.5
PTFNR/L 2525 M22C	25	25	150	32	TNM. 2204..							TTL033
PTFNR/L 3232 P22C	32	32	170	40	TNM. 2204..							TTL033
PTFNR/L 4040 S27C	40	40	250	50	TNM. 2706..							TTL054

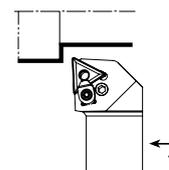
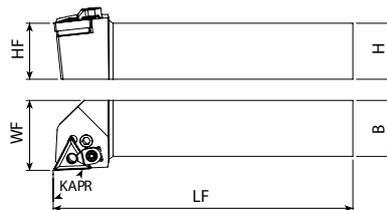
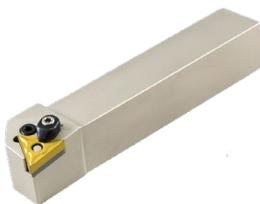
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

# PTGN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SŁUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SCREW SŁUBA ZACISKU	KEY KLUCZ IMBUSOWY
PTGNR/L 1010 E11	10	10	70	12	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTGNR/L 1212 F11	12	12	80	16	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTGNR/L 1616 H11	16	16	100	20	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTGNR/L 1616 H16	16	16	100	20	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTGNR/L 2020 K16	20	20	125	25	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTGNR/L 2525 M16	25	25	150	32	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTGNR/L 3232 P16	32	32	170	40	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTGNR/L 2525 M22C	25	25	150	32	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033
PTGNR/L 3232 P22C	32	32	170	40	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033
PTGNR/L 4040 S27C	40	40	250	50	TNM. 2706..	TPL05	TLV05M10x27	7042701	TTY04	TCK09	TTV05M6x15	TTL054

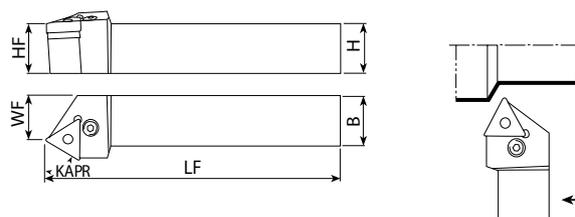
# PTJN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
						DŹWIGNIA	SŁUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SCREW SŁUBA ZACISKU	KEY KLUCZ IMBUSOWY
PTJNR/L 1010 E11	10	10	70	12	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTJNR/L 1212 F11	12	12	80	16	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTJNR/L 1616 H11	16	16	100	20	TNM. 1103..	TPL11	TLV10M5X10	-	-	-	-	TTL132.5
PTJNR/L 1616 H16	16	16	100	20	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTJNR/L 2020 K16	20	20	125	25	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTJNR/L 2525 M16	25	25	150	32	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTJNR/L 3232 P16	32	32	170	40	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTJNR/L 2525 M22C	25	25	150	32	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033
PTJNR/L 3232 P22C	32	32	170	40	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033
PTJNR/L 4040 S27C	40	40	250	50	TNM. 2706..	TPL05	TLV05M10x27	7042701	TTY04	TCK09	TTV05M6x15	TTL054

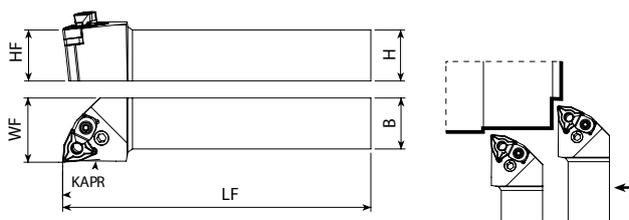
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

PTTN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPREŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
PTTNR/L 1616 H16	16	16	100	13	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTTNR/L 2020 K16	20	20	125	17	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTTNR/L 2525 M16	25	25	150	21.5	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTTNR/L 3232 P16	32	32	170	31	TNM. 1604..	TPL01	TLV02M6x17	TTTN30025	TTY01	-	-	TTL022.5
PTTNR/L 2525 M22C	25	25	150	20.5	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033
PTTNR/L 3232 P22C	32	32	170	29	TNM. 2204..	TPL02	TLV03M8x19	TTTN30015	TTY02	TCK05	4015M4x11	TTL033

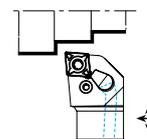
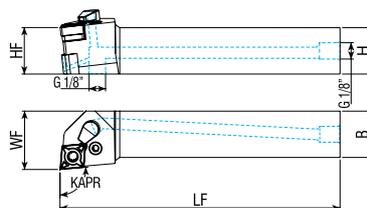
PWLN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPREŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
PWLNLR/L 1616 H06	16	16	100	20	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
PWLNLR/L 2020 K06	20	20	125	25	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
PWLNLR/L 2525 M06	25	25	150	32	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
PWLNLR/L 3232 P06	32	32	170	40	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
PWLNLR/L 1616 H08	16	16	100	20	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	-	-	TTL033
PWLNLR/L 2020 K08C	20	20	125	25	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
PWLNLR/L 2525 M08C	25	25	150	32	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
PWLNLR/L 3232 P08C	32	32	170	40	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033

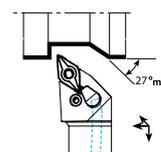
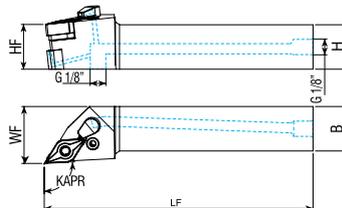
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

# PCLN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPREŻYNA PODKŁADKI	RING PODKŁADKA	THREADED PIN TRZPIEŃ	NOZZLE DYSZA	ALLEN KEY KLUCZ IMBUSOWY			
PCLNR/L 2020 K12H	20	20	125	25	CNM. 1204..											
PCLNR/L 2525 M12H	25	25	150	32	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02					2705G1/8x5.5	TN01	TTL033
PCLNR/L 3232 P12H	32	32	170	40	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02					2705G1/8x5.5	TN01	TTL033
PCLNR/L 3232 P16H	32	32	170	40	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03					2705G1/8x5.5	TN01	TTL033
PCLNR/L 3232 P19H	32	32	170	40	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04					2705G1/8x5.5	TN01	TTL034

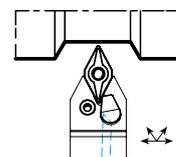
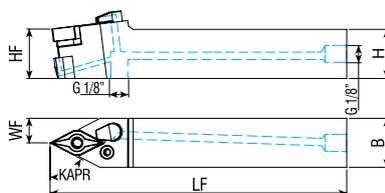
# PDJN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPREŻYNA PODKŁADKI	RING PODKŁADKA	THREADED PIN TRZPIEŃ	NOZZLE DYSZA	ALLEN KEY KLUCZ IMBUSOWY			
PDJNR/L 2020 K15H	20	20	125	25	DNM. 1506..											
PDJNR/L 2525 M15H	25	25	150	32	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02					2705G1/8x5.5	TN01	TTL033
PDJNR/L 3232 P15H	32	32	170	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02					2705G1/8x5.5	TN01	TTL033

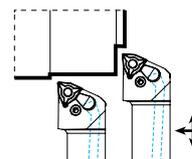
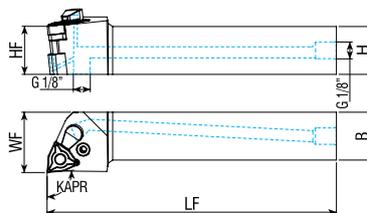
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

PDNN

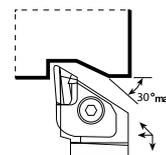
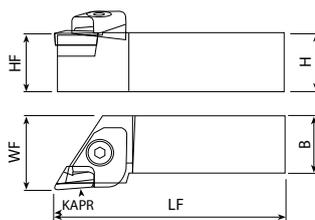


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	RING PODKŁADKA	THREADED PIN TRZPIEŃ	NOZZLE DYSZA	ALLEN KEY KLUCZ IMBUSOWY
PDNN 2525 M15H	25	25	150	32	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TXR01 TOR01	2705G1/8x5.5	TN01	TTL033

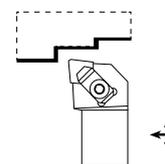
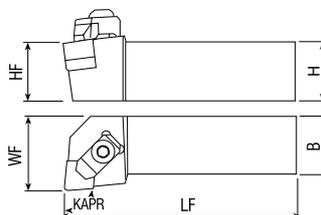
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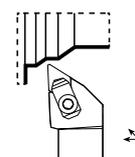
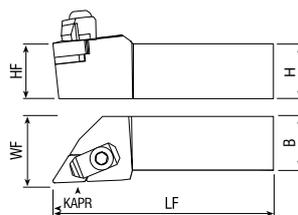
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	RING PODKŁADKA	THREADED PIN TRZPIEŃ	NOZZLE DYSZA	ALLEN KEY KLUCZ IMBUSOWY
PWLN R/L 2020 K08H	20	20	125	25	WNM. 0804..	TPL02	TLV03M8x19	TTCN30001	TTY02	TXR01	2705G1/8x5.5	TN01	TTL033
PWLN R/L 2525 M08H	25	25	150	32	WNM. 0804..	TPL02	TLV03M8x19	TTCN30001	TTY02	TXR01 TOR01	2705G1/8x5.5	TN01	TTL033

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**CKJN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
CKJNR/L 2020 K16	20	20	125	27.5	KNUX1604..	ACK01RACK02L	TKV06M6x20	AKS16RAKS16L	TTV01M3x10	TKY02	TBPL01	TTL054
CKJNR/L 2525 M16	25	25	150	31.5	KNUX1604..				TTV01M3x10	TKY02	TBPL01	TTL054
CKJNR/L 3232 P16	32	32	170	40	KNUX1604..				TTV01M3x10	TKY02	TBPL01	TTL054
CKJNR/L 4040 S16	40	40	250	50	KNUX1604..				TKV06M6x20	TTV01M3x10	TKY02	TBPL01

**CCLN**


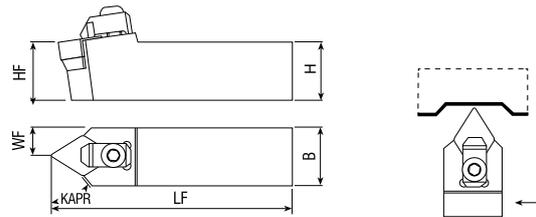
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CCLNR/L 2525 M1207C	25	25	150	32	CN.N 1207..	TCK13	TKV11M8x29	TTCN30001	TTV02M5x12	TCS01	TTL054
CCLNR/L 3232 P1207C	32	32	170	40	CN.N 1207..	TCK13	TKV11M8x29	TTCN30001	TTV02M5x12	TCS01	TTL054
CCLNR/L 2525 M1607C	25	25	150	32	CN.N 1607..	TCK13	TKV11M8x29	TTCN30002	TTV05M6x15	TCS01	TTL054

**CDJN**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	ALLEN KEY KLUCZ IMBUSOWY
CDJNR/L 2525 M1107C	25	25	150	32	DN.N 1107..	TCK22	TKV11M8x29	TTDN20001	TTV04M5x12	TCS01	TTL054
CDJNR/L 2525 M1507C	25	25	150	32	DN.N 1507..	TCK13	TKV11M8x29	TTDN30001	TTV02M5x12	TCS01	TTL054
CDJNR/L 3232 P1507C	32	32	170	40	DN.N 1507..	TCK13	TKV11M8x29	TTDN30001	TTV02M5x12	TCS01	TTL054

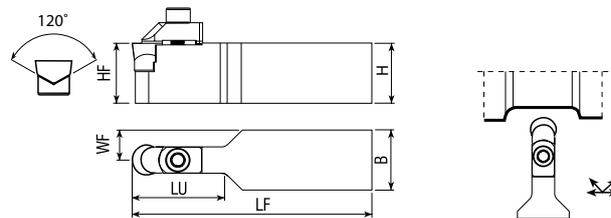
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

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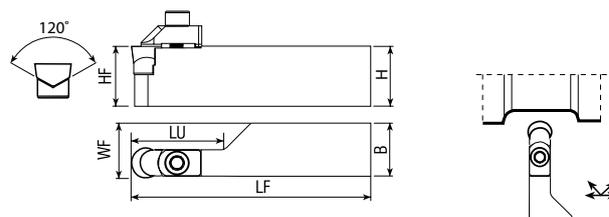
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERSĆCIEN	ALLEN KEY KLUCZ IMBUSOWY
CDNNN 2525 M1107C	25	25	150	12.5	DN.N 1107..	TCK22	TKV11M8x29	TTDN20001	TTV04M5x12	TCS01	TTL054

CRDC



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	LU	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
CRDCN 2525 M06CV	25	25	150	19	12.5	RCGX 0606..	TCK27	2525M3X14	TTRC30001	3007M22X5	TTL0225
CRDCN 3225 P06CV	32	25	170	19	12.5	RCGX 0606..	TCK27	2525M3X14	TTRC30001	3007M22X5	TTL0225
CRDCN 4040 S06CV	40	40	250	19	20	RCGX 0606..	TCK27	2525M3X14	TTRC30001	3007M22X5	TTL0225
CRDCN 2525 M09CV	25	25	150	29	12.5	RCGX 0907..	TCK28	2504M5X16	TTRC30002	3008M25x6	TTL054
CRDCN 3225 P09CV	32	25	170	29	12.5	RCGX 0907..	TCK28	2504M5X16	TTRC30002	3008M25x6	TTL054
CRDCN 4040 S09CV	40	40	250	29	20	RCGX 0907..	TCK28	2504M5X16	TTRC30002	3008M25x6	TTL054
CRDCN 2525 M12CV	25	25	150	38	12.5	RCGX 1207..	TCK29	2505M6X20	TTRC30003	3008M25x6	TTL075
CRDCN 3225 P12CV	32	25	170	38	12.5	RCGX 1207..	TCK29	2505M6X20	TTRC30003	3008M25x6	TTL075
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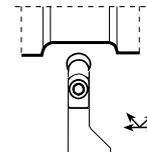
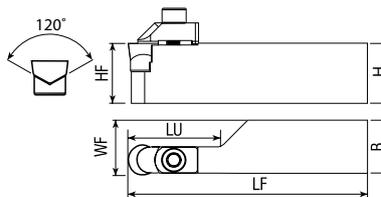
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ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	LU	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
CRDCR/L 3225 P06CV	32	25	170	19.4	25.6	RCGX 060600	TCK27	2525M3X14	TTRC30001	3007M22X5	TTL0225
CRDCR/L 3225 P09CV	32	25	170	29	25.8	RCGX 090700	TCK28	2504M5X16	TTRC30002	3008M25x6	TTL054
CRDCR/L 3225 P12CV	32	25	170	38.5	25.9	RCGX 120700	TCK29	2505M6X20	TTRC30003	3008M25x6	TTL075

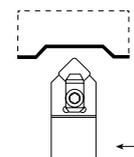
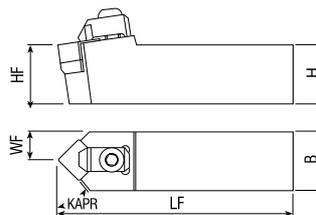
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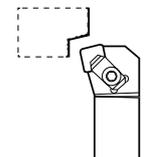
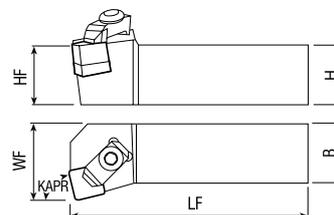
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	LU	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
CRDCN 3232 P06CVK	32	32	170	16	19	RCGX 060600	TCK42	2525M3x12	TTRC30005	2008M25X12	TTL0225mm
CRDCN 4040 R06CVK	40	40	200	20	19	RCGX 060600	TCK42	2525M3x12	TTRC30005	2008M25X12	TTL0225mm
CRDCN 3232 P09CVK	32	32	170	16	29	RCGX 090700	TCK43	2504M5x14	TTRC30006	4015M35x14	TTL054mm
CRDCN 4040 R09CVK	40	40	200	20	29	RCGX 090700	TCK43	2504M5x14	TTRC30006	4015M35x14	TTL054mm
CRDCN 3232 P12CVK	32	32	170	16	38	RCGX 120700	TCK44	2505M6x16	TTRC30007	1620M5x18	TTL075mm
CRDCN 4040 R12CVK	40	40	200	20	38	RCGX 120700	TCK44	2505M6x16	TTRC30007	1620M5x18	TTL075mm

# CSDN



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERSIEN	ALLEN KEY KLUCZ IMBUSOWY
CSDNN 2525 M1207C	25	25	150	12.5	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054
CSDNN 3232 P1207C	32	32	170	16	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054

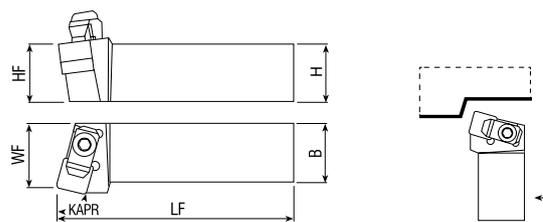
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CSKNR/L 2525 M1207C	25	25	150	32	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054
CSKNR/L 3232 P1207C	32	32	170	40	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054

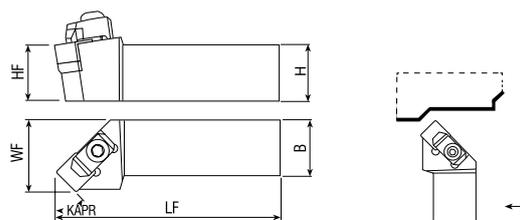
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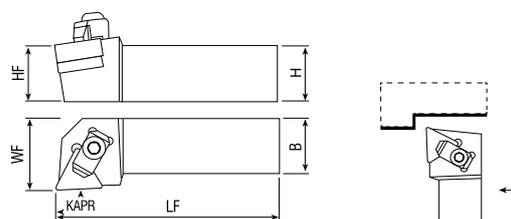
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CSRNR/L 2525 M1207C	25	25	150	32	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054
CSRNR/L 3232 P1207C	32	32	170	40	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054

CSSN

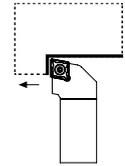
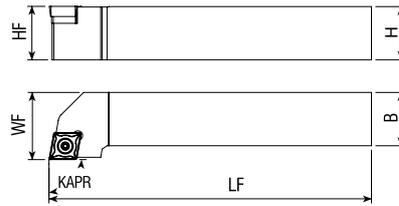


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	ALLEN KEY KLUCZ IMBUSOWY
CSSNR/L 2525 M1207C	25	25	150	32	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054
CSSNR/L 3232 P1207C	32	32	170	40	SN.N 1207..	TCK13	TKV11M8x29	TTSN30004	TTV02M5x12	TCS01	TTL054

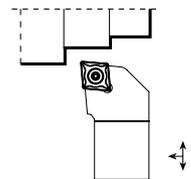
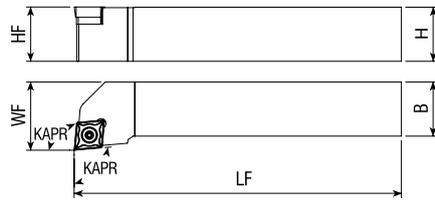
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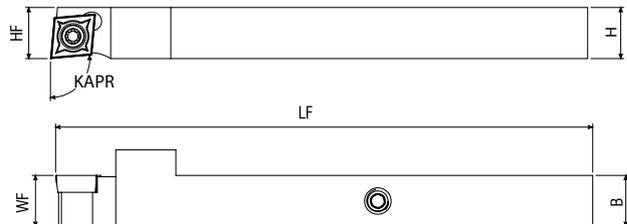
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CTJNR/L 2525 M1207C	25	25	150	32	TN.N 1607..	TCK14	TKV11M8x29	TTTN20002	TTV03M5x12	TCS01	TTL054
CTJNR/L 3232 P1207C	32	32	170	40	TN.N 1607..	TCK14	TKV11M8x29	TTTN20002	TTV03M5x12	TCS01	TTL054

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SCAC**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
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SCACR/L 1010 E06	10	10	70	12	CCM. 0602..	4008M2.5x6	-	-	80T08
SCACR/L 1212 F09	12	12	80	16	CC.T 09T3..	4015M3.5x11	-	-	80T15
SCACR/L 1616 H09	16	16	100	20	CC.T 09T3..	4015M3.5x14	TTCN20001	TTV06M3.5x11	80T15
SCACR/L 2020 K09	20	20	125	25	CC.T 09T3..	4015M3.5x14	TTCN20001	TTV06M3.5x11	80T15
SCACR/L 2020 K12	20	20	125	25	CC.T 1204..	1020M4.5x16	TTCN20003	TTV07M4.5x13	80T20
SCACR/L 2525 M12	25	25	150	32	CC.T 1204..	1020M4.5x16	TTCN20003	TTV07M4.5x13	80T20

**SCLC**


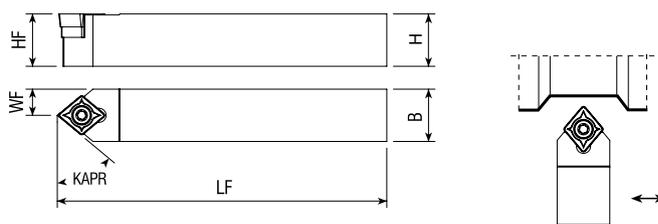
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SCLCR/L 0808 E06	8	8	70	10	CCM. 0602..	4008M2.5x6	-	-	80T08
SCLCR/L 1010 E06	10	10	70	12	CCM. 0602..	4008M2.5x6	-	-	80T08
SCLCR/L 1212 F06	12	12	80	16	CCM. 0602..	4008M2.5x6	-	-	80T08
SCLCR/L 1010 E09	10	10	70	12	CCT 09T3	4015M3x9	-	-	80T15
SCLCR/L 1212 F09	12	12	80	16	CCT 09T3	4015M3.5x11	-	-	80T15
SCLCR/L 1616 H09	16	16	100	20	CCT 09T3	4015M3.5x14	-	TTV06M3 5x11	80T15
SCLCR/L 2020 K09	20	20	125	25	CCT 09T3	4015M3.5x14	TTCN20001	TTV06M3 5x11	80T15
SCLCR/L 2525 M09	25	25	150	32	CCT 09T3	4015M3.5x14	TTCN20001	TTV06M3 5x11	80T15
SCLCR/L 1616 H12	16	16	100	20	CC.T 1204..	1020M5x11	-	-	80T20
SCLCR/L 2020 K12	20	20	125	25	CC.T 1204..	1020M4 5x16	TTCN20003	TTV07M4.5x13	80T20
SCLCR/L 2525 M12	25	25	150	32	CC.T 1204..	1020M4 5x16	TTCN20003	TTV07M4.5x13	80T20

**SCLC**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY	THREADED PIN	TORX KEY KLUCZ TORX
SCLCR/L 1212 K09-SHP	12	12	125	12	CCT 09T3	4015M3.5x11	KLERS25STWLNRO6	2703M6X4	80T15
SCLCR/L 1616 K09-SHP	16	16	125	16	CCT 09T3	4015M3.5x11	TTL054mm	2704M8X1X5	80T15

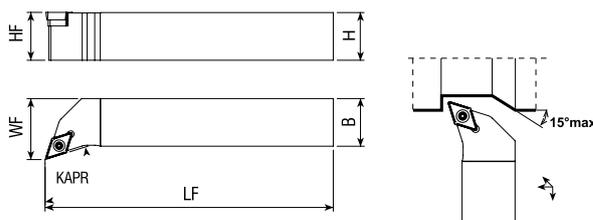
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SCMC

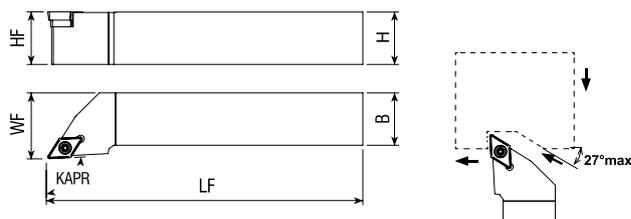


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
									
SCMCN 0808 E06	8	8	70	04	CCM. 0602..	4008M2.5x6	-	-	80T08
SCMCN 1010 E06	10	10	70	05	CCM. 0602..	4008M2.5x6	-	-	80T08
SCMCN 1212 F06	12	12	80	06	CCM. 0602..	4008M2.5x6	-	-	80T08
SCMCN 1212 F09	12	12	80	06	CC.T 0913..	4015M3.5x11	-	-	80T15
SCMCN 1616 H09	16	16	100	08	CC.T 0913..	4015M3.5x14	TTCN20001	TTV06M3.5x11	80T15
SCMCN 2020 K12	20	20	125	10	CC.T 1204..	1020M4.5x16	TTCN20003	TTV07M4.5x13	80T20
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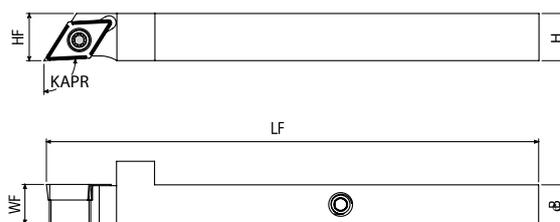
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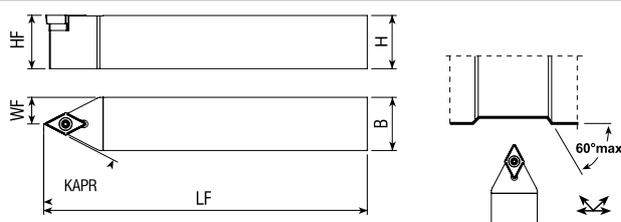
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SDHCR/L 0808 E07	8	8	70	11	DC.T 0702..	4008M2.5x6	-	-	80T08
SDHCR/L 1010 E07	10	10	70	12	DC.T 0702..	4008M2.5x6	-	-	80T08
SDHCR/L 1212 F07	12	12	80	16	DC.T 0702..	4008M2.5x6	-	-	80T08
SDHCR/L 1616 H07	16	16	100	20	DC.T 0702..	4008M2.5x6	-	-	80T08
SDHCR/L 1616 H11	16	16	100	20	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDHCR/L 2020 K11	20	20	125	25	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDHCR/L 2525 M11	25	25	150	32	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDHCR/L 3232 P11	32	32	170	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SDJC**


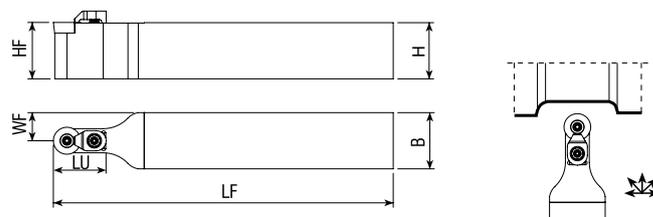
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SDJCR/L 0808 E07	8	8	70	10	DC.T 0702..	4008M2.5X6	-	-	80T08
SDJCR/L 1010 E07	10	10	70	12	DC.T 0702..	4008M2.5X6	-	-	80T08
SDJCR/L 1212 F07	12	12	80	16	DC.T 0702..	4008M2.5X6	-	-	80T08
SDJCR/L 1616 H07	16	16	100	20	DC.T 0702..	4008M2.5X6	-	-	80T08
SDJCR/L 1212 F11	12	12	80	16	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDJCR/L 1616 H11	16	16	100	20	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDJCR/L 2020 K11	20	20	125	25	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDJCR/L 2525 M11	25	25	150	32	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDJCR/L 3232 P11	32	32	170	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

**SDJC**


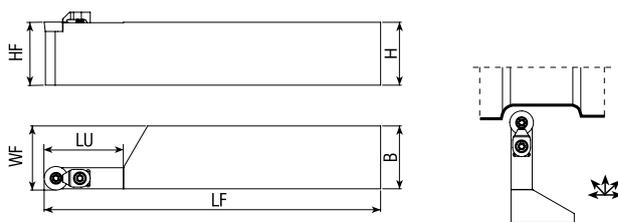
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SDJCR/L 0810 G07-SHP	8	10	90	10	DC.T 0702..	4008M2.5x6	KLERS25STWLNRO6	2703M6X4	82T08
SDJCR/L1010 K07-SHP	10	10	125	10	DC.T 0702..	4008M2.5x6	KLERS25STWLNRO6	2703M6X4	82T08
SDJCR/L1012 K11-SHP	10	12	125	12	DC.T 11T3..	4015M3.5x14	KLERS25STWLNRO6	2703M6X4	80T15
SDJCR/L1212 K11-SHP	12	12	125	12	DC.T 11T3..	4015M3.5x14	KLERS25STWLNRO6	2703M6X4	80T15
SDJCR/L1616 K11-SHP	16	16	125	16	DC.T 11T3..	4015M3.5x14	TTL054mm	2704M8X1X5	80T15

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SDNC**


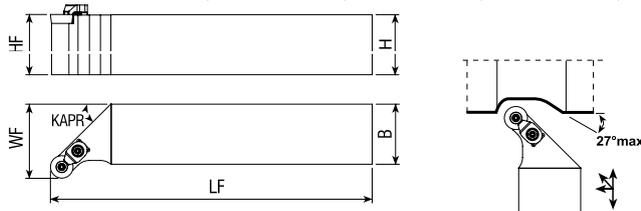
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
									
SDNCN 0808 E07	8	8	70	4	DC.T 0702..	4008M2.5x6	-	-	80T08
SDNCN 1010 E07	10	10	70	5	DC.T 0702..	4008M2.5x6	-	-	80T08
SDNCN 1212 F07	12	12	80	6	DC.T 0702..	4008M2.5x6	-	-	80T08
SDNCN 1616 H07	16	16	100	8	DC.T 0702..	4008M2.5x6	-	-	80T08
SDNCN 1616 H11	16	16	100	8	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDNCN 2020 K11	20	20	125	10	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDNCN 2525 M11	25	25	150	12.5	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
SDNCN 3232 P11	32	32	170	16	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

**SRDCN**


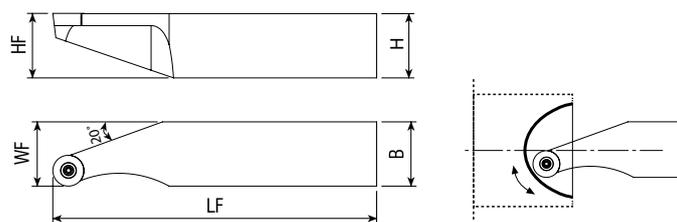
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SRDCN 1616 H06	16	16	100	15	8	RC.T 0602..	3008M2.5x6	-	-	80T08
SRDCN 2020 K06	20	20	125	17	10	RC.T 0602..	3008M2.5x6	-	-	80T08
SRDCN 2525 M06	25	25	150	17	12.5	RC.T 0602..	3008M2.5x6	-	-	80T08
SRDCN 1616 H08C	16	16	100	15	8	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRDCN 2020 K08C	20	20	125	20	10	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRDCN 2525 M08C	25	25	150	20	12.5	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRDCN 1616 H10C	16	16	100	20	8	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRDCN 2020 K10C	20	20	125	20	10	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRDCN 2525 M10C	25	25	150	20	12.5	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRDCN 3232 P10C	32	32	170	20	16	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRDCN 2020 K12C	20	20	125	22	10	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15
SRDCN 2525 M12C	25	25	150	22	12.5	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15
SRDCN 3232 P12C	32	32	170	22	16	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15
SRDCN 2525 M16C	25	25	150	32	12.5	RC.T 1605..	1020M5x11	TCK05	4015M4x11	80T15
SRDCN 3232 P16C	32	32	170	35	16	RC.T 1605..	1020M5x11	TCK05	4015M4x11	80T15
SRDCN 2525 M20C	25	25	150	32	12.5	RC.T 2006..	1420M6x16	TCK09	TTV05M6x15	80T20
SRDCN 3232 P20C	32	32	170	40	16	RC.T 2006..	1420M6x16	TCK09	TTV05M6x15	80T20
SRDCN 3232 P25C	32	32	170	40	16	RC.T 2507..	1520M6x16	TCK09	TTV05M6x15	80T20
SRDCN 3232 P32C	32	32	170	45	16	RC.T 3209..	1904M8x1x20	TCK09	TTV05M6x15	TTL054

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SRDC**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	LU	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SRDCR/L 3232 T06	32	32	300	20	32.35	RC.T 0602..	3008M2.5x6			80T08
SRDCR/L 3232 P12C	32	32	170	40	32.65	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15

**SRGC**


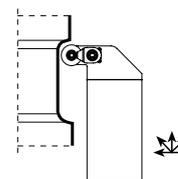
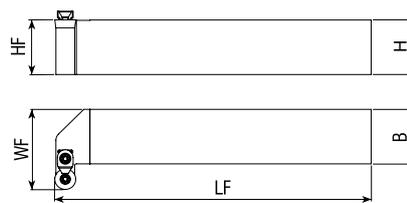
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SRGCR/L 1616 H06	16	16	100	20	RC.I 0602..	3008M2.5x6	-	-	80T08
SRGCR/L 2020 K06	20	20	125	25	RC.I 0602..	3008M2.5x6	-	-	80T08
SRGCR/L 1616 H08C	16	16	100	20	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRGCR/L 2020 K08C	20	20	125	25	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRGCR/L 2525 M08C	25	25	150	32	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRGCR/L 1616 H10C	16	16	100	20	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRGCR/L 2020 K10C	20	20	125	25	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRGCR/L 2525 M10C	25	25	150	32	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRGCR/L 3232 P10C	32	32	170	40	RC.T 10T3..	4015M3.5x11	TCK15	4015M3.5x11	80T15
SRGCR/L 2020 K12C	20	20	125	25	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15
SRGCR/L 2525 M12C	25	25	150	32	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15
SRGCR/L 3232 P12C	32	32	170	40	RC.T 1204..	4015M3.5x11	TCK05	4015M4x11	80T15

**SRHC**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	MIN R	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
SRHCR/L 2525 K06	25	25	125	25	32.5	RCM. 0602..	3008M2.5x6	80T08
SRHCR/L 2525 K08	25	25	125	25	32.5	RCM. 0803..	3008M3x8	80T08
SRHCR/L 2525 K10	25	25	125	25	36	RCM. 10T3..	4015M3.5x11	80T15
SRHCR/L 2525 K12	25	25	125	25	40	RCM. 1204..	4015M3.5x11	80T15
SRHCR/L 2525 K16	25	25	125	25	47.5	RCM. 1606..	1020M5x11	80T20

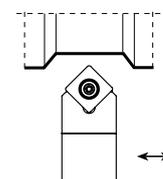
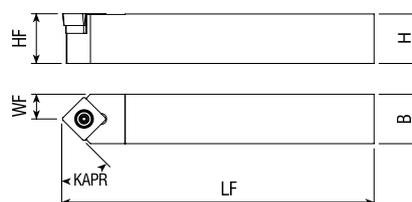
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

SRXC



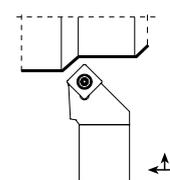
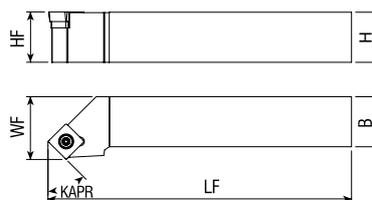
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SRXCR/L 3232 X08C	32	32	220	47	RC.T 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
SRXCR/L 3232 X10C	32	32	220	47	RC.T 10T3..	401DM3.5x11	TCK15	4015M3.5x11	80T15
SRXCR/L 3232 X12C	32	32	220	47	RC.T 1204..	401DM3.5x11	TCK05	4015M4x11	80T15

SSDC

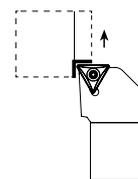
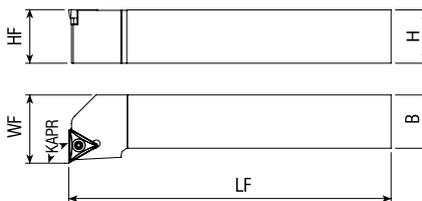


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SSDCN 1212F09	12	12	80	6	SC.T 09T3..	4015M3.5x11	-	-	80T15
SSDCN 1616 H09	16	16	100	8	SC.T 09T3..	4015M3.5x14	TTSN20001	TTV06M3.5x11	80T15
SSDCN 2020 K09	20	20	125	10	SC.T 09T3..	4015M3.5x14	TTSN20001	TTV06M3.5x11	80T15
SSDCN 1616 H12	16	16	100	8	SC.T 1204..	4020M4.5x12	TTSN20004	TTV10M4.5x8	80T20
SSDCN 2020 K12	20	20	125	10	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20
SSDCN 2525 M12	25	25	150	12.5	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20

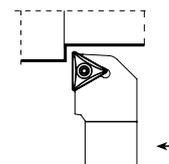
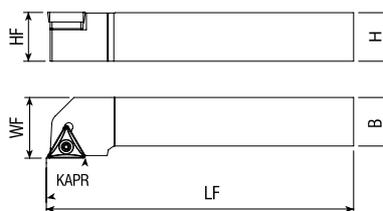
SSSC



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SSSCR/L 1212 F09	12	12	80	16	SC.T 09T3..	4015M3.5x11	-	-	80T15
SSSCR/L 1616 H09	16	16	100	20	SC.T 09T3..	4015M3.5x14	TTSN20001	TTV06M3.5x11	80T15
SSSCR/L 2020 K09	20	20	125	25	SC.T 09T3..	4015M3.5x14	TTSN20001	TTV06M3.5x11	80T15
SSSCR/L 1616 H12	16	16	100	20	SC.T 1204..	4020M4.5x12	TTSN20004	TTV10M4.5x8	80T20
SSSCR/L 2020 K12	20	20	125	25	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20
SSSCR/L 2525 M12	25	25	150	32	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**STFC**


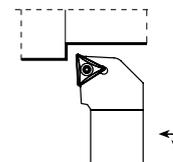
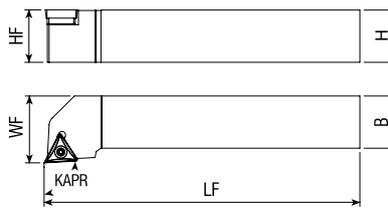
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STFCR/L 0808 E09	8	8	70	10	TC.T 0902..	3007M2.2x5	-	-	80T07
STFCR/L 1010 E09	10	10	70	12	TC.T 0902..	3007M2.2x5	-	-	80T07
STFCR/L 1212 F11	12	12	80	16	TC.T 1102..	4008M2.5x6	-	-	80T08
STFCR/L 1616 H11	16	16	100	20	TC.T 1102..	4008M2.5x6	-	-	80T08
STFCR/L 1616 H16	16	16	100	20	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STFCR/L 2020 K16	20	20	125	25	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STFCR/L 2525 M16	25	25	150	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STFCR/L 3232 P16	32	32	170	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

**STGC**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
STGCR/L 0808 E09	8	8	70	10	TC.T 0902..	3007M2.2x5	-	-	80T07
STGCR/L 1010 E09	10	10	70	12	TC.T 0902..	3007M2.2x5	-	-	80T07
STGCR/L 1212 F11	12	12	80	16	TC.T 1102..	4008M2.5x6	-	-	80T08
STGCR/L 1616 H11	16	16	100	20	TC.T 1102..	4008M2.5x6	-	-	80T08
STGCR/L 1616 H16	16	16	100	20	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STGCR/L 2020 K16	20	20	125	25	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STGCR/L 2525 M16	25	25	150	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STGCR/L 3232 P16	32	32	170	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

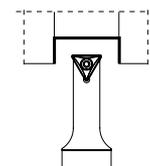
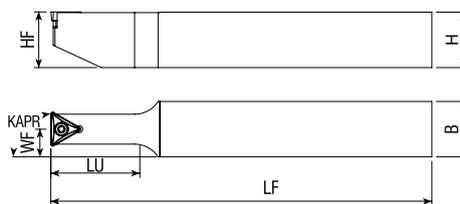
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

STJC



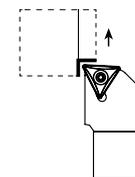
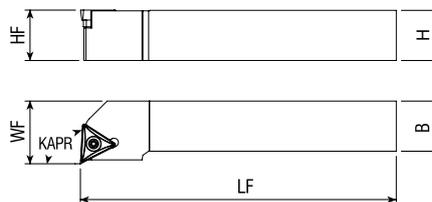
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STJCR/L 0808 E09	8	8	70	10	TCT 0902..	3007M2.2x5	-	-	80T07
STJCR/L 1010 E09	10	10	70	12	TCT 0902..	3007M2.2x5	-	-	80T07
STJCR/L 1212 F11	12	12	80	16	TC.T 1102..	4008M2.5x6	-	-	80T08
STJCR/L 1616 H11	16	16	100	20	TC.T 1102..	4008M2.5x6	-	-	80T08
STJCR/L 1616 H16	16	16	100	20	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STJCR/L 2020 K16	20	20	125	25	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STJCR/L 2525 M16	25	25	150	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STJCR/L 3232 P16	32	32	170	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

STCC

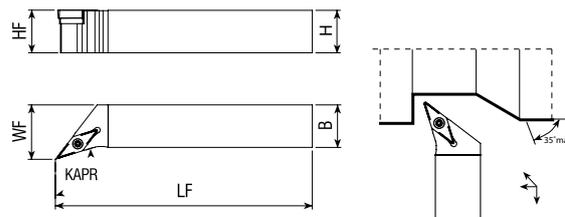


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STCCN 2020 L11	20	20	140	10	50	TC.T 1102..	4008M2.5x6	-	-	80T08
STCCN 1616 K16	16	16	125	8	24	TC.T 1102..	4008M2.5x6	-	-	80T15
STCCN 2020 M16	20	20	150	10	30	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STCCN 2525 P16	25	25	170	12.5	37.5	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STCCN 3232 R16	32	32	200	16	48	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STCCN 2525 P22	25	25	170	12.5	80	TC.T 2204..	4020M4.5x12	-	-	80T20

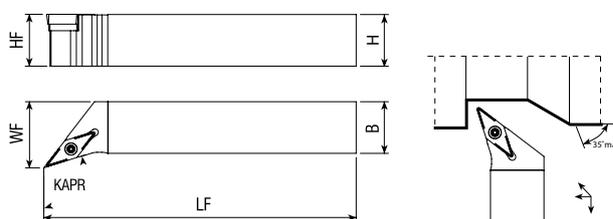
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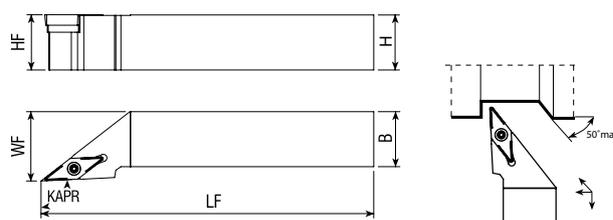
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
									
STUCR/L 0808 E09	8	8	70	10	TC.T 0902..	3007M2.2x5	-	-	80T07
STUCR/L 1010 E09	10	10	70	12	TC.T 0902..	3007M2.2x5	-	-	80T07
STUCR/L 1212 F11	12	12	80	16	TC.T 1102..	4008M2.5x6	-	-	80T08
STUCR/L 1616 H11	16	16	100	20	TC.T 1102..	4008M2.5x6	-	-	80T08
STUCR/L 1616 H16	16	16	100	20	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STUCR/L 2020 K16	20	20	125	25	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STUCR/L 2525 M16	25	25	150	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
STUCR/L 3232 P16	32	32	170	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SVHB**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVHBR/L 1212 F11	12	12	80	16	VBM. 1103..	4008M2.5x6	-	-	80T08
SVHBR/L 1616 H11	16	16	100	20	VBM. 1103..	4008M2.5x6	-	-	80T08
SVHBR/L 2020 K11	20	20	125	25	VBM. 1103..	4008M2.5x6	-	-	80T08
SVHBR/L 2020 K16	20	20	125	25	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVHBR/L 2525 M16	25	25	150	32	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVHBR/L 3232 P16	32	32	170	40	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**SVHC**


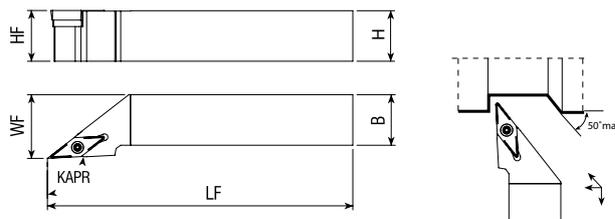
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SVHCR/L 1212 F11	12	12	80	16	VC.T 1103..	4008M2.5x6	-	-	80T08
SVHCR/L 1616 H11	16	16	100	20	VC.T 1103..	4008M2.5x6	-	-	80T08
SVHCR/L 2020 K11	20	20	125	25	VC.T 1103..	4008M2.5x6	-	-	80T08
SVHCR/L 2020 K16	20	20	125	25	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVHCR/L 2525 M16	25	25	150	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVHCR/L 3232 P16	32	32	170	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**SVJB**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVJBR/L 1212 F11	12	12	80	16	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJBR/L 1616 H11	16	16	100	20	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJBR/L 2020 K11	20	20	125	25	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJBR/L 1616 H16	16	16	100	20	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVJBR/L 2020 K16	20	20	125	25	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVJBR/L 2525 M16	25	25	150	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVJBR/L 3232 P16	32	32	170	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

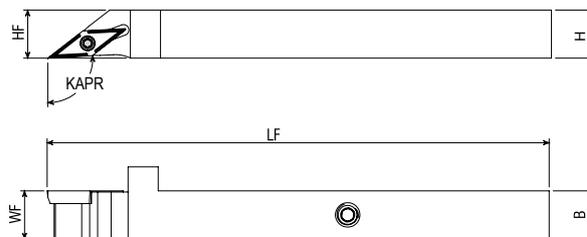
INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE

SVJC



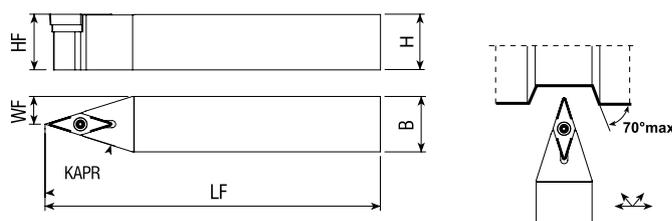
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVJCR/L 1212 F11	12	12	80	16	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJCR/L 1616 H11	16	16	100	20	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJCR/L 2020 K11	20	20	125	25	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJCR/L 2525 M11	25	25	150	32	VC.T 1103..	4008M2.5x6	-	-	80T08
SVJCR/L 1212 F16	12	12	80	16	VC.T 1604..	4015M3.5x11	-	-	80T15
SVJCR/L 2020 K16	20	20	125	25	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVJCR/L 2525M16	25	25	150	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVJCR/L 3232 P16	32	32	170	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

SVJC

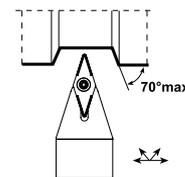
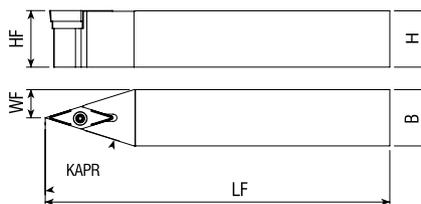


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	THREADED PIN	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVJCR/L 1212 K11-SHP	12	12	125	12	VC.T 1103..	4008M2.5x6	2703M6X4	KLERS25STWLNRO6	82T08
SVJCR/L 1616 K11-SHP	16	16	125	16	VC.T 1103..	4008M2.5x6	704M8X1X5	TTL054mm	82T08

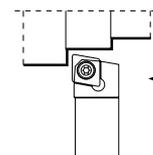
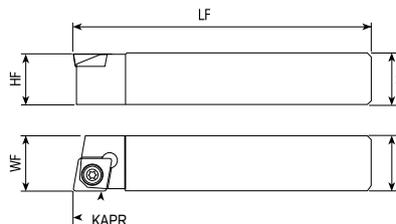
SVVB



ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVVBN 1212 F11	12	12	80	6	VBM. 1103..	4008M2.5x6	-	-	80T08
SVVBN 1616 H11	16	16	100	8	VBM. 1103..	4008M2.5x6	-	-	80T08
SVVBN 2020 K11	20	20	125	10	VBM. 1103..	4008M2.5x6	-	-	80T08
SVVBN 2020 K16	20	20	125	10	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVVBN 2525 M16	25	25	150	12.5	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVVBN 3232 P16	32	32	170	16	VB.T1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SVVC**


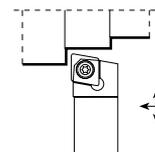
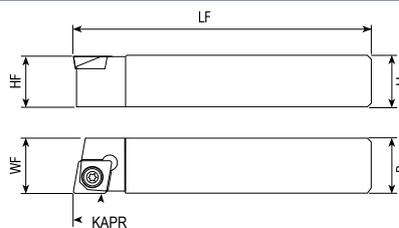
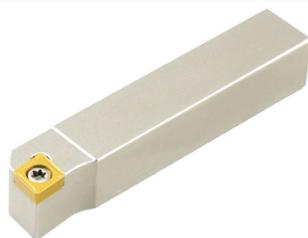
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SVVCN 1212 F11	12	12	80	6	VC.T 1103..	4008M2.5x6	-	-	80T08
SVVCN 1616 H11	16	16	100	8	VC.T 1103..	4008M2.5x6	-	-	80T08
SVVCN 2020 K11	20	20	125	10	VC.T 1103..	4008M2.5x6	-	-	80T08
SVVCN 2020 K16	20	20	125	10	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVVCN 2525 M16	25	25	150	12.5	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
SVVCN 3232 P16	32	32	170	16	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**SCAC-S**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SCACR/L 0808 X06S	08	08	115	08	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1010 K06S	10	10	125	10	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1212 G06S	12	12	90	12	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1212 K06S	12	12	125	12	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1616 F06S	16	16	75	16	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1616 K06S	16	16	125	16	CC.T 0602..	4008M2.5x6			80T08
SCACR/L 1212 G09S	12	12	90	12	CC.T 09T3..	4015M3.5x11			80T15
SCACR/L 1212 K09S	12	12	125	12	CC.T 09T3..	4015M3.5x11			80T15
SCACR/L 1616 F09S	16	16	75	16	CC.T 09T3..	4015M3.5x11			80T15
SCACR/L 1616 K09S	16	16	125	16	CC.T 09T3..	4015M3.5x11			80T15
SCACR/L 2020 K09S	20	20	125	20	CC.T 09T3..	4015M3.5x11			80T15

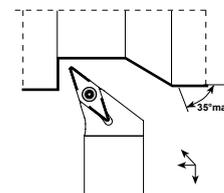
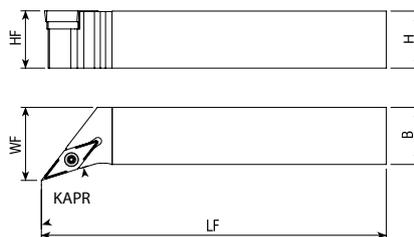
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

## SCLC-S

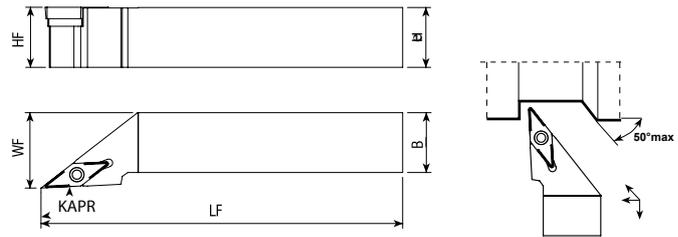


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
									
SCLCR/L 0808 X06S	08	08	115	08	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1010 X06S	10	10	115	10	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1212 G06S	12	12	90	12	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1212 X06S	12	12	130	12	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1212 K06S	12	12	125	12	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1616 F06S	16	16	75	16	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1616 X06S	16	16	130	16	CC.T 0602..	4008M2.5x6			80T08
SCLCR/L 1212 G09S	12	12	90	12	CC.T 09T3..	4015M3.5x11			80T15
SCLCR/L 1212 X09S	12	12	130	12	CC.T 09T3..	4015M3.5x11			80T15
SCLCR/L 1616 F09S	16	16	75	16	CC.T 09T3..	4015M3.5x11			80T15
SCLCR/L 1616 G09S	16	16	90	16	CC.T 09T3..	4015M3.5x11			80T15
SCLCR/L 1616 X09S	16	16	115	16	CC.T 09T3..	4015M3.5x11			80T15
SCLCR/L 2020 X09S	20	20	120	20	CC.T 09T3..	4015M3.5x11			80T15

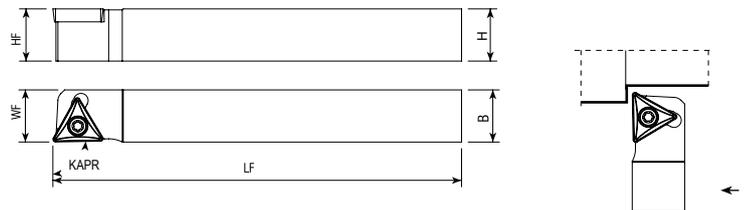
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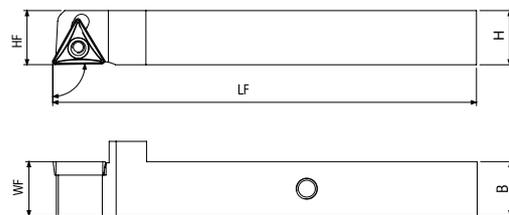
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
									
SDACR/L 0808 X07S	08	08	115	08	DC.T 0702..	4008M2.5x6			80T08
SDACR/L 1010 K07S	10	10	125	10	DC.T 0702..	4008M2.5x6			80T08
SDACR/L 1212 G07S	12	12	90	12	DC.T 0702..	4008M2.5x6			80T08
SDACR/L 1212 K07S	12	12	125	12	DC.T 0702..	4008M2.5x6			80T08
SDACR/L 1616 F07S	16	16	75	16	DC.T 0702..	4008M2.5x6			80T08
SDACR/L 1616 K07S	16	16	125	16	DC.T 0702..	4015M3.5x11			80T15
SDACR/L 1212 G11S	12	12	90	12	DC.T 11T3..	4015M3.5x11			80T15
SDACR/L 1212 K11S	12	12	125	12	DC.T 11T3..	4015M3.5x11			80T15
SDACR/L 1616 F11S	16	16	75	16	DC.T 11T3..	4015M3.5x11			80T15
SDACR/L 1616 K11S	16	16	125	16	DC.T 11T3..	4015M3.5x11			80T15
SDACR/L 2020 K11S	20	20	125	20	DC.T 11T3..	4015M3.5x11			80T15

**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**
**SDJC-S**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SDJCR/L 0808 X07S	08	08	115	08	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1010 X07S	10	10	115	10	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1212 G07S	12	12	90	12	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1212 X07S	12	12	130	12	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1616 F07S	16	16	75	16	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1616 X07S	16	16	130	16	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 2020 X07S	20	20	120	20	DC.T 0702..	4008M2.5x6			80T08
SDJCR/L 1212 G11S	12	12	90	12	DC.T 11T3..	4015M3.5x11			80T15
SDJCR/L 1212 X11S	12	12	130	12	DC.T 11T3..	4015M3.5x11			80T15
SDJCR/L 1212 K11S	12	12	125	12	DC.T 11T3..	4015M3.5x11			80T15
SDJCR/L 1616 F11S	16	16	75	16	DC.T 11T3..	4015M3.5x11			80T15
SDJCR/L 1616 X11S	16	16	130	16	DC.T 11T3..	4015M3.5x11			80T15
SDJCR/L 1616 K11S	16	16	125	16	DC.T 11T3..	4015M3.5x11			80T15
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**STGC-S**


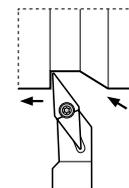
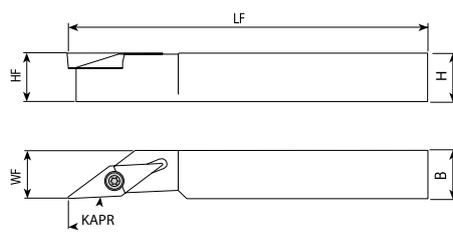
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
STGCR/L 1216 K11S	12	16	125	16	TC.T 1102..	4008M2.5x6			80T08
STGCR/L 1616 K11S	16	16	125	16	TC.T 1102..	4008M2.5x6			80T08
STGCR/L 1216 K16S	12	16	125	16	TC.T 16T3..	4015M3.5x11			80T15
STGCR/L 1616 K16S	16	16	125	16	TC.T 16T3..	4015M3.5x11			80T15

**STGC-S**


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	THREAD- ED PIN	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY	TORX KEY KLUCZ TORX
STGCR/L 1216 K16SHP	12	16	125	16	TC.T 16T3..	4015M35x14	2703M6X4	TTTN20001	TTV06M35x11	KLERS25STWLNRO6	80T15
STGCR/L 1616 K16SHP	16	16	125	16	TC.T 16T3..	4015M35x14	2704M8X1X5	TTTN20001	TTV06M35x11	TTL034	80T15

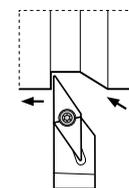
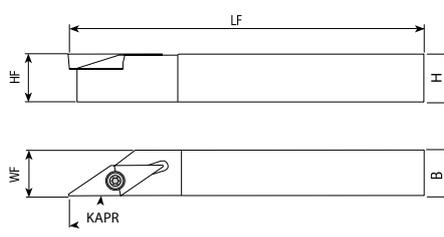
**INSERT HOLDERS NOŻE TOKARSKIE ZEWNĘTRZNE**

**SVJB-S**



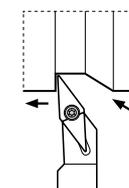
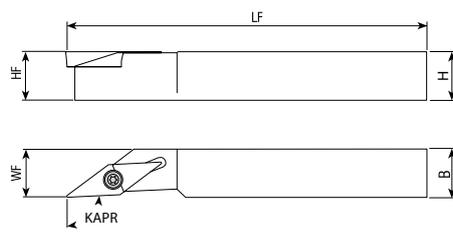
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVJBR/L 1616 K11S	16	16	125	16	VB.T 1103..	4008M2.5x6			80T08

**SVAC-S**

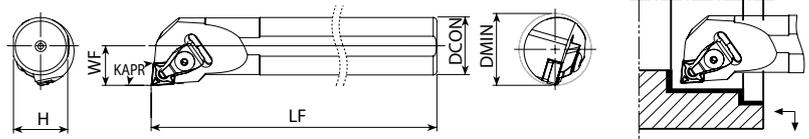


ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVACR/L 0808 X11S	08	08	115	08	VC.T 1103..	4008M25x6			80T08
SVACR/L 1010 K11S	10	10	125	10	VC.T 1103..	4008M25x6			80T08
SVACR/L 1212 G11S	12	12	90	12	VC.T 1103..	4008M25x6			80T08
SVACR/L 1212 K11S	12	12	125	12	VC.T 1103..	4008M25x6			80T08
SVACR/L 1616 F11S	16	16	75	16	VC.T 1103..	4008M25x6			80T08
SVACR/L 1616 K11S	16	16	125	16	VC.T 1103..	4008M25x6			80T08
SVACR/L 2020 K11S	20	20	125	20	VC.T 1103..	4008M25x6			80T08
SVACR/L 1212 K16S	12	12	125	12	VC.T 1604..	4015M35x11			80T15
SVACR/L 1616 K16S	16	16	125	16	VC.T 1604..	4015M35x11			80T15

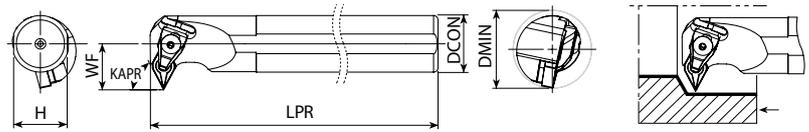
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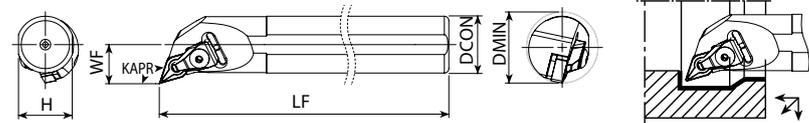
ORDER CODE KOD ZAMÓWIENIA	HF=H	B	LF	WF	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
SVJCR/L 0808 X11S	08	08	115	08	VC.T 1103..	4008M25x6			80T08
SVJCR/L 1010 K11S	10	10	125	10	VC.T 1103..	4008M25x6			80T08
SVJCR/L 1212 G11S	12	12	90	12	VC.T 1103..	4008M25x6			80T08
SVJCR/L 1212 K11S	12	12	125	12	VC.T 1103..	4008M25x6			80T08
SVJCR/L 1616 F11S	16	16	75	16	VC.T 1103..	4008M25x6			80T08
SVJCR/L 1616 K11S	16	16	125	16	VC.T 1103..	4008M25x6			80T08
SVJCR/L 2020 K11S	20	20	125	20	VC.T 1103..	4008M25x6			80T08

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**TCLN**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TCLNR/L 09	25	23	250	17	32	CNM. 0903..	TTK01	TKV01M5x22	TTCN 20001	TTV09M5x9	-	TBPL01	TTL033
S25S TCLNR/L 12	25	23	250	17	32	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV13M5x8	TS01	TBPL01	TTL033
S32T TCLNR/L 12	32	30	300	22	40	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV02M5x12	TS01	TBPL01	TTL033
S40U TCLNR/L 12	40	37.5	350	27	50	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV02M5x12	TS01	TBPL01	TTL033
S50V TCLNR/L 12	50	47	400	35	63	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV02M5x12	TS01	TBPL01	TTL033
S32T TCLNR/L 16	32	30	300	22	40	CNM. 1606..	TTK04	TKV19M7x25	TTCN 30002	TTV05M6x15	TS02	TBPL02	TTL054
S40U TCLNR/L 16	40	37.5	350	27	50	CNM. 1606..	TTK04	TKV19M7x25	TTCN 30002	TTV05M6x15	TS02	TBPL02	TTL054
S50V TCLNR/L 16	50	47	400	35	63	CNM. 1606..	TTK04	TKV19M7x25	TTCN 30002	TTV05M6x15	TS02	TBPL02	TTL054
A25R TCLNR/L 12	25	23	200	17	≥32	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV13M5x8	TS01	TBPL01	TTL033
A40T TCLNR/L 12	40	37.5	300	27	≥50	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV02M5x12	TS01	TBPL01	TTL033
A50V TCLNR/L 12	50	47	400	35	≥63	CNM 1204	TTK02	TKV30M6v22	TTCN 30001	TTV02M5x12	TS01	TBPL01	TTL033

**TDN**


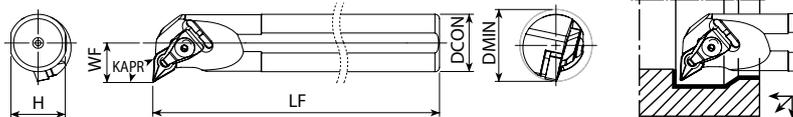
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S32T TDNR/L 15	32	30	300	26	44	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
S40U TDNR/L 15	40	37.5	350	29	52	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
S50V TDNR/L 15	50	47	400	35	63	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033

**TDQN**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TDQNR/L 11	25	23	250	17	32	DNM. 1104..	TTK01	TKV01M5x22	TTDN 20001	TTV09M5x9	-	TBPL01	TTL033
S32T TDQNR/L 11	32	30	300	22	40	DNM. 1104..	TTK01	TKV01M5x22	TTDN 20001	TTV04M5x12	-	TBPL01	TTL033
S25S TDQNR/L 15	25	23	250	17	32	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV13M5x8	TS01	TBPL01	TTL033
S32T TDQNR/L 15	32	30	300	22	40	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
S40U TDQNR/L 15	40	37.5	350	27	50	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033
S50V TDQNR/L 15	50	47	400	35	63	DNM. 1506..	TTK02	TKV30M6x22	TTDN30001	TTV02M5x12	TS01	TBPL01	TTL033

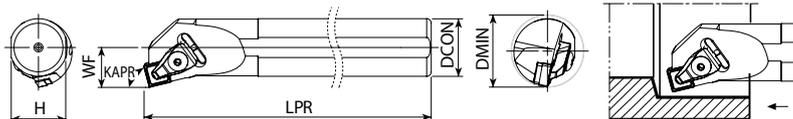
INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

TDUN



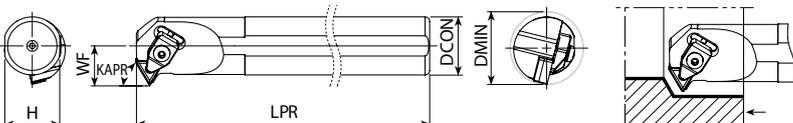
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TDUNR/L 11	25	23	250	17	32	DNM. 1104..					-		
S32T TDUNR/L 11	32	30	300	22	40	DNM. 1104..					-		
S25S TDUNR/L 15	25	23	250	17	32	DNM. 1506..					TS01		
S32T TDUNR/L 15	32	30	300	22	40	DNM. 1506..					TS01		
S40U TDUNR/L 15	40	37.5	350	27	50	DNM. 1506..					TS01		
S50V TDUNR/L 15	50	47	400	35	63	DNM. 1506..					TS01		
A40T TDUNR/L 15	40	37,5	300	27	50	DNM. 1506..					TS01		

TSKN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TSKNR/L 12	25	23	250	17	32	SNM. 1204..					TS01		
S32T TSKNR/L 12	32	30	300	22	40	SNM. 1204..					TS01		
S40U TSKNR/L 12	40	37.5	350	27	50	SNM. 1204..					TS01		

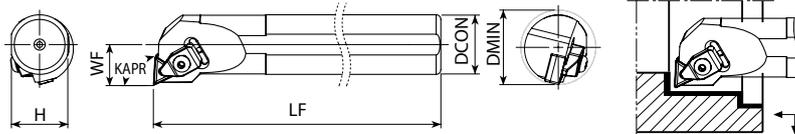
TTN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TTNR/L 16	25	23	250	17	32	TNM. 1604..						
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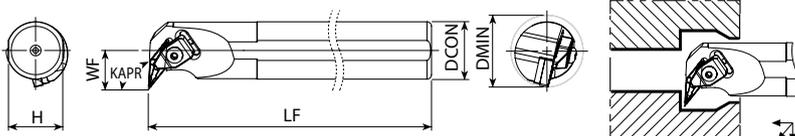
**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**

# TTUN



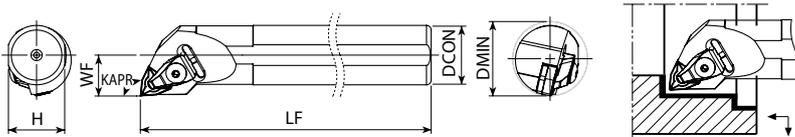
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERSCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TTUNR/L 16	25	23	250	17	32	TNM. 1604..	TTK01	TKV01M5x22	TTTN 20002	TTV03M5x12	-	TBPL01	TTL033
S32T TTUNR/L 16	32	30	300	22	40	TNM. 1604..	TTK01	TKV01M5x22	TTTN 20002	TTV03M5x12	-	TBPL01	TTL033
S25S TTUNR/L 22	25	23	250	17	32	TNM. 2204..	TTK02	TKV30M6x22	TTTN 30015	TTV02M5x12	TS01	TBPL01	TTL033
S32T TTUNR/L 22	32	30	300	22	40	TNM. 2204..	TTK02	TKV30M6x22	TTTN 30015	TTV02M5x12	TS01	TBPL01	TTL033
S40U TTUNR/L 22	40	37.5	350	27	50	TNM. 2204..	TTK02	TKV30M6x22	TTTN 30015	TTV02M5x12	TS01	TBPL01	TTL033
S50V TTUNR/L 22	50	47	400	35	63	TNM. 2204..	TTK02	TKV30M6x22	TTTN 30015	TTV02M5x12	TS01	TBPL01	TTL033

# TVUN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	SPRING SPRĘŻYNA	STAMP	ALLEN KEY KLUCZ IMBUSOWY
S25S TVUNR/L 16	25	23	250	20	36	VNM. 1604..	TTK01	TKV01M5x22	TTVN 20002	TTV04M5x12	-	TBPL01	TTL033
S32T TVUNR/L 16	32	30	300	22	40	VNM. 1604..	TTK01	TKV01M5x22	TTVN 20002	TTV04M5x12	-	TBPL01	TTL033
S40U TVUNR/L 16	40	37.5	350	27	50	VNM. 1604..	TTK01	TKV01M5x22	TTVN 20002	TTV04M5x12	-	TBPL01	TTL033

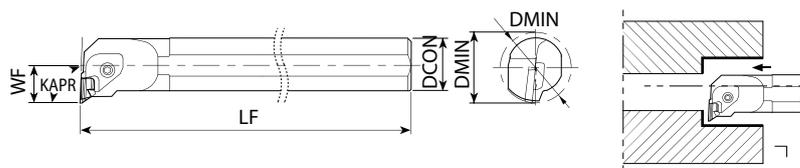
# TWLN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	RING PIERSCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S25S TWLNR/L 06	25	23	250	17	32	WNM. 0604..	TTK01	TKV01M5x22	TTWN SW317	TTV01M3x10	-	TBPL01	TTL033
S32T TWLNR/L 06	32	30	300	22	40	WNM. 0604..	TTK01	TKV01M5x22	TTWN SW317	TTV01M3x10	-	TBPL01	TTL033
S25S TWLNR/L 08	25	23	250	17	32	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV13M5x8	TS01	TBPL01	TTL033
S32T TWLNR/L 08	32	30	300	22	40	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV02M5x12	TS01	TBPL01	TTL033
S40U TWLNR/L 08	40	37.5	350	27	50	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV02M5x12	TS01	TBPL01	TTL033
S50V TWLNR/L 08	50	47	400	35	63	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV02M5x12	TS01	TBPL01	TTL033
A40T TWLNR/L 08	40	37.5	300	27	50	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV02M5x12	TS01	TBPL01	TTL033
A50U TWLNR/L 08	50	47	350	35	63	WNM. 0804..	TTK02	TKV30M6x22	TTWN 30001	TTV02M5x12	TS01	TBPL01	TTL033

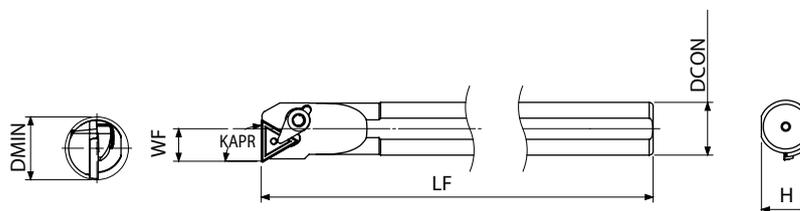
INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

CKUN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	STAMP	ALLEN KEY KLUCZ IMBUSOWY
S25S CKUNR/L 16	25	23	250	19	38	KNUX 1604..	TCK01R TCK02L	TKV06M6x20	TKS16R TKS16L	TTV01M3x10	TKY02	TBPL01	TTL054
S32T CKUNR/L 16	32	30	300	22	40	KNUX 1604..	TCK01R TCK02L	TKV06M6x20	TKS16R TKS16L	TTV01M3x10	TKY02	TBPL01	TTL054
S40U CKUNR/L 16	40	37.5	350	27	50	KNUX 1604..	TCK01R TCK02L	TKV06M6x20	TKS16R TKS16L	TTV01M3x10	TKY02	TBPL01	TTL054
S50V CKUNR/L 16	50	47	400	35	63	KNUX 1604..	TCK01R TCK02L	TKV06M6x20	TKS16R TKS16L	TTV01M3x10	TKY02	TBPL01	TTL054

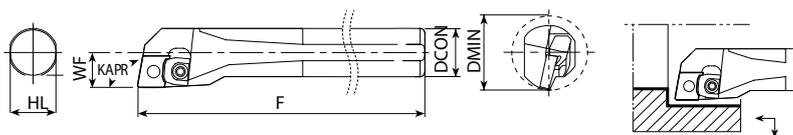
CTFP



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	SPRING SPRĘŻYNA	STAMP	ALLEN KEY KLUCZ IMBUSOWY
S16R CTFPR/L 16	16	14.7	200	11	22	TP. 1603..	TCK06	TKV10M6x14					TTL054
S20S CTFPR/L 16	20	18.3	250	13	24	TP. 1603..	TCK06	TKV10M6x14					TTL054
S25T CTFPR/L 16	25	23	300	17	32	TP. 1603..	TCK06	TKV10M6x14					TTL054

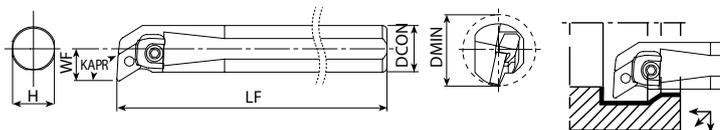
**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**

# MCLN



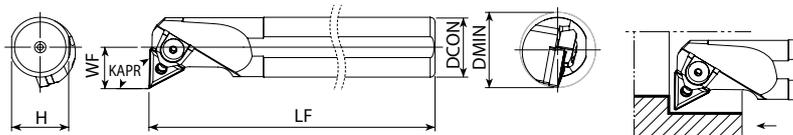
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	ALLEN KEY KLUCZ IMBUSOWY
S20R MCLNR/L 12	20	18.3	200	13	25	CNM. 1204..	TMK07	TKV04M5x17	-	TPM12	TTL033
S25S MCLNR/L 12	25	23	250	17	32	CNM. 1204..	TMK03	TKV04M5x17	TTCN30001	TPM13	TTL033
S32T MCLNR/L 12	32	30	300	22	40	CNM. 1204..	TMK03	TKV04M5x17	TTCN30001	TPM04	TTL033

# MDUN



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S20R MDUNR/L 11	20	18.3	200	13	25	DNM. 1104..	TMK03	TKV17M5x15	-	-	TPM03	-	TTL033
S25S MDUNR/L 11	25	23	250	17	32	DNM. 1104..	TMK03	TKV04M5x17	-	-	TPM03	-	TTL033
S32T MDUNR/L 11	32	30	300	22	40	DNM. 1104..	TMK03	TKV04M5x17	-	-	TPM03	-	TTL033
S25S MDUNR/L 15	25	23	250	17	32	DNM. 1506..	TMK04	TKV20M6x19	TTDN30001	-	TPM04	TBPL01	TTL033
S32T MDUNR/L 15	32	30	300	22	40	DNM. 1506..	TMK04	TKV30M6x22	TTDN30001	TS01	TPM04	TBPL01	TTL033
S40U MDUNR/L 15	40	37.5	350	27	50	DNM. 1506..	TMK04	TKV30M6x22	TTDN30001	TS01	TPM04	TBPL01	TTL033
S50V MDUNR/L 15	50	47	400	35	63	DNM. 1506..	TMK04	TKV30M6x22	TTDN30001	TS01	TPM04	TBPL01	TTL033

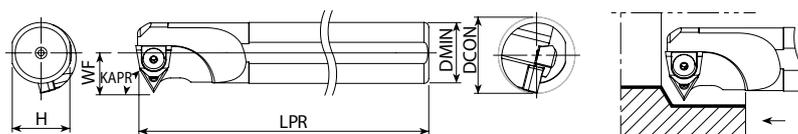
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ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S20R MTFNR/L 16	20	18.3	200	14	25	TNM. 1604..	TMK02	TKV17M5x15	-	TPM03	-	-	TTL033
S25S MTFNR/L 16	25	23	250	17	32	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM14	TS01	TBPL01	TTL033
S32T MTFNR/L 16	32	30	300	22	40	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S40U MTFNR/L 16	40	37.5	350	27	50	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S32T MTFNR/L 22	32	30	300	22	40	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S40U MTFNR/L 22	40	37.5	350	27	50	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
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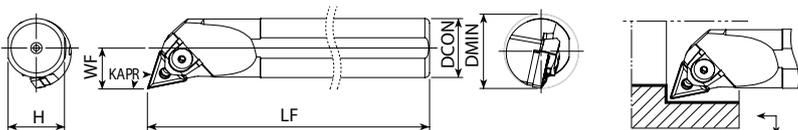
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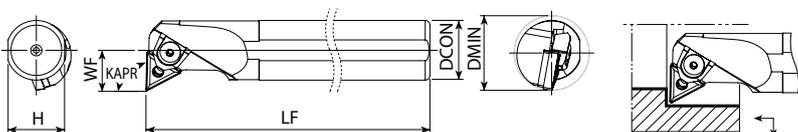
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S20R MTNR/L 16	20	18.3	200	16	26	TNM. 1604..	TMK02	TKV04M5x17	-	TPM03	-	-	TTL033
S25S MTNR/L 16	25	23	250	17	32	TNM. 1604..	TMK02	TKV04M5x17	TTTN20002	TPM14	-	-	TTL033
S32T MTNR/L 16	32	30	300	22	40	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S40U MTNR/L 16	40	37.5	350	27	50	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S32T MTNR/L 22	32	30	300	24	40	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S40U MTNR/L 22	40	37.5	350	27	50	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S50U MTNR/L 22	50	47	350	35	63	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033

MTQN

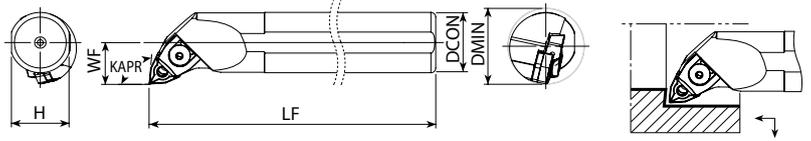


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S20R MTQNR/L 16	20	18.3	200	13	25	TNM. 1604..	TMK02	TKV17M5x15	-	TPM11	-	-	TTL033
S25S MTQNR/L 16	25	23	250	17	32	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM14	TS01	TBPL01	TTL033
S32T MTQNR/L 16	32	30	300	22	40	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM14	TS01	TBPL01	TTL033
S40U MTQNR/L 16	40	37.5	350	27	50	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S32T MTQNR/L 22	32	30	300	22	40	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S40U MTQNR/L 22	40	37.5	350	27	50	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
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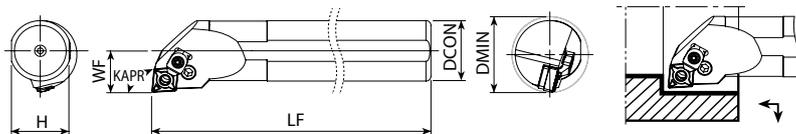
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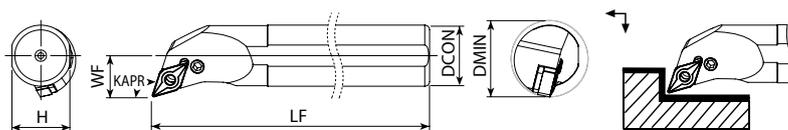
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEN	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S20R MTUNR/L 16	20	18.3	200	13	25	TNM. 1604..	TMK02	TKV17M5x15	-	TPM03	-	-	TTL033
S25S MTUNR L 16	25	23	250	17	32	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM14	TS01	TBPL01	TTL033
S32T MTUNR/L 16	32	30	300	22	40	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S40U MTUNR/L 16	40	37.5	350	27	50	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S50V MTUNR/L 16	50	47	400	35	63	TNM. 1604..	TMK04	TKV30M6x22	TTTN20002	TPM01	TS01	TBPL01	TTL033
S32T MTUNR/L 22	32	30	300	22	40	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S40U MTUNR/L 22	40	37.5	350	27	50	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033
S50V MTUNR/L 22	50	47	400	35	63	TNM. 2204..	TMK04	TKV30M6x22	TTTN30015	TPM02	TS01	TBPL01	TTL033

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**MWLN**


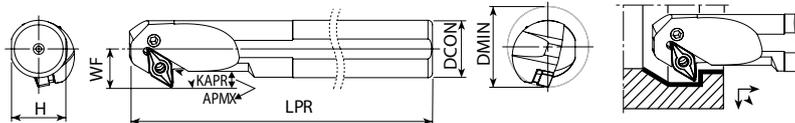
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	SHIM PODKŁADKA	PIN TRZPIEŃ	RING PIERŚCIEŃ	STAMP PODKŁADKA	ALLEN KEY KLUCZ IMBUSOWY
S16P MWLNR/L 06	16	14.8	170	11	20	WNM. 0604..	TMK01	TKV17M5x15	-	TPM09	-	-	TTL033
S20R MWLNR/L 06	20	18.3	200	13	25	WNM. 0604..	TMK01	TKV04M5x17	-	TPM10	-	-	TTL033
S25S MWLNR/L 06	25	23	250	17	32	WNM. 0604..	TMK01	TKV04M5x17	-	TPM08	-	-	TTL033
S25S MWLNR/L 08	25	23	250	17	32	WNM. 0804..	TMK05	TKV27M6x20	TTWN30001	TPM04	TS01	TBPL01	TTL033
S20R MWLNR/L 08	20	18,3	200	13	25	WNM. 0804..	TMK05	TKV03M6X22	TTWN30001	TPM02	TS01	TBPL01	TTL033
S32T MWLNR/L 08	32	30	300	22	40	WNM. 0804..	TMK05	TKV03M6X22	TTWN30001	TPM02	TS01	TBPL01	TTL033
S40U MWLNR/L 08	40	37.5	350	27	50	WNM. 0804..	TMK05	TKV03M6X22	TTWN30001	TPM02	TS01	TBPL01	TTL033

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**PCLN**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP	ALLEN
							DŹWIGNIA	ŚRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	ZACISK KLINOWY	ŚRUBA ZACISKU	KLUCZ IMBUSOWY
S16P PCLNR/L 09	16	14.8	170	11	20	CNM. 0903..	TPL07	TLV07M6x13		TTY07	-	-	TTL022.5
S20R PCLNR/L 09	20	18.3	200	13	25	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
S25S PCLNR/L 09	25	23	250	17	32	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
S25S PCLNR/L 12C	25	23	250	17	32	CNM. 1204..	TPL02	TLV08M8x16	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
S32T PCLNR/L 12C	32	30	300	22	40	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
S40U PCLNR/L 12C	40	37.5	350	27	50	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
S50V PCLNR/L 12C	50	47	400	35	63	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
S32T PCLNR/L 16C	32	30	300	22	40	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
S40U PCLNR/L 16C	40	37.5	350	27	50	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
S50V PCLNR/L 16C	50	47	400	35	63	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
S40U PCLNR/L 19C	40	37.5	350	27	50	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
S50V PCLNR/L 19C	50	47	400	35	63	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
A20P PCLNR/L 09	20	18.3	170	13	25	CNM. 0903..	TPL01	TLV02M6x17	TTCN20002	TTY01	-	-	TTL022.5
A25R PCLNR/L 12C	25	23	200	17	32	CNM. 1204..	TPL02	TLV08M8x16	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A25S PCLNR/L 12C	25	23	250	17	32	CNM. 1204..	TPL02	TLV08M8x16	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A32S PCLNR/L 12C	32	30	250	22	40	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A32S PCLNR/L 12C	32	30	300	22	40	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A40T PCLNR/L 12C	40	37.5	300	27	50	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A50U PCLNR/L 12C	50	47	350	35	63	CNM. 1204..	TPL02	TLV03M8x19	TTCN30001	TTY02	TCK05	4015M4x11	TTL033
A32S PCLNR/L 16C	32	30	250	22	40	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
A40T PCLNR/L 16C	40	37.5	300	27	50	CNM. 1606..	TPL04	TLV04M8x22	TTCN30002	TTY03	TCK09	TTV05M6x15	TTL033
A50U PCLNR/L 16C	50	47	350	35	63	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TCK09	TTV05M6x15	TTL054
A40T PCLNR/L 19C	40	37.5	300	27	50	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TTL054	TTV05M6x15	TTL054
A50U PCLNR/L 19C	50	47	350	35	63	CNM. 1906..	TPL05	TLV05M10x27	TTCN30003	TTY04	TTL054	TTV05M6x15	TTL054

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**PDQN**


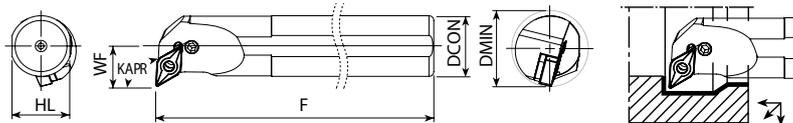
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
S20R PDQNR/L 11	20	18.3	200	13	25	DNM. 1104..	TPL01	TLV01M6x14	TTDNSD317	TTY01	TTL022.5
S25S PDQNR/L 11	25	23	250	17	32	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
S32T PDQNR/L 15	32	30	300	22	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S40U PDQNR/L 15	40	37.5	350	27	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S50V PDQNR/L 15	50	47	400	35	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S32T PDQNR/L 1504	32	30	300	22	40	DNM. 1504..	TPL03	TLV03M8x19	TTDN20003	TTY02	TTL033
S40U PDQNR/L 1504	40	37.5	350	27	50	DNM. 1504..	TPL03	TLV03M8x19	TTDN20003	TTY02	TTL033
S50V PDQNR/L 1504	50	47	400	35	63	DNM. 1504..	TPL03	TLV03M8x19	TTDN20003	TTY02	TTL033
A20P PDQNR/L 11	20	18.3	170	13	25	DNM. 1104..	TPL01	TLV01M6x14	TTDNSD317	TTY01	TTL022.5
A25R PDQNR/L 11	25	23	200	17	32	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
A32S PDQNR/L 15	32	30	250	22	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A40T PDQNR/L 15	40	37.5	300	27	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A50U PDQNR/L 15	50	47	350	35	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A32S PDQNR/L 1504	32	30	250	22	40	DNM. 1504..	TPL03	TLV03M8x19	TTDN20003	TTY02	TTL033
A40T PDQNR/L 1504	40	37.5	300	27	50	DNM. 1504..	TPL03	TLV03M8x19	TTDN20003	TTY02	TTL033

**PDXN**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	APMX	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
S32T PDXNR/L 15	32	30	300	22	12	45	DNM. 1506..	TPL03	TLV08M8x16	TTDN30001	TTY02	TTL033
S40U PDXNR/L 15	40	37.5	350	27	14	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S50V PDXNR/L 15	50	47	400	35	19	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A32S PDXNR/L 15	32	30	250	22	12	40	DNM. 1506..	TPL03	TLV08M8x16	TTDN30001	TTY02	TTL033
A40T PDXNR/L 15	40	37.5	300	27	14	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A50U PDXNR/L 15	50	47	350	35	19	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033

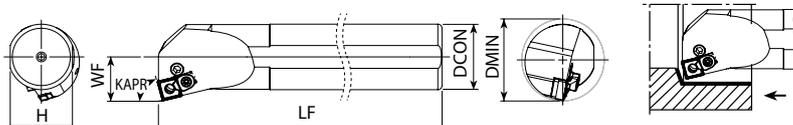
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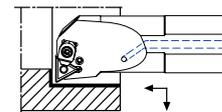
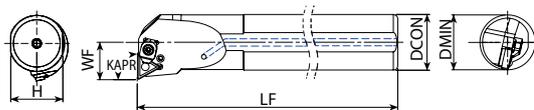


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	ALLEN KEY KLUCZ IMBUSOWY
											
S20R PDUNR/L 11	20	18.3	200	13	25	DNM. 1104..	TPL01	TLV01M6x14	TTDNSD317	TTY01	TTL022.5
S25S PDUNR/L 11	25	23	250	17	32	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
S25S PDUNR/L 15	25	23	250	19	32	DNM. 1506..	TPL03	TLV08M8x16	TTDN30001	TTY02	TTL033
S32T PDUNR/L 15	32	30	300	22	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S40U PDUNR/L 15	40	37.5	350	27	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
S50V PDUNR/L 15	50	47	400	35	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A20P PDUNR/L 11	20	18.3	170	13	25	DNM. 1104..	TPL01	TLV01M6x14	TTDNSD317	TTY01	TTL022.5
A25R PDUNR/L 11	25	23	200	17	32	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
A25S PDUNR/L 11	25	23	250	17	32	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
A32S PDUNR/L 11	32	30	250	22	40	DNM. 1104..	TPL01	TLV02M6x17	TTDNSD317	TTY01	TTL022.5
A32S PDUNR/L 15	32	30	250	22	40	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A40T PDUNR/L 15	40	37.5	300	27	50	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033
A50U PDUNR/L 15	50	47	350	35	63	DNM. 1506..	TPL03	TLV03M8x19	TTDN30001	TTY02	TTL033

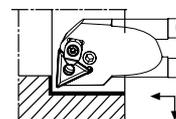
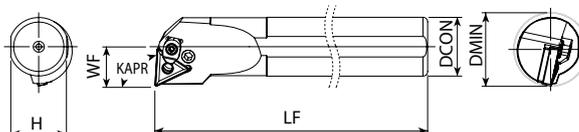
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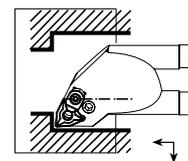
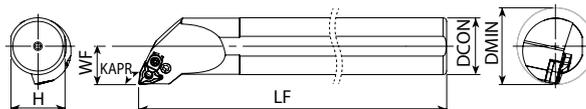
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
													
S25S PSKNR/L 12C	25	23	250	17	32	SNM. 1204..	TPL02	TLV08M8x16	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
S32T PSKNR/L 12C	32	30	300	22	40	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
S40U PSKNR/L 12C	40	37.5	350	27	50	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
S50V PSKNR/L 12C	50	47	400	35	63	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
S32T PSKNR/L 15C	32	30	300	22	40	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
S40U PSKNR/L 15C	40	37.5	350	27	50	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
S50V PSKNR/L 15C	50	47	400	35	63	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
A25R PSKNR/L 12C	25	23	200	17	32	SNM. 1204..	TPL02	TLV08M8x16	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
A32S PSKNR/L 12C	32	30	250	22	40	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
A40T PSKNR/L 12C	40	37.5	300	27	50	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
A50U PSKNR/L 12C	50	47	350	35	63	SNM. 1204..	TPL02	TLV03M8x19	TTSN30004	TTY02	TCK05	4015M4x11	TTL033
A32S PSKNR/L 15C	32	30	250	22	40	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
A40T PSKNR/L 15C	40	37.5	300	27	50	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033
A50U PSKNR/L 15C	50	47	350	35	63	SNM. 1506..	TPL04	TLV04M8x22	TTSN30023	TTY03	TCK09	TTV05M6x15	TTL033

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**PTFN**


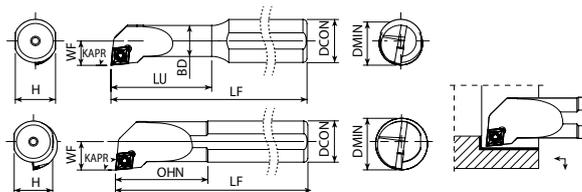
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER	LEVER SCREW	SHIM	SHIM SPRING	WEDGE	CLAMP SCREW	ALLEN KEY
							DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
A25R PTFNR/L 16C	25	23	200	17	32	TNM. 1604..							
A32S PTFNR/L 16C	32	30	250	22	40	TNM. 1604..							

**PTUN**


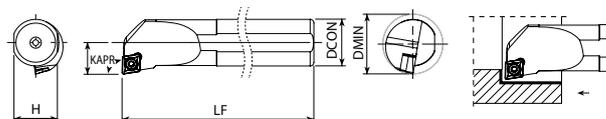
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							DŹWIGNIA	SRUBA DŹWIGNI	PODKŁADKA	SPRĘŻYNA PODKŁADKI	CLAMP ZACISK KLINOWY	SRUBA ZACISKU	KLUCZ IMBUSOWY
S16P PTUNR/L 16	16	14.8	170	11	20	TNM. 1604..					-	-	
S20R PTUNR/L 16	20	18.3	200	13	25	TNM. 1604..					-	-	
S25S PTUNR/L 16C	25	23	250	17	32	TNM. 1604..							
S32T PTUNR/L 16C	32	30	300	22	40	TNM. 1604..							
S40U PTUNR/L 16C	40	37.5	350	27	50	TNM. 1604..							
S32T PTUNR/L 22C	32	30	300	22	40	TNM. 2204..							
S40U PTUNR/L 22C	40	37.5	350	27	50	TNM. 2204..							
S50V PTUNR/L 22C	50	47	400	35	63	TNM. 2204..							
A16M PTUNR/L 16	16	14.8	150	11	20	TNM. 1604..					-	-	
A20P PTUNR/L 16	20	18.3	170	13	25	TNM. 1604..					-	-	
A25R PTUNR/L 16C	25	23	200	17	32	TNM. 1604..							
A32S PTUNR/L 16C	32	30	250	22	40	TNM. 1604..							
A40T PTUNR/L 16C	40	37.5	300	27	50	TNM. 1604..							
A32S PTUNR/L 22C	32	30	250	22	40	TNM 2204							
A40T PTUNR/L 22C	40	37.5	300	27	50	TNM 2204							

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**PWLN**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	LEVER DŹWIGNIA	LEVER SCREW SRUBA DŹWIGNI	SHIM PODKŁADKA	SHIM SPRING SPRĘŻYNA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY
													
S20R PWLNR/L 06	20	18.3	200	13	25	WNM. 0604..	TPL01	TLV01M6x14	TTWNSW317	TTY01	-	-	TTL022.5
S25S PWLNR/L 06	25	23	250	17	32	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
S32T PWLNR/L 06	32	30	300	22	40	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
S25S PWLNR/L 08C	25	23	250	17	32	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
S32T PWLNR/L 08C	32	30	300	22	40	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
S40U PWLNR/L 08C	40	37.5	350	27	50	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
S50V PWLNR/L 08C	50	47	400	35	63	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
A16M PWLNR/L 06	16	14.8	150	11	20	WNM. 0604..	TPL08	TLV07M6x13	-	TTY07	-	-	TTL022.5
A20P PWLNR/L 06	20	18.3	170	13	25	WNM. 0604..	TPL01	TLV01M6x14	TTWNSW317	TTY01	-	-	TTL022.5
A25R PWLNR/L 06	25	23	200	17	32	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
A32S PWLNR/L 06	32	30	250	22	40	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
A40T PWLNR/L 06	40	37.5	300	27	50	WNM. 0604..	TPL01	TLV02M6x17	TTWNSW317	TTY01	-	-	TTL022.5
A25R PWLNR/L 08C	25	23	200	17	32	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
A32S PWLNR/L 08C	32	30	250	22	40	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
A40T PWLNR/L 08C	40	37.5	300	27	50	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033
A50U PWLNR/L 08C	50	47	350	35	63	WNM. 0804..	TPL02	TLV03M8x19	TTWN30001	TTY02	TCK05	4015M4x11	TTL033

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**SCLC**


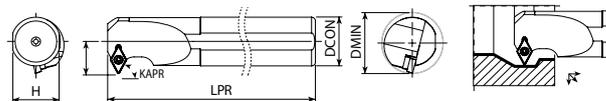
ORDER CODE KOD ZAMÓWIENIA	DCON	BD	H	LF	LU	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S0608H SCLCR/L 03	8	5	7.3	100	18	3	6	CC.T 030102	4006M1.6x3.2	-	-	80T06
S0608H SCLCR/L 06	8	6	7.3	100	25	4.5	8	CC.T 0602..	4008M2.5x4.5	-	-	80T08
S08H SCLCR/L 06	8	8	7.3	100	20	6	11	CC.T 0602..	4008M2.5x6	-	-	80T08
S10K SCLCR/L 06	10	10	9	125	25	7	13	CC.T 0602..	4008M2.5x6	-	-	80T08
S12K SCLCR/L 06	12	12	11	125	25	9	16	CC.T 0602..	4008M2.5x6	-	-	80T08
S1216P SCLCR/L 06	16	11.5	14.8	170	37	9	16	CC.T 0602..	4008M2.5x6	-	-	80T08
S16P SCLCR/L 06	16	16	14.8	170	35	11	20	CC.T 0602..	4008M2.5x6	-	-	80T08
S12K SCLCR/L 09	12	12	11	125	30	9	16	CC.T 09T3..	4015M3.5x8	-	-	80T15
S1416P SCLCR/L 09	16	14	14.8	170	45	9.5	17	CC.T 09T3..	4015M3.5x9	-	-	80T15
S16P SCLCR/L 09	16	16	14.8	170	35	11	20	CC.T 09T3..	4015M3.5x9	-	-	80T15
S1620R SCLCR/L 09	20	16	18.3	200	50	11	20	CC.T 09T3..	4015M3.5x9	-	-	80T15
S20R SCLCR/L 09	20	20	18.3	200	40	13	25	CC.T 09T3..	4015M3.5x9	-	-	80T15
S25S SCLCR/L 09	25	25	23	250	50	17	32	CC.T 09T3..	4015M3.5x12	TTCN20001	TTV08M3.5x8	80T15
S32T SCLCR/L 09	32	32	30	300	60	22	40	CC.T 09T3..	4015M3.5x12	TTCN20001	TTV08M3.5x8	80T15
S25S SCLCR/L 12	25	25	23	250	50	17	32	CC.T 1204..	4020M4.5x12	TTCN20003	TTV10M4.5x8	80T20
S32T SCLCR/L 12	32	32	30	300	60	22	40	CC.T 1204..	4020M4.5x12	TTCN20003	TTV10M4.5x8	80T20
S40U SCLCR/L 12	40	40	37.5	350	70	27	50	CC.T 1204..	1020M4.5x16	TTCN20003	TTV07M4.5x13	80T20
A08H SCLCR/L 06	8	8	7.3	100	20	06	11	CC.T 0602..	4008M2.5x6	-	-	80T08
A10H SCLCR/L 06	10	10	09	100	25	7	13	CC.T 0602..	4008M2.5x6	-	-	80T08
A12H SCLCR/L 06	12	12	11	100	25	9	16	CC.T 0602..	4008M2.5x6	-	-	80T08
A16M SCLCR/L 09	16	16	14.8	150	35	11	20	CC.T 0602..	4015M3.5x9	-	-	80T08
A20P SCLCR/L 09	20	20	18.3	170	40	13	25	CC.T 09T3..	4015M3.5x12	TTCN20001	TTV8M3.5x8	80T15
A25R SCLCR/L 09	25	25	23	200	50	17	32	CC.T 09T3..	4015M3.5x12	TTCN20001	TTV8M3.5x8	80T15
A32S SCLCR/L 09	32	32	30	250	60	22	40	CC.T 09T3..	4015M3.5x12	TTCN20001	TTV8M3.5x8	80T15
A25R SCLCR/L 12	25	25	23	200	50	17	32	CC.T 1204..	4020M4.5x12	TTCN20003	TTV10M4.5x8	80T20

**SCFC**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S08H SCFCR/L 06	8	7.3	100	6	11	CC.T 0602..	4008M2.5x6	-	-	80T08
S10K SCFCR/L 06	10	9	125	7	13	CC.T 0602..	4008M2.5x6	-	-	80T08
S12K SCFCR/L 06	12	11	125	9	16	CC.T 0602..	4008M2.5x6	-	-	80T08
S12K SCFCR/L 09	12	11	125	9	16	CC.T 09T3..	4015M3.5x8	-	-	80T15
S16P SCFCR/L 09	16	14.8	170	11	20	CC.T 09T3..	4015M3.5x9	-	-	80T15
S20R SCFCR/L 09	20	18.3	200	13	25	CC.T 09T3..	4015M3.5x9	-	-	80T15
S25S SCFCR/L 09	25	23	250	17	32	CC.T 09T3..	4015M3.5x12	-	-	80T15
S25S SCFCR/L 12	25	23	250	17	32	CC.T 1204..	4020M4.5x12	TTCN20001	TTV08M3.5x8	80T20
S32T SCFCR/L 12	32	30	300	22	40	CC.T 1204..	4020M4.5x12	TTCN20003	TTV10M4.5x8	80T20
S40U SCFCR/L 12	40	37.5	350	27	50	CC.T 1204..	1020M4.5x16	TTCN20003	TTV10M4.5x8	80T20
A08H SCFCR/L 06	8	7.3	100	6	11	CC.T 0602..	4008M2.5x6	TTCN20003	TTV07M4.5x13	80T08

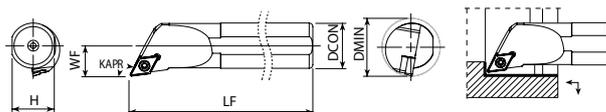
INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

SDC



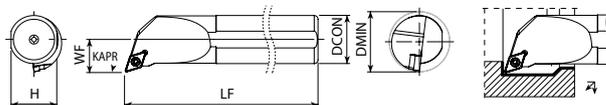
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
										
S10K SDCR/L 07	10	9	125	7	14	DC.T 0702..	4008M2.5x6	-	-	80T08
S12K SDCR/L 07	12	11	125	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDCR/L 07	16	14.8	170	11	20	DC.T 0702..	4008M2.5x6	-	-	80T08
S20R SDCR/L 07	20	18.3	200	13	25	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDCR/L 11	16	14.8	170	14	22	DC.T 11T3..	4015M3.5x11	-	-	80T15
S20R SDCR/L 11	20	18.3	200	15	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
S25S SDCR/L 11	25	23	250	18	32	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S32T SDCR/L 11	32	30	300	22	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S40U SDCR/L 11	40	37.5	350	27	50	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

SDPC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
										
S10K SDPCR/L 07	10	9	125	7	13	DC.T 0702..	4008M2.5x6	-	-	80108
S12K SDPCR/L 07	12	11	125	9	16	DC.T 0702..	4008M2.5x6	-	-	80108
S16P SDPCR/L 11	16	14.8	170	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
S20R SDPCR/L 11	20	18.3	200	13	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
S25S SDPCR/L 11	25	23	250	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15

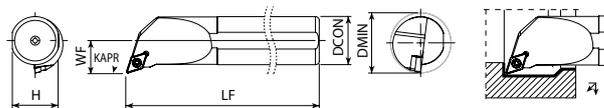
SDQC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
										
S10K SDQCR/L 07	10	9	125	7	13	DC.T 0702..	4008M2.5x6	-	-	80T08
S12K SDQCR/L 07	12	11	125	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDQCR/L 07	16	14.8	170	11	20	DC.T 0702..	4008M2.5x6	-	-	80T08
S20R SDQCR/L 07	20	18.3	200	13	25	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDQCR/L 11	16	14.8	170	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
S20R SDQCR/L 11	20	18.3	200	13	25	DC.T 11T3..	4015M3.5x11	-	-	80T15

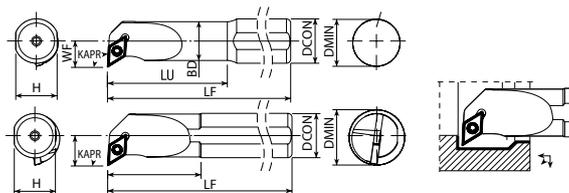
**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**

# SDQC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S25S SDQCR/L 11	25	23	250	17	32	DC.T 11T3..	4015M3.5x12	-	TTV08M3.5x8	80T15
S32T SDQCR/L 11	32	30	300	22	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S40U SDQCR/L 11	40	37.5	350	27	50	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
A10H SDQCR/L 07	10	09	100	07	13	DC.T 0702..	4008M2.5x6	-	-	80T08
A12H SDQCR/L 07	12	11	100	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDQCR/L 07	16	14.8	150	11	20	DC.T 0702..	4008M2.5x6	-	-	80T08
A20P SDQCR/L 07	20	18.3	170	13	25	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDQCR/L 11	16	14.8	150	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
A20P SDQCR/L 11	20	18.3	170	13	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
A25R SDQCR/L 11	25	23	200	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15
A32S SDQCR/L 11	32	30	250	22	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

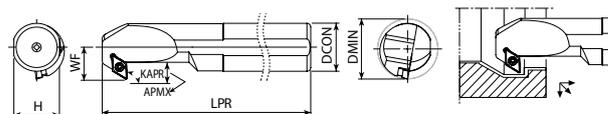
# SDUC



ORDER CODE KOD ZAMÓWIENIA	DCON	BD	H	LF	LU	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S0810K SDUCR/L 07	10	8	9	125	30	8	13	DC.T 0702..	4008M2.5x6	-	-	80T08
S10K SDUCR/L 07	10	10	9	125	25	8	13	DC.T 0702..	4008M2.5x6	-	-	80T08
S12K SDUCR/L 07	12	12	11	125	25	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
S1216P SDUCR/L 07	16	11.5	14.8	170	37	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
S1416P SDUCR/L 07	16	14	14.8	170	45	9.5	17	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDUCR/L 07	16	16	14.8	170	35	11	20	DC.T 0702..	4008M2.5x6	-	-	80T08
S20R SDUCR/L 07	20	20	18.3	200	40	13	25	DC.T 0702..	4008M2.5x6	-	-	80T08
S1416P SDUCR/L 11	16	14	14.8	170	45	11	18	DC.T 11T3..	4015M3.5x9	-	-	80T15
S16P SDUCR/L 11	16	16	14.8	170	35	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
S1620R SDUCR/L 11	20	16	18.3	200	50	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
S20R SDUCR/L 11	20	20	18.3	200	40	13	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
S25S SDUCR/L 11	25	25	23	250	50	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15
S25T SDUCR/L 11	25	25	23	300	50	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15
S32T SDUCR/L 11	32	32	30	300	60	22	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S40U SDUCR/L 11	40	40	37.5	350	70	27	50	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S50V SDUCR/L 11	50	50	47	400	80	35	63	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
A0810H SDUCR/L 07	10	8	9	100	30	8	13	DC.T 0702..	4008M2.5x6	-	-	80T08
A10H SDUCR/L 07	10	10	9	100	25	8	13	DC.T 0702..	4008M2.5x6	-	-	80T08
A12H SDUCR/L 07	12	12	11	100	25	9	16	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDUCR/L 07	16	16	14.8	150	35	11	20	DC.T 0702..	4008M2.5x6	-	-	80T08
A20P SDUCR/L 07	20	20	18.3	170	40	13	25	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDUCR/L 11	16	16	14.8	150	35	11	20	DC.T 11T3..	4015M3.5x9	-	-	80T15
A20P SDUCR/L 11	20	20	18.3	170	40	13	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
A25R SDUCR/L 11	25	25	23	200	50	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15
A25T SDUCR/L 11	25	25	23	300	50	17	32	DC.T 11T3..	4015M3.5x12	TTDN20001	TTV08M3.5x8	80T15
A32S SDUCR/L 11	32	32	30	250	60	22	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
A50U SDUCR/L 11	50	50	47	350	80	35	63	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

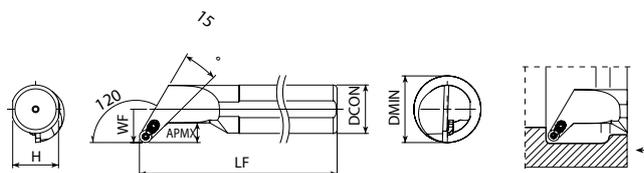
INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

SDXC

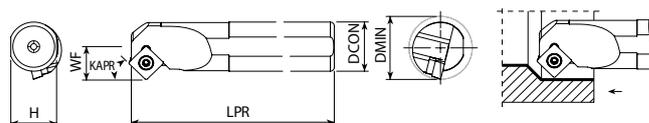


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	APMX	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
											
S12K SDXCR/L 07	12	11	125	9	4.5	16	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDXCR/L 07	16	14.8	170	11	6.5	20	DC.T 0702..	4008M2.5x6	-	-	80T08
S20R SDXCR/L 07	20	18.3	200	13	6.5	25	DC.T 0702..	4008M2.5x6	-	-	80T08
S16P SDXCR/L 11	16	14.8	170	11	6.5	20	DC.T 11T3..	4015M3.5x11	-	-	80T15
S20R SDXCR/L 11	20	18.3	200	14	7.5	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
S25S SDXCR/L 11	25	23	250	17	9	32	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV08M3.5x8	80T15
S32T SDXCR/L 11	32	30	300	22	12.5	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
S40U SDXCR/L 11	40	37.5	350	27	14.5	50	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15
A12H SDXCR/L 07	12	11	100	9	4.5	16	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDXCR/L 07	16	14.8	150	11	6.5	20	DC.T 0702..	4008M2.5x6	-	-	80T08
A20P SDXCR/L 07	20	18.3	170	13	6.5	25	DC.T 0702..	4008M2.5x6	-	-	80T08
A16M SDXCR/L 11	16	14.8	150	11	7.5	20	DC.T 11T3..	4015M3.5x11	-	-	80T15
A20P SDXCR/L 11	20	18.3	170	14	7.5	25	DC.T 11T3..	4015M3.5x11	-	-	80T15
A25R SDXCR/L 11	25	23	200	17	9	32	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV08M3.5x8	80T15
A32S SDXCR/L 11	32	30	250	22	12.5	40	DC.T 11T3..	4015M3.5x14	TTDN20001	TTV06M3.5x11	80T15

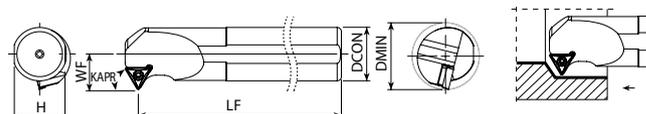
SRGC



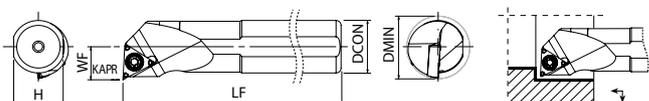
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	APMX	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
											
S16P SRGCR/L 08	16	14.8	170	11	7	22	RCM. 0803..	3008M3x8	-	-	80T08
S20R SRGCR/L 08	20	18.3	200	13	7	26	RCM. 0803..	3008M3x8	-	-	80T08
S25S SRGCR/L 08C	25	23	250	17	9.5	34	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
S32T SRGCR/L 08C	32	30	300	22	13	44	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
S40U SRGCR/L 08C	40	37.5	350	27	15	54	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
A16M SRGCR/L 08	16	14.8	150	11	7	22	RCM. 0803..	3008M3x8	-	-	80T08
A20P SRGCR/L 08	20	18.3	170	13	7	26	RCM. 0803..	3008M3x8	-	-	80T08
A25R SRGCR/L 08C	25	23	200	17	9.5	34	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
A32S SRGCR/L 08C	32	30	250	22	13	44	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08
A40T SRGCR/L 08C	40	37.5	300	27	15	54	RCM. 0803..	3008M3x8	TCK15	4015M3.5x11	80T08

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**SSSC**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S16P SSSCR/L 09	16	14.8	170	11	20	SC.T 09T3..	4015M3.5x9	-	-	80T15
S20R SSSCR/L 09	20	18.3	200	13	25	SC.T 09T3..	4015M3.5x11	-	-	80T15
S25S SSSCR/L 09	25	23	250	17	32	SC.T 09T3..	4015M3.5x12	TTSN20001	TTV08M3.5x8	80T15
S25S SSSCR/L 12	25	23	250	17	32	SC.T 1204..	4020M4.5x12	TTSN20004	TTV10M4.5x8	80T20
S32T SSSCR/L 12	32	30	300	22	40	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20
S40U SSSCR/L 12	40	37.5	350	27	50	SC.T 1204..	1020M4.5x16	TTSN20004	TTV07M4.5x13	80T20

**STC**


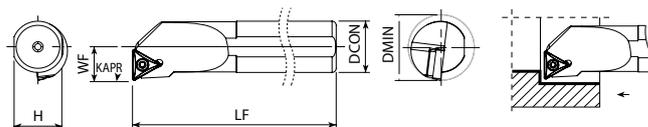
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S12K STCR/L 11	12	11	125	9	17	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STCR/L 11	16	14.8	170	11	20	TC.T 1102..	4008M2.5x6	-	-	80T08
S20R STCR/L 11	20	18.3	200	13	25	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STCR/L 16	16	14.8	170	11	20	TC.T 16T3..	4015M3.5x9	-	-	80T15
S20R STCR/L 16	20	18.3	200	13	25	TC.T 16T3..	4015M3.5x11	-	-	80T15
S25S STCR/L 16	25	23	250	17	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV08M3.5x8	80T15
S32T STCR/L 16	32	30	300	22	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
S40U STCR/L 16	40	37.5	350	27	50	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

**STUP**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
S08H STUPR/L 0802	8	7.3	100	5	10	TP. 0802..	3006M2x4	80T06
S10K STUPR/L 1103	10	9	125	6	12	TP. 1103..	4010M3x6	80T10
S12K STUPR/L 1103	12	11	125	9	16	TP. 1103..	4010M3x6	80T10
S12M STUPR/L 1103	12	11	150	8	16	TP. 1103..	4010M3x6	80T10
S16P STUPR/L 1103	16	14.8	170	10	20	TP. 1103..	4010M3x8	80T10
S16R STUPR/L 1103	16	14.8	200	10	20	TP. 1103..	4010M3x8	80T10
A20R STUPR/L 1103	20	18.3	200	13	25	TP. 1103..	4010M3x8	80T10

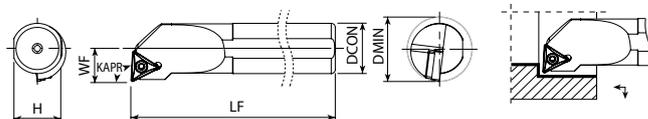
## INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

### STFC

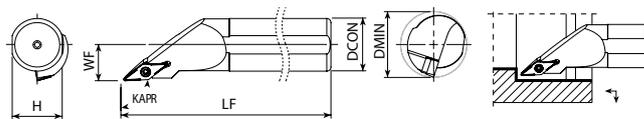


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
										
S0610F STFCR/L 06	10	9	80	4.5	8	TC.T 06T1..	3006M2x4	-	-	80T06
S08H STFCR/L 06	8	7.3	100	6	11	TC.T 06T1..	3006M2x4	-	-	80T06
S10K STFCR/L 09	10	9	125	07	13	TC T 0902	3007.M2 2x5	-	-	80T07
S12K STFCR/L 09	12	11	125	9	17	TC T 0902	3007.M2 2x5	-	-	80T07
S12K STFCR/L 11	12	11	125	9	17	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STFCR/L 11	16	14.8	170	11	20	TC.T 1102..	4008M2.5x6	-	-	80T08
S20R STFCR/L 11	20	18.3	200	13	25	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STFCR/L 16	16	14.8	170	11	20	TC.T 16T3..	4015M3.5x9	-	-	80T15
S20R STFCR/L 16	20	18.3	200	13	25	TC.T 16T3..	4015M3.5x11	TTTN20001	-	80T15
S25S STFCR/L 16	25	23	250	17	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV08M3.5x8	80T15
S32T STFCR/L 16	32	30	300	22	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15
S40U STFCR/L 16	40	37.5	350	27	50	TC.T 16T3..	4015M3.5x14	-	TTV06M3.5x11	80T15
A10H STFCR/L 11	10	9	100	7	13	TC.T 1102..	4008M2.5x6	-	-	80T08
A12H STFCR/L 11	12	11	100	9	17	TC.T 1102..	4008M2.5x6	-	-	80T08
A16M STFCR/L 11	16	14.8	150	11	20	TC.T 1102..	4008M2.5x6	-	-	80T08

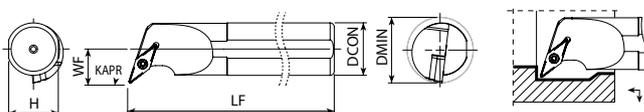
### STUC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
										
S10K STUCR/L 09	10	9	125	7	13	TC.T 0902..	3007M2.2X5	-	-	80T07
S12K STUCR/L 09	12	11	125	9	16	TC.T 0902..	3007M2.2X5	-	-	80T07
S12K STUCR/L 11	12	11	125	9	17	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STUCR/L 11	16	14.8	170	11	20	TC.T 1102..	4008M2.5x6	-	-	80T08
S20R STUCR/L 11	20	18.3	200	13	25	TC.T 1102..	4008M2.5x6	-	-	80T08
S16P STUCR/L 16	16	14.8	170	11	20	TC.T 16T3..	4015M3.5x9	-	-	80T15
S20R STUCR/L 16	20	18.3	200	13	25	TC.T 16T3..	4015M3.5x11	-	-	80T15
S25S STUCR/L 16	25	23	250	17	32	TC.T 16T3..	4015M3.5X14	TTTN20001	TTV08M3.5x8	80T15
S32S STUCR/L 16	32	30	300	22	40	TC.T 16T3..	4015M3.5X14	TTTN20001	TTV06M3.5x11	80T15
S40U STUCR/L 16	40	37.5	350	27	50	TC.T 16T3..	4015M3.5X14	TTTN20001	TTV06M3.5x11	80T15
A10H STUCR/L 09	10	9	100	7	13	TC.T 0902..	3007M2.2x5	-	-	80T07
A12H STUCR/L 09	12	11	100	9	16	TC.T 0902..	3007M2.2x5	-	-	80T07
A12H STUCR/L 11	12	11	100	9	16	TC.T 1102..	4008M2.5x6	-	-	80T08
A16M STUCR/L 11	16	14.8	150	11	20	TC.T 1102..	4008M2.5x6	-	-	80T08
A20P STUCR/L 11	20	18.3	170	13	25	TC.T 1102..	4008M2.5x6	-	-	80T08
A16M STUCR/L 16	16	14.8	150	11	20	TC.T 16T3..	4015M3.5x9	-	-	80T15
A20P STUCR/L 16	20	18.3	170	13	25	TC.T 16T3..	4015M3.5x11	-	-	80T15
A25R STUCR/L 16	25	23	200	17	32	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV08M3.5x8	80T15
A32S STUCR/L 16	32	30	250	22	40	TC.T 16T3..	4015M3.5x14	TTTN20001	TTV06M3.5x11	80T15

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**SVJB**


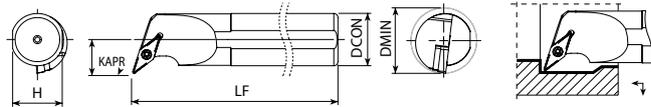
ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S25S SVJBR/L 16	25	23	250	17	32	VB.T 1604..	4015M3.5x12	TTVN20002	TTV08M3.5x8	80T15
S32T SVJBR/L 16	32	30	300	22	40	VB.T 1604..	4015M3.5x12	TTVN20002	TTV08M3.5x8	80T15
S40U SVJBR/L 16	40	37.5	350	27	50	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**SVQB**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S16P SVQBR/L 11	16	14.8	170	11	20	VB.T 1103..	4008M2.5x6	-	-	80T08
S20R SVQBR/L 11	20	18.3	200	13	25	VB.T 1103..	4008M2.5x6	-	-	80T08
S25S SVQBR/L 16	25	23	250	17	32	VB.T 1604..	4015M3.5x14	TTVN20002	TTV08M3.5x8	80T15
S32T SVQBR/L 16	32	30	300	22	40	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S40U SVQBR/L 16	40	37.5	350	27	50	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A20Q SVQBR/L 11	20	18.5	180	13	25	VB.T 1103..	4008M2.5x6	-	-	80T08
A20Q SVQBR/L 16	20	18.5	180	20	30	VB.T 1604..	4015M3.5x11	-	-	80T15
A25S SVQBR/L 16	25	23	250	17	32	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A32S SVQBR/L 16	32	30	250	22	40	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S16P SVQCR/L 11	16	14.8	170	11	20	VB.T 1103..	4008M2.5x6	-	-	80T08
S20R SVQCR/L 11	20	18.3	200	13	25	VB.T 1103..	4008M2.5x6	-	-	80T08
S25S SVQCR/L 16	25	23	250	17	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV08M3.5x8	80T15
S32T SVQCR/L 16	32	30	300	22	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S40U SVQCR/L 16	40	37.5	350	27	50	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A16M SVQCR/L 11	16	14.8	150	11	20	VB.T 1103..	4008M2.5x6	-	-	80T08
A20P SVQCR/L 11	20	18.3	170	13	25	VB.T 1103..	4008M2.5x6	-	-	80T08
A25R SVQCR/L 16	25	23	200	17	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV08M3.5x8	80T15
A32S SVQCR/L 16	32	30	250	22	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A40T SVQCR/L 16	40	37.5	300	27	50	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

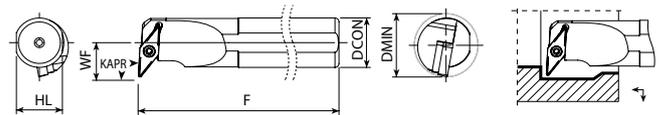
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SVQC



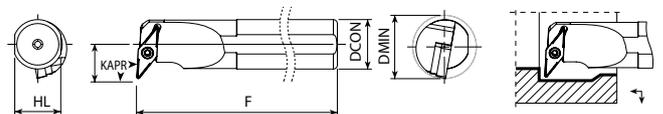
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S16P SVQCR/L 11	16	14.8	170	11	20	VC.T 1103..	4008M25x6	-	-	80T08
S20R SVQCR/L 11	20	18.3	200	13	25	VC.T 1103..	4008M25x6	-	-	80T08
S25S SVQCR/L 16	25	23	250	17	32	VC.T 1604..	4015M35x14	TTVN20002	TTV08M35x8	80T15
S32T SVQCR/L 16	32	30	300	22	40	VC.T 1604..	4015M35x14	TTVN20002	TTV06M35x11	80T15
S40U SVQCR/L 16	40	37.5	350	27	50	VC.T 1604..	4015M35x14	TTVN20002	TTV06M35x11	80T15
A16M SVQCR/L 11	16	14.8	150	11	20	VC.T 1103..	4008M25x6	-	-	80T08
A20P SVQCR/L 11	20	18.3	170	13	25	VC.T 1103..	4008M25x6	-	-	80T08
A25R SVQCR/L 16	25	23	200	17	32	VC.T 1604..	4015M35x14	TTVN20002	TTV08M35x8	80T15
A32S SVQCR/L 16	32	30	250	22	40	VC.T 1604..	4015M35x14	TTVN20002	TTV06M35x11	80T15
A40T SVQCR/L 16	40	37.5	300	27	50	VC.T 1604..	4015M35x14	TTVN20002	TTV06M35x11	80T15

SVUB

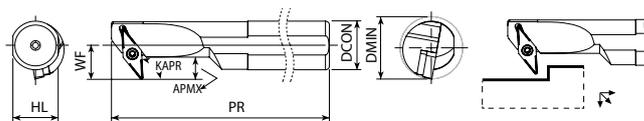


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S16P SVUBR/L 11	16	14.8	170	12.5	20	VB.T 1103..	4008M2.5x6	-	-	80T08
S20R SVUBR/L 11	20	18.3	200	13	25	VB.T 1103..	4008M2.5x6	-	-	80T08
S25S SVUBR/L 16	25	23	250	19	32	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S32T SVUBR/L 16	32	30	300	22	40	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S40U SVUBR/L 16	40	37.5	350	27	50	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A20Q SVUBR/L 16	20	18.3	180	20	30	VB.T 1604..	4015M3.5x11	-	-	80T15
A32S SVUBR/L 16	32	30	250	22	40	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

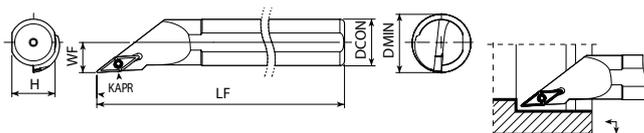
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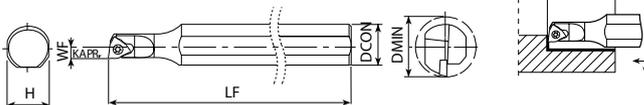
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S16P SVUCR/L 11	16	14.8	170	12.5	20	VC.T 1103..	4008M2.5x6	-	-	80T08
S20R SVUCR/L 11	20	18.3	200	13	25	VC.T 1103..	4008M2.5x6	-	-	80T08
S25S SVUCR/L 16	25	23	250	19	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S32T SVUCR/L 16	32	30	300	22	40	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S40U SVUCR/L 16	40	37.5	350	27	50	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
A12K SVUCR/L 07	12	11	125	9	16	VC.T 0702..	3006M2x4	-	-	80T06
A20P SVUCR/L 11	20	18.3	170	13	25	VC.T 1103..	4008M2.5x6	-	-	80T08
A20Q SVUCR/L 11	20	18.3	180	13	25	VC.T 1103..	4008M2.5x6	-	-	80T08
A25R SVUCR/L 16	25	23	200	19	32	VC.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**
**SVXB**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LPR	WF	APMX	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX
S16P SVXBR/L 1102	16	14.8	170	12.5	7.2	20	VBM. 1102..	4008M2 5x6	-	-	80T08
S20R SVXBR/L 1102	20	18.3	200	13	5.7	25	VBM. 1102..	4008M2 5x6	-	-	80T08
S16P SVXBR/L 11	16	14.8	170	12.5	7.2	20	VB.T 1103..	4008M2 5x6	-	-	80T08
S20R SVXBR/L 11	20	18.3	200	13	5.7	25	VB.T 1103..	4008M2 5x6	-	-	80T08
S25S SVXBR/L 16	25	23	250	19	10.2	32	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S32T SVXBR/L 16	32	30	300	22	11.7	40	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15
S40U SVXBR/L 16	40	37.5	350	27	14.3	50	VB.T 1604..	4015M3.5x14	TTVN20002	TTV06M3.5x11	80T15

**SVJC**


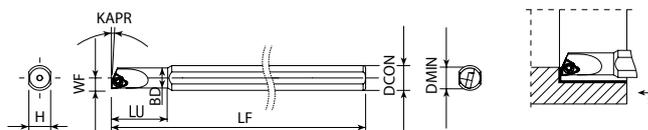
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S12K SVJCR/L 11	12	11	125	7	13	VC.T 1103..	4008M2.5X6	80T08
S16P SVJCR/L 11	16	14.8	170	11	20	VC.T 1103..	4008M2.5X6	80T08
S20R SVJCR/L 11	20	18.3	200	13	25	VC.T 1103..	4008M2.5X6	80T08
A12H SVJCR/L 11	12	11	100	7	13	VC.T 1103..	4008M2.5X6	80T08
A16M SVJCR/L 11	16	14.8	150	11	20	VC.T 1103..	4008M2.5X6	80T08
A20P SVJCR/L 11	20	18.3	170	13	25	VC.T 1103..	4008M2.5X6	80T08

**SWLC**


ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
S0608H SWLCR 03	8	7.3	100	04	8	WC.. 0302..	4008M2.5x4	80T08
S0810K SWLCR 03	10	9	125	06	10	WC.. 0302..	4008M2.5x4.5	80T08

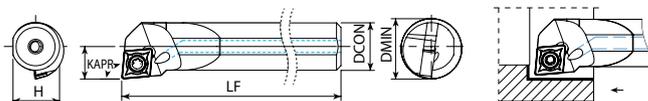
## INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE

### SWUB



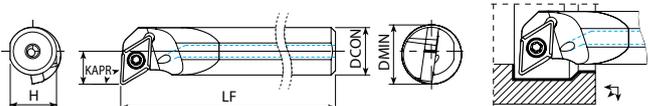
ORDER CODE KOD ZAMÓWIENIA	DCON	BD	H	LF	LU	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
										
S0610H SWUBR 06	10	5	7.3	100	18	3	6	WBGT 060102L	3006M2x3.3	80T06
S08H SWUBR 065.5	8	5	7.3	100	18	2.75	5.7	WBGT 060102L	3006M2x3.3	80T06
S08H SWUBL 065.5	8	5	7.3	100	18	2.75	5.7	WBGT 060102L	3006M2x3.3	80T06
S08H SWUBR 067	8	6.5	7.3	100	18	3.5	7	WBGT 060102L	3006M2x4	80T06

### SCLC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								
C04G SCLCR/L 03	4	3,7	90	2,5	5	CC.0301	4006M1.6x3.2	82T06
C05H SCLCR/L 03	5	4,7	100	3	6	CC.0301	4006M1.6x3.2	82T06
C06J SCLCR/L 04	6	5,7	110	3,5	7	CC.0401	3006M2x3.3	82T06
C07K SCLCR/L 04	7	6,7	125	4	8	CC.0401	3006M2x3.3	82T06
C06J SCLCR/L 06	6	5.7	110	4.5	8	CC.T 0602..	4008M2.5x6	80T08
E08K SCLCR L 06	8	7.5	125	6	11	CC.T 0602..	4008M2.5x6	80T08
E10M SCLCRL 06	10	9.5	150	7	13	CC.T 0602..	4008M2.5x6	80T08
E12Q SCLCRL 06	12	11	180	9	16	CC.T 0602..	4008M2.5x6	80T08
E16R SCLCR L 09	16	15	200	11	20	CC.T 09T3..	4015M3.5x9	80T15
E20S SCLCR/L 09	20	19	250	13	24	CC.T 09T3..	4015M3.5x9	80T15

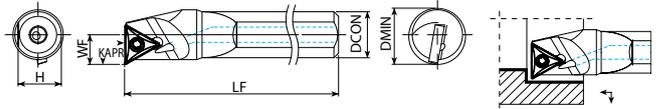
### SDUC



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								
E10M SDUCR/L 07	10	9.5	150	8	13	DC.T 0702..	4008M2.5x6	80T08
E12Q SDUCR L 07	12	11	180	9	16	DC.T 0702..	4008M2.5x6	80T08
E16R SDUCRL 11	16	15	200	11	20	DC.T 11T3..	4015M3.5x9	80T15
E20S SDUCR L 11	20	18.3	250	12	23	DC.T 11T3..	4015M3.5x9	80T15

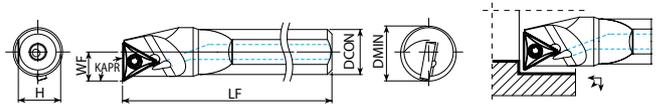
**INSERT HOLDERS NOŻE TOKARSKIE WEWNĘTRZNE**

**STUP**



ORDER CODE KOD ZAMÓWIENIA	DCON	H	LF	WF	DMIN	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								
E12Q STUPR/L 1103	12	11	180	8	15	TP. 1103..	4010M3x6	80T10
E16R STUPR/L 1103	16	15	200	11	20	TP. 1103..	4010M3x8	80T10

**STFC**



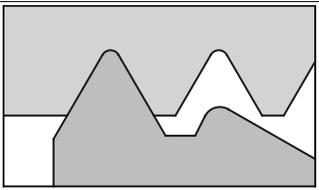
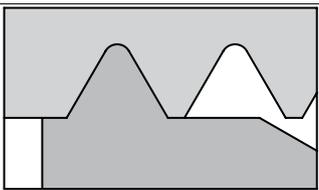
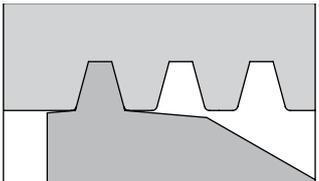
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E12Q STFCR/L 09	12	11	180	8	15	TC.T 0902..	3007M2.2x5	80T07
E12Q STFCR/L 11	12	11	180	8	15	TC.T 1102..	4008M2.5x6	80T08

## THREAD TURNING TOCZENIE GWINTÓW



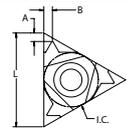
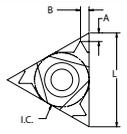
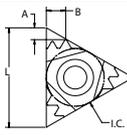
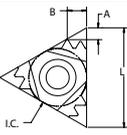
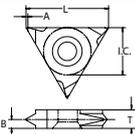
## THREAD PROFILE TYPES

### TYPY PROFILI ZARYSU GWINTU

<p><b>PARTIAL PROFILE</b> PROFIL CZĘŚCIOWY</p> 	<p>Partial profile inserts can be used for a variety of thread pitches and standards, providing the included angle is the same, however, incorrect nose radius on the insert can result in rejection of the component. This style of insert will not deburr the major diameter of the thread and will, therefore, require a secondary operation.</p> <p>Płytki z zarysem częściowym mogą być stosowane dla wielu skoków gwintu i wielu norm, pod warunkiem, że kąt zarysu gwintu jest taki sam, jednak niewłaściwy promień zaokrąglenia ostrza płytki może spowodować odrzucenie części przez kontrolę. Ten rodzaj płytki nie usuwa zadziorów ze średnicy zewnętrznej gwintu dlatego część wymaga wtórnych operacji.</p>
<p><b>FULL PROFILE</b> PROFIL PEŁNY</p> 	<p>Full profile insert cuts thread profile including all three thread diameters. Separate insert required for every pitch</p> <p>Płytko o pełnym profilu wycina profil gwintu, uwzględniając wszystkie trzy średnice gwintu. Dla każdej podziałki wymagana jest osobna płytka</p>
<p><b>SEMI FULL PROFILE</b> PROFIL PÓŁPEŁNY</p> 	<p>Semi full profile inserts style completes the thread form and breaks the corners of outside thread diameter, used for Trapezoidal threading inserts.</p> <p>Półpełny profil wkładek uzupełnia kształt gwintu i łamie naroża zewnętrznej średnicy gwintu, stosowanego do trapezowych wkładek do gwintów.</p>

## INSERT TYPES

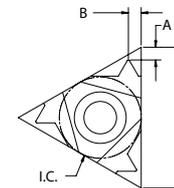
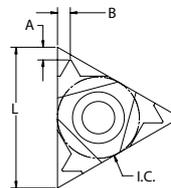
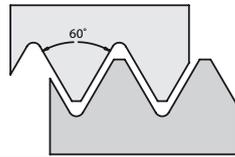
### RODZAJE PŁYTEK

<p><b>STANDARD TYPE</b> WYKONANIE STANDARDOWE</p>	
<p>EXTERNAL ZEWNĘTRZNE</p> 	<p>INTERNAL WEWNĘTRZNE</p> 
<p><b>MULTITOOTH TYPE</b> WYKONANIE WIELOZĘBOWE</p>	
<p>EXTERNAL ZEWNĘTRZNE</p> 	<p>INTERNAL WEWNĘTRZNE</p> 
<p><b>VERTICAL TYPE</b> WYKONANIE PIONOWE</p>	
<p>VERTICAL PIONOWE</p> 	

# PARTIAL PROFILE 60° EXTERNAL AND INTERNAL THREADING

## ZARYS CZĘŚCIOWY 60°. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

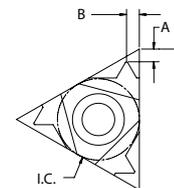
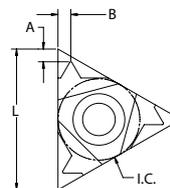
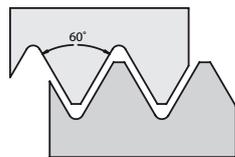
### PP 60° ST



**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK		L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
MM	TPI					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
0.5-1.25	48-20	6	4.00	0.5	0.6	-	-	HM06IRA60	HM06ILA60	●	●	●
0.5-1.5	48-16	8	5.00	0.5	0.7	-	-	HM08IRA60	HM08ILA60	●	●	●
0.5-1.5	48-16	11	6.35	0.8	0.9	HM11ERA60	HM11ELA60	HM11IRA60	HM11ILA60	●	●	●
0.5-1.5	48-16	16	9.525	0.8	0.9	HM16ERA60	HM16ELA60	HM16IRA60	HM16ILA60	●	●	●
1.75-3.0	14-8	16	9.525	1.2	1.7	HM16ERG60	HM16ELG60	HM16IRG60	HM16ILG60	●	●	●
0.5-3.0	48-8	16	9.525	1.2	1.7	HM16ERAG60	HM16ELAG60	HM16IRAG60	HM16ILAG60	●	●	●
3.5-5.0	7-5	22	12.70	1.7	2.5	HM22ERN60	HM22ELN60	HM22IRN60	HM22ILN60	●	●	●
5.5-6.0	4.5-4	27	15.875	2.0	3.0	HM27ERQ60	HM27ELQ60	HM27IRQ60	HM27ILQ60	●	●	●

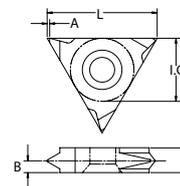
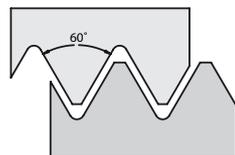
### PP 60° ST



**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK		L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK	
MM	TPI					RIGHT PRAWY	RIGHT PRAWY	P3200	P3100		
0.5-1.5	48-16	11	6.35	0.8	0.9	HM11ERA60	HM11IRA60	●	●		
3.5-5.0	7-5	22	12.70	1.7	2.5	HM22ERN60	HM22IRN60	●	●		

### PP 60° VT



**VERTICAL TYPE** WYKONANIE PIONOWE

PITCH SKOK		L	I.C.	A	B	T	VERTICAL PIONOWE		GRADE GATUNEK		
MM	TPI						RIGHT PRAWY	P511	P508	P509	
0.5-1.5	48-16	16	9.525	1.1	1.0	3.7	HM16ERA60V	●	●	●	
1.75-3.0	14-8	16	9.525	1.1	1.7	3.7	HM16ERG60V	●	●	●	
0.5-3.0	48-8	16	9.525	1.1	1.7	3.7	HM16ERAG60V	●	●	●	

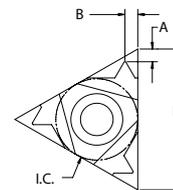
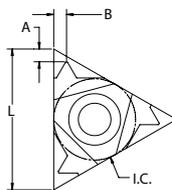
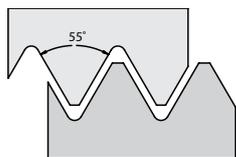
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KOD EDP: KOD ZAMÓWIENIA + GATUNEK

p.175 CUTTING DATA  
PARAMETRY OBÓBK

## PARTIAL PROFILE 55° EXTERNAL AND INTERNAL THREADING

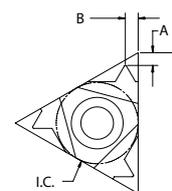
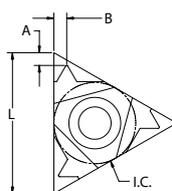
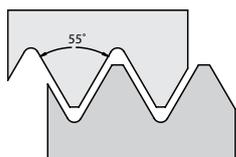
### ZARYS CZĘŚCIOWY 55°. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# PP 55° ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

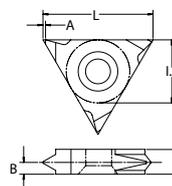
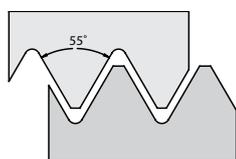
PITCH SKOK		L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
MM	TPI					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
0.5-1.25	48-20	6	4.00	0.5	0.6	-	-	HM06IRA55	HM06ILA55	●	●	●
0.5-1.5	48-16	8	5.00	0.5	0.7	-	-	HM08IRA55	HM08ILA55	●	●	●
0.5-1.5	48-16	11	6.35	0.8	0.9	HM11ERA55	HM11ELA55	HM11IRA55	HM11ILA55	●	●	●
0.5-1.5	48-16	16	9.525	0.8	0.9	HM16ERA55	HM16ELA55	HM16IRA55	HM16ILA55	●	●	●
1.75-3.0	14-8	16	9.525	1.2	1.7	HM16ERG55	HM16ELG55	HM16IRG55	HM16ILG55	●	●	●
0.5-3.0	48-8	16	9.525	1.2	1.7	HM16ERAG55	HM16ELAG55	HM16IRAG55	HM16ILAG55	●	●	●
3.5-5.0	7-5	22	12.70	1.7	2.5	HM22ERN55	HM22ELN55	HM22IRN55	HM22ILN55	●	●	●
5.5-6.0	4.5-4	27	15.875	2.0	3.0	HM27ERQ55	HM27ELQ55	HM27IRQ55	HM27ILQ55	●	●	●

# PP 55° ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK		L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
MM	TPI					RIGHT PRAWY	GRADE GATUNEK	P3200	P3100	RIGHT PRAWY	GRADE GATUNEK	P3200	P3100
0.5-1.5	48-16	11	6.35	0.8	0.9	HM11ERA55		●	●	HM11IRA55		●	●
3.5-5.0	7-5	22	12.70	1.7	2.5	HM22ERN55		●	●	HM22IRN55		●	●

# PP 55° VT

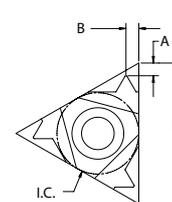
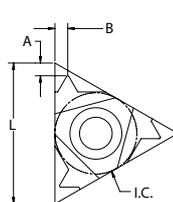
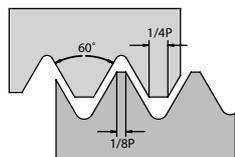

**VERTICAL TYPE WYKONANIE PIONOWE**

PITCH SKOK		L	I.C.	A	B	T	VERTICAL PIONOWE			
MM	TPI						RIGHT PRAWY	P511	P508	P509
0.5-1.5	48-16	16	9.525	1.1	1.0	3.7	HM16ERA55V	●	●	●
1.75-3.0	14-8	16	9.525	1.1	1.7	3.7	HM16ERG55V	●	●	●
0.5-3.0	48-8	16	9.525	1.1	1.7	3.7	HM16ERAG55V	●	●	●

# ISO METRIC (M) EXTERNAL AND INTERNAL THREADING

## GWINTY METRYCZNE (M). TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

**ISO ST**



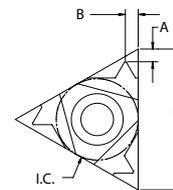
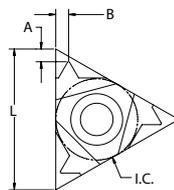
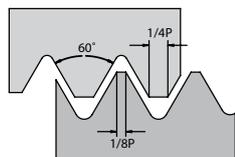
**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK  MM	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
0.5	06	4.00	0.8	0.4	-	-	HM06IR0050ISO	HM06IL0050ISO	●	●	●
0.75	06	4.00	0.7	0.4	-	-	HM06IR0075ISO	HM06IL0075ISO	●	●	●
1.0	06	4.00	0.7	0.5	-	-	HM06IR0100ISO	HM06IL0100ISO	●	●	●
1.25	06	4.00	0.7	0.6	-	-	HM06IR0125ISO	HM06IL0125ISO	●	●	●
0.35	08	5.00	0.7	0.4	-	-	HM08IR0035ISO	HM08IL0035ISO	●	●	●
0.5	08	5.00	0.7	0.4	-	-	HM08IR0050ISO	HM08IL0050ISO	●	●	●
0.75	08	5.00	0.7	0.6	-	-	HM08IR0075ISO	HM08IL0075ISO	●	●	●
1.0	08	5.00	0.7	0.7	-	-	HM08IR0100ISO	HM08IL0100ISO	●	●	●
1.25	08	5.00	0.7	0.7	-	-	HM08IR0125ISO	HM08IL0125ISO	●	●	●
1.5	08	5.00	0.7	0.7	-	-	HM08IR0150ISO	HM08IL0150ISO	●	●	●
1.75	08	5.00	0.7	0.7	-	-	HM08IR0175ISO	HM08IL0175ISO	●	●	●
0.35	11	6.35	0.7	0.4	HM11ER0035ISO	HM11EL0035ISO	HM11IR0035ISO	HM11IL0035ISO	●	●	●
0.4	11	6.35	0.7	0.4	HM11ER0040ISO	HM11EL0040ISO	HM11IR0040ISO	HM11IL0040ISO	●	●	●
0.45	11	6.35	0.7	0.4	HM11ER0045ISO	HM11EL0045ISO	HM11IR0045ISO	HM11IL0045ISO	●	●	●
0.5	11	6.35	0.6	0.4	HM11ER0050ISO	HM11EL0050ISO	HM11IR0050ISO	HM11IL0050ISO	●	●	●
0.6	11	6.35	0.6	0.6	HM11ER0060ISO	HM11EL0060ISO	HM11IR0060ISO	HM11IL0060ISO	●	●	●
0.7	11	6.35	0.6	0.6	HM11ER0070ISO	HM11EL0070ISO	HM11IR0070ISO	HM11IL0070ISO	●	●	●
0.75	11	6.35	0.6	0.6	HM11ER0075ISO	HM11EL0075ISO	HM11IR0075ISO	HM11IL0075ISO	●	●	●
0.8	11	6.35	0.6	0.6	HM11ER0080ISO	HM11EL0080ISO	HM11IR0080ISO	HM11IL0080ISO	●	●	●
1.0	11	6.35	0.7	0.7	HM11ER0100ISO	HM11EL0100ISO	HM11IR0100ISO	HM11IL0100ISO	●	●	●
1.25	11	6.35	0.8	0.9	HM11ER0125ISO	HM11EL0125ISO	HM11IR0125ISO	HM11IL0125ISO	●	●	●
1.5	11	6.35	0.8	1.0	HM11ER0150ISO	HM11EL0150ISO	HM11IR0150ISO	HM11IL0150ISO	●	●	●
1.75	11	6.35	0.8	1.1	HM11ER0175ISO	HM11EL0175ISO	HM11IR0175ISO	HM11IL0175ISO	●	●	●
2.0	11	6.35	0.8	0.9	HM11ER0200ISO	HM11EL0200ISO	HM11IR0200ISO	HM11IL0200ISO	●	●	●
0.35	16	9.525	0.8	0.4	HM16ER0035ISO	HM16EL0035ISO	HM16IR0035ISO	HM16IL0035ISO	●	●	●
0.4	16	9.525	0.8	0.4	HM16ER0040ISO	HM16EL0040ISO	HM16IR0040ISO	HM16IL0040ISO	●	●	●
0.45	16	9.525	0.8	0.4	HM16ER0045ISO	HM16EL0045ISO	HM16IR0045ISO	HM16IL0045ISO	●	●	●
0.5	16	9.525	0.6	0.4	HM16ER0050ISO	HM16EL0050ISO	HM16IR0050ISO	HM16IL0050ISO	●	●	●
0.6	16	9.525	0.6	0.6	HM16ER0060ISO	HM16EL0060ISO	HM16IR0060ISO	HM16IL0060ISO	●	●	●
0.7	16	9.525	0.6	0.6	HM16ER0070ISO	HM16EL0070ISO	HM16IR0070ISO	HM16IL0070ISO	●	●	●
0.75	16	9.525	0.6	0.6	HM16ER0075ISO	HM16EL0075ISO	HM16IR0075ISO	HM16IL0075ISO	●	●	●
0.8	16	9.525	0.6	0.6	HM16ER0080ISO	HM16EL0080ISO	HM16IR0080ISO	HM16IL0080ISO	●	●	●
1.0	16	9.525	0.7	0.7	HM16ER0100ISO	HM16EL0100ISO	HM16IR0100ISO	HM16IL0100ISO	●	●	●
1.25	16	9.525	0.8	0.9	HM16ER0125ISO	HM16EL0125ISO	HM16IR0125ISO	HM16IL0125ISO	●	●	●
1.5	16	9.525	0.8	1.0	HM16ER0150ISO	HM16EL0150ISO	HM16IR0150ISO	HM16IL0150ISO	●	●	●
1.75	16	9.525	0.9	1.2	HM16ER0175ISO	HM16EL0175ISO	HM16IR0175ISO	HM16IL0175ISO	●	●	●
2.0	16	9.525	1.0	1.3	HM16ER0200ISO	HM16EL0200ISO	HM16IR0200ISO	HM16IL0200ISO	●	●	●
2.5	16	9.525	1.1	1.5	HM16ER0250ISO	HM16EL0250ISO	HM16IR0250ISO	HM16IL0250ISO	●	●	●
3.0	16	9.525	1.2	1.5	HM16ER0300ISO	HM16EL0300ISO	HM16IR0300ISO	HM16IL0300ISO	●	●	●
3.5	16	9.525	1.2	1.8	HM16ER0350ISO	HM16EL0350ISO	HM16IR0350ISO	HM16IL0350ISO	●	●	●
3.5	22	12.70	1.6	2.3	HM22ER0350ISO	HM22EL0350ISO	HM22IR0350ISO	HM22IL0350ISO	●	●	●
4.0	22	12.70	1.6	2.3	HM22ER0400ISO	HM22EL0400ISO	HM22IR0400ISO	HM22IL0400ISO	●	●	●
4.5	22	12.70	1.7	2.4	HM22ER0450ISO	HM22EL0450ISO	HM22IR0450ISO	HM22IL0450ISO	●	●	●
5.0	22	12.70	1.7	2.5	HM22ER0500ISO	HM22EL0500ISO	HM22IR0500ISO	HM22IL0500ISO	●	●	●
5.5	27	15.875	1.8	2.4	HM27ER0550ISO	HM27EL0550ISO	HM27IR0550ISO	HM27IL0550ISO	●	●	●
6.0	27	15.875	1.9	2.6	HM27ER0600ISO	HM27EL0600ISO	HM27IR0600ISO	HM27IL0600ISO	●	●	●

## ISO METRIC (M) EXTERNAL AND INTERNAL THREADING

GWINTY METRYCZNE (M). TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

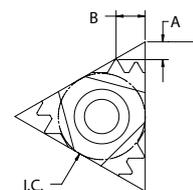
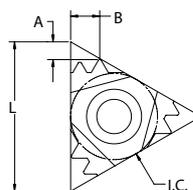
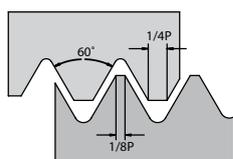
### ISO ST



#### STANDARD TYPE WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
					RIGHT PRAWY	GRADE GATUNEK	P3200	P3100	RIGHT PRAWY	GRADE GATUNEK	P3200	P3100
0.5	11	6.35	0.6	0.4					HM11IR05ISO		●	●
0.75	11	6.35	0.6	0.6					HM11IR075ISO		●	●
1.0	11	6.35	0.7	0.7	HM11ER10ISO		●	●	HM11IR10ISO		●	●
1.25	11	6.35	0.8	0.9	HM11ER125ISO		●	●	HM11IR125ISO		●	●
1.5	11	6.35	0.8	1.0	HM11ER15ISO		●	●	HM11IR15ISO		●	●
1.75	11	6.35	0.8	1.1					HM11IR175ISO		●	●
2.0	11	6.35	0.8	0.9	HM11ER20ISO		●	●	HM11IR20ISO		●	●
2.5	11	6.35	0.8	0.9					HM11IR25ISO		●	●
0.5	16	9.525	0.6	0.4	HM16ER05ISO		●	●	HM16IR05ISO		●	●
0.75	16	9.525	0.6	0.6	HM16ER075ISO		●	●	HM16IR075ISO		●	●
1.0	16	9.525	0.7	0.7	HM16ER10ISO		●	●	HM16IR10ISO		●	●
1.25	16	9.525	0.8	0.9	HM16ER125ISO		●	●	HM16IR125ISO		●	●
1.5	16	9.525	0.8	1.0	HM16ER15ISO		●	●	HM16IR15ISO		●	●
1.75	16	9.525	0.9	1.2	HM16ER175ISO		●	●	HM16IR175ISO		●	●
2.0	16	9.525	1.0	1.3	HM16ER20ISO		●	●	HM16IR20ISO		●	●
2.5	16	9.525	1.1	1.5	HM16ER25ISO		●	●	HM16IR25ISO		●	●
3.0	16	9.525	1.2	1.5	HM16ER30ISO		●	●	HM16IR30ISO		●	●
3.5	16	9.525	1.2	1.8	HM16ER35ISO		●	●	HM16IR35ISO		●	●
3.5	22	12.70	1.6	2.3	HM22ER35ISO		●	●	HM22IR35ISO		●	●
4.0	22	12.70	1.6	2.3	HM22ER40ISO		●	●	HM22IR40ISO		●	●
4.5	22	12.70	1.7	2.4	HM22ER45ISO		●	●	HM22IR45ISO		●	●
5.0	22	12.70	1.7	2.5	HM22ER50ISO		●	●	HM22IR50ISO		●	●
6.0	27	15.875	1.9	2.6	HM22ER60ISO		●	●	HM22IR60ISO		●	●

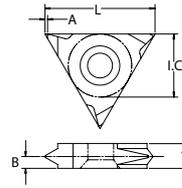
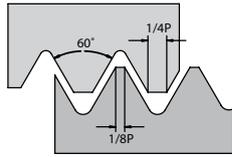
### ISO MT



#### MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE

PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA	P511	P508	P509
1.0	3	16	9.525	1.6	2.6	HM16ER0100ISO3M	SH300	HM16IR0100ISO3M	SH303	●	●	●
1.5	2	16	9.525	1.6	2.4	HM16ER0150ISO2M	SH300	HM16IR0150ISO2M	SH303	●	●	●
1.5	3	22	12.70	2.2	3.8	HM22ER0150ISO3M	SH301	HM22IR0150ISO3M	SH304	●	●	●
2.0	2	22	12.70	2.1	2.9	HM22ER0200ISO2M	SH301	HM22IR0200ISO2M	SH304	●	●	●
2.0	3	22	12.70	3.0	4.9	HM22ER0200ISO3M	SH301	HM22IR0200ISO3M	SH304	●	●	●
2.5	2	22	12.70	2.5	3.8	HM22ER0250ISO2M	SH301	-	-	●	●	●
3.0	2	27	15.875	2.8	4.4	HM27ER0300ISO2M	SH302	HM27IR0300ISO2M	SH305	●	●	●

# ISO VT



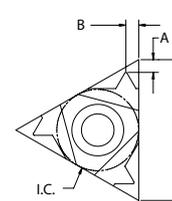
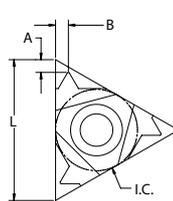
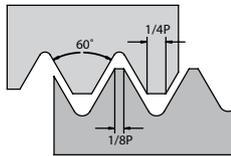
## VERTICAL TYPE WYKONANIE PIONOWE

PITCH SKOK	L	I.C.	A	B	T	VERTICAL PIONOWE		GRADE GATUNEK		
						RIGHT PRAWY		P511	P508	P509
1.0	16	9.525	1.1	0.6	3.7	HM16ER0100ISOV		●	●	●
1.25	16	9.525	1.1	0.9	3.7	HM16ER0125ISOV		●	●	●
1.5	16	9.525	1.1	1.0	3.7	HM16ER0150ISOV		●	●	●
2.0	16	9.525	1.1	1.2	3.7	HM16ER0200ISOV		●	●	●

# UNIFIED (UNC, UNF, UNEF) EXTERNAL AND INTERNAL THREADING

GWINTY CALOWE ZUNIFIKOWANE (UNC, UNF, UNEF). TOCZENIE GWINTÓW ZEWN. I WEWN.

# UN ST



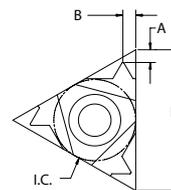
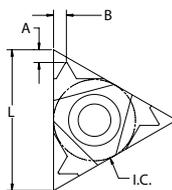
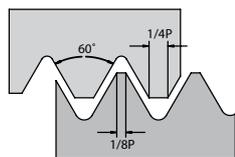
## STANDARD TYPE WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNETRZNE		INTERNAL WEWNETRZNE		GRADE GATUNEK		
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
40	6	4.00	0.7	0.5	-	-	HM06IR400UN	HM06IL400UN	●	●	●
36	6	4.00	0.7	0.5	-	-	HM06IR360UN	HM06IL360UN	●	●	●
32	6	4.00	0.7	0.6	-	-	HM06IR320UN	HM06IL320UN	●	●	●
28	6	4.00	0.7	0.7	-	-	HM06IR280UN	HM06IL280UN	●	●	●
24	6	4.00	0.7	0.7	-	-	HM06IR240UN	HM06IL240UN	●	●	●
20	6	4.00	0.7	0.7	-	-	HM06IR200UN	HM06IL200UN	●	●	●
18	6	4.00	0.7	0.7	-	-	HM06IR180UN	HM06IL180UN	●	●	●
40	8	5.00	0.7	0.5	-	-	HM08IR400UN	HM08IL400UN	●	●	●
36	8	5.00	0.7	0.5	-	-	HM08IR360UN	HM08IL360UN	●	●	●
32	8	5.00	0.7	0.6	-	-	HM08IR320UN	HM08IL320UN	●	●	●
28	8	5.00	0.7	0.7	-	-	HM08IR280UN	HM08IL280UN	●	●	●
24	8	5.00	0.7	0.7	-	-	HM08IR240UN	HM08IL240UN	●	●	●
20	8	5.00	0.7	0.7	-	-	HM08IR200UN	HM08IL200UN	●	●	●
18	8	5.00	0.7	0.7	-	-	HM08IR180UN	HM08IL180UN	●	●	●
16	8	5.00	0.7	0.7	-	-	HM08IR160UN	HM08IL160UN	●	●	●
14	8	5.00	0.7	0.7	-	-	HM08IR140UN	HM08IL140UN	●	●	●
72	11	6.35	0.6	0.6	HM11ER720UN	HM11EL720UN	HM11IR720UN	HM11IL720UN	●	●	●
64	11	6.35	0.6	0.7	HM11ER640UN	HM11EL640UN	HM11IR640UN	HM11IL640UN	●	●	●
56	11	6.35	0.6	0.6	HM11ER560UN	HM11EL560UN	HM11IR560UN	HM11IL560UN	●	●	●
48	11	6.35	0.6	0.7	HM11ER480UN	HM11EL480UN	HM11IR480UN	HM11IL480UN	●	●	●
44	11	6.35	0.6	0.7	HM11ER440UN	HM11EL440UN	HM11IR440UN	HM11IL440UN	●	●	●
40	11	6.35	0.6	0.6	HM11ER400UN	HM11EL400UN	HM11IR400UN	HM11IL400UN	●	●	●
36	11	6.35	0.6	0.7	HM11ER360UN	HM11EL360UN	HM11IR360UN	HM11IL360UN	●	●	●

## UNIFIED (UNC, UNF, UNEF) EXTERNAL AND INTERNAL THREADING

GWINTY CALOWE ZUNIFIKOWANE (UNC, UNF, UNEF). TOCZENIE GWINTÓW ZEW. I WEW.

# UN ST



**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNETRZNE		INTERNAL WEWNETRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
32	11	6.35	0.6	0.6	HM11ER320UN	HM11EL320UN	HM11IR320UN	HM11IL320UN	●	●	●	
28	11	6.35	0.6	0.7	HM11ER280UN	HM11EL280UN	HM11IR280UN	HM11IL280UN	●	●	●	
27	11	6.35	0.6	0.7	HM11ER270UN	HM11EL270UN	HM11IR270UN	HM11IL270UN	●	●	●	
24	11	6.35	0.7	0.8	HM11ER240UN	HM11EL240UN	HM11IR240UN	HM11IL240UN	●	●	●	
20	11	6.35	0.8	0.9	HM11ER200UN	HM11EL200UN	HM11IR200UN	HM11IL200UN	●	●	●	
18	11	6.35	0.8	1.0	HM11ER180UN	HM11EL180UN	HM11IR180UN	HM11IL180UN	●	●	●	
16	11	6.35	0.6	1.1	HM11ER160UN	HM11EL160UN	HM11IR160UN	HM11IL160UN	●	●	●	
14	11	6.35	0.6	1.1	HM11ER140UN	HM11EL140UN	HM11IR140UN	HM11IL140UN	●	●	●	
13	11	6.35	0.6	1.0	HM11ER130UN	HM11EL130UN	HM11IR130UN	HM11IL130UN	●	●	●	
12	11	6.35	0.6	1.1	-	-	HM11IR120UN	HM11IL120UN	●	●	●	
11	11	6.35	0.8	1.1	-	-	HM11IR110UN	HM11IL110UN	●	●	●	
72	16	9.525	0.6	0.6	HM16ER720UN	HM16EL720UN	HM16IR720UN	HM16IL720UN	●	●	●	
64	16	9.525	0.6	0.7	HM16ER640UN	HM16EL640UN	HM16IR640UN	HM16IL640UN	●	●	●	
56	16	9.525	0.6	0.6	HM16ER560UN	HM16EL560UN	HM16IR560UN	HM16IL560UN	●	●	●	
48	16	9.525	0.6	0.7	HM16ER480UN	HM16EL480UN	HM16IR480UN	HM16IL480UN	●	●	●	
44	16	9.525	0.6	0.7	HM16ER440UN	HM16EL440UN	HM16IR440UN	HM16IL440UN	●	●	●	
40	16	9.525	0.6	0.6	HM16ER400UN	HM16EL400UN	HM16IR400UN	HM16IL400UN	●	●	●	
36	16	9.525	0.6	0.7	HM16ER360UN	HM16EL360UN	HM16IR360UN	HM16IL360UN	●	●	●	
32	16	9.525	0.6	0.6	HM16ER320UN	HM16EL320UN	HM16IR320UN	HM16IL320UN	●	●	●	
28	16	9.525	0.6	0.7	HM16ER280UN	HM16EL280UN	HM16IR280UN	HM16IL280UN	●	●	●	
27	16	9.525	0.6	0.7	HM16ER270UN	HM16EL270UN	HM16IR270UN	HM16IL270UN	●	●	●	
24	16	9.525	0.7	0.8	HM16ER240UN	HM16EL240UN	HM16IR240UN	HM16IL240UN	●	●	●	
20	16	9.525	0.8	0.9	HM16ER200UN	HM16EL200UN	HM16IR200UN	HM16IL200UN	●	●	●	
18	16	9.525	0.8	1.0	HM16ER180UN	HM16EL180UN	HM16IR180UN	HM16IL180UN	●	●	●	
16	16	9.525	0.6	1.1	HM16ER160UN	HM16EL160UN	HM16IR160UN	HM16IL160UN	●	●	●	
14	16	9.525	1.0	1.2	HM16ER140UN	HM16EL140UN	HM16IR140UN	HM16IL140UN	●	●	●	
13	16	9.525	1.0	1.3	HM16ER130UN	HM16EL130UN	HM16IR130UN	HM16IL130UN	●	●	●	
12	16	9.525	1.1	1.4	HM16ER120UN	HM16EL120UN	HM16IR120UN	HM16IL120UN	●	●	●	
11	16	9.525	1.1	1.5	HM16ER110UN	HM16EL110UN	HM16IR110UN	HM16IL110UN	●	●	●	
10	16	9.525	1.1	1.5	HM16ER100UN	HM16EL100UN	HM16IR100UN	HM16IL100UN	●	●	●	
9	16	9.525	1.2	1.7	HM16ER090UN	HM16EL090UN	HM16IR090UN	HM16IL090UN	●	●	●	
8	16	9.525	1.2	1.6	HM16ER080UN	HM16EL080UN	HM16IR080UN	HM16IL080UN	●	●	●	
7	22	12.70	1.6	2.3	HM22ER070UN	HM22EL070UN	HM22IR070UN	HM22IL070UN	●	●	●	
6	22	12.70	1.6	2.3	HM22ER060UN	HM22EL060UN	HM22IR060UN	HM22IL060UN	●	●	●	
5	22	12.70	1.7	2.4	HM22ER050UN	HM22EL050UN	HM22IR050UN	HM22IL050UN	●	●	●	
4.5	27	15.875	1.8	2.6	HM27ER045UN	HM27EL045UN	HM27IR045UN	HM27IL045UN	●	●	●	
4	27	15.875	2.0	2.8	HM27ER040UN	HM27EL040UN	HM27IR040UN	HM27IL040UN	●	●	●	

## UNIFIED (UNC, UNF, UNEF) EXTERNAL AND INTERNAL THREADING

GWINTY CALOWE ZUNIFIKOWANE (UNC, UNF, UNEF). TOCZENIE GWINTÓW ZEWE. I WEW.

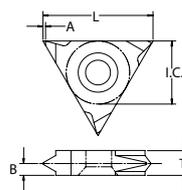
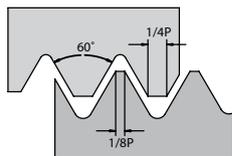
<b>UN ST</b>																			
					<b>STANDARD TYPE WYKONANIE STANDARDOWE</b>										<b>EXTERNAL ZEWNĘTRZNE</b>				
PITCH SKOK	L	I.C.	A	B															
TPI								GRADE GATUNEK	P3200	P3100				GRADE GATUNEK	P3200	P3100			
20	11	6.35	0.8	0.9	HM11ER20UN			●	●		HM11IR20UN			●	●				
24	11	6.35	0.8	0.8							HM11IR24UN			●	●				
24	16	9.525	0.7	0.8	HM16ER24UN			●	●		HM16IR24UN			●	●				
20	16	9.525	0.8	0.9	HM16ER20UN			●	●		HM16IR20UN			●	●				
18	16	9.525	0.8	1.0	HM16ER18UN			●	●		HM16IR18UN			●	●				
16	16	9.525	0.6	1.1	HM16ER16UN			●	●		HM16IR16UN			●	●				
14	16	9.525	1.0	1.2	HM16ER14UN			●	●		HM16IR14UN			●	●				
12	16	9.525	1.1	1.4	HM16ER12UN			●	●		HM16IR12UN			●	●				
11	16	9.525	1.1	1.5	HM16ER11UN			●	●		HM16IR11UN			●	●				

## UNIFIED (UNC, UNF, UNEF) EXTERNAL AND INTERNAL THREADING

GWINTY CALOWE ZUNIFIKOWANE (UNC, UNF, UNEF). TOCZENIE GWINTÓW ZEWE. I WEW.

<b>UN MT</b>																						
						<b>MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE</b>										<b>EXTERNAL ZEWNĘTRZNE</b>					<b>INTERNAL WEWNĘTRZNE</b>	
PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B									P511	P508	P509						
TPI						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA													
20	2	16	9.525	1.4	2.1	HM16ER200UN2M	SH300	HM16IR200UN2M	SH303	●	●	●										
16	2	16	9.525	1.6	2.4	HM16ER160UN2M	SH300	HM16IR160UN2M	SH303	●	●	●										
14	2	16	9.525	1.8	2.7	HM16ER140UN2M	SH300	HM16IR140UN2M	SH303	●	●	●										
12	2	16	9.525	1.8	2.7	-	-	HM16IR120UN2M	SH303	●	●	●										
16	3	22	12.70	2.5	4.1	HM22ER160UN3M	SH301	HM22IR160UN3M	SH304	●	●	●										
12	2	22	12.70	2.1	3.3	HM22ER120UN2M	SH301	HM22IR120UN2M	SH304	●	●	●										
12	3	22	12.70	3.2	5.2	HM22ER120UN3M	SH301	HM22IR120UN3M	SH304	●	●	●										
8	2	27	15.875	3.1	4.8	HM27ER080UN2M	SH302	HM27IR080UN2M	SH305	●	●	●										

# UN VT

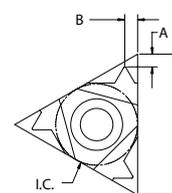
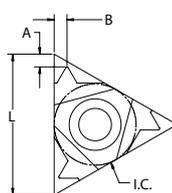
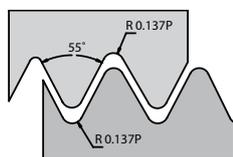

**VERTICAL TYPE WYKONANIE PIONOWE**

PITCH SKOK	L	I.C.	A	B	T	VERTICAL PIONOWE		GRADE GATUNEK		
						RIGHT PRAWY		P511	P508	P509
20	16	9.525	1.1	0.8	3.7	HM16ER200UNV		●	●	●
16	16	9.525	1.1	1.0	3.7	HM16ER160UNV		●	●	●
14	16	9.525	1.1	1.2	3.7	HM16ER140UNV		●	●	●
12	16	9.525	1.1	1.3	3.7	HM16ER120UNV		●	●	●

# WHITWORTH (BSW, BSF, BSP) EXTERNAL AND INTERNAL THREADING

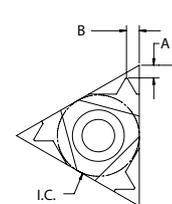
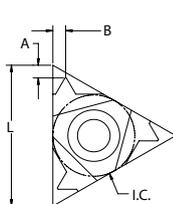
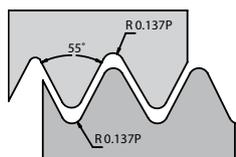
GWINTY CALOWE WHITWORTH (BSW, BSF, BSP). TOCZENIE GWINTÓW ZEW. I WEW.

# W ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNETRZNE		INTERNAL WEWNETRZNE		GRADE GATUNEK		
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
28	6	4.00	0.7	0.6	-	-	HM06IR280W	HM06IL280W	●	●	●
26	6	4.00	0.7	0.6	-	-	HM06IR260W	HM06IL260W	●	●	●
24	6	4.00	0.7	0.6	-	-	HM06IR240W	HM06IL240W	●	●	●
22	6	4.00	0.7	0.6	-	-	HM06IR220W	HM06IL220W	●	●	●
19	6	4.00	0.7	0.7	-	-	HM06IR190W	HM06IL190W	●	●	●
18	6	4.00	0.7	0.7	-	-	HM06IR180W	HM06IL180W	●	●	●
28	8	5.00	0.7	0.7	-	-	HM08IR280W	HM08IL280W	●	●	●
26	8	5.00	0.7	0.7	-	-	HM08IR260W	HM08IL260W	●	●	●
24	8	5.00	0.7	0.7	-	-	HM08IR240W	HM08IL240W	●	●	●
20	8	5.00	0.7	0.7	-	-	HM08IR200W	HM08IL200W	●	●	●
19	8	5.00	0.7	0.7	-	-	HM08IR190W	HM08IL190W	●	●	●
18	8	5.00	0.7	0.7	-	-	HM08IR180W	HM08IL180W	●	●	●
16	8	5.00	0.7	0.7	-	-	HM08IR160W	HM08IL160W	●	●	●
72	11	6.35	0.7	0.4	HM11ER720W	HM11EL720W	HM11IR720W	HM11IL720W	●	●	●
60	11	6.35	0.7	0.4	HM11ER600W	HM11EL600W	HM11IR600W	HM11IL600W	●	●	●
56	11	6.35	0.7	0.4	HM11ER560W	HM11EL560W	HM11IR560W	HM11IL560W	●	●	●
48	11	6.35	0.6	0.6	HM11ER480W	HM11EL480W	HM11IR480W	HM11IL480W	●	●	●
40	11	6.35	0.6	0.6	HM11ER400W	HM11EL400W	HM11IR400W	HM11IL400W	●	●	●
40	11	6.35	0.6	0.6	HM11ER360W	HM11EL360W	-	-	●	●	●
32	11	6.35	0.6	0.6	HM11ER320W	HM11EL320W	HM11IR320W	HM11IL320W	●	●	●
28	11	6.35	0.6	0.7	HM11ER280W	HM11EL280W	HM11IR280W	HM11IL280W	●	●	●
26	11	6.35	0.7	0.8	HM11ER260W	HM11EL260W	HM11IR260W	HM11IL260W	●	●	●
24	11	6.35	0.7	0.8	HM11ER240W	HM11EL240W	HM11IR240W	HM11IL240W	●	●	●
22	11	6.35	0.8	0.9	HM11ER220W	HM11EL220W	-	-	●	●	●
20	11	6.35	0.8	0.9	HM11ER200W	HM11EL200W	HM11IR200W	HM11IL200W	●	●	●
19	11	6.35	0.8	1.0	HM11ER190W	HM11EL190W	HM11IR190W	HM11IL190W	●	●	●
18	11	6.35	0.8	1.0	HM11ER180W	HM11EL180W	HM11IR180W	HM11IL180W	●	●	●
16	11	6.35	0.9	1.1	HM11ER160W	HM11EL160W	HM11IR160W	HM11IL160W	●	●	●

**W ST**



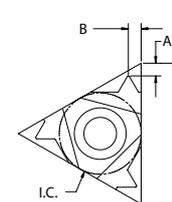
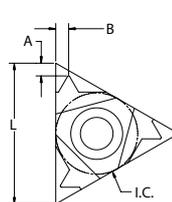
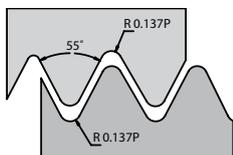
**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNETRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
14	11	6.35	0.9	1.1	HM11ER140W	HM11EL140W	HM11IR140W	HM11IL140W	●	●	●	
72	16	9.525	0.7	0.4	HM16ER720W	HM16EL720W	HM16IR720W	HM16IL720W	●	●	●	
60	16	9.525	0.7	0.4	HM16ER600W	HM16EL600W	HM16IR600W	HM16IL600W	●	●	●	
56	16	9.525	0.7	0.4	HM16ER560W	HM16EL560W	HM16IR560W	HM16IL560W	●	●	●	
48	16	9.525	0.6	0.6	HM16ER480W	HM16EL480W	HM16IR480W	HM16IL480W	●	●	●	
40	16	9.525	0.6	0.6	HM16ER400W	HM16EL400W	HM16IR400W	HM16IL400W	●	●	●	
36	16	9.525	0.6	0.6	HM16ER360W	HM16EL360W	HM16IR360W	HM16IL360W	●	●	●	
32	16	9.525	0.6	0.6	HM16ER320W	HM16EL320W	HM16IR320W	HM16IL320W	●	●	●	
28	16	9.525	0.6	0.7	HM16ER280W	HM16EL280W	HM16IR280W	HM16IL280W	●	●	●	
26	16	9.525	0.7	0.8	HM16ER260W	HM16EL260W	HM16IR260W	HM16IL260W	●	●	●	
24	16	9.525	0.7	0.8	HM16ER240W	HM16EL240W	HM16IR240W	HM16IL240W	●	●	●	
22	16	9.525	0.8	0.9	HM16ER220W	HM16EL220W	HM16IR220W	HM16IL220W	●	●	●	
20	16	9.525	0.8	1.0	HM16ER200W	HM16EL200W	HM16IR200W	HM16IL200W	●	●	●	
19	16	9.525	0.8	1.0	HM16ER190W	HM16EL190W	HM16IR190W	HM16IL190W	●	●	●	
18	16	9.525	0.8	1.0	HM16ER180W	HM16EL180W	HM16IR180W	HM16IL180W	●	●	●	
16	16	9.525	0.9	1.1	HM16ER160W	HM16EL160W	HM16IR160W	HM16IL160W	●	●	●	
14	16	9.525	1.0	1.2	HM16ER140W	HM16EL140W	HM16IR140W	HM16IL140W	●	●	●	
12	16	9.525	1.1	1.4	HM16ER120W	HM16EL120W	HM16IR120W	HM16IL120W	●	●	●	
11	16	9.525	1.1	1.5	HM16ER110W	HM16EL110W	HM16IR110W	HM16IL110W	●	●	●	
10	16	9.525	1.1	1.5	HM16ER100W	HM16EL100W	HM16IR100W	HM16IL100W	●	●	●	
9	16	9.525	1.2	1.7	HM16ER090W	HM16EL090W	HM16IR090W	HM16IL090W	●	●	●	
8	16	9.525	1.2	1.5	HM16ER080W	HM16EL080W	HM16IR080W	HM16IL080W	●	●	●	
7	22	12.70	1.6	2.3	HM22ER070W	HM22EL070W	HM22IR070W	HM22IL070W	●	●	●	
6	22	12.70	1.6	2.3	HM22ER060W	HM22EL060W	HM22IR060W	HM22IL060W	●	●	●	
5	22	12.70	1.7	2.4	HM22ER050W	HM22EL050W	HM22IR050W	HM22IL050W	●	●	●	
4.5	27	15.875	1.7	2.5	HM27ER045W	HM27EL045W	HM27IR045W	HM27IL045W	●	●	●	
4	27	15.875	1.9	2.8	HM27ER040W	HM27EL040W	HM27IR040W	HM27IL040W	●	●	●	

**WHITWORTH (BSW, BSF, BSP) EXTERNAL AND INTERNAL THREADING**

GWINTY CALOWE WHITWORTH (BSW, BSF, BSP). TOCZENIE GWINTÓW ZEW. I WEW.

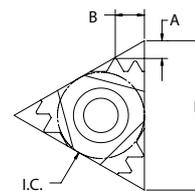
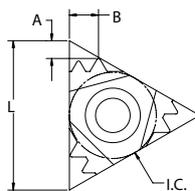
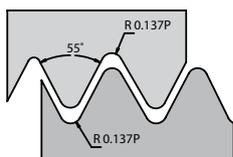
**W ST**



**STANDARD TYPE WYKONANIE STANDARDOWE**

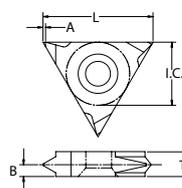
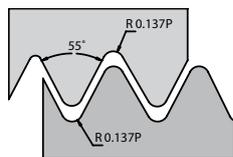
PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNETRZNE			INTERNAL WEWNĘTRZNE			
					GRADE GATUNEK	P3200	P3100	GRADE GATUNEK	P3200	P3100	
TPI											
14	11	6.35	0.9	1.1	HM11ER14W	●	●	HM11IR14W	●	●	
19	11	6.35	0.8	1.0	HM11ER19W	●	●	HM11IR19W	●	●	
11	16	9.525	1.1	1.5	HM16ER11W	●	●	HM16IR11W	●	●	
14	16	9.525	1.0	1.2	HM16ER14W	●	●	HM16IR14W	●	●	
16	16	9.525	0.9	1.1	HM16ER16W	●	●	HM16IR16W	●	●	
19	16	9.525	0.8	1.0	HM16ER19W	●	●	HM16IR19W	●	●	

# W MT


**MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE**

PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA	P511	P508	P509
14	2	16	9.525	1.8	2.8	HM16ER140W2M	SH300	HM16IR140W2M	SH303	●	●	●
14	3	22	12.70	2.8	4.6	HM22ER140W3M	SH301	HM22IR140W3M	SH304	●	●	●
11	2	22	12.70	2.4	3.5	HM22ER110W2M	SH301	HM22IR110W2M	SH304	●	●	●

# W VT

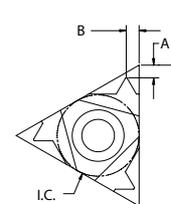
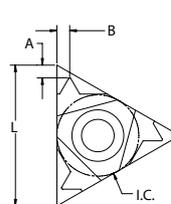
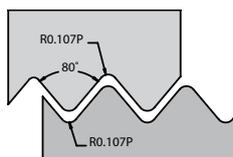

**VERTICAL TYPE WYKONANIE PIONOWE**

PITCH SKOK	L	I.C.	A	B	T	VERTICAL PIONOWE		GRADE GATUNEK		
						RIGHT PRAWY		P511	P508	P509
19	16	9.525	1.1	0.8	3.7	HM16ER190WV		●	●	●
14	16	9.525	1.1	1.1	3.7	HM16ER140WV		●	●	●
11	16	9.525	1.1	1.3	3.7	HM16ER110WV		●	●	●

## PG (PANZERROUHR-GEWINDE). EXTERNAL AND INTERNAL THREADING

GWINTY INSTALACYJNE PANCERNE. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# PG ST

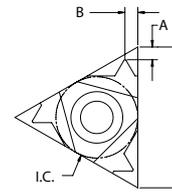
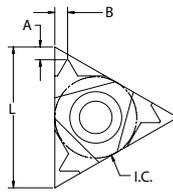
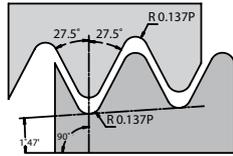

**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	SIZE ROZMIAR	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	GRADE GATUNEK		
						RIGHT PRAWY	RIGHT PRAWY	P511	P508	P509
20	11	6.35	1.3	0.8	PG7	HM11ER200PG	HM11IR200PG	●	●	●
18	11	6.35	0.8	0.9	PG 9, PG 11, PG 13.5, PG16	HM11ER180PG	HM11IR180PG	●	●	●
16	11	6.35	1.0	1.1	PG21, PG29, PG36, PG42, PG48	HM11ER160PG	-	●	●	●
20	16	9.525	0.8	0.8	PG7	HM16ER200PG	HM16IR200PG	●	●	●
18	16	9.525	0.9	1.0	PG 9, PG 11, PG 13.5, PG16	HM16ER180PG	HM16IR180PG	●	●	●
16	16	9.525	0.9	1.1	PG21, PG29, PG36, PG42, PG48	HM16ER160PG	HM16IR160PG	●	●	●

# BRITISH STANDARD PIPE TAPER. EXTERNAL AND INTERNAL THREADING

## BRYTYJSKI STOŻKOWY GWINT RUROWY. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

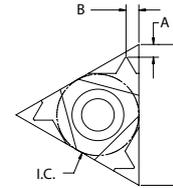
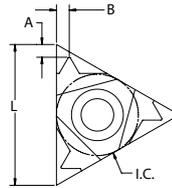
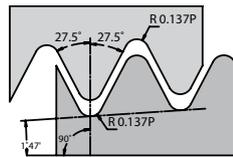
**BSPT  
ST**



**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
28	06	4.00	0.7	0.5	-	-	HM06IR280BSPT	HM06IL280BSPT	●	●	●	
28	08	5.00	0.7	0.6	-	-	HM08IR280BSPT	HM08IL280BSPT	●	●	●	
19	08	5.00	0.7	0.7	-	-	HM08IR190BSPT	HM08IL190BSPT	●	●	●	
28	11	6.35	0.8	0.9	HM11ER280BSPT	HM11EL280BSPT	HM11IR280BSPT	HM11IL280BSPT	●	●	●	
19	11	6.35	0.8	0.9	HM11ER190BSPT	HM11EL190BSPT	HM11IR190BSPT	HM11IL190BSPT	●	●	●	
14	11	6.35	0.9	1.0	HM11ER140BSPT	HM11EL140BSPT	HM11IR140BSPT	HM11IL140BSPT	●	●	●	
28	16	9.525	0.6	0.6	HM16ER280BSPT	HM16EL280BSPT	HM16IR280BSPT	HM16IL280BSPT	●	●	●	
19	16	9.525	0.8	0.9	HM16ER190BSPT	HM16EL190BSPT	HM16IR190BSPT	HM16IL190BSPT	●	●	●	
14	16	9.525	1.0	1.2	HM16ER140BSPT	HM16EL140BSPT	HM16IR140BSPT	HM16IL140BSPT	●	●	●	
11	16	9.525	1.1	1.5	HM16ER110BSPT	HM16EL110BSPT	HM16IR110BSPT	HM16IL110BSPT	●	●	●	

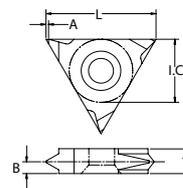
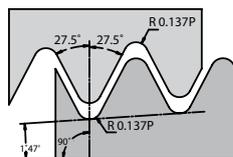
**BSPT  
ST**



**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
						GRADE GATUNEK	P3200	P3100		GRADE GATUNEK	P3200	P3100
TPI												
19	16	9.525	0.8	0.9	HM16ER19BSPT		●	●	HM16IR19BSPT		●	●
14	16	9.525	1.0	1.2	HM16ER14BSPT		●	●	HM16IR14BSPT		●	●
11	16	9.525	1.1	1.5	HM16ER11BSPT		●	●	HM16IR11BSPT		●	●

**BSPT  
VT**



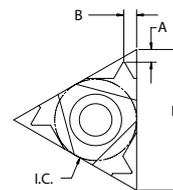
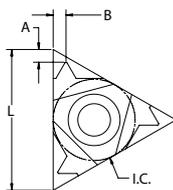
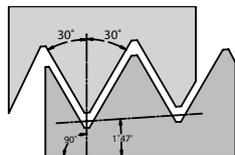
**VERTICAL TYPE WYKONANIE PIONOWE**

PITCH SKOK	L	I.C.	A	B	T	VERTICAL PIONOWE		GRADE GATUNEK		
						RIGHT PRAWY		P511	P508	P509
TPI										
28	16	9.525	1.1	0.8	3.7	HM16ER280BSPTV		●	●	●
19	16	9.525	1.1	1.0	3.7	HM16ER190BSPTV		●	●	●
14	16	9.525	1.1	1.2	3.7	HM16ER140BSPTV		●	●	●
11	16	9.525	1.1	1.5	3.7	HM16ER110BSPTV		●	●	●

## NPT EXTERNAL AND INTERNAL THREADING

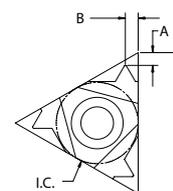
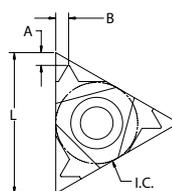
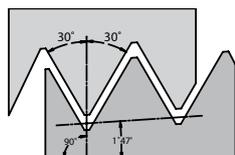
### GWINT NPT. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# NPT ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

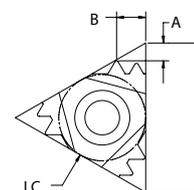
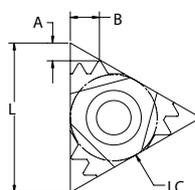
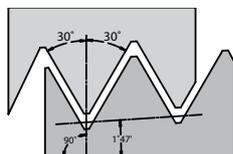
PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
27	06	4.00	0.7	0.5	-	-	HM06IR270NPT	HM06IL270NPT	●	●	●	
27	08	5.00	0.7	0.6	-	-	HM08IR270NPT	HM08IL270NPT	●	●	●	
18	08	5.00	0.7	0.7	-	-	HM08IR180NPT	HM08IL180NPT	●	●	●	
27	11	6.35	0.7	0.8	HM11ER270NPT	HM11EL270NPT	HM11IR270NPT	HM11IL270NPT	●	●	●	
18	11	6.35	0.8	1.0	HM11ER180NPT	HM11EL180NPT	HM11IR180NPT	HM11IL180NPT	●	●	●	
14	11	6.35	0.8	1.0	HM11ER140NPT	HM11EL140NPT	HM11IR140NPT	HM11IL140NPT	●	●	●	
27	16	9.525	0.7	0.8	HM16ER270NPT	HM16EL270NPT	HM16IR270NPT	HM16IL270NPT	●	●	●	
18	16	9.525	0.8	1.0	HM16ER180NPT	HM16EL180NPT	HM16IR180NPT	HM16IL180NPT	●	●	●	
14	16	9.525	0.9	1.2	HM16ER140NPT	HM16EL140NPT	HM16IR140NPT	HM16IL140NPT	●	●	●	
11.5	16	9.525	1.1	1.5	HM16ER115NPT	HM16EL115NPT	HM16IR115NPT	HM16IL115NPT	●	●	●	
8	16	9.525	1.3	1.8	HM16ER080NPT	HM16EL080NPT	HM16IR080NPT	HM16IL080NPT	●	●	●	

# NPT ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
						GRADE GATUNEK	P3200	P3100		GRADE GATUNEK	P3200	P3100
TPI												
18	11	6.35	0.8	1.0					11IR18NPT		●	●
14	11	6.35	0.8	1.0	11ER14NPT		●	●	11IR14NPT		●	●
27	16	9.525	0.7	0.8	16ER27NPT		●	●				
18	16	9.525	0.8	1.0	16ER18NPT		●	●	16IR18NPT		●	●
14	16	9.525	0.9	1.2	16ER14NPT		●	●	16IR14NPT		●	●
11.5	16	9.525	1.1	1.5	16ER11.5NPT		●	●	16IR11.5NPT		●	●

# NPT MT

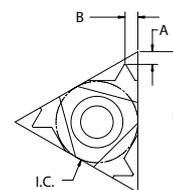
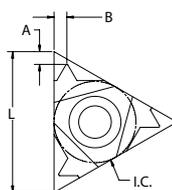
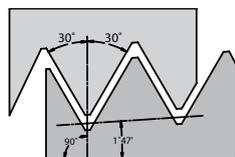

**MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE**

PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA	P511	P508	P509
11.5	2	22	12.70	2.4	3.4	HM22ER115NPT2M	SH301	HM22IR115NPT2M	SH304	●	●	●
11.5	3	27	15.875	3.5	5.6	HM27ER115NPT3M	SH302	HM27IR115NPT3M	SH305	●	●	●
8	2	27	15.875	3.0	4.8	HM27ER080NPT2M	SH302	HM27IR080NPT2M	SH305	●	●	●

## NPTF EXTERNAL AND INTERNAL THREADING

### GWINT NPTF. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

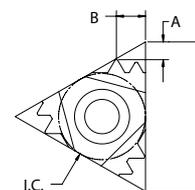
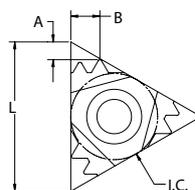
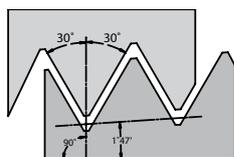
**NPTF  
ST**



**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	PS11	PS08	PS09	
TPI												
27	6	4.00	0.7	0.5	-	-	HM06IR270NPTF	HM06IL270NPTF	●	●	●	
27	8	5.00	0.7	0.6	-	-	HM08IR270NPTF	HM08IL270NPTF	●	●	●	
18	8	5.00	0.7	0.7	-	-	HM08IR180NPTF	HM08IL180NPTF	●	●	●	
27	11	6.35	0.7	0.8	HM11ER270NPTF	HM11EL270NPTF	HM11IR270NPTF	HM11IL270NPTF	●	●	●	
18	11	6.35	0.8	1.0	HM11ER180NPTF	HM11EL180NPTF	HM11IR180NPTF	HM11IL180NPTF	●	●	●	
14	11	6.35	0.8	1.0	HM11ER140NPTF	HM11EL140NPTF	HM11IR140NPTF	HM11IL140NPTF	●	●	●	
27	16	9.525	0.7	0.8	HM16ER270NPTF	HM16EL270NPTF	HM16IR270NPTF	HM16IL270NPTF	●	●	●	
18	16	9.525	0.8	1.0	HM16ER180NPTF	HM16EL180NPTF	HM16IR180NPTF	HM16IL180NPTF	●	●	●	
14	16	9.525	0.9	1.2	HM16ER140NPTF	HM16EL140NPTF	HM16IR140NPTF	HM16IL140NPTF	●	●	●	
11.5	16	9.525	1.1	1.5	HM16ER115NPTF	HM16EL115NPTF	HM16IR115NPTF	HM16IL115NPTF	●	●	●	
8	16	9.525	1.3	1.8	HM16ER080NPTF	HM16EL080NPTF	HM16IR080NPTF	HM16IL080NPTF	●	●	●	

**NPTF  
MT**



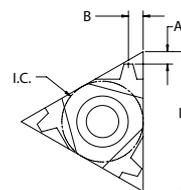
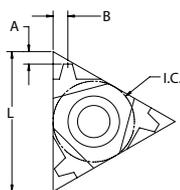
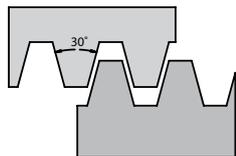
**MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE**

PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA	PS11	PS08	PS09
11.5	2	22	12.70	2.4	3.4	HM22ER115NPTF2M	SH301	HM22IR115NPTF2M	SH304	●	●	●

## TRAPEZOIDAL DIN 103 EXTERNAL AND INTERNAL THREADING

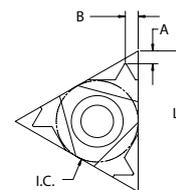
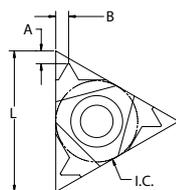
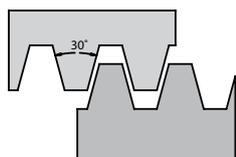
### GWINT TRAPEZOWY DIN 103. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# TR ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
MM												
1.5	11	6.35	0.8	0.8	HM11ER0150TR	HM11EL0150TR	HM11IR0150TR	HM11IL0150TR	●	●	●	
1.5	16	9.525	1.0	1.1	HM16ER0150TR	HM16EL0150TR	HM16IR0150TR	HM16IL0150TR	●	●	●	
2.0	16	9.525	1.1	1.3	HM16ER0200TR	HM16EL0200TR	HM16IR0200TR	HM16IL0200TR	●	●	●	
3.0	16	9.525	1.3	1.5	HM16ER0300TR	HM16EL0300TR	HM16IR0300TR	HM16IL0300TR	●	●	●	
4.0	16	9.525	1.4	1.6	HM16ER0400TR	HM16EL0400TR	HM16IR0400TR	HM16IL0400TR	●	●	●	
4.0	22	12.70	1.7	1.9	HM22ER0400TR	HM22EL0400TR	HM22IR0400TR	HM22IL0400TR	●	●	●	
5.0	22	12.70	2.1	2.4	HM22ER0500TR	HM22EL0500TR	HM22IR0500TR	HM22IL0500TR	●	●	●	
6.0	22	12.70	2.3	2.6	HM22ER0600TR	HM22EL0600TR	HM22IR0600TR	HM22IL0600TR	●	●	●	
6.0	22	12.70	2.0	11.0	HM22ER0600TRU	HM22EL0600TRU	HM22IR0600TRU	HM22IL0600TRU	●	●	●	
6.0	27	15.875	2.2	2.6	HM27ER0600TR	HM27EL0600TR	HM27IR0600TR	HM27IL0600TR	●	●	●	
7.0	22	12.70	2.3	11.0	HM22ER0700TRU	HM22EL0700TRU	HM22IR0700TRU	HM22IL0700TRU	●	●	●	
7.0	27	15.875	2.1	2.5	HM27ER0700TR	HM27EL0700TR	HM27IR0700TR	HM27IL0700TR	●	●	●	
8.0	27	15.875	2.5	13.7	HM27ER0800TRU	HM27EL0800TRU	HM27IR0800TRU	HM27IL0800TRU	●	●	●	
9.0	27	15.875	3.0	13.7	HM27ER0900TRU	HM27EL0900TRU	HM27IR0900TRU	HM27IL0900TRU	●	●	●	
10.0*	27	15.875	3.2	13.7	HM27ER1000TRU	HM27EL1000TRU	HM27IR1000TRU	HM27IL1000TRU	●	●	●	
12.0	33	19.05	3.9	16.9	HM33ER1200TRU	HM33EL1200TRU	HM33IR1200TRU	HM33IL1200TRU	●	●	●	

# TR ST


**STANDARD TYPE WYKONANIE STANDARDOWE**

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
						GRADE GATUNEK	P3200	P3100		GRADE GATUNEK	P3200	P3100
MM												
2.0	16	9.525	1.1	1.3	HM16ER20TR		●	●	-			
4.0	22	12.70	1.7	1.9	HM22ER40TR		●	●	HM22IR40TR		●	●
5.0	22	12.70	2.1	2.4	HM22ER50TR		●	●	HM22IR50TR		●	●
6.0	22	12.70	2.3	2.6	HM22ER60TR		●	●	HM22IR60TR		●	●

## ACME EXTERNAL AND INTERNAL THREADING

GWINT ACME. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

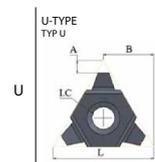
<b>ACME ST</b>									<b>STANDARD TYPE WYKONANIE STANDARDOWE</b>			
PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
16	11	6.35	1.0	1.1	HM11ER160ACME	HM11EL160ACME	HM11IR160ACME	HM11IL160ACME	●	●	●	
16	16	9.525	1.0	1.1	HM16ER160ACME	HM16EL160ACME	HM16IR160ACME	HM16IL160ACME	●	●	●	
14	16	9.525	1.0	1.2	HM16ER140ACME	HM16EL140ACME	HM16IR140ACME	HM16IL140ACME	●	●	●	
12	16	9.525	1.1	1.2	HM16ER120ACME	HM16EL120ACME	HM16IR120ACME	HM16IL120ACME	●	●	●	
10	16	9.525	1.3	1.4	HM16ER100ACME	HM16EL100ACME	HM16IR100ACME	HM16IL100ACME	●	●	●	
8	16	9.525	1.4	1.5	HM16ER080ACME	HM16EL080ACME	HM16IR080ACME	HM16IL080ACME	●	●	●	
6	16	9.525	1.4	1.5	-	-	HM16IR060ACME	HM16IL060ACME	●	●	●	
6	22	12.70	1.8	2.1	HM22ER060ACME	HM22EL060ACME	HM22IR060ACME	HM22IL060ACME	●	●	●	
5	22	12.70	2.0	2.3	HM22ER050ACME	HM22EL050ACME	HM22IR050ACME	HM22IL050ACME	●	●	●	
4	22	12.70	2.1	2.4	HM22ER040ACME	HM22EL040ACME	HM22IR040ACME	HM22IL040ACME	●	●	●	
4	22	12.70	2.3	11.0	HM22ER040ACMEU	HM22EL040ACMEU	HM22IR040ACMEU	HM22IL040ACMEU	●	●	●	
4	27	15.875	2.4	2.6	HM27ER040ACME	HM27EL040ACME	HM27IR040ACME	HM27IL040ACME	●	●	●	
3	27	15.875	2.8	13.7	HM27ER030ACMEU	HM27EL030ACMEU	HM27IR030ACMEU	HM27IL030ACMEU	●	●	●	
2	33	19.05	4.3	16.9	HM33ER020ACMEU	HM33EL020ACMEU	HM33IR020ACMEU	HM33IL020ACMEU	●	●	●	

## STUB ACME EXTERNAL AND INTERNAL THREADING

GWINT NISKI ACME. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

<b>STACME ST</b>									<b>STANDARD TYPE WYKONANIE STANDARDOWE</b>		
PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
TPI											
16	11	6.35	1.0	1.1	HM11ER160STACME	HM11EL160STACME	HM11IR160STACME	HM11IL160STACME	●	●	●
16	16	9.525	1.0	1.1	HM16ER160STACME	HM16EL160STACME	HM16IR160STACME	HM16IL160STACME	●	●	●
14	16	9.525	1.0	1.2	HM16ER140STACME	HM16EL140STACME	HM16IR140STACME	HM16IL140STACME	●	●	●
12	16	9.525	1.1	1.2	HM16ER120STACME	HM16EL120STACME	HM16IR120STACME	HM16IL120STACME	●	●	●
10	16	9.525	1.2	1.4	HM16ER100STACME	HM16EL100STACME	HM16IR100STACME	HM16IL100STACME	●	●	●
8	16	9.525	1.4	1.5	HM16ER080STACME	HM16EL080STACME	HM16IR080STACME	HM16IL080STACME	●	●	●
6	16	9.525	1.7	1.8	HM16ER060STACME	HM16EL060STACME	HM16IR060STACME	HM16IL060STACME	●	●	●
6	22	12.70	1.8	2.1	HM22ER060STACME	HM22EL060STACME	HM22IR060STACME	HM22IL060STACME	●	●	●
5	22	12.70	2.1	2.3	HM22ER050STACME	HM22EL050STACME	HM22IR050STACME	HM22IL050STACME	●	●	●
4	22	12.70	2.3	2.3	HM22ER040STACME	HM22EL040STACME	HM22IR040STACME	HM22IL040STACME	●	●	●
4	22	12.70	2.3	11.0	HM22ER040STACMEU	HM22EL040STACMEU	HM22IR040STACMEU	HM22IL040STACMEU	●	●	●
4	27	15.875	2.4	2.5	HM27ER040STACME	HM27EL040STACME	HM27IR040STACME	HM27IL040STACME	●	●	●
3	22	12.70	3.3	11.0	HM22ER030STACMEU	HM22EL030STACMEU	HM22IR030STACMEU	HM22IL030STACMEU	●	●	●
3	27	15.875	2.7	2.8	HM27ER030STACME	HM27EL030STACME	HM27IR030STACME	HM27IL030STACME	●	●	●
2	33	19.05	5.0	16.9	HM33ER020STACMEU	HM33EL020STACMEU	HM33IR020STACMEU	HM33IL020STACMEU	●	●	●

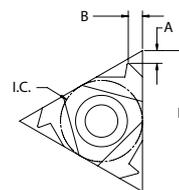
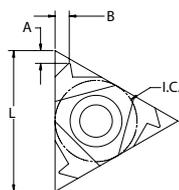
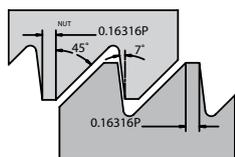
\* ONE CUTTING EDGE  
JEDNA KRAWĘDZ SKRAWAJĄCA



## AMERICAN BUTTRESS EXTERNAL AND INTERNAL THREADING

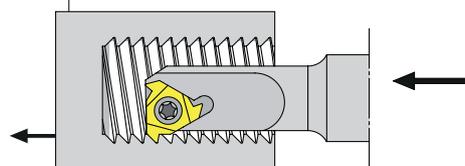
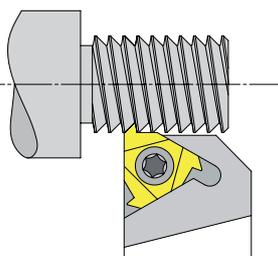
GWINT AMERYKAŃSKI TRAPEZOWY NIESYMETRYCZNY. TOCZENIE GWINTÓW ZEW. I WEW.

# ABUT ST



**STANDARD TYPE** WYKONANIE STANDARDOWE

STANDARD LEADING ANGLE 45°  
DOMYŚLNY KĄT PRZYSTAWIENIA 45°

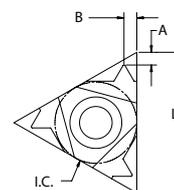
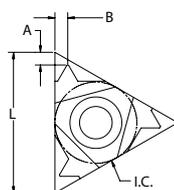
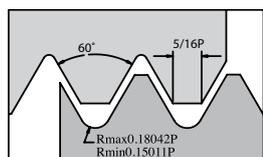


PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P-511	P-508	P-509	
TPI												
20	11	6.35	1.0	1.4	HM11ER200ABUT	HM11EL200ABUT	HM11IR200ABUT	HM11IL200ABUT	●	●	●	
16	11	6.35	1.1	1.6	HM11ER160ABUT	HM11EL160ABUT	HM11IR160ABUT	HM11IL160ABUT	●	●	●	
20	16	9.525	1.0	1.4	HM16ER200ABUT	HM16EL200ABUT	HM16IR200ABUT	HM16IL200ABUT	●	●	●	
16	16	9.525	1.0	1.5	HM16ER160ABUT	HM16EL160ABUT	HM16IR160ABUT	HM16IL160ABUT	●	●	●	
12	16	9.525	1.4	2.0	HM16ER120ABUT	HM16EL120ABUT	HM16IR120ABUT	HM16IL120ABUT	●	●	●	
10	16	9.525	1.5	2.3	HM16ER100ABUT	HM16EL100ABUT	HM16IR100ABUT	HM16IL100ABUT	●	●	●	
8	22	12.70	2.0	3.2	HM22ER080ABUT	HM22EL080ABUT	HM22IR080ABUT	HM22IL080ABUT	●	●	●	
6	22	12.70	2.1	3.4	HM22ER060ABUT	HM22EL060ABUT	HM22IR060ABUT	HM22IL060ABUT	●	●	●	

## UNJ EXTERNAL AND INTERNAL THREADING

### GWINTY UNJ. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# UNJ ST



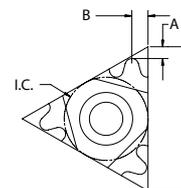
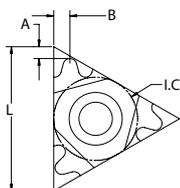
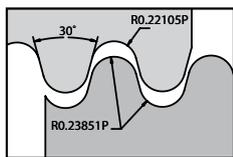
#### STANDARD TYPE WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	PS11	PS08	PS09	
TPI												
32	11	6.35	0.6	0.6	HM11ER320UNJ	HM11EL320UNJ	HM11IR320UNJ	HM11IL320UNJ	●	●	●	
28	11	6.35	0.6	0.6	HM11ER280UNJ	HM11EL280UNJ	HM11IR280UNJ	HM11IL280UNJ	●	●	●	
24	11	6.35	0.7	0.8	HM11ER240UNJ	HM11EL240UNJ	HM11IR240UNJ	HM11IL240UNJ	●	●	●	
20	11	6.35	0.8	0.9	HM11ER200UNJ	HM11EL200UNJ	HM11IR200UNJ	HM11IL200UNJ	●	●	●	
18	11	6.35	0.8	1.0	HM11ER180UNJ	HM11EL180UNJ	HM11IR180UNJ	HM11IL180UNJ	●	●	●	
16	11	6.35	0.8	1.0	HM11ER160UNJ	HM11EL160UNJ	HM11IR160UNJ	HM11IL160UNJ	●	●	●	
14	11	6.35	0.9	1.0	HM11ER140UNJ	HM11EL140UNJ	HM11IR140UNJ	HM11IL140UNJ	●	●	●	
32	16	9.525	0.6	0.6	HM16ER320UNJ	HM16EL320UNJ	HM16IR320UNJ	HM16IL320UNJ	●	●	●	
28	16	9.525	0.6	0.6	HM16ER280UNJ	HM16EL280UNJ	HM16IR280UNJ	HM16IL280UNJ	●	●	●	
24	16	9.525	0.7	0.8	HM16ER240UNJ	HM16EL240UNJ	HM16IR240UNJ	HM16IL240UNJ	●	●	●	
20	16	9.525	0.8	0.9	HM16ER200UNJ	HM16EL200UNJ	HM16IR200UNJ	HM16IL200UNJ	●	●	●	
18	16	9.525	0.8	1.0	HM16ER180UNJ	HM16EL180UNJ	HM16IR180UNJ	HM16IL180UNJ	●	●	●	
16	16	9.525	0.8	1.0	HM16ER160UNJ	HM16EL160UNJ	HM16IR160UNJ	HM16IL160UNJ	●	●	●	
14	16	9.525	1.0	1.2	HM16ER140UNJ	HM16EL140UNJ	HM16IR140UNJ	HM16IL140UNJ	●	●	●	
13	16	9.525	1.0	1.3	HM16ER130UNJ	HM16EL130UNJ	-	-	●	●	●	
12	16	9.525	1.1	1.4	HM16ER120UNJ	HM16EL120UNJ	HM16IR120UNJ	HM16IL120UNJ	●	●	●	
11	16	9.525	1.1	1.5	HM16ER110UNJ	HM16EL110UNJ	HM16IR110UNJ	HM16IL110UNJ	●	●	●	
10	16	9.525	1.1	1.5	HM16ER100UNJ	HM16EL100UNJ	HM16IR100UNJ	HM16IL100UNJ	●	●	●	
9	16	9.525	1.2	1.6	HM16ER090UNJ	HM16EL090UNJ	HM16IR090UNJ	HM16IL090UNJ	●	●	●	
8	16	9.525	1.2	1.6	HM16ER080UNJ	HM16EL080UNJ	HM16IR080UNJ	HM16IL080UNJ	●	●	●	

## ROUND DIN 405 EXTERNAL AND INTERNAL THREADING

GWINT OKRĄGŁY DIN 405. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

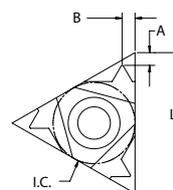
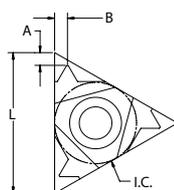
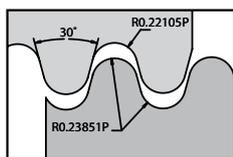
### RD ST



**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
10	16	9.525	1.1	1.2	HM16ER100RD	HM16EL100RD	HM16IR100RD	HM16IL100RD	●	●	●	
8	16	9.525	1.4	1.4	HM16ER080RD	HM16EL080RD	HM16IR080RD	HM16IL080RD	●	●	●	
6	16	9.525	1.4	1.5	HM16ER060RD	HM16EL060RD	HM16IR060RD	HM16IL060RD	●	●	●	
6	22	12.70	1.5	1.7	HM22ER060RD	HM22EL060RD	HM22IR060RD	HM22IL060RD	●	●	●	
4	22	12.70	2.2	2.3	HM22ER040RD	HM22EL040RD	HM22IR040RD	HM22IL040RD	●	●	●	
4	27	15.875	2.3	2.3	HM27ER040RD	HM27EL040RD	HM27IR040RD	HM27IL040RD	●	●	●	

### RD ST



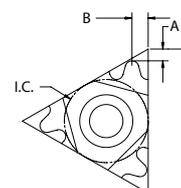
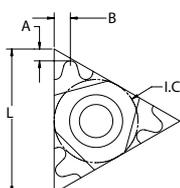
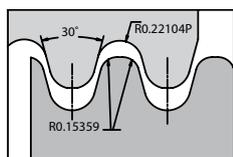
**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE			INTERNAL WEWNĘTRZNE				
						GRADE GATUNEK	P3200	P3100		GRADE GATUNEK	P3200	P3100
TPI												
8	16	9.525	1.4	1.4	HM16ER8RD		●	●	HM16IR8RD		●	●
6	16	9.525	1.4	1.5	HM16ER6RD		●	●	HM16IR6RD		●	●

## ROUND DIN 20400 EXTERNAL AND INTERNAL THREADING

GWINT OKRĄGŁY DIN 20400. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

### DIN ST



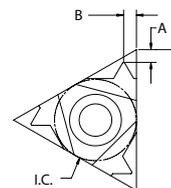
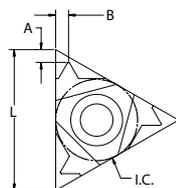
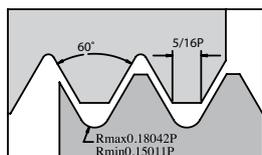
**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509
TPI											
3.0	16	9.525	1.3	1.6	HM16ER0300DIN	HM16EL0300DIN	HM16IR0300DIN	HM16IL0300DIN	●	●	●
4.0	22	12.70	1.6	1.5	HM22ER0400DIN	HM22EL0400DIN	HM22IR0400DIN	HM22IL0400DIN	●	●	●
5.0	22	12.70	1.6	1.7	HM22ER0500DIN	HM22EL0500DIN	HM22IR0500DIN	HM22IL0500DIN	●	●	●
6.0	22	12.70	1.7	2.1	HM22ER0600DIN	HM22EL0600DIN	HM22IR0600DIN	HM22IL0600DIN	●	●	●

## MJ EXTERNAL AND INTERNAL THREADING

GWINTY MJ. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

### MJ ST



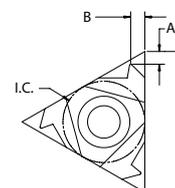
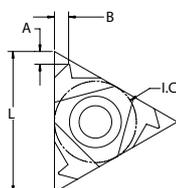
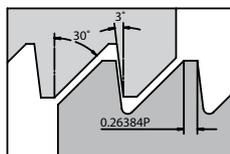
STANDARD TYPE WYKONANIE STANDARDOWE

PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
MM												
1.0	11	6.35	0.7	0.8	-		HM11IR0100MJ		●	●	●	
1.25	11	6.35	0.8	0.9	-		HM11IR0125MJ		●	●	●	
1.5	11	6.35	0.8	1.0	-		HM11IR0150MJ		●	●	●	
1.0	16	9.525	0.7	0.8	HM16ER0100MJ		HM16IR0100MJ		●	●	●	
1.25	16	9.525	0.8	0.9	HM16ER0125MJ		HM16IR0125MJ		●	●	●	
1.5	16	9.525	0.8	1.0	HM16ER0150MJ		HM16IR0150MJ		●	●	●	
2.0	16	9.525	1.0	1.3	HM16ER0200MJ		HM16IR0200MJ		●	●	●	
2.5	16	9.525	0.8	1.5	HM16ER0250MJ		HM16IR0250MJ		●	●	●	
3.0	16	9.525	1.1	1.4	HM16ER0300MJ		HM16IR0300MJ		●	●	●	

## SÄGENGEWINDE EXTERNAL AND INTERNAL THREADING

GWINT PIŁOWY. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

### SAGE ST

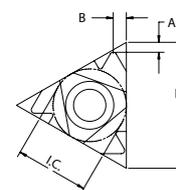
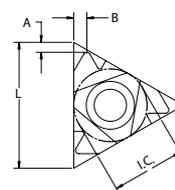
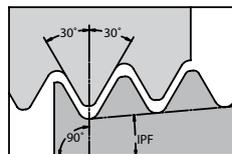


PITCH SKOK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK			
					RIGHT PRAWY	LEFT LEWY	RIGHT PRAWY	LEFT LEWY	P511	P508	P509	
TPI												
2.0	16	9.525	1.3	1.8	HM16ER0200SAGE	HM16EL0200SAGE	HM16IR0200SAGE	HM16IL0200SAGE	●	●	●	
3.0	22	12.70	1.8	2.7	HM22ER0300SAGE	HM22EL0300SAGE	HM22IR0300SAGE	HM22IL0300SAGE	●	●	●	
4.0	22	12.70	2.1	3.3	HM22ER0400SAGE	HM22EL0400SAGE	HM22IR0400SAGE	HM22IL0400SAGE	●	●	●	

## API EXTERNAL AND INTERNAL THREADING

### GWINT API. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

# API ST



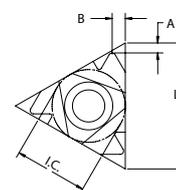
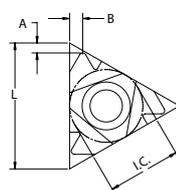
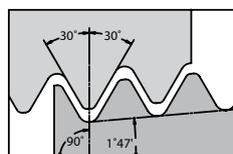
#### STANDARD TYPE WYKONANIE STANDARDOWE

THREAD GWINT	PITCH SKOK	TAPER STOZEK	L	I.C.	A	B	SIZE ROZMIAR	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	GRADE GATUNEK		
	TPI	IPF						RIGHT PRAWY	RIGHT PRAWY	P511	P508	P509
V-0.040	5	3	22	12.70	1.8	2.6	2 3/8" - 4 1/2" REG	HM22ER403API	HM22IR403API	●	●	●
V-0.038R	4	2	22	12.70	2.0	2.6	NC23-NC50	HM22ER382API	HM22IR382API	●	●	●
V-0.038R	4	3	22	12.70	2.0	2.6	NC56-NC77	HM22ER383API	HM22IR383API	●	●	●
V-0.050	4	2	22	12.70	1.9	2.8	6 5/8" REG	HM22ER502API	HM22IR502API	●	●	●
V-0.050	4	3	22	12.70	1.9	2.8	5 1/2", 7 5/8", 8 5/8" REG	HM22ER503API	HM22IR503API	●	●	●
V-0.040	5	3	27	15.875	1.9	2.7	2 3/8" - 4 1/2" REG	HM27ER403API	HM27IR403API	●	●	●
V-0.038R	4	2	27	15.875	2.2	2.8	NC23-NC50	HM27ER382API	HM27IR382API	●	●	●
V-0.038R	4	3	27	15.875	2.2	2.8	NC56-NC77	HM27ER383API	HM27IR383API	●	●	●
V-0.050	4	2	27	15.875	2.2	3.0	6 5/8" REG	HM27ER502API	HM27IR502API	●	●	●
V-0.050	4	3	27	15.875	2.2	3.0	5 1/2", 7 5/8", 8 5/8" REG	HM27ER503API	HM27IR503API	●	●	●

## API RD EXTERNAL AND INTERNAL THREADING

### GWINTY API RD. TOCZENIE GWINTÓW ZEWNĘTRZNYCH I WEWNĘTRZNYCH

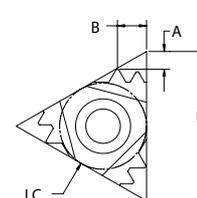
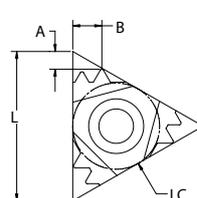
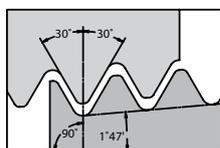
# API RD ST



#### STANDARD TYPE WYKONANIE STANDARDOWE

PITCH SKOK	TAPER STOZEK	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	GRADE GATUNEK		
	TPI					IPF	RIGHT PRAWY	RIGHT PRAWY	P511	P508
10	0.75	16	9.525	1.4	1.4	HM16ER100APIRD10	HM16IR100APIRD10	●	●	●
8	0.75	16	9.525	1.3	1.5	HM16ER080APIRD8	HM16IR080APIRD8	●	●	●

# API MT



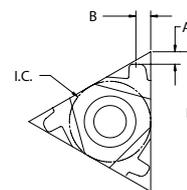
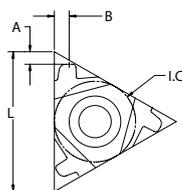
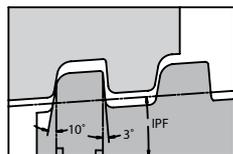
#### MULTITOOTH TYPE WYKONANIE WIELOZĘBOWE

PITCH SKOK	TEETH ZĘBY	L	I.C.	A	B	EXTERNAL ZEWNĘTRZNE		INTERNAL WEWNĘTRZNE		GRADE GATUNEK		
						RIGHT PRAWY	ANVIL PODKŁADKA	RIGHT PRAWY	ANVIL PODKŁADKA	P511	P508	P509
10	2	22	12.70	2.4	3.6	HM22ER100API2M	SH301	HM22IR100API2M	SH304	●	●	●
10	3	27	15.875	3.6	6.3	HM27ER100API3M	SH302	HM27IR100API3M	SH305	●	●	●
8	2	27	15.875	2.9	4.6	HM27ER080API2M	SH302	HM27IR080API2M	SH305	●	●	●

## BUTTRESS CASING EXTERNAL AND INTERNAL THREADING

GWINT TRAPEZOWY NIESYMETRYCZNY RUROWY. TOCZENIE GWINTÓW ZEWN. I WEWN.

**BUT ST**



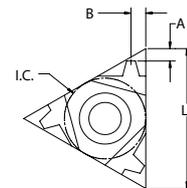
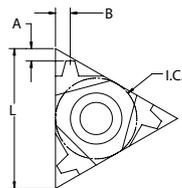
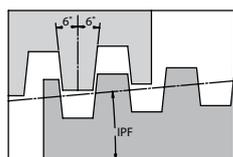
**STANDARD TYPE** WYKONANIE STANDARDOWE

PITCH SKOK	TAPER STOŻEK	L	I.C.	A	B	SIZE ROZMIAR	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	GRADE GATUNEK			
							RIGHT PRAWY	RIGHT PRAWY	P511	P508	P509	
MM	IPF											
5	0.75	22	12.70	2.2	2.3	4 1/2" - 13 3/8"	HM22ER575BUT	HM22IR575BUT	●	●	●	
5	1.00	22	12.70	2.2	2.3	16" - 20"	HM22ER510BUT	HM22IR510BUT	●	●	●	

## EXTREME LINE CASING EXTERNAL AND INTERNAL THREADING

GWINT TRAPEZOWY SYMETRYCZNY WYSOKI. TOCZENIE GWINTÓW ZEWN. I WEWN.

**EL ST**



**STANDARD TYPE** WYKONANIE STANDARDOWE

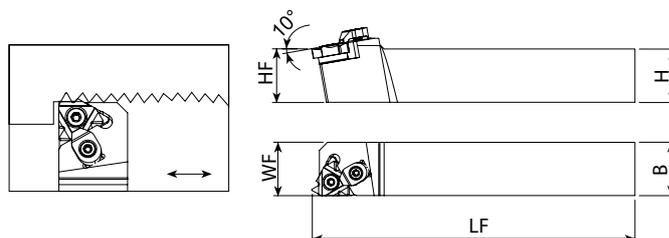
PITCH SKOK	TAPER STOŻEK	L	I.C.	A	B	SIZE ROZMIAR	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	GRADE GATUNEK		
							RIGHT PRAWY	RIGHT PRAWY	P511	P508	P509
MM	IPF										
6	1.5	22	12.70	2.0	1.9	5" - 7 5/8"	HM22ER060EL	HM22IR060EL	●	●	●
5	1.25	22	12.70	2.3	2.4	8 5/8" - 10 3/4"	HM22ER050EL	HM22IR050EL	●	●	●

## EXTERNAL TOOLHOLDERS

### OPRAWKI NARZĘDZIOWE ZEWNĘTRZNE

# SSW ST

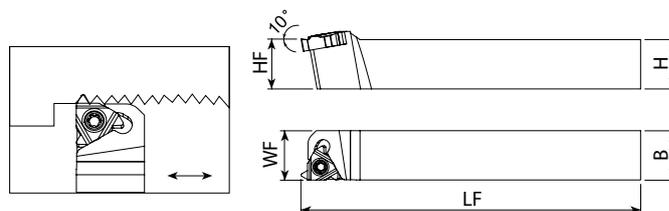
**STANDARD TYPE** WYKONANIE STANDARDOWE



ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY				INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA					
	HF=H	B	LF	WF		SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SSWR/L0808E11A	8	8	70	11	11 ER/EL	4008M25x6					82T08
SSWR/L1010E11A	10	10	70	11		4008M25x6					82T08
SSWR/L1212F11A	12	12	80	12		4008M25x6					82T08
SSWR/L1616H11A	16	16	100	16		4008M25x6					82T08
SSWR/L2020H11A	20	20	100	20		4008M25x6					82T08
SSWR/L1616H16CA	16	16	100	16	16 ER/EL (0.35- 3) ISO METRIC	4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L2020K16CA	20	20	125	20		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L2525M16CA	25	25	150	25		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L3232P16CA	32	32	170	32		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L2525M22CA	25	25	150	25	22 ER/EL (3.5-4.5) ISO METRIC	1020M45x16	TTTN20004	TTV07M45x13	TCK05	4015M4x11	80T20
SSWR/L3232P22CA	32	32	170	32		1020M45x16	TTTN20004	TTV07M45x13	TCK05	4015M4x11	80T20
SSWR/L4040S22CA	40	40	250	40		1020M45x16	TTTN20004	TTV07M45x13	TCK05	4015M4x11	80T20
SSWR/L2525M16CTA	25	25	150	25	16 ER/L (1.5-3TR)	4015M35x14			TCK05	4015M4x11	80T15
SSWR/L2525M22CTA	25	25	150	25	22 ER/L(4-6TR)	1020M45x16			TCK05	4015M4x11	80T20
SSWR/L2020K16CSA	20	20	125	25	SNDVK166ER/L16	4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L2525M16CSA	25	25	150	31		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSWR/L3232P16CSA	32	32	170	38.5		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15

# SSW SWISS TYPE

**STANDARD TYPE** WYKONANIE STANDARDOWE



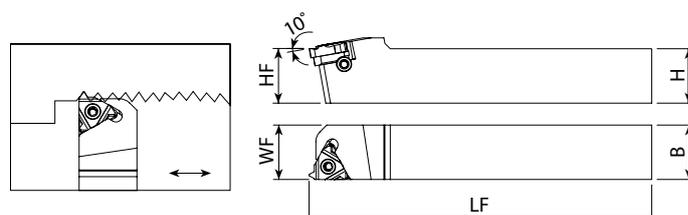
ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY				INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA					
	HF=H	B	LF	WF		SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SSWR/L1010K11SA	10	10	125	10	11 ER/EL	4008M25X6					82T08
SSWR/L1212K11SA	12	12	125	12		4008M25X6					82T08
SSWR/L1212K16SA	12	12	125	12	16ER3.5	4015M35x14	TTTN20020	TTV08M.5X8			80-T15

## EXTERNAL TOOLHOLDERS

### OPRAWKI NARZĘDZIOWE ZEWNĘTRZNE

## STE ST

### STANDARD TYPE WYKONANIE STANDARDOWE



ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY				INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA					
	HF=H	B	LF	WF		SCREW ŚRUBA	SHIM PODKŁADKA	SHIM PODKŁADKA	SHIM SCREW ŚRUBA PODKŁADKI	SHIM SCREWRING PIERSCIEN ŚRUBY PODKŁADKI	TORX KEY KLUCZ TORX
STER/L1616H16A	16	16	100	16	16ER/EL	17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
STER/L2020K16A	20	20	125	20	16ER/EL	17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
STER/L2525M16A	25	25	150	25	16ER/EL	17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
STER/L3232P16A	32	32	170	32	16ER/EL	17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
STER/L2525M22A	25	25	150	25	22ER/EL	1720U832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
STER/L3232P22A	32	32	170	32	22ER/EL	1720U832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
STER/L4040S22A	40	40	250	40	22ER/EL	1720U832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
STER/L2525M27A	25	25	150	25	27ER/EL	1620M5x22	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20
STER/L3232P27A	32	32	170	32	27ER/EL	1620M5x22	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20
STER/L4040S27A	40	40	250	40	27ER/EL	1620M5x22	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20

## HERE ST

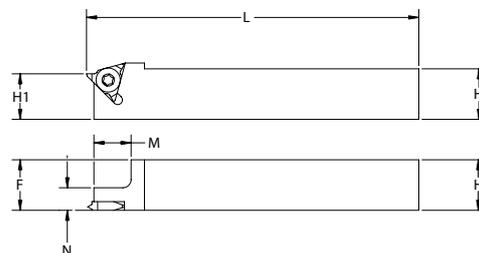
### STANDARD TYPE WYKONANIE STANDARDOWE



ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY			INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA				
	H=H1	L1	F		ANVIL RH PODKŁADKA RH	ANVIL LH PODKŁADKA LH	ANVIL SCREW ŚRUBA PODKŁADKI	TORX KEY KLUCZ TORX	INSERT SCREW ŚRUBA PŁYTKI
HERE0808ER11	8.0	10.0	100	ER11	-	-	-	W301	SR305
HERE1010ER11	10.0	10.0	100	ER11	-	-	-	W301	SR305
HERE1212ER16	12.0	16.0	100	ER16	ES16	IS16	SR300	W302	SR306
HERE1616ER16	16.0	16.0	100	ER16	ES16	IS16	SR300	W302	SR306
HERE2020ER16	20.0	20.0	125	ER16	ES16	IS16	SR300	W302	SR306
HERE2525ER16	25.0	25.0	150	ER16	ES16	IS16	SR300	W302	SR306
HERE3232ER16	32.0	32.0	170	ER16	ES16	IS16	SR300	W302	SR306
HERE2525ER22	25.0	25.0	150	ER22	ES22	IS22	SR301	W303	SR309
HERE3232ER22	32.0	32.0	170	ER22	ES22	IS22	SR301	W303	SR309
HERE2525ER22U	25.0	25.0	150	ER22U	ES22U	IS22U	SR301	W303	SR309
HERE3232ER22U	32.0	32.0	170	ER22U	ES22U	IS22U	SR301	W303	SR309
HERE2525ER27	25.0	32.0	150	ER27	ES27	IS27	SR302	W304	SR311
HERE3232ER27	32.0	32.0	170	ER27	ES27	IS27	SR302	W304	SR311
HERE2525ER27U	25.0	32.0	150	ER27U	ES27U	IS27U	SR302	W304	SR311
HERE3232ER27U	32.0	32.0	170	ER27U	ES27U	IS27U	SR302	W304	SR311
HERE2525ER33U	25.0	32.0	150	ER33U	-	-	-	W305	SR312
HERE3232ER33U	32.0	32.0	170	ER33U	-	-	-	W305	SR312

**EXTERNAL TOOLHOLDERS**  
OPRAWKI NARZĘDZIOWE ZEWNĘTRZNE

**HERE VT**



**STANDARD TYPE** WYKONANIE STANDARDOWE

ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY					INSERT TYPE TYP PŁYTKI	TORX KEY KLUCZ TORX	INSERT SCREW ŚRUBA PŁYTKI
	N	M	H=H1	L1	F			
HERE1616ER16V	7.5	15.5	16.0	16.0	100	ER16V	W302	SR308
HERE2020ER16V	7.5	15.5	20.0	20.0	125	ER16V	W302	SR308
HERE2525ER16V	7.5	15.5	25.0	25.0	150	ER16V	W302	SR308

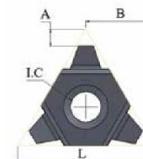
ATTENTION  
UWAGA

ALL TOOLHOLDERS ARE MADE WITH 1.5° HELIX ANGLE.  
FOR EX. L.H. INSERTS, CHANGE TO HEL INSTEAD OF HER  
WSZYSTKIE OPRAWKI WYKONANE Z KĄTEM POCHYLENIA LINII ŚRUBOWEJ 1.5.  
DLA OPRAWEK LEWYCH, NALEŻY ZMIEŃĆ HEL NA HER W KODZIE.

\* WITHOUT ANVIL  
BEZ PODKŁADKI

U-TYPE  
TYP U

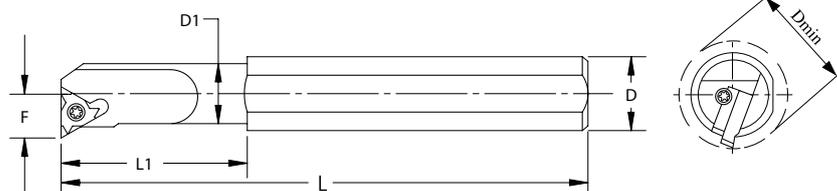
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## INTERNAL TOOLHOLDERS

### OPRAWKI NARZĘDZIOWE WEWNĘTRZNE

# HIRE ST

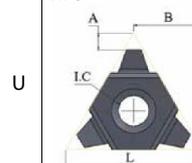

**STANDARD TYPE** WYKONANIE STANDARDOWE

ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY						INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA				
	D	D1	B	L1	L2	F		ANVIL RH PODKŁADKA RH	ANVIL LH PODKŁADKA LH	ANVIL SCREW SRUBA PODKŁADKI	TORX KEY KLUCZ TORX	INSERT SCREW SRUBA PŁYTKI
HIRE0012IR06	12.0	5.0	6.1	100	12	4.4	IR06	-	-	-	W300	SR303
HIRE0016IR08	16.0	6.5	8.0	125	17	5.4	IR08	-	-	-	W300	SR304
HIRE0016IR08M	16.0	7.8	9.2	125	17	5.4	IR08	-	-	-	W300	SR304
HIRE0010IR11	10.0	10.0	12.5	100	-	7.3	IR11	-	-	-	W301	SR305
HIRE0016IR11	16.0	10.0	12.5	125	25	7.3	IR11	-	-	-	W301	SR305
HIRE0013IR16	16.0	13.0	16.5	150	32	10.4	IR16	-	-	-	W302	SR307
HIRE0016IR16	20.0	16.0	19.5	170	40	11.6	IR16	-	-	-	W302	SR307
HIRE0020IR16	20.0	20.0	23.5	170	-	13.6	IR16	IS16	ES16	SR300	W302	SR306
HIRE0025IR16	25.0	25.0	28.5	200	-	16.3	IR16	IS16	ES16	SR300	W302	SR306
HIRE0032IR16	32.0	32.0	35.5	250	-	19.6	IR16	IS16	ES16	SR300	W302	SR306
HIRE0040IR16	40.0	40.0	43.5	300	-	23.6	IR16	IS16	ES16	SR300	W302	SR306
HIRE0020IR22	20.0	20.0	25.0	170	-	15.5	IR22	-	-	-	W303	SR310
HIRE0025IR22	25.0	25.0	30.0	200	-	18.3	IR22	IS22	ES22	SR301	W303	SR309
HIRE0032IR22	32.0	32.0	37.0	250	-	21.7	IR22	IS22	ES22	SR301	W303	SR309
HIRE0040IR22	40.0	40.0	45.0	300	-	25.7	IR22	IS22	ES22	SR301	W303	SR309
HIRE0032IR22U	32.0	32.0	38.0	250	-	24.4	IR22U	IS22U	ES22U	SR301	W303	SR309
HIRE0040IR22U	40.0	40.0	46.0	300	-	28.1	IR22U	IS22U	ES22U	SR301	W303	SR309
HIRE0032IR27	32.0	32.0	39.0	250	-	22.8	IR27	IS27	ES27	SR302	W304	SR311
HIRE0040IR27	40.0	40.0	47.0	300	-	26.8	IR27	IS27	ES27	SR302	W304	SR311
HIRE0032IR27U	32.0	32.0	40.0	250	-	25.8	IR27U	IS27U	ES27U	SR302	W304	SR311
HIRE0040IR27U	40.0	40.0	48.0	300	-	29.4	IR27U	IS27U	ES27U	SR302	W304	SR311
HIRE0050IR33U	50.0	50.0	62.0	350	-	37.5	IR33U	-	-	-	W305	SR312

 ATTENTION  
 UWAGA

ALL TOOLHOLDERS ARE MADE WITH 1.5° HELIX ANGLE.  
 FOR EX. L.H. INSERTS, CHANGE TO HIL INSTEAD OF HIR  
 WSZYSTKIE OPRAWKI WYKONANE Z KĄTEM POCHYLENIA LINII SRUBOWEJ 1.5.  
 DLA OPRAWEK LEWYCH, NALEŻY ZMIENIĆ HIL NA HIR W KODZIE.

 \* WITHOUT ANVIL  
 BEZ PODKŁADKI

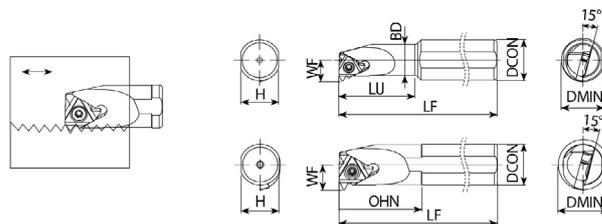
 U-TYPE  
 TYP U


# INTERNAL TOOLHOLDERS

## OPRAWKI NARZĘDZIOWE WEWNĘTRZNE

### SSN ST

**STANDARD TYPE** WYKONANIE STANDARDOWE



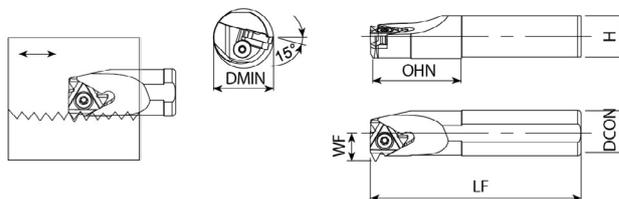
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	DCON	BD	LF	LU	OHN	WF	DMIN		SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
SSNR/LS12X05H06A	12	05	100	15	15	4.3	6.4	06IR/L	3006M2X36					82T06
SSNR/LS16X05H06A	16	05	100	15	15	4.3	6.4		3006M2X36					82T06
SSNR/LS16X07M08A	16	07	150	18	18	5.3	7.8	08IR/L	3007M22x46					82T07
SSNR/LS10H11A	10	10	100	-	-	7.4	12	11IR/L	4008M25x6					82T08
SSNR/LS12K11A	12	12	125	-	-	8.4	15		4008M25x6					82T08
SSNR/LS16X10M11A	16	10	150	25	25	7.4	12		4008M25x6					82T08
SSNR/LS16X13M11A	16	13	150	32	32	8.9	15		4008M25x6					82T08
SSNR/LS16M11A	16	16	150	-	-	11.7	19		4008M25x6					82T08
SSNR/LA16X13M16A	16	12.8	150	32	32	9.05	18.1	16IR/L (0.35 - 31) ISO METRIC	4015M35x9					80T15
SSNR/LS16X13M16A	16	13	150	32	32	10.2	16		4015M35x9					80T15
SSNR/LS16M16A	16	16	150	-	-	11.7	19		4015M35x11					80T15
SSNR/LS20X16P16A	20	16	170	40	40	11.7	19		4015M35x11					80T15
SSNR/LA20X16P16A	20	31	170	40	40	11.7	19		4015M35x11					80T15
SSNR/LS20P16A	20	20	170	-	-	13.7	24		4015M35x11					80T15
SSNR/LS25R16CA	25	25	200	-	-	16.2	29		4015M35x14	TTTN20020	TTV08M35x8	TCK05	4015M4x11	80T15
SSNR/LS32S16CA	32	32	250	-	-	19.7	36		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSNR/LS40T16CA	40	40	300	-	-	23.7	44		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSNR/LS50U16CA	50	50	350	-	-	28.7	54		4015M35x14	TTTN20020	TTV06M35x11	TCK05	4015M4x11	80T15
SSNR/LS20P22A	20	20	170	-	-	15.7	24	4020M45x12						
SSNR/LS25R22CA	25	25	200	-	-	18.1	29	22IR/L (3.5-4.5) ISOMETRIC	1020M45x16	TTTN20004	TTV10M45x8	TCK05	4015M4x11	
SSNR/LS32S22CA	32	32	250	-	-	21.6	38		1020M45x16	TTTN20004	TTV10M45x8	TCK05	4015M4x11	
SSNR/LS40T22CA	40	40	300	-	-	25.6	46		1020M45x16	TTTN20004	TTV07M45x13	TCK05	4015M4x11	80T20
SSNR/LS50U22CA	50	50	350	-	-	30.6	58		1020M45x16	TTTN20004	TTV07M45x13	TCK05	4015M4x11	80T20
SSNR/LS25R16CTA	25	25	200	-	-	16.2	29	16IR/I (15- 3TR)	4015M35x14			TCK05	4015M4x11	
SSNR/LS32S16CTA	32	32	250	-	-	19.7	36		4015M35x14			TCK05	4015M4x11	
SSNR/LS25R22CTA	25	25	200	-	-	18.1	29	22 IR/L(4-6TR)	1020M45x16					80T20
SSNR/LS32S22CTA	32	32	250	-	-	21.6	38		1020M45x16					80T20
SSNR/LS40T27VT08A	40	39.5	300	70	70	29	50	27VNR10TRNNT	1620M5X18					

## INTERNAL TOOLHOLDERS

### OPRAWKI NARZĘDZIOWE WEWNĘTRZNE

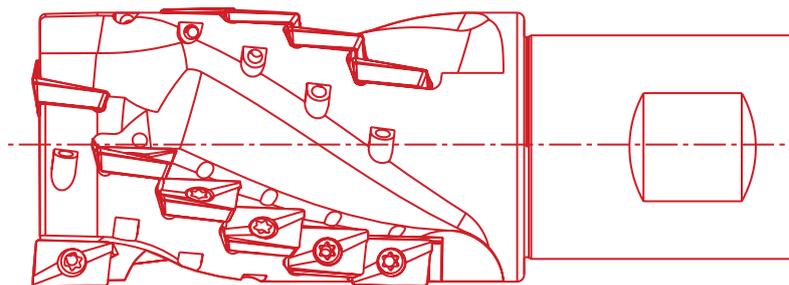
# TSN ST

**STANDARD TYPE** WYKONANIE STANDARDOWE



ORDER CODE KOD ZAMÓWIENIA	DIMENSIONS WYMIARY						INSERT TYPE TYP PŁYTKI	SPARE PARTS AKCESORIA					
	DCON	H	LF	OHN	WF	DMIN		SCREW SRUBA	SHIM PODKŁADKA	SHIM SCREW SRUBA PODKŁADKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX
TSNR/LS25R16A	25	23	200		16,2	29	16IR/L	17100540x122	TTS16E	TTS16I	TTV110540x45	TBPL03	82T10
TSNR/LS32S16A	32	30	250	-	19.7	36		17100540x122	TTS16E	TTS16I	TTV110540x45	TBPL03	82T10
TSNR/LS40T16A	40	37.5	300	-	23.7	44		17100540x122	TTS16E	TTS16I	TTV110540x45	TBPL03	82T10
TSNR/LS50U16A	50	47	350	-	28.7	54		17100540x122	TTS16E	TTS16I	TTV110540x45	TBPL03	82T10
TSNR/LS25R22A	25	23	200	-	18.1	29	22IR/L	17200832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
TSNR/LS32S22A	32	30	250	-	21.6	38		17200832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
TSNR/LS40T22A	40	37.5	300	-	25.6	46		17200832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
TSNR/LS50U22A	50	47	350	-	30.6	58		17200832x15	TTS22E	TTS22I	TTV12U832x55	TBPL04	80T20
TSNR/LS32S27A	32	30	250	-	22.6	40	27IR/L	1620M5x18	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20
TSNR/LS40T27A	40	37.5	300	-	26.6	48		1620M5x22	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20
TSNR/LS50U27A	50	47	350	-	31.6	58		1620M5x22	TTS27E	TTS27I	TTV15M5x57	TBPL05	80T20
TSNR/LA20P16A	20	13.7	170	40	18	24	16IR/L	17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
TSNR/LA25R16A	25	23	200	50	16.2	29		17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
TSNR/LA32S16A	32	30	250	60	19.7	36		17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10
TSNR/LA40T16A	40	37.5	300	65	23.9	44		17100540x122	TTS16E	TTS16I	TTV11U540x45	TBPL03	82T10

# MILLING FREZOWANIE



M760 | Z=2-5 | p.124



TPKT1004

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M760 | Z=1-4 | p.124



TPKT0603  
TPKT1004  
TPKT1505

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M765 | Z=2-3 | p.125



TNKS0603

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M765 | Z=2-3 | p.125



TNKS0603

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M180 | Z=5-7 | p.127



APKT1003  
APLT1604

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M180 | Z=2-5 | p.128



APKT1003  
APLT11T3  
APLT1604

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M330 | Z=2-3 | p.130



JDMX1705

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M330 | Z=2-3 | p.130



JDMX1705

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M442 | Z=1-5 | p.131



JDRX11T3  
JDRX1704

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M767 | Z=2-5 | p.132



JX.T1235  
JX.T1705

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKI PŁASZCZYZN

M805 | Z=4-7 | p.133



JDMT1704

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKI PŁASZCZYZN

M805 | Z=2-4 | p.133



JDMT1704

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKI PŁASZCZYZN

M804 | Z=5-7 | p.134



LBMX0603  
LBMX0904

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M804 | Z=3-5 | p.134



LBMX0603  
LBMX0904

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M803 | Z=7-15 | p.135



HNGX0905

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKI PŁASZCZYZN

M376 | Z=2-5 | p.136



LNMX 0404

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M376 | Z=6-9 | p.136



LNMX 0404

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M376 | Z=4-6 | p.136



LNMX 0404

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M374 | Z=1-4 | p.137



JNMX1006

**END FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKI PŁASZCZYZN

M181 | Z=6-9 | p.138



LOGX0404

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M181 | Z=2-5 | p.138



LOGX0404

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKI SZYBKOŚCIOWEJ

M181 | Z=2-5 | p.139



LOGX040

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKİ SZYBKOŚCIOWEJ

M177 | Z=2-3 | p.140



JNGU15T6

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M370 | Z=4-10 | p.141


LNMT1106  
LNMT1306

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M460 | Z=6-8 | p.142



OD.. 0605

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M492 | Z=5-9 | p.143



OF.. 05T3

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M273 | Z=5-9 | p.144



ON.. 0604

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M802 | Z=5-12 | p.145



PNMU 0905

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M495 | Z=4-6 | p.146



RPMT 1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M495 | Z=2-3 | p.146


RPMT 08T2  
RPMT 10T3  
RPMT 1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M495 | Z=2-4 | p.147


RPMT 08T2  
RPMT 10T3  
RPMT 1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M162 | Z=4-12 | p.148

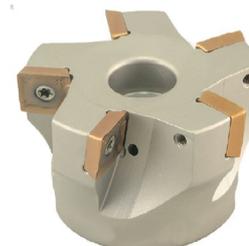


SEM12T3

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M766 | Z=4-16 | p.149



SDRX1404

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYŹN

M250 | Z=4-14 | p.150



SN.. 1206

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M850 | Z=4-14 | p.151



SPKN 1203

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M175 | Z=4-18 | p.152



TP.. 1603  
TP.. 2204

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M252 | Z=3-4 | p.153



WNMX 09T3

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKİ SZYBKOŚCIOWEJ

M252 | Z=2-4 | p.153



WNMX 0603  
WNMX 09T3

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKİ SZYBKOŚCIOWEJ

M768 | Z=4-8 | p.155



TNEX 0403  
TNEX 0806

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M331 | Z=5-12 | p.156



JOMX1204

**FACE MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M887 | Z=2 | p.157



JPGT0102

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKİ SZYBKOŚCIOWEJ

M179 | Z=2-5 | p.158



RD10T3  
RD1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M179 | Z=5-8 | p.158



RD10T3  
RD1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M179 | Z=5-8 | p.159



RD10T3  
RD1204

**FACE AND COPY MILLING CUTTERS**

NARZĘDZIA DO OBRÓBKİ PŁASZCZYZN

M111 | Z=4-18 | p.129



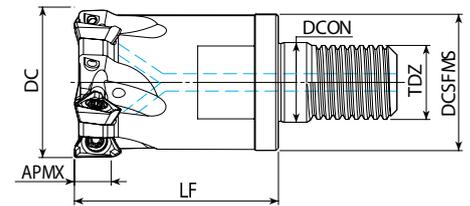
APKT1003

**HIGH FEED MILLING CUTTERS**

FREZY DO OBRÓBKİ SZYBKOŚCIOWEJ

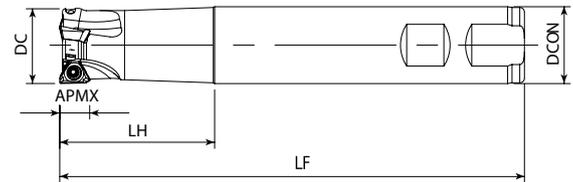
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M760



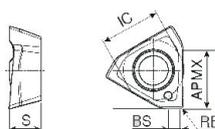
ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	DCS- FMS	TDZ	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M760B02002M10035TP10		20	2	18	M10	35	10,5	7	TPKT1004	1108M25x6	82T08	
M760A03205M16043TP10	●	32	5	29	M16	43	17	7		1108M25x6	82T08	

M760



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M760A01201T12120TP06	●	12	1	120	12	4.7	TPKT0603	3006M2x4	82T06	
M760A01603W16120TP06	●	16	3	120	16	4.7		3006M2x4	82T06	
M760A02003W20150TP06	●	20	3	150	20	4.7		3006M2x4	82T06	
M760A02505W25150TP06	●	25	5	150	25	4.7		3006M2x4	82T06	
M760B02002W20150TP10		20	2	150	20	7	TPKT1004	1108M25x6	82T08	
M760B02102T20200TP10		21	2	200	20	7		1108M25x6	82T08	
M760B02202W20150TP10		22	2	150	20	7		1108M25x6	82T08	
M760B02503W25150TP10		25	3	150	25	7	TPKT1505	1108M25x6	82T08	
M760B03203W32150TP15		32	3	150	32	11		1115M4x10	80T15	
M760B03803W32150TP15		38	3	150	32	11		1115M4x10	80T15	
M760B04004W32150TP15		40	4	150	32	11		1115M4x10	80T15	

TPKT



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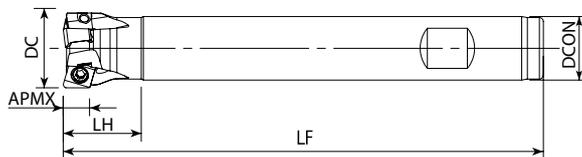
TPKT	IC	S	BS
06	03	5.3	2.8 1.0
10	04	6.9	4.0 0.9
15	05	10.7	5.0 0.50

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		
					P3300	P3200	P3350
	TPKT060304CM	0.40	1.0-4.0	0.04-0.10	●		●
	TPKT100408CM	0.80	2.0-6.0	0.05-0.12	●	●	●
	TPKT150508CM	0.80	3.0-9.0	0.07-0.17	●	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

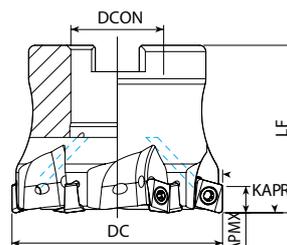
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M765



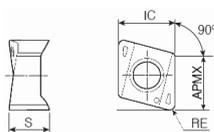
ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZAFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M765A01602W16120TN06	●	16	2	120	16	6	TNKS0603	1108M3x68	82T08	
M765B01602W16160TN06		16	2	160	16	6		1108M3x68	82T08	
M765A02003W16120TN06	●	20	3	120	16	6		1108M3x68	82T08	
M765B02003W16160TN06		20	3	160	16	6		1108M3x68	82T08	
M765B02003W20160TN06		20	3	160	20	6		1108M3x68	82T08	

# M765



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZAFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M765A04005016040TN06	●	40	5	40	16	6	TNKS0603	1108M3x68	82T08	2506M8x30
M765A05006022040TN06	●	50	6	40	22	6		1108M3x68	82T08	2508M10x30

# TNKS



P			
M			
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TNKS	IC	S	APMX
06 03	6.60	4.67	6.0

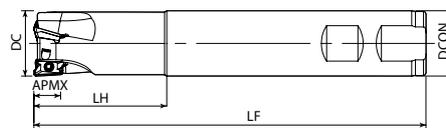
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		
					P3200	P3350	P3100
	TNKS060308CM	0.8	1.0-5.0	0.07-0.15	●	●	
	TNKS0603CM	0.8	1.0-5.0	0.07-0.15	●	●	●

MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

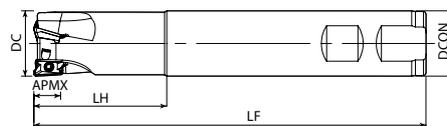
# M180



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
									
M180AP1016T1615002		16	2	150	16	10	AP..1003	3008M25x5	82T08
M180AP1016T1615002C	●	16	2	150	16	10		3008M25x5	82T08
M180AP1016W1615002		16	2	150	16	10		3008M25x5	82T08
M180AP1016T1620002		16	2	200	16	10		3008M25x5	82T08
M180AP1016T1620002C	●	16	2	200	16	10		3008M25x5	82T08
M180AP1016T1625002		17	2	150	16	10		3008M25x5	82T08
M180AP1017T1615002		17	2	250	16	10		3008M25x5	82T08
M180AP1018W1610002C	●	18	2	100	16	10		3008M25x5	82T08
M180AP1018W1615002		18	2	150	16	10		3008M25x5	82T08
M180AP1020T1918002		20	2	180	19	10		3008M25x5	80T15
M180AP1020T2010003C	●	20	3	100	20	10		3008M25x5	80T15
M180AP1020W2009003C	●	20	3	90	20	10		3008M25x5	82T08
M180AP1020W2010003C	●	20	3	100	20	10		3008M25x5	82T08
M180AP1020T2012003C	●	20	3	120	20	10		3008M25x5	82T08
M180AP1020T2015003		20	3	150	20	10		3008M25x5	82T08
M180AP1020T2015003C	●	20	3	150	20	10		3008M25x5	82T08
M180AP1020W2015003		20	3	150	20	10		3008M25x5	82T08
M180AP1020T2020002		20	2	200	20	10		3008M25x5	82T08
M180AP1020T2020003C	●	20	3	200	20	10		3008M25x5	82T08
M180AP1020T2025002		20	2	250	20	10		3008M25x5	82T08
M180AP1020T2025002C	●	20	2	250	20	10		3008M25x5	82T08
M180AP10205T2009002		20.5	3	90	20	10		3008M25x6	82T08
M180AP1021T2015003		21	3	200	20	10		3008M25x6	82T08
M180AP1021T2020003		21	3	200	20	10		3008M25x6	82T08
M180AP1021T2020003C	●	21	3	200	20	10		3008M25x6	82T08
M180AP1021W2015003		21	3	150	20	10		3008M25x6	82T08
M180AP1022W2010003C	●	22	3	100	20	10		3008M25x6	82T08
M180AP1022W2015003		22	3	150	20	10		3008M25x6	80T15
M180AP10225W2015003		22.5	3	150	20	10		3008M25x6	80T15
M180AP1023W2015003		23	3	150	20	10		3008M25x6	82T08
M180AP1024W2015003		24	3	150	20	10		3008M25x6	82T08
M180AP1025W2510004C	●	25	4	100	25	10		3008M25x6	82T08
M180AP1025T2510003C	●	25	4	95	25	10		3008M25x6	82T08
M180AP1025T2510003C	●	25	4	150	25	10		3008M25x6	82T08
M180AP1025T2510003C	●	25	3	100	25	10		3008M25x6	82T08
M180AP1025W2510003C	●	25	3	100	25	10		3008M25x6	82T08
M180AP1025T2512003C	●	25	3	120	25	10		3008M25x6	82T08
M180AP1025T2515003		25	3	150	25	10		3008M25x6	80T15
M180AP1025W2515003		25	3	150	25	10		3008M25x6	80T15
M180AP1025T2520002		25	2	200	25	10		3008M25x6	82T08
M180AP1025T2520003		25	3	200	25	10	3008M25x6	82T08	
M180AP1025T2525002		25	2	250	25	10	3008M25x6	82T08	
M180AP1026T2525004		26	4	200	25	10	3008M25x6	82T08	
M180B01602016150AP11		16	2	150	16	11	AP.. 11T3	3008M25x6	82T08
M180A01602016150AP11	●	16	2	150	16	11		3008M25x6	82T08
M180B01602W16150AP11		16	2	150	16	11		3008M25x6	82T08
M180A01602W16150AP11	●	16	2	150	16	11		3008M25x6	82T08
M180B01602016200AP11		16	2	200	16	11		3008M25x6	82T08
M180B01702016150AP11		17	2	150	16	11		3008M25x6	82T08
M180B01702016200AP11		17	2	200	16	11		3008M25x6	82T08
M180B02003020150AP11		20	3	150	20	11		3008M25x6	82T08

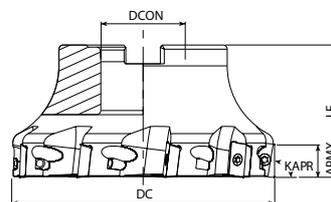
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M180



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
									
M180A02502T451200AP16	●	25	2	120	45	16	AP..1604	4015M4x9	80T15
M180B02502T551500AP16		25	2	150	55	16		4015M4x9	80T15
M180B02502T552000AP16		25	2	200	55	16		4015M4x9	80T15
M180B02502T1002500AP16		25	2	250	100	16		4015M4x9	80T15
M180A03003W401200AP16	●	30	3	120	40	16		4015M4x9	80T15
M180A03203T451200AP16		32	3	120	45	16		4015M4x9	80T15
M180B03203T551500AP16		32	3	150	55	16		4015M4x9	80T15
M180B03203T552000AP16		32	3	200	55	16		4015M4x9	80T15
M180B03203T1002500AP16		32	3	250	100	16		4015M4x9	80T15
M180A04004T401200AP16	●	40	4	120	40	16		4015M4x9	80T15
M180B04004T401500AP16		40	4	150	40	16		4015M4x9	80T15
M180B04004T402000AP16		40	4	200	40	16		4015M4x9	80T15
M180B04004T402500AP16		40	4	250	40	16		4015M4x9	80T15

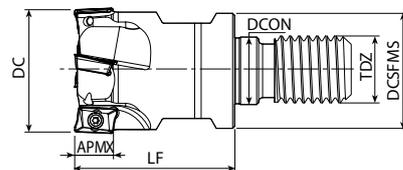
# M180



ORDER CODE KOD ZAMÓWIENIA	COOL- ANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW ŚRUBA MOCUJĄCA
										
M180AP10040A1604C	●	40	4	16	35	10	AP..1003	3008M25x6	82T08	2506M8X30
M180AP10040A1605C	●	40	5	16	40	10		3008M25x6	82T08	2506M8X30
M180AP10050A06C	●	50	6	22	40	10		3008M25x6	82T08	2508M10x30
M180AP10050A07C	●	50	7	22	40	10		3008M25x6	82T08	3008M2.5x6
M180AP10063A06		63	6	22	40	10		3008M25x6	82T08	3008M2.5x6
M180AP10063A07C	●	63	7	22	40	10		3008M25x6	82T08	2508M10x30
M180AP10063A09		63	9	22	40	10		3008M25x6	82T08	3008M2.5x6
M180AP10080A708C	●	80	8	27	50	10		3008M25x6	82T08	2510M12x35
M180AP10100A309C	●	100	9	32	50	10		3008M25x6	82T08	2514M16x35
M180A050050220400AP16	●	50	5	40	22	16	AP..1604	4015M4x11	80T15	2508M10X30
M180A063060220400AP16	●	63	6	40	22	16		4015M4x11	80T15	2508M10X30
M180A080070270500AP16	●	80	7	50	27	16		4015M4x11	80T15	2510M12X35

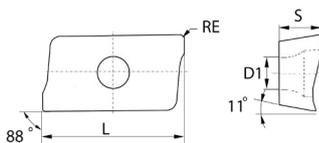
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M180



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	DCSFMS	TDZ	LF	DCON	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
M180AP1016M083002C	●	16	2	14,75	M8	30	8,5	AP..1003	3008M2.5x6	82T08
M180AP1020M103003C	●	20	3	18	M10	30	10.5		3008M2.5x6	82T08
M180AP1025M123503C	●	25	3	21	M12	35	12.7		3008M2.5x6	82T08
M180AP1032M163504C	●	32	4	29	M16	35	17		3008M2.5x6	82T08
M180AP1032M164004C	●	32	4	29	M16	40	17		3008M2.5x6	82T08
M180AP1040M164305C	●	40	5	29	M16	43	17		3008M2.5x6	82T08
M180AP1042M164305C	●	42	5	29	M16	43	17		3008M2.5x6	82T08
M180A01602M08030AP11	●	16	2	14.75	M08	30	8.5	AP..11T3	3008M25x6	82T08
M180A02003M10030AP11	●	20	3	18	M10	30	10.5		3008M25x6	82T08
M180A02503M12035AP11	●	25	3	21	M12	35	12.5		3008M25x6	82T08
M180A03204M16035AP11	●	32	4	29	M16	35	17		3008M25x6	82T08
M180A04005M16043AP11	●	40	5	29	M16	43	17		3008M25x6	82T08
M180A02502M12043AP16	●	25	2	21	M12	43	12.5	AP..1604	4015M4x9	80T15
M180A03203M16043AP16	●	32	3	29	M16	43	17		4015M4x9	80T15
M180A04004M16043AP16	●	40	4	29	M16	43	17		4015M4x9	80T15

# AP



P	●	●	
M		●	
K	●	●	●
N			●
S			●
H			

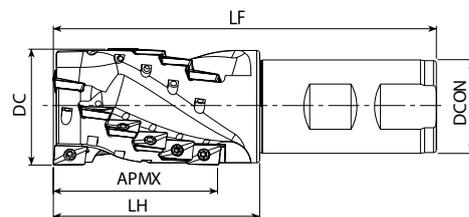
APLT	IC	S	d
11	T3	12.24	3.6
16	04	17.877	5.76

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD		
					P3200	P3350	PK01
	APKT100304CM	0.40	0.30-9.00	0.10-0.20			●
	APKT100308CM	0.80	0.30-9.00	0.10-0.20			●
	APLT11T308CM	0.80	0.50-9.00	0.11-0.26	●	●	
	APLT160408CM	0.80	0.50-15.00	0.13-0.29	●	●	

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

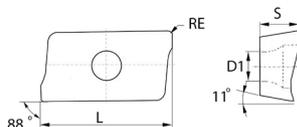
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M111



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	LH	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M111B02004W20087AP10		20	4	87	20	28	37	AP. 1003	3008M25x6	82T08	
M111B02006W20087AP10		20	6	87	20	28	37		3008M25x6	82T08	
M111A02508W25105AP10	●	25	8	105	25	37	50		3008M25x6	82T08	
M111A03215W32115AP10	●	32	15	115	32	46	55		3008M25x6	82T08	
M111A04018W32130AP10	●	40	18	130	32	55	70		3008M25x6	82T08	

# APKT



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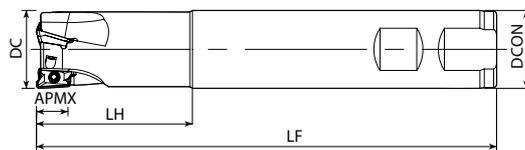
APKT	IC	S	L
10 03	6,70	3,50	10

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	$a_p$	$f_z$	$r$	PK01
 MEDIUM ŚREDNIA	APKT100304CM	0.30-9.00	0.10-0.20	0.4	●
	APKT100308CM	0.30-9.00	0.10-0.20	0.8	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

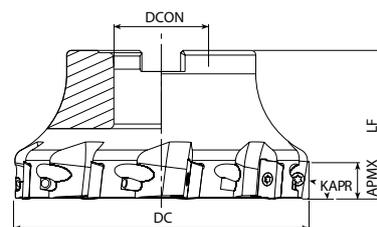
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M330



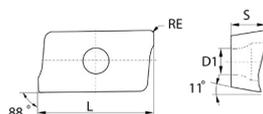
ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M330B02502T25120JD17		25	2	120	25	16	JD.. 1705	4015M4x9	80T15	
M330B02602T25200JD17		26	2	200	25	16		4015M4x9	80T15	
M330B02602T25250JD17		26	2	250	25	16		4015M4x9	80T15	
M330B02602T25300JD17		26	2	300	25	16		4015M4x9	80T15	
M330B02802W25075JD17		28	2	75	25	16		4015M4x9	80T15	
M330B03203T25150JD17		32	3	150	25	16		4015M4x9	80T15	
M330B03303T32250JD17		33	3	250	32	16		4015M4x9	80T15	
M330B03302T32300JD17		33	2	300	32	16		4015M4x9	80T15	

M330



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M330A05005022040JD17	●	50	5	40	22	16	JD.. 1705	4015M4x11	80T15	2508M10x30
M330A06306022040JD17	●	63	6	40	22	16		4015M4x11	80T15	2508M10x30
M330A08007027050JD17	●	80	7	50	27	16		4015M4x11	80T15	2510M12x35
M330A10008032050JD17	●	100	8	50	32	16		4015M4x11	80T15	2514M16x35

JDMX



P		
M		
K		
N		
S		
H		

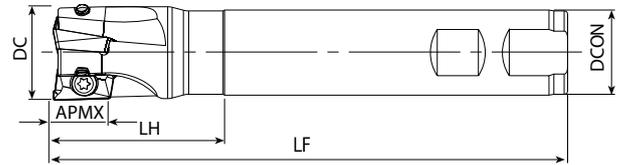
JDMX	IC	S	APMX	
17	05	18.5	5.56	16.00

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD	
					P3200	P3350
	JDMX170508CM	0.8	4.5-13.0	0.1-0.5	●	●
	JDMX170516CM	1.6	4.5-13.0	0.1-0.5	●	●
	JDMX170524CM	2.4	4.5-13.0	0.1-0.5	●	●
	JDMX170530CM	3.0	4.5-13.0	0.1-0.5	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

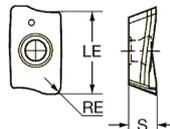
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M442



ORDER CODE KOD ZAMOWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA	
M442B01201W12100JD11		12	1	100	12	10	JDRX11T3	3008M25x5	82T08		
M442A01602W16100JD11	●	16	2	100	16	10		3008M25x5	82T08		
M442B01602W16150JD11		16	2	150	16	10		3008M25x5	82T08		
M442A01602W16150JD11	●	16	2	150	16	10		3008M25x5	82T08		
M442A02002W20090JD11	●	20	2	90	20	10		3008M25x5	82T08		
M442A02003W20100JD11	●	20	3	100	20	10		3008M25x5	82T08		
M442B02003W20150JD11		20	3	150	20	10		3008M25x6	82T08		
M442A02003W20150JD11	●	20	3	150	20	10		3008M25x7	82T08		
M442B02003T20150JD11		20	3	150	20	10		3008M25x8	82T08		
M442A02202W20090JD11	●	22	2	90	20	10		3008M25x9	82T08		
M442B02503T20150JD11		25	3	150	20	10		3008M25x10	82T08		
M442A02503W25100JD11	●	25	3	100	25	10		3008M25x11	82T08		
M442B02503W25150JD11		25	3	150	25	10		3008M25x12	82T08		
M442A02503W25150JD11	●	25	3	150	25	10		3008M25x13	82T08		
M442A03004W25150JD11	●	30	4	150	25	10		3008M25x14	82T08		
M442B03203T25200JD11		32	3	200	25	10		3008M25x15	82T08		
M442A03205W32150JD11	●	32	5	150	32	10		3008M25x16	82T08		
M442B02502W25150JD17		25	2	150	25	15.4		JDRX1704	4015M35x8	80T15	
M442A02502W25150JD17	●	25	2	150	25	15.4			4015M35x8	80T15	
M442B03003W25150JD17	●	30	3	150	25	15.4			4015M35x8	80T15	
M442A03003W25150JD17	●	30	3	150	25	15.4	4015M35x9		80T15		
M442A03203W32150JD17	●	32	3	150	32	15.4	4015M35x9		80T15		

JDRX



P			
M			
K			
N			
S			
H			

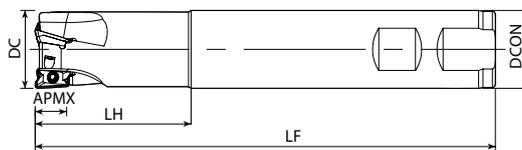
JDRX	d1	LE	S
11 T3	2,8	10	3,59
17 04	4,1	15,7	4,76

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD		
				P3200	P3350	P3340
	JDRX11T308CM	0.8	0.08-0.2	●	●	
	JDRX170408CM	0.8	0.1-0.25	●	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

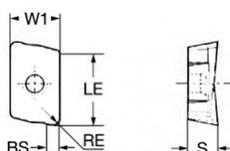
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M767



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M767A01602T14120JX12	●	16	2	120	14	10	JX.T 1235..	3008M3x6	82T08	
M767A01602T15145JX12	●	16	2	145	15	10		3108M3x6	82T08	
M767A01602T16100JX12	●	16	2	100	16	10		3108M3x6	82T08	
M767A01602T16140JX12	●	16	2	140	16	10		3008M3x6	82T08	
M767A01602T16145JX12	●	16	2	145	16	10		3108M3x6	82T08	
M767B01602T16150JX12		16	2	150	16	10		3008M3x6	82T08	
M767A02002T19150JX12	●	20	2	150	19	10		3108M3x6	82T08	
M767A02003T20110JX12	●	20	3	110	20	10		3108M3x6	82T08	
M767B02002T20150JX12		20	2	150	20	10		3008M3x6	82T08	
M767A02002T20150JX12	●	20	2	150	20	10		3108M3x6	82T08	
M767B02003T20150JX12		20	3	150	20	10		3008M3x6	82T08	
M767A02504T20120JX12	●	25	4	120	20	10		3008M3x6	82T08	
M767A02504T20150JX12	●	25	4	150	20	10		3008M3x6	82T08	
M767A02502T24170JX12	●	25	2	170	24	10		3108M3x6	82T08	
M767A02504T25120JX12	●	25	4	120	25	10		3108M3x6	82T08	
M767B02503T25150JX12		25	3	150	25	10		3008M3x6	82T08	
M767A02502T25170JX12	●	25	2	170	25	10		3108M3x6	82T08	
M767A02504W25100JX12	●	25	4	100	25	10		3108M3x6	82T08	
M767A03205T32130JX12	●	32	5	130	32	10		3108M3x6	82T08	
M767A03202T32180JX12	●	32	2	180	32	10		3108M3x6	82T08	
M767B02502T25150JX17		25	2	150	25	14	JX.T 1705..	4015M4x9	80T15	
M767A02802W25115JX17	●	28	2	115	25	14		4015M4x9	80T15	
M767B03203T32150JX17		32	3	150	32	14		4015M4x9	80T15	
M767A03202T32180JX17	●	32	2	180	32	14		4015M4x9	80T15	

# JXMT



P	●	●
M	●	●
K	●	●
N		
S		
H		

JXMT	IC	S	W1	
12	35	6.6	3.5	6.6
17	05	10.2	5.56	10.2


 INSERT SHAPE  
KSZTAŁT PŁYTKI

 MEDIUM  
ŚREDNIA

 DESCRIPTION  
OZNACZENIE

r

 a<sub>p</sub>

 f<sub>z</sub>

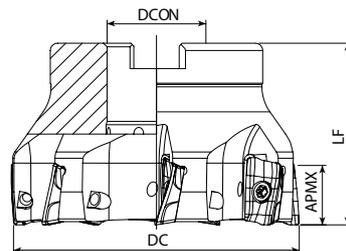
PVD	
P3200	P3350
●	●
●	●

JXMT123504CM	0.4	1.0-10.0	0.12-0.35	●	●
JXMT170508CM	0.8	1.0-10.0	0.30-0.35	●	●

- Ideal machining conditions / Idealne warunki obróbki
- Normal machining conditions / Normalne warunki obróbki
- ⊕ Unfavourable machining conditions / Niekorzystne warunki obróbki

INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

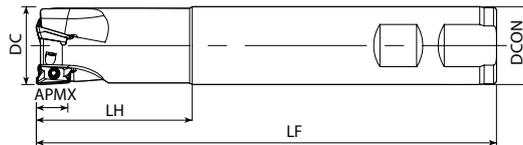
# M805



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX
M805A05004022040JD17	●	50	4	40	22	15.7
M805A05005022040JD17	●	50	5	40	22	15.7
M805A06306022040JD17	●	63	6	40	22	15.7
M805A08006027050JD17	●	80	6	50	27	15.7
M805A08007027050JD17	●	80	7	50	27	15.7
M805A10007032050JD17	●	100	7	50	32	15.7

INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
JDMT1704			
	4015M4x11	80T15	2508M10x30
	4015M4x11	80T15	2508M10x30
	4015M4x11	80T15	2508M10x30
	4015M4x11	80T15	2510M12x35
	4015M4x11	80T15	2510M12x35

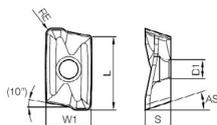
# M805



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX
M805A02502W25100JD17	●	25	2	100	25	15.7
M805B02502W25150JD17		25	2	150	25	15.7
M805A02502T25210JD17	●	25	2	210	25	15.7
M805A03203W32110JD17	●	32	3	110	32	15.7
M805A03203T32130JD17	●	32	3	130	32	15.7
M805A03203W32130JD17	●	32	3	130	32	15.7
M805B03203W32150JD17		32	3	150	32	15.7
M805A04004W32110JD17	●	40	4	110	32	15.7
M805B04004W32150JD17		40	4	150	32	15.7

INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
JDMT1704			
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	
	4015M4x8	80T15	

# JDMT



P		
M		
K		
N		
S		
H		

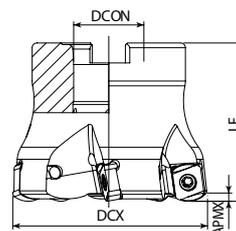
JDMT	IC	S
17	04	17 4.9

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD	
					P3200	P3350
	JDMT170408CM	0.8	9	0.08-0.25	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

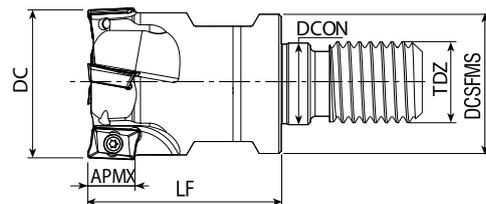
# M804



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI
M804A04006016040LB06	●	40	6	40	16	1	LBMX0603
M804A05007022040LB06	●	50	7	40	22	1	
M804A04005016040LB09	●	40	5	40	16	2	LBMX0904
M804A05006022050LB09	●	50	6	50	22	2	
M804A06305022050LB09	●	63	5	50	22	2	
M804A06307022050LB09	●	63	7	50	22	2	

SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
3008M25x6	82T08	2506M8x30
3008M25x6	82T08	2506M8x30
3010M35x9	82T10	2506M8x30
3010M35x9	82T10	2508M10x30
3010M35x9	82T10	2508M10x30
3010M35x9	82T10	2508M10x30

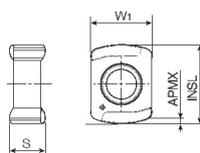
# M804



ORDER CODE KOD ZAMÓWIENIA	DC	ZFP	DCSFMS	TDZ	LF	DCON	INSERT SHAPE KSZTAŁT PŁYTKI
M804A02003M10030LB06	20	3	18	M10	30	10.5	LBMX0603
M804A02504M12035LB06	25	4	21	M12	35	12.5	
M804A03205M16040LB06	32	5	29	M16	40	17	
M804A03204M16040LB09	32	4	29	M16	40	17	LBMX0904
M804A03204M16043LB09	32	4	29	M16	43	17	
M804A04205M16043LB09	42	5	29	M16	43	17	

SCREW SRUBA	TORX KEY KLUCZ TORX
3008M25x6	82T08
3008M25x6	82T08
3008M25x6	82T08
3010M35x9	82T10
3010M35x9	82T10
3010M35x9	82T10

# LBMX



P		
M		
K		
N		
S		
H		

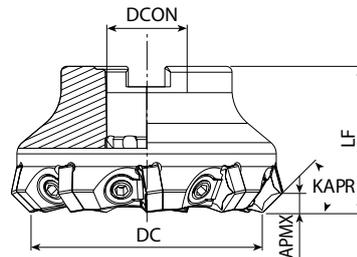
LBMX	W1	S	L	APMX	
06	03	6.39	3.73	9.00	1
09	04	9.1	4.79	11.49	1,1

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	a <sub>p</sub>	f <sub>z</sub>	PVD	
				P3200	P3350
	LBMX0603CM	0.1-1.0	0.3-2.5	●	●
	LBMX0904CM	0.1-0.5	0.3-3.5	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

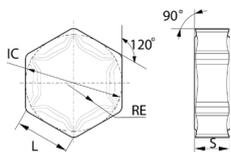
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M803



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA	ALLEN KEY KLUCZ IMBUSOWY
M803B06307022040HN09		63	7	40	22	4.5	HN.. 0905	2508M10x30	TCK11	TKV15M8x1x20	TTL054
M803B08009027050HN09		80	9	50	27	4.5		2510M12x35	TCK11	TKV15M8x1x20	TTL054
M803B10011032050HN09		100	11	50	32	4.5		2514M16x35	TCK11	TKV15M8x1x20	TTL054
M803B12513040063HN09		125	13	63	40	4.5			TCK11	TKV15M8x1x20	TTL054
M803B12510040063HN09		125	10	63	40	4.5			TCK11	TKV15M8x1x20	TTL054
M803B16015040063HN09		160	15	63	40	4.5			TCK11	TKV15M8x1x20	TTL054

# HNGX



P	
M	
K	
N	
S	
H	

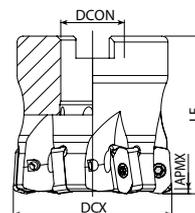
HNGX	IC	S	L
09 05	15,88	5,56	9,35

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	
 MEDIUM ŚREDNIA	HNGX090520CM	2.0	P2115

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

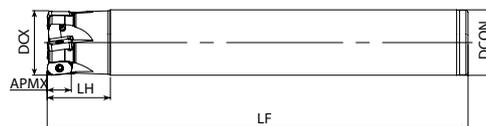
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M376



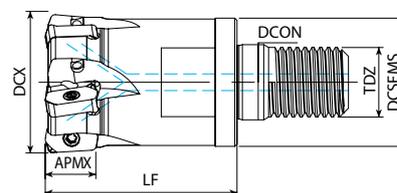
ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M376A04006016040LN04	●	40	6	40	16	12	LNMX 0404	3008M25x6	82T08	2508M8x30
M376A05007022050LN04	●	50	7	50	22	12		3008M25x6	82T08	2508M8x30
M376A06309022050LN04	●	63	9	50	22	12		3008M25x6	82T08	2508M10x30

# M376



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	LH	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M376B01602T15150LN04		16	2	150	15	30	LNMX 0404	3008M25x6	82T08	
M376A01602W16150LN04	●	16	2	150	16	50		3008M25x6	82T08	
M376A01702T16150LN04	●	17	2	150	16	30		3008M25x6	82T08	
M376A02003W20150LN04	●	20	3	150	20	50		3008M25x6	82T08	
M376B02103T20150LN04		21	3	150	20	30		3008M25x6	82T08	
M376A02504W25150LN04	●	25	4	150	25	50		3008M25x6	82T08	
M376B02604T25150LN04		26	4	150	25	30		3008M25x6	82T08	
M376B02803T25180LN04		28	3	180	25	30		3008M25x6	82T08	
M376B03305T32200LN04		33	5	200	32	30		3008M25x6	82T08	

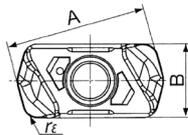
# M376



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCS- FMS	TDZ	LF	DCON	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M376A02504M12035LN04	●	25	4	21	M12	35	12	LNMX 0404	3008M25x6	82T08	
M376A03205M16043LN04	●	32	5	29	M16	43	17		3008M25x6	82T08	
M376A04206M16043LN04	●	42	6	29	M16	43	17		3008M25x6	82T08	

INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# LNMX



P	●	●
M	●	
K	●	●
N		
S		
H		

LNMX	L	S
04	04	3.2 4.3

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

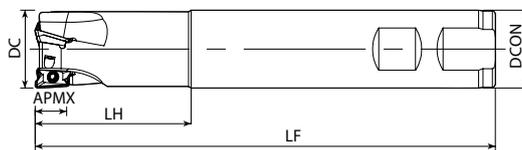
PVD  
P3350 P3200



LNMX0404EHCS	-	0.1-1.0	0.4-0.9	●	●
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- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

# M374



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	LH	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M374A01601W16120JN10	●	16	1	120	16	30	JNMX 1006	4010M3x8	82T10	
M374B01601W16150JN10		16	1	150	16	50	JNMX 1006	4010M3x8	82T10	
M374A01802W16120JN10	●	18	2	120	16	30	JNMX 1006	4010M3x8	82T10	
M374A02002W20120JN10	●	20	2	120	20	30	JNMX 1006	4010M3x8	82T10	
M374B02002W20150JN10		20	2	150	20	50	JNMX 1006	4010M3x8	82T10	
M374A02503W25120JN10	●	25	3	120	25	30	JNMX 1006	4010M3x8	82T10	
M374B02503W25150JN10		25	3	150	25	50	JNMX 1006	4010M3x8	82T10	
M374A03204W32120JN10	●	32	4	120	32	30	JNMX 1006	4010M3x8	82T10	
M374B03204W32150JN10		32	4	150	32	50	JNMX 1006	4010M3x8	82T10	

# JNMX

P	●	●
M	●	
K	●	●
N		
S		
H		

JNMX	L	S
10	06	10 5.9

INSERT SHAPE  
KSZTAŁT PŁYTKI

DESCRIPTION  
OZNACZENIE

r

$a_p$

$f_z$

PVD  
P3350 P3200

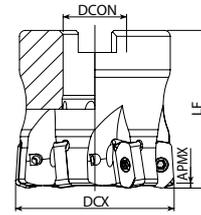


JNMX100608CS	0.8	0.5-9.0	0.05-0.25	●	●
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- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

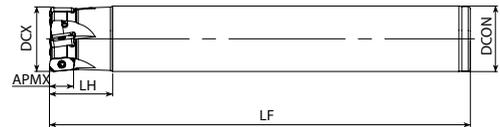
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M181



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M181B4006A016040LO04	●	40	6	40	16	1	LOGX0404	1108M3x68	82T08	2506M8x30
M181B5007A022040LO04	●	50	7	40	22	1		1108M3x68	82T08	2508M10x30
M181B6309A022040LO04	●	63	9	40	22	1		1108M3x68	82T08	2508M10x30

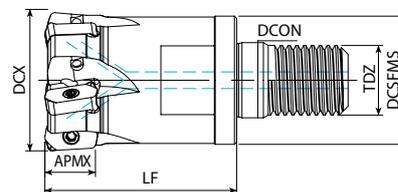
# M181



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	LH	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M181B01602T16100LO04		16	2	100	16	30	LOGX0404	1108M3x68	82T08	
M181B01602T16100LO04F		16	2	100	16	30		1108M3x68	82T08	
M181A01602T16130LO04	●	16	2	130	16	40		1108M3x68	82T08	
M181B01602T15160LO04		16	2	160	15	30		1108M3x68	82T08	
M181B01602T16160LO04		16	2	160	16	50		1108M3x68	82T08	
M181A01602T16160LO04	●	16	2	160	16	100		1108M3x68	82T08	
M181B01702T16180LO04		17	2	180	16	30		1108M3x68	82T08	
M181B02003T20130LO04		20	3	130	20	40		1108M3x68	82T08	
M181A02003T20130LO04	●	20	3	130	20	40		1108M3x68	82T08	
M181B02003T20160LO04		20	3	160	20	80		1108M3x68	82T08	
M181A02003T20160LO04	●	20	3	160	20	100		1108M3x68	82T08	
M181A02103T20150LO04	●	21	3	150	20	30		1108M3x68	82T08	
M181B02103T20200LO04		21	3	200	20	30		1108M3x68	82T08	
M181A02103T20200LO04	●	21	3	200	20	30		1108M3x68	82T08	
M181A02504T25140LO04		25	4	140	25	50		1108M3x68	82T08	
M181B02504T25140LO04		25	4	140	25	50		1108M3x68	82T08	
M181B02504T25180LO04		25	4	180	25	100		1108M3x68	82T08	
M181B02604T25250LO04		26	4	250	25	40		1108M3x68	82T08	
M181B03205T32200LO04		32	5	200	32	120		1108M3x68	82T08	
M181B03305T32250LO04		33	5	250	32	40		1108M3x68	82T08	

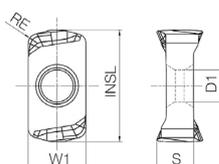
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M181



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCS- FMS	TDZ	LF	DCON	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW ŚRUBA MOCUJĄCA
M181A02004M10030LO04F	●	20	4	18	M10	30	10.5	LOGX0404	1108M3x68	82T08	
M181A02504M12035LO04F	●	25	4	21	M12	35	12.5		1108M3x68	82T08	
M181A02504M12035LO04	●	25	4	21	M12	35	12.5		1108M3x68	82T08	
M181A03205M16040LO04F	●	32	5	29	M16	40	17		1108M3x68	82T08	
M181A03205M16040LO04	●	32	5	29	M16	40	17		1108M3x68	82T08	
M181A03206M16040LO04F	●	32	6	29	M16	40	17		1108M3x68	82T08	
M181A03206M16040LO04	●	32	6	29	M16	40	17		1108M3x68	82T08	
M181A03505M16040LO04	●	35	5	29	M16	40	17		1108M3x68	82T08	
M181A03506M16040LO04	●	35	6	29	M16	40	17		1108M3x68	82T08	
M181A04205M16040LO04	●	42	5	29	M16	40	17		1108M3x68	82T08	
M181A04206M16040LO04	●	42	6	29	M16	40	17		1108M3x68	82T08	

LOGX



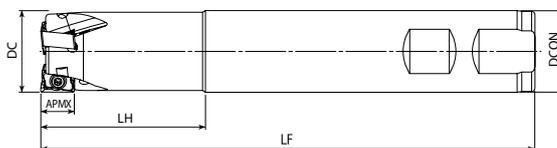
P			
M			
K			
N			
S			
H			

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub> MAX	f <sub>z</sub>	PVD			
					P3200	P3350	P3825	
	MEDIUM ŚREDNIA	LOGX040410CM	1	1.6	0.2-1.9	●	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

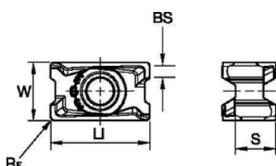
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M177



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA	ALLEN KEY KLUCZ IMBUSOWY
M177A02502W25150JN15	●	25	2	150	25	15.5	JNGU15T6	4015M4x12	80T15		
M177A03203W32150JN15	●	32	3	150	32	15.5		4015M4x12	80T15		
M177A04003W32150JN15	●	40	3	150	32	15.5		4015M4x12	80T15		

JNGU



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M			
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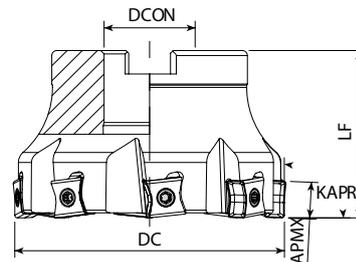
JNGU	L	S	W	BS
15 T6	17.01	6.96	10	2.2

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD		
			P3300	P3350	P3200
	JNGU15T6CM	-	●	●	●
	JNGU15T608CM	0.8	●	●	

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

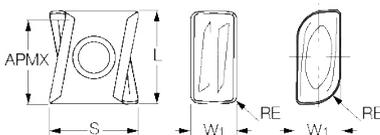
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M370



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA	ALLEN KEY KLUCZ IMBUSOWY
M370B05005022040LN11		50	5	40	22	10	LNMT 1106	4015M35x11	80T15	2508M10x30	
M370B06306022040LN11		63	6	40	22	10		4015M35x11	80T15	2508M10x30	
M370B08008027050LN11		80	8	50	27	10		4015M35x11	80T15	2510M12x35	
M370B08008027050LN11L		80	8	50	27	10		4015M35x11	80T15	2510M12x35	
M370B10009032050LN11		100	9	50	32	10		4015M35x11	80T15	2514M16x35	
M370B10009032050LN11L		100	9	50	32	10		4015M35x11	80T15	2514M16x35	
M370B12510040063LN11		125	10	63	40	10		4015M35x11	80T15		
M370A04004016040LN13	●	40	4	40	16	12.5	LNMT 1306	4015M4x11	80T15	2506M8x30	
M370A05005022040LN13	●	50	5	40	22	12.5		4015M4x11	80T15	2508M10x30	
M370A06306022040LN13	●	63	6	40	22	12.5		4015M4x11	80T15	2508M10x30	
M370A08007027050LN13	●	80	7	50	27	12.5		4015M4x11	80T15	2510M12x35	
M370A10008032050LN13	●	100	8	50	32	12.5		4015M4x11	80T15	2514M16x35	

LNMT



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M		
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LNMT	L	S	APMX	W1	
11	06	11.16	11	5	6.00
13	06	13.75	12.45	12.5	6.65

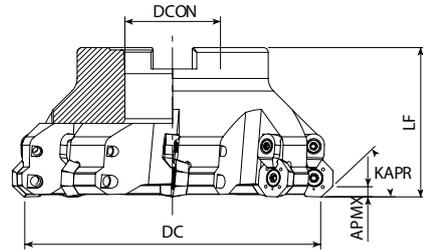
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD	
				P3200	P3350
	LNMT1106CM	0.80	0.15-0.20	●	●
	LNMT1306CM	0.85	0.1-0.25	●	●

MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

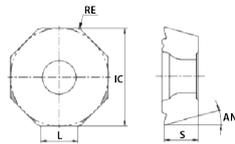
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M460



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW	TORX KEY	MOUNTING SCREW	WEDGE CLAMP	CLAMP SCREW
								ŚRUBA	KLUCZ TORX	ŚRUBA MOCUJĄCA	ZACISK KLINOWY	ŚRUBA ZACISKU
M460A0800602750AOD06	●	80	6	50	27	4	OD.. 0605					
M460A1000703250AOD06	●	100	7	50	32	4		1020M5x11	80T20	2510M12x35	TCK05	4015-M4x11
M460B1250804063AOD06		125	8	63	40	4		1020M5x11	80T20		TCK05	4015-M4x11

ODMT



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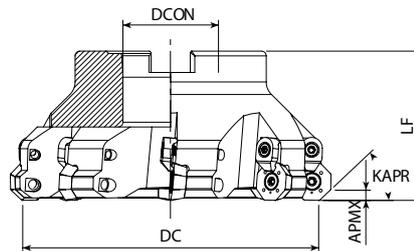
ODMT	S	L
06	05	3.18   12.7

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD		
				P3200	P3350	
	MEDIUM SREDNIA	ODMT060508CTN	0.8	0.18-0.34	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

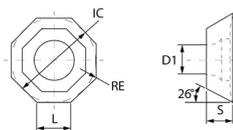
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M492



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M492A05005022040OF05	●	50	5	40	22	3	OF.. 05T3			
M492A06306022040OF05	●	63	6	40	22	3		4015M4x9	80T15	2407M10x30
M492A08007027050OF05	●	80	7	50	27	3		4015M4x11	80T15	2407M10x30
M492B12509040063OF05		125	9	63	40	3		4015M4x11	80T15	2510M12x35

# OFMT



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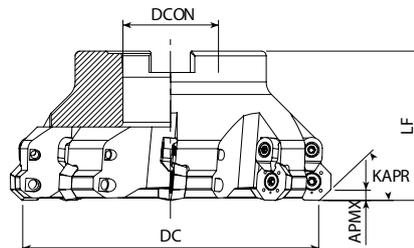
OFMT	S	L
05	T3	4 12.7

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD	
 MEDIUM ŚREDNIA	OFMT05T305C890	0.5		

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

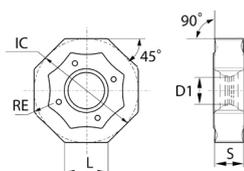
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M273



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M273A05005022040ON06	●	50	5	40	22	4	ON.. 0604			
M273A06306022040ON06	●	63	6	40	22	4		4015M4x11	80T15	2407M10x30
M273A08007027050ON06	●	80	7	50	27	4		4015M4x11	80T15	2510M12x35
M273A10008032050ON06	●	100	8	50	32	4		4015M4x11	80T15	2514M16x35
M273B12509040063ON06		125	9	63	40	4		4015M4x11	80T15	

# ONHU



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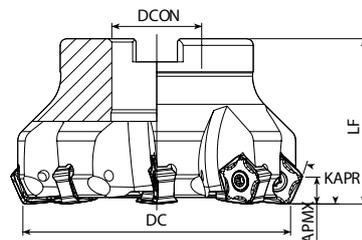
ONHU	L	I.C	S	d	
06	04	6.58	15.875	4.76	4.4

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD		
	MEDIUM ŚREDNIA	ONHU060408CM	0.8	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

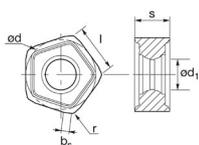
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M802



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M802A05005022040PN09		50	5	40	22	8	PNMU 0905			
M802A06306022040PN09		63	6	40	22	8		4015M4x11	80T15	2508M10x30
M802A08008027050PN09		80	8	50	27	8		4015M4x11	80T15	2510M12x35
M802A10010032050PN09		100	10	50	32	8		4015M4x11	80T15	2514M16x35
M802A12512040063PN09		125	12	63	40	8		4015M4x11	80T15	

# PNMU



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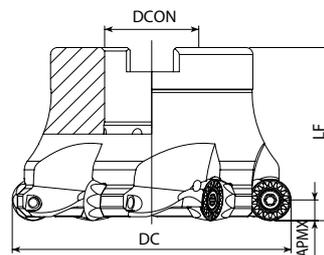
PNMU	I.C	S
09	05	14.6   5.56

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD	P3200	P3350
 MEDIUM ŚREDNIA	PNMU090508CM	0.8			

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

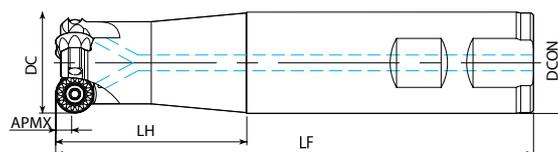
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M495



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M495A04204016040RP12	●	42	4	40	16	6	RPMT 1204	4015M4x11	80T15	2406M8x30
M495A05004022050RP12	●	50	4	50	22	6		4015M4x11	80T15	2508M10x30
M495A05205022050RP12	●	52	5	50	22	6		4015M4x11	80T15	2508M10x30
M495A06305022050RP12	●	63	5	50	22	6		4015M4x11	80T15	2508M10x30
M495A08006027050RP12	●	80	6	50	27	6		4015M4x11	80T15	2510M12x35

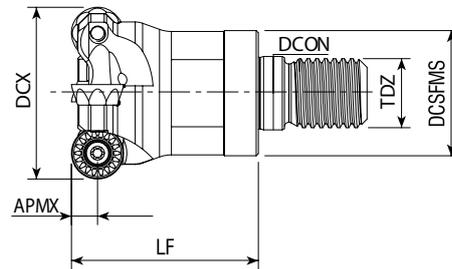
# M495



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZFP	LF	DCON	LH	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M495A02002W20150RP08	●	20	2	150	20	60	RPMT 08T2	3008M25x6	82T08	
M495A02503W25200RP08	●	25	3	200	25	100		3008M25x6	82T08	
M495A02502W25200RP10	●	25	2	200	25	100	RPMT 10T3	4015M35x9	80T15	
M495A03203W32200RP10	●	32	3	200	32	100		4015M35x9	80T15	
M495B02502025180RP12		25	2	180	25	50	RPMT 1204	4015M4x9	80T15	
M495A02502025180RP12	●	25	2	180	25	50		4015M4x9	80T15	
M495A03203W32150RP12	●	32	3	150	32	60		4015M4x9	80T15	
M495A03203W32200RP12	●	32	3	200	32	100		4015M4x9	80T15	
M495B03603025160RP12		36	3	160	25	30		4015M4x9	80T15	

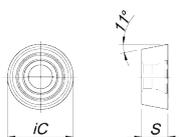
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M495



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEPF	DCS- FMS	TDZ	LF	DCON	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M495A020020M10030RP08	●	20	2	18	M10	30	10.5	RPMT 08T2	3008M25x6	82T08	
M495A025020M12035RP10	●	25	2	21	M12	35	12.5	RPMT 10T3	4015M35x9	80T15	
M495A032030M16043RP10	●	32	3	29	M16	43	17		4015M35x9	80T15	
M495A3203M16043RP12	●	32	3	29	M16	43	17	RPMT 1204	4015M4x9	80T15	
M495A4004M16043RP12	●	40	4	29	M16	43	17		4015M4x9	80T15	

RPMT



P	●	●	●	●
M	●	●	●	●
K	●	●	●	
N				
S				●
H				

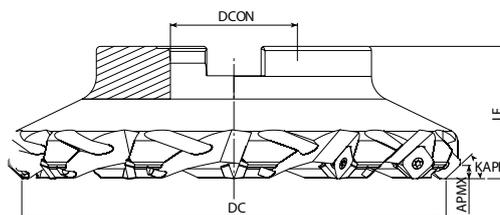
RPMT	IC	S
12	04	12 4.76
10	T3	10 3.97
08	T2	8 2.78

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	a <sub>p</sub>	f <sub>z</sub>	PVD		Ru	
				P3100	P3350	P3035	P3029
	RPMT08T2MO4	0.50-2.50	0.14-0.45	●	●		
	RPMT10T3MO4	0.50-2.50	0.15-0.64	●	●		
	RPMT1204MO4	0.50-3.00	0.21-0.74		●	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

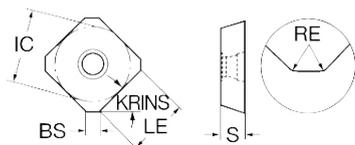
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M162



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M162A05004022040SE12	●	50	4	40	22	6	SEM12T3	4015M35x11	80T15	2407M10x30
M162A05004022040SE12L	●	50	4	40	22	6		4015M35x11	80T15	2407M10x30
M162A06305022040SE12	●	63	5	40	22	6		4015M35x11	80T15	2407M10x30
M162A06305022040SE12L	●	63	5	40	22	6		4015M35x11	80T15	2407M10x30
M162A08006027050SE12	●	80	6	50	27	6		4015M35x11	80T15	2510M12x35
M162A08006027050SE12L	●	80	6	50	27	6		4015M35x11	80T15	2510M12x35
M162A10007032050SE12	●	100	7	50	32	6		4015M35x11	80T15	2514M16x35
M162B12508040063SE12		125	8	63	40	6		4015M35x11	80T15	
M162B16010040063SE12		160	10	63	40	6		4015M35x11	80T15	
M162B16010040063SE12L		160	10	63	40	6		4015M35x11	80T15	
M162B20012060063SE12		200	12	63	60	6		4015M35x11	80T15	

# SEM12T3



P				
M				
K				
N				
S				
H				

SEM12T3	I.C	S	LE	BS	
12	T3	13.4	3.969	10	2.03

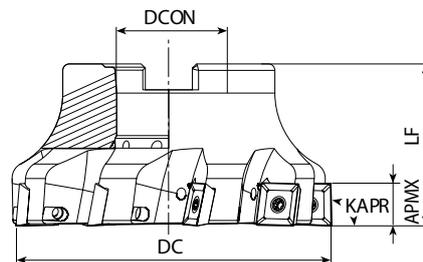
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD		CVD	
				P3200	P3350	P3100	P3250
	SEM12T3CM	0.8	0.1-0.28	●	●	●	●

 MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

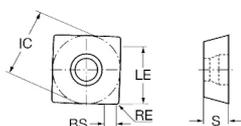
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M766



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M766A05004022040SD14	●	50	4	40	22	10	SDRX1404			
M766A06305022040SD14	●	63	5	40	22	10				
M766A08007027050SD14	●	80	7	50	27	10				
M766A10007032050SD14	●	100	7	50	32	10				
M766B12508040063SD14		125	8	63	40	10				
M766B12512040063SD14		125	12	63	40	10				
M766B16012040063SD14		160	12	63	40	10				
M766B25016060063SD14		250	16	63	60	10				

# SDRX



P		
M		
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S		
H		

SDRX	IC	S	LE
14	04	13.8	3.9   10.3

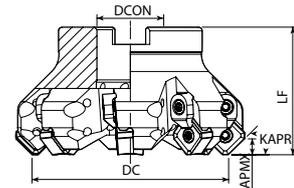
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD	
					P3200	P3350
	SDRX140408CM	0.8	1.0-5.0	0.12-0.25	●	●

MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

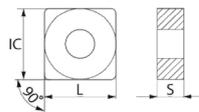
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M250



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW SRUBA ZACISKU	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M250A05004022042SN12	●	50	4	22	42	6	SN.. 1206	4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A05005022022SN12	●	50	5	22	42	6		4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A05005022042SN12	●	50	5	22	42	6		4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A06306022042SN12	●	63	6	22	42	6		4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A06307022042SN120	●	63	7	22	42	6		4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A06307022042SN12	●	63	7	22	42	6		4015M4x11	80T15	2407M10x30	TCK05	4015M4x11
M250A08007027052SN12	●	80	7	27	52	6		4015M4x11	80T15	2510M12x35	TCK05	4015M4x11
M250A08008027052SN120	●	80	8	27	52	6		4015M4x11	80T15	2510M12x35	TCK05	4015M4x11
M250A08008027052SN12	●	80	8	27	52	6		4015M4x11	80T15	2510M12x35	TCK05	4015M4x11
M250A10008032052SN12	●	100	8	32	52	6		4015M4x11	80T15	2510M12x35	TCK05	4015M4x11
M250AA10010032052SN12	●	100	10	32	52	6		4015M4x11	80T15	2514M16x35	TCK05	4015M4x11
M250A10010032052SN12	●	100	10	32	52	6		4015M4x11	80T15	2514M16x35	TCK05	4015M4x11
M250B12511040065SN12		125	11	40	65	6		4015M4x11	80T15	2514M16x35	TCK05	4015M4x11
M250B12511040065SN12L		125	11	40	65	6		4015M4x11	80T15		TCK05	4015M4x11
M250B16012040065SN12		160	12	40	65	6		1015M4x11	80T15		TCK05	4015M4x11
M250B16012040065SN12L		160	12	40	65	6		4015M4x11	80T15		TCK05	4015M4x11
M250B20014060065SN120		200	14	60	65	6		4015M4x11	80T15		TCK05	4015M4x11
M250B20014060065SN12		200	14	60	65	6		4015M4x11	80T15		TCK05	4015M4x11

# SNMX



P		
M		
K		
N		
S		
H		

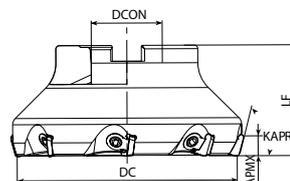
SNMX	L	I.C.	d
12 06	12.7	4.76	5.16

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD	
					P3350	P3200
	SNMX1206CX	-	0.50-6.00	0.10-0.38	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

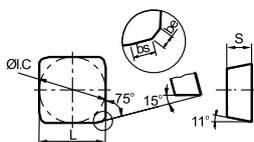
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M850



ORDER CODE KOD ZTMÓWIENIT	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHYPE KSZTŁT PŁYTKI	WEDGE CLTMP ZTCISK KLINOWY	CLTMP SCREW SRUBT ZTCISKU	TLLEN KEY KLUCZ IMBUSOWY	MOUNTING SCREW SRUBT MOCUJĄCT
M850SP12050A2204		50	4	22	42	8	SPKN 1203	TCK10	TKV22M8x1x14	TTL054	2508M10x30
M850SP12063A2205		63	5	22	40	8		TCK10	TKV13M8x1x16	TTL054	2508M10x30
M850SP12080A2706		80	6	27	50	8		TCK10	TKV13M8x1x16	TTL054	2510M12x35
M850SP12100A3207		100	7	32	50	8		TCK10	TKV13M8x1x16	TTL054	2514M16x35
M850SP12125B4008		125	8	40	63	8		TCK10	TKV13M8x1x16	TTL054	
M850SP12160C4009		160	9	40	63	8		TCK10	TKV13M8x1x16	TTL054	
M850SP12200C6012		200	12	60	63	8		TCK10	TKV13M8x1x16	TTL054	

# SPKN



P	●	●
M	●	●
K	●	●
N		
S		
H		

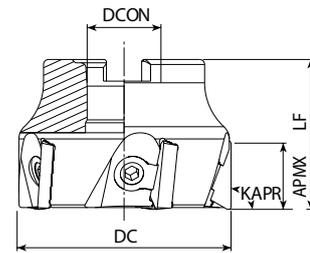
SPKN	L	I.C.	d
12 03	12.7	4.76	5.16

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	a <sub>p</sub>	f <sub>z</sub>	PVD	
				P3200	P3350
	SPKN1203CS1	0.50-7.00	0.15-0.43	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

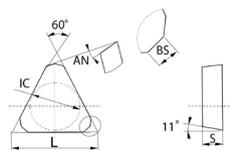
**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

# M175



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLAMP ZACISK KLINOWY	CLAMP SCREW ŚRUBA ZACISKU	ALLEN KEY KLUCZ IMBUSOWY	MOUNTING SCREW ŚRUBA MOCUJĄCA
M175B05004022040TP16		50	4	40	22	12	TP.. 1603	TCK10	TKV22M8x1x14	TTL054	2407M10x30
M175B06306022045TP16		63	6	45	22	12		TCK10	TKV13M8x1x16	TTL054	2508M10x30
M175B08007027050TP16		80	7	50	27	12		TCK11	TKV14M8x1x18	TTL054	2510M12x35
M175B10008032050TP16		100	8	50	32	12		TCK11	TKV14M8x1x18	TTL054	2514M16x35
M175B12508040063TP16		125	8	63	40	12		TCK11	TKV14M8x1x18	TTL054	
M175B06305022045TP22		63	5	45	22	18	TP.. 2204	TCK11	TKV14M8x1x18	TTL054	2508M10x30
M175B08006027050TP22		80	6	50	27	18		TCK11	TKV14M8x1x18	TTL054	2510M12x35
M175B10007032050TP22		100	7	50	32	18		TCK11	TKV14M8x1x18	TTL054	2514M16x35
M175B12508040A63TP22		125	8	63	40	18		TCK11	TKV14M8x1x18	TTL054	
M175B16009040063TP22		160	9	63	40	18		TCK11	TKV14M8x1x18	TTL054	
M175B20012060A63TP22		200	12	63	60	18		TCK11	TKV14M8x1x18	TTL054	
M175B25015060063TP22		250	15	63	60	18		TCK11	TKV14M8x1x18	TTL054	
M175B31518060063TP22		315	18	63	60	18		TCK11	TKV14M8x1x18	TTL054	

# TPKN



P	●	●	●	●	●
M	●	●			
K	●	●	●		
N					
S					
H					

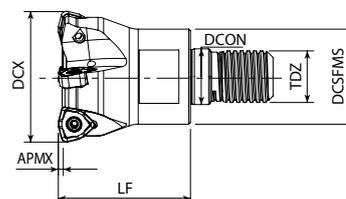
TP**	L	I.C.	S	
16	03	16.5	9.525	3.18
22	04	22	12.7	4.76

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	bs	be	an	PVD			CVD	
					P3200	P3350	P3100	P1125	P1025
	TPKN1603CS	1.0	1.2	11	●	●		●	
	TPKN2204CS	1.4	0.7	11	●	●	●		●

- Ideal machining conditions  
idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

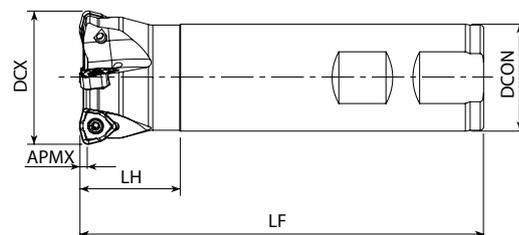
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M252



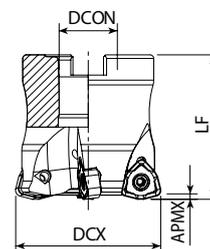
ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCS- FMS	TDX	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
M252A03203M16040WN09	●	32	3	29	M16	40	17	1.5	WNMX 09T3		
M252A03504M16040WN09	●	35	4	26	M16	40	17	1.5			
M252A04004M16040WN09	●	40	4	29	M16	40	17	1.5			

# M252



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	LH	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
M252A02502W25120WN09	●	25	2	25	120	40	1.5	WNMX 09T3		
M252A02502W25120WN09L	●	25	2	25	120	40	1.5			
M252A03203W32120WN09	●	32	3	32	120	30	1.5			
M252A03203W32200WN09	●	32	3	32	200	100	1.5			
M252A03504W32200WN09	●	35	4	32	200	50	1.5			
M252A04004W32120WN09	●	40	4	32	120	30	1.5			

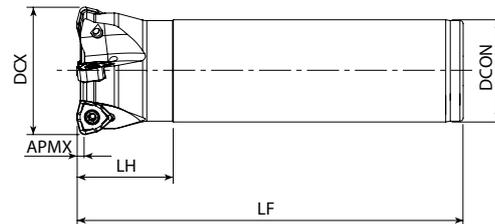
# M252



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
M252A04004016040WN09	●	40	4	16	40	1.5	WNMX 09T3		
M252A04004016040WN09L	●	40	4	16	40	1.5			
M252A05005022040WN09	●	50	5	22	40	1.5			
M252A05005022040WN09L	●	50	5	22	40	1.5			
M252A06306022040WN09	●	63	6	22	40	1.5			

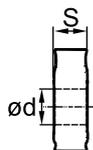
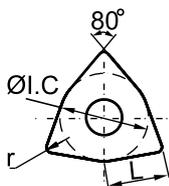
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M252



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	LH	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
M252A01602T16110WN06	●	16	2	110	16	30	1	WNMX 0603	3008M25x6	82T08
M252A01602T16150WN06	●	16	2	150	16	70	1		3008M25x6	82T08
M252A01702T16150WN06	●	17	2	150	16	20	1		3008M25x6	82T08
M252A02002T20150WN06	●	20	2	150	20	70	1		3008M25x6	82T08
M252A02002T20200WN06	●	20	2	200	20	100	1		3008M25x6	82T08
M252A02102T20150WN06	●	21	2	150	20	20	1		3008M25x6	82T08
M252B02502T25200WN09		25	2	25	200	120	1.5	WNMX 09T3	4010M3x8	80T10
M252B04004T32200WN09		40	4	32	200	30	1.5		4010M3x8	80T10

WNMX



P		
M		
K		
N		
S		
H		

WN**	L	S	d
06	04	8.7	3.97 3.81
09	T3	9.8	4.76 5.16

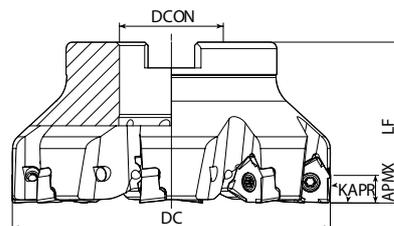
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	a <sub>p</sub>	f <sub>z</sub>	PVD	
					P3200	P3350
	WNMX060312CM	1.20	0.07-0.12	0.45-1.50	●	●
	WNMX09T316CM	1.60	0.07-0.12	0.45-1.50	●	●

MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

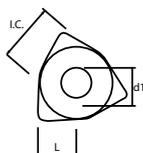
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M768



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
M768A04005016040TN04	●	40	5	40	16	4	TNEX 0403	3008M25x6	82T08	2506M8x30
M768A05004022040TN08	●	50	4	40	22	7.5	TNEX 0806	4015M4x11	80T15	2508M10x30
M768A06305022040TN08	●	63	5	40	22	7.5		4015M4x11	80T15	2508M10x30
M768A08007027050TN08	●	80	7	50	27	7.5		4015M4x11	80T15	2510M12x35
M768A10008032050TN08	●	100	8	50	32	7.5		4015M4x11	80T15	2514M16x35

# TNEX



P		
M		
K		
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S		
H		

XNEX	LE	I.C.	S	
04	03	4	6.7	3.29
08	06	7.5	12.48	6.45

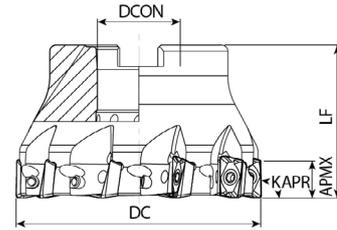
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD	
			P3200	P3350
	TNEX040304CM	0.4	●	
	TNEX080608CM	0.8	●	●

MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

**INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA**

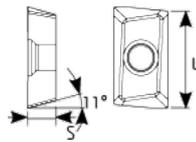
# M331



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI
M331A04005016040JO12	●	40	5	40	16	11	JO.. 1204
M331A05007022040JO12	●	50	7	40	22	11	
M331A06308022040JO12	●	63	8	40	22	11	
M331A08010027050JO12	●	80	10	50	27	11	
M331A10012032050JO12	●	100	12	50	32	11	

SCREW SRUBA	TORX KEY KLUCZ TORX	MOUNTING SCREW SRUBA MOCUJĄCA
3010M35x9	82T10	2506M8x30
3010M35x9	82T10	2508M10x30
3010M35x9	82T10	2508M10x30
3010M35x9	82T10	2510M12x35
3010M35x9	82T10	2514M16x35

# JOMX



P		
M		
K		
N		
S		
H		

JOMX	L	w1	S
12	04	12,06	8,6
			5,07

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD	
			P3300	P3350
	JOMX120408C862	0.8	●	●
	JOMX120420C862	2.0	●	●

 MEDIUM  
ŚREDNIA

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

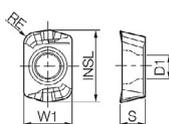
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

# M887



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DCX	ZEFP	DCON	LF	LH	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
M887B01002T09120JP01		10	2	9	120	20	0.5	JPGT 0102	3006M1.8x4	82T06
M887B01002T10120JP01		10	2	10	120	20	0.5	JPGT 0102	3006M1.8x4	82T06
M887B01202T11120JP01		12	2	11	120	20	0.5	JPGT 0102	3006M1.8x4	82T06
M887B01202T12120JP01		12	2	12	120	20	0.5	JPGT 0102	3006M1.8x4	82T06

# JPGT



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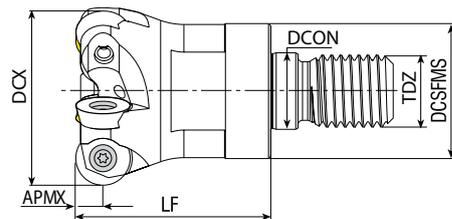
JPGT	INSL	D1	S	W1
01 02	6,26	2,1	2,19	4,19

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD	
				P3200	P3350
	JPGT010210CM	1.0	0,2-0,6		

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

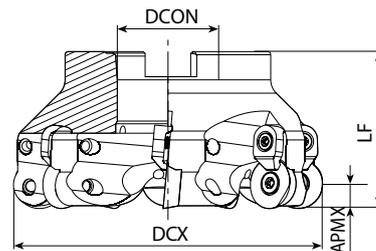
**INDEXABLE MILLING TOOLS** NARZĘDZIA SKŁADANE DO FREZOWANIA

# M179



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DCX	ZEFP	DCS- FMS	TDX	LF	DCON	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
M179A02503M12035RD10	●	25	3	21	M12	35	12.5	5	RD.. 10T3	4015M3.5x9	80T15
M179A03204M16045RD10	●	32	4	29	M16	45	17	5	RD.. 10T3	4015M3.5x9	80T15
M179A03504M16043RD10	●	35	4	29	M16	43	17	5	RD.. 10T3	4015M3.5x9	80T15
M179A04205M16043RD10	●	42	5	29	M16	43	17	5	RD.. 10T3	4015M3.5x9	80T15
M179A02502M12035RD12	●	25	2	21	M12	35	12.5	6	RD.. 1204	4015M3.5x9	80T15
M179A03203M16043RD12	●	32	3	29	M16	43	17	6	RD.. 1204	4015M3.5x9	80T15
M179A04004M16043RD12	●	40	4	29	M16	43	17	6	RD.. 1204	4015M3.5x9	80T15
M179A04204M16043RD12	●	42	4	29	M16	43	17	6	RD.. 1204	4015M3.5x9	80T15

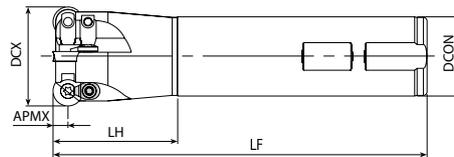
# M179



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DC	ZEFP	DCON	LF	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	WEDGE CLTMP ZTČISK KLINOWY	CLTMP SCREW ŚRUBT ZTČISKU	TLLEN KEY KLUCZ IMBUSOWY	MOUNTING SCREW ŚRUBT MOCUJĄCT
M179A04005016040RD10	●	40	5	16	40	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2406M8X30
M179A04205016040RD10	●	42	5	16	40	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2406M8X30
M179A05005022050RD10	●	50	5	22	50	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2508M10X30
M179A05205022040RD10	●	52	5	22	40	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2508M10X30
M179A05206022040RD10	●	52	6	22	40	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2508M10X30
M179A06306022050RD10	●	63	6	22	50	5	RD.. 10T3	TCK15	4015M3.5x11	80T15	2508M10X30
M179A04004016040RD12	●	40	4	40	63	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2406M8X30
M179A04204016040RD12	●	42	4	16	40	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2406M8X30
M179A05005022050RD12	●	50	5	16	40	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2508M10X30
M179A05205022050RD12	●	52	5	22	50	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2508M10X30
M179A06306022050RD12	●	63	6	22	50	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2508M10X30
M179A08007027050RD12	●	80	7	22	50	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2510M12X35
M179A10007032050RD12	●	100	7	27	50	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2514M16x35
M179A10008032050RD12	●	100	8	32	50	6	RD.. 1204	TCK15	4015M3.5x11	80T15	2514M16x35

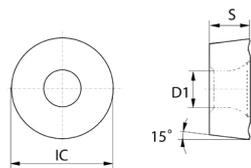
INDEXABLE MILLING TOOLS NARZĘDZIA SKŁADANE DO FREZOWANIA

M179



ORDER CODE KOD ZAMÓWIENIA	COOLANT HOLE	DCX	ZEFP	DCON	LF	LH	APMX	INSERT SHAPE KSZTAŁT PŁYTKI	SCREW	WEDGE CLTMP	CLTMP SCREW	TILEN KEY
									SRUBA	ZTCISK KLINOWY	SRUBT ZTCISKU	KLUCZ IMBUSOWY
M179A02002T200180RD10	●	20	2	20	180	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x9	80T15
M179RD10T320C2015002		20	2	20	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD10T320W2015002		20	2	20	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179A02102T200200RD10	●	21	2	20	200	80	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD10T325C2515002		25	2	25	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD10T25C2520002C	●	25	2	25	200	100	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179B02503T320150RD10		25	3	32	150	50	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179B02502W250150RD10		25	2	25	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179A02602T250200RD10	●	26	2	25	200	35	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179A03203T250250RD10	●	32	3	25	250	35	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179B03203W320150RD10		32	3	32	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179B03204T320150RD10		32	4	32	150	60	5	RD.. 10T3	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179B03202T320200RD12		32	2	32	200	100	6	RD.. 1204	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD120432C3216003		32	3	32	160	70	6	RD.. 1204	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD120432W3216003		32	3	32	160	70	6	RD.. 1204	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179RD120433C3216003		33	3	32	160	70	6	RD.. 1204	4015M3.5x9	TCK15	4015M3.5x11	80T15
M179A03203T320160RD12	●	32	3	32	160	70	6	RD.. 1204	4015M3.5x9	TCK15	4015M3.5x11	80T15

RD\*



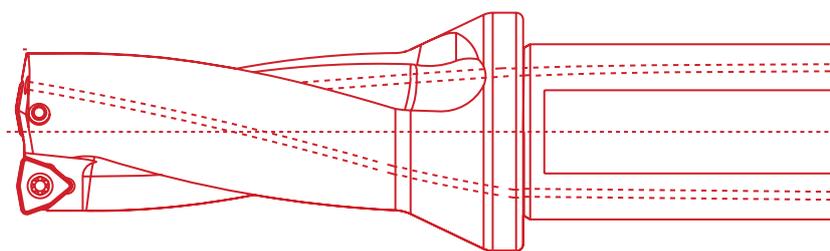
P	●	●	●
M	●	●	●
K	●	●	●
N			
S			
H			

RDK*	IC	S
12	04	12 4,46

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	PVD		
		P3200	P3350	P3100
	RDKT1204MOCS	●	●	
	RDKW10T3CR		●	●
	RDMT1204MO	●	●	

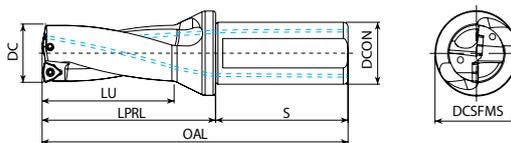
- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- Unfavourable machining conditions  
Niekorzystne warunki obróbki

# DRILLING WIERCENIE



INDEXABLE DRILLS WIERTŁA SKŁADANE

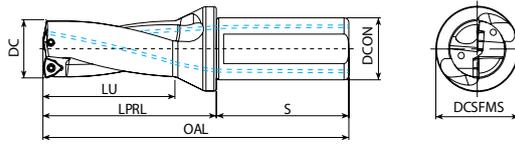
DSFC 2D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0160003225BN	16	25	34	110	32	54	56	1.5	19	WCM. 030208	3008M25x6	80T08
DSFC0165003225BN	16.5	25	34	110	32	54	56	1.5	19.5	WCM. 030208	3008M25x6	80T08
DSFC0170003425BN	17	25	34	112	34	56	56	1.5	20	WCM. 030208	3008M25x6	80T08
DSFC0175003425BN	17.5	25	34	112	34	56	56	1.5	20.5	WCM. 030208	3008M25x6	80T08
DSFC0180003625BN	18	25	34	114	36	58	56	1.4	20.8	WCM. 030208	3008M25x6	80T08
DSFC0185003625BN	18.5	25	34	114	36	58	56	1.3	21.1	WCM. 030208	3008M25x6	80T08
DSFC0190003825BN	19	25	34	116	38	60	56	1.2	21.4	WCM. 030208	3008M25x6	80T08
DSFC0195003825BN	19.5	25	34	116	38	60	56	1.2	21.9	WCM. 030208	3008M25x6	80T08
DSFC0200004025BN	20	25	34	118	40	62	56	1.4	22.8	WCM. 040208	3008M25x6	80T08
DSFC0205004025BN	20.5	25	34	118	40	62	56	1.4	23.3	WCM. 040208	3008M25x6	80T08
DSFC0210004225BN	21	25	34	120	42	64	56	1	23	WCM. 040208	3008M25x6	80T08
DSFC0215004225BN	21.5	25	34	120	42	64	56	1	23.5	WCM. 040208	3008M25x6	80T08
DSFC0220004425BN	22	25	34	122	44	66	56	0.9	23.8	WCM. 040208	3008M25x6	80T08
DSFC0225004425BN	22.5	25	34	122	44	66	56	0.9	24.3	WCM. 040208	3008M25x6	80T08
DSFC0230004625BN	23	25	34	124	46	68	56	0.8	24.6	WCM. 040208	3008M25x6	80T08
DSFC0235004625BN	23.5	25	34	124	46	68	56	0.8	25.1	WCM. 040208	3008M25x6	80T08
DSFC0240004825BN	24	25	34	126	48	70	56	1.4	26.8	WCM. 050308	3008M3x8	80T08
DSFC0245004825BN	24.5	25	34	126	48	70	56	1.4	27.3	WCM. 050308	3008M3x8	80T08
DSFC0250005025BN	25	25	34	128	50	72	56	1.4	27.8	WCM. 050308	3008M3x8	80T08
DSFC0255005025BN	25.5	25	34	128	50	72	56	1.4	28.3	WCM. 050308	3008M3x8	80T08
DSFC0260005225BN	26	25	34	130	52	74	56	1.4	28.8	WCM. 050308	3008M3x8	80T08
DSFC0265005225BN	26.5	25	34	130	52	74	56	1.4	29.3	WCM. 050308	3008M3x8	80T08
DSFC0270005425BN	27	25	34	132	54	76	56	1.4	29.8	WCM. 050308	3008M3x8	80T08
DSFC0275005425BN	27.5	25	34	132	54	76	56	1.4	30.3	WCM. 050308	3008M3x8	80T08
DSFC0280005625BN	28	25	34	134	56	78	56	1.4	30.8	WCM. 050308	3008M3x8	80T08
DSFC0285005625BN	28.5	25	34	134	56	78	56	1.4	31.3	WCM. 050308	3008M3x8	80T08
DSFC0290005825BN	29	25	34	136	58	80	56	1.4	31.8	WCM. 050308	3008M3x8	80T08
DSFC0295005825BN	29.5	25	34	136	58	80	56	1.4	32.3	WCM. 050308	3008M3x8	80T08
DSFC0300006032BN	30	32	44	147	60	87	60	2.4	34.8	WCM. 06T308	3010M35x9	80T10
DSFC0310006232BN	31	32	44	149	62	89	60	2.3	35.6	WCM. 06T308	3010M35x9	80T10
DSFC0320006432BN	32	32	44	151	64	91	60	2.1	36.2	WCM. 06T308	3010M35x9	80T10
DSFC0330006632BN	33	32	44	153	66	93	60	1.9	36.8	WCM. 06T308	3010M35x9	80T10
DSFC0340006832BN	34	32	44	155	68	95	60	1.9	37.8	WCM. 06T308	3010M35x9	80T10
DSFC0350007032BN	35	32	44	157	70	97	60	1.8	38.6	WCM. 06T308	3010M35x9	80T10
DSFC0360007232BN	36	32	44	159	72	99	60	1.7	39.4	WCM. 06T308	3010M35x9	80T10
DSFC0370007432BN	37	32	44	161	74	101	60	1.6	40,2	WCM. 06T308	3010M35x9	80T10
DSFC0380007632BN	38	32	44	163	76	103	60	1.5	41	WCM. 06T308	3010M35x9	80T10
DSFC0390007832BN	39	32	44	165	78	105	60	1.3	41.6	WCM. 06T308	3010M35x9	80T10
DSFC0400008032BN	40	32	44	167	80	107	60	1	42	WCM. 06T308	3010M35x9	80T10
DSFC0410008232BN	41	32	44	169	82	109	60	0.8	42.6	WCM. 06T308	3010M35x9	80T10
DSFC0420008432BN	42	32	44	171	84	111	60	0.5	43	WCM. 06T308	3010M35x9	80T10
DSFC0430008632BN	43	32	44	173	86	113	60	0.3	43.6	WCM. 06T308	3010M35x9	80T10
DSFC0440008832BN	44	32	44	175	88	115	60	0	44	WCM. 06T308	3010M35x9	80T10
DSFC0450009040BN	45	40	54	192	90	122	70	3.3	51.6	WCM. 080412	4015M4x11	80T15
DSFC0460009240BN	46	40	54	194	92	124	70	3	52	WCM. 080412	4015M4x11	80T15
DSFC0470009440BN	47	40	54	196	94	126	70	2.8	52.6	WCM. 080412	4015M4x11	80T15
DSFC0480009640BN	48	40	54	198	96	128	70	2.5	53	WCM. 080412	4015M4x11	80T15
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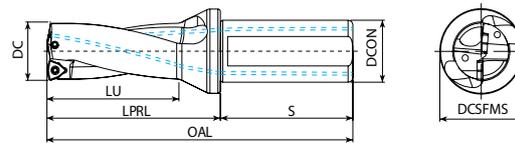
**INDEXABLE DRILLS WIERTŁA SKŁADANE**

# DSFC 2D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0500010040BN	50	40	54	202	100	132	70	2	54	WCM.080412	4015M4x11	80T15
DSFC0510010240BN	51	40	54	204	102	134	70	1.8	54.6	WCM.080412	4015M4x11	80T15
DSFC0520010440BN	52	40	54	206	104	136	70	1.5	55	WCM.080412	4015M4x11	80T15
DSFC0530010640BN	53	40	54	208	106	138	70	1.3	55.6	WCM.080412	4015M4x11	80T15
DSFC0540010840BN	54	40	54	210	108	140	70	1	56	WCM.080412	4015M4x11	80T15
DSFC0550011040BN	55	40	54	212	110	142	70	0.8	56.6	WCM.080412	4015M4x11	80T15
DSFC0560011240BN	56	40	64	214	112	144	70	0.5	57	WCM.080412	4015M4x11	80T15
DSFC0570011440BN	57	40	64	216	114	146	70	0.3	57.6	WCM.080412	4015M4x11	80T15
DSFC0580011640BN	58	40	64	218	116	148	70	0	58	WCM.080412	4015M4x11	80T15
DSFC0590011840BN	59	40	64	220	118	150	70	0	59	WCM.080412	4015M4x11	80T15
DSFC0600012040BN	60	40	64	222	120	152	70	0	60	WCM.080412	4015M4x11	80T15

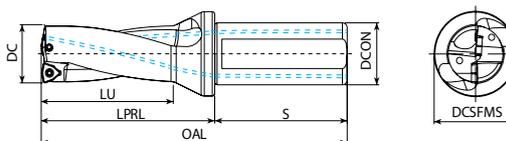
# DSFC 3D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0160004825BN	16	25	34	126	48	70	56	1.5	19	WCM.030208	3008M25x6	80T08
DSFC0165004825BN	16.5	25	34	126	48	70	56	1.5	19.5	WCM.030208	3008M25x6	80T08
DSFC0170005125BN	17	25	34	129	51	73	56	1.5	20	WCM.030208	3008M25x6	80T08
DSFC0175005125BN	17.5	25	34	129	51	73	56	1.5	20.5	WCM.030208	3008M25x6	80T08
DSFC0180005425BN	18	25	34	132	54	76	56	1.4	20.8	WCM.030208	3008M25x6	80T08
DSFC0185005425BN	18.5	25	34	132	54	76	56	1.3	21.1	WCM.030208	3008M25x6	80T08
DSFC0190005725BN	19	25	34	135	57	79	56	1.2	21.4	WCM.030208	3008M25x6	80T08
DSFC0195005725BN	19.5	25	34	135	57	79	56	1.2	21.9	WCM.030208	3008M25x6	80T08
DSFC0200006025BN	20	25	34	138	60	82	56	1.4	22.8	WCM.040208	3008M25x6	80T08
DSFC0205006025BN	20.5	25	34	138	60	82	56	1.4	23.3	WCM.040208	3008M25x6	80T08
DSFC0210006325BN	21	25	34	141	63	85	56	1	23	WCM.040208	3008M25x6	80T08
DSFC0215006325BN	21.5	25	34	141	63	85	56	1	23.5	WCM.040208	3008M25x6	80T08
DSFC0220006625BN	22	25	34	144	66	88	56	0.9	23.8	WCM.040208	3008M25x6	80T08
DSFC0225006625BN	22.5	25	34	144	66	88	56	0.9	24.3	WCM.040208	3008M25x6	80T08
DSFC0230006925BN	23	25	34	147	69	91	56	0.8	24.6	WCM.040208	3008M25x6	80T08
DSFC0235006925BN	23.5	25	34	147	69	91	56	0.8	25.1	WCM.040208	3008M25x6	80T08
DSFC0240007225BN	24	25	34	150	72	94	56	1.4	26.8	WCM.050308	3008M3x8	80T08
DSFC0245007225BN	24.5	25	34	150	72	94	56	1.4	27.3	WCM.050308	3008M3x8	80T08
DSFC0250007525BN	25	25	34	153	75	97	56	1.4	27.8	WCM.050308	3008M3x8	80T08
DSFC0255007525BN	25.5	25	34	153	75	97	56	1.4	28.3	WCM.050308	3008M3x8	80T08
DSFC0260007825BN	26	25	34	156	78	100	56	1.4	28.8	WCM.050308	3008M3x8	80T08
DSFC0265007825BN	26.5	25	34	156	78	100	56	1.4	29.3	WCM.050308	3008M3x8	80T08
DSFC0270008125BN	27	25	34	159	81	103	56	1.4	29.8	WCM.050308	3008M3x8	80T08

INDEXABLE DRILLS WIERTŁA SKŁADANE

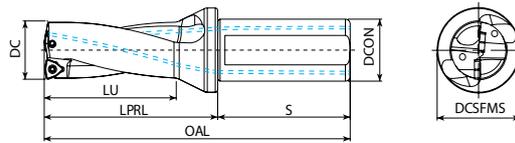
DSFC 3D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0275008125BN	27.5	25	34	159	81	103	56	1.4	30.3	WCM. 050308	3008M3x8	80T08
DSFC0280008425BN	28	25	34	162	84	106	56	1.4	30.8	WCM. 050308	3008M3x8	80T08
DSFC0285008425BN	28.5	25	34	162	84	106	56	1.4	31.3	WCM. 050308	3008M3x8	80T08
DSFC0290008725BN	29	25	34	165	87	109	56	1.4	31.8	WCM. 050308	3008M3x8	80T08
DSFC0295008725BN	29.5	25	34	165	87	109	56	1.4	32.3	WCM. 050308	3008M3x8	80T08
DSFC0300009032BN	30	32	44	177	90	117	60	2.4	34.8	WCM. 06T308	3010M35x9	80T10
DSFC0305009032BN	30.5	32	44	177	90	117	60	2.4	35.3	WCM. 06T308	3010M35x9	80T10
DSFC0310009332BN	31	32	44	180	93	120	60	2.3	35.6	WCM. 06T308	3010M35x9	80T10
DSFC0315009332BN	31.5	32	44	180	93	120	60	2.3	36.1	WCM. 06T308	3010M35x9	80T10
DSFC0320009632BN	32	32	44	183	96	123	60	2.1	36.2	WCM. 06T308	3010M35x9	80T10
DSFC0325009632BN	32.5	32	44	183	96	123	60	2.1	36.7	WCM. 06T308	3010M35x9	80T10
DSFC0330009932BN	33	32	44	186	99	126	60	1.9	36.8	WCM. 06T308	3010M35x9	80T10
DSFC0335009932BN	33.5	32	44	186	99	126	60	1.9	37.3	WCM. 06T308	3010M35x9	80T10
DSFC0340010232BN	34	32	44	189	102	129	60	1.9	37.8	WCM. 06T308	3010M35x9	80T10
DSFC0345010232BN	34.5	32	44	189	102	129	60	1.9	38.3	WCM. 06T308	3010M35x9	80T10
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DSFC0355010532BN	35.5	32	44	192	105	132	60	1.8	39.1	WCM. 06T308	3010M35x9	80T10
DSFC0360010832BN	36	32	44	195	108	135	60	1.7	39.4	WCM. 06T308	3010M35x9	80T10
DSFC0365010832BN	36.5	32	44	195	108	135	60	2	40.5	WCM. 06T308	3010M35x9	80T10
DSFC0370011132BN	37	32	44	198	111	138	60	1.6	40.2	WCM. 06T308	3010M35x9	80T10
DSFC0375011132BN	37.5	32	44	198	111	138	60	1.8	41.1	WCM. 06T308	3010M35x9	80T10
DSFC0380011432BN	38	32	44	201	114	141	60	1.5	41	WCM. 06T308	3010M35x9	80T10
DSFC0385011432BN	38.5	32	44	201	114	141	60	1.5	41.5	WCM. 06T308	3010M35x9	80T10
DSFC0390011732BN	39	32	44	204	117	144	60	1.3	41.6	WCM. 06T308	3010M35x9	80T10
DSFC0395011732BN	39.5	32	44	204	117	144	60	1.3	42.1	WCM. 06T308	3010M35x9	80T10
DSFC0400012032BN	40	32	44	207	120	147	60	1	42	WCM. 06T308	3010M35x9	80T10
DSFC0405012032BN	40.5	32	44	207	120	147	60	1	42.5	WCM. 06T308	3010M35x9	80T10
DSFC0410012332BN	41	32	44	210	123	150	60	0.8	42.6	WCM. 06T308	3010M35x9	80T10
DSFC0415012332BN	41.5	32	44	210	123	150	60	0.8	43.1	WCM. 06T308	3010M35x9	80T10
DSFC0420012632BN	42	32	44	213	126	153	60	0.5	43	WCM. 06T308	3010M35x9	80T10
DSFC0425012632BN	42.5	32	44	213	126	153	60	0.5	43.5	WCM. 06T308	3010M35x9	80T10
DSFC0430012932BN	43	32	44	216	129	156	60	0.3	43.1	WCM. 06T308	3010M35x9	80T10
DSFC0435012932BN	43.5	32	44	216	129	156	60	0.3	44.1	WCM. 06T308	3010M35x9	80T10
DSFC0440013232BN	44	32	44	219	132	159	60	0	44	WCM. 06T308	3010M35x9	80T10
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DSFC0450013540BN	45	40	54	237	135	167	70	3.3	51.6	WCM. 080412	4015M4x11	80T15
DSFC0455013540BN	45.5	40	54	237	135	167	70	3.3	52.1	WCM. 080412	4015M4x11	80T15
DSFC0460013840BN	46	40	54	240	138	170	70	3	52	WCM. 080412	4015M4x11	80T15
DSFC0470014140BN	47	40	54	243	141	173	70	2.8	52.6	WCM. 080412	4015M4x11	80T15
DSFC0480014440BN	48	40	54	246	144	176	70	2.5	53	WCM. 080412	4015M4x11	80T15
DSFC0490014740BN	49	40	54	249	147	179	70	2.2	53.4	WCM. 080412	4015M4x11	80T15
DSFC0500015040BN	50	40	54	252	150	182	70	2	54	WCM. 080412	4015M4x11	80T15
DSFC0510015340BN	51	40	54	255	153	185	70	1.8	54.6	WCM. 080412	4015M4x11	80T15
DSFC0520015640BN	52	40	54	258	156	188	70	1.5	55	WCM. 080412	4015M4x11	80T15
DSFC0530015940BN	53	40	54	261	159	191	70	1.3	55.6	WCM. 080412	4015M4x11	80T15
DSFC0540016240BN	54	40	54	264	162	194	70	1	56	WCM. 080412	4015M4x11	80T15
DSFC0550016540BN	55	40	54	267	165	197	70	0.8	56.6	WCM. 080412	4015M4x11	80T15

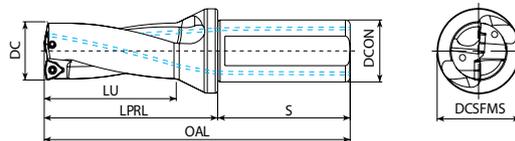
**INDEXABLE DRILLS WIERTŁA SKŁADANE**

# DSFC 3D

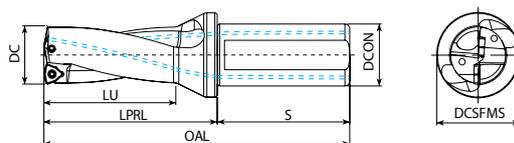


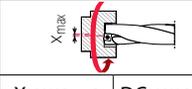
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0560016840BN	56	40	64	270	168	200	70	0.5	57	WCM. 080412	4015M4x11	80T15
DSFC0570017140BN	57	40	64	273	171	203	70	0.3	57.6	WCM. 080412	4015M4x11	80T15
DSFC0580017440BN	58	40	64	276	174	206	70	0	58	WCM. 080412	4015M4x11	80T15
DSFC0590017740BN	59	40	64	279	177	209	70	0	59	WCM. 080412	4015M4x11	80T15
DSFC0600018040BN	60	40	64	282	180	212	70	0	60	WCM. 080412	4015M4x11	80T15

# DSFC 4D



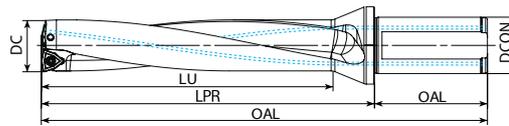
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSFC0160006425BN	16	25	34	142	64	86	56	1.5	19	WCM. 030208	3008M25x6	80T08
DSFC0165006425BN	16.5	25	34	142	64	86	56	1.5	19.5	WCM. 030208	3008M25x6	80T08
DSFC0170006825BN	17	25	34	146	68	90	56	1.5	20	WCM. 030208	3008M25x6	80T08
DSFC0175006825BN	17.5	25	34	146	68	90	56	1.5	20.5	WCM. 030208	3008M25x6	80T08
DSFC0180007225BN	18	25	34	150	72	94	56	1.4	20.8	WCM. 030208	3008M25x6	80T08
DSFC0185007225BN	18.5	25	34	150	72	94	56	1.3	21.1	WCM. 030208	3008M25x6	80T08
DSFC0190007625BN	19	25	34	154	76	98	56	1.2	21.4	WCM. 030208	3008M25x6	80T08
DSFC0195007625BN	19.5	25	34	154	76	98	56	1.2	21.9	WCM. 030208	3008M25x6	80T08
DSFC0200008025BN	20	25	34	158	80	102	56	1.4	22.8	WCM. 040208	3008M25x6	80T08
DSFC0205008025BN	20.5	25	34	158	80	102	56	1.4	23.3	WCM. 040208	3008M25x6	80T08
DSFC0210008425BN	21	25	34	162	84	106	56	1	23	WCM. 040208	3008M25x6	80T08
DSFC0215008425BN	21.5	25	34	162	84	106	56	1	23.5	WCM. 040208	3008M25x6	80T08
DSFC0220008825BN	22	25	34	166	88	110	56	0.9	23.8	WCM. 040208	3008M25x6	80T08
DSFC0225008825BN	22.5	25	34	166	88	110	56	0.9	24.3	WCM. 040208	3008M25x6	80T08
DSFC0230009225BN	23	25	34	170	92	114	56	0.8	24.6	WCM. 040208	3008M25x6	80T08
DSFC0235009225BN	23.5	25	34	170	92	114	56	0.8	25.1	WCM. 040208	3008M25x6	80T08
DSFC0240009625BN	24	25	34	174	96	118	56	1.4	26.8	WCM. 050308	3008M3x8	80T08
DSFC0245009625BN	24.5	25	34	174	96	118	56	1.4	27.3	WCM. 050308	3008M3x8	80T08
DSFC0250010025BN	25	25	34	178	100	122	56	1.4	27.8	WCM. 050308	3008M3x8	80T08
DSFC0255010025BN	25.5	25	34	178	100	122	56	1.4	28.3	WCM. 050308	3008M3x8	80T08
DSFC0260010425BN	26	25	34	182	104	126	56	1.4	28.8	WCM. 050308	3008M3x8	80T08
DSFC0265010425BN	26.5	25	34	182	104	126	56	1.4	29.3	WCM. 050308	3008M3x8	80T08
DSFC0270010825BN	27	25	34	186	108	130	56	1.4	29.8	WCM. 050308	3008M3x8	80T08
DSFC0275010825BN	27.5	25	34	186	108	130	56	1.4	30.3	WCM. 050308	3008M3x8	80T08

**INDEXABLE DRILLS WIERTŁA SKŁADANE**
**DSFC 4D**


ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA 	TORX KEY KLUCZ TORX 
												
								XMAX [mm]	DCMAX [mm]			
DSFC0280011225BN	28	25	34	190	112	134	56	1.4	30.8	WCM.050308	3008M3x8	80T08
DSFC0285011225BN	28.5	25	34	190	112	134	56	1.4	31.3	WCM.050308	3008M3x8	80T08
DSFC0290011625BN	29	25	34	194	116	138	56	1.4	31.8	WCM.050308	3008M3x8	80T08
DSFC0295011625BN	29.5	25	34	194	116	138	56	1.4	32.3	WCM.050308	3008M3x8	80T08
DSFC0300012032BN	30	32	44	207	120	147	60	2.4	34.8	WCM.06T308	3010M35x9	80T10
DSFC0310012432BN	31	32	44	211	124	151	60	2.3	35.6	WCM.06T308	3010M35x9	80T10
DSFC0320012832BN	32	32	44	215	128	155	60	2.1	36.2	WCM.06T308	3010M35x9	80T10
DSFC0330013232BN	33	32	44	219	132	159	60	1.9	36.8	WCM.06T308	3010M35x9	80T10
DSFC0335013232BN	33.5	32	44	219	132	159	60	1.9	37.3	WCM.06T308	3010M35x9	80T10
DSFC0340013632BN	34	32	44	223	136	163	60	1.9	37.8	WCM.06T308	3010M35x9	80T10
DSFC0350014032BN	35	32	44	227	140	167	60	1.8	38.6	WCM.06T308	3010M35x9	80T10
DSFC0360014432BN	36	32	44	231	144	171	60	1.7	39.4	WCM.06T308	3010M35x9	80T10
DSFC0370014832BN	37	32	44	235	148	175	60	1.6	40.2	WCM.06T308	3010M35x9	80T10
DSFC0380015232BN	38	32	44	239	152	179	60	1.5	41	WCM.06T308	3010M35x9	80T10
DSFC0385015232BN	38.5	32	44	239	152	179	60	1.5	41.5	WCM.06T308	3010M35x9	80T10
DSFC0390015632BN	39	32	44	243	156	183	60	1.3	41.6	WCM.06T308	3010M35x9	80T10
DSFC0400016032BN	40	32	44	247	160	187	60	1	42	WCM.06T308	3010M35x9	80T10
DSFC0410016432BN	41	32	44	251	164	191	60	0.8	42.6	WCM.06T308	3010M35x9	80T10
DSFC0420016832BN	42	32	44	255	168	195	60	0.5	43	WCM.06T308	3010M35x9	80T10
DSFC0430017232BN	43	32	44	259	172	199	60	0.3	43.6	WCM.06T308	3010M35x9	80T10
DSFC0440017632BN	44	32	44	263	176	203	60	0	44	WCM.06T308	3010M35x9	80T10
DSFC0450018040BN	45	40	54	282	180	212	70	3.3	51.6	WCM.080412	4015M4x11	80T15
DSFC0460018440BN	46	40	54	286	184	216	70	3	52	WCM.080412	4015M4x11	80T15
DSFC0470018840BN	47	40	54	290	188	220	70	2.8	52.6	WCM.080412	4015M4x11	80T15
DSFC0480019240BN	48	40	54	294	192	224	70	2.5	53	WCM.080412	4015M4x11	80T15
DSFC0490019640BN	49	40	54	298	196	228	70	2.2	53.4	WCM.080412	4015M4x11	80T15
DSFC0500020040BN	50	40	54	302	200	232	70	2	54	WCM.080412	4015M4x11	80T15

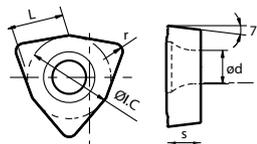
INDEXABLE DRILLS WIERTŁA SKŁADANE

DSFC 5D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DCMAX [mm]			
DSFC0200010025BN	20	25	34	178	100	122	56	1.4	22.8	WCM. 040208	3008M25x6	80T08
DSFC0210010525BN	21	25	34	183	105	127	56	1	23	WCM. 040208	3008M25x6	80T08
DSFC0220011025BN	22	25	34	188	110	132	56	0.9	23.8	WCM. 040208	3008M25x6	80T08
DSFC0230011525BN	23	25	34	193	115	137	56	0.8	24.6	WCM. 040208	3008M25x6	80T08
DSFC0240012025BN	24	25	34	198	120	142	56	1.4	26.8	WCM. 050308	3008M3x8	80T08
DSFC0250012525BN	25	25	34	203	125	147	56	1.4	27.8	WCM. 050308	3008M3x8	80T08
DSFC0260013025BN	26	25	34	208	130	152	56	1.4	28.8	WCM. 050308	3008M3x8	80T08
DSFC0270013525BN	27	25	34	213	135	157	56	1.4	29.8	WCM. 050308	3008M3x8	80T08
DSFC0280014025BN	28	25	34	218	140	162	56	1.4	30.8	WCM. 050308	3008M3x8	80T08
DSFC0290014525BN	29	25	34	223	145	167	56	1.4	31.8	WCM. 050308	3008M3x8	80T08
DSFC0300015032BN	30	32	44	237	150	177	60	2.4	34.8	WCM. 06T308	3010M35x9	80T10
DSFC0310015532BN	31	32	44	242	155	182	60	2.3	35.6	WCM. 06T308	3010M35x9	80T10
DSFC0320016032BN	32	32	44	247	160	187	60	2.1	36.2	WCM. 06T308	3010M35x9	80T10
DSFC0330016532BN	33	32	44	252	165	192	60	1.9	36.8	WCM. 06T308	3010M35x9	80T10
DSFC0340017032BN	34	32	44	257	170	197	60	1.9	37.8	WCM. 06T308	3010M35x9	80T10
DSFC0350017532BN	35	32	44	262	175	202	60	1.8	38.6	WCM. 06T308	3010M35x9	80T10
DSFC0370018532BN	37	32	44	272	185	212	60	1.6	40.2	WCM. 06T308	3010M35x9	80T10
DSFC0380019032BN	38	32	44	277	190	217	60	1.5	41	WCM. 06T308	3010M35x9	80T10
DSFC0460023040BN	46	40	54	332	230	262	70	3	52	WCM. 080412	4015M4x11	80T15

WC



P	●	●	●
M	●	●	●
K	●	●	●
N	●	●	●
S	●	●	●
H	●	●	●

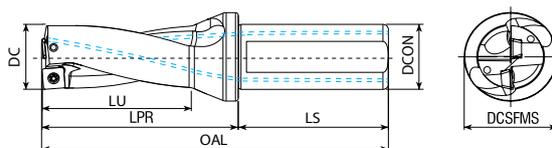
WCMX	L	I.C.	S	d	
03	02	3.8	5.56	2.38	2.8
04	02	4.3	6.35	2.38	3.1
06	T3	6.5	9.525	3.97	3.7
08	04	8.7	12.7	4.76	4.3

- Ideal machining conditions / Idealne warunki obróbki
- Normal machining conditions / Normalne warunki obróbki
- Unfavourable machining conditions / Niekorzystne warunki obróbki

INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	f <sub>z</sub>	PVD		
				P3200	P3350	P3250
	WCMX030208CM10	0.80	0.04-0.10	●	●	
	WCMX040208CM10	0.80	0.04-0.10	●	●	
	WCMX05T308CM10	0.80	0.05-0.11	●	●	
	WCMX06T308CM10	0.80	0.06-0.12	●	●	
	WCMX080412CM10	1.20	0.06-0.15	●	●	
	WCMX030208CM20	0.80	0.04-0.10	●		●
	WCMX040208CM20	0.80	0.04-0.10	●		●
	WCMX05T308CM20	0.80	0.05-0.11	●		●
	WCMX06T308CM20	0.80	0.06-0.12	●		●
	WCMX080412CM20	1.20	0.06-0.15	●		●

## INDEXABLE DRILLS WIERTŁA SKŁADANE

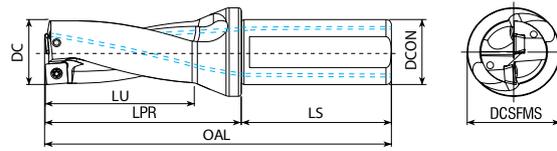
### DXFC 2D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DCMAX [mm]			
DXFC0125002420BN	12.5	20	25	96	24	46	50	0.5	13.5	SP.. 050204	3006M2x4	80T06
DXFC0130002620BN	13	20	25	98	26	48	50	0.5	14	SP.. 050204	3006M2x4	80T06
DXFC0135002620BN	13.5	20	25	98	26	48	50	0.5	14.5	SP.. 050204	3006M2x4	80T06
DXFC0140002820BN	14	20	25	100	28	50	50	0.5	15	SP.. 050204	3006M2x4	80T06
DXFC0145002820BN	14.5	20	25	100	28	50	50	0.5	15.5	SP.. 050204	3006M2x4	80T06
DXFC0150003020BN	15	20	25	102	30	52	50	0.5	16	SP.. 050204	3006M2x4	80T06
DXFC0155003020BN	15.5	20	25	102	30	52	50	0.5	16.5	SP.. 060204	3007M22x5	80T07
DXFC0160003225BN	16	25	34	110	32	54	56	0.5	17	SP.. 060204	3007M22x5	80T07
DXFC0165003225BN	16.5	25	34	110	32	54	56	0.5	17.5	SP.. 060204	3007M22x5	80T07
DXFC0170003425BN	17	25	34	112	34	56	56	0.5	18	SP.. 060204	3007M22x5	80T07
DXFC0175003425BN	17.5	25	34	112	34	56	56	0.5	18.5	SP.. 060204	3007M22x5	80T07
DXFC0180003625BN	18	25	34	114	36	58	56	0.5	19	SP.. 060204	3007M22x5	80T07
DXFC0185003625BN	18.5	25	34	114	36	58	56	0.5	19.5	SP.. 060204	3007M22x5	80T07
DXFC0190003825BN	19	25	34	116	38	60	56	0.25	19.5	SP.. 060204	3007M22x5	80T07
DXFC0195003825BN	19.5	25	34	116	38	60	56	0.25	20	SP.. 060204	3007M22x5	80T07
DXFC0200004025BN	20	25	34	118	40	62	56	0	20	SP.. 060204	3007M22x5	80T07
DXFC0205004025BN	20.5	25	34	118	40	62	56	0	20.5	SP.. 060204	3007M22x5	80T07
DXFC0210004225BN	21	25	34	120	42	64	56	0	21	SP.. 060204	3007M22x5	80T07
DXFC0215004225BN	21.5	25	34	120	42	64	56	0	21.5	SP.. 060204	3007M22x5	80T07
DXFC0220004425BN	22	25	34	122	44	66	56	0.5	23	SP.. 07T308	3008M25X6	80T08
DXFC0220004432BN	22	32	44	131	44	71	60	1,0	24,0	SP.. 07T308	3008M25X6	80T08
DXFC0225004425BN	22.5	25	34	122	44	66	56	0.5	23.5	SP.. 07T308	3008M25X6	80T08
DXFC0230004625BN	23	25	34	124	46	68	56	0.5	24	SP.. 07T308	3008M25X6	80T08
DXFC0230004632BN	23	32	44	133	46	73	60	0.75	24,5	SP.. 07T308	3008M25X6	80T08
DXFC0235004625BN	23.5	25	34	124	46	68	56	0.5	24.5	SP.. 07T308	3008M25X6	80T08
DXFC0240004825BN	24	25	34	126	48	70	56	0.5	25	SP.. 07T308	3008M25X6	80T08
DXFC0240004832BN	24	32	44	135	48	75	60	0.5	25,0	SP.. 07T308	3008M25X6	80T08
DXFC0245004825BN	24.5	25	34	126	48	70	56	0.5	25.5	SP.. 07T308	3008M25X6	80T08
DXFC0250005025BN	25	25	34	128	50	72	56	0.25	25.5	SP.. 07T308	3008M25X6	80T08
DXFC0250005032BN	25	32	44	137	50	77	60	0.25	25,5	SP.. 07T308	3008M25X6	80T08
DXFC0255005025BN	25.5	25	34	128	50	72	56	0.25	26	SP.. 07T308	3008M25X6	80T08
DXFC0260005225BN	26	25	34	130	52	74	56	0	26	SP.. 07T308	3008M25X6	80T08
DXFC0260005232BN	26	32	44	139	52	79	60	0,0	26,0	SP.. 07T308	3008M25X6	80T08
DXFC0265005225BN	26.5	25	34	130	52	74	56	0	26.5	SP.. 07T308	3008M25X6	80T08
DXFC0270005425BN	27	25	34	132	54	76	56	0	27	SP.. 07T308	3008M25X6	80T08
DXFC0270005432BN	27	32	44	141	54	81	60	0	27,0	SP.. 07T308	3008M25X6	80T08
DXFC0275005425BN	27.5	25	34	132	54	76	56	0	27.5	SP.. 07T308	3008M25X6	80T08
DXFC0280005625BN	28	25	34	134	56	78	56	0.5	29	SP..090408	4015M35x9	80T15
DXFC0280005632BN	28	32	44	143	56	83	60	1	29	SP..090408	4015M35x9	80T15
DXFC0285005625BN	28.5	25	34	134	56	78	56	0.5	29.5	SP..090408	4015M35x9	80T15
DXFC0290005825BN	29	25	34	136	58	80	56	0.5	30	SP..090408	4015M35x9	80T15
DXFC0290005832BN	29	32	44	145	58	80	56	0.75	30,5	SP..090408	4015M35x9	80T15
DXFC0295005825BN	29.5	25	34	136	58	80	56	0.5	30.5	SP..090408	4015M35x9	80T15
DXFC0300006032BN	30	32	44	147	60	87	60	0.5	31	SP..090408	4015M35x9	80T15
DXFC0310006232BN	31	32	44	149	62	89	60	0.25	31.5	SP..090408	4015M35x9	80T15
DXFC0320006432BN	32	32	44	151	64	91	60	0	32	SP..090408	4015M35x9	80T15
DXFC0330006632BN	33	32	44	153	66	93	60	0	33	SP..090408	4015M35x9	80T15
DXFC0340006832BN	34	32	44	155	68	95	60	0.5	35	SP.. 110408	4015M4x11	80T15
DXFC0350007032BN	35	32	44	157	70	97	60	0.5	36	SP.. 110408	4015M4x11	80T15
DXFC0360007232BN	36	32	44	159	72	99	60	0.5	37	SP.. 110408	4015M4x11	80T15
DXFC0370007432BN	37	32	44	161	74	101	60	0.5	38	SP.. 110408	4015M4x11	80T15
DXFC0380007632BN	38	32	44	163	76	103	60	0.5	39	SP.. 110408	4015M4x11	80T15
DXFC0390007832BN	39	32	44	165	78	105	60	0.5	40	SP.. 110408	4015M4x11	80T15
DXFC0400008032BN	40	32	44	167	80	107	60	0.25	40.5	SP.. 110408	4015M4x11	80T15
DXFC0410008232BN	41	32	44	169	82	109	60	0	41	SP.. 110408	4015M4x11	80T15

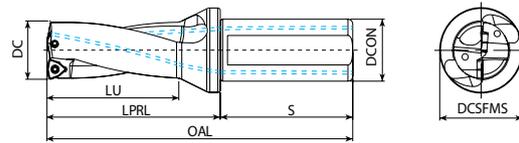
**INDEXABLE DRILLS WIERTŁA SKŁADANE**

# DXFC 2D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DXFC0420008432BN	42	32	44	171	84	111	60	0.5	43	SP..140512	1020M5x11	80T20
DXFC0430008632BN	43	32	44	173	86	113	60	0.5	44	SP..140512	1020M5x11	80T20
DXFC0440008832BN	44	32	44	175	88	115	60	0.5	45	SP..140512	1020M5x11	80T20
DXFC0450009040BN	45	40	54	192	90	122	70	0.5	46	SP..140512	1020M5x11	80T20
DXFC0460009240BN	46	40	54	194	92	124	70	0.5	47	SP..140512	1020M5x11	80T20
DXFC0470009440BN	47	40	54	196	94	126	70	0.5	48	SP..140512	1020M5x11	80T20
DXFC0480009640BN	48	40	54	198	96	128	70	0.25	48.5	SP..140512	1020M5x11	80T20
DXFC0490009840BN	49	40	54	200	98	130	70	0	49	SP..140512	1020M5x11	80T20
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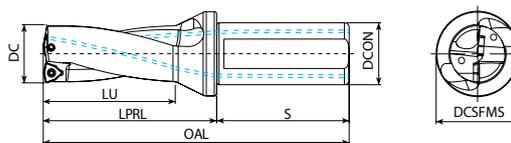
# DXFC 3D



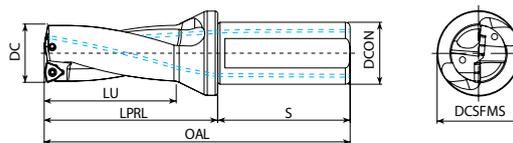
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DXFC0125003620BN	12.5	20	25	108	36	58	50	0.5	13.5	SP..050204	3006M2x4	80T06
DXFC0130003920BN	13	20	25	111	39	61	50	0.5	14	SP..050204	3006M2x4	80T06
DXFC0135003920BN	13.5	20	25	111	39	61	50	0.5	14.5	SP..050204	3006M2x4	80T06
DXFC0140004220BN	14	20	25	114	42	64	50	0.5	15	SP..050204	3006M2x4	80T06
DXFC0145004220BN	14.5	20	25	114	42	64	50	0.5	15.5	SP..050204	3006M2x4	80T06
DXFC0150004520BN	15	20	25	117	45	67	50	0.5	16	SP..050204	3006M2x4	80T06
DXFC0155004520BN	15.5	20	25	117	45	67	50	0.5	16.5	SP..060204	3007M22x5	80T07
DXFC0160004825BN	16	25	34	126	48	70	56	0.5	17	SP..060204	3007M22x5	80T07
DXFC0165004825BN	16.5	25	34	126	48	70	56	0.5	17.5	SP..060204	3007M22x5	80T07
DXFC0170005125BN	17	25	34	129	51	73	56	0.5	18	SP..060204	3007M22x5	80T07
DXFC0175005125BN	17.5	25	34	129	51	73	56	0.5	18.5	SP..060204	3007M22x5	80T07
DXFC0180005425BN	18	25	34	132	54	76	56	0.5	19	SP..060204	3007M22x5	80T07
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DXFC0190005725BN	19	25	34	135	57	79	56	0.25	19.5	SP..060204	3007M22x5	80T07
DXFC0195005725BN	19.5	25	34	135	57	79	56	0.25	20	SP..060204	3007M22x5	80T07
DXFC0200006025BN	20	25	34	138	60	82	56	0	20	SP..060204	3007M22x5	80T07
DXFC0205006025BN	20.5	25	34	138	60	82	56	0	20.5	SP..060204	3007M22x5	80T07
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DXFC0220006625BN	22	25	34	144	66	88	56	0.5	23	SP..07T308	3008M25x6	80T08
DXFC0220006632BN	22	32	44	153	66	96	60	0.5	23	SP..07T308	3008M25x6	80T08
DXFC0225006625BN	22.5	25	34	144	66	88	56	0.5	23.5	SP..07T308	3008M25x6	80T08
DXFC0230006925BN	23	25	34	147	69	91	56	0.5	24	SP..07T308	3008M25x6	80T08
DXFC0230006932BN	23	32	44	156	69	96	60	0.75	24	SP..07T308	3008M25x6	80T08
DXFC0235006925BN	23.5	25	34	147	69	91	56	0.5	24.5	SP..07T308	3008M25x6	80T08
DXFC0240007225BN	24	25	34	150	72	94	56	0.5	25	SP..07T308	3008M25x6	80T08
DXFC0240007232BN	24	32	44	159	72	99	60	0.5	25	SP..07T308	3008M25x6	80T08

INDEXABLE DRILLS WIERTŁA SKŁADANE

DXFC 3D



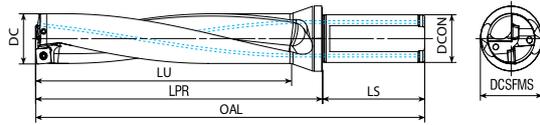
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DXFC0245007225BN	24.5	25	34	150	72	94	56	0.5	25.5	SP. 07T308	3008M25x6	80T08
DXFC0250007525BN	25	25	34	153	75	97	56	0.25	25.5	SP. 07T308	3008M25x6	80T08
DXFC0250007532BN	25	32	44	162	75	102	60	0.25	25.5	SP. 07T308	3008M25x6	80T08
DXFC0255007525BN	25.5	25	34	153	75	97	56	0.25	26	SP. 07T308	3008M25x6	80T08
DXFC0260007825BN	26	25	34	156	78	100	56	0	26	SP. 07T308	3008M25x6	80T08
DXFC0260007832BN	26	32	44	165	78	105	60	0,00	26	SP. 07T308	3008M25x6	80T08
DXFC0265007825BN	26.5	25	34	156	78	100	56	0	26.5	SP. 07T308	3008M25x6	80T08
DXFC0270008125BN	27	25	34	159	81	103	56	0	27	SP. 07T308	3008M25x6	80T08
DXFC0270008132BN	27	32	44	168	81	108	60	0,00	27	SP. 07T308	3008M25x6	80T08
DXFC0275008125BN	27.5	25	34	159	81	103	56	0	27.5	SP. 07T308	3008M25x6	80T08
DXFC0280008425BN	28	25	34	162	84	106	56	0.5	29	SP. 090408	4015M35x9	80T15
DXFC0280008432BN	28	32	44	171	84	111	60	1,00	29	SP. 090408	4015M35x9	80T15
DXFC0285008425BN	28.5	25	34	162	84	106	56	0.5	29.5	SP. 090408	4015M35x9	80T15
DXFC0290008725BN	29	25	34	165	87	109	56	0.5	30	SP. 090408	4015M35x9	80T15
DXFC0290008732BN	29	32	44	174	87	114	56	0.75	30.5	SP. 090408	4015M35x9	80T15
DXFC0295008725BN	29.5	25	34	165	87	109	56	0.5	30.5	SP. 090408	4015M35x9	80T15
DXFC0300009032BN	30	32	44	177	90	117	60	0.5	31	SP. 090408	4015M35x9	80T15
DXFC0305009032BN	30.5	32	44	177	90	117	60	0.5	31.5	SP. 090408	4015M35x9	80T15
DXFC0310009332BN	31	32	44	180	93	120	60	0.25	31.5	SP. 090408	4015M35x9	80T15
DXFC0315009332BN	31.5	32	44	180	93	120	60	0.25	32	SP. 090408	4015M35x9	80T15
DXFC0320009632BN	32	32	44	183	96	123	60	0	32	SP. 090408	4015M35x9	80T15
DXFC0325009632BN	32.5	32	44	183	96	123	60	0	32.5	SP. 090408	4015M35x9	80T15
DXFC0330009932BN	33	32	44	186	99	126	60	0	33	SP. 090408	4015M35x9	80T15
DXFC0335009932BN	33.5	32	44	186	99	126	60	0	33.5	SP. 090408	4015M35x9	80T15
DXFC0340010232BN	34	32	44	189	102	129	60	1.4	30.8	SP. 110408	4015M4x11	80T15
DXFC0345010232BN	34.5	32	44	189	102	129	60	1.4	31.3	SP. 110408	4015M4x11	80T15
DXFC0350010532BN	35	32	44	192	105	132	60	1.4	31.8	SP. 110408	4015M4x11	80T15
DXFC0355010532BN	35.5	32	44	192	105	132	60	1.4	32.3	SP. 110408	4015M4x11	80T15
DXFC0360010832BN	36	32	44	195	108	135	60	2.4	34.8	SP. 110408	4015M4x11	80T15
DXFC0365010832BN	36.5	32	44	195	108	135	60	2.3	35.6	SP. 110408	4015M4x11	80T15
DXFC0370011132BN	37	32	44	198	111	138	60	2.1	36.2	SP. 110408	4015M4x11	80T15
DXFC0375011132BN	37.5	32	44	198	111	138	60	1.9	36.8	SP. 110408	4015M4x11	80T15
DXFC0380011432BN	38	32	44	201	114	141	60	1.9	37.8	SP. 110408	4015M4x11	80T15
DXFC0385011432BN	38.5	32	44	201	114	141	60	1.8	38.6	SP. 110408	4015M4x11	80T15
DXFC0390011732BN	39	32	44	204	117	144	60	1.7	39.4	SP. 110408	4015M4x11	80T15
DXFC0395011732BN	39.5	32	44	204	117	144	60	1.6	40.2	SP. 110408	4015M4x11	80T15
DXFC0400012032BN	40	32	44	207	120	147	60	1.5	41	SP. 110408	4015M4x11	80T15
DXFC0405012032BN	40.5	32	44	207	120	147	60	1.3	41.6	SP. 110408	4015M4x11	80T15
DXFC0410012332BN	41	32	44	210	123	150	60	1	42	SP. 110408	4015M4x11	80T15
DXFC0415012332BN	41.5	32	44	210	123	150	60	0.8	42.6	SP. 110408	4015M4x11	80T15
DXFC0420012632BN	42	32	44	213	126	153	60	0.5	43	SP. 140512	1020M5x11	80T20
DXFC0425012632BN	42.5	32	44	213	126	153	60	0.3	43.6	SP. 140512	1020M5x11	80T20
DXFC0430012932BN	43	32	44	216	129	156	60	0	44	SP. 140512	1020M5x11	80T20
DXFC0435012932BN	43.5	32	44	216	129	156	60	3.3	51.6	SP. 140512	1020M5x11	80T20
DXFC0440013232BN	44	32	44	219	132	159	60	3	52	SP. 140512	1020M5x11	80T20
DXFC0445013232BN	44.5	32	44	219	132	159	60	2.8	52.6	SP. 140512	1020M5x11	80T20
DXFC0450013540BN	45	40	54	237	135	167	70	2.5	53	SP. 140512	1020M5x11	80T20
DXFC0455013540BN	45.5	40	54	237	135	167	70	2.2	53.4	SP. 140512	1020M5x11	80T20
DXFC0460013840BN	46	40	54	240	138	170	70	2	54	SP. 140512	1020M5x11	80T20
DXFC0470014140BN	47	40	54	243	141	173	70	0.2	47.4	SP. 140512	1020M5x11	80T20
DXFC0480014440BN	48	40	54	246	144	176	70	0	48	SP. 140512	1020M5x11	80T20
DXFC0490014740BN	49	40	54	249	147	179	70	0	49	SP. 140512	1020M5x11	80T20
DXFC0500015040BN	50	40	54	252	150	182	70	0	50	SP. 140512	1020M5x11	80T20
DXFC0510015340BN	51	40	54	255	153	185	70	0	51	SP. 140512	1020M5x11	80T20
DXFC0520015640BN	52	40	54	258	156	188	70	0	52	SP. 140512	1020M5x11	80T20

**INDEXABLE DRILLS WIERTŁA SKŁADANE**
**DXFC 4D**


ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW SRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub>	DC <sub>MAX</sub> [mm]			
DXFC0130005220BN	13	20	25	124	52	74	50	0.5	14	SP.. 050204	3006M2x4	80T06
DXFC0140005620BN	14	20	25	128	56	78	50	0.5	15	SP.. 050204	3006M2x4	80T06
DXFC0145005620BN	14,5	20	25	128	56	78	50	0.6	15	SP.. 050204	3006m25x4	80T06
DXFC0150006020BN	15	20	25	132	60	82	50	0.5	16	SP.. 050204	3006M2x4	80T06
DXFC0160006425BN	16	25	34	142	64	86	56	0.5	17	SP.. 060204	3007M22x5	80T07
DXFC0170006825BN	17	25	34	146	68	90	56	0.5	18	SP.. 060204	3007M22x5	80T07
DXFC0170006825BN	17	25	34	146	68	90	56	0.5	18.5	SP.. 060204	3007M22x5	80T07
DXFC0180007225BN	18	25	34	150	72	94	56	0.5	19	SP.. 060204	3007M22x5	80T07
DXFC0190007625BN	19	25	34	154	76	98	56	0.25	19.5	SP.. 060204	3007M22x5	80T07
DXFC0195007625BN	19.5	25	34	154	76	98	56	0.25	20	SP.. 060204	3007M22x5	80T07
DXFC0200008025BN	20	25	34	158	80	102	56	0	20	SP.. 060204	3007M22x5	80T07
DXFC0210008425BN	21	25	34	162	84	106	56	0	21	SP.. 060204	3007M22x5	80T07
DXFC0220008825BN	22	25	34	166	88	110	56	0.5	23	SP.. 07T308	3008M25x6	80T08
DXFC0230009225BN	23	25	34	170	92	114	56	0.5	24	SP.. 07T308	3008M25x6	80T08
DXFC0235009225BN	23.5	25	34	170	92	114	56	0.5	24.5	SP.. 07T308	3008M25x6	80T08
DXFC0240009625BN	24	25	34	174	96	118	56	0.5	25	SP.. 07T308	3008M25x6	80T08
DXFC0250010025BN	25	25	34	178	100	122	56	0.25	25.5	SP.. 07T308	3008M25x6	80T08
DXFC0260010425BN	26	25	34	182	104	126	56	0	26	SP.. 07T308	3008M25x6	80T08
DXFC0270010825BN	27	25	34	186	108	130	56	0	27	SP.. 07T308	3008M25x6	80T08
DXFC0275010825BN	27.5	25	34	186	108	130	56	0	27.5	SP.. 07T308	3008M25x6	80T08
DXFC0280011225BN	28	25	34	190	112	134	56	0.5	29	SP.. 090408	4015M35x9	80T15
DXFC0290011625BN	29	25	34	194	116	138	56	0.5	30	SP.. 090408	4015M35x9	80T15
DXFC0300012032BN	30	32	44	207	120	147	60	0.5	31	SP.. 090408	4015M35x9	80T15
DXFC0310012432BN	31	32	44	211	124	151	60	0.25	31.5	SP.. 090408	4015M35x9	80T15
DXFC0320012832BN	32	32	44	215	128	155	60	0	32	SP.. 090408	4015M35x9	80T15
DXFC0330013232BN	33	32	44	219	132	159	60	0	33	SP.. 090408	4015M35x9	80T15
DXFC0335013232BN	33.5	32	44	219	132	159	60	0	33.5	SP.. 090408	4015M35x9	80T15
DXFC0340013632BN	34	32	44	223	136	163	60	0.5	35	SP.. 110408	4015M4x11	80T15
DXFC0350014032BN	35	32	44	227	140	167	60	0.5	36	SP.. 110408	4015M4x11	80T15
DXFC0360014432BN	36	32	44	231	144	171	60	0.5	37	SP.. 110408	4015M4x11	80T15
DXFC0370014832BN	37	32	44	235	148	175	60	0.5	38	SP.. 110408	4015M4x11	80T15
DXFC0380015232BN	38	32	44	239	152	179	60	0.5	39	SP.. 110408	4015M4x11	80T15
DXFC0390015632BN	39	32	44	243	156	183	60	0.5	40	SP.. 110408	4015M4x11	80T15
DXFC0400016032BN	40	32	44	247	160	187	60	0.25	40.5	SP.. 110408	4015M4x11	80T15
DXFC0410016432BN	41	32	44	251	164	191	60	0	41	SP.. 110408	4015M4x11	80T15
DXFC0420016832BN	42	32	44	255	168	195	60	0.5	43	SP.. 140512	1020M5x11	80T20
DXFC0430017232BN	43	32	44	259	172	199	60	0.5	44	SP.. 140512	1020M5x11	80T20
DXFC0440017632BN	44	32	44	263	176	203	60	0.5	45	SP.. 140512	1020M5x11	80T20
DXFC0460018440BN	46	40	54	286	184	216	70	0.4	47	SP.. 140512	1020M5x11	80T20

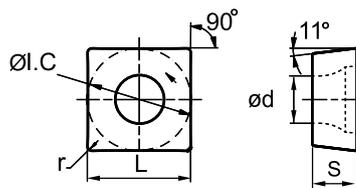
INDEXABLE DRILLS WIERTŁA SKŁADANE

DXFC 5D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DC <sub>MAX</sub> [mm]			
DXFC0130006520BN	13	20	25	137	65	87	50	0.75	15	SP. 050204	3006M25x4	80T06
DXFC0140007020BN	14	20	25	142	70	92	50	0.5	15.00	SP. 050204	3006M2x4	80T06
DXFC0145007020BN	14,5	20	25	142	70	92	50	0.6	15,70	SP. 050204	3006M25x4	80T06
DXFC0150007520BN	15	20	25	147	75	97	50	0.6	16,00	SP. 050204	3006M25x4	80T06
DXFC0160008025BN	16	25	34	158	80	102	56	0.5	17.00	SP. 060204	3007M22x5	80T07
DXFC0170008525BN	17	25	34	163	85	107	56	0.5	18.00	SP. 060204	3007M22x5	80T07
DXFC0170008532BN	17	32	34	163	85	107	56	0.75	18,50	SP. 060204	3007m22x46	80T07
DXFC0180009025BN	18	25	34	168	90	112	56	0.5	19.00	SP. 060204	3007M22x5	80T07
DXFC0190009525BN	19	25	34	173	95	117	56	0.25	19.50	SP. 060204	3007M22x5	80T07
DXFC0200010025BN	20	25	34	178	100	122	56	0	20.00	SP. 060204	3007M22x5	80T07
DXFC0210010525BN	21	25	34	183	105	127	56	0	21.00	SP. 060204	3007M22x5	80T07
DXFC0220011025BN	22	25	34	188	110	132	56	0.5	23.00	SP. 07T308	3008M25x6	80T08
DXFC0220011032BN	22	32	44	197	110	137	60	0.5	23.00	SP. 07T308	3008M25x6	80T08
DXFC0230011525BN	23	25	34	193	115	137	56	0.5	24.00	SP. 07T308	3008M25x6	80T08
DXFC0230011532BN	23	32	44	202	115	142	60	0.5	24.00	SP. 07T308	3008M25x6	80T08
DXFC0240012032BN	24	32	44	207	120	147	60	0.5	25.00	SP. 07T308	3008M25x6	80T08
DXFC0250012525BN	25	25	34	203	125	147	56	0.25	25.50	SP. 07T308	3008M25x6	80T08
DXFC0250012532BN	25	32	44	212	125	152	60	0.25	25.50	SP. 07T308	3008M25x6	80T08
DXFC0260013025BN	26	25	34	208	130	152	56	0	26.00	SP. 07T308	3008M25x6	80T08
DXFC0260013032BN	26	32	44	217	130	157	60	0	26.00	SP. 07T308	3008M25x6	80T08
DXFC0270013525BN	27	25	34	213	135	157	56	0	27.00	SP. 07T308	3008M25x6	80T08
DXFC0270013532BN	27	32	44	222	135	162	60	0	27.00	SP. 07T308	3008M25x6	80T08
DXFC0280014032BN	28	32	44	227	140	167	60	0.5	29.00	SP. 090408	4015M35x9	80T15
DXFC0290014532BN	29	32	44	232	145	172	60	0.5	30.00	SP. 090408	4015M35x9	80T15
DXFC0300015032BN	30	32	44	237	150	177	60	0.5	31.00	SP. 090408	4015M35x9	80T15
DXFC0310015532BN	31	32	44	242	155	182	60	0.25	31.50	SP. 090408	4015M35x9	80T15
DXFC0320016032BN	32	32	44	247	160	187	60	0	32.00	SP. 090408	4015M35x9	80T15
DXFC0330016532BN	33	32	44	252	165	192	60	0	33.00	SP. 090408	4015M35x9	80T15

SPMT



P	●	●	●
M	●	●	●
K	●	●	●
N	●	●	●
S	●	●	●
H	●	●	●

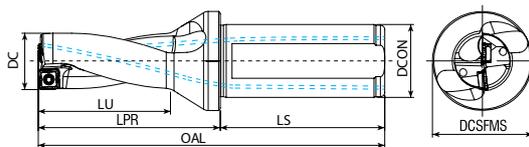
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				P3200	P3350	P3250
	SPMT050204CM30	0.40	0,04-0,09	●	●	●
	SPMT060204CM30	0.40	0,04-0,10	●	●	●
	SPMT07T308CM30	0.80	0,05-0,11	●	●	●
	SPMT090408CM30	0.80	0,06-0,12	●	●	●
	SPMT110408CM30	0.80	0,06-0,15	●	●	●
	SPMT140512CM30	1.20	0,12-0,18	●	●	●
	SPMT050204CM2	0.40	0,04-0,09	●	●	●
	SPMT060204CM2	0.40	0,04-0,10	●	●	●
	SPMT07T308CM2	0.80	0,05-0,11	●	●	●
	SPMT090408CM2	0.80	0,06-0,12	●	●	●
	SPMT110408CM2	0.80	0,06-0,15	●	●	●
	SPMT140512CM2	1.20	0,12-0,18	●	●	●

- Ideal machining conditions / Idealne warunki obróbki
- Normal machining conditions / Normalne warunki obróbki
- Unfavourable machining conditions / Niekorzystne warunki obróbki

SPMT	L	I.C.	S	d	
05	02	5	5	2.38	2.2
06	02	6	6	2.38	2.6
07	T3	7.97	7.97	3.97	2.8
09	04	9.8	9.8	4.76	4.2
11	04	11.5	11.5	4.76	4.4
14	05	14.3	14.3	5.2	5.75

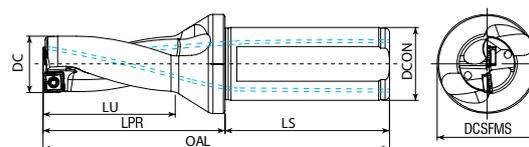
**INDEXABLE DRILLS WIERTŁA SKŁADANE**

# DSOC 2D

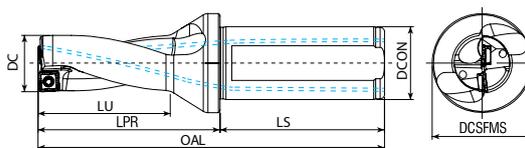


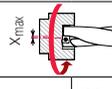
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
							XMAX [mm]	DCMAX [mm]			
DSOC0140002820BN	14	20	25	100	28	50	05	15	SXMT 050204	3006M2x4	82T06
DSOC0160003225BN	16	25	34	110	32	54	03	16.6	SXMT 050204	3006M2x4	82T06
DSOC0170003425BN	17	25	34	112	34	56	05	18	SXMT 060204	3007M22x46	82T07
DSOC0180003625BN	18	25	34	114	36	58	04	18.8	SXMT 060204	3007M22x46	82T07
DSOC0200004025BN	20	25	34	118	40	62	05	21	SXMT 070306	3007M22x46	82T07
DSOC0220004425BN	22	25	34	122	44	66	03	22.6	SXMT 070306	3007M22x46	82T07
DSOC0230004625BN	23	25	34	124	46	68	05	24	SXMT 08T306	3008M25x6	82T08
DSOC0240004825BN	24	25	34	126	48	70	05	25	SXMT 08T306	3008M25x6	82T08
DSOC0250005025BN	25	25	34	128	50	72	04	25.8	SXMT 08T306	3008M25x6	82T08
DSOC0260005225BN	26	25	34	130	52	74	03	26.6	SXMT 08T306	3008M25x6	82T08
DSOC0270005425BN	27	25	34	132	54	76	05	28	SXMT 09T308	4015M35x9	80T15
DSOC0280005625BN	28	25	34	134	56	78	05	29	SXMT 09T308	4015M35x9	80T15
DSOC0290005825BN	29	25	34	136	58	80	05	30	SXMT 09T308	4015M35x9	80T15
DSOC0300006032BN	30	32	44	147	60	87	05	31	SXMT 09T308	4015M35x9	80T15
DSOC0320006432BN	32	32	44	151	64	91	05	33	SXMT 11T308	4015M35x9	80T15
DSOC0330006632BN	33	32	44	153	66	93	05	34	SXMT 11T308	4015M35x9	80T15
DSOC0340006832BN	34	32	44	155	68	95	05	35	SXMT 11T308	4015M35x9	80T15
DSOC0350007032BN	35	32	44	157	70	97	05	36	SXMT 11T308	4015M35x9	80T15
DSOC0370007432BN	37	32	44	161	74	101	05	38	SXMT 130408	4015M4x11	80T15
DSOC0380007632BN	38	32	44	163	76	103	05	39	SXMT 130408	4015M4x11	80T15
DSOC0400008032BN	40	32	44	167	80	107	05	41	SXMT 130408	4015M4x11	80T15
DSOC0450009040BN	45	40	54	192	90	122	0.5	46	SXMT 150510	1020M5x11	80T20
DSOC0470009440BN	47	40	54	196	94	126	0.5	48	SXMT 150510	1020M5x11	80T20

# DSOC 3D



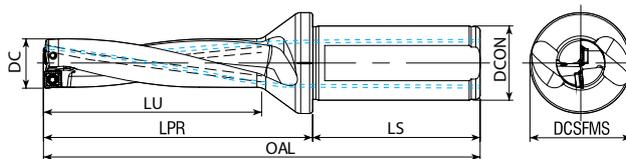
ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								XMAX [mm]	DCMAX [mm]			
DSOC0140004220BN	14	20	25	114	42	64	50	05	15	SXMT 050204	3006M2x4	82T06
DSOC0145004220BN	14,5	20	25	114	42	64	50	04	15.3	SXMT 050204	3006M2x4	82T06
DSOC0150004520BN	15	20	25	117	45	67	50	04	15.8	SXMT 050204	3006M2x4	82T06
DSOC0155004520BN	15,5	20	25	117	45	67	50	03	16.1	SXMT 050204	3006M2x4	82T06
DSOC0160004825BN	16	25	34	126	48	70	56	03	16.6	SXMT 050204	3006M2x4	82T06
DSOC0165004825BN	16,5	25	34	126	48	70	56	05	17.5	SXMT 060204	3007M22x46	82T07
DSOC0170005125BN	17	25	34	129	51	73	56	05	18	SXMT 060204	3007M22x46	82T07
DSOC0175005125BN	17,5	25	34	129	51	73	56	04	18.3	SXMT 060204	3007M22x46	82T07
DSOC0180005425BN	18	25	34	132	54	76	56	04	18.8	SXMT 060204	3007M22x46	82T07
DSOC0185005425BN	18,5	25	34	132	54	76	56	03	19.1	SXMT 060204	3007M22x46	82T07
DSOC0190005725BN	19	25	34	135	57	79	56	03	19.6	SXMT 060204	3007M22x46	82T07

**INDEXABLE DRILLS WIERTŁA SKŁADANE**
**DSOC 3D**


ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
												
								XMAX [mm]	DCMAX [mm]			
DSOC0195005725BN	19,5	25	34	135	57	79	56	05	20.5	SXMT 070306	3007M22x46	82T07
DSOC0200006025BN	20	25	34	138	60	82	56	05	21	SXMT 070306	3007M22x46	82T07
DSOC0205006025BN	20,5	25	34	138	60	82	56	04	21.3	SXMT 070306	3007M22x46	82T07
DSOC0210006325BN	21	25	34	141	63	85	56	04	21.8	SXMT 070306	3007M22x46	82T07
DSOC0220006625BN	22	25	34	144	66	88	56	03	22.6	SXMT 070306	3007M22x46	82T07
DSOC0225006625BN	22,5	25	34	144	66	88	56	05	23.5	SXMT 08T306	3008M25x6	82T08
DSOC0230006925BN	23	25	34	147	69	91	56	05	24	SXMT 08T306	3008M25x6	82T08
DSOC0235006925BN	23,5	25	34	147	69	91	56	05	24.5	SXMT 08T306	3008M25x6	82T08
DSOC0240007225BN	24	25	34	150	72	94	56	05	25	SXMT 08T306	3008M25x6	82T08
DSOC0245007225BN	24,5	25	34	150	72	94	56	04	25.3	SXMT 08T306	3008M25x6	82T08
DSOC0250007525BN	25	25	34	153	75	97	56	04	25.8	SXMT 08T306	3008M25x6	82T08
DSOC0260007825BN	26	25	34	156	78	100	56	03	26.6	SXMT 08T306	3008M25x6	82T08
DSOC0270008125BN	27	25	34	159	81	103	56	05	28	SXMT 09T308	4015M35x9	80T15
DSOC0275008125BN	27,5	25	34	159	81	103	56	05	27.5	SXMT 09T308	4015M35x9	80T15
DSOC0280008425BN	28	25	34	162	84	106	56	05	29	SXMT 09T308	4015M35x9	80T15
DSOC0290008725BN	29	25	34	165	87	109	56	05	30	SXMT 09T308	4015M35x9	80T15
DSOC0300009032BN	30	32	44	177	90	117	60	05	31	SXMT 09T308	4015M35x9	80T15
DSOC0320009632BN	32	32	44	183	96	123	60	05	33	SXMT 11T308	4015M35x9	80T15
DSOC0330009932BN	33	32	44	186	99	126	60	05	34	SXMT 11T308	4015M35x9	80T15
DSOC0340010232BN	34	32	44	189	102	129	60	05	35	SXMT 11T308	4015M35x9	80T15
DSOC0350010532BN	35	32	44	192	105	132	60	05	36	SXMT 11T308	4015M35x9	80T15
DSOC0360010832BN	36	32	44	195	108	135	60	04	36.8	SXMT 11T308	4015M35x9	80T15
DSOC0370011132BN	37	32	44	198	111	138	60	05	38	SXMT 130408	4015M4x11	80T15
DSOC0380011432BN	38	32	44	201	114	141	60	05	39	SXMT 130408	4015M4x11	80T15
DSOC0390011732BN	39	32	44	204	117	144	60	05	40	SXMT 130408	4015M4x11	80T15
DSOC0400012032BN	40	32	44	207	120	147	60	05	41	SXMT 130408	4015M4x11	80T15
DSOC0450013540BN	45	40	54	237	135	167	70	0.5	46	SXMT 150510	1020M5x11	80T20
DSOC0490014740BN	49	40	54	249	147	179	70	0.5	50	SXMT 150510	1020M5x11	80T20
DSOC0500015040BN	50	40	54	252	150	182	70	0.5	51	SXMT 150510	1020M5x11	80T20

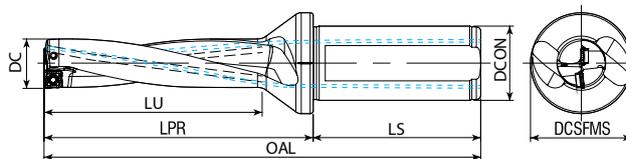
**INDEXABLE DRILLS WIERTŁA SKŁADANE**

# DSOC 4D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DC <sub>MAX</sub> [mm]			
DSOC0140005620BN	14	20	25	128	56	78	50	05	15	SXMT 050204	3006M2x4	82T06
DSOC0145005620BN	14,5	20	25	128	56	78	50	04	15.3	SXMT 050204	3006M2x4	82T06
DSOC0160006425BN	16	25	34	142	64	86	56	03	16.6	SXMT 050204	3006M2x4	82T06
DSOC0170006825BN	17	25	34	146	68	90	56	05	18	SXMT 060204	3007M22x46	82T07
DSOC0175006825BN	17,5	25	34	146	68	90	56	04	18.3	SXMT 060204	3007M22x46	82T07
DSOC0180007225BN	18	25	34	150	72	94	56	04	18.8	SXMT 060204	3007M22x46	82T07
DSOC0190007625BN	19	25	34	154	76	98	56	03	19.6	SXMT 060204	3007M22x46	82T07
DSOC0200008025BN	20	25	34	158	80	102	56	05	21	SXMT 070306	3007M22x46	82T07
DSOC0210008425BN	21	25	34	162	84	106	56	04	21.8	SXMT 070306	3007M22x46	82T07
DSOC0220008825BN	22	25	34	166	88	110	56	03	22.6	SXMT 070306	3007M22x46	82T07
DSOC0240009625BN	24	25	34	174	96	118	56	05	25	SXMT 08T306	3008M25x6	82T08
DSOC0250010025BN	25	25	34	178	100	122	56	04	25.8	SXMT 08T306	3008M25x6	82T08

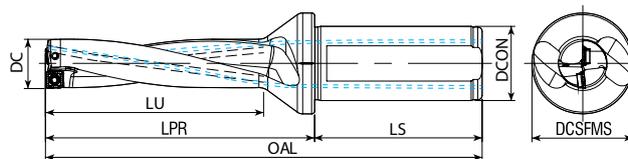
# DSOC 5D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DC <sub>MAX</sub> [mm]			
DSOC0140007020BN	14	20	25	142	70	92	50	05	15	SXMT 050204	3006M2x4	82T06
DSOC0150007520BN	15	20	25	147	75	97	50	04	15.8	SXMT 050204	3006M2x4	82T06
DSOC0155007520BN	15,5	20	25	147	75	97	50	03	16.1	SXMT 050204	3006M2x4	82T06
DSOC0160008025BN	16	25	34	158	80	102	56	03	16.6	SXMT 050204	3006M2x4	82T06
DSOC0165008025BN	16,5	25	34	158	80	102	56	05	17.5	SXMT 060204	3007M22x46	82T07
DSOC0175008525BN	17,5	25	34	163	85	107	56	04	18.3	SXMT 060204	3007M22x46	82T07
DSOC0180009025BN	18	25	34	168	90	112	56	04	18.8	SXMT 060204	3007M22x46	82T07
DSOC0185009025BN	18,5	25	34	168	90	112	56	03	19.1	SXMT 060204	3007M22x46	82T07
DSOC0190009525BN	19	25	34	173	95	117	56	03	19.6	SXMT 060204	3007M22x46	82T07
DSOC0195009525BN	19,5	25	34	173	95	117	56	05	20.5	SXMT 070306	3007M22x46	82T07
DSOC0200010025BN	20	25	34	178	100	122	56	05	21	SXMT 070306	3007M22x46	82T07
DSOC0210010525BN	21	25	34	183	105	127	56	04	21.8	SXMT 070306	3007M22x46	82T07
DSOC0220011025BN	22	25	34	188	110	132	56	03	22.6	SXMT 070306	3007M22x46	82T07
DSOC0230011525BN	23	25	34	193	115	137	56	05	24	SXMT 08T306	3008M25x6	82T08
DSOC0240012025BN	24	25	34	198	120	142	56	05	25	SXMT 08T306	3008M25x6	82T08
DSOC0250012525BN	25	25	34	203	125	147	56	04	25.8	SXMT 08T306	3008M25x6	82T08
DSOC0260013025BN	26	25	34	208	130	152	56	03	26.6	SXMT 08T306	3008M25x6	82T08
DSOC0270013525BN	27	25	34	213	135	157	56	05	28	SXMT 09T308	4015M35x9	80T15
DSOC0280014025BN	28	25	34	218	140	162	56	05	29	SXMT 09T308	4015M35x9	80T15
DSOC0290014525BN	29	25	34	223	145	167	56	05	30	SXMT 09T308	4015M35x9	80T15

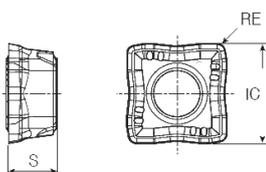
INDEXABLE DRILLS WIERTŁA SKŁADANE

DSOC 5D



ORDER CODE KOD ZAMÓWIENIA	DC	DCON	DCSFMS	OAL	LU	LPR	LS	MAX OFFSET [rad]		INSERT SHAPE KSZTAŁT PŁYTKI	SCREW ŚRUBA	TORX KEY KLUCZ TORX
								X <sub>max</sub> [mm]	DCMAX [mm]			
DSOC0300015032BN	30	32	44	237	150	177	60	05	31	SXMT 09T308	4015M35x9	80T15
DSOC0330016532BN	33	32	44	252	165	192	60	05	34	SXMT 11T308	4015M35x9	80T15
DSOC0340017032BN	34	32	44	257	170	197	60	05	35	SXMT 11T308	4015M35x9	80T15
DSOC0350017532BN	35	32	44	262	175	202	60	05	36	SXMT 11T308	4015M35x9	80T15
DSOC0360018032BN	36	32	44	267	180	207	60	04	36.8	SXMT 11T308	4015M35x9	80T15

SX



P	●	●	●
M	●	●	●
K	●	●	●
N	●	●	●
S	●	●	●
H	●	●	●

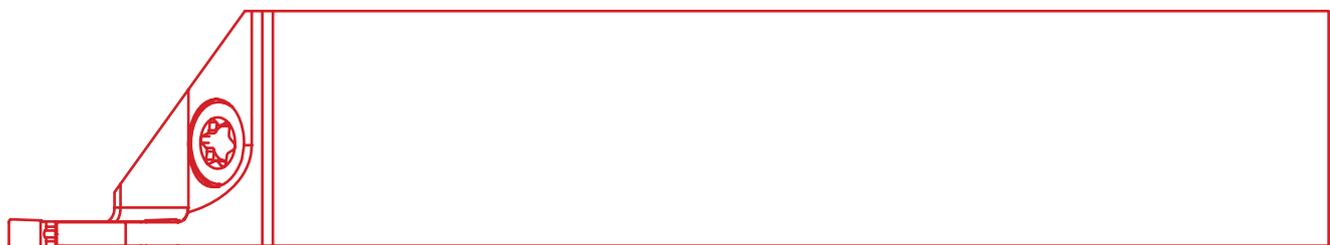
INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	r	PVD		
			P3200	P3350	P3300
	SXMT050204CS40	0.40	●	●	●
	SXMT060204CS40	0.40	●	●	●
	SXMT070306CS40	0.60	●	●	●
	SXMT08T306CS40	0.60	●	●	●
	SXMT09T308CS40	0.80	●	●	●
	SXMT11T308CS40	0.80	●	●	●
	SXMT130408CS40	0.80	●	●	●
	SXMT150510CS40	1.00	●	●	●

SXMT	I.C.	S
05	02	4.9 2.38
06	02	5.70 2.38
07	03	6.80 2.80
08	T3	7.90 3.97
09	T3	9.20 3.97
11	T3	11.00 3.79
13	04	12.8 4.40
15	05	15.0 4.80

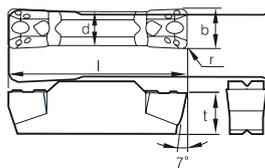
● Ideal machining conditions  
 Idealne warunki obróbki  
 ● Normal machining conditions  
 Normalne warunki obróbki  
 ● Unfavourable machining conditions  
 Niekorzystne warunki obróbki

# GROOVING ROWKOWANIE



GROOVING INSERTS PŁYTKI ROWKOWANIE

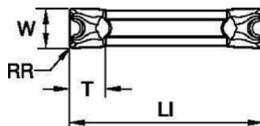
# MGM



INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	b	r	l	d	r	PVD	
							P3200	P3100
	MGMN150	1.5	0.15	16	1.2	3.5	●	●
	MGMN200	2.0	0.2	16.0	1.6	3.5	●	●
	MGMN250	2.5	0.2	18.5	2.0	3.85	●	●
	MGMN300	3.0	0.4	21.0	2.35	4.83	●	●
	MGMN400	4.0	0.4	21.0	3.3	4.83	●	●
	MGMN500	5.0	0.8	26.0	5.0	5.81	●	●
	MGMN600	6.0	0.8	26.0	5.0	5.81	●	●

- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

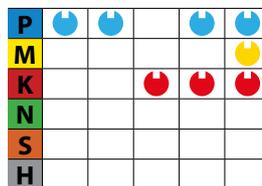
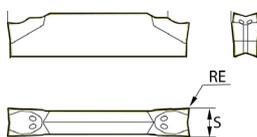
# E\*MB



INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	W	R	T	L1	CVD	
						P2115	
	ECMB03004	3.05	0.2	3.5	20.0	●	
	ECMB04008	4.05	0.4	3.4	20.0	●	
	EFMB03004	3.05	0.2	3.5	20.0	●	
	EFMB04008	4.05	0.4	3.4	20.0	●	

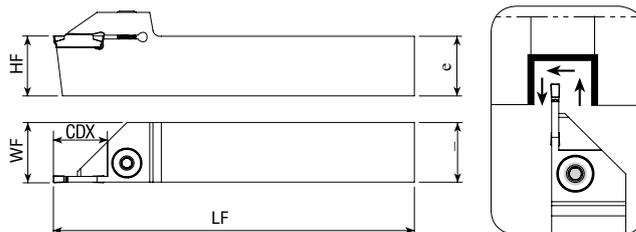
- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

# GED



INSERT SHAPE KSZTAŁT PŁYTKI	DESCRIPTION OZNACZENIE	CDX	S	f	CVD			PVD	
					P1025	P1125	P2115	P3200	P3100
	GED02503	17	2,5	0,03-0,11	●	●	●	●	●
	GED03003	17	3	0,04-0,14	●	●	●	●	●
	GED04004	22	4	0,07-0,2	●	●	●	●	●
	GED05004	22	5	0,10-0,25	●	●	●	●	●
	GED06008	22	6	0,13-0,30	●	●	●	●	●

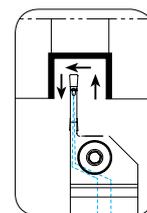
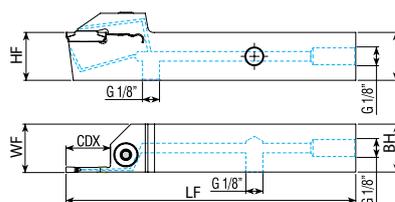
- Ideal machining conditions  
Idealne warunki obróbki
- Normal machining conditions  
Normalne warunki obróbki
- ⊕ Unfavourable machining conditions  
Niekorzystne warunki obróbki

**EXTERNAL GROOVING TOOLHOLDERS ROWKOWANIE ZEWNĘTRZNE**
**QEAD**


ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	INSERT PEYTKI	SCREW ŚRUBA	RING PIERŚCIEŃ	ALLEN KEY KLUCZ IMBUSOWY
QEADR/L121210015	12	12	100	12.2	15	MGM.-1.5	TKV02M6x22	TBPL01	TTL033
QEADR/L202012515	20	20	125	20.2	15		TKV02M6x22	TBPL01	TTL033
QEADR/L121210015	12	12	100	16.3	15	MGM.-2	TKV02M6x22	TBPL01	TTL033
QEADR/L161612510	16	16	125	16.3	10		TKV02M6x22	TBPL01	TTL033
QEADR/L161612515	16	16	125	16.3	15		TKV02M6x22	TBPL01	TTL033
QEADR/L202015015	20	20	150	20.3	15		TKV02M6x22	TBPL01	TTL033
QEADR/L252515015	25	25	150	25.3	15		TKV02M6x22	TBPL01	TTL033
QEADR/L323217015	32	32	170	32.3	15		TKV02M6x22	TBPL01	TTL033
QEADR/L121210015	12	12	100	12.3	15	MGM.-3	2004M8X1X20		TTL054
QEADR/L161612515	16	16	125	16.3	15		2004M8X1X20		TTL054
QEADR/L202012510	20	20	125	20.3	10		2004M8X1X20		TTL054
QEADR/L202012520	20	20	125	20.3	20		2004M8X1X20		TTL054
QEADR/L202012528	20	20	125	20.3	28		2004M8X1X20		TTL054
QEADR/L252515010	25	25	150	25.3	10		2004M8X1X20		TTL054
QEADR/L252515015	25	25	150	25.3	15		2004M8X1X20		TTL054
QEADR/L252515022	25	25	150	25.3	22		2004M8X1X20		TTL054
QEADR/L323217010	32	32	170	32.3	10		2004M8X1X20		TTL054
QEADR/L323217022	32	32	170	32.3	22		2004M8X1X20		TTL054
QEADR/L202012510	20	20	125	20.4	10	MGM.-4	2004M8X1X20		TTL054
QEADR/L202012520	20	20	125	20.4	20		2004M8X1X20		TTL054
QEADR/L202012525	20	20	125	20.4	25		2004M8X1X20		TTL054
QEADR/L252515010	25	25	150	25.4	10		2004M8X1X20		TTL054
QEADR/L252515018	25	25	150	25.4	18		2004M8X1X20		TTL054
QEADR/L252515022	25	25	150	25.4	22		2004M8X1X20		TTL054
QEADR/L323217010	32	32	170	32.4	10		2004M8X1X20		TTL054
QEADR/L323217022	32	32	170	32.4	22		2004M8X1X20		TTL054
QEADR/L202012520	20	20	125	20.5	20	MGM.-5	2004M8X1X20		TTL054
QEADR/L252515015	25	25	150	25.5	15		2004M8X1X20		TTL054
QEADR/L252515018	25	25	150	25.5	18		2004M8X1X20		TTL054
QEADR/L252515025	25	25	150	25.5	25		2004M8X1X20		TTL054
QEADR/L323217015	32	32	170	32.5	15		2004M8X1X20		TTL054
QEADR/L323217025	32	32	170	32.5	25		2004M8X1X20		TTL054
QEADR/L252515015	25	25	150	25.6	15	MGM.-6	2004M8X1X20		TTL054
QEADR/L252515025	25	25	150	25.6	25		2004M8X1X20		TTL054
QEADR/L323217025	32	32	170	32.6	25		2004M8X1X20		TTL054

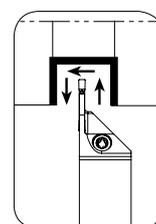
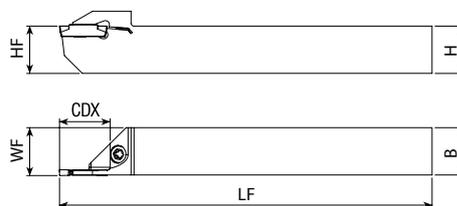
**EXTERNAL GROOVING TOOLHOLDERS ROWKOWANIE ZEWNĘTRZNE**

**QEAD**



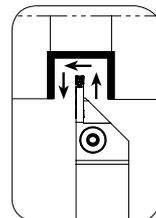
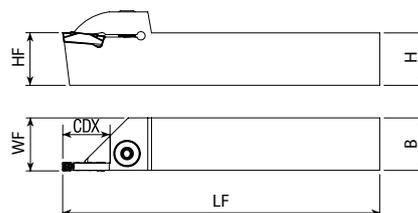
ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	INSERT PŁYTKI	SCREW SRUBA	RING PIERŚCIEŃ	ALLEN KEY KLUCZ IMBUSOWY
QEADR/L20201252003	20	20	125	20.4	20	MGM.-3	2004M8x1x20		TTL054
QEADR/L25251502203	25	25	150	25.4	22	MGM.-3	2004M8x1x20		TTL054
QEADR/L20201252003	20	20	125	20.4	20	MGM.-4	2004M8x1x20		TTL054
QEADR/L25251502203	25	25	150	25.4	22	MGM.-4	2004M8x1x20		TTL054
QEADR/L25251502503	25	25	150	25.5	25	MGM.-5	2004M8x1x20		TTL054

**QEAD-S**



ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	INSERT PŁYTKI	SCREW SRUBA	RING PIERŚCIEŃ	ALLEN KEY KLUCZ IMBUSOWY
QEADR/L1212125R12S	12	12	125	12.20	12	MGM.- 2	4015M4x11		80T15
QEADR/L1616125R16S	16	16	125	16.20	16		4015M4x11		80T15
QEADR/L1212125R12S	12	12	125	12.30	12	MGM.-3	4015M4x11		80T15
QEADR/L1616125R16S	16	16	125	16.30	16		4015M4x11		80T15

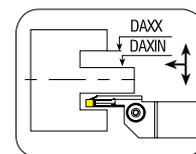
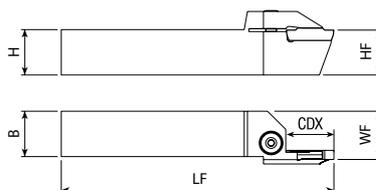
**ATHK**



ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	INSERT PŁYTKI	SCREW SRUBA	RING PIERŚCIEŃ	ALLEN KEY KLUCZ IMBUSOWY
QDKTR/L20203T20	20	20	125	20.4	20	E*MB.-3	2004M8x1x20		TTL054
QDKTR/L25253T22	25	25	150	25.4	22	E*MB.-3	2004M8x1x20		TTL054
QDKTR/L25254T22	25	25	150	25.5	22	E*MB.-4	2004M8x1x20		TTL054

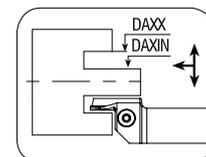
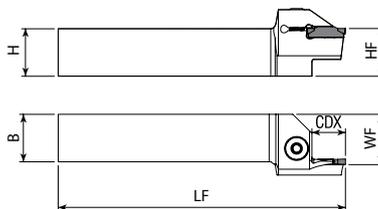
**EXTERNAL GROOVING TOOLHOLDERS ROWKOWANIE ZEWNĘTRZNE**

# ATHK



ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	DAXIN	DAXX	INSERT PLYTKI	SCREW SRUBA	RING PIERSCIEŃ	ALLEN KEY KLUCZ IMBUSOWY	
ATHKR/L252534453T17	25	25	150	26.5	17	34	45	MGM.-3	2004M8x1x20		TTL054	
ATHKR/L252539553T17	25	25	150	26.5	17	39	55		2004M8x1x20		TTL054	
ATHKR/L252549803T17	25	25	150	26.5	17	49	80		2004M8x1x20		TTL054	
ATHKR/L2525701103T17	25	25	150	26.5	17	70	110		2004M8x1x20		TTL054	
ATHKR/L25251001503T17	25	25	150	26.5	17	100	150		2004M8x1x20		TTL054	
ATHKR/L2525801803T32	25	25	150	26.5	32	80	180		2004M8x1x20		TTL054	
ATHKR/L25251752153T22	25	25	150	26.5	22	175	215		2004M8x1x20		TTL054	
ATHKR/L25257008003T17	25	25	150	26.5	17	700	800		2004M8x1x20		TTL054	
ATHKR/L252550854T22	25	25	150	26.5	22	50	85		2004M8x1x20		TTL054	
ATHKR/L2525701104T22	25	25	150	26.5	22	70	110		2004M8x1x20		TTL054	
ATHKR/L25251001504T22	25	25	150	26.5	22	100	150	MGM.-4	2004M8x1x20		TTL054	
ATHKR/L2525801804T32	25	25	150	26.5	32	80	180		2004M8x1x20		TTL054	
ATHKR/L25251808004T32	25	25	150	26.5	32	180	800		2004M8x1x20		TTL054	
ATHKR/L2525701105T25	25	25	150	26.5	25	70	110	MGM.-5	2004M8x1x20		TTL054	
ATHKR/L25251001505T25	25	25	150	26.5	25	100	150		2004M8x1x20		TTL054	
ATHKR/L2525801805T32	25	25	150	26.5	32	80	180		2004M8x1x20		TTL054	
ATHKR/L25251402005T25	25	25	150	26.5	25	140	200		2004M8x1x20		TTL054	
ATHKR/L25251808005T32	25	25	150	26.5	32	180	800		2004M8x1x20		TTL054	
ATHKR/L25251808005T40	25	25	150	26.5	40	180	800		2004M8x1x20		TTL054	
ATHKR/L2525601006T25	25	25	150	26.5	25	60	100		MGM.-6	2004M8x1x20		TTL054
ATHKR/L2525601006T35	25	25	150	26.5	35	60	100			2004M8x1x20		TTL054
ATHKR/L25251002006T25	25	25	150	26.5	25	100	200			2004M8x1x20		TTL054
ATHKR/L25251002006T35	25	25	150	26.5	35	100	200			2004M8x1x20		TTL054
ATHKR/L25251002006T45	25	25	150	26.5	45	100	200	2004M8x1x20			TTL054	
ATHKR/L25251403006T35	25	25	150	26.5	35	140	300	2004M8x1x20			TTL054	
ATHKR/L25251803606T40	25	25	150	26.5	40	180	360	2004M8x1x20		TTL054		

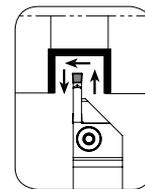
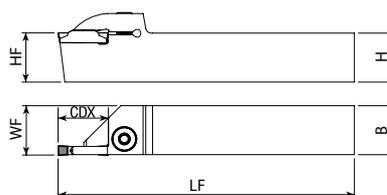
# ATHZK



ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	DAXIN	DAXX	INSERT PLYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY
ATHZKR/L252535453T17	25	25	150	26.5	17	35	45	GED-3	2004M8x1x20	TTL054
ATHZKR/L252539553T17	25	25	150	26.5	17	39	55		2004M8x1x20	TTL054
ATHZKR/L252549803T17	25	25	150	26.5	17	49	80		2004M8x1x20	TTL054
ATHZKR/L2525701103T15	25	25	150	26.5	15	70	110		2004M8x1x20	TTL054
ATHZKR/L2525701103T17	25	25	150	26.5	17	70	110		2004M8x1x20	TTL054
ATHZKR/L25251001503T17	25	25	150	26.5	17	100	150		2004M8x1x20	TTL054
ATHZKR/L25251001503T22	25	25	150	26.5	22	100	150		2004M8x1x20	TTL054
ATHZKR/L252540604T22	25	25	150	26.5	22	40	60		2004M8x1x20	TTL054
ATHZKR/L252552804T22	25	25	150	26.5	22	52	80		2004M8x1x20	TTL054
ATHZKR/L2525721104T22	25	25	150	26.5	22	72	110		2004M8x1x20	TTL054
ATHZKR/L25251001504T22	25	25	150	26.5	22	100	150	GED-4	2004M8x1x20	TTL054
ATHZKR/L25251402004T22	25	25	150	26.5	22	140	200		2004M8x1x20	TTL054
ATHZKR/L252555955T25	25	25	150	26.5	25	55	95		2004M8x1x20	TTL054
ATHZKR/L2525851405T25	25	25	150	26.5	25	85	140	GED-5	2004M8x1x20	TTL054
ATHZKR/L25251302005T25	25	25	150	26.5	25	130	200		2004M8x1x20	TTL054
ATHZKR/L25251904005T25	25	25	150	26.5	25	190	400		2004M8x1x20	TTL054
ATHZKR/L25251904005T35	25	25	150	26.5	35	190	400		2004M8x1x20	TTL054
ATHZKR/L25252005005T17	25	25	150	26.5	17	200	500		2004M8x1x20	TTL054
ATHZKR/L2525601106T15	25	25	150	26.5	15	60	110		GED-6	2004M8x1x20
ATHZKR/L32321604006T25	32	32	170	33.5	25	160	400	2004M8x1x20		TTL054

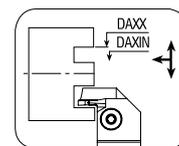
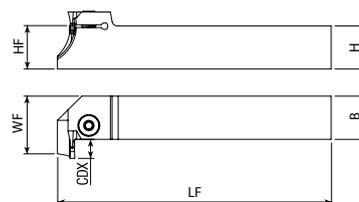
EXTERNAL GROOVING TOOLHOLDERS ROWKOWANIE ZEWNĘTRZNE

QDKT

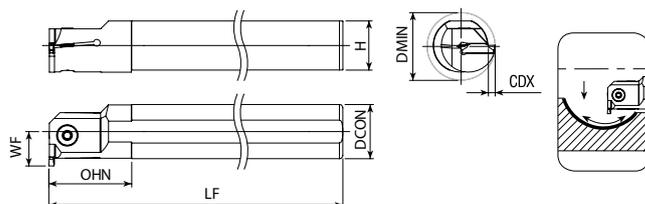


ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	INSERT PŁYTKI	SCREW SRUBA	RING PIERSCIEŃ	ALLEN KEY KLUCZ IMBUSOWY
QDKTZR/L161625T15	16	16	125	16.3	15	GED-2.5	2004M8x1x20		TTL054
QDKTZR/L202025T17	20	20	125	20.3	17		2004M8x1x20		TTL054
QDKTZR/L252525T15	25	25	150	25.3	15		2004M8x1x20		TTL054
QDKTZR/L16163T15	16	16	125	16.3	15	GED-3	2004M8x1x20		TTL054
QDKTZR/L16163T17	16	16	125	16.3	17		2004M8x1x20		TTL054
QDKTZR/L16163T20	16	16	125	16.3	20		2004M8x1x20		TTL054
QDKTZR/L20203T12	20	20	125	20.3	12		2004M8x1x20		TTL054
QDKTZR/L20203T20	20	20	125	20.3	20		2004M8x1x20		TTL054
QDKTZR/L20203R21	20	20	125	20.3	21		2004M8x1x20		TTL054
QDKTZR/L20203R25	20	20	125	20.3	25		2004M8x1x20		TTL054
QDKTZR/L25253T12	25	25	150	25.3	12		2004M8x1x20		TTL054
QDKTZR/L25253T22	25	25	150	25.3	22		2004M8x1x20		TTL054
QDKTZR/L25253R30	25	25	150	25.3	30		2004M8x1x20		TTL054
QDKTZR/L20205T12	20	20	125	20.5	12	GED-5	2004M8x1x20		TTL054
QDKTZR/L20205T20	20	20	125	20.5	20		2004M8x1x20		TTL054
QDKTZR/L25255T12	25	25	150	25.5	12		2004M8x1x20		TTL054
QDKTZR/L25255T25	25	25	150	25.5	25		2004M8x1x20		TTL054
QDKTZR/L32325T25	32	32	170	32.5	25	GED-6	2004M8x1x20		TTL054
QDKTZR/L20206T20	20	20	125	20.6	20		2004M8x1x20		TTL054
QDKTZR/L25256T25	25	25	150	25.6	25		2004M8x1x20		TTL054
QDKTZR/L32326T25	32	32	170	32.6	25		2004M8x1x20		TTL054
QDKTZR/L32326T30	32	32	170	32.6	30	2004M8x1x20		TTL054	

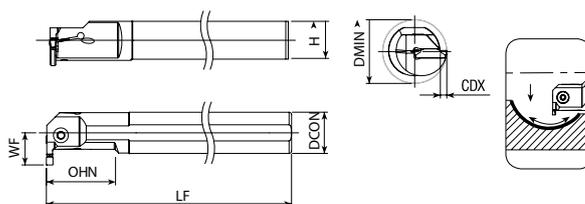
ALLK



ORDER CODE KOD ZAMÓWIENIA	HF	B	LF	WF	CDX	DAXIN	DAXX	INSERT PŁYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY
ALLKR/L252535453T10	25	25	150	36	10	35	45	GED-3	2004M8x1x20	TTL054
ALLKR/L252539553T10	25	25	150	36	10	39	55		2004M8x1x20	TTL054
ALLKR/L2525353T4	25	25	150	30	4	35			2004M8x1x20	TTL054
ALLKR/L252540604T14	25	25	150	40	14	40	60	GED-4	2004M8x1x20	TTL054
ALLKR/L252552804T14	25	25	150	40	14	52	80		2004M8x1x20	TTL054
ALLKR/L2525721104T14	25	25	150	40	14	72	110		2004M8x1x20	TTL054
ALLKR/L25251002304T14	25	25	150	40	14	100	230		2004M8x1x20	TTL054
ALLKR/L2525404T4	25	25	150	30	4	40		2004M8x1x20	TTL054	

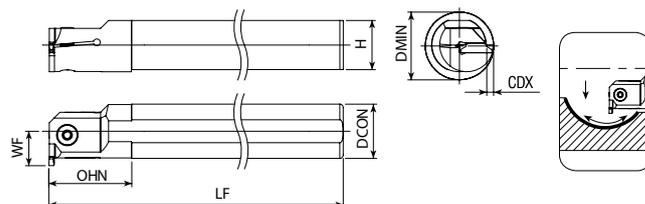
**INTERNAL GROOVING TOOLHOLDERS ROWKOWANIE WEWNĘTRZNE**
**IITK**


ORDER CODE KOD ZAMÓWIENIA	DCON	DMIN	LF	OHN	CDX	H	WF	INSERT PLYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY	
IIKTR/L016150T4MGM2	16	21	150	28	4	14.8	12	MGM.-2	2503M4x10	TTL033	
IIKTR/L020170T4MGM2	20	25	170	30	4	18.3	14		2503M4x12	TTL033	
IIKTR/L025200T6MGM2	25	32	200	40	6	23	18.5		2504M5x12	TTL054	
IIKTR/L020170T6MGM3	20	27	170	30	6	18.3	16	MGM.-3	2504M5X12	TTL054	
IIKTR/L020170T7MGM3	20	25	170	38	7	18.3	13		2504M5X12	TTL054	
IIKTR/L025200T6MGM3	25	32	200	40	6	23	18.5		2504M5x16	TTL054	
IIKTR/L025200T10MGM3	25	32	200	48	10	23	17		2504M5x16	TTL054	
IIKTR/L032250T6MGM3	32	39	250	50	6	30	22		2004M8X1X20	TTL054	
IIKTR/L032250T12MGM3	32	39	250	53	12	30	22		2004M8X1X20	TTL054	
IIKTR/L040300T6MGM3	40	47	300	55	6	37.5	26		2004M8X1X20	TTL054	
IIKTR/L040300T12MGM3	40	48	300	63	12	37.5	27	2004M8X1X20	TTL054		
IIKTR/L020170T6MGM4	20	27	170	30	6	18.3	16	MGM.-4	2504M5x12	TTL054	
IIKTR/L020170T7MGM4	20	25	170	38	7	18.3	13		2504M5x12	TTL054	
IIKTR/L025200T6MGM4	25	32	200	40	6	23	18.5		2504M5x16	TTL054	
IIKTR/L025200T10MGM4	25	32	200	49	10	23	17		2504M5x16	TTL054	
IIKTR/L032250T6MGM4	32	39	250	50	6	30	22		2004M8X1X20	TTL054	
IIKTR/L032250T12MGM4	32	39	250	53	12	30	22		2004M8X1X20	TTL054	
IIKTR/L040300T6MGM4	40	47	300	55	6	37.5	26		2004M8X1X20	TTL054	
IIKTR/L040300T12MGM4	40	48	300	63	12	37.5	27		2004M8X1X20	TTL054	
IIKTR/L025200T7MGM5	25	33	200	40	7	23	19.5		MGM.-5	2504M5x16	TTL054
IIKTR/L032250T7MGM5	32	40	250	50	7	30	23			2004M8X1X20	TTL054
IIKTR/L040300T7MGM5	40	48	300	55	7	37.5	27	2004M8X1X20		TTL054	
IIKTR/L040300T12MGM5	40	48	300	63	12	37.5	27	2004M8X1X20		TTL054	

**IITK**


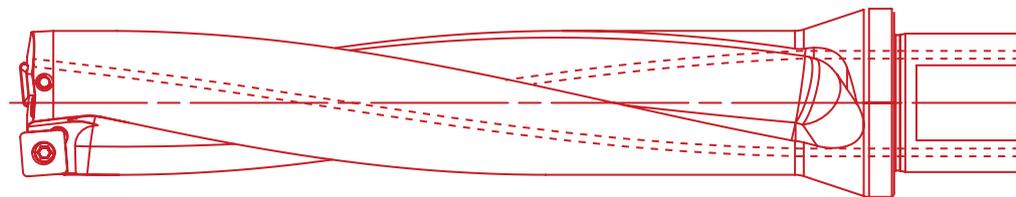
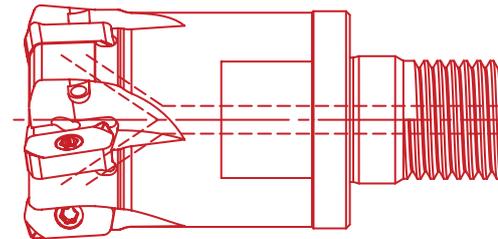
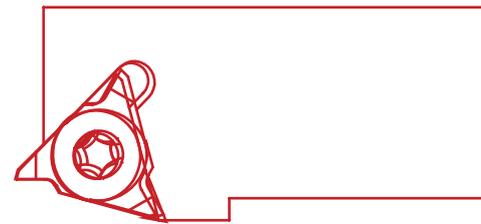
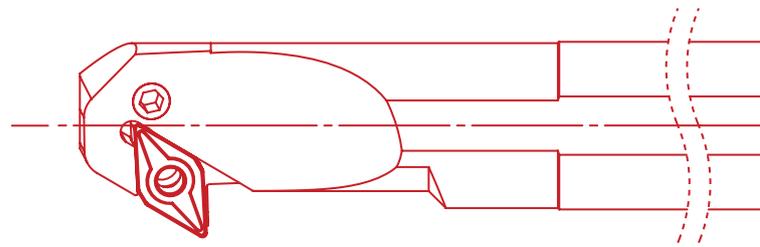
ORDER CODE KOD ZAMÓWIENIA	DCON	DMIN	LF	OHN	CDX	H	WF	INSERT PLYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY
IIKTR/L020170E3	20	25	170	40	7	18.3	13	E*MB.-3	2504M5x12	TTL054
IIKTR/L025200E3	25	32	200	50	10	23	17	E*MB.-3	2505M6x16	TTL075
IIKTR/L032250E3	32	40	250	64	12	30	22	E*MB.-3	2505M6x16	TTL075
IIKTR/L040300E3	40	48	300	80	12	37.5	27	E*MB.-3	2505M6x20	TTL075
IIKTR/L020170E4	20	25	170	40	7	18.3	13	E*MB.-4	2504M5x12	TTL054
IIKTR/L032190E4C	32	40	190	104	12.2	31	22	E*MB.-4	2504M5x14	TTL054

**INTERNAL GROOVING TOOLHOLDERS** ROWKOWANIE WEWNĘTRZNE

**IJKZ**


ORDER CODE KOD ZAMÓWIENIA	DCON	DMIN	LF	OHN	CDX	H	WF	INSERT PŁYTKI	SCREW SRUBA	ALLEN KEY KLUCZ IMBUSOWY
										
IJKZR/L203T5	20	27	170	30	5	18.3	15	GED-3	2504M5X12	TTL054
IJKZR/L203T8	20	29	170	30	8	18.3	18		2504M5X12	TTL054
IJKZR/L253T5	25	31	200	40	5	23	17.5		2504M5X16	TTL054
IJKZR/L253T10	25	36	200	40	10	23	22.5		2004XM8X1X20	TTL054
IJKZR/L323T6	32	39	250	50	6	30	22		2004XM8X1X20	TTL054
IJKZR/L323T8	32	41	250	50	8	30	24		2004XM8X1X20	TTL054
IJKZR/L323T13	32	46	250	50	13	30	29		2504M5X12	TTL054
IJKZR/L403T12	40	53	300	55	12	37.5	32		2504M5X12	TTL054
IJKZR/L254T6	25	32	200	40	6	23	18.5		2504M5X16	TTL054
IJKZR/L324T7	32	40	250	50	7	30	23		2004M8X1X20	TTL054
IJKZR/L324T8	32	41	250	50	8	30	24	2004M8X1X20	TTL054	
IJKZR/L324T10	32	43	250	50	10	30	26	2004M8X1X20	TTL054	
IJKZR/L325T7	32	40	250	50	7	30	23	2004M8X1X20	TTL054	
IJKZR/L325T8	32	41	250	50	8	30	24	2004M8X1X20	TTL054	
IJKZR/L405T8	40	49	300	55	8	37.5	28	2004M8X1X20	TTL054	
IJKZR/L405T10	40	51	300	55	10	37.5	30	2004M8X1X20	TTL054	

# CUTTING DATA PARAMETRY SKRAWANIA



# TURNING CUTTING DATA PARAMETRY SKRAWANIADLA TOCZENIA

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
CCMT060204CFP1025	180-480			
CCMT060204CFP1125	180-480	110-280	150-380	
CCMT060204CFP2115			190-450	
CCMT060204CFP3100	150-380	170-300	140-220	
CCMT060204CFP3200	150-380		140-220	
CCMT060204CMP1025	180-480			
CCMT060204CMP1125	180-480	110-280	150-380	
CCMT060204CMP2115			190-450	
CCMT060204CMP3100	150-380	170-300	140-220	
CCMT060204CMP3200	150-380		140-220	
CCMT060204CRP2115			190-450	
CCMT09T304CFP1125	180-480	110-280	150-380	
CCMT09T304CFP2115			190-450	
CCMT09T304CFP3100	150-380	170-300	140-220	
CCMT09T304CFP3200	150-380		140-220	
CCMT09T304CMP1025	180-480			
CCMT09T304CMP2115			190-450	
CCMT09T304CMP3100	150-380	170-300	140-220	
CCMT09T304CMP3200	150-380		140-220	
CCMT09T304CRP3200	150-380		140-220	
CCMT09T308CFP1125	180-480	110-280	150-380	
CCMT09T308CFP2115			190-450	
CCMT09T308CMP1125	180-480	110-280	150-380	
CCMT09T308CMP2115			190-450	
CCMT09T308CMP3100	150-380	170-300	140-220	
CCMT09T308CMP3200	150-380		140-220	
CCMT09T308CRP2115			190-450	
CCMT09T308CRP3100	150-380	170-300	140-220	
CCMT120404CFP1125	180-480	110-280	150-380	
CCMT120404CFP3100	150-380	170-300	140-220	
CCMT120404CFP3200	150-380		140-220	
CCMT120404CMP1025	180-480			
CCMT120404CMP1125	180-480	110-280	150-380	
CCMT120404CMP2115			190-450	
CCMT120404CMP3100	150-380	170-300	140-220	
CCMT120408CMP1025	180-480			
CCMT120408CMP1125	180-480	110-280	150-380	
CCMT120408CMP2115			190-450	
CCMT120408CMP3100	150-380	170-300	140-220	
CCMT120408CMP3200	150-380		140-220	
CCMT120408CRP1025	180-480			
CCMT120408CRP1125	180-480	110-280	150-380	
CCMT120408CRP2115			190-450	
CCMT120408CRP3200	150-380		140-220	
CCMT120412CMP2115			190-450	
CNMG120404CF2P3100	150-380	170-300	140-220	
CNMG120404CF2P3200	150-380		140-220	
CNMG120404CF3P1025	180-480			
CNMG120404CF3P1125	180-480	110-280	150-380	
CNMG120404CF3P2115			190-450	
CNMG120404CF3P3100	150-380	170-300	140-220	
CNMG120404CM3P3100	150-380	170-300	140-220	
CNMG120404CM5P3100	150-380	170-300	140-220	
CNMG120404CM5P3200	150-380		140-220	
CNMG120404CM6P1025	180-480			
CNMG120404CM6P1125	180-480	110-280	150-380	
CNMG120404CM6P2115			190-450	
CNMG120404CM6P3100	150-380	170-300	140-220	
CNMG120404CM7P1025	180-480			
CNMG120404CM7P1125	180-480	110-280	150-380	
CNMG120404CM8P3100	150-380	170-300	140-220	
CNMG120404CM9P1025	180-480			
CNMG120404CM9P1125	180-480	110-280	150-380	
CNMG120404CM9P3100	150-380	170-300	140-220	
CNMG120404P1025	180-480			
CNMG120404P1125	180-480	110-280	150-380	
CNMG120404P2115			190-450	
CNMG120404P3100	150-380	170-300	140-220	
CNMG120404P3200	150-380		140-220	
CNMG120408CF2P3100	150-380	170-300	140-220	
CNMG120408CF2P3200	150-380		140-220	
CNMG120408CF3P1025	180-480			
CNMG120408CF3P1125	180-480	110-280	150-380	

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
CNMG120408CF3P3100	150-380	170-300	140-220	
CNMG120408CM3P3100	150-380	170-300	140-220	
CNMG120408CM3P3200	150-380		140-220	
CNMG120408CM5P2115			190-450	
CNMG120408CM5P3100	150-380	170-300	140-220	
CNMG120408CM5P3200	150-380		140-220	
CNMG120408CM6P1025	180-480			
CNMG120408CM6P1125	180-480	110-280	150-380	
CNMG120408CM6P2115			190-450	
CNMG120408CM6P3100	150-380	170-300	140-220	
CNMG120408CM6P3200	150-380		140-220	
CNMG120408CM7P1025	180-480			
CNMG120408CM7P1125	180-480	110-280	150-380	
CNMG120408CM8P3200	150-380		140-220	
CNMG120408CM9P1025	180-480			
CNMG120408CM9P1125	180-480	110-280	150-380	
CNMG120408CM9P3100	150-380	170-300	140-220	
CNMG120408CR8P2115			190-450	
CNMG120408CR9P2115			190-450	
CNMG120408P1025	180-480			
CNMG120408P1125	180-480	110-280	150-380	
CNMG120408P2115			190-450	
CNMG120408P3100	150-380	170-300	140-220	
CNMG120408P3200	150-380		140-220	
CNMG120412CM3P3100	150-380	170-300	140-220	
CNMG120412CM3P3200	150-380		140-220	
CNMG120412CM6P1025	180-480			
CNMG120412CM6P1125	180-480	110-280	150-380	
CNMG120412CM6P2115			190-450	
CNMG120412CM6P3100	150-380	170-300	140-220	
CNMG120412CM9P1025	180-480			
CNMG120412CM9P1125	180-480	110-280	150-380	
CNMG120412CM9P3100	150-380	170-300	140-220	
CNMG120412CR8P2115			190-450	
CNMG120412CR8P3200	150-380		140-220	
CNMG120412CR9P1025	180-480			
CNMG120412CR9P1125	180-480	110-280	150-380	
CNMG120412CR9P2115			190-450	
CNMG120412CR9P3100	150-380	170-300	140-220	
CNMG120412P1025	180-480			
CNMG120412P1125	180-480	110-280	150-380	
CNMG120412P2115			190-450	
CNMG120412P3100	150-380	170-300	140-220	
CNMG120412P3200	150-380		140-220	
CNMG160616CM6P1125	180-480	110-280	150-380	
CNMG160616CM6P3100	150-380	170-300	140-220	
CNMG160616CR8P2115			190-450	
CNMG160616CR9P1125	180-480	110-280	150-380	
CNMG160616CR9P2115			190-450	
CNMG160616CR9P3100	150-380	170-300	140-220	
CNMG160616CR9P3200	150-380		140-220	
CNMG160616P2115			190-450	
CNMM120412HDRP1125	180-480	110-280	150-380	
DCMT070204CFP1025	180-480			
DCMT070204CFP1125	180-480	110-280	150-380	
DCMT070204CFP3200	150-380		140-220	
DCMT070204CMP1025	180-480			
DCMT070204CMP1125	180-480	110-280	150-380	
DCMT070204CMP2115			190-450	
DCMT070204CM3P100	150-380	170-300	140-220	
DCMT070204CM3P200	150-380		140-220	
DCMT11T304CFP1025	180-480			
DCMT11T304CFP1125	180-480	110-280	150-380	
DCMT11T304CFP2115			190-450	
DCMT11T304CFP3100	150-380	170-300	140-220	
DCMT11T304CFP3200	150-380		140-220	
DCMT11T304CMP1025	180-480			
DCMT11T304CMP1125	180-480	110-280	150-380	
DCMT11T304CMP2115			190-450	
DCMT11T304CMP3100	150-380	170-300	140-220	
DCMT11T304CMP3200	150-380		140-220	
DCMT11T304CRP3100	150-380	170-300	140-220	
DCMT11T308CFP3100	150-380	170-300	140-220	

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
DCMT11T308CMP1025	180-480			
DCMT11T308CMP1125	180-480	110-280	150-380	
DCMT11T308CMP2115			190-450	
DCMT11T308CMP3100	150-380	170-300	140-220	
DCMT11T308CMP3200	150-380		140-220	
DNMG110404CM3P3100	150-380	170-300	140-220	
DNMG110404CM5P3100	150-380	170-300	140-220	
DNMG110404CM5P3200	150-380		140-220	
DNMG110404CM6P1025	180-480			
DNMG110404CM6P2115			190-450	
DNMG110404CM6P3100	150-380	170-300	140-220	
DNMG110408CM7P3100	150-380	170-300	140-220	
DNMG110408CM5P3100	150-380	170-300	140-220	
DNMG110408CM5P3200	150-380		140-220	
DNMG110408CM6P2115			190-450	
DNMG110408CM6P3100	150-380	170-300	140-220	
DNMG110408CM6P3200	150-380		140-220	
DNMG110408P2115			190-450	
DNMG110408P3100	150-380	170-300	140-220	
DNMG150404CF3P1025	180-480			
DNMG150404CM5P3100	150-380	170-300	140-220	
DNMG150404CM5P3200	150-380		140-220	
DNMG150404CM6P1025	180-480			
DNMG150404CM6P1125	180-480	110-280	150-380	
DNMG150404CM6P2115			190-450	
DNMG150404CM7P1025	180-480			
DNMG150404CM7P1125	180-480	110-280	150-380	
DNMG150404P1025	180-480			
DNMG150404P2115			190-450	
DNMG150404P3100	150-380	170-300	140-220	
DNMG150408CF3P1125	180-480	110-280	150-380	
DNMG150408CM5P1025	180-480			
DNMG150408CM5P3100	150-380	170-300	140-220	
DNMG150408CM5P3200	150-380		140-220	
DNMG150408CM6P1025	180-480			
DNMG150408CM6P1125	180-480	110-280	150-380	
DNMG150408CM6P2115			190-450	
DNMG150408CM6P3100	150-380	170-300	140-220	
DNMG150408CM6P3200	150-380		140-220	
DNMG150408CM7P1025	180-480			
DNMG150408CM7P1125	180-480	110-280	150-380	
DNMG150408CM7P3200	150-380		140-220	
DNMG150408CR8P2115			190-450	
DNMG150408P1025	180-480			
DNMG150408P2115			190-450	
DNMG150408P3100	150-380	170-300	140-220	
DNMG150412CM5P1025	180-480			
DNMG150412CM5P3100	150-380	170-300	140-220	
DNMG150412CM5P3200	150-380		140-220	
DNMG150412CM6P1025	180-480			
DNMG150412CM6P1125	180-480	110-280	150-380	
DNMG150412CM6P2115			190-450	
DNMG150412CR8P2115			190-450	
DNMG150412CR9P1125	180-480	110-280	150-380	
DNMG150412P21025	180-480			
DNMG150412P2115	180-480			
DNMG150412P2125	180-480	110-280	150-380	
DNMG150604CM3P3100	150-380	170-300	140-220	
DNMG150604CM3P3200	150-380		140-220	
DNMG150604CM5P3100	150-380	170-300	140-220	
DNMG150604CM5P3200	150-380		140-220	
DNMG150604CM6P1025	180-480			
DNMG150604CM6P2115			190-450	
DNMG150604CM6P3100	150-380	170-300	140-220	
DNMG1506				

# TURNING CUTTING DATA PARAMETRY SKRAWANIADLA TOCZENIA

ORDER CODE KOD ZAMÓWIENIA	P M K S				ORDER CODE KOD ZAMÓWIENIA	P M K S				ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)					Vc (mm/min)					Vc (mm/min)			
DNMG150608CM6P1025	180-480				SNMG120412CM6P1125	180-480	110-280	150-380		TNMG160404CM9P3200	150-380		140-220	
DNMG150608CM6P1125	180-480	110-280	150-380		SNMG120412CM6P2115			190-450		TNMG160404CR8P3100	150-380	170-300	140-220	
DNMG150608CM6P2115			190-450		SNMG120412CM7P1125	180-480	110-280	150-380		TNMG160404P1025	180-480			
DNMG150608CM6P3100	150-380	170-300	140-220		SNMG120412CR8P2115			190-450		TNMG160404P1125	180-480	110-280	150-380	
DNMG150608CM6P3200	150-380		140-220		SNMG120412CR9P1025	180-480				TNMG160404P2115			190-450	
DNMG150608CM7P1125	180-480	110-280	150-380		SNMG120412CR9P1125	180-480	110-280	150-380		TNMG160404P3100	150-380	170-300	140-220	
DNMG150608CR9P1125	180-480	110-280	150-380		SNMG120412CR9P2115			190-450		TNMG160404P3200	150-380	170-300	140-220	
DNMG150608P1125	180-480	110-280	150-380		SNMG120412P1025	180-480				TNMG160404P3200	150-380	170-300	140-220	
DNMG150608P3100	150-380	170-300	140-220		SNMG120412P1125	180-480	110-280	150-380		TNMG160408CF2P3100	150-380	170-300	140-220	
DNMG150608P3200	150-380		140-220		SNMG120412P2115			190-450		TNMG160408CF2P3200	150-380		140-220	
DNMG150612CM5P3100	150-380	170-300	140-220		SNMG120412P3100	150-380	170-300	140-220		TNMG160408CF3P1025	180-480			
DNMG150612CM5P3200	150-380		140-220		SNMG120412P3200	150-380		140-220		TNMG160408CF3P1125	180-480	110-280	150-380	
DNMG150612CM6P1025	180-480				TCMT110204CFP1025	180-480				TNMG160408CF3P3100	150-380	170-300	140-220	
DNMG150612CM6P1125	180-480	110-280	150-380		TCMT110204CFP1125	180-480	110-280	150-380		TNMG160408CM3P100	150-380	170-300	140-220	
DNMG150612CM6P2115			190-450		TCMT110204CFP3100	150-380	170-300	140-220		TNMG160408CM3P3200	150-380		140-220	
DNMG150612CM6P3100	150-380	170-300	140-220		TCMT110204CFP3200	150-380		140-220		TNMG160408CM5P1025	180-480			
DNMG150612CM6P3200	150-380		140-220		TCMT110204CMP1025	180-480				TNMG160408CM5P1125	180-480	110-280	150-380	
DNMG150612CR9P1025	180-480				TCMT110204CMP1125	180-480	110-280	150-380		TNMG160408CM5P3100	150-380	170-300	140-220	
DNMG150612CR9P1125	180-480	110-280	150-380		TCMT110204CMP3100	150-380	170-300	140-220		TNMG160408CM5P3200	150-380		140-220	
DNMG150612CR9P2115			190-450		TCMT110204CMP3200	150-380		140-220		TNMG160408CM6P1025	180-480			
DNMG150612CR9P3200	150-380		140-220		TCMT110208CMP1025	180-480				TNMG160408CM6P1125	180-480	110-280	150-380	
DNMG150612P1125	180-480	110-280	150-380		TCMT110208CMP1125	180-480	110-280	150-380		TNMG160408CM6P2115			190-450	
DNMG150612P2115			190-450		TCMT110208CMP3100	150-380	170-300	140-220		TNMG160408CM6P3100	150-380	170-300	140-220	
DNMG150612P3100	150-380	170-300	140-220		TCMT110208CMP3200	150-380		140-220		TNMG160408CM7P1125	180-480	110-280	150-380	
DNMG150612P3200	150-380		140-220		TCMT110208CRP2115	180-480		190-450		TNMG160408CM7P3100	150-380	170-300	140-220	
KNUX160405LP1025	180-480				TCMT110208CRP3100	180-480				TNMG160408CM8P1025	180-480			
KNUX160405LP1125	180-480	110-280	150-380		TCMT110208CRP3200	180-480				TNMG160408CM8P3100	150-380	170-300	140-220	
KNUX160405LP2115			190-450		TCMT16T304CFP1025	180-480				TNMG160408CM8P3200	150-380		140-220	
KNUX160405RP1025	180-480				TCMT16T304CFP1125	180-480	110-280	150-380		TNMG160408CM9P1025	180-480			
KNUX160405RP1125	180-480	110-280	150-380		TCMT16T304CFP2115	180-480		190-450		TNMG160408CM9P1125	180-480	110-280	150-380	
KNUX160405RP2115			190-450		TCMT16T304CFP3100	150-380	170-300	140-220		TNMG160408CM9P3100	150-380	170-300	140-220	
RCMT0602CNNP3200	150-380		140-220		TCMT16T304CFP3200	150-380		140-220		TNMG160408CR8P2115			190-450	
RCMT0803CNNP3200	150-380		140-220		TCMT16T304CFP3200	150-380		140-220		TNMG160408CR9P1025	180-480			
RCMT10T3CNNP3200	150-380		140-220		TCMT16T304CMP1125	180-480	110-280	150-380		TNMG160408CR9P1125	180-480	110-280	150-380	
RCMT1204CNNP3200	150-380		140-220		TCMT16T304CMP1125	180-480	110-280	150-380		TNMG160408CR9P2115			190-450	
SCMT09T304CFP1025	180-480				TCMT16T304CMP3100	150-380	170-300	140-220		TNMG160408CR9P3100	150-380	170-300	140-220	
SCMT09T304CFP1125	180-480	110-280	150-380		TCMT16T304CMP3200	150-380		140-220		TNMG160408P1025	180-480			
SCMT09T304CFP3100	150-380	170-300	140-220		TCMT16T304CRP1125	180-480	110-280	150-380		TNMG160408P1125	180-480	110-280	150-380	
SCMT09T304CMP1025	180-480				TCMT16T304CRP2115	180-480		190-450		TNMG160408P2115			190-450	
SCMT09T304CMP1125	180-480	110-280	150-380		TCMT16T304CRP3100	180-480				TNMG160408P3100	150-380	170-300	140-220	
SCMT09T304CMP2115			190-450		TCMT16T304CRP3200	180-480				TNMG160408P3200	150-380		140-220	
SCMT09T304CMP3100	150-380	170-300	140-220		TCMT16T312CMP1025	180-480				TNMG160412CF2P3100	150-380	170-300	140-220	
SCMT09T304P1025	180-480				TCMT16T312CMP1125	180-480	110-280	150-380		TNMG160412CF3P1125	180-480	110-280	150-380	
SCMT09T304P1125	180-480	110-280	150-380		TCMT16T312CMP3100	150-380	170-300	140-220		TNMG160412CM3P3100	150-380	170-300	140-220	
SCMT09T308CFP1125	180-480	110-280	150-380		TNMG160404CF2P3100	150-380	170-300	140-220		TNMG160412CM5P1025	180-480			
SCMT09T308CFP1025	180-480				TNMG160404CF2P3200	150-380		140-220		TNMG160412CM5P3100	150-380	170-300	140-220	
SCMT09T308CFP3100	150-380	170-300	140-220		TNMG160404CF3P1025	180-480				TNMG160412CM5P3200	150-380		140-220	
SCMT09T308CFP3200	150-380		140-220		TNMG160404CF3P1125	180-480	110-280	150-380		TNMG160412CM6P1025	180-480			
SNMG120408CF2P3100	150-380	170-300	140-220		TNMG160404CF3P2115			190-450		TNMG160412CM6P1125	180-480	110-280	150-380	
SNMG120408CF2P3200	150-380		140-220		TNMG160404CF3P3100	150-380	170-300	140-220		TNMG160412CM6P2115			190-450	
SNMG120408CM3P3100	150-380	170-300	140-220		TNMG160404CF3P3200	150-380		140-220		TNMG160412CM6P3100	150-380	170-300	140-220	
SNMG120408CM3P3200	150-380		140-220		TNMG160404CM3P3100	150-380	170-300	140-220		TNMG160412CM6P3200	150-380		140-220	
SNMG120408CM5P3100	150-380	170-300	140-220		TNMG160404CM3P3200	150-380		140-220		TNMG160412CM9P1025	180-480			
SNMG120408CM5P3200	150-380		140-220		TNMG160404CM5P1125	180-480	110-280	150-380		TNMG160412CM9P1125	180-480	110-280	150-380	
SNMG120408CM6P1025	180-480				TNMG160404CM5P3100	150-380	170-300	140-220		TNMG160412CM9P2115			190-450	
SNMG120408CM6P1125	180-480	110-280	150-380		TNMG160404CM5P3200	150-380		140-220		TNMG160412CR8P2115			190-450	
SNMG120408CM6P2115			190-450		TNMG160404CM6P1025	180-480				TNMG160412CR8P3100	150-380	170-300	140-220	
SNMG120408CM6P3100	150-380	170-300	140-220		TNMG160404CM6P1125	180-480	110-280	150-380		TNMG160412CM9P1025	180-480			
SNMG120408CM7P1025	180-480				TNMG160404CM6P2115			190-450		TNMG160412CM9P1125	180-480	110-280	150-380	
SNMG120408CM7P1125	180-480	110-280	150-380		TNMG160404CM6P3100	150-380	170-300	140-220		TNMG160412CM9P2115			190-450	
SNMG120408CM7P3100	150-380	170-300	140-220		TNMG160404CM6P3200	150-380		140-220		TNMG160412CR9P1025	180-480			
SNMG120408CR8P2115			190-450		TNMG160404CM7P1025	180-480	110-280	150-380		TNMG160412CR9P1125	180-480	110-280	150-380	
SNMG120408P1025	180-480				TNMG160404CM7P1125	180-480				TNMG160412CR9P2115	150-380		140-220	
SNMG120408P1125	180-480	110-280	150-380		TNMG160404CM7P3100	150-380	170-300	140-220		TNMG160412P1025	180-480			
SNMG120408P2115			190-450		TNMG160404CM8P3100	150-380	170-300	140-220		TNMG160412P1125	180-480	110-280	150-380	
SNMG120408P3100	150-380	170-300	140-220		TNMG160404CM8P3200	150-380		140-220		TNMG160412P2115			190-450	
SNMG120408P3200	150-380		140-220		TNMG160404CM9P1025	180-480				TNMG160412P3200	150-380		140-220	
SNMG120412CM3P3100	150-380	170-300	140-220		TNMG160404CM9P1125	180-480	110-280	150-380		TNMG220408CM3P3100	150-380	170-300	140-220	
SNMG120412CM3P3200	150-380		140-220		TNMG160404CM9P2115			190-450		TNMG220408CM3P3200	150-380		140-220	
SNMG120412CM5P3100	150-380	170-300	140-220		TNMG160404CM9P3100	150-380	170-300	140-220						
SNMG120412CM5P3200	150-380		140-220											
SNMG120412CM6P1025	180-480													

# TURNING CUTTING DATA PARAMETRY SKRAWANIADLA TOCZENIA

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
TNMG220408CM6P1025	180-480			
TNMG220408CM6P1125	180-480	110-280	150-380	
TNMG220408CM6P2115			190-450	
TNMG220408CM6P3100	150-380	170-300	140-220	
TNMG220408CM6P3200	150-380		140-220	
TNMG220408P1025	180-480			
TNMG220408P1125	180-480	110-280	150-380	
TNMG220408P2115			190-450	
TNMG220408P3200	150-380		140-220	
TNMG220412CM6P2115			190-450	
TNMG220412CM6P3100	150-380	170-300	140-220	
TNMG220412CR8P2115			190-450	
TNMG220412CR9P1125	180-480	110-280	150-380	
TNMG220412P1125	180-480	110-280	150-380	
TNMG220412P2115			190-450	
TNMG220412P3100	150-380	170-300	140-220	
TNUX160404LP3200	150-380		140-220	
TNUX160404RP3200	150-380		140-220	
TNUX160408LP3200	150-380		140-220	
TNUX160408RP3200	150-380		140-220	
TPMR160304D3P3100	150-380	170-300	140-220	
TPMR160304P1025	180-480			
TPMR160304P1125	180-480	110-280	150-380	
TPMR160308P2115			190-450	
VBMT110204CFP3100	150-380	170-300	140-220	
VBMT160404CF2P3100	150-380	170-300	140-220	
VBMT160404CM5P2115			190-450	
VBMT160404CM5P3100	150-380	170-300	140-220	
VBMT160404CM5P3200	150-380		140-220	
VBMT160404CMP1125	180-480	110-280	150-380	
VBMT160404CMP2115			190-450	
VBMT160404CMP3100	150-380	170-300	140-220	
VBMT160404P1025	180-480			
VBMT160404P1125	180-480	110-280	150-380	
VBMT160404P2115			190-450	
VBMT160404P3100	150-380	170-300	140-220	
VBMT160404P3200	150-380		140-220	
VBMT160408CF2P3100	150-380	170-300	140-220	
VBMT160408CMP1025	180-480			
VBMT160408CMP2115			190-450	
VBMT160408CMP3100	150-380	170-300	140-220	
VBMT160408CMP3200	150-380		140-220	
VBMT160408CRP2115			190-450	
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VBMT160408P2115			190-450	
VBMT160408P3100	150-380	170-300	140-220	
VBMT160408P3200	150-380		140-220	
VCMT160404CF1P1025	180-480			
VCMT160404P1025	180-480			
VCMT160404P2115			190-450	
VCMT160404P3100	150-380	170-300	140-220	
VCMT160404P3200	150-380		140-220	
VCMT160408CF1P3100	150-380	170-300	140-220	
VCMT160408CF1P3200	150-380		140-220	
VNMG160404CF3P1125	180-480	110-280	150-380	
VNMG160404CF3P3100	150-380	170-300	140-220	
VNMG160404CM3P3100	150-380	170-300	140-220	
VNMG160404CM3P3200	150-380		140-220	
VNMG160404CM5P1025	180-480			
VNMG160404CM5P1125	180-480	110-280	150-380	
VNMG160404CM5P3100	150-380	170-300	140-220	
VNMG160404CM5P3200	150-380		140-220	
VNMG160404CM6P1025	180-480			
VNMG160404CM6P1125	180-480	110-280	150-380	
VNMG160404CM6P2115			190-450	
VNMG160404CM6P3100	150-380	170-300	140-220	
VNMG160404CM7P1025	180-480			
VNMG160404CM7P1125	180-480	110-280	150-380	
VNMG160404CM8P3100	150-380	170-300	140-220	
VNMG160404CM9P1025	180-480			
VNMG160404CM9P1125	180-480	110-280	150-380	
VNMG160404CM9P3100	150-380	170-300	140-220	
VNMG160404CM9P3200	150-380		140-220	

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
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VNMG160404CM6P2115			190-450	
VNMG160404CM6P3100	150-380	170-300	140-220	
VNMG160404CM6P3200	150-380		140-220	
VNMG160404P1025	180-480			
VNMG160404P1125	180-480	110-280	150-380	
VNMG160404P2115			190-450	
VNMG160404P3100	150-380	170-300	140-220	
VNMG160404P3200	150-380		140-220	
VNMG160408CF3P1025	180-480			
VNMG160408CF3P1125	180-480	110-280	150-380	
VNMG160408CF3P2115			190-450	
VNMG160408CM3P100	150-380	170-300	140-220	
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VNMG160408CM5P3100	150-380	170-300	140-220	
VNMG160408CM5P3200	150-380		140-220	
VNMG160408CM6P1025	180-480			
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VNMG160408CM6P2115			190-450	
VNMG160408CM6P3200	150-380		140-220	
VNMG160408CM9P1025	180-480			
VNMG160408CM9P1125	180-480	110-280	150-380	
VNMG160408CM9P3100	150-380	170-300	140-220	
VNMG160408CM9P3200	150-380		140-220	
VNMG160408P1025	180-480			
VNMG160408P1125	180-480	110-280	150-380	
VNMG160408P2115			190-450	
VNMG160408P3100	150-380	170-300	140-220	
VNMG160408P3200	150-380		140-220	
VNMG060404CF3P1025	180-480			
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VNMG060404CF3P3100	150-380	170-300	140-220	
VNMG060404CF3P31125	180-480	110-280	150-380	
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VNMG060408CM3P3100	150-380	170-300	140-220	
VNMG060408CM6P1025	180-480			
VNMG060408CM6P2115			190-450	
VNMG060408CM6P3100	150-380	170-300	140-220	
VNMG060408CM6P3200	150-380		140-220	
VNMG080404CF2P3100	150-380	170-300	140-220	
VNMG080404CF2P3200	150-380		140-220	
VNMG080404CF3P1025	180-480			
VNMG080404CF3P1125	180-480	110-280	150-380	
VNMG080404CF3P2115			190-450	
VNMG080404CF3P3100	150-380	170-300	140-220	
VNMG080404CF3P3200	150-380		140-220	
VNMG080404CM3P3100	150-380	170-300	140-220	
VNMG080404CM3P3200	150-380		140-220	
VNMG080404CM5P1025	180-480			
VNMG080404CM5P1125	180-480	110-280	150-380	
VNMG080404CM5P3100	150-380	170-300	140-220	
VNMG080404CM5P3200	150-380		140-220	
VNMG080404CM6P1025	180-480			
VNMG080404CM6P1125	180-480	110-280	150-380	
VNMG080404CM6P3100	150-380	170-300	140-220	
VNMG080404CM6P3200	150-380		140-220	
VNMG080404CM7P1025	180-480			
VNMG080404CM7P1125	180-480	110-280	150-380	
VNMG080404CM7P3100	150-380	170-300	140-220	
VNMG080404CM7P3200	150-380		140-220	
VNMG080404CM8P3100	150-380	170-300	140-220	
VNMG080404CM9P1025	180-480			
VNMG080404CM9P1125	180-480	110-280	150-380	
VNMG080404CM9P3100	150-380	170-300	140-220	
VNMG080404CM9P3200	150-380		140-220	

ORDER CODE KOD ZAMÓWIENIA	P M K S			
	Vc (mm/min)			
WNMG080404CM9P1125	180-480	110-280	150-380	
WNMG080404CM9P3100	150-380	170-300	140-220	
WNMG080404CR8P2115			190-450	
WNMG080404P1025	180-480			
WNMG080404P1125	180-480	110-280	150-380	
WNMG080404P2115			190-450	
WNMG080404P3100	150-380	170-300	140-220	
WNMG080404P3200	150-380		140-220	
WNMG080408CF2P3100	150-380	170-300	140-220	
WNMG080408CF2P3200	150-380		140-220	
WNMG080408CF3P1025	180-480			
WNMG080408CF3P1125	180-480	110-280	150-380	
WNMG080408CF3P2115			190-450	
WNMG080408CF3P3100	150-380	170-300	140-220	
WNMG080408CF3P3200	150-380		140-220	
WNMG080408CM3P3100	150-380	170-300	140-220	
WNMG080408CM3P3200	150-380		140-220	
WNMG080408CM5P1025	180-480			
WNMG080408CM5P1125	180-480	110-280	150-380	
WNMG080408CM5P2115			190-450	
WNMG080408CM5P3100	150-380	170-300	140-220	
WNMG080408CM5P3200	150-380		140-220	
WNMG080408CM7P1025	180-480			
WNMG080408CM7P1125	180-480	110-280	150-380	
WNMG080408CM7P2115			190-450	
WNMG080408CM8P3200	150-380		140-220	
WNMG080408CM9P1025	180-480			
WNMG080408CM9P1125	180-480	110-280	150-380	
WNMG080408CM9P2115			190-450	
WNMG080408CM9P3100	150-380	170-300	140-220	
WNMG080408CM9P3200	150-380		140-220	
WNMG080408CR8P2115			190-450	
WNMG080408CR9P1025	180-480			
WNMG080408CR9P1125	180-480	110-280	150-380	
WNMG080408CR9P2115			190-450	
WNMG080408P1025	180-480			
WNMG080408P1125	180-480	110-280	150-380	
WNMG080408P2115			190-450	
WNMG080408P3100	150-380	170-300	140-220	
WNMG080408P3200	150-380		140-220	
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WNMG080412CM3P3200	150-380		140-220	
WNMG080412CM5P3100	150-380	170-300	140-220	
WNMG080412CM5P3200	150-380		140-220	
WNMG080412CM6P1025	180-480			
WNMG080412CM6P1125	180-480	110-280	150-380	
WNMG080412CM6P3100	150-380	170-300	140-220	
WNMG080412CM6P3200	150-380		140-220	
WNMG080412CM9P1025	180-480			
WNMG080412CM9P1125	180-480	110-280	150-380	
WNMG080412CM9P3100	150-380	170-300	140-220	
WNMG080412CR8P2115			190-450	
WNMG080412CR9P1025	180-480			
WNMG080412CR9P1125	180-480	110-280	150-380	
WNMG080412CR9P3100	150-380	170-300	140-220	
WNMG080412P1025	180-480			
WNMG080412P2115			190-450	
WNMG080412P3100	150-380	170-300	140-220	
WNMG080412P3200	150-380		140-220	

**THREAD TURNING CUTTING DATA** PARAMETRY SKRAWANIADLA TOCZENIA GWINTÓW

	MATERIAL MATERIAŁ	HARDNESS HB TWARDOŚĆ HB	COATED POKRYWANE		UNCOATED NIEPOKRYWANE
			P508	P509	P511
			CUTTING SPEED VC M/MIN PRĘDKOŚĆ SKRAWANIA VC M/MIN		
<b>P</b> STEEL STAL	NON-ALLOY STEEL FREE MACHINING STEEL STAL NIESTOPOWA STALA AUTOMATOWA	130	120-200	110-180	-
	LOW CARBON ALLOY STEEL STAL STOPOWA NISKOWĘGLOWA	200	110-180	100-170	-
	HIGH CARBON ALLOY STEEL STAL STOPOWA WYSOKOWĘGLOWA	240	100-170	90-160	-
	TOOL STEEL CAST STEEL STAL NARZĘDZIOWA STALIWO	270	70-120	60-110	-
	HEAT TREATED STEEL STAL ULEPSZANA CIEPLNIE	400	50-90	50-90	-
<b>M</b> STAINLESS STEEL STAL NIERDZENA	300 STAINLESS STEEL STAL NIERDZEWNA KWASOODPORNĄ: (303,304,316)	200	70-140	70-130	-
	400 STAINLESS STEEL STAL NIERDZEWNA KWASOODPORNĄ: (420, 440)	240	80-120	80-130	-
	17-4 PH, 15-5 PH, 13-8MO PH	400	50-110	50-110	-
<b>K</b> CAST IRON ŻELIWO	GREY CAST IRON ŻELIWO SZARE	190	70-150	80-150	80-120
	NODULAR CAST IRON ŻELIWO SFEROIDALNE	180	100-140	90-130	90-130
	MALLEABLE CAST IRON ŻELIWO CIĄGLIWE	240	90-150	90-140	80-130
<b>N</b> ALUMINIUM ALUMINIUM	WROUGHT ALUMINIUM ALUMINIUM CZYSTE: (2024, 6061, 7075...)	80	100-400	100-400	100-300
	CAST ALUMINIUM ALUMINIUM ODLEWNICZE	90	150-400	150-400	100-250
	COPPER ALLOYS: BRASS, BRONZE, COPPER SILICON STOPY MIEDZI: MOSIĄDZ, BRĄZ, MIEDŹ KRZEMOWA	100	80-180	80-180	60-150
	NON METALIC: RUBBER, POLYPROPYLENE, THERMOPLASTICS ( PVC ), THERMOSETTING PLASTICS (FIBERGLASS), POLYAMIDES NIEMETALE: KAUCZUK, POLPROPYLEN, TWORZYWA TERMOPLASTYCZNE (WŁÓKNA SZKLANE)	-	200-500	200-500	200-500
<b>S</b> HEAT RESISTENT/ TITANIUM ALLOYS ODPORNE NA CIEPŁO/ STOPY TYTANU	PURE TITANIUM TYTAN CZYSTY: 99.0TI	-	100-150	100-150	70-130
	ALPHA ALLOYS STOPY -A: TI 5AL2.5SN	-	40-60	40-60	30-50
	BETA ALLOYS STOPY -B: TI 13V11CR3AL	-	30-50	30-50	25-40
	ALPHA-BETA ALLOYS STOPY A-B: TI 6AL4V	-	30-50	30-50	25-40
	COBALT BASE ALLOYS: STELLITE STOPY KOBALTU: STELLIT	350	20-40	20-40	20-30
	NIKEL BASE ALLOYS: INCONEL, HASTELLOY, WASPALLOY, KOVAR STOPY NIKLU: INKONEL, HASTALLOY, WASPALOY, KOVAR (FE-NI-CO)	300	20-40	20-35	20-40
	HIGH TEMPERATURE ALLOYS: IRON BASED:INCOLOY STOP ŻELAZA ŻAROWYTRZYMAŁY: INCOLOY	270	30-60	30-50	-
<b>H</b> HARDENED MATERIALS STAL HARTOWANA	HARDENED STEEL STALE HARTOWANE	56 HRC	30-50	25-45	-
	HARDENED CAST IRON ŻELIWO UTWARDZONE	50 HRC	25-35	25-40	-

## THREAD TURNING CUTTING DATA PARAMETRY SKRAWANIA DLA TOCZENIA GWINTÓW

P STEEL STAL					M STAINLESS STEEL STAL NIERDZENA					K CAST IRON ZELIWO					N ALUMINIUM ALUMINIUM				S HEAT RESISTANT/ TITANIUM ALLOYS ODPORNE NA CIEPŁO/ STOPY TYTANU				H HARDENED MATERIALS STAL HARTOWANA						
P10	P20	P25	P30	P40	M10	M20	M25	M30	M40	K10	K15	K20	K30	K40	N10	N20	N30	N40	S10	S20	S30	S40	H10	H20	H30	H40			
	P508					P508					P508					P508					P508								
	P509					P509					P509					P509					P509					P509			
											P511					P511					P511								
P3200											P3200																		
P3100					P3100					P3100																			

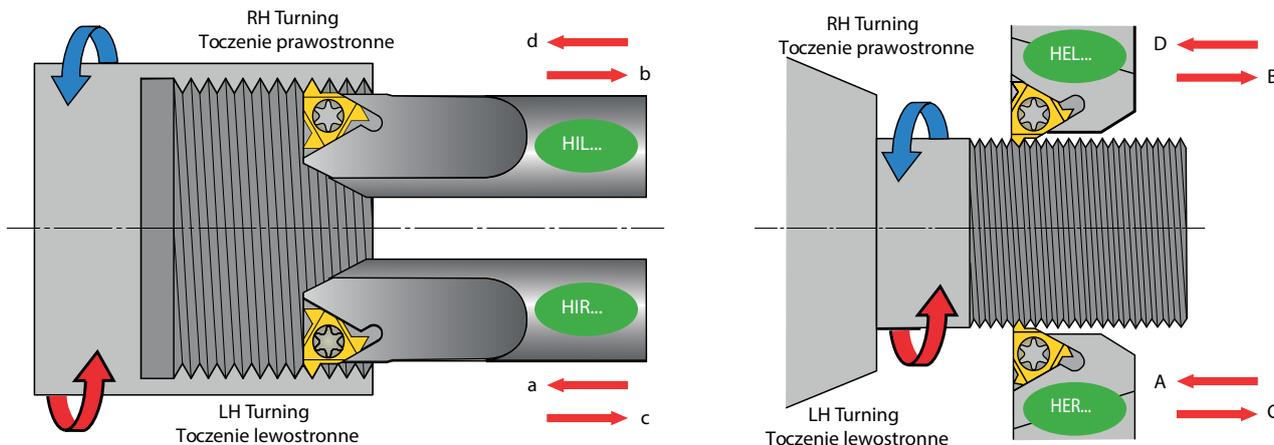
GRADE GATUNEK	DESCRIPTION OPIS	APPLICATION ISO ZASTOSOWANIE WG ISO
P508	AN ADVANCED PVD COATED GRADE OVER A TOUGH WEAR-RESISTANT SUBMICRON SUBSTRATE FOR GENERAL PURPOSE MACHINING OF STEEL, STAINLESS STEEL, SUPERALLOYS. GATUNEK WĘGLIKA Z ZAAWANSOWANĄ POWŁOKĄ PVD NA SUB-MIKRONOWYM PODŁOŻU O DUŻEJ ODPORNOŚCI NA OBCIĄŻENIA DYNAMICZNE DO OBRÓBKI OGÓLNEJ STALI, STALI NIERDZEWNEJ, SUPERSTOPÓW.	P20-P30 M20-M30 K20-K30 N10-N30 S10-S20 H10-H30
P509	SPECIAL MULTILAYER PVD COATING WITH A TOUGH, VERY FINE GRAIN SUBSTRATE, FOR MACHINING MOST STEEL, STAINLESS STEELS, CAST IRON, NON-FERROUS MATERIALS AND SUPER ALLOYS. TWARDY GATUNEK O BARDZO MAŁYM ZIARNIE ZE SPECJALNĄ WIELOWARSTWOWĄ POWŁOKĄ PVD DO OBRÓBK WIEKUSZOŚCI STALI, STALI NIERDZEWNYCH, ŻELIWA, METALI NIEŻELAZNYCH ORAZ SUPERSTOPÓW.	P20-P30 M20-M40 K20-K40 N20-N30 S20-S30 H20-H40
P511	UNCOATED GRADE, FOR MACHINING CAST IRON, NON-FERROUS MATERIALS ALUMINIUM AND SUPER ALLOYS. GATUNEK BEZ POKRYCIA, DO OBRÓBK ŻELIWA, MATERIAŁÓW NIEMETALOWYCH, ALUMINIUM I SUPER-STOPÓW.	K20-K40 N20-N40 S20-S40
P3100	2-4UM TIALN PVD COATED, COMBINATING WITH ULTRA FINE PARTICLES' SUBSTRATES WITH HIGH-TOUGHNESS, SUITABLE FOR ALL MATERIALS, STAINLESS STEEL, STEEL, CAST ALLOY IN FINISHING, SEMI-FINISHING 2-4UM TIALN PVD POWLEKANY, ŁĄCZĄCY Z ULTRA DROBNYMI PODŁOŻAMI CZĄSTEK O WYSOKIEJ WYTRZYMAŁOŚCI, ODPOWIEDNI DO WSZYSTKICH MATERIAŁÓW, STALI NIERDZEWNEJ, STALI, STOPU ODLEWANEGO, DO OBRÓBK WYKONCZAJĄCEJ I PÓŁWYKAŃCZAJĄCEJ	P10-P25/ K15-K30 M10-M25
P3200	2-4UM ALCR + ALCRSIN PVD COATING, COMBINED WITH ULTRA-FINE PARTICLE MATRIX, HAS HIGH WEAR RESISTANCE, SUITABLE FOR FINISHING AND SEMI-FINISHING OF HEAT-TREATED STEEL, STAINLESS STEEL AND QUENCHED STEEL POWŁOKA 2-4UM ALCR + ALCRSIN PVD, W POŁĄCZENIU Z ULTRADROBNĄ MATRYCĄ CZĄSTEK, MA WYSOKĄ ODPORNOŚĆ NA ZUŻYCIE, NADAJE SIĘ DO OBRÓBK WYKAŃCZAJĄCEJ I PÓŁWYKAŃCZAJĄCEJ STALI PODDANEJ OBRÓBCE CIEPLNEJ, STALI NIERDZEWNEJ I STALI HARTOWANEJ	P10-P25/ K15-K30/

## HELIX ANGLE ANVILS SELECTION

### DOBÓR PŁYTKI PODPOROWEJ W ZALEŻNOŚCI OD KĄTA POCHYLENIA LINII ŚRUBOWEJ

L	HOLDER TYPE TYP UCHWYTU	THREAD HELIX ANGLE KĄT HELISY GWINTU							
		4.5	3.5	2.5	1.5	0.5	0	-0.5	-1.5
16	ER/IL	ES16+4.5	ES16+3.5	ES16+2.5	ES16	ES16+0.5	ES16-0	ES16-0.5	ES16-1.5
	IR/EL	IS16+4.5	IS16+3.5	IS16+2.5	IS16	IS16+0.5	IS16-0	IS16-0.5	IS16-1.5
22	ER/IL	ES22+4.5	ES22+3.5	ES22+2.5	ES22	ES22+0.5	ES22-0	ES22-0.5	ES22-1.5
	IR/EL	IS22+4.5	IS22+3.5	IS22+2.5	IS22	IS22+0.5	IS22-0	IS22-0.5	IS22-1.5
27	ER/IL	ES27+4.5	ES27+3.5	ES27+2.5	ES27	ES27+0.5	ES27-0	ES27-0.5	ES27-1.5
	IR/EL	IS27+4.5	IS27+3.5	IS27+2.5	IS27	IS27+0.5	IS27-0	IS27-0.5	IS27-1.5

## THREAD TURNING CUTTING DATA PARAMETRY SKRAWANIADLA TOCZENIA GWINTÓW



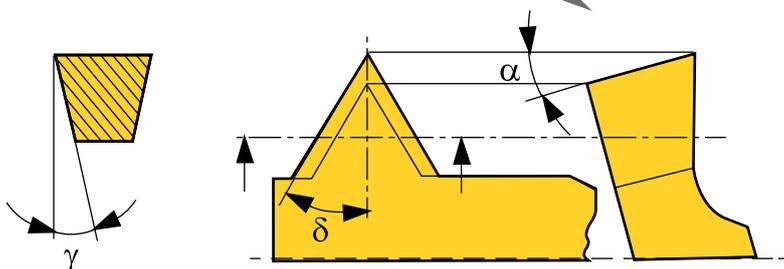
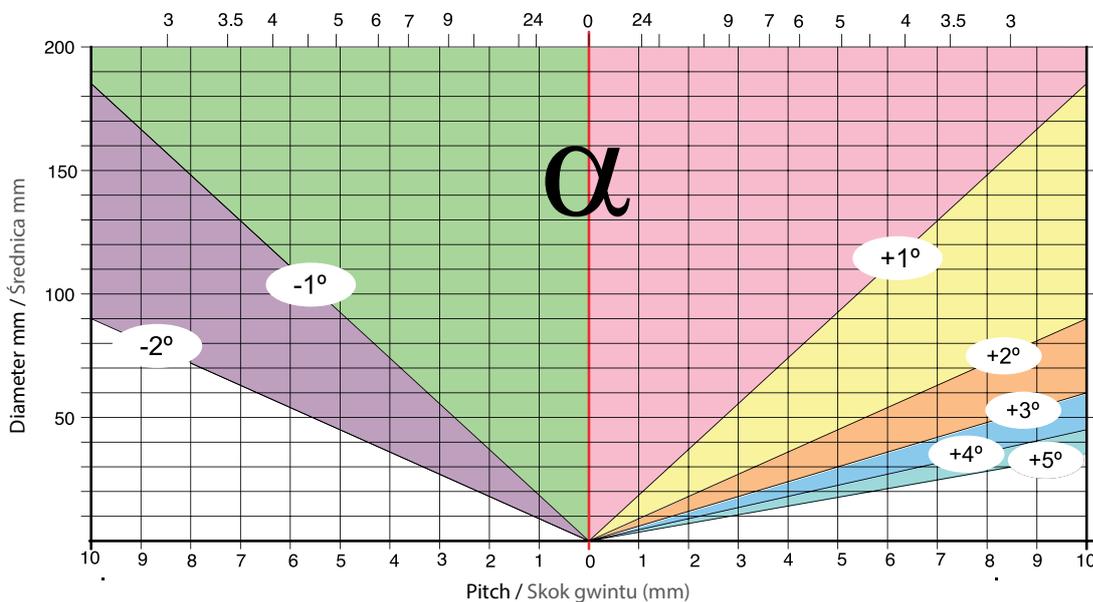
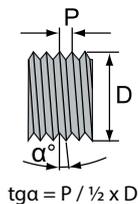
METHOD METODA	THREAD TYPE TYP GWINTU	TURNING TOCZENIE	INSERT & HOLDER TYPE TYP PŁYTKI I OPRAWKI
A, a	R.H.	R.H.	R.H.
B, b	R.H.	L.H.	L.H.
C, c	L.H.	R.H.	R.H.
D, d	L.H.	L.H.	L.H.

## THREAD HELIX ANGLE KĄT POCHYLENIA LINII ŚRUBOWEJ

ALL STANDARD TOOLHOLDERS MADE WITH 1.5° HELIX ANGLE. IF THE HELIX ANGLE  $\Lambda < 1^\circ$  OR  $\Lambda > 2^\circ$  THEN THE ANVIL MUST CHANGE. IN CASE OF METHOD B, C, B, C THE ANVIL MUST CHANGE TO NEGATIVE ANVIL.

WSZYSTKIE STANDARDOWE OPRAWKI WYKONANE Z KĄTEM POCHYLENIA LINII ŚRUBOWEJ 1.5°. KIEDY KĄT POCHYLENIA LINII ŚRUBOWEJ  $\Lambda < 1^\circ$  LUB  $\Lambda > 2^\circ$  W PRZYPADKU METODY B, C, B, C, PŁYTKA PODPOROWA MUSI BYĆ ZAMIENIONA - NA NEGATYWNĄ.

Pitch / Skok gwintu (TPI zwojów/cal)



FLANK CLEARANCE ANGLE  
BOCZNY KĄT PRZYŁOŻENIA KRAWĘDZI SKRAWAJĄCEJ ( $\gamma$ )

$$\gamma = tg^{-1} [tga \times tg\delta]$$

Insert clearance angle

Kąt przyłożenia płytki:  
 $\alpha = 10^\circ$  for external toolholders  
do opravek zewnętrznych  
 $\alpha = 15^\circ$  for internal toolholders  
do opravek wewnętrznych

## THREAD TURNING TROUBLESHOOTING ELIMINOWANIE PROBLEMÓW TOCZENIA GWINTÓW

ISSUE PROBLEM	CAUSE PRZYPADEK	SOLUTION ROZWIĄZANIE
<b>PLASTIC DEFORMATION</b> DEFORMACJA PLASTYCZNA	<b>WRONG CARBIDE GRADE, INSUFFICIENT COOLANT, CUTTING SPEED TOO HIGH, CUTTING RESISTANCE HIGH</b> NIEODPOWIEDNI GATUNEK WĘGLIKA, NIEDOSTATECZNE CHŁODZENIE, ZBYT DUŻA PRĘDKOŚĆ SKRAWANIA, WYSOKIE OPORY SKRAWANIA	<b>CHANGE GRADE, CHECK COOLANT FLOW, DECREASE CUTTING SPEED, INCREASE THE NUMBER OF PASSES</b> ZMIEŃ GATUNEK WĘGLIKA, SPRAWDZIĆ PRZEPŁYW CHŁODZIWA, ZMNIJSZYĆ PRĘDKOŚĆ SKRAWANIA, ZWIĘKSZYĆ ILOŚĆ PRZEJŚĆ ROBOCZYCH
<b>FRACTURE AND CHIPPING</b> PĘKANIE I WYKRUSZANIE	<b>UNSTABLE CONDITIONS, CUTTING SPEED TOO HIGH, DEPTH OF CUT, LARGE POOR CHIP CONTROL, WRONG CARBIDE GRADE, INCORRECT CENTER HIGH, WRONG ANVIL</b> NIESTABILNE WARUNKI SKRAWANIA, ZBYT DUŻA PRĘDKOŚĆ, DUŻA GŁĘBOKOŚĆ SKRAWANIA, SŁABA KONTROLA SPŁYWU WIÓRÓW, ŹLE DOBRANY GATUNEK WĘGLIKA, ŹLE WYCENTROWANY KIEŁ, ZŁA PODPORA PŁYTKI	<b>CHECK TOOL AND WORKPIECE CLAMPING AND STABILITY, DECREASE CUTTING SPEED, INCREASE THE NUMBER OF PASSES, CHANGE TO FLANK FEED, CHANGE GRADE, CHECK CENTER HIGH, CHECK HELIX ANGLE</b> SPRAWDZIĆ MOCOWANIE I STABILNOŚĆ NARZĘDZIA I CZĘŚCI OBRABIANEJ, ZMNIJSZYĆ PRĘDKOŚĆ SKRAWANIA, ZWIĘKSZYĆ ILOŚĆ PRZEJŚĆ ROBOCZYCH, ZMIEŃ WARTOŚĆ POSUW NA BOK/FLANKĘ GWINTU, ZMIEŃ GATUNEK WĘGLIKA, SPRAWDZIĆ WYSOKOŚĆ KŁA, SPRAWDZIĆ KĄT POCHYLENIA LINII ŚRUBOWEJ GWINTU
<b>BUILT UP EDGE</b> NAROST	<b>INCORRECT CUTTING SPEED, WRONG CARBIDE GRADE, INSUFFICIENT COOLANT</b> NIEWŁAŚCIWA PRĘDKOŚĆ SKRAWANIA, NIEODPOWIEDNI GATUNEK WĘGLIKA, NIEWYSTARCZAJĄCE CHŁODZENIE	<b>INCREASE CUTTING SPEED, CHANGE GRADE, INCREASE COOLANT FLOW</b> ZWIĘKSZYĆ PRĘDKOŚĆ SKRAWANIA, ZMIEŃ GATUNEK WĘGLIKA, ZWIĘKSZYĆ PRZEPŁYW CHŁODZIWA
<b>VIBRATIONS</b> WIBRACJE	<b>CUTTING SPEED TOO HIGH INCORRECT TOOL AND WORKPIECE INSTALLATION LARGE DEPTH OF CUT</b> PRĘDKOŚĆ SKRAWANIA ZA DUŻA, NIEWŁAŚCIWE NARZĘDZIE I ZAMOCOWANIE CZĘŚCI OBRABIANEJ, DUŻA GŁĘBOKOŚĆ SKRAWANIA	<b>CHANGE CUTTING SPEED CHECK CENTER HIGH AND CLAMPING INCREASE NUMBER OF PASSES</b> ZMIEŃ PRĘDKOŚĆ SKRAWANIA, SPRAWDZIĆ WYSOKOŚĆ KŁA I MOCOWANIE CZĘŚCI, ZWIĘKSZYĆ ILOŚĆ PRZEJŚĆ ROBOCZYCH
<b>ASYMMETRIC WEAR OF THREAD FLANKS</b> ASYMETRYCZNE ZUŻYCIE BOKÓW PŁYTKI	<b>INCORRECT ANVIL</b> NIEWŁAŚCIWA PODPORA PŁYTKI	<b>CALCULATE HELIX ANGLE AND SELECT AN APPROPRIATE ANVIL</b> OBLICZYĆ KĄT POCHYLENIA LINII ŚRUBOWEJ I DOBRAĆ ODPOWIEDNIĄ PODPORĘ

## EXTERNAL ISO METRIC RECOMMENDED NUMBER OF PASSES

### ZEWNĘTRZNY GWINT METRYCZNY ISO ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH MM SKOK MM															
	6	5.5	5	4.5	4	3.5	3	2.5	2	1.75	1.5	1.25	1	0.75	0.5	0.35
1	0.45	0.43	0.42	0.39	0.34	0.34	0.27	0.26	0.24	0.23	0.23	0.20	0.19	0.17	0.11	0.1
2	0.37	0.36	0.37	0.33	0.30	0.31	0.23	0.22	0.23	0.21	0.21	0.18	0.16	0.15	0.09	0.08
3	0.33	0.31	0.31	0.29	0.25	0.24	0.20	0.20	0.19	0.16	0.18	0.14	0.13	0.11	0.08	0.06
4	0.28	0.27	0.28	0.25	0.21	0.20	0.18	0.17	0.17	0.14	0.16	0.12	0.10	0.06	0.06	-
5	0.26	0.25	0.25	0.23	0.19	0.19	0.17	0.16	0.15	0.12	0.11	0.10	0.06	-	-	-
6	0.24	0.23	0.23	0.20	0.18	0.17	0.16	0.14	0.12	0.10	0.06	0.06	-	-	-	-
7	0.23	0.22	0.21	0.19	0.16	0.16	0.15	0.13	0.10	0.08	-	-	-	-	-	-
8	0.22	0.20	0.20	0.18	0.15	0.15	0.13	0.12	0.06	0.06	-	-	-	-	-	-
9	0.20	0.19	0.19	0.16	0.15	0.14	0.12	0.10	-	-	-	-	-	-	-	-
10	0.19	0.18	0.18	0.15	0.14	0.12	0.11	0.06	-	-	-	-	-	-	-	-
11	0.18	0.17	0.16	0.14	0.13	0.10	0.09	-	-	-	-	-	-	-	-	-
12	0.17	0.16	0.14	0.12	0.12	0.06	0.06	-	-	-	-	-	-	-	-	-
13	0.16	0.15	0.10	0.10	0.10	-	-	-	-	-	-	-	-	-	-	-
14	0.14	0.12	0.06	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-
15	0.13	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0.10	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓLEM	3.71	3.40	3.10	2.79	2.48	2.18	1.87	1.56	1.26	1.10	0.95	0.80	0.64	0.49	0.49	0.24

## INTERNAL ISO METRIC RECOMMENDED NUMBER OF PASSES

### WEWNĘTRZNY GWINT METRYCZNY ISO ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH MM SKOK MM															
	6	5.5	5	4.5	4	3.5	3	2.5	2	1.75	1.5	1.25	1	0.75	0.5	0.35
1	0.44	0.43	0.42	0.36	0.32	0.32	0.25	0.25	0.23	0.22	0.22	0.19	0.18	0.16	0.10	0.09
2	0.36	0.34	0.37	0.32	0.27	0.29	0.22	0.21	0.21	0.20	0.20	0.16	0.15	0.14	0.09	0.08
3	0.32	0.29	0.28	0.28	0.22	0.23	0.19	0.19	0.18	0.15	0.17	0.13	0.12	0.10	0.07	0.06
4	0.27	0.24	0.26	0.25	0.20	0.19	0.17	0.16	0.16	0.13	0.15	0.11	0.10	0.06	0.06	-
5	0.25	0.23	0.24	0.22	0.19	0.18	0.16	0.15	0.14	0.11	0.10	0.10	0.06	-	-	-
6	0.23	0.22	0.21	0.19	0.18	0.16	0.16	0.13	0.11	0.09	0.06	0.06	-	-	-	-
7	0.22	0.21	0.20	0.18	0.16	0.15	0.14	0.12	0.09	0.08	-	-	-	-	-	-
8	0.21	0.20	0.19	0.17	0.15	0.14	0.12	0.11	0.06	0.06	-	-	-	-	-	-
9	0.19	0.18	0.18	0.15	0.14	0.13	0.11	0.09	-	-	-	-	-	-	-	-
10	0.17	0.16	0.16	0.14	0.14	0.11	0.10	0.06	-	-	-	-	-	-	-	-
11	0.16	0.16	0.14	0.12	0.12	0.09	0.08	-	-	-	-	-	-	-	-	-
12	0.15	0.15	0.12	0.10	0.10	0.06	0.06	-	-	-	-	-	-	-	-	-
13	0.14	0.14	0.09	0.09	0.09	-	-	-	-	-	-	-	-	-	-	-
14	0.13	0.11	0.06	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-
15	0.11	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0.09	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓLEM	3.50	3.21	2.92	2.63	2.34	2.05	1.76	1.47	1.18	1.04	0.90	0.75	0.61	0.46	0.32	0.23

## EXTERNAL UNIFIED UNC, UNF, UNEF RECOMMENDED NUMBER OF PASSES

### ZEWNĘTRZNY GWINT CALOWY ZUNIFIKOWANY UNC, UNF, UNEF ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI																		
	4	4.5	5	6	7	8	9	10	11	12	13	14	16	18	20	24	28	32	48
1	0.44	0.43	0.42	0.37	0.33	0.29	0.29	0.26	0.25	0.25	0.24	0.23	0.22	0.21	0.20	0.20	0.18	0.18	0.13
2	0.38	0.35	0.37	0.32	0.28	0.22	0.24	0.22	0.22	0.23	0.22	0.20	0.20	0.19	0.16	0.17	0.15	0.16	0.09
3	0.33	0.30	0.32	0.27	0.23	0.20	0.23	0.20	0.19	0.20	0.18	0.18	0.18	0.17	0.15	0.14	0.11	0.12	0.07
4	0.29	0.28	0.27	0.25	0.22	0.18	0.22	0.17	0.17	0.18	0.16	0.14	0.14	0.16	0.13	0.11	0.09	0.06	0.06
5	0.27	0.26	0.26	0.24	0.21	0.17	0.18	0.16	0.16	0.16	0.14	0.12	0.11	0.11	0.11	0.06	0.06	-	-
6	0.26	0.23	0.24	0.18	0.19	0.16	0.16	0.15	0.15	0.14	0.13	0.11	0.09	0.06	0.06	-	-	-	-
7	0.24	0.22	0.22	0.17	0.18	0.16	0.15	0.14	0.13	0.11	0.10	0.10	0.06	-	-	-	-	-	-
8	0.23	0.21	0.20	0.16	0.15	0.15	0.12	0.12	0.12	0.06	0.06	0.06	-	-	-	-	-	-	-
9	0.21	0.20	0.19	0.15	0.14	0.14	0.11	0.11	0.06	-	-	-	-	-	-	-	-	-	-
10	0.20	0.19	0.18	0.13	0.14	0.14	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-
11	0.19	0.18	0.17	0.12	0.12	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-
12	0.18	0.17	0.14	0.10	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0.18	0.15	0.11	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	0.17	0.14	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	0.16	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0.13	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓLEM	3.92	3.49	3.15	2.63	2.25	1.98	1.76	1.59	1.45	1.33	1.23	1.14	1.00	0.90	0.81	0.68	0.59	0.52	0.35

## INTERNAL UNIFIED UNC, UNF, UNEF RECOMMENDED NUMBER OF PASSES

### WEWNĘTRZNY GWINT CALOWY ZUNIFIKOWANY UNC, UNF, UNEF ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI																		
	4	4.5	5	6	7	8	9	10	11	12	13	14	16	18	20	24	28	32	48
1	0.43	0.43	0.42	0.34	0.31	0.29	0.23	0.25	0.24	0.24	0.23	0.22	0.21	0.20	0.19	0.19	0.17	0.17	0.12
2	0.34	0.35	0.37	0.28	0.27	0.22	0.23	0.21	0.20	0.21	0.21	0.20	0.19	0.18	0.16	0.16	0.14	0.15	0.09
3	0.32	0.29	0.28	0.26	0.22	0.19	0.20	0.19	0.18	0.19	0.17	0.17	0.17	0.16	0.14	0.13	0.10	0.11	0.07
4	0.28	0.24	0.26	0.22	0.20	0.17	0.20	0.16	0.16	0.17	0.15	0.13	0.13	0.15	0.11	0.10	0.08	0.06	0.06
5	0.26	0.23	0.24	0.21	0.19	0.16	0.16	0.15	0.15	0.15	0.13	0.11	0.10	0.09	0.10	0.06	0.06	-	-
6	0.25	0.22	0.21	0.18	0.18	0.16	0.15	0.13	0.14	0.13	0.12	0.10	0.09	0.06	0.06	-	-	-	-
7	0.23	0.21	0.20	0.17	0.16	0.14	0.14	0.12	0.12	0.10	0.09	0.09	0.06	-	-	-	-	-	-
8	0.21	0.20	0.19	0.16	0.15	0.14	0.13	0.12	0.10	0.06	0.06	0.06	-	-	-	-	-	-	-
9	0.20	0.19	0.18	0.15	0.14	0.13	0.11	0.11	0.06	-	-	-	-	-	-	-	-	-	-
10	0.19	0.18	0.16	0.13	0.14	0.12	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-
11	0.18	0.17	0.16	0.12	0.10	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-
12	0.17	0.16	0.13	0.10	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0.16	0.14	0.10	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	0.16	0.12	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	0.14	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0.12	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓLEM	3.70	3.29	2.96	2.47	2.12	1.86	1.67	1.50	1.35	1.25	1.16	1.08	0.95	0.84	0.76	0.64	0.55	0.49	0.34

## WHITWORTH BSW, BSF, BSP RECOMMENDED NUMBER OF PASSES

GWINT CALOWY WHITWORTH(BSW, BSF, BSP ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI																		
	4	4.5	5	6	7	8	9	10	11	12	13	14	16	18	20	24	28	32	48
1	0.45	0.44	0.43	0.38	0.34	0.30	0.28	0.27	0.26	0.26	0.24	0.22	0.24	0.22	0.21	0.20	0.18	0.19	0.16
2	0.40	0.36	0.38	0.33	0.29	0.24	0.25	0.23	0.23	0.23	0.21	0.18	0.21	0.19	0.19	0.18	0.15	0.16	0.14
3	0.35	0.31	0.33	0.28	0.24	0.21	0.22	0.21	0.20	0.21	0.17	0.15	0.16	0.17	0.15	0.16	0.12	0.13	0.06
4	0.31	0.29	0.28	0.27	0.23	0.19	0.21	0.18	0.18	0.19	0.15	0.13	0.15	0.14	0.13	0.11	0.10	0.06	-
5	0.28	0.27	0.27	0.25	0.22	0.18	0.20	0.17	0.17	0.17	0.14	0.12	0.11	0.11	0.10	0.06	0.06	-	-
6	0.27	0.24	0.25	0.19	0.20	0.17	0.17	0.16	0.16	0.15	0.12	0.10	0.06	0.06	0.06	-	-	-	-
7	0.25	0.23	0.23	0.18	0.19	0.17	0.17	0.14	0.13	0.12	0.10	0.09	-	-	-	-	-	-	-
8	0.24	0.22	0.21	0.17	0.16	0.16	0.15	0.13	0.12	0.06	0.06	0.06	-	-	-	-	-	-	-
9	0.22	0.21	0.20	0.16	0.15	0.14	0.13	0.11	0.06	-	-	-	-	-	-	-	-	-	-
10	0.21	0.20	0.19	0.14	0.15	0.13	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-
11	0.20	0.19	0.18	0.12	0.12	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-
12	0.19	0.18	0.15	0.10	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0.18	0.16	0.12	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	0.18	0.15	0.06	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	0.17	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0.13	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓLEM	4.09	3.64	3.28	2.74	2.35	2.06	1.84	1.66	1.51	1.39	1.19	1.05	0.93	0.89	0.84	0.71	0.61	0.54	0.36

## PT RECOMMENDED NUMBER OF PASSES

GWINT NPT ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI				
	8	11.5	14	18	27
1	0.32	0.23	0.22	0.18	0.14
2	0.25	0.19	0.18	0.15	0.11
3	0.21	0.17	0.15	0.13	0.11
4	0.17	0.16	0.14	0.13	0.10
5	0.16	0.15	0.13	0.12	0.09
6	0.16	0.13	0.12	0.11	0.08
7	0.15	0.12	0.10	0.09	0.06
8	0.15	0.10	0.10	0.08	-
9	0.14	0.10	0.09	0.06	-
10	0.13	0.10	0.08	-	-
11	0.13	0.09	0.06	-	-
12	0.12	0.08	-	-	-
13	0.12	0.06	-	-	-
14	0.10	-	-	-	-
15	0.08	-	-	-	-
16	0.06	-	-	-	-
TOTAL OGÓLEM	2.45	1.68	1.37	1.05	0.69

## NPTF RECOMMENDED NUMBER OF PASSES

### GWINT NPTF ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI				
	8	11.5	14	18	27
1	0.31	0.22	0.21	0.17	0.14
2	0.24	0.17	0.17	0.14	0.10
3	0.20	0.16	0.14	0.13	0.09
4	0.16	0.16	0.14	0.12	0.09
5	0.16	0.14	0.14	0.11	0.08
6	0.15	0.13	0.12	0.10	0.08
7	0.15	0.12	0.10	0.09	0.06
8	0.14	0.11	0.10	0.08	-
9	0.14	0.10	0.09	0.06	-
10	0.13	0.10	0.08	-	-
11	0.13	0.09	0.06	-	-
12	0.12	0.08	-	-	-
13	0.12	0.06	-	-	-
14	0.10	-	-	-	-
15	0.08	-	-	-	-
16	0.06	-	-	-	-
TOTAL OGÓLEM	2.39	1.64	1.35	1.00	0.64

## TRAPEZOIDAL DIN 103 RECOMMENDED NUMBER OF PASSES

### GWINT TRAPEZOWY DIN 103 ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH MM SKOK MM						
	7	6	5	4	3	2	1,5
1	0.38	0.36	0.34	0.32	0.31	0.30	0.24
2	0.34	0.32	0.30	0.23	0.26	0.26	0.22
3	0.28	0.28	0.25	0.20	0.23	0.22	0.17
4	0.26	0.25	0.23	0.19	0.19	0.18	0.14
5	0.25	0.24	0.22	0.18	0.19	0.16	0.12
6	0.23	0.23	0.21	0.17	0.18	0.12	-
7	0.22	0.22	0.19	0.16	0.15	0.06	-
8	0.21	0.20	0.18	0.15	0.12	-	-
9	0.20	0.19	0.17	0.14	0.11	-	-
10	0.19	0.17	0.16	0.12	0.06	-	-
11	0.19	0.16	0.14	0.10	-	-	-
12	0.18	0.15	0.13	0.06	-	-	-
13	0.18	0.13	0.12	-	-	-	-
14	0.16	0.13	0.10	-	-	-	-
15	0.16	0.12	0.06	-	-	-	-
16	0.15	0.12	-	-	-	-	-
17	0.15	0.11	-	-	-	-	-
18	0.14	0.11	-	-	-	-	-
19	0.12	0.06	-	-	-	-	-
20	0.06	-	-	-	-	-	-
TOTAL OGÓLEM	4.05	3.55	2.80	2.30	1.80	1.30	0.95

## ACME RECOMMENDED NUMBER OF PASSES

### GWINT ACME ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI							
	4	5	6	8	10	12	14	16
1	0.36	0.34	0.31	0.27	0.26	0.26	0.25	0.24
2	0.32	0.30	0.29	0.23	0.23	0.22	0.21	0.22
3	0.28	0.25	0.25	0.19	0.20	0.18	0.18	0.18
4	0.25	0.23	0.21	0.18	0.19	0.16	0.15	0.15
5	0.24	0.22	0.18	0.17	0.16	0.14	0.13	0.12
6	0.23	0.21	0.17	0.16	0.14	0.12	0.10	0.06
7	0.22	0.19	0.16	0.15	0.12	0.10	0.06	-
8	0.20	0.19	0.15	0.14	0.11	0.06	-	-
9	0.19	0.18	0.15	0.12	0.10	-	-	-
10	0.17	0.17	0.14	0.12	0.06	-	-	-
11	0.15	0.15	0.13	0.10	-	-	-	-
12	0.14	0.13	0.12	0.06	-	-	-	-
13	0.13	0.12	0.10	-	-	-	-	-
14	0.12	0.10	0.06	-	-	-	-	-
15	0.11	0.06	-	-	-	-	-	-
16	0.11	-	-	-	-	-	-	-
17	0.10	-	-	-	-	-	-	-
18	0.10	-	-	-	-	-	-	-
19	0.06	-	-	-	-	-	-	-
TOTAL OGÓLEM	3.48	2.84	2.42	1.89	1.57	1.24	1.08	0.97

## STUB ACME RECOMMENDED NUMBER OF PASSES

### GWINT STUB ACME ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI							
	4	5	6	8	10	12	14	16
1	0.31	0.30	0.27	0.23	0.23	0.22	0.21	0.18
2	0.26	0.26	0.23	0.19	0.17	0.17	0.18	0.16
3	0.21	0.21	0.20	0.16	0.14	0.14	0.15	0.13
4	0.19	0.18	0.16	0.15	0.13	0.12	0.12	0.12
5	0.17	0.16	0.15	0.13	0.12	0.10	0.06	0.06
6	0.17	0.15	0.14	0.12	0.11	0.06	-	-
7	0.16	0.15	0.13	0.11	0.10	-	-	-
8	0.15	0.13	0.12	0.10	0.06	-	-	-
9	0.15	0.12	0.10	0.06	-	-	-	-
10	0.14	0.10	0.06	-	-	-	-	-
11	0.13	0.06	-	-	-	-	-	-
12	0.11	-	-	-	-	-	-	-
13	0.06	-	-	-	-	-	-	-
TOTAL OGÓLEM	2.21	1.82	1.56	1.25	1.06	0.81	0.72	0.65

## UNJ RECOMMENDED NUMBER OF PASSES

### GWINT UNJ ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI												
	8	9	10	11	12	13	14	16	18	20	24	28	32
1	0.29	0.29	0.26	0.25	0.25	0.24	0.23	0.22	0.21	0.20	0.20	0.18	0.18
2	0.22	0.24	0.22	0.22	0.23	0.22	0.20	0.20	0.19	0.16	0.17	0.14	0.15
3	0.20	0.22	0.19	0.19	0.19	0.18	0.17	0.17	0.16	0.14	0.13	0.10	0.11
4	0.18	0.20	0.17	0.16	0.17	0.15	0.14	0.13	0.15	0.12	0.10	0.09	0.06
5	0.16	0.17	0.15	0.15	0.15	0.13	0.11	0.10	0.10	0.10	0.06	0.06	-
6	0.16	0.16	0.14	0.14	0.13	0.12	0.10	0.09	0.06	0.06	-	-	-
7	0.15	0.14	0.13	0.12	0.10	0.09	0.09	0.06	-	-	-	-	-
8	0.14	0.12	0.11	0.11	0.06	0.06	0.06	-	-	-	-	-	-
9	0.13	0.10	0.10	0.06	-	-	-	-	-	-	-	-	-
10	0.12	0.06	0.06	-	-	-	-	-	-	-	-	-	-
11	0.10	-	-	-	-	-	-	-	-	-	-	-	-
12	0.06	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL OGÓŁEM	1.91	1.70	1.53	1.40	1.28	1.19	1.10	0.97	0.87	0.78	0.66	0.57	0.50

## EXTERNAL MJ

### ZEWNETRZNY GWINT MJ

NO NR	PITCH TPI SKOK TPI					
	1	1.25	1.5	2.0	2.5	3.0
1	0.18	0.18	0.22	0.23	0.25	0.26
2	0.15	0.16	0.20	0.22	0.21	0.22
3	0.13	0.14	0.18	0.18	0.19	0.19
4	0.10	0.12	0.15	0.16	0.16	0.17
5	0.06	0.10	0.11	0.14	0.15	0.16
6	-	0.06	0.06	0.12	0.14	0.15
7	-	-	-	0.10	0.13	0.14
8	-	-	-	0.06	0.12	0.13
9	-	-	-	-	0.10	0.12
10	-	-	-	-	0.06	0.11
11	-	-	-	-	-	0.09
12	-	-	-	-	-	0.06
TOTAL OGÓŁEM	0.62	0.76	0.92	1.21	1.51	1.80

## INTERNAL MJ

### WEWNETRZNY GWINT MJ

NO NR	PITCH TPI SKOK TPI					
	1	1.25	1.5	2.0	2.5	3.0
1	0.16	0.17	0.22	0.23	0.24	0.24
2	0.13	0.14	0.19	0.21	0.21	0.20
3	0.11	0.12	0.14	0.18	0.18	0.18
4	0.09	0.10	0.11	0.16	0.16	0.17
5	0.06	0.09	0.09	0.14	0.14	0.16
6	-	0.06	0.06	0.10	0.13	0.15
7	-	-	-	0.06	0.12	0.13
8	-	-	-	-	0.10	0.12
9	-	-	-	-	0.06	0.10
10	-	-	-	-	-	0.09
11	-	-	-	-	-	0.06
12	-	-	-	-	-	-
TOTAL OGÓŁEM	0.55	0.68	0.81	1.08	1.34	1.60

**ROUND DIN 408**  
 GWINT OKRĄGŁY DIN 405

NO NR	PITCH MM SKOK MM			
	4	6	8	10
1	0.35	0.25	0.24	0.23
2	0.32	0.24	0.22	0.21
3	0.31	0.22	0.20	0.19
4	0.30	0.21	0.19	0.18
5	0.29	0.20	0.18	0.16
6	0.28	0.19	0.16	0.14
7	0.25	0.18	0.14	0.11
8	0.22	0.16	0.11	0.09
9	0.21	0.15	0.10	0.06
10	0.18	0.13	0.09	-
11	0.16	0.12	0.06	-
12	0.13	0.11	-	-
13	0.12	0.06	-	-
14	0.10	-	-	-
15	0.06	-	-	-
TOTAL OGÓŁEM	3.28	2.22	1.69	1.37

**ROUND DIN 20400**  
 GWINT OKRĄGŁY DIN 20400

NO NR	PITCH MM SKOK MM			
	4	6	8	10
1	0.35	0.32	0.25	0.24
2	0.33	0.28	0.24	0.23
3	0.32	0.27	0.23	0.21
4	0.31	0.26	0.22	0.20
5	0.30	0.25	0.21	0.19
6	0.29	0.24	0.20	0.18
7	0.26	0.22	0.19	0.14
8	0.23	0.20	0.18	0.11
9	0.22	0.19	0.16	0.10
10	0.19	0.16	0.14	0.09
11	0.17	0.15	0.12	0.06
12	0.15	0.13	0.10	-
13	0.12	0.12	0.06	-
14	0.10	0.06	-	-
15	0.06	-	-	-
TOTAL OGÓŁEM	3.40	2.85	2.30	1.75

**PG PANZERROUHR-GEWINDE**  
 GWINTY INSTALACYJNE PANCERNY

NO NR	PITCH MM SKOK MM		
	4	6	8
1	0.17	0.18	0.19
2	0.15	0.14	0.16
3	0.14	0.12	0.13
4	0.10	0.10	0.11
5	0.06	0.09	0.10
6	-	0.06	0.09
7	-	-	0.06
TOTAL OGÓŁEM	0.62	0.69	0.78

## AMERICAN BUTTRESS RECOMMENDED NUMBER OF PASSES

### GWINT AMERYKAŃSKI TRAPEZOWY ZALECANA LICZBA PRZEJŚĆ

NO NR	PITCH TPI SKOK TPI					
	6	8	10	12	16	20
1	0.28	0.25	0.22	0.21	0.20	0.18
2	0.24	0.22	0.20	0.19	0.18	0.16
3	0.21	0.19	0.19	0.18	0.17	0.14
4	0.20	0.19	0.17	0.16	0.14	0.13
5	0.20	0.17	0.16	0.15	0.13	0.12
6	0.19	0.16	0.15	0.14	0.12	0.10
7	0.19	0.16	0.13	0.13	0.10	0.06
8	0.18	0.15	0.12	0.12	0.06	-
9	0.17	0.14	0.12	0.11	-	-
10	0.16	0.13	0.11	0.06	-	-
11	0.15	0.12	0.10	-	-	-
12	0.14	0.11	0.06	-	-	-
13	0.14	0.10	-	-	-	-
14	0.13	0.06	-	-	-	-
15	0.12	-	-	-	-	-
16	0.10	-	-	-	-	-
17	0.06	-	-	-	-	-
TOTAL OGÓLEM	2.86	2.15	1.73	1.45	1.10	0.89

## EXTERNAL SAGENGWINDE

### GWINT PIŁOWY ZEWNĘTRZNY

NO NR	PITCH MM SKOK MM		
	4	3	2
1	0.32	0.30	0.29
2	0.30	0.28	0.26
3	0.27	0.26	0.24
4	0.25	0.24	0.19
5	0.23	0.22	0.18
6	0.21	0.21	0.17
7	0.20	0.20	0.15
8	0.19	0.18	0.14
9	0.18	0.17	0.11
10	0.17	0.15	0.06
11	0.16	0.14	-
12	0.15	0.13	-
13	0.15	0.11	-
14	0.15	0.06	-
15	0.14	-	-
16	0.14	-	-
17	0.13	-	-
18	0.12	-	-
19	0.06	-	-
TOTAL OGÓLEM	3.52	2.65	1.79

## INTERNAL SAGENGWINDE

### GWINT PIŁOWY WEWNĘTRZNY

NO NR	PITCH MM SKOK MM		
	4	3	2
1	0.32	0.31	0.29
2	0.30	0.29	0.27
3	0.27	0.27	0.25
4	0.24	0.24	0.21
5	0.23	0.23	0.18
6	0.21	0.22	0.16
7	0.20	0.20	0.12
8	0.19	0.19	0.06
9	0.18	0.16	-
10	0.17	0.13	-
11	0.16	0.06	-
12	0.15	-	-
13	0.14	-	-
14	0.13	-	-
15	0.10	-	-
16	0.06	-	-
TOTAL OGÓLEM	3.05	2.30	1.54

## API RECOMMENDED NUMBER OF PASSES

### GWINT API ZALECANA LICZBA PRZEJŚĆ

NO NR	V0.038R 4TPI		V0.050R 4TPI		V0.040R 5TPI	Buttress Casing 5TPI	
	2 IPF	3 IPF	2 IPF	3 IPF	3 IPF	0.75 IPF	1.0 IPF
1	0.45	0.45	0.44	0.44	0.41	0.24	0.24
2	0.38	0.38	0.39	0.39	0.36	0.22	0.22
3	0.33	0.33	0.34	0.34	0.32	0.18	0.18
4	0.30	0.30	0.31	0.31	0.28	0.14	0.14
5	0.28	0.28	0.28	0.28	0.26	0.12	0.12
6	0.24	0.24	0.26	0.26	0.24	0.12	0.12
7	0.22	0.22	0.24	0.24	0.22	0.12	0.12
8	0.20	0.20	0.23	0.23	0.20	0.10	0.10
9	0.18	0.18	0.21	0.21	0.18	0.10	0.10
10	0.14	0.14	0.19	0.19	0.14	0.10	0.10
11	0.13	0.13	0.18	0.18	0.13	0.10	0.10
12	0.12	0.12	0.16	0.16	0.12	0.06	0.06
13	0.11	0.10	0.14	0.14	0.11	-	-
14	0.06	0.06	0.13	0.13	0.06	-	-
15	-	-	0.12	0.12	-	-	-
16	-	-	0.10	0.11	-	-	-
17	-	-	0.06	0.06	-	-	-
TOTAL OGÓŁEM	3.14	3.13	3.79	3.78	3.03	1.60	1.60

## EL RECOMMENDED NUMBER OF PASSES

### GWINT EL ZALECANA LICZBA PRZEJŚĆ

NO NR	EXTREME LINE CASING GWINT TRAPEZOWY SYMETRYCZNY WYSOKI 6TPI 1.5IPF		EXTREME LINE CASING GWINT TRAPEZOWY SYMETRYCZNY WYSOKI 5TPI 1.25IPF		ROUND API GWINT API RD 0,75IPF 8TPI		ROUND API GWINT API RD 0,75IPF 10TPI	
	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE	EXTERNAL ZEWNĘTRZNE	INTERNAL WEWNĘTRZNE
1	0.23	0.25	0.25	0.25	0.25	0.25	0.25	0.25
2	0.20	0.20	0.22	0.23	0.22	0.22	0.20	0.20
3	0.16	0.17	0.20	0.21	0.20	0.20	0.17	0.17
4	0.15	0.15	0.18	0.19	0.18	0.18	0.15	0.15
5	0.13	0.14	0.15	0.16	0.16	0.16	0.14	0.14
6	0.12	0.13	0.14	0.15	0.15	0.15	0.13	0.13
7	0.11	0.12	0.13	0.14	0.14	0.14	0.12	0.12
8	0.10	0.12	0.12	0.13	0.13	0.13	0.12	0.12
9	0.06	0.10	0.11	0.12	0.12	0.12	0.10	0.10
10	-	0.06	0.10	0.11	0.11	0.11	0.06	0.06
11	-	-	0.10	0.11	0.11	0.11	-	-
12	-	-	0.06	0.10	0.06	0.06	-	-
13	-	-	-	0.06	-	-	-	-
TOTAL OGÓŁEM	1.26	1.44	1.76	1.96	1.83	1.83	1.44	1.44

## MULTITOOTH INSERTS RECOMMENDED NUMBER OF PASSES

### PŁYTKI WIELOZĘBOWE ZALECANA LICZBA PRZEJŚĆ

STANDARD NORMA	PITCH SKOK	Z Z	ORDER CODE KOD ZAMÓWIENIA	NO OF PASSES LICZBA PRZEJŚĆ	DEPTH OF CUT PER PASS NADDATEK NA PRZEJŚCIE			
					1	2	3	4
ISO EXTERNAL ISO ZEWNĘTRZNE	1.0	3	HM16ER0100ISO3M	2	0.37	0.26	-	-
	1.5	2	HM16ER0150ISO2M	3	0.44	0.29	0.21	-
	1.5	3	HM22ER0150ISO3M	2	0.56	0.37	-	-
	2.0	2	HM22ER0200ISO2M	3	0.56	0.41	0.28	-
	2.0	3	HM22ER0200ISO3M	2	0.77	0.48	-	-
	2.5	2	HM22ER0250ISO2M	4	0.55	0.40	0.34	0.26
	3.0	2	HM27ER0300ISO2M	4	0.60	0.52	0.40	0.32
ISO INTERNAL ISO WEWNĘTRZNE	1.0	3	HM16IR0100ISO3M	2	0.34	0.24	-	-
	1.5	2	HM16IR0150ISO2M	3	0.39	0.28	0.20	-
	1.5	3	HM22IR0150ISO3M	2	0.52	0.35	-	-
	2.0	2	HM22IR0200ISO2M	3	0.53	0.37	0.25	-
	2.0	3	HM22IR0200ISO3M	2	0.72	0.43	-	-
	3.0	2	HM27IR0300ISO2M	4	0.60	0.45	0.37	0.29
UN EXTERNAL UN ZEWNĘTRZNE	20	2	HM16ER200UN2M	3	0.38	0.24	0.18	-
	16	2	HM16ER160UN2M	3	0.45	0.30	0.22	-
	14	2	HM16ER140UN2M	3	0.52	0.38	0.24	-
	16	3	HM22ER160UN3M	2	0.57	0.40	-	-
	12	2	HM22ER120UN2M	3	0.58	0.41	0.31	-
	12	3	HM22ER120UN3M	2	0.79	0.51	-	-
	8	2	HM27ER080UN2M	4	0.64	0.53	0.44	0.35
UN INTERNAL UN WEWNĘTRZNE	20	2	HM16IR200UN2M	3	0.35	0.24	0.18	-
	16	2	HM16IR160UN2M	3	0.44	0.27	0.21	-
	14	2	HM16IR140UN2M	3	0.47	0.36	0.25	-
	12	2	HM16IR120UN2M	3	0.54	0.38	0.30	-
	16	3	HM22IR160UN3M	2	0.54	0.38	-	-
	12	2	HM22IR120UN2M	3	0.54	0.38	0.30	-
	12	3	HM22IR120UN3M	2	0.73	0.49	-	-
	8	2	HM27IR080UN2M	4	0.65	0.49	0.39	0.30
W EXTERNAL W ZEWNĘTRZNE	14	2	HM16ER140W2M	3	0.54	0.35	0.27	-
	14	3	HM22ER140W3M	2	0.69	0.47	-	-
	11	2	HM22ER110W2M	3	0.66	0.48	0.34	-
W INTERNAL W WEWNĘTRZNE	14	2	HM16IR140W2M	3	0.54	0.35	0.27	-
	14	3	HM22IR140W3M	2	0.69	0.47	-	-
	11	2	HM22IR110W2M	3	0.66	0.48	0.34	-
NPT EXTERNAL NPT ZEWNĘTRZNE	11.5	2	HM22ER115NPT2M	4	0.53	0.47	0.38	0.30
	11.5	3	HM27ER115NPT3M	3	0.77	0.54	0.37	-
	8	2	HM27ER080NPT2M	4	0.82	0.60	0.54	0.45
NPT INTERNAL NPT WEWNĘTRZNE	11.5	2	HM22IR115NPT2M	4	0.53	0.47	0.38	0.30
	11.5	3	HM27IR115NPT3M	3	0.77	0.54	0.37	-
	8	2	HM27IR080NPT2M	4	0.82	0.60	0.54	0.45
NPTF EXTERNAL NPTF ZEWNĘTRZNE	11.5	2	HM22ER115NPTF2M	4	0.52	0.46	0.38	0.30
NPTF INTERNAL NPTF WEWNĘTRZNE	11.5	2	HM22IR115NPTF2M	4	0.52	0.46	0.38	0.30
RD API EXTERNAL RD API ZEWNĘTRZNE	10	2	HM22ER100API2M	3	0.61	0.49	0.31	-
	10	3	HM27ER100API3M	2	0.99	0.42	-	-
	8	2	HM27ER080API2M	3	0.82	0.59	0.40	-
RD API INTERNAL RD API WEWNĘTRZNE	10	2	HM22IR100API2M	3	0.61	0.49	0.31	-
	10	3	HM27IR100API3M	2	0.99	0.42	-	-
	8	2	HM27IR080API2M	3	0.82	0.59	0.40	-

**NATIONAL TAPER PIPE THREAD (NPT) INTERNAL THREADING RECOMMENDED TOOLS**
**GWINT CALOWY RUROWY STOŻKOWY (NPT). TOCZENIE GWINTÓW WEWNĘTRZNYCH ZALECANE NARZĘDZIA**

THREAD TYPE TYP GWINTU	PITCH SKOK		PROFILE DEPTH GŁĘBOKOŚĆ PROFILU	RECOMMENDED TOOLS ZALECANE NARZĘDZIA	
	MM	TPI		INSERT PLYTKA	TOOLHOLDER OPRWKA
NPT 1/16	27	0.941	0.69	HM06IR270NPT	HIRE0012H06
NPT 1/8	27	0.941	0.69	HM08IR270NPT	HIRE0016K08
NPT 1/4	18	1.411	1.05	HM08IR180NPT	HIRE0016K08M
NPT 3/8	18	1.411	1.05	HM11IR180NPT	HIRE0010H11
NPT 1/2	14	1.814	1.37	HM16IR140NPT	HIRE0010K11
NPT 3/4	14	1.814	1.37	HM16IR140NPT	HIRE0013M16
NPT 1	11.5	2.209	1.68	HM16IR115NPT	HIRE0016P16
NPT 1 1/4	11.5	2.209	1.68	HM16IR115NPT	HIRE0020P16
NPT 1 1/2	11.5	2.209	1.68	HM16IR115NPT	HIRE0025R16
NPT 2	11.5	2.209	1.68	HM16IR115NPT	HIRE0032S16
NPT 2 1/2	8	3.175	2.45	HM16IR080NPT	HIRE0040T16
NPT 3	8	3.175	2.45	HM16IR080NPT	HIRE0020P22
NPT 3 1/2	8	3.175	2.45	HM16IR080NPT	HIRE0025R22
NPT 4	8	3.175	2.45	HM16IR080NPT	HIRE0032S22
NPT 5	8	3.175	2.45	HM16IR080NPT	HIRE0040T22

**NATIONAL DRYSEAL PIPE THREAD (NPTF) INTERNAL THREADING RECOMMENDED TOOLS**
**GWINT CALOWY RUROWY SZCZELNY (NPTF) . TOCZENIE GWINTÓW WEWNĘTRZNYCH ZALECANE NARZĘDZIA**

THREAD TYPE TYP GWINTU	PITCH SKOK		PROFILE DEPTH GŁĘBOKOŚĆ PROFILU	RECOMMENDED TOOLS ZALECANE NARZĘDZIA	
	MM	TPI		INSERT PLYTKA	TOOLHOLDER OPRWKA
NPTF 1/16	27	0.941	0.64	HM06IL270NPTF	HIRE0012H06
NPTF 1/8	27	0.941	0.64	HM08IL270NPTF	HIRE0016K08
NPTF 1/4	18	1.411	1.00	HM08IL180NPTF	HIRE0016K08
NPTF 3/8	18	1.411	1.00	HM11IR180NPTF	HIRE0010K11
NPTF 1/2	14	1.814	1.35	HM16IR140NPTF	HIRE0013M16
NPTF 3/4	14	1.814	1.35	HM16IR140NPTF	HIRE0016P16
NPTF 1	11.5	2.209	1.64	HM16IR115NPTF	HIRE0020P16
NPTF 1 1/4	11.5	2.209	1.64	HM16IR115NPTF	HIRE0025R16
NPTF 1 1/2	11.5	2.209	1.64	HM16IR115NPTF	HIRE0032S16
NPTF 2	11.5	2.209	1.64	HM16IR115NPTF	HIRE0032S16
NPTF 2 1/2	8	3.175	2.39	HM16IR080NPTF	HIRE0040T16
NPTF 3	8	3.175	2.39	HM16IR080NPTF	HIRE0040T16

**PARALLEL PIPE THREAD (BSP(G)) INTERNAL THREADING RECOMMENDED TOOLS**
**GWINT CALOWY RUROWY STOŻKOWY. TOCZENIE GWINTÓW WEWNĘTRZNYCH ZALECANE NARZĘDZIA**

THREAD TYPE TYP GWINTU	PITCH SKOK		PROFILE DEPTH GŁĘBOKOŚĆ PROFILU	BORE DIAMETER ŚREDNICA OTWORU	RECOMMENDED TOOLS ZALECANE NARZĘDZIA	
	MM	TPI			INSERT PLYTKA	TOOLHOLDER OPRWKA
G1/16	28	0.907	0.581	6.561	HM06IR280W	HIRE0012IR06
G1/8	28	0.907	0.581	8.556	HM06IR280W	HIRE0016IR08
G1/4	19	1.337	0.856	11.445	HM08IR190W	HIRE0016IR08
G3/8	19	1.337	0.856	14.950	HM11IR190W	HIRE0016IR11
G1/2	14	1.814	1.162	18.631	HM16IR140W	HIRE0013IR16
G5/8	14	1.814	1.162	20.587	HM16IR140W	HIRE0016IR16
G3/4	14	1.814	1.162	24.117	HM16IR140W	HIRE0016IR16
G7/8	14	1.814	1.162	27.877	HM16IR140W	HIRE0020IR16
G1	11	2.309	1.479	30.291	HM16IR110W	HIRE0020IR16
G1 1/8	11	2.309	1.479	34.939	HM16IR110W	HIRE0025IR16
G1 1/4	11	2.309	1.479	38.952	HM16IR110W	HIRE0025IR16
G1 1/2	11	2.309	1.479	44.845	HM16IR110W	HIRE0032IR16
G1 3/4	11	2.309	1.479	50.788	HM16IR110W	HIRE0032IR16
G2	11	2.309	1.479	56.656	HM16IR110W	HIRE0032IR16

**BRITISH STANDARD PIPE TAPER THREAD (RC SERIES) RECOMMENDED TOOLS**
**GWINT CALOWY RUROWY STOKOWY (WYKONANIE RC) ZALECANE NARZĘDZIA**

THREAD TYPE TYP GWINTU	PITCH SKOK		PROFILE DEPTH GŁĘBOKOŚĆ PROFILU	BORE DIAMETER ŚREDNICA OTWORU	RECOMMENDED TOOLS ZALECANE NARZĘDZIA	
	MM	TPI			INSERT PLYTKA	TOOLHOLDER OPRWKA
Rc 1/16	28	0.907	0.581	6.561	HM06IR280BSPT	HIRE0012IR06
Rc 1/8	28	0.907	0.581	8.556	HM08IR280BSPT	HIRE0016IR08
Rc 1/4	19	1.337	0.856	11.445	HM08IR190BSPT	HIRE0016IR08
Rc 3/8	19	1.337	0.856	14.950	HM11IR190BSPT	HIRE0016IR11
Rc 1/2	14	1.814	1.162	18.631	HM16IR140BSPT	HIRE0013IR16
Rc 5/8	14	1.814	1.162	20.587	HM16IR140BSPT	HIRE0016IR16
Rc 3/4	14	1.814	1.162	24.117	HM16IR140BSPT	HIRE0016IR16
Rc 7/8	14	1.814	1.162	27.877	HM16IR140BSPT	HIRE0020IR16
Rc 1	11	2.309	1.479	30.291	HM16IR110BSPT	HIRE0020IR16
Rc 1 1/8	11	2.309	1.479	34.939	HM16IR110BSPT	HIRE0025IR16
Rc 1 1/4	11	2.309	1.479	38.952	HM16IR110BSPT	HIRE0025IR16
Rc 1 1/2	11	2.309	1.479	44.845	HM16IR110BSPT	HIRE0032IR16
Rc 1 3/4	11	2.309	1.479	50.788	HM16IR110BSPT	HIRE0032IR16
Rc 2	11	2.309	1.479	56.656	HM16IR110BSPT	HIRE0032IR16

**MILLING CUTTING DATA PARAMETRY SKRAWANIA DLA FREZOWANIA**

ORDER CODE KOD ZAMÓWIENIA	<div style="display: flex; justify-content: space-around; background-color: #00a0e3; color: white; padding: 5px;"> <span style="background-color: #00a0e3; color: white; padding: 5px 10px;">P</span> <span style="background-color: #ffcc00; color: white; padding: 5px 10px;">M</span> <span style="background-color: #c00000; color: white; padding: 5px 10px;">K</span> </div>		
	Vc (mm/min)		
TPKT100408CMP3200	150-380		140-220
TPKT150508CMP3200	150-380		140-220
SDRX140408CMP3200	150-380		140-220
TNKS060308CMP3200	150-380		140-220
TNKS0603CMP3200	150-380		140-220
TNKS0603CMP3100	150-380	170-300	140-220
APLT11T308CMP3200	150-380		140-220
APLT160408CMP3200	150-380		140-220
JDMX170508CMP3200	150-380		140-220
JDMX170516CMP3100	150-380	170-300	140-220
JXMT123504CMP3200	150-380		140-220
JXMT170508CMP3200	150-380		140-220
JDMT170408CSP3200	150-380		140-220
LBMX0603RMP3200	150-380		140-220
LBMX0603CMP3200	150-380		140-220
LBMX0904RMP3200	150-380		140-220
LBMX0904CMP3200	150-380		140-220
HNGX090520CMP2115			190-450
JNGU15T6CMP3200	150-380		140-220
LNMT1106CMP3200	150-380		140-220
LNMT1306CMP3200	150-380		140-220
JNMX100608CSP3200	150-380		140-220
LOGX040410CMP3200	150-380		140-220
ODMT060508CTNP3200	150-380		140-220
OFMT05T305C890P3200	150-380		140-220
ONHU060408CMP3200	150-380		140-220

ORDER CODE KOD ZAMÓWIENIA	<div style="display: flex; justify-content: space-around; background-color: #00a0e3; color: white; padding: 5px;"> <span style="background-color: #00a0e3; color: white; padding: 5px 10px;">P</span> <span style="background-color: #ffcc00; color: white; padding: 5px 10px;">M</span> <span style="background-color: #c00000; color: white; padding: 5px 10px;">K</span> </div>		
	Vc (mm/min)		
PNMU090508CMP3200	150-380		140-220
SEMT12T3CMP3200	150-380		140-220
SEMT12T3CMP3100	150-380	170-300	140-220
JDRX11T308CMP3200	150-380		140-220
JDRX170408CMP3200	150-380		140-220
RPMT08T2CSP3100	150-380	170-300	140-220
RPMT10T3CSP3100	150-380	170-300	140-220
RPMT1204CSP3100	150-380	170-300	140-220
SNMX1206CM2P3200	150-380		140-220
SNMX1206CXP3200	150-380		140-220
SNMX1206CMP3100	150-380	170-300	140-220
SPKN1203CMP3100	150-380	170-300	140-220
SPKN1203CS1P3200	150-380		140-220
SPKN1203CM2P3200	150-380		140-220
SPKN1203CSP3200	150-380		140-220
TPKN1603CSP3200	150-380		140-220
TPKN1603CSP1125	180-480	110-280	150-380
TPKN2204CSP1025	180-480		
TPKN2204CSP3100	150-380	170-300	140-220
TPKN2204CSP3200	150-380		140-220
TPUN160308CM4P3200	150-380		140-220
TPUN220408CSP1025	180-480		
WNMX060312CMP3200	150-380		140-220
WNMX09T3CMP3200	150-380		140-220
TNEX040304CMP3200	150-380		140-220
TNEX080608CMP3200	150-380		140-220

**DRILLING CUTTING DATA PARAMETRY SKRAWANIA DLA WIERCENIA**

ORDER CODE KOD ZAMÓWIENIA	<div style="display: flex; justify-content: space-around; background-color: #00a0e3; color: white; padding: 5px;"> <span style="background-color: #00a0e3; color: white; padding: 5px 10px;">P</span> <span style="background-color: #ffcc00; color: white; padding: 5px 10px;">M</span> <span style="background-color: #c00000; color: white; padding: 5px 10px;">K</span> </div>		
	Vc (mm/min)		
SXMT050204CS40P3200	140-240		160-260
SXMT060204CS40P3200	140-240		160-260
SXMT070306CS40P3200	140-240		160-260
SXMT08T306CS40P3200	140-240		160-260
SXMT09T308CS40P3200	140-240		160-260
SXMT11T308CS40P3200	140-240		160-260
SXMT130408CS40P3200	140-240		160-260
SPMT050204CM30P3200	120-300		120-200
SPMT060204CM30P3200	120-300		120-200
SPMT07T308CM30P3200	120-300		120-200
SPMT090408CM30P3200	120-300		120-200
SPMT110408CM30P3200	120-300		120-200
SPMT140512CM30P3200	120-300		120-200
WCMX030208CM10P3200	120-300		120-240
WCMX030208CM20P3200	120-300		120-240
WCMX040208CM10P3200	120-300		120-240
WCMX040208CM20P3200	120-300		120-240
WCMX05T308CM10P3200	120-300		120-240
WCMX05T308CM20P3200	120-300		120-240
WCMX06T308CM10P3200	120-300		120-240
WCMX06T308CM20P3200	120-300		120-240
WCMX080412CM10P3200	120-300		120-240
WCMX080412CM20P3200	120-300		120-240
SXMT050204CS40P3350	140-240	150-250	160-260
SXMT060204CS40P3350	140-240	150-250	160-260
SXMT070306CS40P3350	140-240	150-250	160-260
SXMT08T306CS40P3350	140-240	150-250	160-260
SXMT09T308CS40P3350	140-240	150-250	160-260
SXMT11T308CS40P3350	140-240	150-250	160-260
SXMT130408CS40P3350		150-250	160-260

ORDER CODE KOD ZAMÓWIENIA	<div style="display: flex; justify-content: space-around; background-color: #00a0e3; color: white; padding: 5px;"> <span style="background-color: #00a0e3; color: white; padding: 5px 10px;">P</span> <span style="background-color: #ffcc00; color: white; padding: 5px 10px;">M</span> <span style="background-color: #c00000; color: white; padding: 5px 10px;">K</span> </div>		
	Vc (mm/min)		
SPMT050204CM30P3250	120-300	75-130	120-170
SPMT060204CM30P3250	120-300	75-130	120-170
SPMT07T308CM30P3250	120-300	75-130	120-170
SPMT090408CM30P3250	120-300	75-130	120-170
SPMT110408CM30P3250	120-300	75-130	120-170
SPMT140512CM30P3250	120-300	75-130	120-170
WCMX030208CM10P3350	120-300	110-230	120-240
WCMX030208CM20P3250	120-300	110-230	120-240
WCMX040208CM10P3350	120-300	110-230	120-240
WCMX040208CM20P3250	120-300	110-230	120-240
WCMX05T308CM10P3350	120-300	110-230	120-240
WCMX05T308CM20P3250	120-300	110-230	120-240
WCMX06T308CM10P3350	120-300	110-230	120-240
WCMX06T308CM20P3250	120-300	110-230	120-240
WCMX080412CM10P3350	120-300	110-230	120-240
WCMX080412CM20P3250	120-300	110-230	120-240

# REFERENCES

## REFERENCJE

## WHO DO WE COLLABORATE WITH?

### Z KIM WSPÓŁPRACUJEMY?

TIZ Implements collaborates with many domestic and international companies with a well-established position on the market. Every year, the number of our trading partners is increasing. We are proud of the fact that more and more companies, which have achieved success, trust us and value the quality of our services. The satisfaction of the customers is the greatest motivation and reward for us.

TIZ Implements is a member of the most important organisation, which pertains to research in manufacturing engineering – the CIRP, and a European organisation focused on industrial research – the EFFRA.

TIZ Implements współpracuje z wieloma krajowymi i międzynarodowymi firmami o ugruntowanej pozycji na rynku. Z roku na rok przybywa naszych partnerów handlowych. Jesteśmy dumni z tego, że coraz więcej firm, które odniosły sukces, ufa nam i ceni jakość naszych usług. Zadowolenie klientów jest dla nas największą motywacją i nagrodą.

TIZ Implements jest członkiem najważniejszej organizacji zajmującej się badaniami w inżynierii wytwarzania - CIRP oraz europejskiej organizacji zajmującej się badaniami przemysłowymi - EFFRA.

### TYPES OF INDUSTRIES THAT USE OUR SERVICES:

- Aerospace
- Automobile
- Railway
- Tool
- Machine
- Medical

### RODZAJE BRANŻ, KTÓRE KORZYSTAJĄ Z NASZYCH USŁUG:

- Lotnictwo
- Samochód
- Kolej żelazna
- Narzędzie
- Maszyna
- Medyczny



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