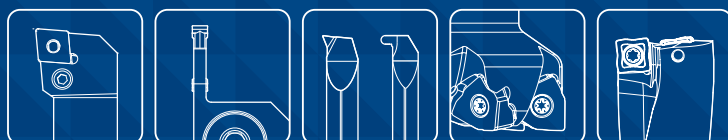


YE-IT26
EUROPE
2025/2026



CUTTING TOOLS



INDEXABLE INSERTS

YG YG-1 CO., LTD.

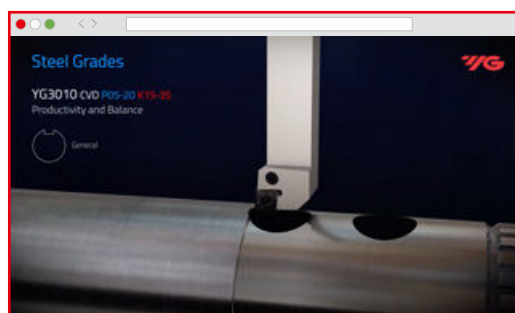
If you Click an icon or page number, you can easily find information as below;

- 1 Go to the page
- 2 Go to the Index
- 3 Go to the Overview
- 4 Go to the section
- 5 Watch the video

	Contents	Page
1	External Turning Holder Code	4
	Internal Turning Holder Code	6
	Insert ISO Code System	8
	Grade Naming System	10
	Turning Grades Map	11
	Turning Grades	12

Type	Series	Size & Thickness	Page
1	CNMA	1204 1606 1906	62
	CNMG	1204 1606 1906	
	DNMA	1504 1506	65
	DNMG	1504 1506	
	KNUX	1604	68

Series	Turning Holder
CCGT CCMT	SCACRL SCLCR/L
p. 80	p. 31



INDEX	Click for Overview
TURNING	Turning Inserts - Negative CNMA / CNMG (80° Rhombic)
PROFILING	
MILLING	
DRILLING	
TECHNICAL INFORMATION	
..MA	Cast Iron
..UF	Finishing
..UL	Light Machining and Sticky Material
..UM	Medium Machining Unstable condition

CNMA CNMG	Designation	RE	F _n (mm/rev.)	A _p (mm)	EDP 2200..
					K10 P10 P15 P20 P25 P30 P35 P40 P45 P50 P55 P60 P65 P70 P75 P80 P85 P90 P95 P100 P105 P110 P115 P120 P125 P130 P135 P140 P145 P150 P155 P160 P165 P170 P175 P180 P185 P190 P195 P200 P205 P210 P215 P220 P225 P230 P235 P240 P245 P250 P255 P260 P265 P270 P275 P280 P285 P290 P295 P300 P305 P310 P315 P320 P325 P330 P335 P340 P345 P350 P355 P360 P365 P370 P375 P380 P385 P390 P395 P400 P405 P410 P415 P420 P425 P430 P435 P440 P445 P450 P455 P460 P465 P470 P475 P480 P485 P490 P495 P500 P505 P510 P515 P520 P525 P530 P535 P540 P545 P550 P555 P560 P565 P570 P575 P580 P585 P590 P595 P600 P605 P610 P615 P620 P625 P630 P635 P640 P645 P650 P655 P660 P665 P670 P675 P680 P685 P690 P695 P700 P705 P710 P715 P720 P725 P730 P735 P740 P745 P750 P755 P760 P765 P770 P775 P780 P785 P790 P795 P800 P805 P810 P815 P820 P825 P830 P835 P840 P845 P850 P855 P860 P865 P870 P875 P880 P885 P890 P895 P900 P905 P910 P915 P920 P925 P930 P935 P940 P945 P950 P955 P960 P965 P970 P975 P980 P985 P990 P995 P1000 P1005 P1010 P1015 P1020 P1025 P1030 P1035 P1040 P1045 P1050 P1055 P1060 P1065 P1070 P1075 P1080 P1085 P1090 P1095 P1100 P1105 P1110 P1115 P1120 P1125 P1130 P1135 P1140 P1145 P1150 P1155 P1160 P1165 P1170 P1175 P1180 P1185 P1190 P1195 P1200 P1205 P1210 P1215 P1220 P1225 P1230 P1235 P1240 P1245 P1250 P1255 P1260 P1265 P1270 P1275 P1280 P1285 P1290 P1295 P1300 P1305 P1310 P1315 P1320 P1325 P1330 P1335 P1340 P1345 P1350 P1355 P1360 P1365 P1370 P1375 P1380 P1385 P1390 P1395 P1400 P1405 P1410 P1415 P1420 P1425 P1430 P1435 P1440 P1445 P1450 P1455 P1460 P1465 P1470 P1475 P1480 P1485 P1490 P1495 P1500 P1505 P1510 P1515 P1520 P1525 P1530 P1535 P1540 P1545 P1550 P1555 P1560 P1565 P1570 P1575 P1580 P1585 P1590 P1595 P1600 P1605 P1610 P1615 P1620 P1625 P1630 P1635 P1640 P1645 P1650 P1655 P1660 P1665 P1670 P1675 P1680 P1685 P1690 P1695 P1700 P1705 P1710 P1715 P1720 P1725 P1730 P1735 P1740 P1745 P1750 P1755 P1760 P1765 P1770 P1775 P1780 P1785 P1790 P1795 P1800 P1805 P1810 P1815 P1820 P1825 P1830 P1835 P1840 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INDEXABLE INSERTS



TURNING



**PARTING
GROOVING**



MILLING

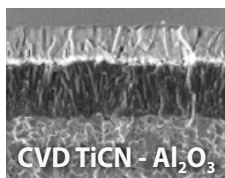


DRILLING

YGTURN YG1020

NEW

First choice for ductile cast iron



CVD TiCN - Al₂O₃

YG1020

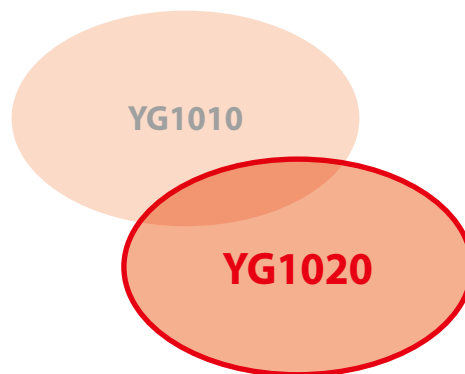
K15 - K25

Optimized grade for machining various ductile cast iron

- Stability and wear resistance optimized for interrupted and continuous machining.
- A customized CVD coating structure was applied to the machining of ductile cast iron.
- Applying post-treatment improved the reliability of cutting edge and ensured stable tool life.

Cutting
Speed

Cast iron



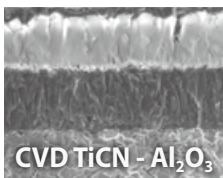
Feed

Turning
New Product

YGTURN **YG3125**

NEW

Recommended first grade for steel



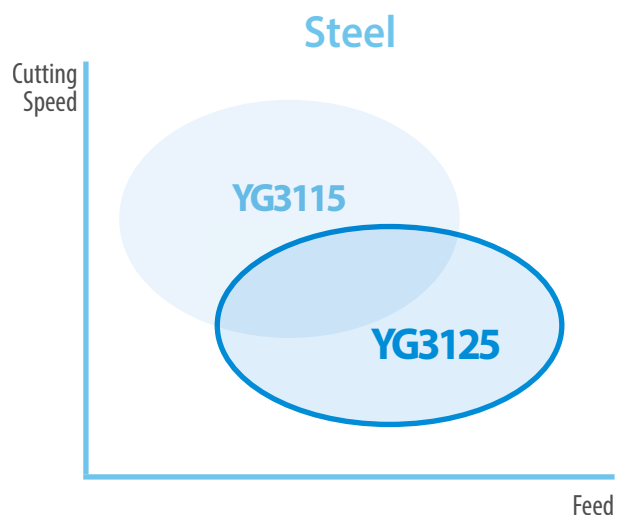
CVD TiCN - Al₂O₃

YG3125

P20 - P30

Recommended first grade for steel

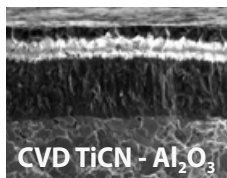
- New substrates with a unique combination of good toughness and plastic deformation resistance
- General Machining on steel



YGTURN YG2035

NEW

CVD Coated Grade for stainless steel at Low Cutting Speed



YG2035

M30~M40

CVD Grade with enhanced stability for stainless steel

- The substrate is suitable for interrupt and continuous machining conditions.
- Prevent build-up edge with a controlled surface finish, even at low cutting speeds.
- Specialized for irregular surface machining, providing predictable tool life.

Cutting
Speed

Stainless steel

YG2025

YG2035

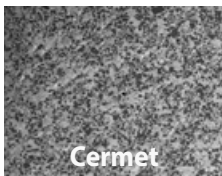
Feed

Turning
New Product

YGTURN **YT100G**

NEW

PVD-coated Cermet grade for turning

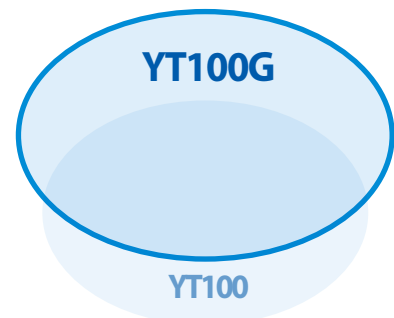


YT100G

P5 - P20**M5 - M20****K5 - K20**

Cutting
Speed

Steel - Cermet



PVD-Coated Cermet Grade for Turning

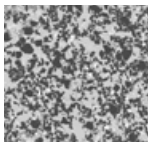
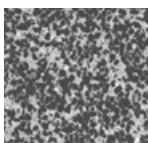
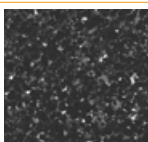
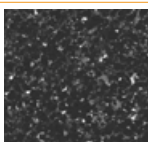
- Excellent wear resistance and low friction during machining provide better surface finishing
- For steels, stainless steels, and cast irons machining
- PVD-coated cermet provides better wear resistance and higher productivity.

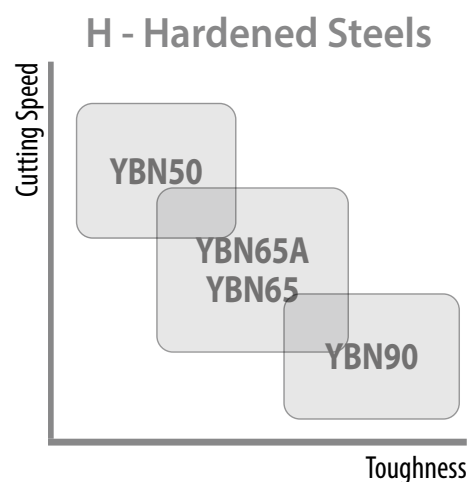
Feed

YGTURN PCBN GRADE

NEW

PCBN Turning Grades for Hardened Steel

YBN50 H5 - H15		Uncoated PCBN grade for Continuous to light interrupted turning of hardened steels
YBN65A H10 - H25		Coated PCBN Grade for Continuous to Medium interrupted turning with higher cutting Speed of hardened steels
YBN65 H10 - H25		Uncoated PCBN grade for Continuous to Medium interrupted turning of hardened steels
YBN90 H20 - H35 K05 - K20		Uncoated PCBN grade of Severe interrupted turning of hardened steels, and the Stable machining of Gray Cast iron, Sintered alloy steel

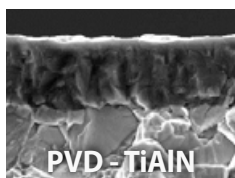


Milling
New Product

NEW

YG MILL YG904

First choice for difficult-to-cut materials with high reliability.



YG904

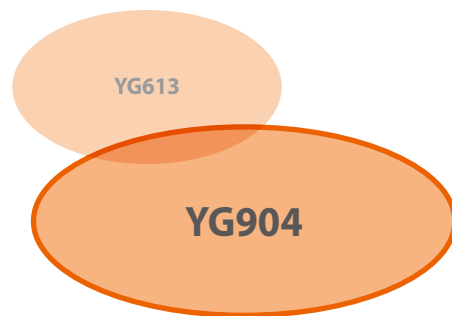
S30 - S45

First choice for difficult-to-cut materials with high reliability.

- Special substrates provide excellent reliability by heat resistance and chipping resistance.
- To prevent accidental breakage caused by chip flow, an anti-weld coating is applied.
- Surface treatment enhanced the stability of cutting performance.

Cutting Speed

Superalloy

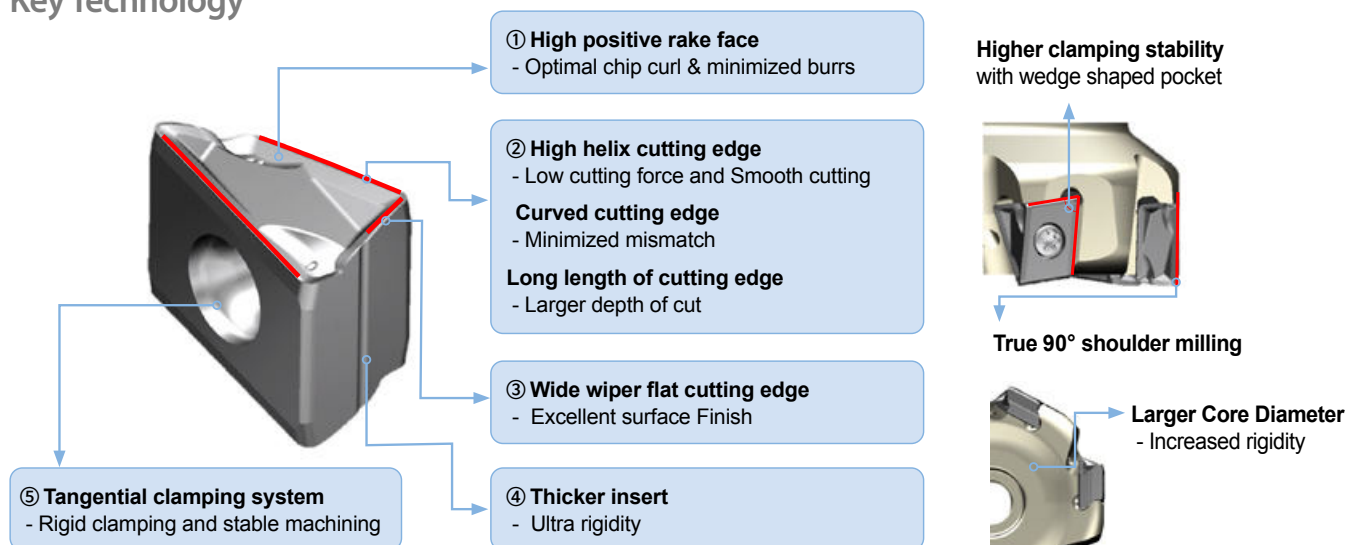


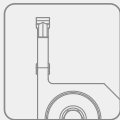
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TM4 **NEW** YG MILL LNKU

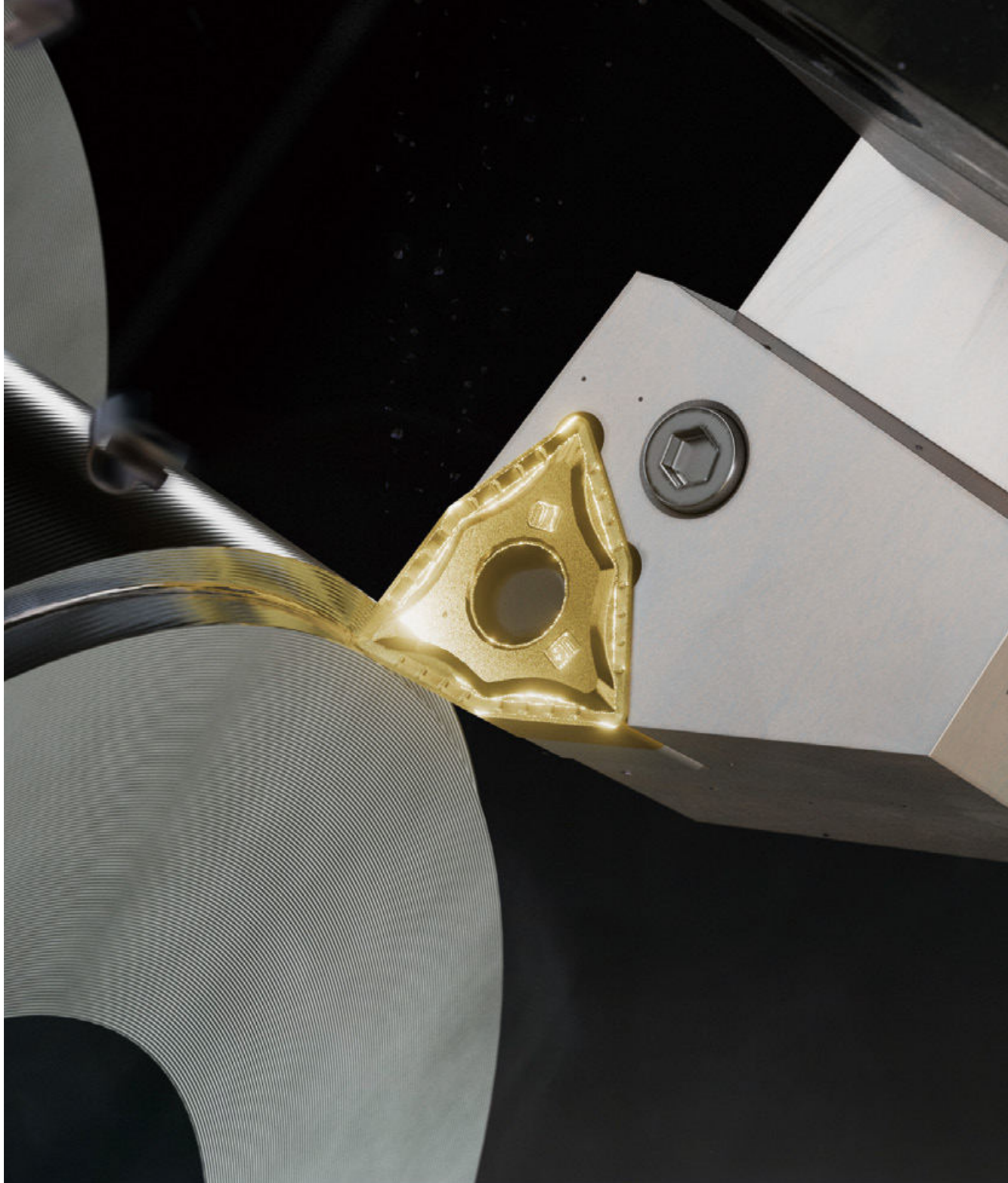
4 cutting edges High Productivity
Tangential Insert

Key Technology



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ISO TURNING

Product Overview

Application Guide

Turning Inserts Overview

Turning Inserts

Turning Holders Overview

Turning Holders

Turning - Name Code System

External Turning Holder Code

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

1	2	3	4	5	6	7	8	9	10
P	C	L	N	R	25	25	M	12	(C)
Clamping System	Insert Shape (1st Letter of Insert)	Tool Style	Insert Clearance (2nd Letter of Insert)	Tool Hand	Shank Height (H)	Shank Width (B)	Length (LF)	Insert Size	(Optional Clamp)

1 - Clamping System

Symbol	System
C	Top Clamp (No Clamping Hole Insert)
M	Multi lock (Straight Clamping Hole Insert)
P	Lever Lock (Straight Clamping Hole Insert)
S	Screw Clamp (Screw Clamping Hole Insert)
T (D, A)	Double Clamp (Straight Clamping Hole Insert)

2, 4 - Insert Compatibility *



* Related to Insert Designation to check compatibility

* Refer to '1-shape' of page 18

3 - Tool Style

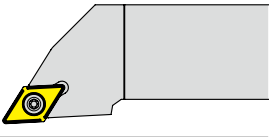
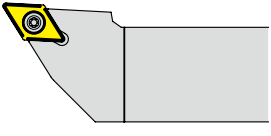
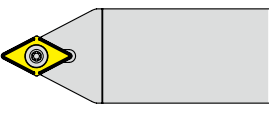
Approach Angle (KAPR)	Side Direction		End Direction
	Straight Shank	Offset Shank	
45°	D 	S 	
60°		T 	
62.5°	N 		
72.5°	V 		
75°	B 		K
90°/91°	A 	G 	F
93°		J 	U
95°		L (Both Direction) 	
107.5°		H 	

Turning - Name Code System

External Turning Holder Code

1	2	3	4	5	6	7	8	9
S	D	J	C	R	20	20	K	11
Clamping System	Insert Shape (1st Letter of Insert)	Tool Style	Insert Clearance (2nd Letter of Insert)	Tool Hand	Shank Height (H)	Shank Width (B)	Length (LF)	Insert Size

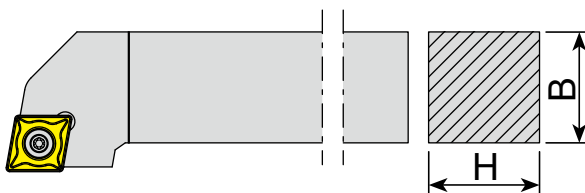
5 - Hand Direction

Symbol	Hand Direction
R	Right Hand 
L	Left Hand 
N	Neutral 

8 - Length (LF)

Symbol	Length (mm)	Symbol	Length (mm)
E	70	Q	180
F	80	R	200
H	100	S	250
K	125	T	300
M	150	U	350
P	170	V	400

6, 7 - Shank Height (H) Shank Width (B)



9 - Insert Size *

Examples	is Compatible with...
PCLNR 2525M 12	CNMG 1204**
SCLCR 2020K 09	CCMT 09T3**
TWLNr 2525M 08	WNMG 0804**

* Related to Insert Designation to check compatibility

(10 - Optional Clamp)

Symbol	Optional Clamp
C	Included

Turning - Name Code System

Internal Turning Holder Code

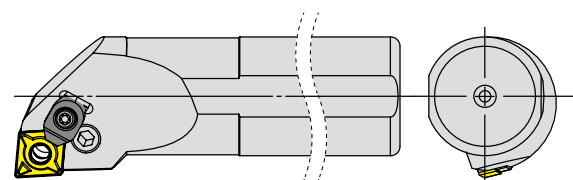
*Metric

1	2	3	4	5	6	7	8	9	10
A	32	S	P	W	L	N	R	12	(C)
Coolant & Material	Shank Diameter (DCON)	Legth (LF)	Clamping System	Insert Shape (1st Letter of Insert)	Tool Style	Insert Clearance (2nd Letter of Insert)	Tool Hand	Insert Size	(Optional Clamp)

1 - Coolant and Tool Material

Symbol	Internal Coolant	Tool Material
A	O	Steel
S	X	
E	O	Carbide
C	X	

2 - Shank Diameter (DCON)



3 - Length (LF)

Symbol	Length (mm)	Symbol	Length (mm)
E	70	Q	180
F	80	R	200
H	100	S	250
K	125	T	300
M	150	U	350
P	170	V	400

4 - Clamping System

Symbol	System
C	Top Clamp (No Clamping Hole Insert)
M	Multi lock (Straight Clamping Hole Insert)
P	Lever Lock (Straight Clamping Hole Insert)
S	Screw Clamp (Screw Clamping Hole Insert)
T (D, A)	Double Clamp (Straight Clamping Hole Insert)

Turning - Name Code System

Internal Turning Holder Code

*Metric

1	2	3		4	5	6	7	8	9
A	25	R	-	S	C	L	C	R	09
Coolant & Material	Shank Diameter (DCON)	Legth (LF)		Clamping System	Insert Shape (1st Letter of Insert)	Tool Style	Insert Clearance (2nd Letter of Insert)	Tool Hand	Insert Size

6 - Tool Style

Approach Angle (KAPR)	Side Direction	EndDirection
	Offset Shank	
75°		K
91°		F
93°	J	U
95°	L (Both Direction)	
107.5°		Q

8 - Hand Direction

Symbol	Hand Direction
R	Right Hand
L	Left Hand

9 - Insert Size *

Examples	is Compatible with...
PCLNR 2525M 12	CNMG 1204**
SCLCR 2020K 09	CCMT 09T3**
TWLNR 2525M 08	WNMG 0804**

* Related to Insert Designation to check compatibility

5, 7 - Insert Compatibility *



* Related to Insert Designation to check compatibility

* Refer to '1-Shape' of page 18

(10 - Optional Clamp)

Symbol	Optional Clamp
C	Included

Insert ISO Code System

*Metric : According to ISO 1832

page 14

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TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

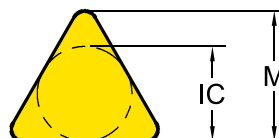
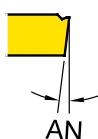
1	2	3	4	5	6	7	8	9
C	N	M	G	12	04	08	-UG	YG3115
Shape	Clearance	Tolerance	Clamping & Chipbreaker	Insert Size	Insert Thickness	Corner Radius	Chipbreaker Geometry	Grade

1 - Shape

Symbol	Shape
H	Hexagonal
O	Octagonal
P	Pentagonal
S	Square
T	Triangular
C	Rhombic 80°
D	Rhombic 55°
V	Rhombic 35°
W	Trigon
L	Rectangular
K	Parallelogram 55°
R	Round

2 - Relief Angle (AN)

Symbol	Relief Angle (AN)
N	No Relief Angle
B	Relief 5°
C	Relief 7°
P	Relief 11°
D	Relief 15°
E	Relief 20°
F	Relief 25°
O	Special



3 - Tolerance Class

Symbol	Inner Circle IC (mm)	Nose Height M (mm)	Thickness S (mm)
C	± 0.025	± 0.013	± 0.025
E	± 0.025	± 0.025	± 0.025
G	± 0.025	± 0.025	± 0.13
H	± 0.013	± 0.013	± 0.025
K*	± 0.05~0.15*	± 0.013	± 0.025
M*	± 0.05~0.15*	± 0.08~0.2*	± 0.13
U*	± 0.08~0.25*	± 0.13~0.38*	± 0.13

* Tolerance is different by insert IC size. Please see ISO 1832

4 - Clamping & Chipbreaker

Symbol	Clamping	Chipbreaker	Figure
N	No clamping hole	X	
R		One Face	
A	Cylindrical Clamping hole	X	
M		One Face	
G		Both Faces	
W	Screw Hole	X	
T		One Face	
U		Both Faces	
X		Special	

Insert ISO Code System

*Inch

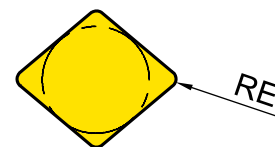
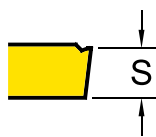
page 14

page 12

1	2	3	4	5	6	7	8	9
C	N	M	G	4	3	2	-UG	YG3115
Shape	Clearance	Tolerance	Clamping & Chipbreaker	Insert Size	Insert Thickness	Corner Radius	Chipbreaker Geometry	Grade

5 - Insert Size

Metric							Inner Circle IC (mm)	Inch
06	11	06	07	11			6.35	2
07	13	08	09	13	15		7.94	2.5
09	16	09	11	16	06	09 (00)	9.525	3
12	22	12	15	22	08	12 (00)	12.7	4
15	27	16	19	27	10		15.875	5
19	33	19	23	33	13		19.05	6
25		25					25.4	8
						06 (M0)	6	
						08 (M0)	8	
						10 (M0)	10	
						12 (M0)	12	
						16 (M0)	16	



6 - Insert Thickness (S)

Metric	Thickness - S (mm)	Inch
T1	1.98	1.2
02	2.38	1.5
03	3.18	2
T3	3.97	2.5
04	4.76	3
05	5.56	3.5
06	6.35	4
07	7.94	5
09	9.525	6

7 - Corner Radius (RE)

Metric	Corner Radius - RE (mm)	Inch
01	0.1	03
02	0.2	05
04	0.4	1
08	0.8	2
12	1.2	3
16	1.6	4
20	2.0	5
24	2.4	6

Grade Naming System

TURNING	1	2	3	4	5	(6)
	YG	3	1	1	5	(G)
	YG Brand	Workpiece Material	Grade Version	Application Range (1st Digit)	Application Range (2nd Digit)	Minor Variation
	Carbide CVD (4 Digits)	●	●	●	●	YG3115
PARTING & GROOVING	Carbide PVD (3 Digits)	●	●	●		YG211
	Carbide Uncoated (2 Digits)	●	●			YG10

1 - YG Brand

2 - Workpiece Material

Symbol	Workpiece Material	Turning	Milling	Drilling	Parting
1	K Cast Iron or N Non-Ferrous	●			
2	M Stainless Steel	●			
3	P Steel	●			
4	S Superalloys	●			
5	K Cast Iron or N Non-Ferrous		●	●	●
6	M Stainless Steel or Universal		●	●	●
7	P Steel		●	●	●
8	Universal	●			
9	Exotic Material		●		
0	Hardened Steel		●		

3 - Grade Version

4 & 5 - Application Range

Symbol	
05	 Wear Resistant Grade Stable Application Continuous Cut Finishing
10	
15	
20	 Balanced Grade High Versatility General Application
25	
30	
35	
40	 Tougher Grade Unstable Application Interrupted Cut Chipping Resistance Roughing
45	

(6) - (Minor Variation)

G - Gold Coated Version

Product Overview

Turning Grades Map

Speed : Vc (m/min.)
Feed : Fn (mm/rev.)

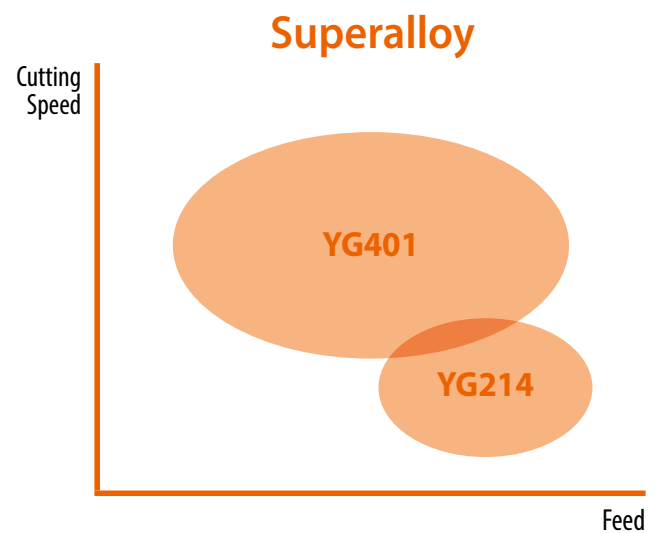
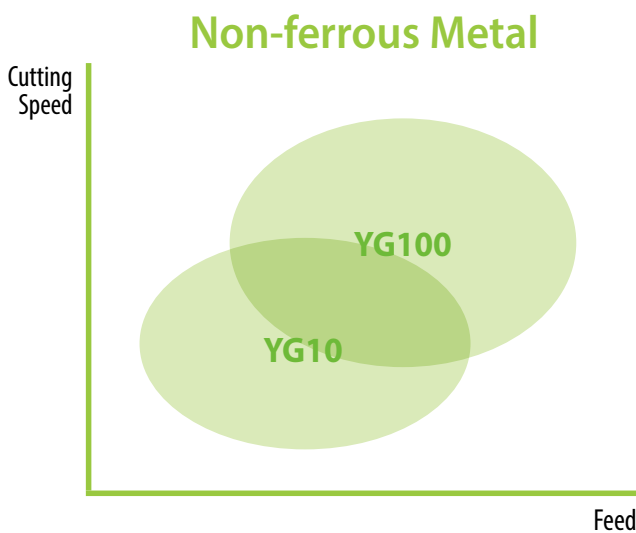
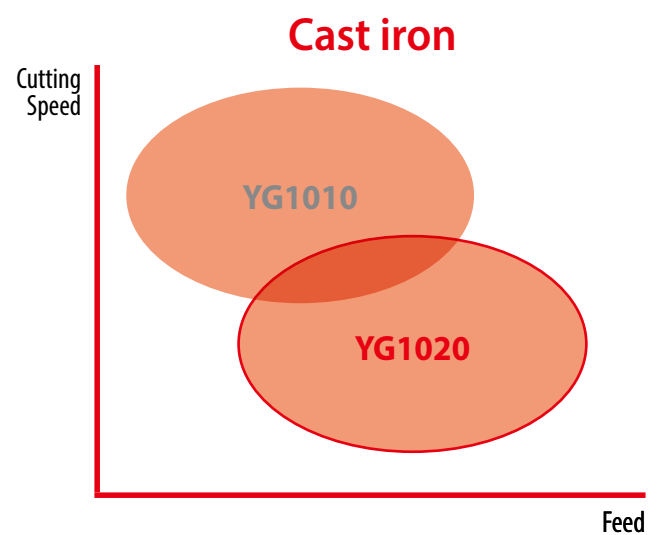
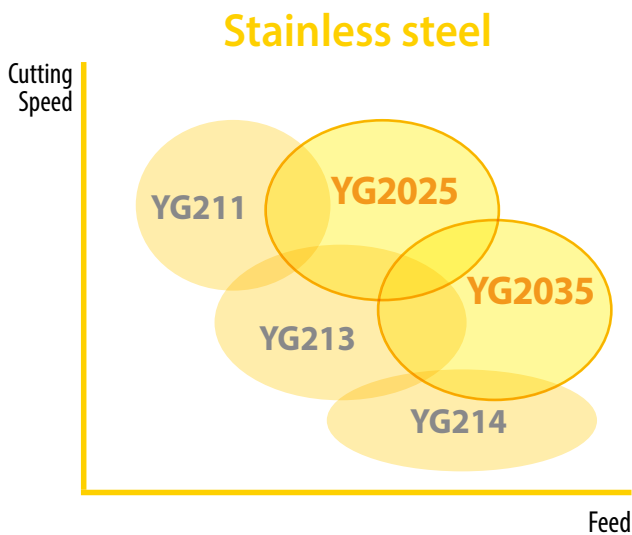
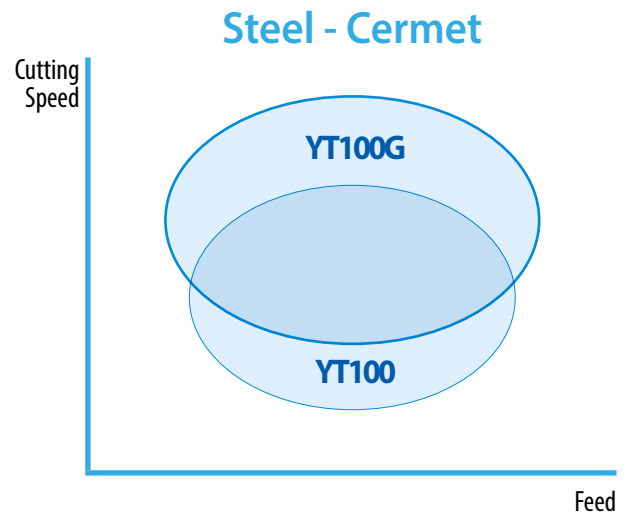
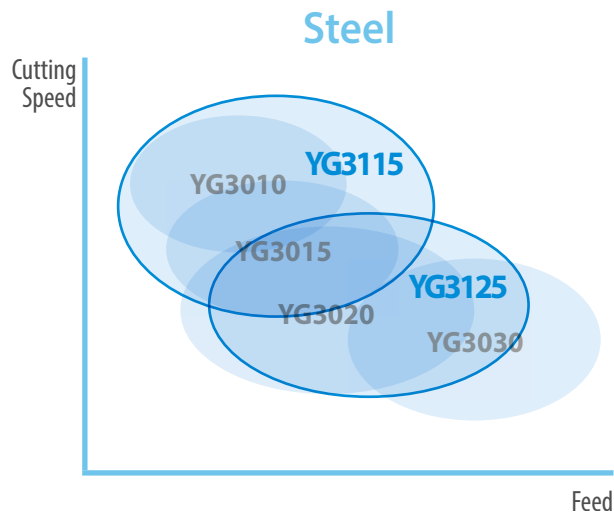
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Product Overview

Turning Grades

	Turning Grades	P Steel				M Stainless steel			K Cast iron			N Non-ferrous		S Superalloys	
		P10	P20	P30	P40	M10	M20	M30	K10	K20	K30	N10	N20	S10	S20
TURNING	YG1010								1010						
	YG1001	1001							1001						
	YG1020								1020						
	YG3010	3010							3010						
	YG3015	3015													
	YG3115	3115													
	YG3125	3125													
	YG3020	3020													
	YG3030	3030													
	YG2025					2025									
	YG2035						2035								
PARTING & GROOVING	YG801	801													
	YG211					211									
	YG213					213									
	YG214					214									
	YG401													401	
MILLING	YT100	YT100				YT100			YT100						
	YT100G	YT100G				YT100G			YT100G						
	YG100											100			
DRILLING	-	YG10										10			
TECHNICAL INFORMATION	YG1010 K05 - K15					First Choice for Cast Iron - Effective coating structure enables high speed machining - Special post treatment for improved chipping resistance									
	YG1001 P01 - P10 K10 - K25					Stable Machining of Cast Iron - Substrate especially designed for high wear resistance - Thick Al₂O₃ layer ensures good wear resistance at high cutting speeds including dry machining									
	NEW YG1020 K15 - K25					First choice for ductile cast iron - Excellent wear and fracture resistance when machining ductile cast iron - New coating ensures outstanding resistance to abrasion wear									
	YG3010 P05 - P20 K15 - K35					First choice for Finishing Steels, and Ductile Cast iron - Finishing and light machining of steel under in stable condition - New Al₂O₃ coating technology and excellent surface smoothness increase wear resistance and chipping resistance									
	YG3015 P10 - P25					Balanced Productivity for Continuous cut High wear resistance and improved toughness ensures high productivity with less trouble									
	YG3115 P15 - P25					First choice grade for high cutting speed in Steels - Suitable for mass production due to stable and predictable tool life - Minimizing built up edge due to new post surface treatment in mild steels, low carbon steel and low carbon alloy steel. - Best choice for both continuous as well as interrupted cuts									
	NEW YG3125 P20 - P30					Recommended first grade for steel - New substrates with a unique combination of good toughness and plastic deformation resistance - General Machining on steel									

Product Overview

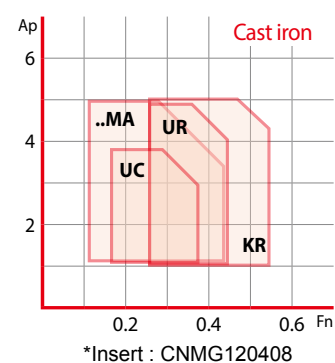
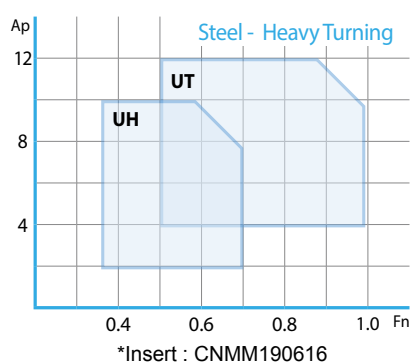
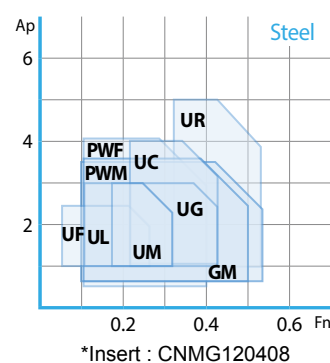
Turning Grades

TURNING PARTING & GROOVING MILLING DRILLING TECHNICAL INFORMATION	YG3020 P15 - P30		First Choice Grade for General Steel Application • Substrate especially designed for good toughness • Excellent surface smoothness increases wear resistance and reliability
	YG3030 P20 - P35		Interrupted Cutting of Steel and Stainless steel • Substrate for heavy roughing in mild steel and low carbon alloy steel • New Al₂O₃ technology and optimized surface treatment achieves a good balance between wear resistance and chipping resistance
	YG801 P10 - P30		for Carbon Steel with Low Cutting Speed • Recommended for mild steel and boring application • Substrate and special PVD coating for excellent wear resistance
	YG2025 M15 - M35		CVD grade for High Cutting Speed for Stainless steel • Utilizing a new carbide substrate and new coating • Excellent combination of wear resistance and chipping resistance • Minimized built up edge due to post surface treatment
	NEW YG2035 M30 - M40		CVD Coated Grade for stainless steel at Low Cutting Speed • Substrate withstands heavy interruption, while the coating provides the wear resistance needed for a long tool life • Smooth surface resists build-up edge, even at low cutting speeds
	YG211 M05 - M25		High wear Resistance Grade for Stainless steel • Finishing Stainless steel
	YG213 M20 - M35		First Choice Grade on Low Cutting Speed of Stainless steel • First choice on Stainless steel for Low cutting speed • For Medium to low cutting speed
	YG214 M30 - M40 S25 - S30		Heavy Interrupted cut for Stainless steel • For Heavy Interrupted cut on Stainless steel • Minimize risk of Mechanical fracture or Chipping
	YG401 S10 - S20		PVD Turning Grade for HRSA • Highly heat-resistant TiAlSiN structure for excellent wear resistance • Greatly improved film coating realizes excellent boundary defect resistance • Top coating layer provides a smooth surface and lubricant effect
	YT100 P10 - P20 M10 - M20 K10 - K20		New Generation Cermet Grade • Enhanced wear resistance & chipping resistance • Excellent fracture resistance • Superior surface finish with special edge preparation
	NEW YT100G P5 - P20 M5 - M20 K5 - K20		PVD-coated Cermet grade for turning • Outstanding wear resistance and a low coefficient of friction enable high-speed turning of steels, stainless steels, and cast irons with extended tool life
	YG100 N05 - N25		First Choice Grade for Aluminum with DLC Coating • Submicron carbide for high wear resistance • DLC coating minimizes Built Up Edge tendency. • Improve tool life in sticky non-ferrous alloy
	YG10 N05 - N25		Uncoated Grade for General Aluminum • Substrate consisted of submicron carbide for high wear resistance • Shining surface to prevent built up edge

Product Overview

Turning Chipbreakers - Negative

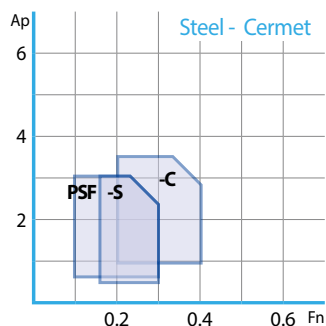
	P M K N S						Feed						
							0	0.1	0.2	0.3	0.4	0.5	0.6
TURNING	P					UF	Finishing		Fn 0.05~0.25	Ap 1.0~2.5			
	P					NEW PWF	Wiper-Finishing		Fn 0.10~0.40	Ap 0.5~4.0			
	P					UL	Semi Finishing and sticky materials		Fn 0.1~0.3	Ap 1.0~3.0			
	P					UM	Medium & Unstable conditions		Fn 0.15~0.3	Ap 1.0~3.0			
PARTING & GROOVING	P					NEW GM	Medium machining for steel & Stainless steel		Fn 0.17~0.50	Ap 0.8~5.0			
	P					UG	First Choice for Medium (Stable conditions)		Fn 0.2~0.4	Ap 1.0~3.0			
	P					PWM	Wiper-Medium		Fn 0.1~0.5	Ap 0.8~3.5			
	P					UH	Low cutting force		Fn 0.35~0.7	Ap 2.0~9.0			
MILLING	P					UT	Heavy roughing		Fn 0.5~1.0	Ap 4.0~12.0			
	P					UC	Medium Roughing and First choice for Cast iron		Fn 0.2~0.4	Ap 1.0~4.0			
	P					UR	Roughing and Heavy interrupted cut		Fn 0.3~0.5	Ap 1.0~5.0			
	P					..MA	Cast iron Heavy Roughing		Fn 0.15~0.50	Ap 1.0~5.0			
DRILLING	P												
	P												
	P												
	P												
TECHNICAL INFORMATION	P												
	P												
	P												
	P												



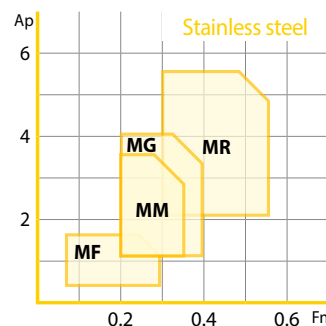
Product Overview

Turning Chipbreakers - Negative

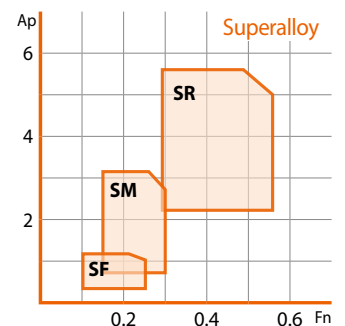
							Feed								
P	M	K	N	S			0	0.1	0.2	0.3	0.4	0.5	0.6	Fn (mm/rev.)	
		K			KR	Cast Iron Heavy Roughing								Fn 0.3~0.6	
	M			S	MF	Stainless steel Finishing								Fn 0.07~0.30	
P	M			S	MM	Stainless steel Medium and Low Carbon Steel								Fn 0.20~0.35	
	M			S	MG	Stainless steel General								Fn 0.20~0.40	
	M			S	MR	Stainless steel Roughing								Fn 0.30~0.55	
				S	SF	HRSA Finishing								Fn 0.1~0.25	
				S	SM	HRSA Medium								Fn 0.15~0.30	
				S	SR	Roughing for HRSA								Fn 0.30~0.55	
P	M	K			PSF	Cermet Finishing to Semi medium								Fn 0.10~0.30	
P	M	K			-S	Cermet Finishing								Fn 0.15~0.30	
P	M	K			-C	Cermet Medium								Fn 0.20~0.40	
								0	1	2	3	4	5	6	Depth of Cut Ap (mm)



*Insert : CNMG120408 / TNGG160408



*Insert : CNMG120408



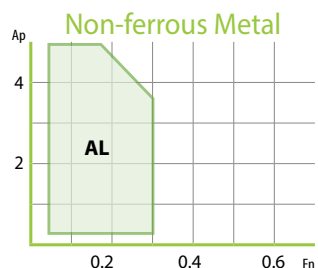
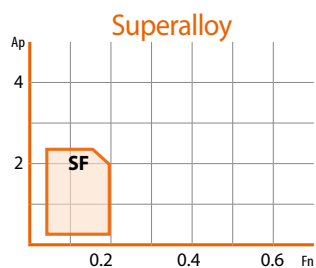
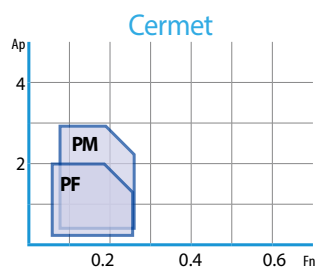
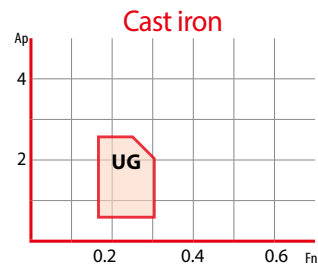
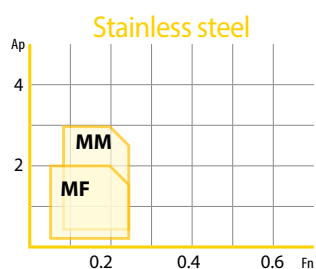
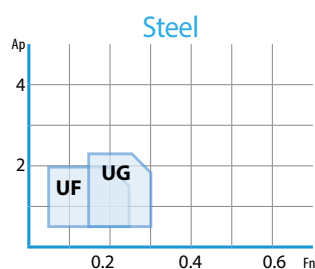
*Insert : CNMG120408

Product Overview

Turning Chipbreakers - Positive

	P M K N S					Feed											Fn (mm/rev.)			
						0 0.1 0.2 0.3 0.4 0.5 0.6														
TURNING				N		AL		Aluminum application	Fn 0.02~0.30		Ap 0.1~5.0									
	P	M				UF		Finishing application	Fn 0.05~0.25		Ap 0.5~2.0									
PARTING & GROOVING	P		K			UG		Medium application	Fn 0.15~0.30		Ap 0.5~2.5									
		M				MF		Stainless steel Finishing	Fn 0.04~0.30		Ap 0.1~2.0									
MILLING		M				MM		Stainless steel Medium	Fn 0.06~0.35		Ap 0.25~3.0									
				S		SF		HRSA Finishing	Fn 0.03~0.20		Ap 0.1~2.5									
DRILLING	P	M	K			PF		Finishing	Fn 0.06~0.25		Ap 0.1~2.0									
	P	M	K			PM		Medium	Fn 0.08~0.25		Ap 0.25~3.0									
								0 1 2 3 4 5 6											Depth of Cut Ap (mm)	

TECHNICAL INFORMATION



*Insert : CCMT09T304

Turning Inserts Overview

Negative Inserts

Recommended Cutting Conditions : p.258

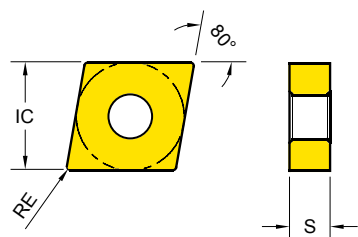
Shape	Series	Size & Thickness												Page
C	 CNMA				1204				1606	1906				28
	CNMG	0903	0904		1204				1606	1906			2509	
	CNGG				1204									
	CNMM				1204				1606	1906			2509	
D	 DNMA					1504	1506							33
	DNMG			1104		1504	1506							
	DNGG					1504	1506							
	DNMM						1506							
	 DNUX					1504	1506							38
K	 KNUX							1604						39
S	 SNMA				1204	1506			1906					40
	SNMG	0903			1204				1906				2509	
	SNMM					1506			1906		2507	2509		
T	 TNMA							1604						44
	TNMG							1604		2204				
	TNGG							1604						
	TNMM							1604		2204				
	 TNUX							1604						50
V	 VNMA							1604						51
	VNMG							1604						
	VNGG							1604						
W	 WNMA				0804									53
	WNMG		0604		0804									
	WNGG				0804									

Positive Inserts

Shape	Series	Size & Thickness												Page
C	 CCGT	0602			09T3				1204					57
	CCMT	0602			09T3				1204					
D	 DCGT		0702						11T3					60
	DCMT		0702						11T3					
R	 RCMT	0602		0803	10T3				1204		1606			62
	RCMX										1606	2006		63
S	 SCGT				09T3									64
	SCMT				09T3				1204					
T	 TCGT					1102				16T3				66
	TCMT					1102				16T3				
V	 VBGT / VBMT							1103			1604			68
	VCGT / VCMT							1103			1604			69

Turning Inserts - Negative

CNMA / CNMG (80° Rhombic)



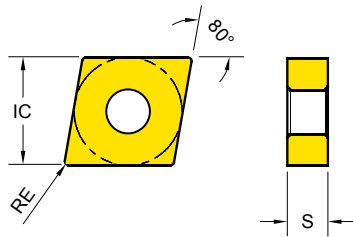
Series	IC	S	Series	IC	S
CN** 0903	9.525	3.18	CN** 1606	15.875	6.35
CN** 0904	9.525	4.76	CN** 1906	19.050	6.35
CN** 1204	12.700	4.76			

EDP 2200.. ● : Stock item ○ : Order made item

CNMA CNMG		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
..MA  Cast iron	CNMA 120404	0.4	0.15 - 0.50	0.5 - 5.0	● 0894	○ 0089	● 3435	○ 0354																	
	CNMA 120408	0.8	0.15 - 0.50	1.0 - 5.0	● 1484	○ 0010	● 3473	○ 0355																	
	CNMA 120412	1.2	0.15 - 0.50	1.5 - 5.0	● 0766	○ 0011	● 3426	○ 0356																	
	CNMA 120416	1.6	0.15 - 0.50	2.0 - 5.0	● 1207	○ 1188	● 3461	○ 1314																	
	CNMA 160612	1.2	0.15 - 0.50	1.5 - 5.0	● 0881	○ 0012	● 3433	○ 0357																	
	CNMA 160616	1.6	0.15 - 0.50	2.0 - 5.0	● 0937	○ 0446	● 3452	○ 0447																	
	CNMA 190612	1.2	0.15 - 0.50	1.5 - 9.0	● 1617	○ 0989	● 3506	○ 0990																	
	CNMA 190616	1.6	0.15 - 1.00	3.0 - 10.0	● 1015	○ 0448	● 3456	○ 0449																	
-UF  Finishing	CNMG 120404 - UF	0.4	0.05 - 0.25	0.5 - 2.5				○ 0178		● 2370	● 3200	● 0179	● 0180	○ 0003				○ 2222							
	CNMG 120408 - UF	0.8	0.05 - 0.25	1.0 - 2.5				○ 0189	○ 1027	● 2204	● 3203	● 0190	● 0191												
	CNMG 120412 - UF	1.2	0.05 - 0.25	1.5 - 2.5				○ 1349		● 2598	● 3362	● 1360	● 1350												
NEW -PWF  Wiper-Finishing	CNMG120404 - PWF	0.4	0.08 - 0.30	0.3 - 4.0	● 3848					● 3855	● 3859		● 3866												
	CNMG120408 - PWF	0.8	0.10 - 0.40	0.5 - 4.0	● 3849					● 3856	● 3860		● 3867												
-UL  Light Machining and Sticky Material	CNMG 090308 - UL	0.8	0.10 - 0.30	1.0 - 2.5				○ 1211		● 2589	● 3358	● 1328	● 1212												
	CNMG 090312 - UL	1.2	0.10 - 0.30	1.5 - 2.5				○ 1274		● 2590	● 3355	● 1270	● 1704												
	CNMG 090408 - UL	0.8	0.10 - 0.30	1.0 - 2.5				○ 1338		● 2591	● 3359	● 1335	● 1705												
	CNMG 090412 - UL	1.2	0.10 - 0.30	1.5 - 2.5				○ 1339		● 2592	● 3360	● 1336	● 1706												
	CNMG 120404 - UL	0.4	0.10 - 0.30	0.5 - 3.0				○ 0358		● 2381	● 3250	● 0359	● 0524												
	CNMG 120408 - UL	0.8	0.10 - 0.30	1.0 - 3.0				○ 0192		● 2315	● 3204	● 0193	● 0194												
	CNMG 120412 - UL	1.2	0.10 - 0.30	1.5 - 3.0				○ 0201		● 2396	● 3207	● 0202	● 0203												
-UM  Medium Machining Unstable condition	CNMG 120404 - UM	0.4	0.15 - 0.30	0.5 - 3.0	● 1074		○ 0184		○ 0184	● 2174	● 3202	● 0185	● 0186												
	CNMG 120408 - UM	0.8	0.15 - 0.30	1.0 - 3.0	● 0897	● 0338	○ 0114	○ 0843	○ 0114	● 2218	● 3175	● 0100	● 0140												
	CNMG 120412 - UM	1.2	0.15 - 0.30	1.5 - 3.0	● 1075		○ 0525		○ 0525	● 2387	● 3280	● 0486	● 0526												
NEW -GM  Medium machining for steel & Stainless steel	CNMG 120404 - GM	0.4	0.15~0.40	0.5~4.0						● 3630	● 3651					● 3690									
	CNMG 120408 - GM	0.8	0.17~0.50	0.8~5.0						● 3631	● 3652					● 3695									
	CNMG 120412 - GM	1.2	0.20~0.55	1.0~5.0						● 3632	● 3653					● 3700									

Turning Inserts - Negative CNMG (80° Rhombic)

Refer to
Turning holder
p. 92, 97, 113, 118, 124



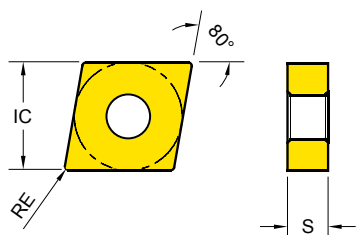
Series	IC	S	Series	IC	S
CN** 0903	9.525	3.18	CN** 1606	15.875	6.35
CN** 0904	9.525	4.76	CN** 1906	19.050	6.35
CN** 1204	12.700	4.76	CN** 2509	25.400	9.52

EDP 2200.. ● : Stock item ○ : Order made item

					→ S ←																				
					K10	P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S30	S10	P15	P10	N20	N20
					K20	K30																M15	M10		
					K15	K10																			
CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10	
 Medium Machining at stable condition	CNMG 120404 - UG	0.4	0.20 - 0.40	0.5 - 3.0	●	○	●	○		●	●	●	●												
	CNMG 120408 - UG	0.8	0.20 - 0.40	1.0 - 3.0	1578	1073	3492	0181		2219	3201	0182	0183												
	CNMG 120412 - UG	1.2	0.20 - 0.40	1.5 - 3.0	0896	0337	3437	0113	1001	2178	3174	0099	0139	0001											
	CNMG 160608 - UG	0.8	0.20 - 0.40	1.0 - 5.0	1579	0685	3493	0198		2199	3206	0199	0200												
	CNMG 160612 - UG	1.2	0.20 - 0.40	1.5 - 5.0	1826	1077		1078		2599	3314	0748	0749												
	CNMG 160616 - UG	1.6	0.30 - 0.50	2.0 - 5.0	1827	0791		0530		2430	3285	0508	0531		○	●									
	CNMG 190608 - UG	0.8	0.20 - 0.60	1.0 - 6.0	1828	1229		0534		2600	3287	0510	0535												
	CNMG 190612 - UG	1.2	0.20 - 0.60	1.5 - 6.0	1847			0801		2601	3321	0802	0803												
 Wiper-Medium	CNMG 120404 - PWM	0.4	0.10 - 0.50	0.5 - 3.5	●	○				●	●	●	●	○											
	CNMG 120408 - PWM	0.8	0.10 - 0.50	0.8 - 3.5	1940	1941				2593	3391	1977	2046	0003											
	CNMG 120412 - PWM	1.2	0.10 - 0.50	1.0 - 3.5	2047					2595	3354	1251	1319		○	●					●				
 Cast iron and Medium roughing	CNMG 120404 - UC	0.4	0.20 - 0.40	0.5 - 4.0	1697					2597	3390	1950	1951												
	CNMG 120408 - UC	0.8	0.20 - 0.40	1.0 - 4.0	●	○	●	○		●	●	●	●												
	CNMG 120412 - UC	1.2	0.20 - 0.40	1.5 - 4.0	0895	0096	3436	0115		2372	3176	0101	0116												
 Roughing	CNMG 120408 - UR	0.8	0.30 - 0.50	1.0 - 5.0	1483	0062	3472	0117		2172	3177	0102	0118												
	CNMG 120412 - UR	1.2	0.30 - 0.50	1.5 - 5.0	●	○	●	○		●	●	●	●												
	CNMG 120416 - UR	1.6	0.30 - 0.50	2.0 - 5.0	0873	0088	3429	0119		2185	3178	0103	0120												
	CNMG 160608 - UR	0.8	0.30 - 0.50	1.0 - 5.0	1536	1050	3486	0195		2196	3205	0196	0197												
	CNMG 160612 - UR	1.2	0.30 - 0.50	1.5 - 5.0	0878	1051	3430	0204		2179	3208	0205	0206	0004				○		2223					
	CNMG 160616 - UR	1.6	0.30 - 0.50	2.0 - 5.0	●	○	●	○		●	●	●	●												
	CNMG 190608 - UR	0.8	0.30 - 0.80	3.0 - 9.0	1530	1076	3485	0707		2213	3298	0623	0847												
	CNMG 190612 - UR	1.2	0.30 - 0.80	3.0 - 9.0	1668	1079		1080		2426	3315	0750	0751												
	CNMG 250924 - UR	2.4	0.40 - 1.00	5.0 - 12.0	●	○	●	○		●	●	●	●												
	 Cast Iron Heavy Roughing	CNMG 120408 - KR	0.8	0.30 - 0.60	1.0 - 5.0	0882	0792	3434	0532		2197	3286	0509	0533											
CNMG 120412 - KR		1.2	0.30 - 0.60	1.5 - 5.0	●	○	●	○		●	●	●	●												
CNMG 160612 - KR		1.2	0.30 - 0.60	1.5 - 6.0	0938	0676	3453	0536		2187	3288	0511	0537												
CNMG 160616 - KR		1.6	0.30 - 0.60	2.0 - 6.0	●		○	○		2427	3322	0805	0806												
CNMG 190612 - KR		1.2	0.30 - 1.00	3.0 - 9.0	1848		3544	0804		2427	3322	0805	0806												

Turning Inserts - Negative
CNMG (80° Rhombic)Refer to
Turning holder
p. 92, 97, 113, 118, 124

TURNING



Series	IC	S	Series	IC	S
CN** 0903	9.525	3.18	CN** 1606	15.875	6.35
CN** 0904	9.525	4.76	CN** 1906	19.050	6.35
CN** 1204	12.700	4.76			

EDP 2200.. ● : Stock item ○ : Order made item

CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-MF  Stainless steel Finishing	CNMG 120404 - MF	0.4	0.07 - 0.3	0.2 - 1.5						○	○	○			●	●	●	●	●	○				
	CNMG 120408 - MF	0.8	0.07 - 0.3	0.2 - 1.5						●		○			●	●	●	●	●	○				
	CNMG 120412 - MF	1.2	0.07 - 0.3	0.2 - 1.5						●		○			●	●								
-MM  Stainless steel Medium	CNMG 120404 - MM	0.4	0.20 - 0.35	0.5 - 3.5													●	●	●	○				
	CNMG 120408 - MM	0.8	0.20 - 0.35	1.0 - 3.5						○	○	○					●	●	●	○				
	CNMG 120412 - MM	1.2	0.20 - 0.35	1.5 - 3.5								○			○	●	●	●	○					
	CNMG 190608 - MM	0.8	0.20 - 0.50	2.0 - 5.5													●	●	●					
	CNMG 190612 - MM	1.2	0.20 - 0.55	2.0 - 5.5													●	●	●					
-MG  Stainless steel General	CNMG120404 - MG	0.4	0.20 - 0.40	0.5 - 4.0								○			●	●								
	CNMG 120408 - MG	0.8	0.20 - 0.40	1.0 - 4.0								○			●	●	●	●	●					
	CNMG 120412 - MG	1.2	0.20 - 0.40	1.5 - 4.0											●	●	●	●	●					
	CNMG 160608 - MG	0.8	0.20 - 0.45	1.0 - 4.0													●	●	●	●				
	CNMG 160612 - MG	1.2	0.20 - 0.50	2.0 - 4.0													●	●	●	●				
	CNMG 160616 - MG	1.6	0.20 - 0.50	2.0 - 4.0													●	●	●	●				
	CNMG 190616 - MG	1.6	0.20 - 0.50	2.0 - 5.0													●	●	●	●				
-MR  Stainless steel Roughing	CNMG 120408 - MR	0.8	0.30 - 0.55	2.0 - 5.5								○			●	●	●	●	●					
	CNMG 120412 - MR	1.2	0.30 - 0.55	2.0 - 5.5						○	○	○			●	●	●	●	●					
	CNMG 120416 - MR	1.6	0.30 - 0.55	2.0 - 5.5						○	○	○			●	●	●	●	●					
	CNMG 160616 - MR	1.6	0.30 - 0.55	2.0~6.0											●	●								

PARTING & GROOVING

MILLING

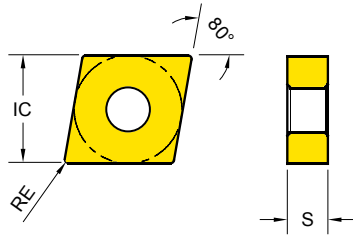
DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

CNGG / CNMG (80° Rhombic)

Refer to
Turning holder
p. 92, 97, 113, 118, 124



Series	IC	S	Series	IC	S
CN** 0903	9.525	3.18	CN** 1606	15.875	6.35
CN** 0904	9.525	4.76	CN** 1906	19.050	6.35
CN** 1204	12.700	4.76			

EDP 2200.. ● : Stock item ○ : Order made item

CNGG CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
- SF HRSA Finishing	CNGG 120401 - SF	0.1	0.10 ~ 0.25	0.1 ~ 1.0																●				
	CNGG 120402 - SF	0.2	0.10 ~ 0.25	0.1 ~ 1.0																●				
	CNGG 120404 - SF	0.4	0.10 ~ 0.25	0.2 ~ 1.0																●				
	CNGG 120408 - SF	0.8	0.10 ~ 0.25	0.2 ~ 1.0																●				
- SM HRSA Medium	CNMG 120404 - SM	0.4	0.15 ~ 0.30	0.5 ~ 3.0																●				
	CNMG 120408 - SM	0.8	0.15 ~ 0.30	0.5 ~ 3.0																●				
	CNMG 120412 - SM	1.2	0.15 ~ 0.30	0.5 ~ 3.0																●				
- SR HRSA Roughing	CNMG 120408 - SR	0.8	0.30 ~ 0.55	2.0 ~ 5.5																●				
	CNMG 120412 - SR	1.2	0.30 ~ 0.55	2.0 ~ 5.5																●				
	CNMG 120416 - SR	1.6	0.30 ~ 0.55	2.0 ~ 5.5																●				
- PSF Cermet Finishing	CNMG 120404 - PSF	0.4	0.07 ~ 0.30	0.4 ~ 3.0																●	○			
	CNMG 120408 - PSF	0.8	0.10 ~ 0.30	0.6 ~ 3.0																●	○			

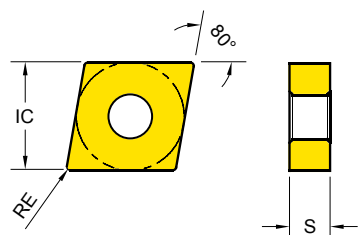
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S	Series	IC	S
CN** 1204	12.700	4.76	CN** 1906	19.050	6.35
CN** 1606	15.875	6.35	CN** 2507	25.400	7.94
			CN** 2509	25.400	9.52

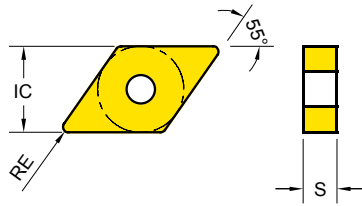
EDP 2200.. ● : Stock item ○ : Order made item

CNMM																							
	Designation	RE	Fn (mm/rev.)	Ap (mm)																			
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100
- UH  Low cutting force	CNMM 120408 - UH	0.8	0.30-0.50	1.5-5.0						●	●	●	●		●								
	CNMM 120412 - UH	1.2	0.30-0.55	1.6-5.0						●					●								
	CNMM 120416 - UH	1.6	0.30-0.60	2.0-5.0						●					●								
	CNMM 160612 - UH	1.2	0.35-0.60	2.0-5.5						●	●	●	●		●								
	CNMM 160616 - UH	1.6	0.35-0.60	2.5-5.5						●	●	●	●		●								
	CNMM 190612 - UH	1.2	0.35-0.70	1.5-9.0	●		●			●	●	●	●		●								
	CNMM 190616 - UH	1.6	0.35-0.70	2.0-9.0	●		●			●	●	●	●		●								
	CNMM 190624 - UH	2.4	0.35-0.70	3.0-9.0	●		●			●	●	●	●		●								
	CNMM 250724 - UH	2.4	0.40-0.80	3.0-10.0						●					●								
	CNMM 250924 - UH	2.4	0.40-0.80	3.0-10.0	●		●			●	●	●	●		●								
- UT  Heavy Roughing	CNMM 120408 - UT	0.8	0.40-0.70	1.5-6.0						●	●	●	●										
	CNMM 160612 - UT	1.2	0.45-0.70	2.0-6.0						●	●	●	●										
	CNMM 160616 - UT	1.6	0.45-0.70	2.5-6.0						●	●	●	●										
	CNMM 190612 - UT	1.2	0.50-1.00	3.0-12.0	●	○	●			●	●	●	●										
	CNMM 190616 - UT	1.6	0.50-1.00	4.0-12.0	●	○	●			●	●	●	●										
	CNMM 190624 - UT	2.4	0.50-1.00	6.0-12.0	●	○	●			●	●	●	●										
	CNMM 250724 - UT	2.4	0.40-0.80	3.0-10.0						●													
	CNMM 250924 - UT	2.4	0.55-1.20	6.0-13.0	●	○	●			●	●	●	●										

Turning Inserts - Negative

DNMA / DNMG (55° Rhombic)

Refer to
Turning holder
p.93, 98, 114, 119, 124



Series	IC	S
DN** 1104	9.525	4.76
DN** 1504	12.700	4.76
DN** 1506	12.700	6.35

EDP 2200.. ● : Stock item ○ : Order made item

DNMA DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..																	
					K10	P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S10	P15	P10
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G
					1558	1505	3489	1506														
					1559	0573	3490	0574														
					1421	0575	3467	0576														
					1581	1445	3495	1447														
					1557	0091	3488	1129														
					1422	0092	3468	1130														
-UF	DNMG 150404 - UF	0.4	0.10-0.50	0.5-5.0																		
		0.8	0.15-0.50	1.0-5.0																		
		1.2	0.15-0.50	1.5-5.0																		
		0.4	0.10-0.50	1.0-5.0																		
		0.8	0.15-0.50	1.0-5.0																		
		1.2	0.15-0.50	1.5-5.0																		
-PWF	DNMG 110404 - PWF	0.4	0.08-0.30	0.3-2.5																		
		0.8	0.10-0.40	0.5-2.5																		
		0.8	0.10-0.40	0.5-3.5																		
		0.8	0.10-0.40	0.5-3.5																		
		0.8	0.10-0.40	0.5-3.5																		
		0.8	0.10-0.40	0.5-3.5																		
-UL	DNMG 150404 - UL	0.4	0.10-0.3	0.5-2.5																		
		0.8	0.10-0.3	1.0-2.5																		
		0.4	0.10-0.3	0.5-3.0																		
		0.8	0.10-0.3	1.0-3.0																		
		1.2	0.10-0.3	1.5-3.0																		
		0.4	0.10-0.3	0.5-3.0																		
		0.8	0.10-0.3	1.0-3.0																		
		1.2	0.10-0.3	1.5-3.0																		

Turning Inserts - Negative
DNMG (55° Rhombic)Refer to
Turning holder
p. 93, 98, 114, 119, 124

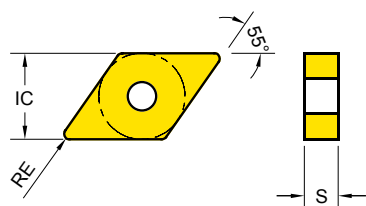
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



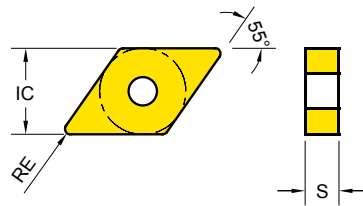
Series	IC	S
DN** 1104	9.525	4.76
DN** 1504	12.700	4.76
DN** 1506	12.700	6.35

EDP 2200.. ● : Stock item ○ : Order made item

DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-UM  Medium Machining Unstable condition	DNMG 150404 - UM	0.4	0.15 - 0.30	0.5 - 3.0	○ 1672	○ 1472		○ 1702		● 2608	● 3383	● 1703	● 1707											
	DNMG 150408 - UM	0.8	0.15 - 0.30	1.0 - 3.0		○ 1106		○ 0688		● 2360	● 3303	● 0689	● 0701											
	DNMG 150412 - UM	1.2	0.15 - 0.30	1.5 - 3.0		○ 0604		○ 0512		● 2203	● 3282	● 0488	● 0705											
	DNMG 150604 - UM	0.4	0.15 - 0.30	0.5 - 3.0		○ 1408		○ 1436		● 2609	● 3368	● 1409	● 1425											
	DNMG 150608 - UM	0.8	0.15 - 0.30	1.0 - 3.0		○ 1128		○ 0240		● 2201	● 3220	● 0241	● 0242											
	DNMG 150612 - UM	1.2	0.15 - 0.30	1.5 - 3.0		○ 1149		○ 1132		● 2612	● 3305	● 0695	● 0706											
-GM  Medium machining for steel & Stainless steel	DNMG 150404 - GM	0.4	0.15 - 0.40	0.5 - 4.0						● 3633	● 3654						● 3717							
	DNMG 150408 - GM	0.8	0.17 - 0.50	0.8 - 4.0						● 3634	● 3655						● 3721							
	DNMG 150412 - GM	1.2	0.20 - 0.55	1.0 - 4.0						● 3636	● 3657						● 3724							
	DNMG 150608 - GM	0.8	0.17 - 0.50	0.8 - 4.0						● 3635	● 3656						● 3730							
	DNMG 150612 - GM	1.2	0.20 - 0.55	1.0 - 4.0						● 3637	● 3658						● 3733							
-UG  Medium Machining at stable condition	DNMG 110408 - UG	0.8	0.20 - 0.40	1.0 - 2.5						● 2780														
	DNMG 110412 - UG	1.2	0.20 - 0.40	1.5 - 2.5						● 2781														
	DNMG 150404 - UG	0.4	0.20 - 0.40	0.5 - 3.0	● 1618	○ 1544	● 3507	○ 1131		● 2443	● 3316	● 0772	● 1137											
	DNMG 150408 - UG	0.8	0.20 - 0.40	1.0 - 3.0	● 1608	○ 0452	● 3499	○ 0366		● 2368	● 3253	● 0367	● 0368	○ 0017				○ 2227						
	DNMG 150412 - UG	1.2	0.20 - 0.40	1.5 - 3.0	● 1514	○ 0703	● 3484	○ 1107		● 2442	● 3281	● 0487	● 0704											
	DNMG 150604 - UG	0.4	0.20 - 0.40	0.5 - 3.0	● 1619	○ 1545	● 3508	○ 0228		● 2375	● 3216	● 0229	● 0230											
	DNMG 150608 - UG	0.8	0.20 - 0.40	1.0 - 3.0	● 1609	○ 0453	● 3500	○ 0234		● 2212	● 3218	● 0235	● 0236	○ 0019				○ 2229						
	DNMG 150612 - UG	1.2	0.20 - 0.40	1.5 - 3.0	● 1511	○ 0454	● 3481	○ 0243		● 2356	● 3221	● 0244	● 0245											
	DNMG 150616 - UG	1.6	0.20 - 0.40	1.8 - 3.0						● 2720														
-UC  Cast iron and Medium roughing	DNMG 150404 - UC	0.4	0.20 - 0.40	0.5 - 4.0	● 3827		● 3625			● 3829	● 3830		● 3828											
	DNMG 150408 - UC	0.8	0.20 - 0.40	1.0 - 4.0	● 1611	○ 0577	● 3502	○ 0578	○ 1273	● 2388	● 3348	● 1193	● 0700											
	DNMG 150412 - UC	1.2	0.20 - 0.40	1.5 - 4.0	● 1512	○ 0579	● 3482	○ 0580		● 2373	● 3345	● 1168	● 0702											
	DNMG 150604 - UC	0.4	0.20 - 0.40	0.5 - 4.0	● 3570		● 3831			● 3571	● 3572		● 3832											
	DNMG 150608 - UC	0.8	0.20 - 0.40	1.0 - 4.0	● 0898	○ 0090	● 3438	○ 0121	○ 1272	● 2376	● 3179	● 0104	● 0122											
	DNMG 150612 - UC	1.2	0.20 - 0.40	1.5 - 4.0	● 1509	○ 0098	● 3479	○ 0123		● 2410	● 3180	● 0105	● 0124											
-UR  Roughing	DNMG 150408 - UR	0.8	0.30 - 0.50	1.0 - 5.0	● 1621	○ 1095	● 3510	○ 0585		● 2446	● 3341	● 1096	● 1097											
	DNMG 150412 - UR	1.2	0.30 - 0.50	1.5 - 5.0	● 1513	○ 1127	● 3483	○ 0581		● 2400	● 3343	● 1134	● 1101											
	DNMG 150608 - UR	0.8	0.30 - 0.50	1.0 - 5.0	● 1622	○ 0691	● 3511	○ 0692		● 2447	● 3304	● 0693	● 0854											
	DNMG 150612 - UR	1.2	0.30 - 0.50	1.5 - 5.0	● 1510	○ 1258	● 3480	○ 0371		● 2416	● 3255	● 0372	● 0373	○ 0020				○ 2230						
	DNMG 150616 - UR	1.6	0.30 ~ 0.50	1.8 ~ 5.0	● 3833		● 3834			● 3626	● 3836		● 3835											

Turning Inserts - Negative DNMG (55° Rhombic)

Refer to
Turning holder
p. 93, 98, 114, 119, 124



Series	IC	S
DN** 1104	9.525	4.76
DN** 1504	12.700	4.76
DN** 1506	12.700	6.35

EDP 2200.. ● : Stock item ○ : Order made item

					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
 Stainless steel Finishing	DNMG 150404 - MF	0.4	0.07 - 0.30	0.2 - 1.5						●					2454	3715	0848	0771	1815	○	●	○		
	DNMG 150408 - MF	0.8	0.07 - 0.30	0.2 - 1.5						●			○		2456	3718	0849	0773	1816	○	○	○		
	DNMG 150604 - MF	0.4	0.07 - 0.30	0.2 - 1.5						○					2455	3725	0811	0850	1819	○	○	○		
	DNMG 150608 - MF	0.8	0.07 - 0.30	0.2 - 1.5						○	○	○	○		2457	3727	0812	0859	1820	○	○	○		
 Stainless steel Medium	DNMG 150404 - MM	0.4	0.20 - 0.35	0.5 - 3.5									○	0527			●	●	●	○				
	DNMG 150408 - MM	0.8	0.20 - 0.35	1.0 - 3.5									○	0506			●	●	●	○				
	DNMG 150412 - MM	1.2	0.20 - 0.35	1.5 - 3.5									○	0529			●	●	●	○				
	DNMG 150604 - MM	0.4	0.20 - 0.35	0.5 - 3.5									○	0528			●	●	●	○				
	DNMG 150608 - MM	0.8	0.20 - 0.35	1.0 - 3.5									○	0507			●	●	●	○				
	DNMG 150612 - MM	1.2	0.20 - 0.35	1.5 - 3.5									○	0496			●	●	●	○				
 Stainless steel General	DNMG 110404 - MG	0.4	0.20 - 0.40	0.5 - 3.0											●	●								
	DNMG 110408 - MG	0.8	0.20 - 0.40	0.8 - 3.0											●	●								
	DNMG 150404 - MG	0.4	0.20 - 0.40	0.5 - 4.0											●	●								
	DNMG 150408 - MG	0.8	0.20 - 0.40	1.0 - 4.0						○					●	●	●	●	●	●				
	DNMG 150412 - MG	1.2	0.20 - 0.40	1.5 - 4.0											●	●								
	DNMG 150604 - MG	0.4	0.20 - 0.40	0.5 - 4.0											●	●								
	DNMG 150608 - MG	0.8	0.20 - 0.40	1.0 - 4.0						●					●	●	●	●	●	●				
	DNMG 150612 - MG	1.2	0.20 - 0.40	1.5 - 4.0											●	●								
 Stainless steel Roughing	DNMG 150408 - MR	0.8	0.30 - 0.55	2.0 - 5.5									○	1036	●	●	●	●	●					
	DNMG 150412 - MR	1.2	0.30 - 0.55	2.0 - 5.5											●	●	●	●	●					
	DNMG 150608 - MR	0.8	0.30 - 0.55	2.0 - 5.5									○	1037	●	●	●	●	●					
	DNMG 150612 - MR	1.2	0.30 - 0.55	2.0 - 5.5											●	●	●	●	●					

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

DNGG / DNMG (55° Rhombic)

Refer to
Turning holder
p. 93, 98, 114, 119, 124

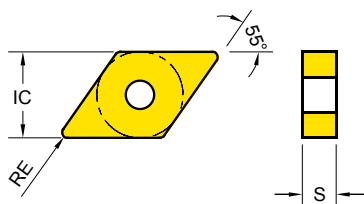
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
DN** 1104	9.525	4.76
DN** 1504	12.700	4.76
DN** 1506	12.700	6.35

EDP 2200.. ● : Stock item ○ : Order made item

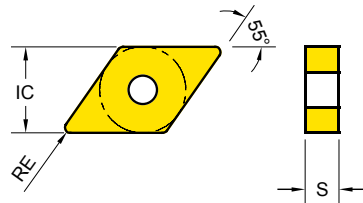
DNGG DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-SF  HRSA Finishing	DNGG 150404 - SF	0.4	0.10 - 0.25	0.2 - 1.0																●				
	DNGG 150408 - SF	0.8	0.10 - 0.25	0.2 - 1.0																●				
	DNGG 150604 - SF	0.4	0.10 - 0.25	0.2 - 1.0																●				
	DNGG 150608 - SF	0.8	0.10 - 0.25	0.2 - 1.0																●				
-SM  HRSA Medium	DNMG 150408 - SM	0.8	0.15 - 0.30	0.5 - 3.0						○								○	○	○	●			
	DNMG 150412 - SM	1.2	0.15 - 0.30	0.5 - 3.0						3148								○	○	○	●			
	DNMG 150608 - SM	0.8	0.15 - 0.30	0.5 - 3.0						●								○	○	○	●			
	DNMG 150612 - SM	1.2	0.15 - 0.30	0.5 - 3.0														○	○	○	●			
-SR  HRSA Roughing	DNMG 150408 - SR	0.8	0.30 - 0.55	2.0 - 5.5																●				
	DNMG 150412 - SR	1.2	0.30 - 0.55	2.0 - 5.5																●				
	DNMG 150608 - SR	0.8	0.30 - 0.55	2.0 - 5.5																●				
	DNMG 150612 - SR	1.2	0.30 - 0.55	2.0 - 5.5																●				
-PSF  Cermet Finishing	DNMG 150404 - PSF	0.4	0.07 - 0.30	0.4 - 3.0																●	○			
	DNMG 150408 - PSF	0.8	0.10 - 0.30	0.6 - 3.0																●	○			
	DNMG 150604 - PSF	0.4	0.07 - 0.30	0.4 - 3.0																●	○			
	DNMG 150608 - PSF	0.8	0.10 - 0.35	0.6 - 3.0																●	○			

Turning Inserts - Negative

DNMM - Heavy Turning (55° Rhombic)



Refer to
Turning holder
p. 93, 98, 114, 119, 124



Series	IC	S
DN** 1104	9.525	4.76
DN** 1504	12.700	4.76
DN** 1506	12.700	6.35

EDP 2200..

● : Stock item ○ : Order made item

DNMM	Designation	RE	Fn (mm/rev.)	Ap (mm)																								
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10				
-UH	DNMM 150612 - UH	1.2	0.30-0.50	2.0-7.0						●	●	●	●		●													
										2731	3414	2327	2328		2769													
-UT	DNMM 150612 - UT	1.2	0.40-0.70	2.0-8.0						●	●	●	●															
										2732	3415	2329	2330															



Low cutting force



Heavy
Roughing

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

DNUX (4 Corners 55° Rhombic)

Refer to
Turning holder
p. 93, 98, 114, 119, 124

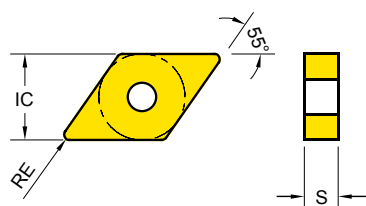
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
DNUX 1504	12.7	4.76
DNUX 1506	12.7	6.35

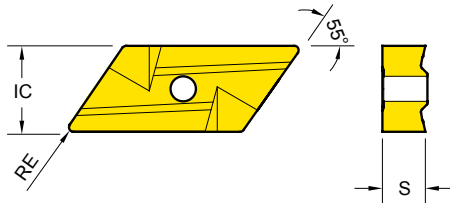
EDP 2200.. ● : Stock item ○ : Order made item

DNUX	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S10	P15	P10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
..UX  Left Hand Shown	DNUX 150404 L	0.4	0.10 - 0.35	0.7 - 4.0				○		●	●	●	●											
	DNUX 150408 L	0.8	0.10 - 0.35	1.0 - 4.0				○		●	●	●	●											
	DNUX 150604 L	0.4	0.10 - 0.35	0.7 - 4.0				○		●	●	●	●					●						
	DNUX 150608 L	0.8	0.10 - 0.35	1.0 - 4.0				○		●	●	●	●					●						
..UX  Right Hand Shown	DNUX 150404 R	0.4	0.10 - 0.35	0.7 - 4.0				○		●	●	●	●								●	○		
	DNUX 150408 R	0.8	0.10 - 0.35	1.0 - 4.0				○		●	●	●	●											
	DNUX 150604 R	0.4	0.10 - 0.35	0.7 - 4.0				○		●	●	●	●					●	●	●				
	DNUX 150608 R	0.8	0.10 - 0.35	1.0 - 4.0				○		●	●	●	●					●	●	●				

Turning Inserts - Negative

KNUX (2 Corners 55° Parallelogram)

Refer to
Turning holder
p. 99, 127



Series	IC	S
KN** 1604	9.525	4.76

EDP 2200..

● : Stock item ○ : Order made item

KNUX	Designation	RE	Fn (mm/rev.)	Ap (mm)																				
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
..UX  Left Hand Shown	KNUX 160405 L	0.5	0.10-0.40	0.5-6.0				○ 0249		● 2621	● 3223	● 0250	● 0251	○ 0079										
	KNUX 160410 L	1.0	0.30-0.60	1.0-6.0				○ 1785		● 2622	● 3384	● 1786	● 1315											
..UX  Right Hand Shown	KNUX 160405 R	0.5	0.10-0.40	0.5-6.0				○ 0252		● 2408	● 3224	● 0253	● 0254	○ 0080										
	KNUX 160410 R	1.0	0.30-0.60	1.0-6.0				○ 1358		● 2623	● 3344	● 1155	● 1156											

TURNING

PARTING & GROOVING

MILLING

DRILLING

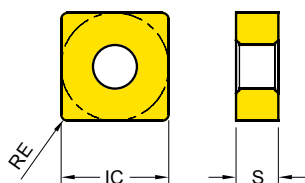
TECHNICAL INFORMATION

Turning Inserts - Negative

SNMA / SNMG (90° Square)

Refer to
Turning holder
p. 94, 100, 115, 120

TURNING



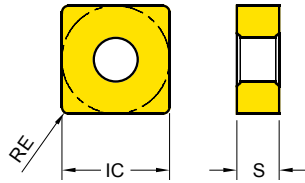
Series	IC	S	Series	IC	S
SN** 0903	9.525	3.18	SN** 1506	15.875	6.35
SN** 1204	12.700	4.76	SN** 1906	19.050	6.35

EDP 2200.. ● : Stock item ○ : Order made item

SNMA SNMG		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	K20 YG1001	K30 YG1020	K30 YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
..MA  Cast iron	SNMA 120408	0.8	0.15 - 0.50	1.0 - 5.0	● 0767	○ 0027	● 3427	○ 1166																	
	SNMA 120412	1.2	0.15 - 0.50	1.5 - 5.0	● 0768	○ 0028	● 3428	○ 1133																	
	SNMA 120416	1.6	0.15 - 0.50	1.8 - 5.0	● 2023																				
	SNMA 150612	1.2	0.15 - 0.50	1.5 - 5.0	● 1423	○ 0729	● 3469	○ 1150																	
	SNMA 190616	1.6	0.15 - 0.50	2.0 - 9.0	● 1344	○ 1184	● 3465	○ 1261																	
-UF  Finishing	SNMG 090308 - UF	0.8	0.05 - 0.20	1.0 - 2.0						● 2630	● 3337	● 0999													
	SNMG 120404 - UF	0.4	0.05 - 0.25	0.5 - 1.5				○ 1458		● 2631	● 3373	● 1459	● 1454	○ 0029				○ 2237							
	SNMG 120408 - UF	0.8	0.05 - 0.25	1.0 - 2.5				○ 1430		● 2633	● 3370	● 1433	● 1437												
-UL  Light Machining and Sticky Material	SNMG 120404 - UL	0.4	0.10 - 0.30	0.5 - 3.0				○ 1167		● 2632	● 3313	● 0747	● 1194												
	SNMG 120408 - UL	0.8	0.10 - 0.30	1.0 - 3.0				○ 0389		● 2634	● 3261	● 0390	● 0391												
-UM  Medium Machining Unstable condition	SNMG 120408 - UM	0.8	0.15 - 0.30	1.0 - 3.0		○ 0983		○ 0739		● 2635	● 3318	● 0784	● 0740												

Turning Inserts - Negative SNMG (90° Square)

Refer to
Turning holder
p. 94, 100, 115, 120



Series	IC	S	Series	IC	S
SN** 0903	9.525	3.18	SN** 1906	19.050	6.35
SN** 1204	12.700	4.76	SN** 2509	25.400	9.52
SN** 1506	15.875	6.35			

EDP 2200.. ● : Stock item ○ : Order made item

SNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG10	P05 K10	P05 K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
-UG  Medium Machining at stable condition	SNMG 120408 - UG	0.8	0.20-0.40	1.0-3.0	●	○	●	○						○										
	SNMG 120412 - UG	1.2	0.20-0.40	1.5-3.0	●	○	●	○																
	SNMG 120416 - UG	1.6	0.20-0.40	2.0-3.0	●	○																		
-UC  Cast iron and Medium roughing	SNMG 120404 - UC	0.4	0.20-0.40	0.5-4.0	●																			
	SNMG 120408 - UC	0.8	0.20-0.40	1.0-4.0	●	○	●	○																
	SNMG 120412 - UC	1.2	0.20-0.40	1.5-4.0	●	○	●	○																
-UR  Roughing	SNMG 120408 - UR	0.8	0.30-0.50	1.0-5.0	●	○	●	○																
	SNMG 120412 - UR	1.2	0.30-0.50	1.5-5.0	●	○	●	○																
	SNMG 120416 - UR	1.6	0.30-0.50	2.0-5.0	●	○																		
	SNMG 150616 - UR	1.6	0.30-0.60	2.0-7.0																				
	SNMG 190612 - UR	1.2	0.30-0.80	3.0-9.0																				
	SNMG 190616 - UR	1.6	0.30-0.80	3.0-9.0	●	○	●																	
	SNMG 250924 - UR	2.4	0.40-1.00	5.0-12.0																				
-KR  Cast Iron Heavy Roughing	SNMG 120412 - KR	1.2	0.30-0.60	1.5-5.0	●	○	●	○																
	SNMG 120416 - KR	1.6	0.30-0.60	2.0-5.0	●	○	●	○																

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative SNMG (90° Square)

Refer to
Turning holder
p. 94, 100, 115, 120

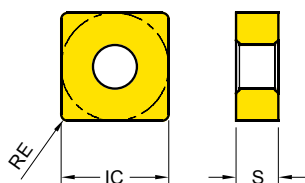
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S	Series	IC	S
SN** 0903	9.525	3.18	SN** 1506	15.875	6.35
SN** 1204	12.700	4.76	SN** 1906	19.050	6.35

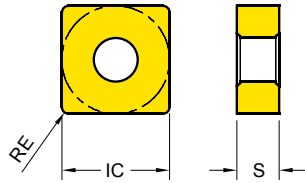
EDP 2200.. ● : Stock item ○ : Order made item

	SNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
						YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-MF		SNMG 120404 - MF	0.4	0.07 - 0.30	0.2 - 1.5													●	●	●	○				
		SNMG 120408 - MF	0.8	0.07 - 0.30	0.2 - 1.5					●	2872			○	0818	●	●	●	●	●	○				
		SNMG 120412 - MF	1.2	0.07 - 0.30	0.2 - 1.5					●	2873			○	0821	●	●	●	●	●	○				
-MM		SNMG 120408 - MM	0.8	0.20 - 0.35	1.0 - 3.5													●	●	●	○				
		SNMG 120412 - MM	1.2	0.20 - 0.35	1.5 - 3.5													●	●	●	○				
																		●	●	●	○				
-MG		SNMG 120404 - MG	0.4	0.20 - 0.40	0.5 - 4.0											●	●								
		SNMG 120408 - MG	0.8	0.20 - 0.40	1.0 - 4.0											●	●	●	●	●	●				
		SNMG 120412 - MG	1.2	0.20 - 0.40	1.5 - 4.0											●	●								
-MR		SNMG 120408 - MR	0.8	0.30 - 0.55	2.0 - 5.5									○	1059	●	●	●	●	●					
		SNMG 120412 - MR	1.2	0.30 - 0.55	2.0 - 5.5									○	0823	●	●	●	●	●					
		SNMG 120416 - MR	1.6	0.30 - 0.55	2.0 - 5.5											●	●								
-SM		SNMG 090304 - SM	0.4	0.15 - 0.30	0.5 - 3.0													○			●				
		SNMG 120408 - SM	0.8	0.15 - 0.30	0.5 - 3.0													○	○	○	●				
-SR		SNMG 120408 - SR	0.8	0.30 - 0.55	2.0 - 5.5																●				
		SNMG 120412 - SR	1.2	0.30 - 0.55	2.0 - 5.5																●				

Turning Inserts - Negative

SNMM - Heavy Turning (90° Square)

Refer to
Turning holder
p. 94, 100, 115, 120



Series	IC	S	Series	IC	S
SN** 1506	15.875	6.35	SN** 2507	25.400	7.94
SN** 1906	19.050	6.35	SN** 2509	25.400	9.52

EDP 2200.. ● : Stock item ○ : Order made item

					IC		S			K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
SNMM	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10					
 Low cutting force	SNMM 150612 - UH	1.2	0.35-0.60	2.0-5.5						●	●	●	●	●	●														
	SNMM 190612 - UH	1.2	0.35-0.70	1.5-9.0	● 2123			● 2124		●	●	●	●	●	●	●													
	SNMM 190616 - UH	1.6	0.35-0.70	2.0-9.0	● 2127			● 2128		●	●	●	●	●	●	●													
	SNMM 190624 - UH	2.4	0.35-0.70	3.0-9.0	● 2131			● 2132		●	●	●	●	●	●	●													
	SNMM 250724 - UH	2.4	0.40-0.80	3.0-10.0						●	●				●	●													
	SNMM 250924 - UH	2.4	0.40-0.80	3.0-10.0	● 2135			● 2136		●	●	●	●	●	●	●													
 Heavy Roughing	SNMM 150612 - UT	1.2	0.45-0.70	2.0-6.0						●	●	●	●																
	SNMM 190612 - UT	1.2	0.50-1.00	3.0-12.0	● 2153		○ 3556	● 2154		●	●	●	●	●															
	SNMM 190616 - UT	1.6	0.50-1.00	4.0-12.0	● 2157		○ 3557	● 2158		●	●	●	●	●															
	SNMM 190624 - UT	2.4	0.50-1.00	6.0-12.0	● 2161		○ 3558	● 2018		●	●	●	●	●															
	SNMM 250724 - UT	2.4	0.55-1.20	6.0-13.0	● 2850	● 1330		● 1255		●	●	●	●	●															
	SNMM 250924 - UT	2.4	0.55-1.20	6.0-13.0	● 2164	● 1334	○ 3559	● 1626		●	●	●	●	●															

TURNING

PARTING & GROOVING

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TECHNICAL INFORMATION

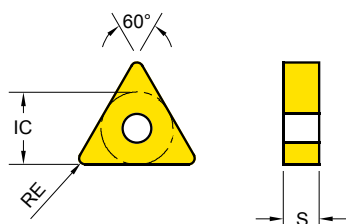
Turning Inserts - Negative

TNMA / TNMG (60° Triangle)


Refer to
Turning holder

p. 95, 101, 116, 121, 125

Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

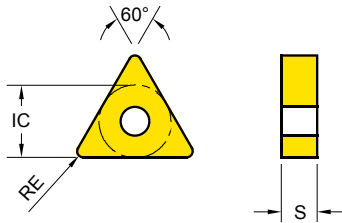


EDP 2200.. ● : Stock item ○ : Order made item

						→ S ←																							
TNMA TNMG						RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N25	
..MA 	TNMA 160404	0.4	0.15 - 0.50	0.5 - 5.0	● 1582	○ 1446	● 3496	○ 1448																					
	TNMA 160408	0.8	0.15 - 0.50	1.0 - 5.0	● 1486	○ 0035	● 3475	○ 1191																					
	TNMA 160412	1.2	0.15 - 0.50	1.5 - 5.0	● 1485	○ 0036	● 3474	○ 1192																					
-UF 	TNMG 160404 - UF	0.4	0.05 - 0.25	0.5 - 2.5				○ 0270						● 2363	● 3230	● 0271	● 0272	○ 0039											
	TNMG 160408 - UF	0.8	0.05 - 0.25	1.0 - 2.5				○ 0276						● 2217	● 3232	● 0277	● 0278												
	TNMG 160412 - UF	1.2	0.05 - 0.25	1.5 - 2.5				○ 0721						● 2645	● 3294	● 0588	● 1197												
	TNMG 220404 - UF	0.4	0.10 - 0.35	0.5 - 4.0				○ 0407						● 2409	● 3350	● 1203	● 1205	○ 0042											
NEW -PWF 	TNMG160404 - PWF	0.4	0.08 - 0.25	0.3 - 2.5	● 3854									● 3858	● 3865		● 3872									○ 3873			
-UL 	TNMG 160404 - UL	0.4	0.10 - 0.30	0.5 - 3.0				○ 1605						● 2643	● 3379	● 1606	● 1607												
	TNMG 160408 - UL	0.8	0.10 - 0.30	1.0 - 3.0				○ 0279	○ 0752					● 2374	● 3233	● 0280	● 0281												
	TNMG 160412 - UL	1.2	0.10 - 0.30	1.5 - 3.0				○ 0884	○ 0868					● 2586	● 3297	● 0621	● 1198												
-UM 	TNMG 160404 - UM	0.4	0.15 - 0.30	0.5 - 3.0	○ 1669	○ 0949		○ 0948	○ 0844				● 2644	● 3334	● 0952	● 0954													
	TNMG 160408 - UM	0.8	0.15 - 0.30	1.0 - 3.0	○ 1141	○ 1053		○ 0282	○ 0758				● 2195	● 3234	● 0283	● 0284													
	TNMG 160412 - UM	1.2	0.15 - 0.30	1.5 - 3.0	○ 1143	○ 0596		○ 0597	○ 0760				● 2587	● 3292	● 0586	● 0710													
NEW -GM 	TNMG 160404 - GM	0.4	0.15 - 0.40	0.5 - 4.5										● 3638	● 3659							● 3767							
	TNMG 160408 - GM	0.8	0.17 - 0.50	0.8 - 4.5										● 3639	● 3660							● 3771							
	TNMG 160412 - GM	1.2	0.20 - 0.55	1.0 - 4.5										● 3640	● 3661							● 3774							

Turning Inserts - Negative TNMG (60° Triangle)

 **Refer to**
Turning holder
p. 95, 101, 116, 121, 125



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

[illegible]

Turning Inserts - Negative TNMG (60° Triangle)

Refer to
Turning holder
p. 95, 101, 116, 121, 125

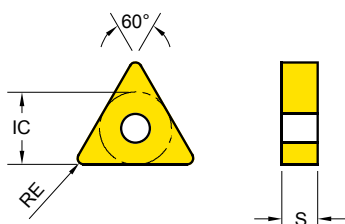
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

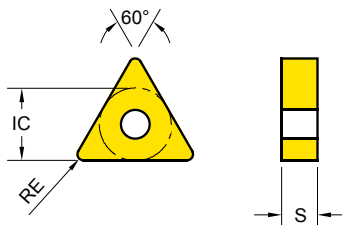
EDP 2200.. ● : Stock item ○ : Order made item

					CUTTING DATA																			
					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N25
TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-MF  Stainless steel Finishing	TNMG 160404 - MF	0.4	0.07 - 0.3	0.2 - 1.5					●	2889			●	2952	●	2788	3765	0824	0775	1457	○	●	○	
	TNMG 160408 - MF	0.8	0.07 - 0.3	0.2 - 1.5					●	2871	○	○				2458	3768	0589	0776	0825	1285			
-MM  Stainless steel Medium	TNMG 160404 - MM	0.4	0.20 - 0.35	0.5 - 3.5													●	●	●	○				
	TNMG 160408 - MM	0.8	0.20 - 0.35	1.0 - 3.5														0567	0568	1790	2297			
	TNMG 160412 - MM	1.2	0.20 - 0.35	1.5 - 3.5														0569	0570	0913	1281			
-MG  Stainless steel General	TNMG 160404 - MG	0.4	0.20 - 0.40	0.5 - 4.0											●	●	●	●	●	●				
	TNMG 160408 - MG	0.8	0.20 - 0.40	1.0 - 4.0											●	2473	3769	1568	1569	1713	1660			
	TNMG 160412 - MG	1.2	0.20 - 0.50	2.0 - 4.0											●	2474	3772	2104	2105	2103	2054			
-MR  Stainless steel Roughing	TNMG 160408 - MR	0.8	0.30 - 0.55	2.0 - 5.5									○	0727	●	2493	3770	0826	0985	0726				
	TNMG 160412 - MR	1.2	0.30 - 0.55	2.0 - 5.5									○	1062		●	2494	3773	0995	0827	0828			

Turning Inserts - Negative

TNMG / TNMG (60° Triangle)

Refer to
Turning holder
p. 95, 101, 116, 121, 125



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

		RE		S		EDP 2200..																			
						K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
TNMG		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-SF		TNMG 160408 - SF	0.8	0.10-0.25	0.2 - 1.0																● 1427				
-SM		TNMG 160408 - SM	0.8	0.15-0.30	0.5 - 3.0														○ 1575	○ 1576	○ 1577	● 1228			
		TNMG 160412 - SM	1.2	0.15-0.30	0.5 - 3.0														○ 1635	○ 1636	○ 1858	● 1508			
		TNMG 220412 - SM	1.2	0.18-0.33	1.0 - 6.0																	● 3161			
-SR		TNMG 160408 - SR	0.8	0.30-0.55	2.0 - 5.5																● 1307				
		TNMG 160412 - SR	1.2	0.30-0.55	2.0 - 5.5																● 1306				
			</																						

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

TNGG / TNMG (60° Triangle)

Refer to
Turning holder
p. 95, 101, 116, 121, 125

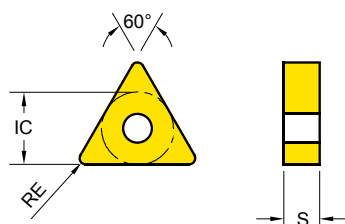
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

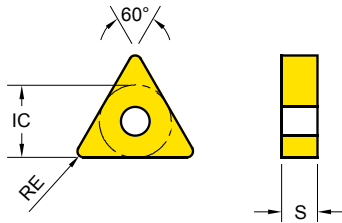
EDP 2200.. ● : Stock item ○ : Order made item

TNGG TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-PSF  Cermet Finishing	TNMG 160404 - PSF	0.4	0.07 - 0.30	0.4 - 2.5																	●	○		
	TNMG 160408 - PSF	0.8	0.10 - 0.30	0.6 - 2.5																	●	○		
																					2535	3580		
NEW -S  Cermet Finishing Left Hand Shown	TNGG 160402L - S	0.2	0.10 - 0.20	0.3 - 2.0																	●			
	TNGG 160404L - S	0.4	0.10 - 0.20	0.4 - 2.0																	●			
	TNGG 160408L - S	0.8	0.12 - 0.22	0.6 - 2.0																	●			
NEW -S  Cermet Finishing Right Hand Shown	TNGG 160402R - S	0.2	0.10 - 0.20	0.3 - 2.0																	●			
	TNGG 160404R - S	0.4	0.10 - 0.20	0.4 - 2.0																	●			
	TNGG 160408R - S	0.8	0.12 - 0.22	0.6 - 2.0																	●			
-C  Cermet Medium Left Hand Shown	TNGG 160402L - C	0.2	0.20 - 0.40	0.3 - 3.5																	○			
	TNGG 160404L - C	0.4	0.20 - 0.40	0.5 - 3.5																	○			
	TNGG 160408L - C	0.8	0.20 - 0.40	1.0 - 3.5																	○			
-C  Cermet Medium Right Hand Shown	TNGG 160402R - C	0.2	0.20 - 0.40	0.3 - 3.5																	○			
	TNGG 160404R - C	0.4	0.20 - 0.40	0.5 - 3.5																	○			
	TNGG 160408R - C	0.8	0.20 - 0.40	1.0 - 3.5																	○			

Turning Inserts - Negative

TNMM - Heavy Turning (60° Triangle)

Refer to
Turning holder
p.95, 101, 116, 121, 125



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

TNMM	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
	TNMM 160412 - UH	1.2	0.30-0.50	2.0-5.0						● 2846														
	TNMM 220412 - UH	1.2	0.30-0.50	2.0-7.0						● 2848														

-UH



Low cutting force

TURNING

PARTING & GROOVING

MILLING

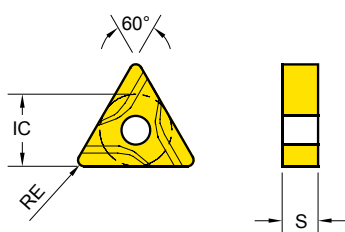
DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative TNUX (60° Triangle)

 **Refer to**
Turning holder
p. 95, 101, 116, 121, 125

Series	IC	S
TN** 1604	9.525	4.76



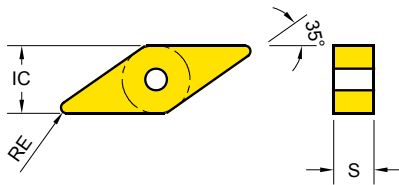
EDP 2200.. ●: Stock item ○: Order made item

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Turning Inserts - Negative

VNMA / VNMG (35° Rhombic)

Refer to
Turning holder
p. 102, 122



Series	IC	S
VN** 1604	9.525	4.76

EDP 2200.. ● : Stock item ○ : Order made item

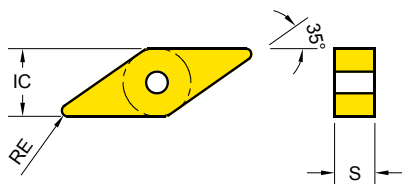
	VNMA VNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..																			
						K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
..MA  Cast iron		VNMA 160408	0.8	0.15-0.40	1.0-5.0	●	○	●	○																
						1573	0162	3491	1275																
-UF  Finishing		VNMG 160404 - UF	0.4	0.05-0.25	0.5-2.5				○			●	●	●	○										
		VNMG 160408 - UF	0.8	0.05-0.25	1.0-2.5				○			●	●	●											
-UL  Light Machining and Sticky Material		VNMG 160404 - UL	0.4	0.10-0.30	0.5-3.0				○			●	●	●	●										
		VNMG 160408 - UL	0.8	0.10-0.30	1.0-3.0				○			●	●	●	●										
-UM  Medium Machining Unstable condition		VNMG 160408 - UM	0.8	0.15-0.30	1.0-3.0		○		○			●	●	●	●										
		VNMG 160412 - UM	1.2	0.15-0.30	1.5-3.0		○		○			●	●	●	●										
NEW -GM  Medium machining for steel & Stainless steel		VNMG 160404 - GM	0.4	0.15-0.35	0.5-3.0							●	●					●							
		VNMG 160408 - GM	0.8	0.17-0.35	0.8-3.0							●	●					●							
-UG  Medium Machining at stable condition		VNMG 160404 - UG	0.4	0.20-0.40	0.5-3.0	●	○	●	○			●	●	●	●										
		VNMG 160408 - UG	0.8	0.20-0.40	1.0-3.0	●	○	●	○			●	●	●	○										
-UC  Cast iron and Medium roughing		VNMG 160404 - UC	0.4	0.20-0.40	0.5-3.5	●	○	○	○			●	●	●	●										
		VNMG 160408 - UC	0.8	0.20-0.40	1.0-3.5	●	○	○	○			●	●	●	○										
-UR  Roughing		VNMG 160412 - UR	1.2	0.30-0.45	1.5-4.0	●	○	○	○			●	●	●	○										
						1638	1231	3515	0430	0871		2380	3274	0431	0432	0051									

Turning Inserts - Negative

VNGG / VNMG (35° Rhombic)


 Refer to
Turning holder
p. 102, 122

Series	IC	S
VN** 1604	9.525	4.76



EDP 2200.. ● : Stock item ○ : Order made item

	VNGG VNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
						YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
TURNING	-MF	 VNMG 160404 - MF	0.4	0.07 - 0.30	0.2 - 1.5						●			●		●	●	●	●	●	○				
		Stainless steel Finishing	0.8	0.07 - 0.30	0.2 - 1.5						○			○		●	●	●	●	●	○				
PARTING & GROOVING	-MM	 VNMG 160404 - MM	0.4	0.20 - 0.35	0.5 - 3.5													●	●	●	○				
		Stainless steel Medium	0.8	0.20 - 0.35	1.0 - 3.5													●	●	●	○				
MILLING	-MG	 VNMG 160404 - MG	0.4	0.20 - 0.40	0.5 - 4.0											●	●								
		Stainless steel General	0.8	0.20 - 0.40	1.0 - 4.0											●	●								
DRILLING	-MR	 VNMG 160408 - MR	0.8	0.30 - 0.55	2.0 - 5.5									○		●	●	●	●	●					
		Stainless steel Roughing	1.2	0.30 - 0.55	2.0 - 5.5									○		●	●								
TECHNICAL INFORMATION	-SF	 VNGG 160412 - SF	1.2	0.10 - 0.25	0.4 - 1.5																●				
		HRSA Finishing																			3158				
	-SR	 VNMG 160408 - SR	0.8	0.30 - 0.55	2.0 - 5.5																●				
		HRSA Medium																			1449				
	-PSF	 VNMG 160404 - PSF	0.4	0.07 - 0.30	0.3 - 2.0																●	○			
		Cermet Finishing	0.8	0.10 - 0.35	0.5 - 2.0																●	○			

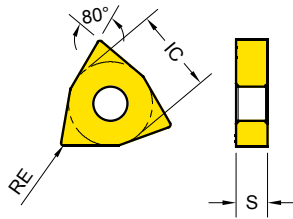
Turning Inserts - Negative

WNMA / WNMG (80° Trigon)



Refer to
Turning holder

p.96, 103, 105, 117, 123, 126



Series	IC	S
WN** 0604	9.525	4.76
WN** 0804	12.700	4.76

EDP 2200..

● : Stock item ○ : Order made item

WNMA WNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)		K10	P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S10	P15	P10	N20	N20
						K20	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K30	K15	K10	N20	N20
..MA Cast iron	WNMA 060412	1.2	0.15-0.50	1.5-4.0	●	2714																			
	WNMA 080404	0.4	0.15-0.50	0.5-5.0	●	0903	○	●	○																
	WNMA 080408	0.8	0.15-0.50	1.0-5.0	●	0904	○	●	○																
	WNMA 080412	1.2	0.15-0.50	1.5-5.0	●	0905	○	●	○																
-UF Finishing	WNMG 060404 - UF	0.4	0.05-0.20	0.5-2.0					○	0435		●	●	●	○	0058									
	WNMG 080404 - UF	0.4	0.05-0.25	0.5-2.5					○	0315		●	●	●	○	0055									
	WNMG 080408 - UF	0.8	0.05-0.25	1.0-2.5					○	0321		●	●	●											
	WNMG 080412 - UF	1.2	0.05-0.25	1.5-2.5					○	1424		●	●	●											
-UL Light Machining and Sticky Material	WNMG 060408 - UL	0.8	0.10-0.30	1.0-2.5					○	0439		●	●	●											
	WNMG 080404 - UL	0.4	0.10-0.30	0.5-3.0					○	1431		●	●	●											
	WNMG 080408 - UL	0.8	0.10-0.30	1.0-3.0					○	0324		●	●	●											
	WNMG 080412 - UL	1.2	0.10-0.30	1.5-3.0								●	●	●											
-UM Medium Machining Unstable condition	WNMG 060404 - UM	0.4	0.15-0.30	0.5-2.5		○	○		○	2106	1259	0741	●	●	●	0742									
	WNMG 060408 - UM	0.8	0.15-0.30	1.0-2.5		○	○		○	1554	1260	0600	●	●	●										
	WNMG 080404 - UM	0.4	0.15-0.30	0.5-3.0		○	○		○	1313	0786	2704	●	●	●	0788									
	WNMG 080408 - UM	0.8	0.15-0.30	1.0-3.0		○	○		○	0470	0327	0761	●	●	●	0329									
	WNMG 080412 - UM	1.2	0.15-0.30	1.5-3.0		○	○		○	1210	0649	0762	●	●	●	0712									
	WNMG 080416 - UM	1.6	0.15-0.30	2.0-3.0		○	○		○	1234	0593	0763	●	●	●										
NEW -GM Medium machining for steel & Stainless steel	WNMG 060404 - GM	0.4	0.15-0.40	0.5-3.0								●	●				3802								
	WNMG 060408 - GM	0.8	0.17-0.50	0.8-3.0								●	●				3806								
	WNMG 060412 - GM	1.2	0.20-0.55	1.0-3.0								●	●				3809								
	WNMG 080404 - GM	0.4	0.15-0.40	0.5-4.0								●	●				3812								
	WNMG 080408 - GM	0.8	0.17-0.50	0.8-4.0								●	●				3816								
	WNMG 080412 - GM	1.2	0.20-0.55	1.0-4.0								●	●				3819								
	WNMG 080416 - GM	1.6	0.23-0.55	1.3-4.0								●	●				3820								
												3644	3665												

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative WNMG (80° Trigon)


Refer to
Turning holder

p. 96, 103, 105, 117, 123, 126

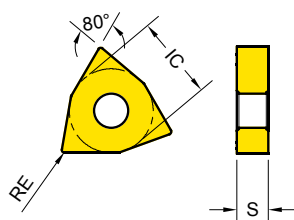
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
WN** 0604	9.525	4.76
WN** 0804	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

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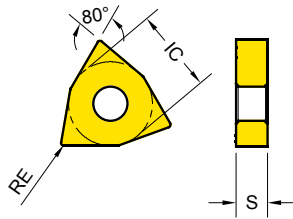
Turning Inserts - Negative

WNMG (80° Trigon)



Refer to
Turning holder

p.96, 103, 105, 117, 123, 126



Series	IC	S
WN** 0604	9.525	4.76
WN** 0804	12.700	4.76

EDP 2200..

● : Stock item ○ : Order made item

					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
WNMG	Designation	RE	F _n (mm/rev.)	A _p (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-MF  Stainless steel Finishing	WNMG 060404 - MF	0.4	0.07-0.30	0.4-2.0				○ 0833	● 2874				○ 0996		● 2461	● 3800	● 1215	● 1217	● 2284	○ 2279				
	WNMG 060408 - MF	0.8	0.07-0.30	0.8-2.0					● 2890				● 2953		● 2789	● 3803	● 1216	● 1218	● 2285	○ 2280				
	WNMG 080404 - MF	0.4	0.07-0.30	0.4-2.5					● 2875				○ 0834		● 2462	● 3810	● 0667	● 0668	● 0970	○ 2281				
	WNMG 080408 - MF	0.8	0.07-0.30	0.8-2.5					● 2876				○ 1098		● 2463	● 3813	● 0617	● 0618	● 2268	○ 2282				
-MM  Stainless steel Medium	WNMG 080404 - MM	0.4	0.20-0.35	0.5-3.5													● 0571	● 0572	● 2300	○ 2301				
	WNMG 080408 - MM	0.8	0.20-0.35	1.0-3.5									○ 0491				● 0497	● 0498	● 0633	○ 2302				
	WNMG 080412 - MM	1.2	0.20-0.35	1.5-3.5													● 0612	● 0615	● 1926	○ 2303				
-MG  Stainless steel General	WNMG 060404 - MG	0.4	0.20-0.40	0.5-3.0											● 2487	● 3801								
	WNMG 060408 - MG	0.8	0.20-0.40	1.0-3.0											● 2476	● 3804								
	WNMG 060412 - MG	1.2	0.20-0.40	1.5-3.0											● 2477	● 3807								
	WNMG 080404 - MG	0.4	0.20-0.40	0.5-4.0											● 2488	● 3811								
	WNMG 080408 - MG	0.8	0.20-0.40	1.0-4.0											● 2478	● 3814	● 1496	● 1497	● 1160	● 1498				
	WNMG 080412 - MG	1.2	0.20-0.40	1.5-4.0											● 2479	● 3817	● 1499	● 1500	● 1161	● 1501				
-MR  Stainless steel Roughing	WNMG 060408 - MR	0.8	0.30-0.55	1.2-4.0											● 2793	● 3805								
	WNMG 060412 - MR	1.2	0.30-0.55	1.2-4.0									○ 1154		● 2498	● 3808	● 0616	● 1787	● 1896					
	WNMG 080408 - MR	0.8	0.30-0.55	2.0-5.5									○ 1099		● 2499	● 3815	● 0619	● 0620	● 0835					
	WNMG 080412 - MR	1.2	0.30-0.55	2.0-5.5									○ 0837		● 2482	● 3818	● 0665	● 0666	● 0836					

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative
WNGG / WNMG (80° Trigon)

Refer to
Turning holder

p. 96, 103, 105, 117, 123, 126

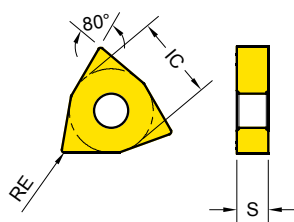
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
WN** 0604	9.525	4.76
WN** 0804	12.700	4.76

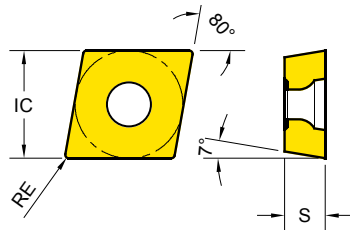
EDP 2200.. ● : Stock item ○ : Order made item

						K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 K15	P10 K10	N20	N20	
WNGG WNMG		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10	
-SF		WNGG 080408 - SF	0.8	0.10 - 0.25	0.2 - 1.0																● 1308					
-SM		WNMG 080408 - SM	0.8	0.15 - 0.30	0.5 - 3.0													○ 1199	○ 1206	○ 1859	● 1311					
		WNMG 080412 - SM	1.2	0.15 - 0.30	0.5 - 3.0														○ 1374	○ 1416	○ 1860	● 1312				
-SR		WNMG 060412 - SR	1.2	0.30 - 0.55	2.0 - 4.0																● 1439					
		WNMG 080408 - SR	0.8	0.30 - 0.55	2.0 - 5.5																	● 1310				
		WNMG 080412 - SR	1.2	0.30 - 0.55	2.0 - 5.5																	● 1309				
		WNMG 080416 - SR	1.6	0.30 - 0.55	2.0 - 5.5																	● 2843				
-PSF		WNMG 080404 - PSF	0.4	0.07 - 0.30	0.4 - 2.5																● 2539	○ 3584				
		WNMG 080408 - PSF	0.8	0.10 - 0.35	0.6 - 2.5																	● 2540	○ 3585			

Turning Inserts - Positive

CCGT / CCMT (80° Rhombic)

Refer to
Turning holder
p. 106, 128, 129



Series	IC	S
CC** 0602	6.350	2.38
CC** 09T3	9.525	3.97
CC** 1204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

						S																				
CCGT CCMT		Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20	
						YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10	
-AL  Aluminum	CCGT 060202 - AL	0.2	0.01 - 0.12	0.05 - 3.0																					●	1398
	CCGT 060204 - AL	0.4	0.02 - 0.15	0.10 - 3.0																				●	●	1278 1320
	CCGT 09T302 - AL	0.2	0.02 - 0.20	0.05 - 3.0																				●	●	0340 0339
	CCGT 09T304 - AL	0.4	0.02 - 0.30	0.10 - 5.0																				●	●	0330 0081
	CCGT 09T308 - AL	0.8	0.03 - 0.50	0.10 - 5.0																				●	●	0331 0082
	CCGT 120402 - AL	0.2	0.02 - 0.30	0.05 - 4.0																				●	●	0474 0473
	CCGT 120404 - AL	0.4	0.03 - 0.50	0.10 - 5.0																				●	●	0476 0475
	CCGT 120408 - AL	0.8	0.04 - 0.80	0.10 - 5.5																				●	●	0478 0477
-UF  Finishing	CCMT 060204 - UF	0.4	0.05 - 0.20	0.5 - 2.0				○	○	●	●	●	●													
	CCMT 09T304 - UF	0.4	0.05 - 0.25	0.5 - 2.0				○		●	●	●	●													
	CCMT 09T308 - UF	0.8	0.05 - 0.25	1.0 - 2.0				○		●	●	●	●													
	CCMT 120404 - UF	0.4	0.10 - 0.25	1.0 - 5.0						●	●	●	●													
-UG  General	CCMT 060204 - UG	0.4	0.10 - 0.25	0.5 - 2.0	●	○	○	○		●	●	●	●	○				○	○							
	CCMT 060208 - UG	0.8	0.10 - 0.25	0.8 - 2.0	●	○	○	○		●	●	●	●	○				○	○							
	CCMT 09T304 - UG	0.4	0.15 - 0.30	0.5 - 2.5	●	○	○			●	●	●	●	○						○						
	CCMT 09T308 - UG	0.8	0.15 - 0.30	0.8 - 2.5	●	○	○	○		●	●	●	●	○				○	○							
	CCMT 120404 - UG	0.4	0.15 - 0.35	0.5 - 3.0	●	○	○			●	●	●	●													
	CCMT 120408 - UG	0.8	0.15 - 0.35	0.8 - 3.0	●	○	○	○		●	●	●	●	○						○						
	CCMT 120412 - UG	1.2	0.15 - 0.35	1.2 - 3.0	●	○	○			●	●	●	●													

TURNING

PARTING & GROOVING

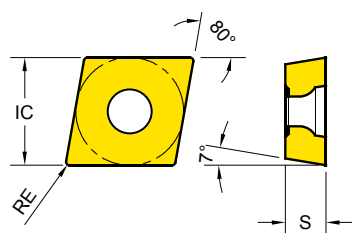
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

CCGT / CCMT (80° Rhombic)

Refer to
Turning holder
p. 106, 128, 129


Series	IC	S
CC** 0602	6.350	2.38
CC** 09T3	9.525	3.97
CC** 1204	12.700	4.76

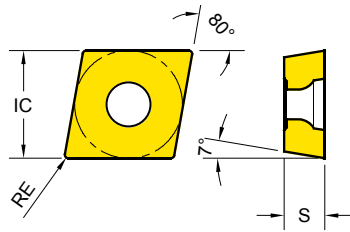
EDP 2200.. ● : Stock item ○ : Order made item

						K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N2	
CCGT CCMT		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10	
-SF	 HRSA Finishing	CCGT 060201 - SF	0.1	0.02-0.15	0.10-1.5															●	●					
		CCGT 060202 - SF	0.2	0.02-0.15	0.10-1.5																2341	2065				
		CCGT 060204 - SF	0.4	0.03-0.20	0.10-2.4																2080	2066				
		CCGT 09T301 - SF	0.1	0.02-0.15	0.10-2.5																●	●				
		CCGT 09T302 - SF	0.2	0.02-0.15	0.10-2.5																2339	2071				
		CCGT 09T304 - SF	0.4	0.03-0.20	0.10-2.5																2340	2072				
		CCGT 09T304 - SF	0.4	0.03-0.20	0.10-2.5																2093	2073				
CCGT 09T308 - SF	0.8	0.03-0.25	0.10-2.5																2096	2074						
-MF	 Stainless steel Finishing	CCMT 060202 - MF	0.2	0.04-0.15	0.08-2.0											●	●	●	●	●						
		CCMT 060204 - MF	0.4	0.06-0.25	0.10-2.0												2795	3673	2834	2835	2836					
		CCMT 060208 - MF	0.8	0.07-0.28	0.12-2.0												2796	3674	2726	2723		2833				
		CCMT 09T302 - MF	0.2	0.04-0.15	0.08-2.0												2501	3677	2002	2003	2004	2028				
		CCMT 09T304 - MF	0.4	0.06-0.25	0.10-2.0												2502	3678	1589	1590	1947	2029				
		CCMT 09T308 - MF	0.8	0.08-0.30	0.15-2.0						○ 2568						2503	3680	1957	1958	1959	1943				
		CCMT 120404 - MF	0.4	0.07-0.25	0.20-2.4												2797	3683								
		CCMT 120408 - MF	0.8	0.08-0.30	0.50-2.4												2798	3685								
-MM	 Stainless steel Medium	CCMT 060204 - MM	0.4	0.06-0.17	0.3-2.4											●	●									
		CCMT 060208 - MM	0.8	0.08-0.23	0.8-2.4												2811	3675								
		CCMT 09T304 - MM	0.4	0.08-0.25	0.25-3.0												2812	3676								
		CCMT 09T308 - MM	0.8	0.10-0.30	0.50-3.0												●	●	●	●	●	●				
		CCMT 09T312 - MM	1.2	0.12-0.35	1.0-3.0												2514	3679	1591	1592	1946	2039				
		CCMT 120404 - MM	0.4	0.09-0.27	0.4-4.2												●	●	●	●	●	●				
		CCMT 120408 - MM	0.8	0.12-0.36	0.8-4.2												2515	3681	1887	1888	1956	1944				
CCMT 120412 - MM	1.2	0.14-0.43	1.2-4.2												●	●										

Turning Inserts - Positive

CCMT (80° Rhombic)

Refer to
Turning holder
p. 106, 128, 129



Series	IC	S
CC** 0602	6.350	2.38
CC** 09T3	9.525	3.97
CC** 1204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

CCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)																				
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YT100	YT100
- PF  Finishing	CCMT 060202 - PF	0.2	0.04-0.15	0.08-2.0						●			●								●	○		
	CCMT 060204 - PF	0.4	0.06-0.25	0.10-2.0						●			●								●	○		
	CCMT 09T302 - PF	0.2	0.04-0.15	0.08-2.0						●			●								●	○		
	CCMT 09T304 - PF	0.4	0.06-0.25	0.10-2.0						●			●								●	○		
	CCMT 09T308 - PF	0.8	0.08-0.30	0.15-2.0						●			●								●	○		
	CCMT 09T312 - PF	1.2	0.10-0.32	0.2-2.0																	●	○		
	CCMT 120404 - PF	0.4	0.07-0.25	0.2-2.4						●			●											
	CCMT 120408 - PF	0.8	0.08-0.30	0.5-2.4						●			●											
- PM  Medium	CCMT 060204 - PM	0.4	0.06-0.17	0.25-2.4						●			●								●	○		
	CCMT 060208 - PM	0.8	0.08-0.23	0.8-2.4						●			●								●	○		
	CCMT 09T304 - PM	0.4	0.08-0.25	0.25-3.0						●			●								●	○		
	CCMT 09T308 - PM	0.8	0.10-0.30	0.50-3.0						●			●								●	○		
	CCMT 09T312 - PM	1.2	0.12-0.35	1.0-3.0						●			●											
	CCMT 120404 - PM	0.4	0.09-0.27	0.4-4.2						●			●											
	CCMT 120408 - PM	0.8	0.12-0.36	0.8-4.2						●			●											
	CCMT 120412 - PM	1.2	0.14-0.43	1.2-4.2						●			●											

TURNING

PARTING & GROOVING

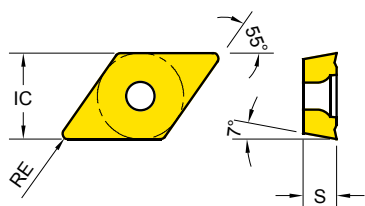
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

DCGT / DCMT (55° Rhombic)

Refer to
Turning holder
p. 107, 130, 131

Series	IC	S
DC** 0702	6.350	2.38
DC** 11T3	9.525	3.97

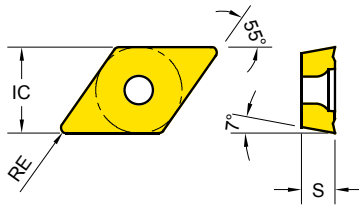
EDP 2200.. ● : Stock item ○ : Order made item

DCGT DCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-AL  Aluminum	DCGT 070202 - AL	0.2	0.01 - 0.20	0.05 - 3.0																				● 1399
	DCGT 070204 - AL	0.4	0.02 - 0.30	0.10 - 4.0																				● 1400
	DCGT 11T301 - AL	0.1	0.01 - 0.30	0.05 - 4.0																			● 2101	● 2100
	DCGT 11T302 - AL	0.2	0.02 - 0.30	0.05 - 4.0																			● 0342	● 0341
	DCGT 11T304 - AL	0.4	0.03 - 0.50	0.10 - 5.0																			● 0332	● 0083
	DCGT 11T308 - AL	0.8	0.03 - 0.50	0.10 - 5.0																			● 0333	● 0084
-UF  Finishing	DCMT 070204 - UF	0.4	0.05 - 0.20	0.50 - 2.0				○ 0207		● 2397	● 3209	● 0208	● 0209					○ 1909	○ 1903					
	DCMT 11T304 - UF	0.4	0.05 - 0.25	0.50 - 2.0		○ 1533		○ 0213		● 2208	● 3211	● 0214	● 0215					○ 1044	○ 1043	○ 1910				
	DCMT 11T308 - UF	0.8	0.05 - 0.25	1.00 - 2.0	● 2053			○ 0219		● 1897	● 3213	● 0220	● 0221											
-UG  General	DCMT 070204 - UG	0.4	0.10 - 0.25	0.50 - 2.0	● 1849		○ 3545	○ 0210		● 2391	● 3210	● 0211	○ 0212	○ 0013										
	DCMT 070208 - UG	0.8	0.10 - 0.25	0.80 - 2.0	● 1850		○ 3546	○ 0484		● 2386	● 3309	● 0717	● 1136											
	DCMT 11T304 - UG	0.4	0.15 - 0.30	0.50 - 2.5	● 1831	○ 0677	● 3529	○ 0216		● 2209	● 3212	● 0217	● 0218	○ 0014				○ 1520	○ 1522	○ 1521				
	DCMT 11T308 - UG	0.8	0.15 - 0.30	0.80 - 2.5	● 1832	○ 0678	● 3530	○ 0222		● 2215	● 3214	● 0223	● 0224	○ 0015										
	DCMT 11T312 - UG	1.2	0.15 - 0.35	1.50 - 3.0						● 2605	● 3393	● 2056												

Turning Inserts - Positive

DCGT / DCMT (55° Rhombic)

Refer to
Turning holder
p. 107, 130, 131



Series	IC	S
DC** 0702	6.350	2.38
DC** 11T3	9.525	3.97

EDP 2200..

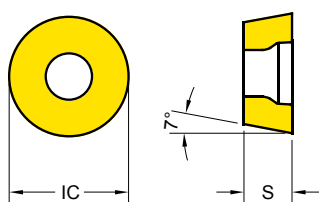
● : Stock item ○ : Order made item

					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
DCGT DCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-SF  HRSA Finishing	DCGT 070201 - SF	0.1	0.02 - 0.15	0.10 - 1.5															● 2342	● 2068				
	DCGT 070202 - SF	0.2	0.02 - 0.15	0.10 - 1.5															● 2343	● 2069				
	DCGT 070204 - SF	0.4	0.03 - 0.20	0.10 - 1.5														○ 2338		● 2344	● 2070			
	DCGT 11T301 - SF	0.1	0.01 - 0.05	0.10 - 2.5																● 2345	● 2075			
	DCGT 11T302 - SF	0.2	0.02 - 0.15	0.10 - 2.5														○ 0559	○ 0560	● 1478	● 1474			
	DCGT 11T304 - SF	0.4	0.03 - 0.20	0.10 - 2.5														○ 1460	○ 1473	● 1479	● 1463			
	DCGT 11T308 - SF	0.8	0.03 - 0.20	0.10 - 2.5																● 2346	● 2076			
-MF  Stainless steel Finishing	DCMT 070202 - MF	0.2	0.05 - 0.15	0.05 - 1.5											● 2799	● 3703								
	DCMT 070204 - MF	0.4	0.05 - 0.17	0.08 - 1.5												● 2504	● 3704	● 1978	● 1979	● 1980	● 2030			
	DCMT 11T302 - MF	0.2	0.04 - 0.15	0.08 - 2.0												● 2505	● 3707	● 2005	● 2006	● 2007	● 2031			
	DCMT 11T304 - MF	0.4	0.06 - 0.25	0.10 - 2.0												● 2506	● 3708	● 1885	● 1886	● 1927	● 2032			
	DCMT 11T308 - MF	0.8	0.08 - 0.30	0.15 - 2.0												● 2507	● 3710	● 1963	● 1964	● 1965	● 2033			
-MM  Stainless steel Medium	DCMT 070204 - MM	0.4	0.06 - 0.17	0.20 - 2.3											● 2516	● 3705	● 1999	● 2000	● 2001	● 2040				
	DCMT 070208 - MM	0.8	0.08 - 0.25	0.5 - 2.3								○ 1868			● 2817	● 3706								
	DCMT 11T304 - MM	0.4	0.06 - 0.17	0.25 - 3.0												● 2517	● 3709	● 1990	● 1991	● 1992	● 2041			
	DCMT 11T308 - MM	0.8	0.08 - 0.25	0.50 - 3.0												● 2518	● 3711	● 1984	● 1985	● 1986	● 2042			
	DCMT 11T312 - MM	1.2	0.12 - 0.36	1.2 - 3.0												● 2818	● 3712							
-PF  Finishing	DCMT 070202 - PF	0.2	0.05 - 0.15	0.05 - 1.5					● 2896				● 2959								● 2783	○ 3614		
	DCMT 070204 - PF	0.4	0.05 - 0.17	0.08 - 1.5					● 2881				● 2942								● 2544	○ 3589		
	DCMT 11T302 - PF	0.2	0.04 - 0.15	0.08 - 2.0					● 2882				● 2943								● 2545	○ 3005		
	DCMT 11T304 - PF	0.4	0.06 - 0.25	0.10 - 2.0					● 2862				● 2944								● 2546	○ 3590		
	DCMT 11T308 - PF	0.8	0.07 - 0.20	0.15 - 2.0					● 2883				● 2945								● 2547	○ 3591		
-PM  Medium	DCMT 070204 - PM	0.4	0.08 - 0.30	0.20 - 2.3					● 2910				● 2973								● 2556	○ 3600		
	DCMT 070208 - PM	0.8	0.08 - 0.25	0.5 - 2.3					● 2923	○ 3385			● 2987											
	DCMT 11T304 - PM	0.4	0.06 - 0.17	0.25 - 3.0					● 2911				● 2974								● 2557	○ 3601		
	DCMT 11T308 - PM	0.8	0.08 - 0.25	0.50 - 3.0					● 2851				● 2975								● 2558	○ 3602		
	DCMT 11T312 - PM	1.2	0.12 - 0.36	1.2 - 3.0						● 2924				● 2988										

Turning Inserts - Positive
RCMT (Round)

Refer to
Turning holder
p. 108, 132

TURNING



Series	IC	S	Series	IC	S
RC** 0602	6	2.38	RC** 10T3	10	3.97
RC** 0803	8	3.18	RC** 1204	12	4.76

EDP 2200.. ● : Stock item ○ : Order made item

RCMT					K20	K30	P10	P15	P20	P25	P30	P35	S30	K15	K10	N20	N25								
Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10		
 General	RCMT 0602M0	3.0	0.05 - 0.25	0.2 - 1.2	● 2057	○ 0374	● 3549	○ 0375		● 2624	● 3256	● 0376	● 1151	○ 0023			○ 2233								
	RCMT 0803M0	4.0	0.05 - 0.30	0.5 - 1.5	● 2058	○ 0377	● 3550	○ 0378		● 2625	● 3257	● 0379	● 1152	○ 0024			○ 2234								
	RCMT 10T3M0	5.0	0.10 - 0.35	0.5 - 2.5	● 2059	○ 0380	● 3551	○ 0381		● 2626	● 3258	● 0382	● 1153	○ 0021			○ 2231								
	RCMT 1204M0	6.0	0.15 - 0.45	0.5 - 3.0	● 1833	○ 0383	● 3531	○ 0384		● 2627	● 3259	● 0385	● 1170	○ 0022			○ 2232								
-SM  General	RCMT 0602M0 - SM	3.0	0.12 - 0.33	0.3 - 1.6															● 2571						
	RCMT 0803M0 - SM	4.0	0.15 - 0.41	0.3 - 2.0																● 2570					
	RCMT 10T3M0 - SM	5.0	0.17 - 0.46	0.4 - 2.5																● 2572					
	RCMT 1204M0 - SM	6.0	0.20 - 0.56	0.5 - 3.0	● 3159					● 2573					● 3173					● 2569					
	RCMT 1606M0 - SM	8.0	0.25 - 0.77	0.7 - 4.0																● 3151					

PARTING & GROOVING

MILLING

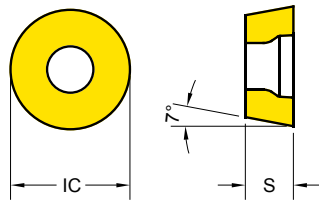
DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

RCMX - Heavy Turning (Round)

Refer to
Turning holder
p. 108, 132



Series	IC	S	Series	IC	S
RC** 1606	16	6.35	RC** 2507	25	7.94
RC** 2006	20	6.35	RC** 3209	32	9.52

EDP 2200.. ● : Stock item ○ : Order made item

-UT		RCMX	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10	
			RCMX 1606M0 - UT	8.0	0.3-0.8	1.0-7.0	● 2441						● 2719					● 3160	● 3734								
			RCMX 2006M0 - UT	10.0	0.4-0.9	1.5-9.0	● 3564			● 1928			● 2169	● 3423	● 2844	● 2845											
			RCMX 2507M0 - UT	12.5	0.5-1.2	2.5-12.0	● 3837		● 3838				● 3146	● 3840		● 3839											
			RCMX 3209M0 - UT	16.0	0.6-1.5	3.5-15.0	● 3841		● 3842				● 3147	● 3844		● 3843											

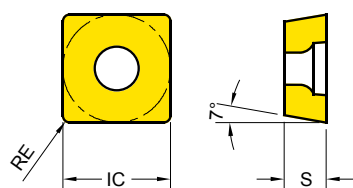
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



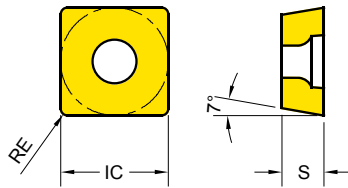
Series	IC	S
SC** 09T3	9.525	3.97
SC** 1204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

SCGT SCMT		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	K20 YG1001	K30 YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	S30 YG214	K15 YG401	K10 YT100	YT100G	YG100	YG10	
-AL		SCGT 09T304 - AL	0.4	0.03 - 0.40	0.1 - 5.0																				● 1516	
		SCGT 09T308 - AL	0.8	0.04 - 0.40	0.1 - 5.0																				● 1517	
Aluminium																										
-UF		SCMT 09T304 - UF	0.4	0.05 - 0.25	0.5 - 2.0				○ 0386		● 2628	● 3260	● 0387	● 0783												
		SCMT 09T308 - UF	0.8	0.05 - 0.25	1.0 - 2.0	● 2083			○ 1021		● 2629	● 3339	● 1022	● 0997												
-UG		SCMT 09T304 - UG	0.4	0.15 - 0.30	0.5 - 2.5	● 1834	○ 0455	● 3532	○ 0482		● 2414	● 3329	● 0916	● 1171	○ 0025			○ 2235								
		SCMT 09T308 - UG	0.8	0.15 - 0.30	0.8 - 2.5	● 1835	○ 0456	● 3533	○ 0159		● 2383	● 3194	● 0160	● 0161	○ 0026			○ 2236		○ 1904						
		SCMT 120408 - UG	0.8	0.15 - 0.35	0.8 - 3.0	● 1836	○ 0674	● 3534	○ 0255		● 2393	● 3225	● 0256	● 0257							○ 1911					
		SCMT 120412 - UG	1.2	0.15 - 0.35	1.5 - 3.0	● 2098																				
-MF		SCMT 09T304 - MF	0.4	0.06 - 0.22	0.1 - 2.0											● 2800	● 3735									
		SCMT 09T308 - MF	0.8	0.09 - 0.30	0.3 - 2.0												● 2801	● 3737				● 2564				
		SCMT 120404 - MF	0.4	0.09 - 0.28	0.3 - 4.2												● 2802	● 3740								
		SCMT 120408 - MF	0.8	0.10 - 0.30	0.6 - 4.2												● 2803	● 3742								
-MM		SCMT 09T304 - MM	0.4	0.08 - 0.24	0.4 - 3.2											● 2819	● 3736									
		SCMT 09T308 - MM	0.8	0.10 - 0.30	0.8 - 3.2												● 2820	● 3738								
		SCMT 09T312 - MM	1.2	0.12 - 0.35	0.9 - 3.2												● 2821	● 3739								
		SCMT 120404 - MM	0.4	0.09 - 0.28	0.3 - 4.2												● 2822	● 3741								
		SCMT 120408 - MM	0.8	0.10 - 0.30	0.6 - 4.2												● 2519	● 3743	● 1973	● 1974	● 1975	● 1976				
		SCMT 120412 - MM	1.2	0.16 - 0.45	1.2 - 4.2												● 2823	● 3744								

Turning Inserts - Positive SCMT (Square)

Refer to
Turning holder
p. 109, 133



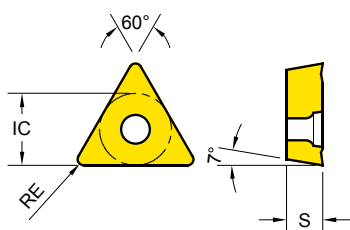
Series	IC	S
SC** 09T3	9.525	3.97
SC** 1204	12.700	4.76

EDP 2200.. ● : Stock item ○ : Order made item

					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
SCMT					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
 Finishing	SCMT 09T304 - PF	0.4	0.06 - 0.22	0.1 - 2.0						●			●											
	SCMT 09T308 - PF	0.8	0.09 - 0.30	0.3 - 2.0						●			●											
	SCMT 120404 - PF	0.4	0.09 - 0.28	0.3 - 4.2						●			●											
	SCMT 120408 - PF	0.8	0.10 - 0.30	0.6 - 4.2						●			●											
 Medium	SCMT 09T304 - PM	0.4	0.08 - 0.24	0.4 - 3.2						●			●											
	SCMT 09T308 - PM	0.8	0.10 - 0.30	0.8 - 3.2						●			●								●	○		
	SCMT 09T312 - PM	1.2	0.12 - 0.35	0.9 - 3.2						●			●								2853	3617		
	SCMT 120404 - PM	0.4	0.09 - 0.28	0.3 - 4.2						●			●											
	SCMT 120408 - PM	0.8	0.10 - 0.30	0.6 - 4.2						●			●								●	○		
	SCMT 120412 - PM	1.2	0.16 - 0.45	1.2 - 4.2						●			●								2530	3575		

Turning Inserts - Positive

TCGT / TCMT (Triangle)

Refer to
Turning holder
p. 110, 134


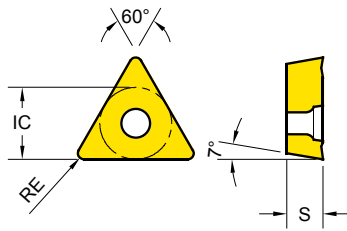
Series	IC	S
TC** 0902	5.56	2.38
TC** 1102	6.350	2.38
TC** 16T3	9.525	3.97

EDP 2200.. ● : Stock item ○ : Order made item

TCGT TCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S10	P15	P10	M15	M10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10		
-AL Aluminum	TCGT 110204 - AL	0.4	0.03 - 0.30	0.10 - 4.0																					●	1333
	TCGT 16T302 - AL	0.2	0.02 - 0.30	0.05 - 5.0																				●	●	0344 0343
	TCGT 16T304 - AL	0.4	0.03 - 0.40	0.10 - 5.5																				●	●	0334 0085
	TCGT 16T308 - AL	0.8	0.03 - 0.50	0.10 - 5.5																				●	●	0335 0086
-UF Finishing	TCMT 090204 - UF	0.4	0.05 - 0.20	0.5 - 1.5	●					●			●													
	TCMT 110204 - UF	0.4	0.05 - 0.20	0.5 - 2.0				○		●	●	●	●					○	○	○						
	TCMT 16T304 - UF	0.4	0.05 - 0.25	0.5 - 2.0				○		●	●	●	●	○	0033			1906		1905						
	TCMT 16T308 - UF	0.8	0.05 - 0.25	0.8 - 2.0				○		●	●	●	●													
-UG General	TCMT 090204 - UG	0.4	0.10 - 0.25	0.5 - 1.5	●					●			●													
	TCMT 090208 - UG	0.8	0.10 - 0.25	0.8 - 1.5	●					●			●													
	TCMT 110204 - UG	0.4	0.10 - 0.25	0.5 - 2.0	●	○	●	○		●	●	●	●	○				○								
	TCMT 110208 - UG	0.8	0.10 - 0.25	0.8 - 2.0	●	○	○	○		●	●	●	●													
	TCMT 16T304 - UG	0.4	0.15 - 0.30	0.5 - 2.5	●	○	●	○		●	●	●	●													
	TCMT 16T308 - UG	0.8	0.15 - 0.30	0.8 - 2.5	●	○	●	○		●	●	●	●	○				○		○						

Turning Inserts - Positive TCMT (Triangle)

Refer to
Turning holder
p.110, 134



Series	IC	S
TC** 1102	6.350	2.38
TC** 16T3	9.525	3.97

EDP 2200.. ● : Stock item ○ : Order made item

					K10		P05	K20	P10	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40	S10	P15	P10	N20	N20
TCMT		Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
 Stainless steel Finishing	TCMT 110202 - MF	0.2	0.04-0.14	0.1-1.7												●	●								
	TCMT 110204 - MF	0.4	0.07-0.20	0.2-1.7												●	●				●				
	TCMT 110208 - MF	0.8	0.07-0.25	0.3-1.7												●	●				●				
	TCMT 16T304 - MF	0.4	0.06-0.25	0.10-2.0												●	●	●	●	●	●				
	TCMT 16T308 - MF	0.8	0.08-0.30	0.15-2.0												●	●	●	●	●	●				
 Stainless steel Medium	TCMT 110204 - MM	0.4	0.06-0.19	0.25-2.2											●	●									
	TCMT 110208 - MM	0.8	0.09-0.26	0.5-2.2												●	●								
	TCMT 16T304 - MM	0.4	0.08-0.25	0.25-3.0												●	●	●	●	●	●				
	TCMT 16T308 - MM	0.8	0.10-0.30	0.50-3.0												●	●	●	●	●	●				
	TCMT 16T312 - MM	1.2	0.12-0.36	0.9-3.0												●	●								
 Medium	TCMT 110202 - PF	0.2	0.04-0.14	0.1-1.7						●				●											
	TCMT 110204 - PF	0.4	0.07-0.20	0.2-1.7						●					●							●	○		
	TCMT 110208 - PF	0.8	0.07-0.25	0.3-1.7						●					●										
	TCMT 16T304 - PF	0.4	0.06-0.25	0.10-2.0						●					●							●	○		
	TCMT 16T308 - PF	0.8	0.08-0.30	0.15-2.0						●					●							●	○		
 Medium	TCMT 110204 - PM	0.4	0.06-0.19	0.25-2.2						●				●											
	TCMT 110208 - PM	0.8	0.09-0.26	0.5-2.2						●					●										
	TCMT 16T304 - PM	0.4	0.08-0.25	0.25-3.0						●					●							●	○		
	TCMT 16T308 - PM	0.8	0.10-0.30	0.50-3.0						●					●							●	○		
	TCMT 16T312 - PM	1.2	0.12-0.36	0.9-3.0						●					●							●	○		

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

VBGT / VBMT (35° Rhombic)



Refer to
Turning holder
p.111,135

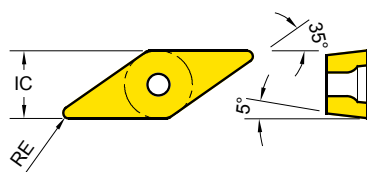
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
VB** 1103	6.350	3.18
VB** 1604	9.525	4.76

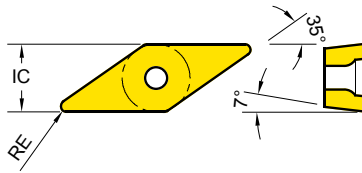
EDP 2200.. ● : Stock item ○ : Order made item

	VBGT VBMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
						YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-SF	 HRSA Finishing	VBGT 110301 - SF	0.1	0.01 - 0.20	0.10 - 1.5																				
		VBGT 110302 - SF	0.2	0.02 - 0.20	0.10 - 1.5																				
		VBGT 110304 - SF	0.4	0.05 - 0.20	0.20 - 1.5																				
		VBGT 160404 - SF	0.4	0.05 - 0.20	0.20 - 2.0																				
		VBGT 160408 - SF	0.8	0.05 - 0.20	0.4 - 2.0																				
-UF	 Finishing	VBMT 110304 - UF	0.4	0.04 - 0.16	0.10 - 0.8																				
		VBMT 110308 - UF	0.4	0.04 - 0.16	0.40 - 1.0																				
		VBMT 160404 - UF	0.4	0.05 - 0.25	0.50 - 2.0																				
		VBMT 160408 - UF	0.8	0.05 - 0.25	0.80 - 2.0																				
-UG	 General	VBMT 160404 - UG	0.4	0.15 - 0.30	0.50 - 2.5																				
		VBMT 160408 - UG	0.8	0.15 - 0.30	0.80 - 2.5																				
-MF	 Stainless steel Finishing	VBMT 110304 - MF	0.4	0.05 - 0.20	0.1 - 1.7																				
		VBMT 110308 - MF	0.8	0.07 - 0.23	0.3 - 1.7																				
		VBMT 160402 - MF	0.2	0.04 - 0.15	0.10 - 2.0																				
		VBMT 160404 - MF	0.4	0.05 - 0.20	0.20 - 2.0																				
		VBMT 160408 - MF	0.8	0.07 - 0.27	0.30 - 2.0																				
-MM	 Stainless steel Medium	VBMT 110304 - MM	0.4	0.06 - 0.18	0.25 - 2.2																				
		VBMT 110308 - MM	0.8	0.07 - 0.23	0.5 - 2.2																				
		VBMT 160404 - MM	0.4	0.07 - 0.21	0.25 - 2.7																				
		VBMT 160408 - MM	0.8	0.08 - 0.27	0.50 - 2.7																				
-PF	 Cermet Medium	VBMT 110304 - PF	0.4	0.05 - 0.20	0.1 - 1.7																				
		VBMT 110308 - PF	0.8	0.07 - 0.23	0.3 - 1.7																				
		VBMT 160402 - PF	0.2	0.04 - 0.15	0.10 - 2.0																				
		VBMT 160404 - PF	0.4	0.05 - 0.20	0.20 - 2.0																				
		VBMT 160408 - PF	0.8	0.07 - 0.27	0.30 - 2.0																				
-PM	 Cermet Medium	VBMT 110304 - PM	0.4	0.06 - 0.18	0.25 - 2.2																				
		VBMT 110308 - PM	0.8	0.07 - 0.23	0.5 - 2.2																				
		VBMT 160404 - PM	0.4	0.07 - 0.21	0.25 - 2.7																				
		VBMT 160408 - PM	0.8	0.08 - 0.27	0.50 - 2.7																				

Turning Inserts - Positive

VCGT / VCMT (35° Rhombic)

Refer to
Turning holder
p. 112, 136



Series	IC	S
VC** 1103	6.350	3.18
VC** 1604	9.525	4.76

EDP 2200.. ● : Stock item ○ : Order made item

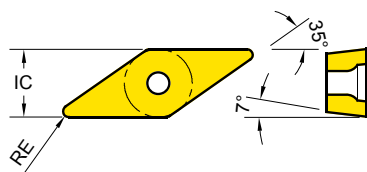
					K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
VCGT VCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-AL  Aluminum	VCGT 110301 - AL	0.1	0.02-0.15	0.05-3.0																			● 2102	● 1041
	VCGT 110302 - AL	0.2	0.02-0.20	0.05-3.0																			● 1353	● 1042
	VCGT 110304 - AL	0.4	0.02-0.25	0.10-4.0																			● 1519	● 1518
	VCGT 160402 - AL	0.2	0.02-0.30	0.05-5.0																			● 0418	● 0417
	VCGT 160404 - AL	0.4	0.03-0.40	0.10-5.0																			● 0336	● 0087
	VCGT 160408 - AL	0.8	0.03-0.50	0.10-5.0																			● 0420	● 0419
	VCGT 160412 - AL	1.2	0.03-0.50	0.10-5.0																			● 2082	● 2081
-SF  HRSA Finishing	VCGT 110301 - SF	0.1	0.01-0.20	0.1-1.5														● 2347	● 2077					
	VCGT 110302 - SF	0.2	0.02-0.20	0.1-1.5													○ 1475	○ 1476	● 1480	● 1481				
	VCGT 110304 - SF	0.4	0.05-0.20	0.2-1.5															● 2348	● 2078				
	VCGT 110308 - SF	0.8	0.05-0.20	0.4-1.5															● 2349	● 2079				
-UF  Finishing	VCMT 160404 - UF	0.4	0.05-0.25	0.5-2.0			○ 0716		● 2385	● 3270	● 0421	● 0955												
	VCMT 160408 - UF	0.8	0.05-0.25	1.0-2.0			○ 0557		● 2699	● 3289	● 0558													
-UG  General	VCMT 160404 - UG	0.4	0.10-0.20	0.3-2.5									○ 0060											
	VCMT 160408 - UG	0.8	0.15-0.30	0.8-2.5	● 1853	● 3548	○ 0946		● 2422	● 3271	● 0422	● 0956	○ 0061											

Turning Inserts - Positive

VCMT (35° Rhombic)

Refer to
Turning holder
p. 112, 136

Series	IC	S
VC** 1103	6.350	3.18
VC** 1604	9.525	4.76



EDP 2200.. ● : Stock item ○ : Order made item

VCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	K20	P10 K30	P15	P10	P25	P20	P30	P20	M25	M35	M15	M30	M40 S30	S10	P15 M15 K15	P10 M10 K10	N20	N20
					YG1010	YG1001	YG1020	YG3010	YG3015	YG3115	YG3125	YG3020	YG3030	YG801	YG2025	YG2035	YG211	YG213	YG214	YG401	YT100	YT100G	YG100	YG10
-MF  Stainless steel Finishing	VCMT 110304 - MF	0.4	0.05 - 0.20	0.1 - 1.7											●	●	●	●	●	●				
	VCMT 160404 - MF	0.4	0.05 - 0.20	0.2 - 2.0											●	●	●	●	●	●				
	VCMT 160408 - MF	0.8	0.07 - 0.27	0.3 - 2.0											●	●	●	●	●	●				
-MM  Stainless steel Medium	VCMT 110304 - MM	0.4	0.06 - 0.18	0.25 - 2.2											●	●	●	●	●	●				
	VCMT 160404 - MM	0.4	0.07 - 0.21	0.25 - 2.7											●	●	●	●	●	●				
	VCMT 160408 - MM	0.8	0.08 - 0.27	0.5 - 2.7											●	●	●	●	●	●				
-PF  Finishing	VCMT 110304 - PF	0.4	0.05 - 0.20	0.1 - 1.7					●				●							●	○			
	VCMT 160404 - PF	0.4	0.05 - 0.20	0.2 - 2.0					●				●											
	VCMT 160408 - PF	0.8	0.07 - 0.27	0.3 - 2.0					●				●											
-PM  Medium	VCMT 110304 - PM	0.4	0.06 - 0.18	0.25 - 2.2					●				●											
	VCMT 160404 - PM	0.4	0.07 - 0.21	0.25 - 2.7					●				●											
	VCMT 160408 - PM	0.8	0.08 - 0.27	0.5 - 2.7					●				●											



PCBN TURNING

Product Overview

PCBN - Turning Inserts Overview

PCBN Turning Inserts

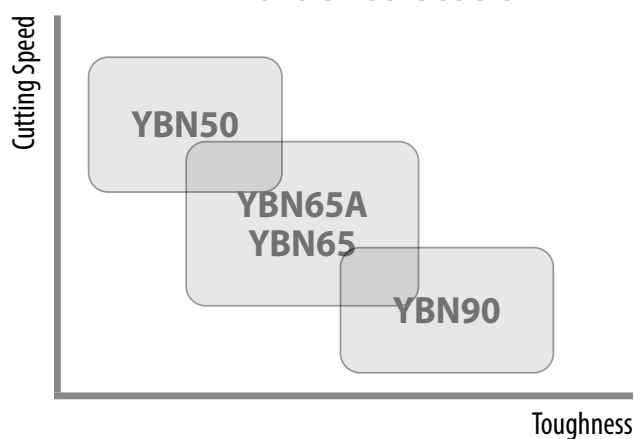
Product Overview

PCBN - Turning Grades

Turning Grades		K Cast iron				H Hardened Steel			
		K10	K20	K30		H10	H20	H30	
PCBN	YBN50					YBN50			
	YBN65						YBN65		
	YBN65A						YBN65A		
	YBN90		YBN90					YBN90	

NEW YBN50 H5 - H15			Uncoated PCBN grade for Continuous to light interrupted turning of hardened steels Low content PCBN with excellent chemical wear resistance
NEW YBN65A H10 - H25			Coated PCBN Grade for Continuous to Medium interrupted turning of hardened steels - A coated (AlTiSiN Multi layer) PCBN grade for higher cutting speed - Medium content PCBN with superior edge toughness, Good flank and crater wear resistance - Suitable for both roughing and finishing
NEW YBN65 H10 - H25			Uncoated PCBN grade for Continuous to Medium interrupted turning of hardened steels - Medium content PCBN with superior edge toughness, good flank and crater wear resistance - Suitable for both roughing and finishing
NEW YBN90 H20 - H35 K05 - K20			Uncoated PCBN grade of Severe interrupted turning of hardened steels, and the Stable machining of Gray Cast iron, Sintered alloy steel - High content PCBN with high wear resistance, superior impact strength - Excellent edge quality and retention

H - Hardened Steels



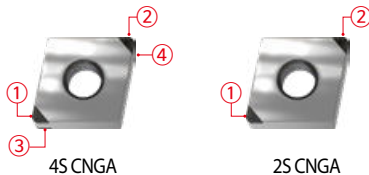
Product Overview

PCBN - Turning Insert Code System

1	2	3	4	5	6
2	S	CNGA120408	S	010 20	WG
Number of PCBN corner	PCBN Length	Insert ISO Code System	Edge preparation	① Chamfer width ② Chamfer angel	Special shape

1 - Number of PCBN corner

1	One corner PCBN
2	Two corner PCBN



3 - Insert ISO Code System

Refer to Page. 20

6 - Special shape

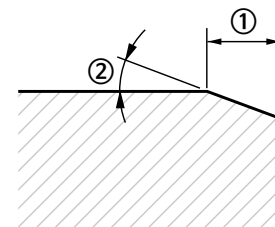
WG	Wiper
None	No Wiper

4 - Edge preparation

T	T-Land, None Honing
S	T-Land with Honed
X	Special land shape

5 - Chamfer

①	Chamfer width (010 means 0.10mm)
②	Chamfer angle (20 means 20°)



2 - PCBN Length

N	Normal PCBN tip length, Regrindable
S	Small PCBN tip length One time use
SD	Solid PCBN
FT	Full Top PCBN

Grade Name Code System

1	2	3	4
Y	BN	65	A
Company Name	Materials	Contents of PCBN	Kind of Coating

1 - Company Name

Y	YG-1
----------	------

2 - Materials

BN	PCBN
-----------	------

3 - Contents of PCBN

50	50%
65	65%
90	90%

4 - Kind of Coating

None	Uncoated
A	AlTiSiN multi-layer
B	TiAlN-TiN

PCBN - Turning Inserts Overview

TURNING

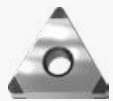
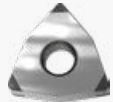
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Negative Inserts

Shape	Series	No. of PCBN Eege	Size & Thickness						Page
C		CNGA	2		1204				75
			4		1204				
D		DNGA	2			1504	1506		76
			4			1504			
S		SNGA	4		1204				77
T		TNGA	3					1604	78
			6					1604	
V		VNGA	2					1604	79
W		WNGA	3	0804					80
			6	0804					

Positive Inserts

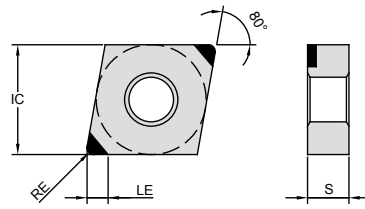
Shape	Series	No. of PCBN Eege	Size & Thickness								Page
C		CCGW	2	0602		09T3					81
D		DCGW	2		0702			11T3			82
S		SCGW	2			09T3					83
T		TCGW	3			0902	1102			16T3	84
		TPGW	3			0902		1103	1604		85
V		VBGW						1103	1604		86
		VCGW						1103	1604		87

Turning Inserts - Negative

CNGA - PCBN (80° Rhombic)



Refer to
Turning holder
p. 92, 97, 113, 118, 124



Series	IC	S
CN.. 1204	12.70	4.76

EDP 2200..

● : Stock item ○ : Order made item

H05 - H15	H10 - H25	H10 - H25	H20 - H35
YBN50	YBN65	YBN65A	YBN90
●	●	●	●
3009	3010	3011	3065
●	●	●	●
3012	3013	3014	3015
●	●	●	●
3016	3017	3018	3066
●	●	●	●
3019	3020	3021	3067
●	●	●	●
3022			



CNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege
	2S CNGA120404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S CNGA120408 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S CNGA120408 T01020	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2
	4S CNGA120408 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	4
	2S CNGA120412 S01225	1.2	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S CNGA120404 S01215 WG	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S CNGA120408 S01215 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S CNGA120408 T01020 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2
	4S CNGA120408 S01215 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	4
	4S CNGA120408 T01020 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	4
	2S CNGA120412 S01215 WG	1.2	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2

TURNING

PARTING & GROOVING

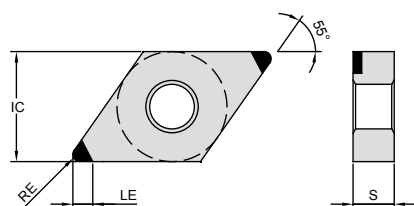
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

DNGA - PCBN (55° Rhombic)

Refer to
Turning holder
p. 93, 98, 114, 119, 124


Series	IC	S
DN.. 1504	12.70	4.76
DN.. 1506	12.70	6.35

H05 - H15	H10 - H25	H10 - H25	H20 - H35
YBN50	YBN65	YBN65A	YBN90
●	●	●	●
3024	3025	3026	3068
●	●	●	●
3031	3032	3033	3069
●	●	●	●
3034	3035	3036	3069

DNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege
	2S DNGA150404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150408 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	4S DNGA150408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	4
	2S DNGA150412 S01225	1.2	2	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150604 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150608 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150608 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DNGA150612 S01225	1.2	2.0	0.03 ~ 0.20	0.05 ~ 0.30	2



TURNING

PARTING & GROOVING

MILLING

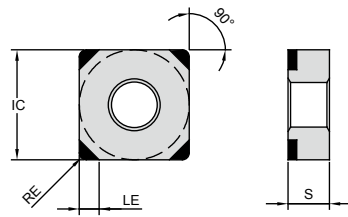
DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

SNGA - PCBN (Square)

Refer to
Turning holder
p. 94, 100, 115, 120



Series	IC	S
SN.. 1204	12.70	4.76

SNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35 K05 - K20
							YBN50	YBN65	YBN65A	YBN90
	4S SNGA120404 S01225	0.4	2.3	0.03 ~ 0.20	0.05 ~ 0.30	4		● 3035		
	4S SNGA120408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	4	● 3036	● 3037	● 3038	
	4S SNGA120408 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	4				● 3070
	4S SNGA120412 S01225	1.2	2.3	0.03 ~ 0.20	0.05 ~ 0.30	4		● 3039		

TURNING

PARTING & GROOVING

MILLING

DRILLING

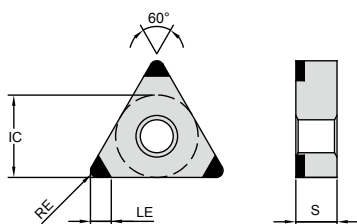
TECHNICAL INFORMATION

Turning Inserts - Negative

TNGA - PCBN (60° Triangle)

Refer to
Turning holder
p. 95, 101, 116, 121, 125

Series	IC	S
TN.. 1604	9.525	4.76



TNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Edge	H05 - H15	H10 - H25	H10 - H25	H20 - H35 K05 - K20
							YBN50	YBN65	YBN65A	YBN90
	3S TNGA160404 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3040		
	3S TNGA160408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3	● 3041	● 3042	● 3043	
	3S TNGA160408 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3				● 3071
	6S TNGA160408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	6		● 3044	● 3045	
	3S TNGA160412 S01225	1.2	2	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3046		

TURNING

PARTING & GROOVING

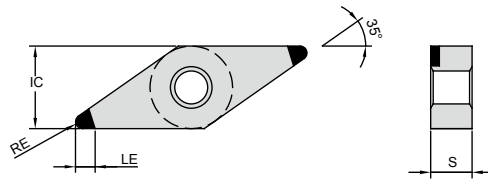
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

VNGA - PCBN (35° Rhombic)

Refer to
Turning holder
p. 102, 122


Series	IC	S
VN.. 1604	9.525	4.76

VNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35
							YBN50	YBN65	YBN65A	K05 - K20 YBN90
	2SVNGA160404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3047		
	2SVNGA160408 S01225	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2	● 3048	● 3049	● 3050	
	2SVNGA160408 T01020	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2				● 3072

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Negative

WNGA - PCBN (80° Trigon)



Refer to
Turning holder

p. 96, 103, 105, 117, 123, 126

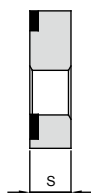
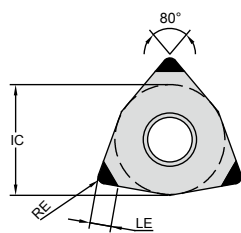
TURNING

PARTING & GROOVING

MILLING

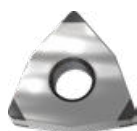
DRILLING

TECHNICAL INFORMATION



Series	IC	S
WN.. 0804	12.70	4.76

H05 - H15	H10 - H25	H10 - H25	H20 - H35
YBN50	YBN65	YBN65A	YBN90
	● 3051		
● 3052	● 3053	● 3054	
			● 3073
	● 3055	● 3056	
	● 3057		
	● 3058		
● 3059	● 3060	● 3061	
			● 3074
	● 3062	● 3063	
	● 3064		



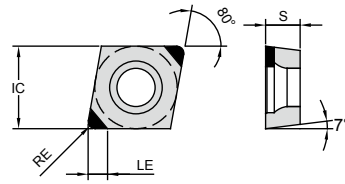
WNGA	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege
	3S WNGA080404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	3
	3S WNGA080408 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	3
	3S WNGA080408 T01020	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	3
	6S WNGA080408 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	6
	3S WNGA080412 S01225	1.2	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3
	3S WNGA080404 S01215 WG	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	3
	3S WNGA080408 S01215 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	3
	3S WNGA080408 T01020 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	3
	6S WNGA080408 S01215 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	6
	3S WNGA080412 S01215 WG	1.2	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3

Turning Inserts - Positive

CCGW - PCBN (80° Rhombic)



Refer to
Turning holder
p. 106, 128, 129

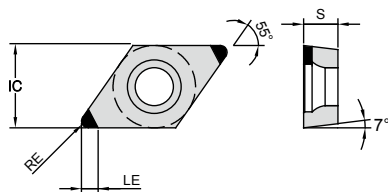


Series	IC	S
CC.. 0602	6.35	2.38
CC.. 09T3	9.525	3.97

CCGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35
							YBN50	YBN65	YBN65A	K05 - K20
	2S CCGW060202 S01225	0.2	2.6	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3075		
	2S CCGW060204 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2	● 3076	● 3077	● 3078	
	2S CCGW060204 T01020	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2				● 3133
	2S CCGW060208 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3079	● 3080	
	2S CCGW09T302 S01225	0.2	2.6	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3081		
	2S CCGW09T304 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3082	● 3083	
	2S CCGW09T308 S01225	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2	● 3084	● 3085	● 3086	
	2S CCGW09T308 T01020	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2				● 3134
	2S CCGW09T304 S01215 WG	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3087	● 3088	
	2S CCGW09T308 S01215 WG	0.8	2.4	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3089	● 3090	

Turning Inserts - Positive

DCGW - PCBN (55° Rhombic)

Refer to
Turning holder
p. 107, 130, 131


Series	IC	S
DC.. 0702	6.35	2.38
DC.. 11T3	9.525	3.97

H05 - H15	H10 - H25	H10 - H25	H20 - H35
YBN50	YBN65	YBN65A	YBN90
	● 3091		
	● 3092	● 3093	
● 3094	● 3095	● 3096	
			● 3135
	● 3097	● 3098	
	● 3099	● 3100	
● 3101	● 3102	● 3103	
			● 3136

DCGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege
	2S DCGW070202 S01225	0.2	2.7	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW070204 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW070208 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW070208 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW11T302 S01225	0.2	2.7	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW11T304 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW11T308 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2
	2S DCGW11T308 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2



TURNING

PARTING & GROOVING

MILLING

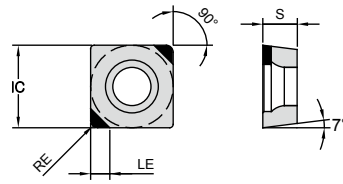
DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

SCGW - PCBN (Square)

Refer to
Turning holder
p. 109, 133



Series	IC	S
SC.. 09T3	9.525	3.97

SCGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10- H25	H10- H25	H20- H35
							YBN50	YBN65	YBN65A	K05 - K20
	2S SCGW09T304 S01225	0.4	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3104		
	2S SCGW09T308 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3105		

TURNING

PARTING & GROOVING

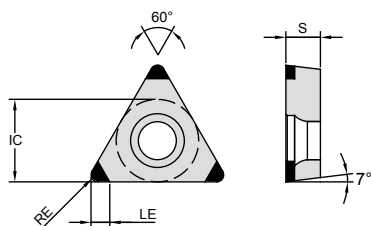
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

TCGW - PCBN (Triangle)


Refer to
Turning holder
p. 110, 134


Series	IC	S
TC.. 0902	5.56	2.38
TC.. 1102	6.35	2.38
TC.. 16T3	9.525	3.97

H05 - H15	H10 - H25	H10 - H25	H20 - H35
YBN50	YBN65	YBN65A	YBN90
	● 3106		
	● 3107	● 3108	
	● 3109	● 3110	
	● 3111	● 3112	
● 3113	● 3114	● 3115	
			● 3137

TCGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege
	3STCGW090204 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3
	3STCGW110204 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3
	3STCGW110208 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3
	3STCGW16T304 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3
	3STCGW16T308 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3
	3STCGW16T308 T01020	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3

TURNING

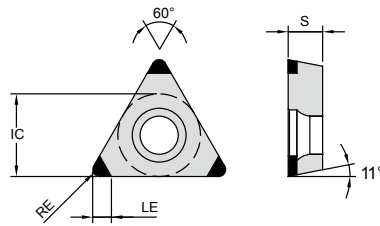
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

TPGW - PCBN (Triangle)


Series	IC	S
TP.. 0902	5.56	2.38
TP.. 1103	6.35	3.18
TP.. 1604	9.525	4.76

TPGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35 K05 - K20
							YBN50	YBN65	YBN65A	YBN90
	3STPGW090204 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3116		
	3STPGW090208 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3117		
	3STPGW110304 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3118		
	3STPGW110308 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3119		
	3STPGW160404 S01225	0.4	2.6	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3120		
	3STPGW160408 S01225	0.8	2.3	0.03 ~ 0.20	0.05 ~ 0.30	3		● 3121		

TURNING

PARTING & GROOVING

MILLING

DRILLING

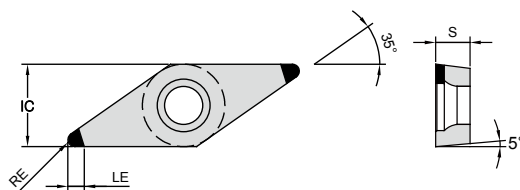
TECHNICAL INFORMATION

Turning Inserts - Positive

VBGW - PCBN (35° Rhombic)

Refer to
Turning holder
p. 111, 135

Series	IC	S
VB.. 1103	6.35	3.18
VB.. 1604	9.525	4.76



VBGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35 K05 - K20
							YBN50	YBN65	YBN65A	YBN90
	2S VBGW110304 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3122		
	2S VBGW110308 S01225	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3123		
	2S VBGW160404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3124	● 3125	
	2S VBGW160408 S01225	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2	● 3126	● 3127	● 3128	
	2S VBGW160408 T01020	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2				● 3138

TURNING

PARTING & GROOVING

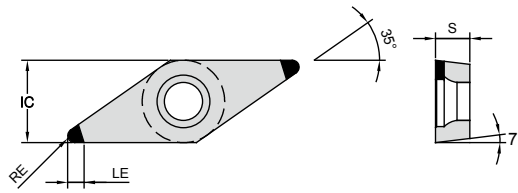
MILLING

DRILLING

TECHNICAL INFORMATION

Turning Inserts - Positive

VCGW - PCBN (35° Rhombic)

Refer to
Turning holder
p. 112, 136


Series	IC	S
VC.. 1103	6.35	3.18
VC.. 1604	9.525	4.76

VCGW	Designation	RE	LE	Fn (mm/rev.)	Ap (mm)	No. of PCBN Eege	H05 - H15	H10 - H25	H10 - H25	H20 - H35 K05 - K20
							YBN50	YBN65	YBN65A	YBN90
	2SVCGW110304 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3129		
	2SVCGW110308 S01225	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3130		
	2SVCGW160404 S01225	0.4	2.5	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3131		
	2SVCGW160408 S01225	0.8	2	0.03 ~ 0.20	0.05 ~ 0.30	2		● 3132		

TURNING

PARTING & GROOVING

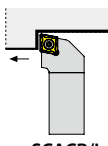
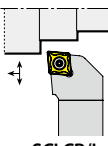
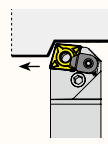
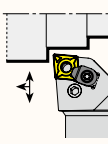
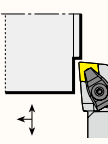
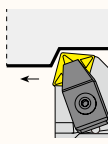
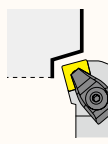
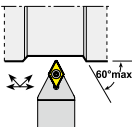
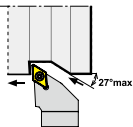
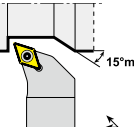
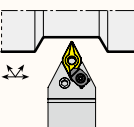
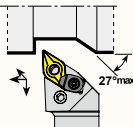
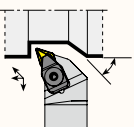
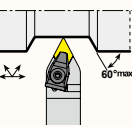
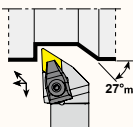
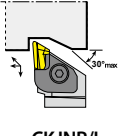
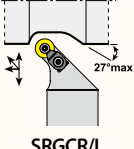
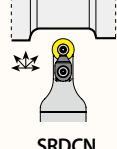
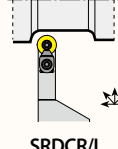
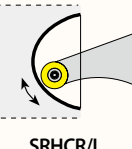
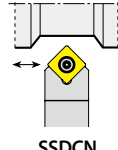
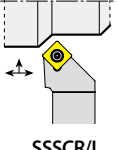
MILLING

DRILLING

TECHNICAL INFORMATION

External Holders Overview

Click/Touch each page number
and move to the very page!

Insert		Turning Holder				
TURNING	 CCGT CCMT	 SCACR/L Screw	 SCLCR/L Screw			
	Page 57	106	106			
PARTING & GROOVING	 CNMA CNMG	 PCBNR/L Lever	 PCLNR/L Lever (+Clamp)	 TCLNR/L Double Clamp	 TCBNR/L Double Clamp	 TCKNR/L Double Clamp
	Page 28	92	92	97	97	97
MILLING	 DCGT DCMT	 SDNCN Screw	 SDJCR/L Screw	 SDHCR/L Screw		
	Page 60	107	107	107		
DRILLING	 DNMA DNMG	 PDNNN Lever (+Clamp)	 PDJNR/L Lever (+Clamp)	 TDHNR/L Double Clamp	 TDNNN Double Clamp	 TDJNR/L Double Clamp
	Page 33	93	93	98	98	98
TECHNICAL INFORMATION	 KNUX	 CKJNR/L Top Clamp				
	Page 39	99				
	 RCMT	 SRGCR/L Screw	 SRDCN Screw	 SRDCR/L Screw	 SRHCR/L Screw	
	Page 62	108	108	108	108	
	 SCGT SCMT	 SSDCN Screw	 SSSCR/L Screw			
	Page 64	109	109			

Turning - Holder - External

External Holders Overview

Click/Touch each page number and move to the very page!

Insert		Turning Holder						
	SNMA SNMG							
		PSDNN Lever (+Clamp)	PSSNR/L Lever (+Clamp)	PSBNR/L Lever (+Clamp)	PSKNR/L Lever (+Clamp)	TSDNN Double Clamp	TSSNR/L Double Clamp	TSKNR/L Double Clamp
Page	40	94	94	94	94	100	100	100
	TCGT TCMT							
		STFCR/L Screw	STGCR/L Screw	STJCR/L Screw	STUCR/L Screw			
Page	66	110	110	110	110			
	TNMA TNMG TNUX							
		PTTNR/L Lever (+Clamp)	PTFNR/L Lever (+Clamp)	PTGNR/L Lever (+Clamp)	PTJNR/L Lever (+Clamp)	TTGNR/L Double Clamp	TTJNR/L Double Clamp	MTJNR/L Multi-Clamp
Page	44	95	95	95	95	101	101	104
	VBMT							
		SVHBR/L Screw	SVVBN Screw	SVJBR/L Screw				
Page	68	111	111	111				
	VCGT VCMT							
		SVHCR/L Screw	SVVCN Screw	SVJCR/L Screw				
Page	69	112	112	112				
	VNMA VNMG							
		TVVNN Double Clamp	TVJNR/L Double Clamp	TVHNR/L Double Clamp				
Page	51	102	102	102				
	WNMA WNMG							
		PWLNR/L Lever (+Clamp)	TWLNR/L Double Clamp	MWLNR/L Multi-Clamp				
Page	53	96	103	105				

TURNING

PARTING & GROOVING

MILLING

DRILLING

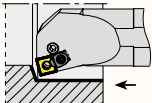
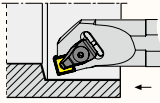
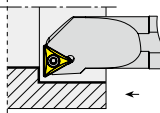
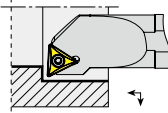
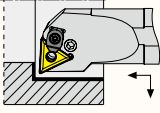
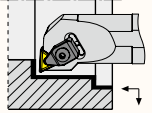
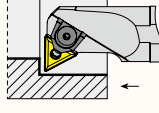
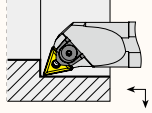
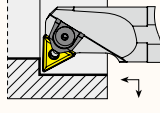
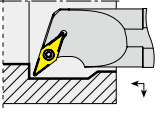
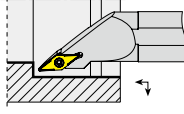
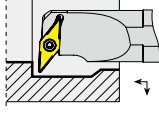
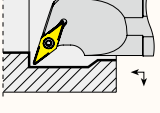
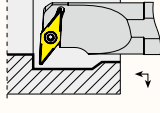
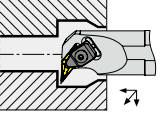
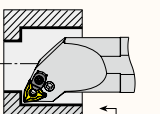
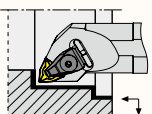
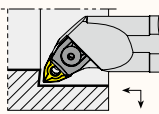
TECHNICAL INFORMATION

Insert		Turning Holder			
	CCGT CCMT				
		..SCFCR/L Screw	..SCLCR/L Screw	E..SCLCR/L Screw	
Page	57	128	129	129	
	CNMA CNMG				
		..PCLNR/L Lever (+Clamp)	..TCLNR/L Double Clamp	..MCLNR/L Multi-Clamp	
Page	28	113	118	124	
	DCGT DCMT				
		..SDPCR/L Screw	..SDQCR/L Screw	..SDUCR/L Screw	E..SDUCR/L Screw
Page	60	130	130	131	131
	DNMA DNMG				
		..PDQNR/L Lever (+Clamp)	..PDUNR/L Lever (+Clamp)	..TDQNR/L Double Clamp	..TDUNR/L Double Clamp
Page	33	114	114	119	119
	KNUX				
		..CKUNR/L Top Clamp			
Page	39	127			
	RCMT				
		..SRGCR-L Screw Type			
Page	62	132			
	SCGT SCMT				
		..SSSCR/L Screw Type			
Page	64	133			

Turning - Holder - Internal

Internal Holders Overview

Click/Touch each page number and move to the very page!

Insert		Turning Holder				
	SNMA SNMG	 ..PSKNR/L Lever (+Clamp)	 ..TSKNR/L Double Clamp			
Page	40	115	120			
	TCGT TCMT	 ..STFCR/L Screw	 ..STUCR/L Screw			
Page	66	134	134			
	TNMA TNMG TNUX	 ..PTUNR/L Lever (+Clamp)	 ..TTUNR/L Double Clamp	 ..MTFNR/L Pin + Clamp	 ..MTQNR/L Multi-Clamp	 ..MTUNR/L Pin + Clamp
Page	44	116	121	125	125	125
	VBMT	 ..SVQBR/L Screw	 ..SVJBR/L Screw	 ..SVUBR/L Screw		
Page	68	135	135	135		
	VCGT VCMT	 ..SVQCR/L Screw	 ..SVUCR/L Screw			
Page	69	136	136			
	VNMA VNMG	 ..TVUNR/L Double Clamp				
Page	51	122				
	WNMA WNMG	 ..PWLNR/L Lever (+Clamp)	 ..TWLNR/L Double Clamp	 ..MWLNR/L Multi-Clamp		
Page	53	117	123	126		

TURNING

PARTING & GROOVING

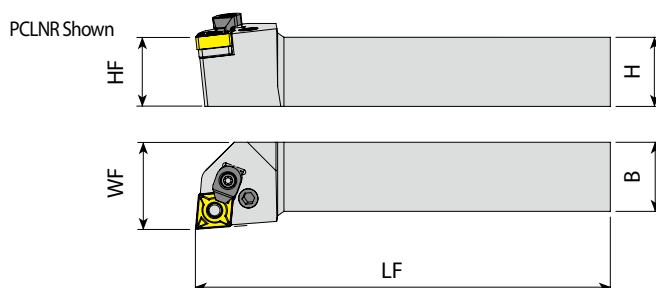
MILLING

DRILLING

TECHNICAL INFORMATION

Turning - Holder - External

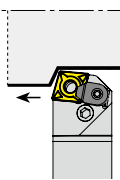
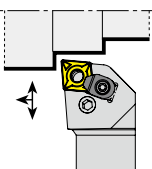
Lever Lock type for CN** Insert



* 'C' Letter at Last : Optional Clamp Included

☐ : Refer to p. 28

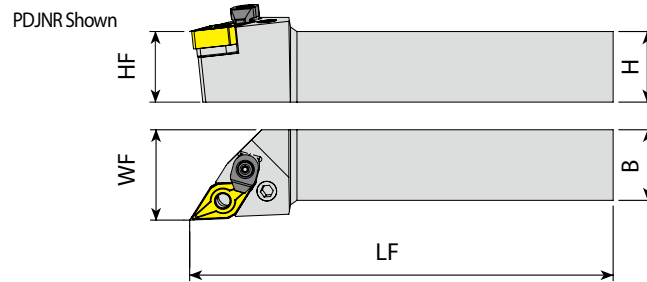
Unit:mm

Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 PCBNR/L Approach angle 75°	PCBNR/L 2020K 12C	0438	0439	20	20	17.5	125	CN1204
	PCBNR/L 2525M 12C	0440	0441	25	25	22.5	150	
	PCBNR/L 3232P 12C	0442	0443	32	32	29.5	170	
	PCBNR/L 2525M 16C	0444	0445	25	25	22.0	150	CN1606
	PCBNR/L 3232P 16C	0446	0447	32	32	27.0	170	
	PCBNR/L 3232P 19C	0448	0449	32	32	37.0	170	CN1906
	PCBNR/L 4040S 19C	0450	0451	40	40	37.0	250	
 PCLNR/L Approach angle 95°	PCLNR/L 1616-H09	0001	0002	16	16	20.0	100	CN0903
	PCLNR/L 1616H 12	0464	0465	16	16	20.0	100	CN1204
	PCLNR/L 2020K 12C	0466	0467	20	20	25.0	125	
	PCLNR/L 2525M 12C	0468	0469	25	25	32.0	150	
	PCLNR/L 3232P 12C	0470	0471	32	32	40.0	170	
	PCLNR/L 2525M 16C	0472	0473	25	25	32.0	150	CN1606
	PCLNR/L 3232P 16C	0474	0475	32	32	40.0	170	
	PCLNR/L 2525M 19C	0476	0477	25	25	32.0	150	CN1906
	PCLNR/L 3232P 19C	0478	0479	32	32	40.0	170	
	PCLNR/L 4040S 19C	0480	0481	40	40	50.0	250	

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
PC..	H09	Description	YAPL-01	YALV-02-M6x17	-	-	YAACN-2-0002	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	28000028	18000053	18000060
	..12	Description	YAPL-02	YALV-03-M8x19	-	-	YAACN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	-	-	18000137	18000054	18000061
	..12C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAACN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000137	18000054	18000061
	..16C	Description	YAPL-04	YALV-04-M8x22	YACK-09	YAAV-05-M6x15	YAACN-3-0002	YAAY-03	YAAL-03-3
		EDP	18000095	18000101	18000066	18000078	18000138	18000055	18000061
	..19C	Description	YAPL-05	YALV-05-M10x27	YACK-09	YAAV-05-M6x15	YAACN-3-0003	YAAY-04	YAAL-05-4
		EDP	18000096	18000102	18000066	18000078	18000139	18000056	18000062

Turning - Holder - External

Lever Lock type for DN** Insert



* 'C' Letter at Last : Optional Clamp Included

: Refer to p. 33

Unit:mm

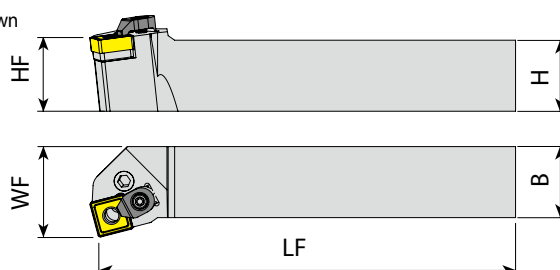
Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
PDNNN Approach angle 62.5°	PDNNN 2020K 15C	0515	20	20	10.0	125	DN1506
	PDNNN 2525M 15C	0516	25	25	12.5	150	
	PDNNN 3232P 15C	0517	32	32	16.0	170	
PDJNR/L Approach angle 93°	PDJNR/L 1616-H11	0031 0032	16	16	20.0	100	DN1104
	PDJNR/L 2020K 15C	0500 0501	20	20	25.0	125	DN1506
	PDJNR/L 2525M 15C	0502 0503	25	25	32.0	150	
	PDJNR/L 3232P 15C	0504 0505	32	32	40.0	170	
	PDJNR/L 4040S 15C	1734 0506	40	40	50.0	250	

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
PD..	..15C	Description	YAPL-03	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAADN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000094	18000100	18000065	18000119	18000137	18000054	18000061
	..H11	Description	YAPL-01	YALV-02-M6x17	-	-	YAADN-SD317	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	28000029	18000053	18000060
	..M15	Description	YAPL-03	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAADN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000094	18000100	18000065	18000119	18000137	18000054	18000061

Turning - Holder - External

Lever Lock type for SN** Insert

PSKNR Shown



* 'C' Letter at Last : Optional Clamp Included

☐ : Refer to p. 40

Unit:mm

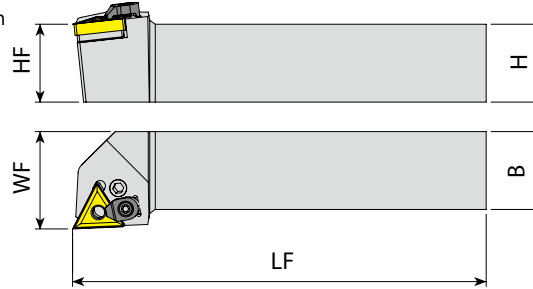
Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
PSDNN Approach angle 45°	PSDNN 1616-H09	0075	16	16	8.0	100	SN0903
	PSDNN 2020K 12C	0530	20	20	10.0	125	SN1204
	PSDNN 2525M 12C	0531	25	25	12.5	150	
	PSDNN 3232P 12C	0532	32	32	16.0	170	SN1204
PSSNR/L Approach angle 45°	PSSNR/L 1616-H09	0079 0080	16	16	20.0	100	SN0903
	PSSNR/L 2020K 12C	0548 0549	20	20	25.0	125	SN1204
	PSSNR/L 2525M 12C	0550 0551	25	25	32.0	150	
	PSSNR/L 3232P 12C	0552 0553	32	32	40.0	170	SN1204
PSBNR/L Approach angle 75°	PSBNR/L 1616-H09	0069 0070	16	16	13.0	100	SN0903
	PSBNR/L 2020K 12	0430 0525	20	20	17.0	125	SN1204
	PSBNR/L 2525M 12C	0526 0527	25	25	22.0	150	
	PSBNR/L 3232P 12C	0528 0529	32	32	27.0	170	SN1204
PSKNR/L Approach angle 75°	PSKNR/L 2020K 12C	0537	20	20	25.0	125	SN1204
	PSKNR/L 2525M 12C	0538 0539	25	25	32.0	150	
	PSKNR/L 3232P 12C	0540 0541	32	32	40.0	170	

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
PS..	..H09	Description	YAPL-01	YALV-02-M6x17	-	-	YAASN-2-0002	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	28000028	18000053	18000060
	..12	Description	YAPL-02	YALV-03-M8x19	-	-	YAASN-3-0004	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	-	-	18000145	18000054	18000060
	..12C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAASN-3-0004	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000145	18000054	18000060

Turning - Holder - External

Lever Lock type for TN** Insert

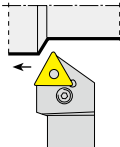
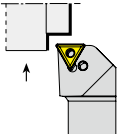
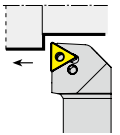
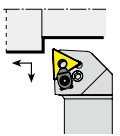
PTJNR Shown



* 'C' Letter at Last : Optional Clamp Included

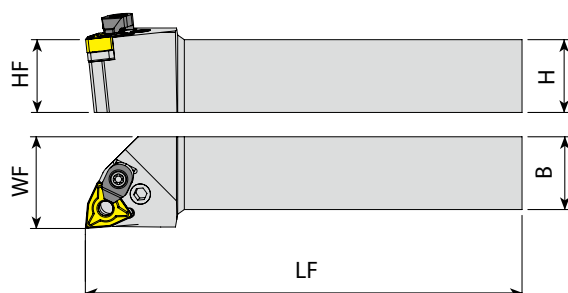
: Refer to p. 44

Unit:mm

Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 PTTNR/L Approach angle 60°	PTTNR/L 1616H 16	0619	0620	16	16	13.0	100	TN1604
	PTTNR/L 2020K 16	0429	0621	20	20	17.0	125	
	PTTNR/L 2525M 16	0622	0623	25	25	21.5	150	
	PTTNR/L 3232P 16	0624	0625	32	32	31.0	170	TN2204
	PTTNR/L 2525M 22C	0626	0627	25	25	20.5	150	
	PTTNR/L 3232P 22C	0628	0629	32	32	29.0	170	
 PTFNR/L Approach angle 91°	PTFNR/L 1616H 16	0560	0561	16	16	20.0	100	TN1604
	PTFNR/L 2020K 16	0049	0050	20	20	25.0	125	
	PTFNR/L 2525M 16	0051	0052	25	25	32.0	150	
	PTFNR/L 3232P 16	0562	0563	32	32	40.0	170	TN2204
	PTFNR/L 2525M 22C	0564	0565	25	25	32.0	150	
	PTFNR/L 3232P 22C	0566	0567	32	32	40.0	170	
 PTGNR/L Approach angle 91°	PTGNR/L 1616H 16	0568	0569	16	16	20.0	100	TN1604
	PTGNR/L 2020K 16	0055	0056	20	20	25.0	125	
	PTGNR/L 2525M 16	0057	0058	25	25	32.0	150	
	PTGNR/L 2525M 22C	0570	0571	25	25	32.0	150	TN2204
	PTGNR/L 3232P 22C	0572	0573	32	32	40.0	170	
 PTJNR/L Approach angle 93°	PTJNR/L 1616H 16	0597	0598	16	16	20.0	100	TN1604
	PTJNR/L 2020K 16	0599	0600	20	20	25.0	125	
	PTJNR/L 2525M 16	0601	0602	25	25	32.0	150	
	PTJNR/L 3232P 16	0603	0604	32	32	40.0	170	
	PTJNR/L 2525M 22C	0605	0606	25	25	32.0	150	TN2204
	PTJNR/L 3232P 22C	0607	0608	32	32	40.0	170	

Series	Designation	Information	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
PT..	..16	Description	YAPL-01	YALV-02-M6x17	-	-	YAATN-3-0025	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	18000149	18000053	18000060
	..22..	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAATN-3-0015	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000148	18000054	18000061

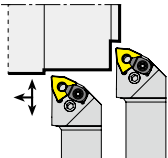
Lever Lock type for WN** Insert



* 'C' Letter at Last : Optional Clamp Included

☐ : Refer to p. 53

Unit:mm

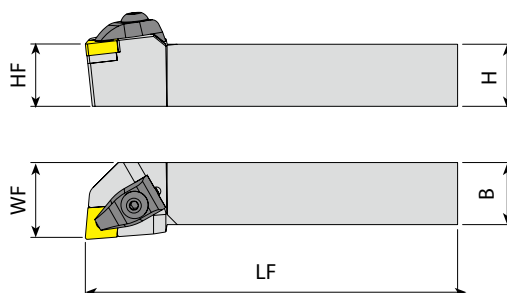
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
	PWLN/L 1616H 06	0647	0648	16	16	20	100	WN0604
	PWLN/L 2020K 06	0649	0650	20	20	25	125	
	PWLN/L 2525M 06	0651	0652	25	25	32	150	
 PWLN/L Approach angle 95°	PWLN/L 1616H 08	0653	0654	16	16	20	100	WN0804
	PWLN/L 2020K 08C	0655	0656	20	20	25	125	
	PWLN/L 2525M 08C	0657	0658	25	25	32	150	
	PWLN/L 3232P 08C	0659	0660	32	32	40	170	

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
PW..	..06	Description	YAPL-01	YALV-02-M6x17	-	-	YAAWN-SW317	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	18000152	18000053	18000060
	..08	Description	YAPL-02	YALV-03-M8x19	-	-	YAAWN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	-	-	18000151	18000054	18000061
	..08C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAAWN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000151	18000054	18000061

Turning - Holder - External

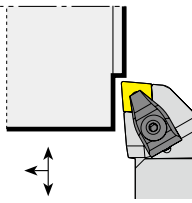
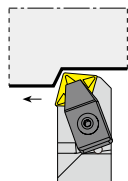
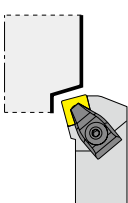
Double Clamp type for CN** Insert

TCLNR Shown



: Refer to p. 28

Unit:mm

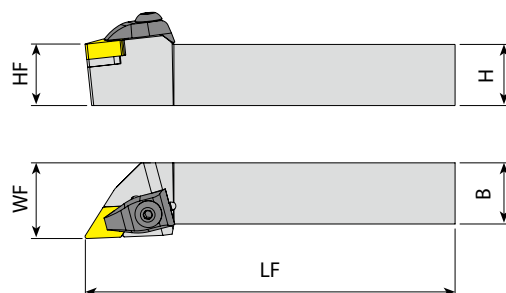
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 TCLNR/L Approach angle 95°	TCLNR/L 2020K 12	0482	0483	20	20	25	125	CN1204
	TCLNR/L 2525M 12	0484	0485	25	25	32	150	
	TCLNR/L 3232P 12	0486	0487	32	32	40	170	
	TCLNR/L 4040S 12	0488	0489	40	40	50	250	
	TCLNR/L 5050S 12	0490	0491	50	50	63	250	
	TCLNR/L 2525M 16	0492	0493	25	25	32	150	CN1606
	TCLNR/L 3232P 16	0494	-	32	32	40	170	
 TCBNR/L Approach angle 75°	TCBNR/L 2525M 16	0452	0453	25	25	22	150	CN1606
 TCKNR/L Approach angle 75°	TCKNR/L 2020K 12	0454	0455	20	20	25	125	CN1204
	TCKNR/L 2525M 12	0456	0457	25	25	32	150	
	TCKNR/L 3232P 12	0458	0459	32	32	40	170	
	TCKNR/L 2525M 16	0460	0461	25	25	32	150	CN1606
	TCKNR/L 3232P 16	0462	0463	32	32	40	170	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TC..	..12	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAACN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000137	18000156	18000061
	..16	Description	YATK-04	YAKV-19-M7x25	YABPL-02	YAS-02	YAACN-3-0002	YAAV-05-M6x15	YAAL-05-4
		EDP	18000077	18000088	18000059	28000042	18000138	18000078	18000062

Turning - Holder - External

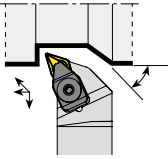
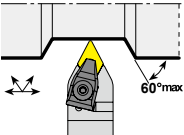
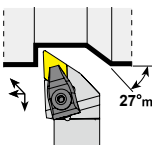
Double Clamp type for DN** Insert

TDJNR Shown



□: Refer to p. 33

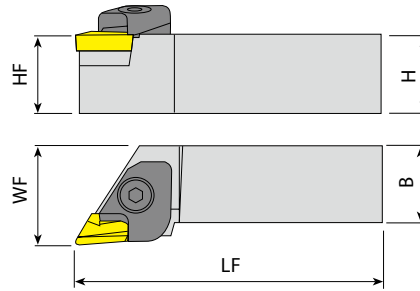
Unit:mm

Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
 TDHNR/L Approach angle 107.5°	TDHNR/L 2020K 15	0495 0496	20	20	25.0	125	DN1506
	TDHNR/L 2525M 15	0497 0498	25	25	32.0	150	DN1506
	TDHNR 3232P 15	0499 -	32	32	40.0	170	DN1504
 TDNNN Approach angle 62.5°	TDNNN 2020K 15	0518	20	20	10.0	125	DN1506
	TDNNN 2525M 15	0519	25	25	12.5	150	DN1506
	TDNNN 3232P 15	0520	32	32	16.0	170	DN1506
 TDJNR/L Approach angle 93°	TDJNR/L 2020K 15	0507 0508	20	20	25.0	125	DN1506
	TDJNR/L 2525M 15	0509 0510	25	25	32.0	150	DN1506
	TDJNR/L 3232P 15	0511 0512	32	32	40.0	170	DN1506
	TDJNR/L 4040S 15	0513 0514	40	40	50.0	250	DN1506

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TD..	..15	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAADN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000142	18000156	18000061

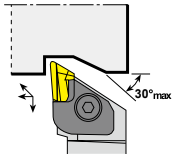
Turning - Holder - External

Top Clamp type for KN** Insert



: Refer to p. 39

Unit:mm

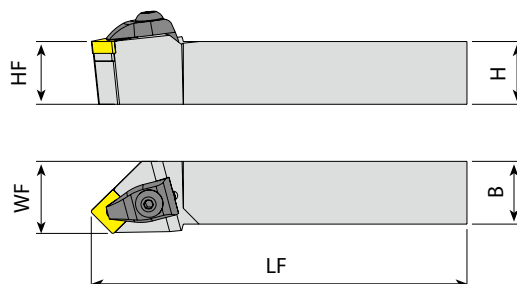
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 CKJNR/L Approach angle 93°	CKJNR/L 2020K 16	0521	0522	20	20	27.5	125	KNUX1604
	CKJNR/L 2525M 16	0152	0153	25	25	31.5	150	
	CKJNR/L 3232P 16	0154	0155	32	32	40.0	170	
	CKJNR/L 4040S 16	0523	0524	40	40	50.0	250	

Series	Designation	Information	Clamp	Clamp Screw	Spring	Upper Ring	Shim	Shim Screw	Allen Key
CK..	..16	Description	YACK-01-R	YAKV-06-M6x20	YAKY-02	YABPL-01	YAKS-16-R	YAAV-01-M3x10	YAAL-05-4
		EDP	18000064	18000083	18000164	18000058	18000154	18000155	18000062
	..16	Description	YACK-02-L	YAKV-06-M6x20	YAKY-02	YABPL-01	YAKS-16-L	YAAV-01-M3x10	YAAL-05-4
		EDP	18000063	18000083	18000164	18000058	18000153	18000155	18000062

Turning - Holder - External

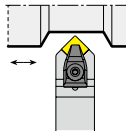
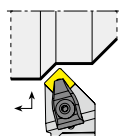
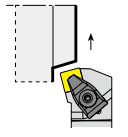
Double Clamp type for SN** Insert

TSSNR Shown



□: Refer to p. 40

Unit:mm

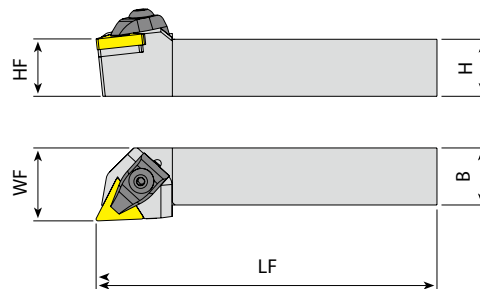
Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
 TSDNN Approach angle 45°	TSDNN 1616H 12	0533	16	16	8.0	100	SN1204
	TSDNN 2020K 12	0534	20	20	10.0	125	
	TSDNN 2525M 12	0535	25	25	12.5	150	
	TSDNN 3232P 12	0536	32	32	16.0	170	
 TSSNR/L Approach angle 45°	TSSNR/L 2020K 12	0554 0555	20	20	25.0	125	SN1204
	TSSNR/L 2525M 12	0556 0557	25	25	32.0	150	
	TSSNR/L 3232P 12	0558 0559	32	32	40.0	170	
 TSKNR/L Approach angle 75°	TSKNR/L 2020K 12	0542 0543	20	20	25.0	125	SN1204
	TSKNR/L 2525M 12	0544 0545	25	25	32.0	150	
	TSKNR/L 3232P 12	0546 0547	32	32	40.0	170	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TS..	..12	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAASN-3-0004	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000145	18000156	18000061

Turning - Holder - External

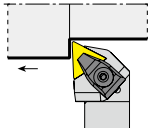
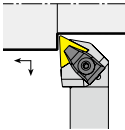
Double Clamp type for TN** Insert

TTJNR Shown



 : Refer to p. 44

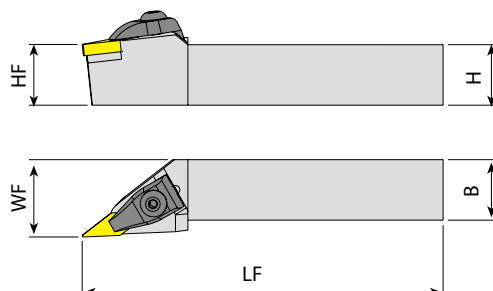
Unit:mm

Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 TTGNR/L Approach angle 91°	TTGNR/L 2020K 16	0574	0575	20	20	25	125	TN1604
	TTGNR/L 2525M 16	0576	0577	25	25	32	150	
	TTGNR/L 3232P 16	0578	0579	32	32	40	170	
	TTGNR/L 2525M 22	0580	0581	25	25	32	150	TN2204
	TTGNR/L 3232P 22	0582	0583	32	32	40	170	
	TTGNR/L 4040S 22	0584	-	40	40	50	250	
 TTJNR/L Approach angle 93°	TTJNR/L 2020K 16	0609	0610	20	20	25	125	TN1604
	TTJNR/L 2525M 16	0611	0612	25	25	32	150	
	TTJNR/L 3232P 16	0613	0614	32	32	40	170	
	TTJNR/L 2525M 22	0615	0616	25	25	32	150	TN2204
	TTJNR/L 3232P 22	0617	0618	32	32	40	170	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TT..	..16	Description	YATK-01	YAKV-01-M5x22	YABPL-01	-	YAATN-2-0002	YAAV-03-M5x12	YAAL-03-3
		EDP	18000074	18000080	18000058	-	18000147	18000157	18000061
	..22	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAATN-3-0015	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000148	18000156	18000061

Double Clamp type for VN** Insert

TVJNR Shown



□ : Refer to p. 51

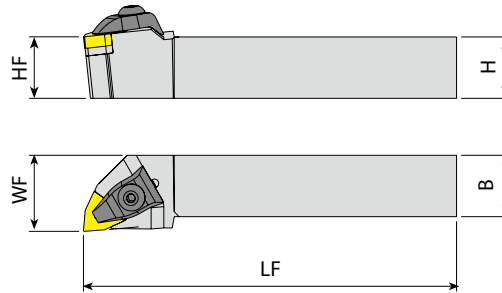
Unit:mm

Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
TVVNN Approach angle 72.5°	TVVNN 2020K 16	0642	20	20	10.0	125	VN1604
	TVVNN 2525M 16	0643	25	25	12.5	150	
	TVVNN 3232P 16	0644	32	32	16.0	170	
TVJNR/L Approach angle 93°	TVJNR/L 2020K 16	0636 0637	20	20	25.0	125	VN1604
	TVJNR/L 2525M 16	0638 0639	25	25	32.0	150	
	TVJNR/L 3232P 16	0640 0641	32	32	40.0	170	
TVHNR/L Approach angle 107.5°	TVHNR/L 2020K 16	0630 0631	20	20	25.0	125	VN1604
	TVHNR/L 2525M 16	0632 0633	25	25	32.0	150	
	TVHNR/L 3232P 16	0634 0635	32	32	40.0	170	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TV..	..16	Description	YATK-03	YAKV-30-M6x22	YABPL-01	YAS-01	YAAVN-2-0002	YAAV-04-M5x12	YAAL-03-3
		EDP	18000076	18000091	18000058	18000052	18000150	18000158	18000061

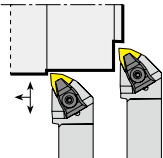
Turning - Holder - External

Double Clamp type for WN** Insert



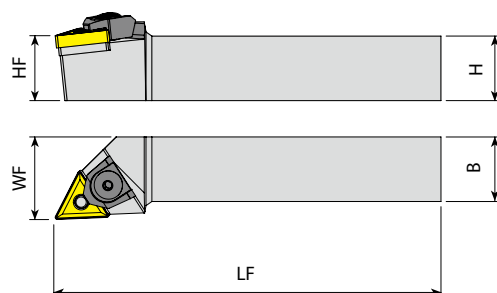
: Refer to p. 53

Unit:mm

Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 TWLNR/L Approach angle 95°	TWLNR/L 1616H 06	0661	0662	16	16	20	100	WN0604
	TWLNR/L 2020K 06	0663	0664	20	20	25	125	
	TWLNR/L 2525M 06	0665	0666	25	25	32	150	
	TWLNR/L 2020K 08	0667	0668	20	20	25	125	WN0804
	TWLNR/L 2525M 08	0669	0670	25	25	32	150	
	TWLNR/L 3232P 08	0671	0672	32	32	40	170	
	TWLNR/L 4040S 08	0673	0674	40	40	50	250	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
TW..	..06	Description	YATK-01	YAKV-01-M5x22	YABPL-01	-	YAAWN-SW317	YAAV-01-M3x10	YAAL-03-3
		EDP	18000074	18000080	18000058	-	18000152	18000155	18000061
	..08	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAAWN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000151	18000156	18000061

Multi-Clamp type for TN** Insert



□: Refer to p. 44

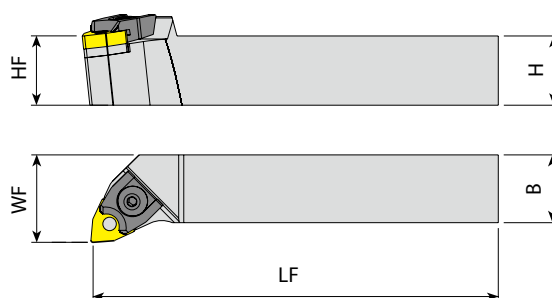
Unit:mm

Series	Designation	EDP 2700.. R	EDP 2700.. L	H (= HF)	B	WF	LF	Insert
 MTJNR/L Approach angle 93°	MTJNR/L 2020K 16	0585	0586	20	20	25	125	TN1604
	MTJNR/L 2525M 16	0587	0588	25	25	32	150	
	MTJNR/L 3232P 16	0589	0590	32	32	40	170	
	MTJNR/L 2525M 22	0591	0592	25	25	32	150	TN2204
	MTJNR/L 3232P 22	0593	0594	32	32	40	170	
	MTJNR/L 4040S 22	0595	0596	40	40	50	250	

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Pin	Shim	Allen Key
MT..	..16	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAPM-01	YAATN-2-0002	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000110	18000147	18000061
	..22	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAPM-02	YAATN-3-0015	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000111	18000148	18000061

Turning - Holder - External

Multi-Clamp type for WN** Insert



☐ : Refer to p. 53

Unit:mm

Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 MWLNR/L Approach angle 95°	MWLNR/L 1616H 06	0645	0646	16	16	20	100	WN0604
	MWLNR/L 2020K 06	0021	0022	20	20	25	125	
	MWLNR/L 2525M 06	0023	0024	25	25	32	150	
	MWLNR/L 2020K 08	0025	0026	20	20	25	125	WN0804
	MWLNR/L 2525M 08	0027	0028	25	25	32	150	
	MWLNR/L 3232P 08	0029	0030	32	32	40	170	

TURNING

PARTING & GROOVING

MILLING

DRILLING

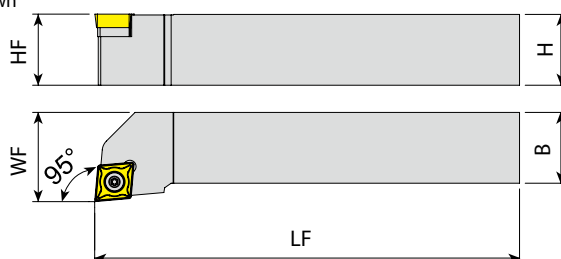
TECHNICAL INFORMATION

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Pin	Shim	Allen Key
MW..	..06	Description	YAMK-01	YAKV-04-M5x17	-	-	YAPM-08	-	YAAL-03-3
		EDP	18000070	18000082	-	-	18000114	-	18000061
	..08	Description	YAMK-05	YAKV-03-M6x22	YABPL-01	YAS-01	YAPM-02	YAAWN-3-0001	YAAL-03-3
		EDP	18000073	18000081	18000058	18000052	18000111	18000151	18000061

Turning - Holder - External

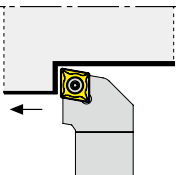
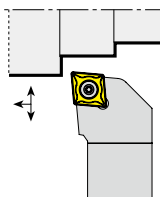
Screw on type for CC** Insert

SCLCR Shown



□: Refer to p. 57

Unit:mm

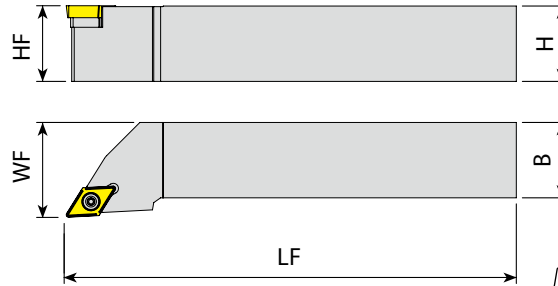
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 SCACR/L Approach angle 90°	SCACR/L 0808E 06	0675	0676	08	08	10	70	CC0602
	SCACR/L 1010E 06	0677	0678	10	10	12	70	
	SCACR/L 1212F 09	0679	0680	12	12	16	80	CC09T3
	SCACR/L 1616H 09	0681	0682	16	16	20	100	
	SCACR/L 2020K 09	0683	0684	20	20	25	125	CC1204
	SCACR/L 2020K 12	0685	0686	20	20	25	125	
	SCACR/L 2525M 12	0687	0688	25	25	32	150	
 SCLCR/L Approach angle 95°	SCLCR/L 0808E 06	0689	0690	08	08	10	70	CC0602
	SCLCR/L 1010E 06	0691	-	10	10	12	70	
	SCLCR/L 1010E 09	0692	0693	10	10	12	70	CC09T3
	SCLCR/L 1212F 09	0089	0090	12	12	16	80	
	SCLCR/L 1616H 09	0091	0092	16	16	20	100	
	SCLCR/L 2020K 09	0093	0094	20	20	25	125	
	SCLCR/L 2525M 09	0694	0695	25	25	32	150	CC1204
	SCLCR/L 1616H 12	0696	-	16	16	20	100	
	SCLCR/L 2020K 12	0095	0096	20	20	25	125	
	SCLCR/L 2525M 12	0097	0098	25	25	32	150	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
SC..	..06	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..F09	Description	Y4015-M3.5x11	YAACN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000118	18000135	18000159	18000167
	..H09	Description	Y4015-M3.5x14	YAACN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000135	18000159	18000167
	..12	Description	Y1020-M4.5x16	YAACN-2-0003	YAAV-07-M4.5x13	Y80-T20
		EDP	18000120	18000136	18000160	18000168
	..1010..09	Description	Y4015-M3x9	-	-	Y80-T15
		EDP	18000132	-	-	18000159
	..1212..09	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000159
	..1616~2525..09	Description	Y4015-M3.5x14	YAACN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000135	18000159	18000159
	..1616..12	Description	Y1020-M5x11	-	-	Y80-T20
		EDP	18000121	-	-	18000168
	..2020~2525..12	Description	Y1020-M4.5x16	YAACN-2-0003	YAAV-07-M4.5x13	Y80-T20
		EDP	18000120	18000136	18000160	18000168

Turning - Holder - External

Screw on type for DC** Insert

SDJCR Shown



: Refer to p. 60

Unit: mm

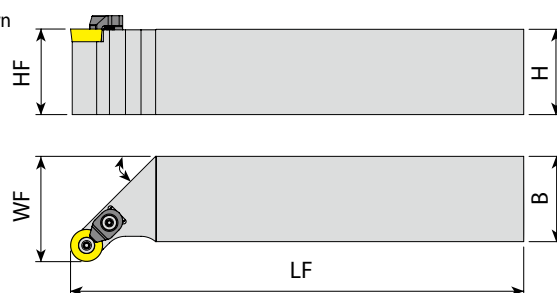
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 SDNCN Approach angle 62.5°	SDNCN 0808E 07	0723		08	08	4.0	70	DC0702
	SDNCN 1010E 07	0724		10	10	5.0	70	
	SDNCN 1212F 07	0123		12	12	6.0	80	
	SDNCN 1616H 07	0725		16	16	8.0	100	
	SDNCN 1616H 11	0124		16	16	8.0	100	DC11T3
	SDNCN 2020K 11	0125		20	20	10.0	125	
	SDNCN 2525M 11	0126		25	25	12.5	150	
	SDNCN 3232P 11	0726		32	32	16.0	170	
 SDJCR/L Approach angle 93°	SDJCR/L 0808E 07	0713	0714	08	08	10.0	70	DC0702
	SDJCR/L 1010E 07	0715	0716	10	10	12.0	70	
	SDJCR/L 1212F 07	0113	0114	12	12	16.0	80	
	SDJCR/L 1616H 07	0717	0718	16	16	20.0	100	
	SDJCR/L 1616H 11	0117	0118	16	16	20.0	100	DC11T3
	SDJCR/L 2020K 11	0119	0120	20	20	25.0	125	
	SDJCR/L 2525M 11	0719	0720	25	25	32.0	150	
	SDJCR/L 3232P 11	0721	0722	32	32	40.0	170	
 SDHCR/L Approach angle 107.5°	SDHCR/L 0808E 07	0697	0698	05	05	11.0	70	DC0702
	SDHCR/L 1010E 07	0699	0700	10	10	12.0	70	
	SDHCR/L 1212F 07	0701	0702	12	12	16.0	80	
	SDHCR/L 1616H 07	0703	0704	16	16	20.0	100	
	SDHCR/L 1616H 11	0705	0706	16	16	20.0	100	DC11T3
	SDHCR/L 2020K 11	0707	0708	20	20	25.0	125	
	SDHCR/L 2525M 11	0709	0710	25	25	32.0	150	
	SDHCR/L 3232P 11	0711	0712	32	32	40.0	170	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
SD..	..07	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	8000127	-	-	18000165
	..11	Description	Y4015-M3.5x14	YAADN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000140	18000159	18000167

Turning - Holder - External

Screw on type for RC** Insert

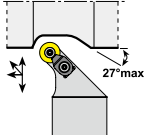
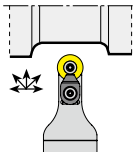
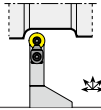
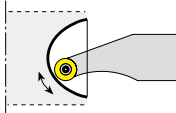
SRGCR Shown



* 'C' Letter at Last : Optional Clamp Included

□ : Refer to p. 62

Unit:mm

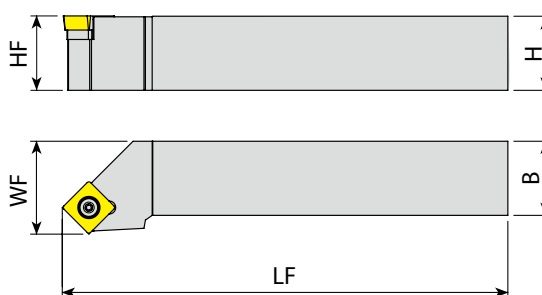
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 SRGCR/L Approach angle 90°	SRGCR/L 1616H 06	0739	0740	16	16	20.0	100	RC0602
	SRGCR/L 2020K 06	0741	0742	20	20	25.0	125	
	SRGCR/L 1616H 08C	0743	0744	16	16	32.0	100	RC0803
	SRGCR/L 2020K 08C	0745	0746	20	20	25.0	125	
	SRGCR/L 2525M 08C	0747	0748	25	25	32.0	150	RC10T3
	SRGCR/L 1616H 10C	0749	0750	16	16	20.0	100	
	SRGCR/L 2020K 10C	0751	0752	20	20	25.0	125	
	SRGCR/L 2525M 10C	0753	0754	25	25	32.0	150	
	SRGCR/L 3232P 10C	0755	0756	32	32	40.0	170	RC1204
	SRGCR/L 2020K 12C	0757	0758	20	20	25.0	125	
	SRGCR/L 2525M 12C	0759	0760	25	25	32.0	150	
	SRGCR/L 3232P 12C	0761	0762	32	32	40.0	170	
 SRDCN Approach angle 90°	SRDCN 1616H 06	0162		16	16	8.0	100	RC0602
	SRDCN 2020K 06	0163		20	20	10.0	125	
	SRDCN 2525M 06	0164		25	25	12.5	150	RC0803
	SRDCN 1616H 08C	0727		16	16	8.0	100	
	SRDCN 2020K 08C	0728		20	20	10.0	125	RC10T3
	SRDCN 2525M 08C	0729		25	25	12.5	150	
	SRDCN 1616H 10C	0730		16	16	8.0	100	
	SRDCN 2020K 10C	0731		20	20	10.0	125	
	SRDCN 2525M 10C	0732		25	25	12.5	150	RC1204
	SRDCN 3232P 10C	0733		32	32	16.0	170	
	SRDCN 2020K 12C	0734		20	20	10.0	125	
	SRDCN 2525M 12C	0735		25	25	12.5	150	
 SRDCR/L	SRDCR/L3232P12C	0737	0738	32	32	40.0	170	RC1204
 SRHCR/L	SRHCR/L 2525K 06	0763	-	25	25	25.0	125	RC0602
	SRHCR/L 2525K 08	0764	0765	25	25	25.0	125	RC0803
	SRHCR/L 2525K 10	0766	0767	25	25	25.0	125	RC10T3
	SRHCR/L 2525K 12	0768	0769	25	25	25.0	125	RC1204

Series	Designation	Information	Clamp	Clamp Screw	Screw	Torx Key
SR..	..06	Description	-	-	Y3008-M2.5x6	Y80-T08
		EDP	-	-	18000124	18000165
	..08	Description	-	-	Y3008-M3x8	Y80-T15
		EDP	-	-	18000125	18000167
	..08C	Description	YACK-15	Y4015-M3.5x11	Y3008-M3x8	Y80-T08
		EDP	18000069	18000118	18000125	18000165
	..10C	Description	YACK-15	Y4015-M3.5x11	Y4015-M3.5x11	Y80-T15
		EDP	18000069	18000118	18000118	18000167
	..12C	Description	YACK-05	Y4015-M4x11	Y4015-M3.5x11	Y80-T15
		EDP	18000065	18000119	18000118	18000167
	..10 ..12	Description	-	-	Y4015-M3.5x11	Y80-T15
		EDP	-	-	18000118	18000167
..1616 ..08C	Description	YACK-15	Y4015-M3.5x11	Y3008-M3x8	Y80-T08	
	EDP	18000069	18000118	18000125	18000165	

Turning - Holder - External

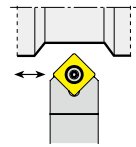
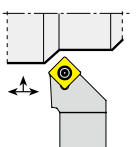
Screw on type for SC** Insert

SSSCR Shown



: Refer to p. 64

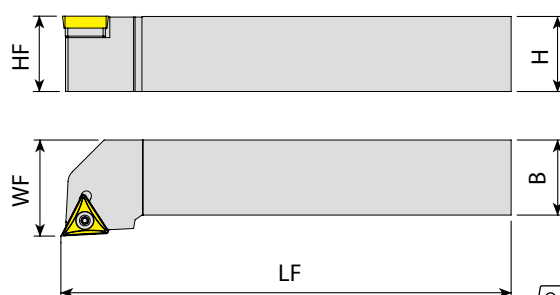
Unit:mm

Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
 SSDCN Approach angle 45°	SSDCN 1212F 09	0148	12	12	6.0	80	SC09T3
	SSDCN 1616H 09	0149	16	16	8.0	100	
	SSDCN 2020K 09	0770	20	20	10.0	125	
	SSDCN 1616H 12	0771	16	16	8.0	100	SC1204
	SSDCN 2020K 12	0150	20	20	10.0	125	
	SSDCN 2525M 12	0151	25	25	12.5	150	
 SSSCR/L Approach angle 45°	SSSCR/L 1212F 09	0772 0773	12	12	16.0	80	SC09T3
	SSSCR/L 1616H 09	0774 0775	16	16	20.0	100	
	SSSCR/L 2020K 09	0776 0777	20	20	25.0	125	
	SSSCR/L 1616H 12	0778 0779	16	16	20.0	100	SC1204
	SSSCR/L 2020K 12	0780 0781	20	20	25.0	125	
	SSSCR/L 2525M 12	0782 0783	25	25	32.0	150	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
SS..	..1212..09	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	..1616~2020..09	Description	Y4015-M3.5x14	YAASN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000135	18000159	18000167
	..1616..12	Description	Y4020-M4.5x12	YAASN-2-0004	YAAV-10-M4.5x8	Y80-T20
		EDP	18000134	18000144	18000162	18000168
	..2020~2525..12	Description	Y1020-M4.5x16	YAASN-2-0004	YAAV-07-M4.5x13	Y80-T20
		EDP	18000120	18000144	18000160	18000168

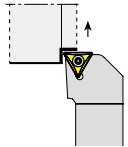
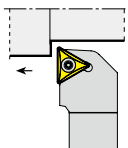
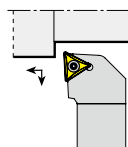
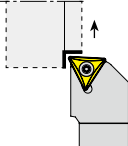
Screw on type for TC** Insert

STJCR Shown



☐: Refer to p. 66

Unit:mm

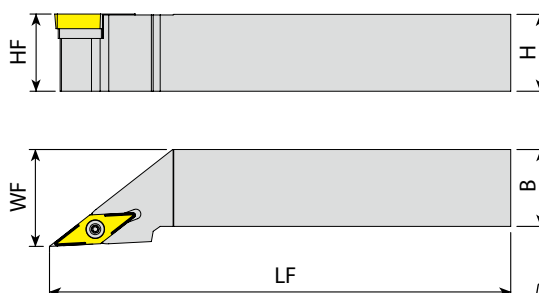
Series	Designation	EDP 2700.. R	L	H (= HF)	B	WF	LF	Insert
 STFCR/L Approach angle 91°	STFCR/L 1212F 11	0099	0100	12	12	16	80	TC1102
	STFCR/L 1616H 11	0101	0102	16	16	20	100	
	STFCR/L 1616H 16	0105	0106	16	16	20	100	TC16T3
	STFCR/L 2020K 16	0107	0108	20	20	25	125	
	STFCR/L 2525M 16	0109	0110	25	25	32	150	
	STFCR/L 3232P 16	0784	0785	32	32	40	170	
 STGCR/L Approach angle 91°	STGCR/L 1212F 11	0786	0787	12	12	16	80	TC1102
	STGCR/L 1616H 11	0433	0788	16	16	20	100	
	STGCR/L 1616H 16	0789	0790	16	16	20	100	TC16T3
	STGCR/L 2020K 16	0434	0791	20	20	25	125	
	STGCR/L 2525M 16	0792	0793	25	25	32	150	
	STGCR/L 3232P 16	0794	0795	32	32	40	170	
 STJCR/L Approach angle 93°	STJCR/L 1212F 11	0796	0797	12	12	16	80	TC1102
	STJCR/L 1616H 11	0798	0799	16	16	20	100	
	STJCR/L 1616H 16	0800	0801	16	16	20	100	TC16T3
	STJCR/L 2020K 16	0802	0803	20	20	25	125	
	STJCR/L 2525M 16	0804	0805	25	25	32	150	
	STJCR/L 3232P 16	0806	0807	32	32	40	170	
 STUCR/L Approach angle 93°	STUCR/L 1212F 11	0808	0809	12	12	16	80	TC1102
	STUCR/L 1616H 11	0810	0811	16	16	20	100	
	STUCR/L 2020K 16	0812	0813	20	20	25	125	TC16T3
	STUCR/L 2525M 16	0814	0815	25	25	32	150	
	STUCR/L 3232P 16	0816	0817	32	32	40	170	

Series	Designation	Infomation	Screw	Shim	Shim Screw	Torx Key
ST..	..11	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..16	Description	Y4015-M3.5x14	YAATN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000146	18000159	18000167

Turning - Holder - External

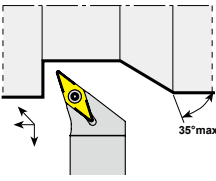
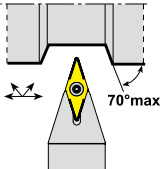
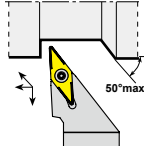
Screw on type for VB** Insert

SVJBR Shown



Refer to p. 68

Unit: mm

Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
 SVHBR/L Approach angle 107.5°	SVHBR/L 2020K 16	0818 0819	20	20	25.0	125	VB1604
	SVHBR/L 2525M 16	0820 0821	25	25	32.0	150	
	SVHBR/L 3232P 16	0822 0823	32	32	40.0	170	
 SVVBN Approach angle 72.5°	SVVBN 2020K 16	0131	20	20	10.0	125	VB1604
	SVVBN 2525M 16	0132	25	25	12.5	150	
	SVVBN 3232P 16	0827	32	32	16.0	170	
 SVJBR/L Approach angle 93°	SVJBR/L 1616H 16	0824 0825	16	16	20.0	100	VB1604
	SVJBR/L 2020K 16	0127 0128	20	20	25.0	125	
	SVJBR/L 2525M 16	0129 0130	25	25	32.0	150	
	SVJBR/L 3232P 16	0436 0826	32	32	40.0	170	

TURNING

PARTING & GROOVING

MILLING

DRILLING

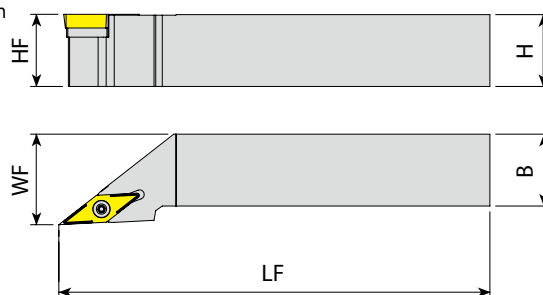
TECHNICAL INFORMATION

Series	Designation	Infomation	Screw	Shim	Shim Screw	Torx Key
SV..	..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	28000043	18000159	18000167

Turning - Holder - External

Screw on type for VC** Insert

SVJCR Shown



□: Refer to p. 69

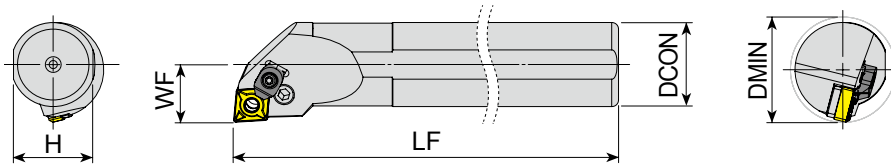
Unit:mm

Series	Designation	EDP 2700.. R L	H (= HF)	B	WF	LF	Insert
SVHCR/L Approach angle 107.5°	SVHCR/L 2020K 16	0828 0829	20	20	25	125	VC1604
	SVHCR/L 2525M 16	0830 0831	25	25	32	150	
	SVHCR/L 3232P 16	0832 0833	32	32	40	170	
SVVCN Approach angle 72.5°	SVVCN 1212-F11	0143	12	12	06	80	VC1103
	SVVCN 1616-H11	0144	16	16	08	100	
	SVVCN 2020-K11	0145	20	20	10	125	
	SVVCN 2020-K16	0146	20	20	10	125	
	SVVCN 2525M 16	0147	25	25	12.5	150	VC1604
	SVVCN 3232P 16	0838	32	32	16	170	
SVJCR/L Approach angle 93°	SVJCR/L 1212F 16	0834 0835	12	12	16	80	VC1604
	SVJCR/L 2020K 16	0139 0140	20	20	25	125	
	SVJCR/L 2525M 16	0141 0142	25	25	32	150	
	SVJCR/L 3232P 16	0836 0837	32	32	40	170	
	SVJCR/L 1212-F11	0133 0134	12	12	16	80	VC1103
	SVJCR/L 1616-H11	0135 0136	16	16	20	100	
	SVJCR/L 2020-K11	0137 0138	20	20	25	125	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
SV..	..11	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	28000043	18000159	18000167
	..1212..16	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	..2020~3232..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	28000043	18000159	18000167

Turning - Holder - Internal

Lever Lock type for CN** Insert

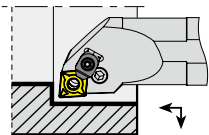


* 'C' Letter at Last : Optional Clamp Included

☐ : Refer to p. 28

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
●	A25R - PCLNR/L 12C	0839 0840	32	25	23	17	200	CN1204
	A32S - PCLNR/L 12C	0841 0842	40	32	30	22	250	
	A40T - PCLNR/L 12C	0843 0844	50	40	37.5	27	300	
	A50U - PCLNR/L 12C	0845 0846	63	50	47	35	350	
	S25S - PCLNR/L 12C	0863 0864	32	25	23	17	250	
	S32T - PCLNR/L 12C	0865 0866	40	32	30	22	300	
	S40U - PCLNR/L 12C	0867 0868	50	40	37.5	27	350	
	S50V - PCLNR/L 12C	0869 0870	63	50	47	35	400	
	A32S - PCLNR/L 16C	0847 0848	40	32	30	22	250	
	A40T - PCLNR/L 16C	0849 0850	50	40	37.5	27	300	
X	A50U - PCLNR/L 16C	0851 0852	63	50	47	35	350	CN1606
	S32T - PCLNR/L 16C	0871 0872	40	32	30	22	300	
	S40U - PCLNR/L 16C	0873 0874	50	40	37.5	27	350	
	S50V - PCLNR/L 16C	0875 0876	63	50	47	35	400	
	A40T - PCLNR/L 19C	0853 0854	50	40	37.5	27	300	CN1906
●	A50U - PCLNR/L 19C	0855 0856	63	50	47	35	350	
	S40U - PCLNR/L 19C	0877 0878	50	40	37.5	27	350	
	S50V - PCLNR/L 19C	0879 0880	63	50	47	35	400	



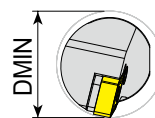
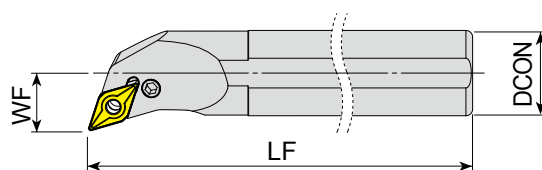
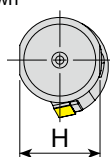
..-PCLNR/L

Approach angle
95°

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
..25.. - 12C	Description	YAPL-02	YALV-08-M8x16	YACK-05	Y4015-M4x11	YAACN-3-0001	YAAY-02	YAAL-03-3	
	EDP	18000093	18000104	18000065	18000119	18000137	18000054	18000061	
..32~50.. - 12C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAACN-3-0001	YAAY-02	YAAL-03-3	
	EDP	18000093	18000100	18000065	18000119	18000137	18000054	18000061	
..16C	Description	YAPL-04	YALV-04-M8x22	YACK-09	YAAV-05-M6x15	YAACN-3-0002	YAAY-03	YAAL-03-3	
	EDP	18000095	18000101	18000066	18000078	18000138	18000055	18000061	
..19C	Description	YAPL-05	YALV-05-M10x27	YACK-09	YAAV-05-M6x15	YAACN-3-0003	YAAY-04	YAAL-05-4	
	EDP	18000096	18000102	18000066	18000078	18000139	18000056	18000062	
..19C	Description	YAPL-05	YALV-05-M10x27	YACK-09	YAAV-05-M6x15	YAACN-3-0003	YAAY-04	YAAL-05-4	
	EDP	18000096	18000102	18000066	18000078	18000139	18000056	18000062	

Lever Lock type for DN** Insert

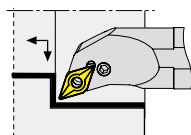
..PDQNR Shown



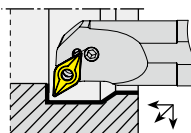
: Refer to p. 33

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
●	A32S - PDQNR/L 1504	0895 -	40	32	30	22	250	DN1504
	A40T - PDQNR/L 1504	0896 -	50	40	37.5	27	300	
	S32T - PDQNR/L 1504	0903 -	40	32	30	22	300	
	X S40U - PDQNR/L 1504	0904 -	50	40	37.5	27	350	
	S50V - PDQNR/L 1504	0905 -	63	50	47	35	400	
●	A32S - PDQNR/L 15	0897 0898	40	32	30	22	250	DN1506
	A40T - PDQNR/L 15	0899 0900	50	40	37.5	27	300	
	A50U - PDQNR/L 15	0901 0902	63	50	47	35	350	
	S32T - PDQNR/L 15	0906 0907	40	32	30	22	300	
	X S40U - PDQNR/L 15	0908 0909	50	40	37.5	27	350	
●	A32S - PDUNR/L 15	0920 0921	40	32	30	22	250	DN1506
	A40T - PDUNR/L 15	0922 0923	50	40	37.5	27	300	
	A50U - PDUNR/L 15	0924 0925	63	50	47	35	350	
	S25S - PDUNR/L 15	0934 0935	32	25	23	19	250	
	X S32T - PDUNR/L 15	0936 0937	40	32	30	22	300	
●	S40U - PDUNR/L 15	0938 0939	50	40	37.5	27	350	DN1506
	S50V - PDUNR/L 15	0940 0941	63	50	47	35	400	



..PDQNR/L
Approach angle
107.5°

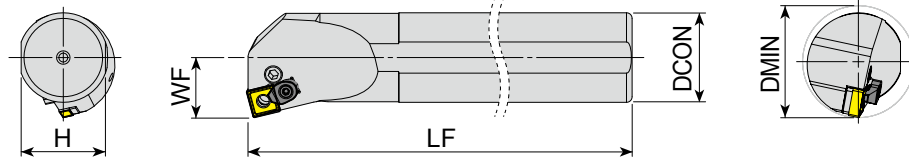


..PDUNR/L
Approach angle
93°

Series	Designation	Information	Lever	Lever Screw	Shim	Shim Pin	Allen Key
..PD..	..15	Description	YAPL-03	YALV-03-M8x19	YAADN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000094	18000100	18000142	18000054	18000061
	..1504	Description	YAPL-03	YALV-03-M8x19	YAADN-2-0003	YAAY-02	YAAL-03-3
		EDP	18000094	18000100	18000141	18000054	18000061
	..25..15	Description	YAPL-03	YALV-08-M8x16	YAADN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000094	18000104	18000142	18000054	18000061
	..32~50..15	Description	YAPL-03	YALV-03-M8x19	YAADN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000094	18000100	18000142	18000054	18000061

Turning - Holder - Internal

Lever Lock type for SN** Insert



* 'C' Letter at Last : Optional Clamp Included

: Refer to p. 40

Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-PSKNR/L Approach angle 75°	X	S25S - PSKNR/L 12C	0958 0959	32	25	23	17	250	SN1204
		S32T - PSKNR/L 12C	0960 0961	40	32	30	22	300	
	X	S40U - PSKNR/L12C	0962 0963	50	40	37.5	27	350	SN1204
		S50V - PSKNR/L12C	0964 0965	63	50	47	35	400	

TURNING

PARTING & GROOVING

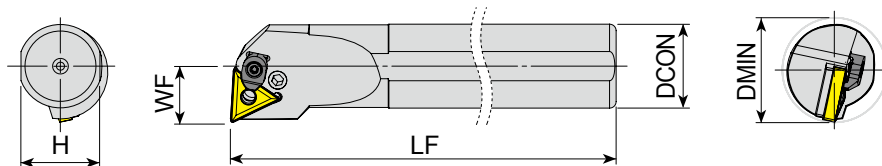
MILLING

DRILLING

TECHNICAL INFORMATION

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
..PS..	..25.. 12C	Description	YAPL-02	YALV-08-M8x16	YACK-05	Y4015-M4x11	YAASN-3-0004	YAAY-02	YAAL-03-3
		EDP	18000093	18000104	18000065	18000119	18000145	18000054	18000061
	..32.. 12C ..40.. 12C ..50.. 12C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAASN-3-0004	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000145	18000054	18000061

Lever Lock type for TN** Insert

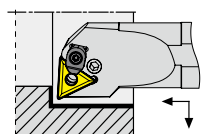


* 'C' Letter at Last : Optional Clamp Included

: Refer to p. 44

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
X	S16P - PTUNR/L 16	1014 1015	20	16	14.8	11	170	TN1604
	S20R - PTUNR/L 16	1016 1017	25	20	18.3	13	200	
	S25S - PTUNR/L 16C	1018 1019	32	25	23	17	250	
	S32T - PTUNR/L 16C	1020 1021	40	32	30	22	300	
	S40U - PTUNR/L 16C	1022 1023	50	40	37.5	27	350	
X	S32T - PTUNR/L 22C	1024 1025	40	32	30	22	300	TN2204
	S40U - PTUNR/L 22C	1026 1027	50	40	37.5	27	350	
	S50V - PTUNR/L 22C	1028 1029	63	50	47	35	400	



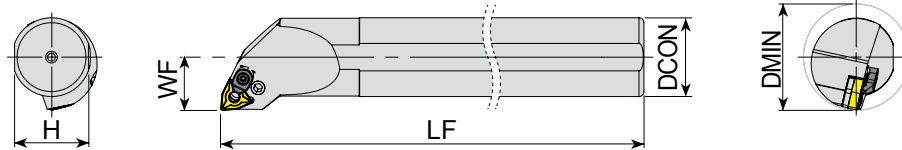
..PTUNR/L

Approach angle
93°

Series	Designation	Information	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
..PT..	..16..16	Description	YAPL-08	YALV-07-M6x13	-	-	-	YAAY-07	YAAL-02-2.5
		EDP	18000097	18000103	-	-	-	18000057	18000060
	..20..16	Description	YAPL-01	YALV-01-M6x14	-	-	YAATN-3-0025	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000098	-	-	18000149	18000053	18000060
	..16C	Description	YAPL-01	YALV-02-M6x17	YACK-05	Y4015-M4x11	YAATN-3-0025	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	18000065	18000119	18000149	18000053	18000060
	..22C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAATN-3-0015	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000148	18000054	18000061

Turning - Holder - Internal

Lever Lock type for WN** Insert

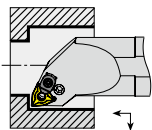


* 'C' Letter at Last : Optional Clamp Included

 : Refer to p. 53

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
●	A20P - PWLNR/L 06	1048 1049	25	20	18.3	13	170	WN0604
	A25R - PWLNR/L 06	1050 1051	32	25	23	17	200	
	A32S - PWLNR/L 06	1052 1053	40	32	30	22	250	
	S20R - PWLNR/L 06	1076 1077	25	20	18.3	13	200	
	X S25S - PWLNR/L 06	1078 1079	32	25	23	17	250	
	S32T - PWLNR/L 06	1080 1081	40	32	30	22	300	
●	A25R - PWLNR/L 08C	1054 1055	32	25	23	17	200	WN0804
	A32S - PWLNR/L 08C	1056 1057	40	32	30	22	250	
	A40T - PWLNR/L 08C	1058 1059	50	40	37.5	27	300	
	A50U - PWLNR/L 08C	1060 1061	63	50	47	35	350	
	S25S - PWLNR/L 08C	1082 1083	32	25	23	17	250	
	X S32T - PWLNR/L 08C	1084 1085	40	32	30	22	300	
	S40U - PWLNR/L 08C	1086 1087	50	40	37.5	27	350	
	S50V - PWLNR/L 08C	1088 1089	63	50	47	35	400	

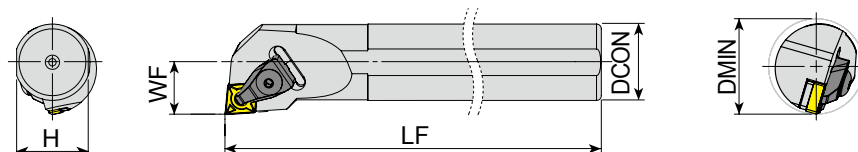


..-PWLNR/L

Approach angle
95°

Series	Designation	Infomation	Lever	Lever Screw	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
..PW..	..20..06	Description	YAPL-01	YALV-01-M6x14	-	-	YAAWN-SW317	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000098	-	-	18000152	18000053	18000060
	..25~32..06	Description	YAPL-01	YALV-02-M6x17	-	-	YAAWN-SW317	YAAY-01	YAAL-02-2.5
		EDP	18000092	18000099	-	-	18000152	18000053	18000060
	..08C	Description	YAPL-02	YALV-03-M8x19	YACK-05	Y4015-M4x11	YAAWN-3-0001	YAAY-02	YAAL-03-3
		EDP	18000093	18000100	18000065	18000119	18000151	18000054	18000061

Double Clamp type for CN** Insert



: Refer to p. 28

Unit:mm

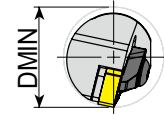
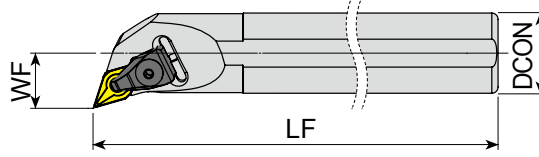
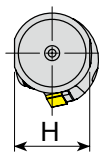
Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-TCLNR/L Approach angle 95°	X	S25S - TCLNR/L 12	0881 0882	32	25	23	17	250	CN1204
		S32T - TCLNR/L 12	0883 0884	40	32	30	22	300	
		S40U - TCLNR/L 12	0885 0886	50	40	37.5	27	350	
		S50V - TCLNR/L 12	0887 0888	63	50	47	35	400	
	X	S32T - TCLNR/L 16	0889 0890	40	32	30	22	300	CN1606
		S40U - TCLNR/L 16	0891 0892	50	40	37.5	27	350	
		S50V - TCLNR/L 16	0893 0894	63	50	47	35	400	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
..TC..	..25..12	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAACN-3-0001	YAAV-13-M5x8	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000137	18000163	18000061
	..32~50..12	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAACN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000137	18000156	18000061
	..16	Description	YATK-04	YAKV-19-M7x25	YABPL-02	-	YAACN-3-0002	YAAV-05-M6x15	YAAL-05-4
		EDP	18000077	18000088	18000059	-	18000138	18000078	18000062

Turning - Holder - Internal

Double Clamp type for DN** Insert

..TDQNR Shown



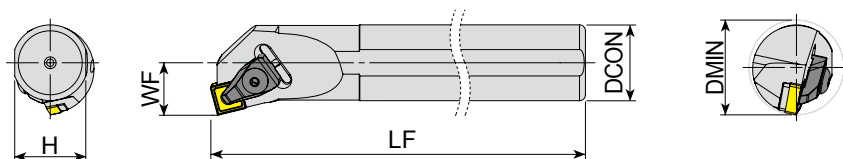
: Refer to p. 33

Unit:mm

Series		Designation	EDP 2700.. R L		DMIN	DCON	H	WF	LF	Insert
..TDQNR/L Approach angle 107.5°	X	S25S - TDQNR/L 15	0912	0913	32	25	23	17	250	DN1506
		S32T - TDQNR/L 15	0914	0915	40	32	30	22	300	
		S40U - TDQNR/L 15	0916	0917	50	40	37.5	27	350	
		S50V - TDQNR/L 15	0918	0919	63	50	47	35	400	
..TDUNR/L Approach angle 93°	X	S25S - TDUNR/L 15	0942	0943	34	25	23	17	250	DN1506
		S32T - TDUNR/L 15	0944	0945	40	32	30	22	300	
		S40U - TDUNR/L 15	0946	0947	50	40	37.5	27	350	
		S50V - TDUNR/L 15	0948	0949	63	50	47	35	400	

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
..TD..	..TDQ..25..15	Description	YATK-02	YAKV-30-M6x22	YABPL-01	-	YAADN-3-0001	YAAV-13-M5x8	YAAL-03-3
		EDP	18000075	18000091	18000058	-	18000142	18000163	18000061
	..25..15	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAADN-3-0001	YAAV-13-M5x8	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000142	18000163	18000061
	..32~50..15	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAADN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000142	18000156	18000061

Double Clamp type for SN** Insert



□: Refer to p. 40

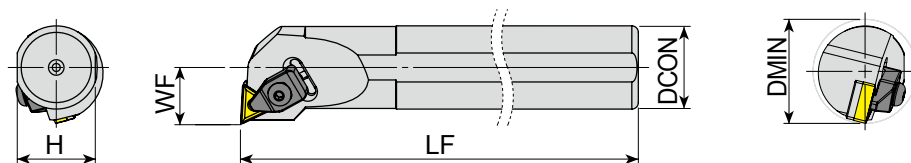
Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-TSKNR/L Approach angle 75°	S25S - TSKNR/L 12	0966 -	32	25	23	17	250	SN1204
	S32T - TSKNR/L12	0968 0969	40	32	30	22	300	
	S40U - TSKNR/L 12	0970 0971	50	40	37.5	27	350	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
..TS..	..12	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAASN-3-0004	YAAV-13-M5x8	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000145	18000163	18000061

Turning - Holder - Internal

Double Clamp type for TN** Insert



: Refer to p. 44

Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..- TTUNR/L Approach angle 93°	X	S25S - TTUNR/L 16	1030 1031	32	25	23	17	250	TN1604
		S32T - TTUNR/L 16	1032 1033	40	32	30	22	300	
	X	S25S - TTUNR/L 22	1034 1035	32	25	23	17	250	TN2204
		S32T - TTUNR/L 22	1036 1037	40	32	30	22	300	
		S40U - TTUNR/L 22	1038 1039	50	40	37.5	27	350	
		S50V - TTUNR/L 22	1040 1041	63	50	47	35	400	

TURNING

PARTING & GROOVING

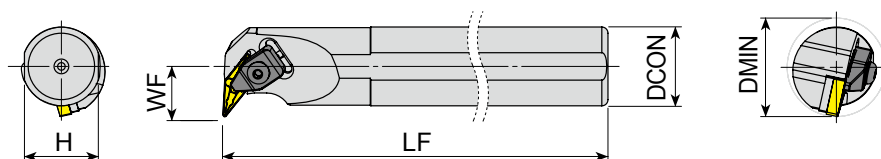
MILLING

DRILLING

TECHNICAL INFORMATION

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
..TT..	..16	Description	YATK-01	YAKV-01-M5x22	YABPL-01	-	YAATN-2-0002	YAAV-03-M5x12	YAAL-03-3
		EDP	18000074	18000080	18000058	-	18000147	18000156	18000061
	..22	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAATN-3-0015	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000148	18000156	18000061

Double Clamp type for VN** Insert



□: Refer to p. 51

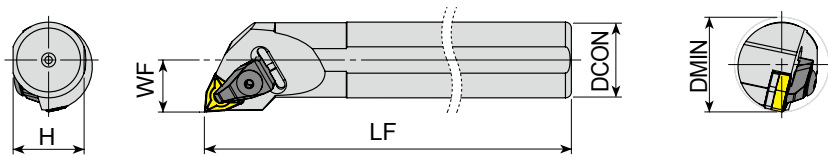
Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..TVUNR/L Approach angle 93°	X	S25S - TVUNR/L 16	1042 1043	36	25	23	20	250	VN1604
		S32T - TVUNR/L 16	1044 1045	40	32	30	22	300	
		S40U - TVUNR/L 16	1046 1047	50	40	37.5	27	350	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Shim	Shim Screw	Allen Key
..TV..	..16	Description	YATK-01	YAKV-01-M5x22	YABPL-01	YAAVN-2-0002	YAAV-04-M5x12	YAAL-03-3
		EDP	18000074	18000080	18000058	18000150	18000185	18000061

Turning - Holder - Internal

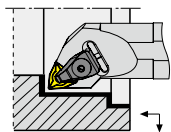
Double Clamp type for WN** Insert



: Refer to p. 53

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
X	S25S - TWLNR/L 06	1090 1091	32	25	23	17	250	WN0604
	S32T - TWLNR/L 06	1092 1093	40	32	30	22	300	
	A40T - TWLNR/L 08	1062 -	50	40	37.5	27	300	WN0804
	A50U - TWLNR/L 08	1063 -	63	50	47	35	350	
●	S25S - TWLNR/L 08	1094 1095	32	25	23	17	250	
	S32T - TWLNR/L 08	1096 1097	40	32	30	22	300	
	S40U - TWLNR/L 08	1098 1099	50	40	37.5	27	350	
	S50V - TWLNR/L 08	1100 1101	63	50	47	35	400	


..-TWLNR/L

Approach angle
95°

TURNING

PARTING & GROOVING

MILLING

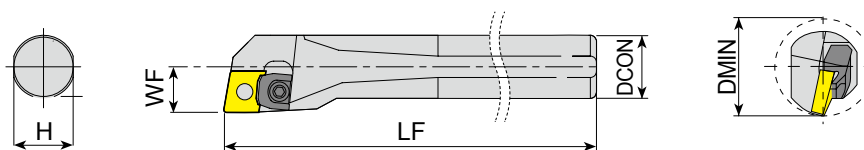
DRILLING

TECHNICAL INFORMATION

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Screw	Allen Key
..TW..	..06	Description	YATK-01	YAKV-01-M5x22	YABPL-01	-	YAAWN-SW317	YAAV-01-M3x10	YAAL-03-3
		EDP	18000074	18000080	18000058	-	18000152	18000155	18000061
	..25..08	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAAWN-3-0001	YAAV-13-M5x8	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000151	18000163	18000061
	..32~50..08	Description	YATK-02	YAKV-30-M6x22	YABPL-01	YAS-01	YAAWN-3-0001	YAAV-02-M5x12	YAAL-03-3
		EDP	18000075	18000091	18000058	18000052	18000151	18000156	18000061

Turning - Holder - Internal

Multi-Clamp type for CN** Insert



: Refer to p. 28

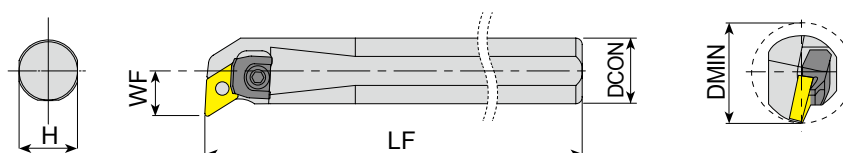
Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..- MCLNR/L Approach angle 95°	X	S20R - MCLNR/L12	0857 0858	25	20	18.3	13	200	CN1204
		S32T - MCLNR/L12	0861 0862	40	32	30	22	300	

Series	Designation	Information	Clamp	Clamp Screw	Shim	Shim Pin	Allen Key
..MC..	..20..12	Description	YAMK-07	YAKV-04-M5x17	-	YAPM-12	YAAL-03-3
		EDP	28000019	18000082	-	28000025	18000061
	..32..12	Description	YAMK-03	-	YAACN-3-0001	YAPM-04	-
		EDP	28000020	-	18000137	18000113	-

Turning - Holder - Internal

Multi-Clamp type for DN** Insert



: Refer to p. 33

Unit:mm

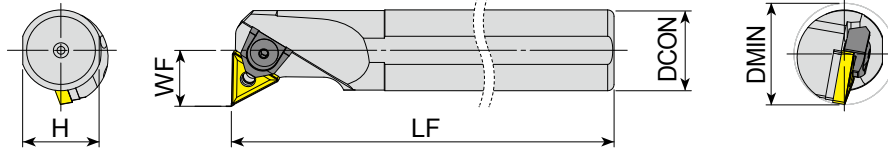
Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..- MDUNR/L Approach angle 93°	X	S32T - MDUNR/L15	0928 0929	40	32	30	22	300	DN1506
		S40U - MDUNR/L15	0930 0931	50	40	37.5	27	350	
		S50V - MDUNR/L15	0932 0933	63	50	47	35	400	

Series	Designation	Information	Clamp	Clamp Screw	Upper Ring	Lower Ring	Shim	Shim Pin	Allen Key
..MD..	..15	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAADN-3-0001	YAPM-04	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000142	18000113	18000061

Turning - Holder - Internal

Multi-Clamp type for TN** Insert

..MTFNR Shown



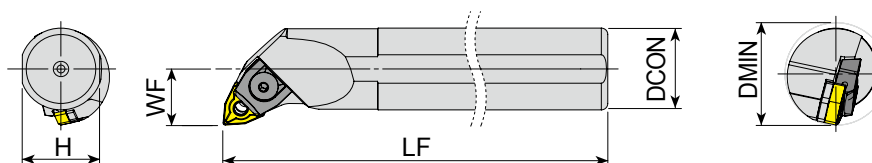
: Refer to p. 44

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..- MTFNR/L Approach angle 91°	X S20R - MTFNR/L 16	0972 -	25	20	18.3	14	200	TN1604
	S25S - MTFNR/L 16	0973 0974	32	25	23	17	250	
	S32T - MTFNR/L 16	0975 0976	40	32	30	22	300	
	S40U - MTFNR/L 16	0977 0978	50	40	37.5	27	350	
	X S32T - MTFNR/L 22	0979 0980	40	32	30	22	300	TN2204
	S40U - MTFNR/L 22	0981 0982	50	40	37.5	27	350	
	S50V - MTFNR/L 22	0983 -	63	50	47	35	400	
 ..- MTQNR/L Approach angle 107.5°	X S20R - MTQNR/L 16	0984 0985	25	20	18.3	13	200	TN1604
	S32T - MTQNR/L 16	0988 0989	40	32	30	22	300	
	S40U - MTQNR/L 16	0990 0991	50	40	37.5	27	350	
	X S32T - MTQNR/L 22	0992 0993	40	32	30	22	300	TN2204
	S40U - MTQNR/L 22	0994 0995	50	40	37.5	27	350	
	S50V - MTQNR/L 22	0996 0997	63	50	47	35	400	
	X S32T - MTQNR/L 22	1008 1009	40	32	30	22	300	
	S40U - MTQNR/L 22	1010 1011	50	40	37.5	27	350	
	S50V - MTQNR/L 22	1012 1013	63	50	47	35	400	
 ..- MTUNR/L Approach angle 93°	X S20R - MTUNR/L 16	0998 0999	25	20	18.3	13	200	TN1604
	S25S - MTUNR/L 16	1000 1001	32	25	23	17	250	
	S32T - MTUNR/L 16	1002 1003	40	32	30	22	300	
	S40U - MTUNR/L 16	1004 1005	50	40	37.5	27	350	
	S50V - MTUNR/L 16	1006 1007	63	50	47	35	400	

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Pin	Shim	Shim Pin	Allen Key
..MT..	..20..16	Description	YAMK-02	YAKV-17-M5x15	-	-	YAPM-03	-	-	YAAL-03-3
		EDP	18000071	18000087	-	-	18000112	-	-	18000061
	..22	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAPM-02	YAATN-3-0015	-	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000054	18000148	-	18000061
	..25..16	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAPM-14	YAATN-2-0002	-	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000117	18000147	-	18000061
	..32~40..16	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	-	YAATN-2-0002	YAPM-14	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	-	18000147	18000117	18000061
	..32~50..16	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	YAPM-01	YAATN-2-0002	-	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	18000110	18000147	-	18000061
	..32~50..22	Description	YAMK-04	YAKV-30-M6x22	YABPL-01	YAS-01	-	YAATN-3-0015	YAPM-02	YAAL-03-3
		EDP	18000072	18000091	18000058	18000052	-	18000148	18000111	18000061

Multi-Clamp type for WN** Insert



□: Refer to p. 53

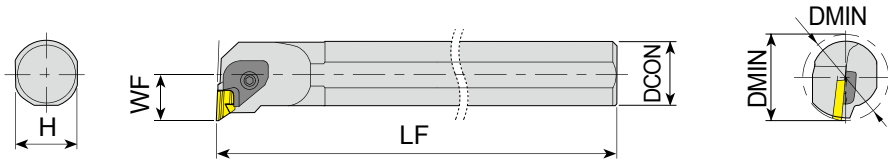
Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-MWLNR/L Approach angle 95°	X	S16P - MWLNR/L 06	1064 1065	20	16	14.8	11	170	WN0604
		S20R - MWLNR/L 06	1066 1067	25	20	18.3	13	200	
		S25S - MWLNR/L 06	1068 1069	32	25	23	17	250	
	X	S25S - MWLNR/L 08	1070 1071	32	25	23	17	250	WN0804
		S32T - MWLNR/L 08	1072 1073	40	32	30	22	300	
		S40U - MWLNR/L 08	1074 1075	50	40	37.5	27	350	

Series	Designation	Infomation	Clamp	Clamp Screw	Upper Ring	Lower Ring	Pin	Shim	Allen Key
..MW..	..16..06	Description	YAMK-01	YAKV-17-M5x15	-	-	YAPM-09	-	-
		EDP	18000070	18000087	-	-	18000115	-	-
	..20..06	Description	YAMK-01	YAKV-04-M5x17	-	-	YAPM-10	-	-
		EDP	18000070	18000082	-	-	18000116	-	-
	..25..06	Description	YAMK-01	YAKV-04-M5x17	-	-	YAPM-08	-	-
		EDP	18000070	18000082	-	-	18000114	-	-
	..25..08	Description	YAMK-05	YAKV-27-M6x20	YABPL-01	YAS-01	YAPM-04	YAAWN-3-0001	YAAL-03-3
		EDP	18000073	18000090	18000058	18000052	18000113	18000151	18000061
	..32~40..08	Description	YAMK-05	YAKV-03-M6x22	YABPL-01	YAS-01	YAPM-02	YAAWN-3-0001	YAAL-03-3
		EDP	18000073	18000081	18000058	18000052	18000111	18000151	18000061

Turning - Holder - Internal

Top Clamp type for KN** Insert



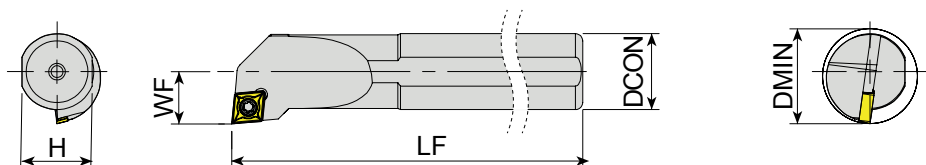
: Refer to p. 39

Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-CKUNR/L Approach angle 93°	X	S32T - CKUNR/L16	0952 0953	40	32	30	22	300	KN1604
		S40U - CKUNR/L16	0954 0955	50	40	37.5	27	350	
		S50V - CKUNR/L16	0956 0957	63	50	47	35	400	

Series	Designation	Infomation	Clamp	Clamp Screw	Spring	Upper Ring	Shim	Shim Screw	Allen Key
..CK..	..16	Description	YACK-01-R YACK-02-L	YAKV-06-M6x20	YAKY-02	YABPL-01	YAKS-16-R YAKS-16-L	YAAV-01-M3x10	YAAL-05-4
		EDP	18000064 (18000063)	18000083	18000164	18000058	18000154 (18000153)	18000155	18000062

Screw on type for CC** Insert



□: Refer to p. 57

Unit:mm

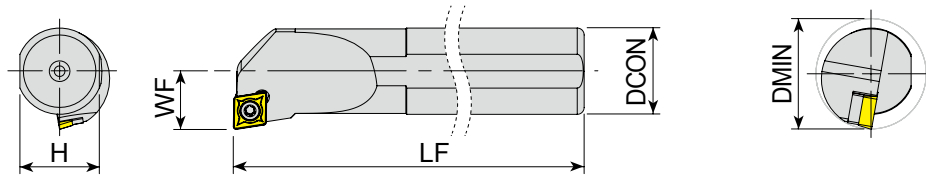
Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..- SCFCR/L Approach angle 91°		S08H - SCFCR/L 06	1102 1103	11	08	7.3	6	100	CC0602
	X	S10K - SCFCR/L 06	1104 1105	13	10	9	7	125	
		S12K - SCFCR/L 06	1106 1107	16	12	11	9	125	
		S12K - SCFCR/L 09	1108 1109	16	12	11	9	125	CC09T3
	X	S16P - SCFCR/L 09	1110 1111	20	16	14.8	11	170	
		S20R - SCFCR/L 09	1112 1113	25	20	18.3	13	200	
		S25S - SCFCR/L 09	1114 1115	32	25	23	17	250	CC1204
	X	S25S - SCFCR/L 12	1116 -	32	25	23	17	250	

► NEXT PAGE

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
	..06	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..12	Description	Y4020-M4.5x12	YAACN-2-0003	YAAV-10-M4.5x8	Y80-T20
		EDP	18000134	18000136	18000162	18000168
..SC..	..12..09	Description	Y4015-M3.5x8	-	-	Y80-T15
		EDP	18000130	-	-	18000167
	..16~20..09	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..25..09	Description	Y4015-M3.5x12	YAACN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000135	18000161	18000167

Turning - Holder - Internal

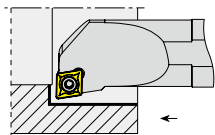
Screw on type for CC** Insert



☐ : Refer to p. 57

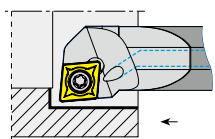
Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
●	A08H - SCLCR/L 06	1117 1118	11	08	7.3	6	100	CC0602
	A10H - SCLCR/L 06	1119 1120	13	10	9	7	100	
	A12H - SCLCR/L 06	1121 1122	16	12	11	9	100	
	S08H - SCLCR/L 06	1133 1134	11	08	7.3	6	100	
	X S10K - SCLCR/L 06	1135 1136	13	10	9	7	125	
	S12K - SCLCR/L 06	1137 1138	16	12	11	9	125	
	S16P - SCLCR/L 06	1139 1140	20	16	14.8	11	170	
●	A16M - SCLCR/L 09	1123 1124	20	16	14.8	11	150	CC09T3
	A20P - SCLCR/L 09	1125 1126	25	20	18.3	13	170	
	A25R - SCLCR/L 09	1127 1128	32	25	23	17	200	
	A32S - SCLCR/L 09	1129 1130	40	32	30	22	250	
	S12K - SCLCR/L 09	1141 1142	16	12	11	9	125	
	S16P - SCLCR/L 09	1474 1143	20	16	14.8	11	170	
	X S20R - SCLCR/L 09	1144 1145	25	20	18.3	13	200	
●	S25S - SCLCR/L 09	1146 1147	32	25	23	17	250	CC1204
	S32T - SCLCR/L 09	1148 1149	40	32	30	22	300	
	A25R - SCLCR/L 12	1131 1132	32	25	23	17	200	
	S25S - SCLCR/L 12	1150 1151	32	25	23	17	250	
	X S32T - SCLCR/L 12	1152 1153	40	32	30	22	300	
	S40U - SCLCR/L 12	1154 1155	50	40	37.5	27	350	
	E08K - SCLCR/L 06	0325 1156	11	08	7.3	6	125	CC0602
●	E12Q - SCLCR/L 06	1157 1158	16	12	11	9	180	
	E16R - SCLCR/L 09	0329 1159	20	16	14.8	11	200	CC09T3
	E20S - SCLCR/L 09	1160 1161	24	20	18.3	13	250	



..SCLCR/L

Approach angle
95°



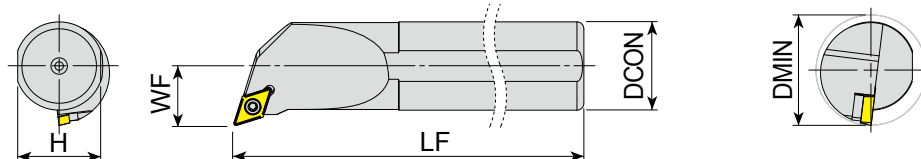
E..SCLCR/L
(Carbide Shank)

Approach angle
95°

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..SC..	..06	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..12..09	Description	Y4015-M3.5x8	-	-	Y80-T15
		EDP	18000130	-	-	18000167
	..16~20..09	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..25~32..09	Description	Y4015-M3.5x12	YAACN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000135	18000161	18000167
	..25~32..12	Description	Y4020-M4.5x12	YAACN-2-0003	YAAV-10-M4.5x8	Y80-T20
		EDP	18000134	18000136	18000162	18000168
	..40..12	Description	Y1020-M4.5x16	YAACN-2-0003	YAAV-07-M4.5x13	Y80-T20
		EDP	18000120	18000136	18000160	18000168
E..SC..	..06	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..09	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167

Screw on type for DC** Insert

..SDQCR Shown



: Refer to p. 60

Unit:mm

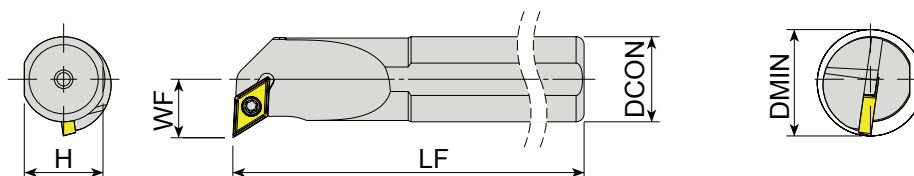
Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
..SDPCR/L Approach angle 117.5°	S10K - SDPCR/L07	1162 1163	13	10	9	7	125	DC0702
	S12K - SDPCR/L07	1164 1165	16	12	11	9	125	
	S16P - SDPCR/L11	1166 1167	20	16	14.8	11	170	DC11T3
	S25S - SDPCR/L11	1170 1171	32	25	23	17	250	
..SDQCR/L Approach angle 107.5°	A10H - SDQCR/L 07	1172 1173	13	10	9	7	100	DC0702
	A12H - SDQCR/L 07	1174 1175	16	12	11	9	100	
	A16M - SDQCR/L 07	1176 1177	20	16	14.8	11	150	
	A20P - SDQCR/L 07	1178 1179	25	20	18.3	13	170	
	S10K - SDQCR/L 07	1188 1189	13	10	9	7	125	
	S12K - SDQCR/L 07	1190 1191	16	12	11	9	125	
	S16P - SDQCR/L 07	1192 1193	20	16	14.8	11	170	DC11T3
	S20R - SDQCR/L 07	1194 1195	25	20	18.3	13	200	
	A16M - SDQCR/L 11	1180 1181	20	16	14.8	11	150	
	A20P - SDQCR/L 11	1182 1183	25	20	18.3	13	170	
	A25R - SDQCR/L 11	1184 1185	32	25	23	17	200	
	A32S - SDQCR/L 11	1186 1187	40	32	30	22	250	
X	S16P - SDQCR/L 11	1196 1197	20	16	14.8	11	170	DC11T3
	S20R - SDQCR/L 11	1198 1199	25	20	18.3	13	200	
	S25S - SDQCR/L 11	1200 1201	32	25	23	17	250	
	S32T - SDQCR/L 11	1202 1203	40	32	30	22	300	
	S40U - SDQCR/L 11	1204 1205	50	40	37.5	27	350	

► NEXT PAGE

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..SD..	..07	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..11	Description	Y4008-M2.5x6	-	-	Y80-T15
		EDP	18000127	-	-	18000167
	..16..11	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..20..11	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	..25..11	Description	Y4015-M3.5x12	YAADN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000140	18000162	18000167
	..32..11	Description	Y4015-M3.5x14	YAADN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000140	18000159	18000162

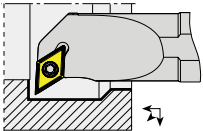
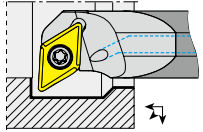
Turning - Holder - Internal

Screw on type for DC** Insert



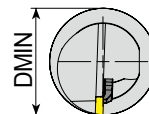
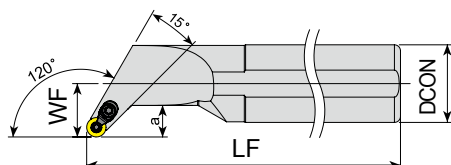
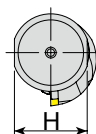
☐ : Refer to p. 60

Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..SDUCR/L Approach angle 93°	A10H - SDUCR/L 07	1206 1207	13	10	9	8	100	DC0702
	A12H - SDUCR/L 07	1208 1209	16	12	11	9	100	
	A16M - SDUCR/L 07	1210 1211	20	16	14.8	11	150	
	A20P - SDUCR/L 07	1212 1213	25	20	18.3	13	170	
	S10K - SDUCR/L 07	1222 1223	13	10	9	8	125	
	S12K - SDUCR/L 07	1224 1225	16	12	11	9	125	
	S16P - SDUCR/L 07	1226 1227	20	16	14.8	11	170	DC11T3
	S20R - SDUCR/L 07	1228 1229	25	20	18.3	13	200	
	A16M - SDUCR/L 11	1214 1215	20	16	14.8	11	150	
	A20P - SDUCR/L 11	1216 1217	25	20	18.3	13	170	
	A25R - SDUCR/L 11	1218 1219	32	25	23	17	200	
	A32S - SDUCR/L 11	1220 1221	40	32	30	22	250	
	S16P - SDUCR/L 11	1230 1231	20	16	14.8	11	170	DC11T3
	S20R - SDUCR/L 11	1232 1233	25	20	18.3	13	200	
	S25S - SDUCR/L 11	1234 1235	32	25	23	17	250	
	S32T - SDUCR/L 11	1236 1237	40	32	30	22	300	
 E..SDUCR/L (Carbide Shank) Approach angle 93°	S40U - SDUCR/L 11	1238 1239	50	40	37.5	27	350	
	S50V - SDUCR/L 11	- 1240	63	50	47	35	400	
	E10M - SDUCR/L 07	1241 1242	13	10	9	8	150	DC0702
	E12Q - SDUCR/L 07	1243 1244	16	12	11	9	180	
	E16R - SDUCR/L 11	0339 1245	20	16	14.8	11	200	DC11T3
	E20S - SDUCR/L 11	1246 1247	23	20	18.3	12	250	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..SD..	..07	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..16..11	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..20..11	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	..25..11	Description	Y4015-M3.5x12	YAADN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000140	18000161	18000167
	..32..11	Description	Y4015-M3.5x14	YAADN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000140	18000159	18000167
E..SD..	..07	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..11	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167

Screw on type for RC** Insert



* 'C' Letter at Last : Optional Clamp Included

: Refer to p. 62

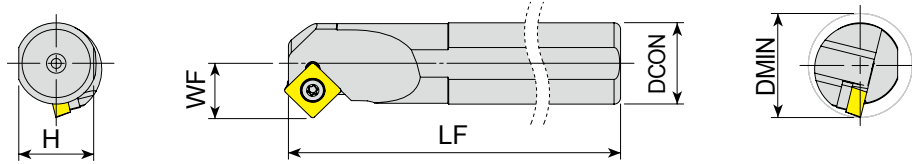
Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..SRGCR/L	X S16P - SRGCR/L08	1248 -	22	16	14.8	11	170	RC0803
	S40U - SRGCR 08C	1254 -	54	40	37.5	27	350	
	● S32T - SRGCR/L08C	1253 -	44	32	30	22	300	
	S25S - SRGCR/L08C	1251 1252	34	25	23	17	250	

Series	Designation	Information	Screw	Clamp	Clamp Screw	Torx Key
..SR..	..08	Description	Y3008-M3x8	-	-	Y80-T08
		EDP	18000125	-	-	18000165
	..08C	Description	Y3008-M3x8	YACK-15	Y4015-M3.5x11	Y80-T08
		EDP	18000125	18000069	18000118	18000165

Turning - Holder - Internal

Screw on type for SC** Insert



: Refer to p. 64

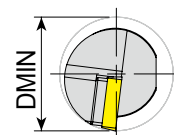
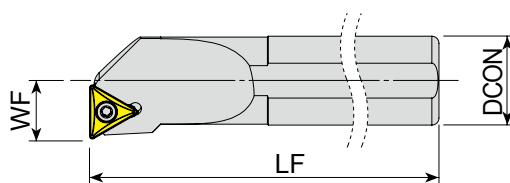
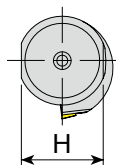
Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 .. - SSSCR/L Approach angle 45°	S16P - SSSCR/L09	1255 1256	20	16	14.8	11	170	SC09T3
	S25S - SSSCR/L09	1259 1260	32	25	23	17	250	
	S25S - SSSCR/L12	1261 1262	32	25	23	17	250	SC1204
	S32T - SSSCR12	1263 -	40	32	30	22	300	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..SS..	..16..09	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..25..09	Description	Y4015-M3.5x12	YAASN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000143	18000161	18000167
	..25..12	Description	Y4020-M4.5x12	YAASN-2-0004	YAAV-10-M4.5x8	Y80-T20
		EDP	18000134	18000144	18000162	18000168
	..32..12	Description	Y1020-M4.5x16	YAASN-2-0004	YAAV-10-M4.5x8	Y80-T20
		EDP	18000120	18000144	18000162	18000168

Screw on type for TC** Insert

..STFCR Shown



☐ : Refer to p. 66

Unit:mm

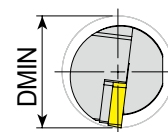
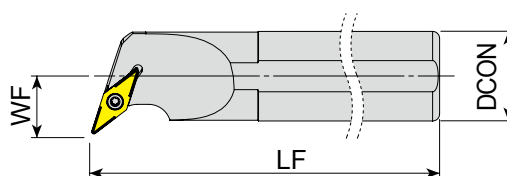
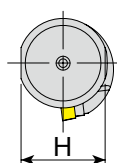
Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..-STFCR/L Approach angle 91°	X	S12K - STFCR/L 11	1264 1265	17	12	11	9	125	TC1102
		S16P - STFCR/L 11	1266 1267	20	16	14.8	11	170	
		S20R - STFCR/L 11	1268 1269	25	20	18.3	13	200	
	X	S16P - STFCR/L 16	1270 1271	20	16	14.8	11	170	TC16T3
		S20R - STFCR/L 16	1272 1273	25	20	18.3	13	200	
		S25S - STFCR/L 16	1274 1275	32	25	23	17	250	
		S32T - STFCR/L 16	1276 1277	40	32	30	22	300	
 ..-STUCR/L Approach angle 93°	X	S12K - STUCR/L 11	1279 1280	17	12	11	9	125	TC1102
		S16P - STUCR/L 11	1281 1282	20	16	14.8	11	170	
		S20R - STUCR/L 11	1283 1284	25	20	18.3	13	200	
	X	S16P - STUCR/L 16	1285 1286	20	16	14.8	11	170	TC16T3
		S20R - STUCR/L 16	1287 1288	25	20	18.3	13	200	
		S25S - STUCR/L 16	1289 1290	32	25	23	17	250	
		S32T - STUCR/L 16	1291 1292	40	32	30	22	300	
		S40U - STFCR/L 16	1278 -	50	40	37.5	27	350	
		S40U - STUCR/L 16	1293 1294	50	40	37.5	27	350	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..ST..	..11	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..12~20..11	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..16..16	Description	Y4015-M3.5x9	-	-	Y80-T15
		EDP	18000131	-	-	18000167
	..20..16	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	..25..16	Description	Y4015-M3.5x14	YAATN-2-0001	YAAV-08-M3.5x8	Y80-T15
		EDP	18000129	18000146	18000161	18000167
	..32~40..16	Description	Y4015-M3.5x14	YAATN-2-0001	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000146	18000159	18000167

Turning - Holder - Internal

Screw on type for VB** Insert

..STFCR Shown



: Refer to p. 68

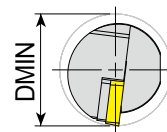
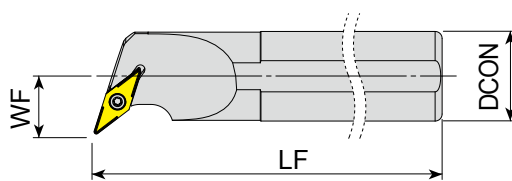
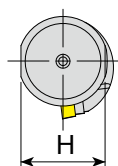
Unit:mm

Series	Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..SVQBR/L Approach angle 107.5°	A20Q - SVQBR/L 16	1299 1300	30	20	18.3	20	180	VB1604
	● A25S - SVQBR/L 16	1301 1302	32	25	23	17	250	
	A32S - SVQBR/L 16	1303 1304	40	32	30	22	250	
	S25S - SVQBR/L 16	1305 1306	32	25	23	17	250	
	X S32T - SVQBR/L 16	1307 1308	40	32	30	22	300	
	S40U - SVQBR/L 16	1309 1310	50	40	37.5	27	350	
 ..SVJBR/L Approach angle 93°	S25S - SVJBR/L 16	1295 1296	32	25	23	17	250	VB1604
	X S32T - SVJBR/L 16	1297 1298	40	32	30	22	300	
 ..SVUBR/L Approach angle 93°	A20Q - SVUBR/L 16	1311 -	30	20	18.3	20	180	VB1604
	● A32S - SVUBR/L 16	1312 1313	40	32	30	22	250	
	S25S - SVUBR/L 16	1314 1315	32	25	23	19	250	
	X S32T - SVUBR/L 16	1316 1317	40	32	30	22	300	
	S40U - SVUBR/L 16	1318 1319	50	40	37.5	27	350	

Series	Designation	Information	Screw	Shim	Shim Screw	Torx Key
..SV..	..20..16	Description	Y4015-M3.5x11	-	-	Y80-T15
		EDP	18000118	-	-	18000167
	A - ..25..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000150	18000159	18000167
	S - ..25..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-08-M3.5x8	Y80-T15
		EDP	18000129	18000150	18000161	18000167
	..32~40..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000150	18000159	18000167
	..16	Description	Y4015-M3.5x12	YAAVN-2-0002	YAAV-08-M3.5x8	Y80-T15
		EDP	18000128	18000150	18000161	18000167
	..25~40..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000150	18000159	18000167

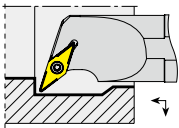
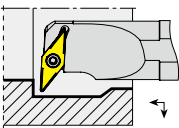
Screw on type for VC** Insert

..SVQCR Shown



: Refer to p. 69

Unit:mm

Series		Designation	EDP 2700.. R L	DMIN	DCON	H	WF	LF	Insert
 ..SVQCR/L Approach angle 107.5°	X	S25S - SVQCR/L 16	1320 1321	32	25	23	17	250	VC1604
		S32T - SVQCR/L 16	1322 1323	40	32	30	22	300	
		S40U - SVQCR/L 16	1324 1325	50	40	37.5	27	350	
 ..SVUCR/L Approach angle 93°	X	S16P - SVUCR/L11	1495 1496	20	16	14.8	12.5	170	VC1103
		S20R - SVUCR/L11	1497 1498	25	20	18.3	13	200	
	●	A25R - SVUCR/L 16	1326 -	32	25	23	19	200	VC1604
		S25S - SVUCR/L 16	1327 1328	32	25	23	19	250	
		S32T - SVUCR/L 16	1329 1330	40	32	30	22	300	
		S40U - SVUCR/L 16	1331 1332	50	40	37.5	27	350	

Series	Designation	Infomation	Screw	Shim	Shim Screw	Torx Key
..SV..	..11	Description	Y4008-M2.5x6	-	-	Y80-T08
		EDP	18000127	-	-	18000165
	..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000150	18000159	18000167
	..25..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-08-M3.5x8	Y80-T15
		EDP	18000129	18000150	18000161	18000167
	..32~40..16	Description	Y4015-M3.5x14	YAAVN-2-0002	YAAV-06-M3.5x11	Y80-T15
		EDP	18000129	18000150	18000159	18000167



PARTING & GROOVING

Parting & Grooving Inserts Overview

Parting & Grooving Inserts

Parting & Grooving Holders

Parting & Groove Turn Grades

Parting and Grooving Grades		P Steel				M Stainless steel				K Cast iron			N Non Ferrous		S Super Alloy	
		P10	P20	P30	P40	M10	M20	M30	M40	K10	K20	K30	N10	N20	S10	S20
PVD	YG602G (YG602)			602G				602G				602G				602G
	YG603							603								

YG602G (YG602) P20 - P35 M20 - M40 K20 - K40 S15 - S25	PVD - TiAlN 	Universal grade for Parting & Groove Turn - Ultra Dense PVD Coating with optimal thermal resistance & strength - Sub-Micron substrate designed for demanding application - YG602G : First Choice for Low Cutting Speed, Soft and Sticky Material with Low Hardness (Gold Color) - YG602 : First Choice for General Application (Violet Color)
YG603 M30 - M50	PVD - TiAlN 	PVD Parting & Grooving Grade for Stainless Steel - Ultra high toughness substrate and strong adhesion - Excellent cutting edge strength and chipping resistance - Stable machinability and tool life for stainless steel

Parting & Grooving Inserts

	TD. Series	Inserts	2, 3, 4, 5, 6, 8
		TDN, TDP, TDY	

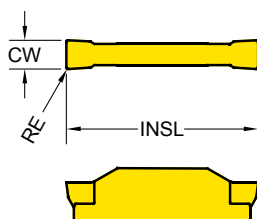
Parting & Grooving Chipbreakers

Parting & Grooving	-P			- For Parting & Grooving - For Low Feed Rate and Difficult to Cut Materials
	-N			- For External Parting And Grooving - For General Use
Turning & Grooving	-Y			- For External Turning & Grooving - For Medium feed rate
	GL			- For External, Internal turning and Grooving - Face grooving and Face turning - For low feed rate
	GM			- For External, Internal turning and Grooving - First choice Face Grooving and Face turning - For Medium feed rate
	RG			- For External, Internal turning and Grooving - Full radius Insert for Profiling

Parting & Grooving

Parting & Grooving Inserts

Recommended Cutting Conditions : p.258



Series	INSL	CW	Series	INSL	CW
TD* 2	20.00	2.00	TD* 5	25.00	5.00
TD* 3	20.00	3.00	TD* 6	25.00	6.00
TD* 4	20.00	4.00	TD* 8	30.00	8.00

* CDX : Cutting Depth Maximum

● : Stock item ○ : Order made item

TD.	Designation	RE	Parting & Grooving		Turning		EDP 5200..			
			Fn (mm/rev.)	CDX (mm)	Fn (mm/rev.)	Ap (mm)	YG602	YG602G	YG603	
-P	 Parting & Grooving (Sharp edge)	TDP 2002	0.2	0.04-0.12	19	-	-	● 0012	○ 0036	● 0078
		TDP 3002	0.2	0.05-0.16	19	-	-	● 0029	○ 0030	● 0076
		TDP 4003	0.3	0.06-0.18	19	-	-	● 0023	○ 0038	● 0080
		TDP5003	0.3	0.06-0.20	24	-	-	● 0142	○ 0143	● 0144
		TDP6003	0.3	0.06-0.22	24	-	-	● 0145	○ 0146	● 0147
	 Parting & Grooving Right Hand Shown (Sharp edge)  6° Angled Parting	*TDPR 2002 - 6	0.2	0.03-0.08	19	-	-	● 0045		● 0085
		*TDPR 3002 - 6	0.2	0.04-0.12	19	-	-	● 0048		● 0089
		*TDPL 2002 - 6	0.2	0.03-0.08	19	-	-	● 0046		● 0086
		*TDPL 3002 - 6	0.2	0.04-0.12	19	-	-	● 0049		● 0090
	-N	 Parting & Grooving (General)	TDN 2002	0.2	0.05-0.18	19	-	-	● 0010	○ 0035
TDN 3002			0.2	0.07-0.23	19	-	-	● 0024	○ 0025	● 0075
TDN 4003			0.3	0.08-0.28	19	-	-	● 0022	○ 0037	● 0079
TDN 5003			0.3	0.09-0.30	24	-	-	● 0042	○ 0136	● 0130
TDN6003			0.3	0.10-0.35	24	-	-	● 0132	○ 0137	● 0133
TDN8004			0.4	0.12-0.40	29	-	-	● 0138	○ 0139	● 0140
 Parting & Grooving Right Hand Shown (General)  6° Angled Parting		*TDNR 2002 - 6	0.2	0.04-0.14	19	-	-	● 0043		● 0083
		*TDNR 3002 - 6	0.2	0.06-0.18	19	-	-	● 0040		● 0087
		*TDNL 2002 - 6	0.2	0.04-0.14	19	-	-	● 0044		● 0084
		*TDNL 3002 - 6	0.2	0.06-0.18	19	-	-	● 0047		● 0088
		*TDNL 4003 - 6	0.3	0.06-0.24	19	-	-	● 0096		

TURNING

PARTING & GROOVING

MILLING

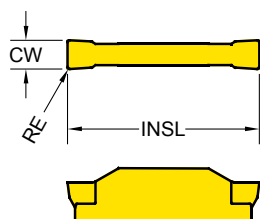
DRILLING

TECHNICAL INFORMATION

Parting & Grooving

Parting & Grooving Inserts

Recommended Cutting Conditions : p.258



Series	INSL	CW	Series	INSL	CW
TD* 2	20.00	2.0	TD* 5	25.00	5.0
TD* 3	20.00	3.0	TD* 6	25.00	6.0
TD* 4	20.00	4.0	TD* 8	30.00	8.0

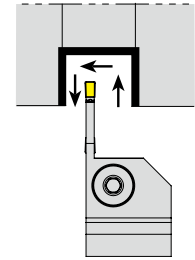
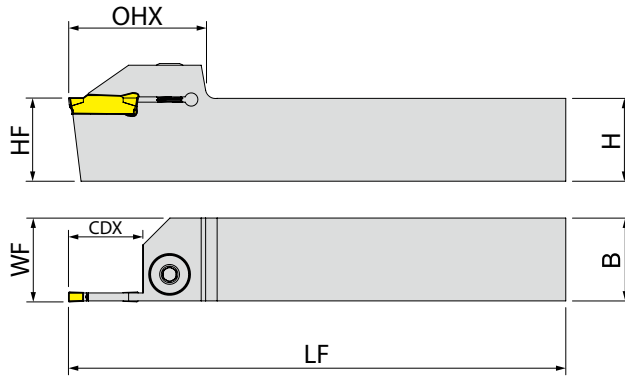
* CDX : Cutting Depth Maximum

● : Stock item ○ : Order made item

TD.	Designation	RE	Parting & Grooving		Turning		EDP 5200..		
			Fn (mm/rev.)	CDX (mm)	Fn (mm/rev.)	Ap (mm)	YG602	YG602G	YG603
 Turn Groove	TDY3E - 0.4	0.4	0.06 ~ 0.24	10	0.12 ~ 0.22	0.5 ~ 2.4		● 0027	
	TDY4E - 0.4	0.4	0.08 ~ 0.27	10	0.15 ~ 0.30	0.5 ~ 2.8		● 0020	
	TDY5E - 0.4	0.4	0.08 ~ 0.23	10	0.15 ~ 0.30	0.5 ~ 3.2		● 0082	
 GL	TDY2E - 0.3 - GL	0.3	0.04 ~ 0.20	10	0.06 ~ 0.18	0.4 ~ 1.5		● 0123	● 0124
	TDY3E - 0.3 - GL	0.3	0.05 ~ 0.23	10	0.08 ~ 0.20	0.4 ~ 2.0		● 0125	● 0126
	TDY4E - 0.4 - GL	0.4	0.06 ~ 0.26	10	0.10 ~ 0.25	0.5 ~ 2.3		● 0112	● 0127
	TDY5E - 0.4 - GL	0.4	0.08 ~ 0.30	12.5	0.10 ~ 0.30	0.5 ~ 3.0		● 0157	● 0158
	TDY6E - 0.4 - GL	0.4	0.12 ~ 0.35	12.5	0.15 ~ 0.35	0.5 ~ 3.5		● 0159	● 0160
	TDY8E - 0.8 - GL	0.8	0.15 ~ 0.50	15	0.20 ~ 0.50	1.0 ~ 4.5		● 0164	● 0165
	TDY3E - 0.4 - GM	0.4	0.06 ~ 0.24	10	0.12 ~ 0.22	0.5 ~ 2.4		● 0118	● 0119
 GM	TDY4E - 0.4 - GM	0.4	0.08 ~ 0.27	10	0.15 ~ 0.30	0.5 ~ 2.8		● 0113	● 0120
	TDY4E - 0.8 - GM	0.8	0.10 ~ 0.27	10	0.18 ~ 0.32	0.8 ~ 2.8		● 0114	● 0122
	TDY5E - 0.4 - GM	0.4	0.08 ~ 0.27	12.5	0.18 ~ 0.35	0.5 ~ 3.0		● 0134	● 0135
	TDY5E - 0.8 - GM	0.8	0.10 ~ 0.27	12.5	0.18 ~ 0.37	0.8 ~ 3.0		● 0148	● 0149
	TDY6E - 0.4 - GM	0.4	0.12 ~ 0.30	12.5	0.18 ~ 0.40	0.8 ~ 3.6		● 0150	● 0153
	TDY6E - 0.8 - GM	0.8	0.12 ~ 0.35	12.5	0.18 ~ 0.42	1.0 ~ 3.6		● 0129	● 0154
	TDY8E - 0.8 - GM	0.8	0.10 ~ 0.25	15	0.20 ~ 0.50	1.0 ~ 4.5		● 0155	● 0156
	TDY2E - 1.0 - RG	1.0	0.05 ~ 0.15	10	0.10 ~ 0.30	0.1 ~ 0.8		● 0111	● 0115
	TDY3E - 1.5 - RG	1.5	0.08 ~ 0.18	10	0.15 ~ 0.35	0.1 ~ 1.2		● 0108	● 0116
	TDY4E - 2.0 - RG	2.0	0.10 ~ 0.20	10	0.18 ~ 0.45	0.1 ~ 1.6		● 0109	● 0117
 RG	TDY5E - 2.5 - RG	2.5	0.12 ~ 0.23	12.5	0.20 ~ 0.50	0.1 ~ 2.0		● 0166	● 0167
	TDY6E - 3.0 - RG	3.0	0.15 ~ 0.28	12.5	0.25 ~ 0.60	0.1 ~ 2.4		● 0168	● 0169
	TDY8E - 4.0 - RG	4.0	0.18 ~ 0.30	15	0.25 ~ 0.70	0.1 ~ 3.2		● 0170	● 0171

Parting & Grooving - Holder - External

External holders



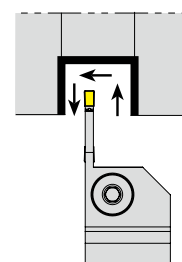
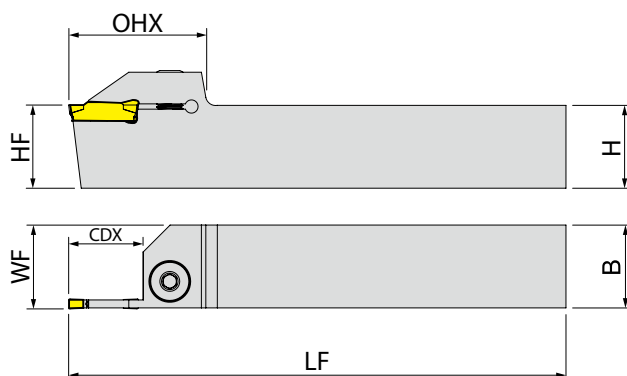
: Refer to p. 139-140

Unit : mm

Designation	EDP 5700.. R L	CW	CDX	H (= HF)	B	LF	OHX	WF	Insert
YTER/L1616J-2T08	0574 0634	2	8	16	16	110	33	15.12	TD.2..
YTER/L1616J-2T15	0575 0618	2	15	16	16	110	33	15.12	
YTER/L2020K-2T08	0576 0635	2	8	20	20	125	33	19.12	
YTER/L2020K-2T15	0577 0619	2	15	20	20	125	33	19.12	
YTER/L2525M-2T08	0578 0638	2	8	25	25	150	33	24.12	
YTER/L2525M-2T15	0579 0622	2	15	25	25	150	33	24.12	
YTER/L1616J-3T10	0580 0641	3	10	16	16	110	33	14.8	TD.3..
YTER/L1616J-3T20	0581 0625	3	20	16	16	110	38.5	14.8	
YTER/L2020K-3T10	0582 0644	3	10	20	20	125	33	18.8	
YTER/L2020K-3T20	0583 0626	3	20	20	20	125	38.5	18.8	
YTER/L2525M-3T10	0584 0674	3	10	25	25	150	33	23.8	
YTER/L2525M-3T20	0585 0627	3	20	25	25	150	38.5	23.8	
YTER/L2020K-4T13	0586 0649	4	13	20	20	125	33	18.5	TD.4..
YTER/L2020K-4T25	0587 0650	4	25	20	20	125	45	18.5	
YTER/L2525M-4T13	0588 0651	4	13	25	25	150	33	23.5	
YTER/L2525M-4T25	0589 0654	4	25	25	25	150	45	23.5	
YTER/L2020K-5T13	0695 0739	5	13	20	20	125	37	18.02	TD.5..
YTER/L2020K-5T20	0696 0740	5	20	20	20	125	39	18.02	
YTER/L2525M-5T13	0697 0741	5	13	25	25	150	37	23.02	
YTER/L2525M-5T20	0698 0742	5	20	25	25	150	39	23.02	
YTER/L2525M-5T25	0699 0743	5	25	25	25	150	47	23.02	
YTER/L2525M-5T32	0700 0744	5	32	25	25	150	56	23.02	
YTER/L3232P-5T20	0701 0745	5	20	32	32	170	39	30.02	
YTER/L3232P-5T32	0702 0746	5	32	32	32	170	56	30.02	

▶ NEXT PAGE

External holders



: Refer to p. 139-140

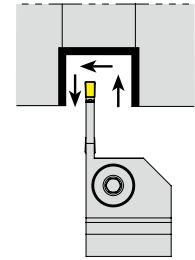
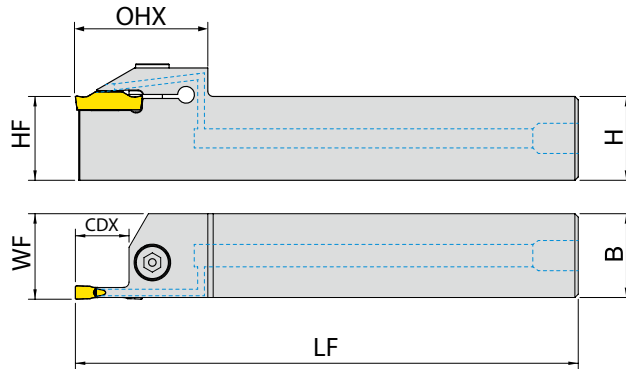
Unit : mm

Designation	EDP 5700.. R L	CW	CDX	H (= HF)	B	LF	OHX	WF	Insert
YTER/L2020K-6T13	0703 0747	6	13	20	20	125	38	17.52	TD.6..
YTER/L2020K-6T20	0704 0748	6	20	20	20	125	41	17.52	
YTER/L2525M-6T13	0705 0749	6	13	25	25	150	38	22.52	
YTER/L2525M-6T20	0706 0750	6	20	25	25	150	41	22.52	
YTER/L2525M-6T25	0707 0751	6	25	25	25	150	47	22.52	
YTER/L2525M-6T32	0708 0752	6	32	25	25	150	56	22.52	
YTER/L3232P-6T20	0709 0753	6	20	32	32	170	41	29.52	TD.8..
YTER/L3232P-6T25	0710 0754	6	25	32	32	170	47	29.52	
YTER/L3232P-6T32	0711 0755	6	32	32	32	170	56	29.52	
YTER/L2525M-8T16	0712 0756	8	16	25	25	150	47	22.02	
YTER/L2525M-8T25	0713 0757	8	25	25	25	150	47	22.02	
YTER/L3232P-8T16	0714 0758	8	16	32	32	170	47	29.02	
YTER/L3232P-8T25	0715 0759	8	25	32	32	170	47	29.02	TD.8..
YTER/L3232P-8T32	0716 0760	8	32	32	32	170	56	29.02	

Series	Designation	Infomation	Screw	Ring	Wrench
YTER/L	..1616.-2T/3T..	Description	SHB-M5x0.8x15L	-	HL-04
		EDP	58000035	-	58000040
	..2020.-2T/3T..	Description	SHB-M5x0.8x20L	-	HL-04
		EDP	58000036	-	58000040
	..2525.-2T/3T..	Description	SHB-M5x0.8x25L	-	HL-04
		EDP	58000037	-	58000040
	..2020.-4T/5T..	Description	SHB-M6x1.0x20L	-	HL-05
		EDP	58000038	-	58000041
	..2525.-4T/5T..	Description	SHB-M6x1.0x25L	-	HL-05
		EDP	58000039	-	58000041
	..3232.-5T..	Description	SHB-M6x1.0x25L	-	HL-05
		EDP	58000039	-	58000041
	..2020.-6T..	Description	SHB-M8x1.25x20L	-	HL-06
		EDP	58000045	-	58000047
	..2525.-6T/8T..	Description	SHB-M8x1.25x25L	-	HL-06
		EDP	58000046	-	58000047
	..3232.-6T/8T..	Description	SHB-M8x1.25x25L	-	HL-06
		EDP	58000046	-	58000047

Parting & Grooving - Holder - External

External holders with coolant supply



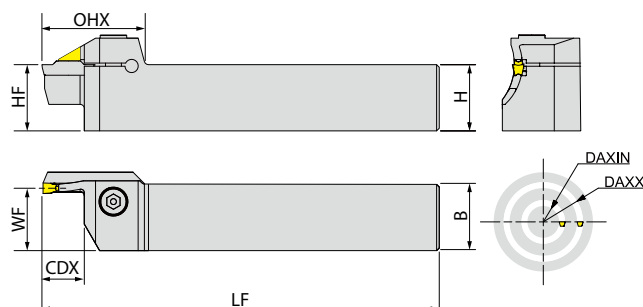
: Refer to p. 139-140

Unit : mm

Designation		EDP 5700.. R L	CW	CDX	H (= HF)	B	LF	WF	Insert
YTER/L 1212 - 2T15 - C	●	0194 0171	2	15	12	12	100	12.3	TD.2..
YTER/L 1616 - 2T15 - C	●	0197 0174	2	15	16	16	125	16.3	
YTER/L 2020 - 2T15 - C	●	0201 0178	2	15	20	20	125	20.3	
YTER/L 2020 - 2T17 - C	●	0202	2	17	20	20	125	20.3	
YTER/L 2020 - 2T20 - C	●	0203 0179	2	20	20	20	125	20.3	
YTER/L 2020 - 2T09 - C	●	0204 0180	2	09	20	20	125	20.3	
YTER/L 2525 - 2T17 - C	●	0208 0184	2	17	25	25	150	25.3	TD.3..
YTER/L 1212 - 3T15 - C	●	0196 0173	3	15	12	12	100	12.4	
YTER/L 1616 - 3T15 - C	●	0199 0176	3	15	16	16	125	16.4	
YTER/L 2020 - 3T20 - C	●	0205 0181	3	20	20	20	125	20.4	
YTER/L 2020 - 3T25 - C	●	0206 0182	3	25	20	20	125	20.4	
YTER/L 2020 - 3T30 - C	●	0207 0183	3	30	20	20	125	20.4	
YTER/L 2525 - 3T22 - C	●	0209 0185	3	22	25	25	150	25.4	
YTER/L 2525 - 3T25 - C	●	0210 0186	3	25	25	25	150	25.4	
YTER/L 2525 - 3T30 - C	●	0211 0187	3	30	25	25	150	25.4	
YTER/L 2525 - 3T09 - C	●	0212 0188	3	09	25	25	150	25.4	TD.4..
YTER/L 3232 - 3T25 - C	●	0217 0192	3	25	32	32	170	32.4	
YTER/L 2525 - 4T22 - C	●	0213 0189	4	22	25	25	150	25.5	
YTER/L 2525 - 4T25 - C	●	0214	4	25	25	25	150	25.5	TD.5..
YTER/L 2525 - 4T30 - C	●	0215 0190	4	30	25	25	150	25.5	
YTER/L 2525 - 5T25 - C	●	0216 0191	5	25	25	25	150	25.5	

Series	Designation	Information	Screw	Ring	Wrench
YTER/L	..-2..	Description	YAKV-02-M6X22	YABPL-01	YAAL-03-3
		EDP	18000195	18000058	18000061
	..-3.. / ..-4.. / ..-5..	Description	Y2004-M8X1X20	-	YAAL-05-4
		EDP	18000196	-	18000062

External holders- Face grooving



: Refer to p. 139-140

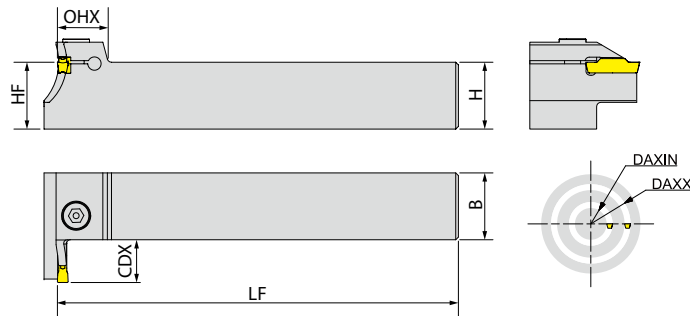
Unit : mm

Designation	EDP 5700.. R L	CW	DAXIN	DAXX	CDX	H (= HF)	B	LF	OHX	WF	Insert
YTFR/L 25M-D034050-3T10A	0599 0657	3	34	50	10	25	25	150	38	24	TD.3..
YTFR/L 25M-D044060-3T15A	0600 0658	3	44	60	15	25	25	150	38	24	
YTFR/L 25M-D054085-3T15A	0601 0659	3	54	85	15	25	25	150	38	24	
YTFR/L 25M-D034050-4T15A	0602 0660	4	34	50	15	25	25	150	39	23.6	TD.4..
YTFR/L 25M-D042060-4T15A	0603 0661	4	42	60	15	25	25	150	39	23.6	
YTFR/L 25M-D052072-4T20A	0604 0662	4	52	72	20	25	25	150	39	23.6	
YTFR/L 25M-D064120-4T20A	0605 0663	4	64	120	20	25	25	150	39	23.6	
YTFR/L 25M-D112200-4T20A	0606 0664	4	112	200	20	25	25	150	39	23.6	
YTFR/L 25M-D200-4T20A	0607 0665	4	200	-	20	25	25	150	39	23.6	TD.5..
YTFR/L 25M-D050080-5T20A	0717 0761	5	50	80	20	25	25	150	49	23.02	
YTFR/L 25M-D070110-5T20A	0718 0762	5	70	110	20	25	25	150	49	23.02	
YTFR/L 25M-D100150-5T20A	0719 0763	5	100	150	20	25	25	150	49	23.02	
YTFR/L 25M-D140200-5T20A	0720 0764	5	140	200	20	25	25	150	49	23.02	
YTFR/L 25M-D200-5T20A	0721 0765	5	200	-	20	25	25	150	49	23.02	TD.6..
YTFR/L 25M-D058100-6T20A	0722 0766	6	58	100	20	25	25	150	49	22.52	
YTFR/L 25M-D088180-6T20A	0723 0767	6	88	180	20	25	25	150	49	22.52	
YTFR/L 25M-D168400-6T20A	0724 0768	6	168	400	20	25	25	150	49	22.52	

Series	Designation	Information	Screw	Ring	Wrench
YTFR/L	..-3T/4T..	Description	SHB-M6x1.0x25L	-	HL-05
		EDP	58000039	-	58000041
	..-5T/6T..	Description	SHB-M8x1.25x25L	-	HL-06
		EDP	58000046	-	58000047

Parting & Grooving - Holder - External

External holders - Perpendicular Face grooving



: Refer to p. 139-140

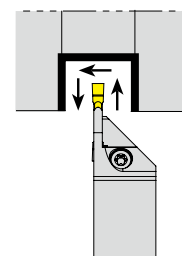
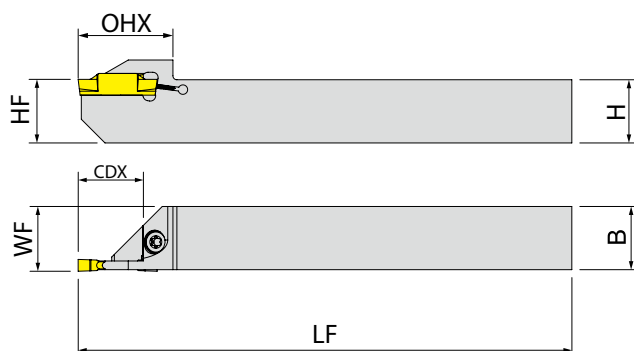
Unit : mm

Designation	EDP 5700.. R L	CW	DAXIN	DAXX	CDX	H (= HF)	B	LF	OHX	Insert
YTFPR/L25M - D034050 - 3T12A	0608 0666	3	34	50	12	25	25	150	18.5	TD.3..
YTFPR/L25M - D044060 - 3T15A	0609 0667	3	44	60	15	25	25	150	18.5	
YTFPR/L25M - D054085 - 3T15A	0610 0668	3	54	85	15	25	25	150	18.5	
YTFPR/L25M - D034050 - 4T15A	0611 0669	4	34	50	15	25	25	150	19	TD.4..
YTFPR/L25M - D042060 - 4T15A	0612 0670	4	42	60	15	25	25	150	19	
YTFPR/L25M - D052072 - 4T20A	0613 0671	4	52	72	20	25	25	150	19	
YTFPR/L25M - D064120 - 4T20A	0614 0672	4	64	120	20	25	25	150	19	
YTFPR/L25M - D112200 - 4T20A	0615 0673	4	112	200	20	25	25	150	19	TD.5..
YTFPR/L25M - D050080 - 5T20A	0725 0769	5	50	80	20	25	25	150	22	
YTFPR/L25M - D070110 - 5T20A	0726 0770	5	70	110	20	25	25	150	22	
YTFPR/L25M - D100150 - 5T20A	0727 0771	5	100	150	20	25	25	150	22	
YTFPR/L25M - D140200 - 5T20A	0728 0772	5	140	200	20	25	25	150	22	
YTFPR/L25M - D200 - 5T20A	0729 0773	5	200	-	20	25	25	150	22	TD.6..
YTFPR/L25M - D073150 - 6T20A	0730 0774	6	73	150	20	25	25	150	22	
YTFPR/L25M - D138250 - 6T20A	0731 0775	6	138	250	20	25	25	150	22	

Series	Designation	Information	Screw	Ring	Wrench
YTFPR/L	..-3T/4T..	Description	SHB-M6x1.0x25L	-	HL-05
		EDP	58000039	-	58000041
	..-5T/6T..	Description	SHB-M8x1.25x25L	-	HL-06
		EDP	58000046	-	58000047

Parting & Grooving - Holder - External

External holders (Swiss Lathe)



: Refer to p. 139-140

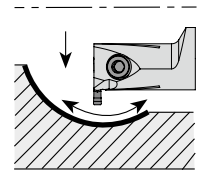
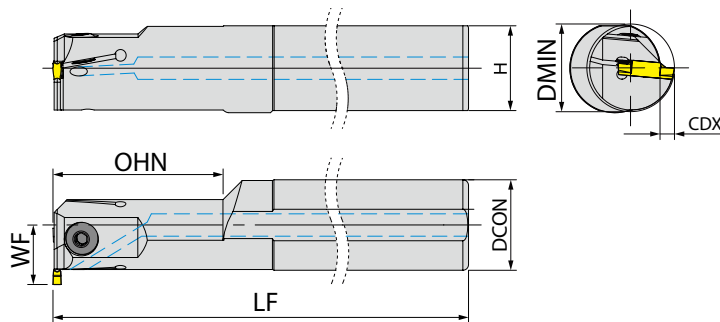
Unit : mm

Designation		EDP 5700.. R L	CW	CDX	H (= HF)	B	LF	OHX	WF	Insert
YTER/L1010K-2D20-S	X	0678 0680	2	10	10	125	10	21	9.12	TD.2..
YTER/L1212K-2D24-S	X	0628 0655	2	12	12	125	12	21	11.12	
YTER/L1616K-2D32-S	X	0629 0656	2	16	16	125	16	24	15.12	
YTER/L1010K-3D20-S	X	0679 0681	3	10	10	125	10	21	8.8	TD.3..
YTER/L1212K-3D24-S	X	0631 0630	3	12	12	125	12	21	10.8	
YTER/L1616K-3D32-S	X	0633 0632	3	16	16	125	16	24	14.8	
YTER/L 1212 - 2T12 - S - C	●	0193 0170	2	12	12	12	125	-	12.2	TD.2..
YTER/L 1616 - 2T16 - S - C	●	0198 0175	2	16	16	16	125	-	16.2	
YTER/L 1212 - 3T12 - S - C	●	0195 0172	3	12	12	12	125	-	12.3	TD.3..
YTER/L 1616 - 3T16 - S - C	●	0200 0177	3	16	16	16	125	-	16.3	

Series	Designation	Information	Screw	Ring	Wrench
YTER/L	..S..-C	Description	Y4015-M4x11	-	Y80-T15
		EDP	18000119	-	18000167
	..S	Description	TOS150412	-	TOF-15
		EDP	58000042	-	58000043

Parting & Grooving - Holder - Internal

Internal holders with Coolant supply



: Refer to p. 139-140

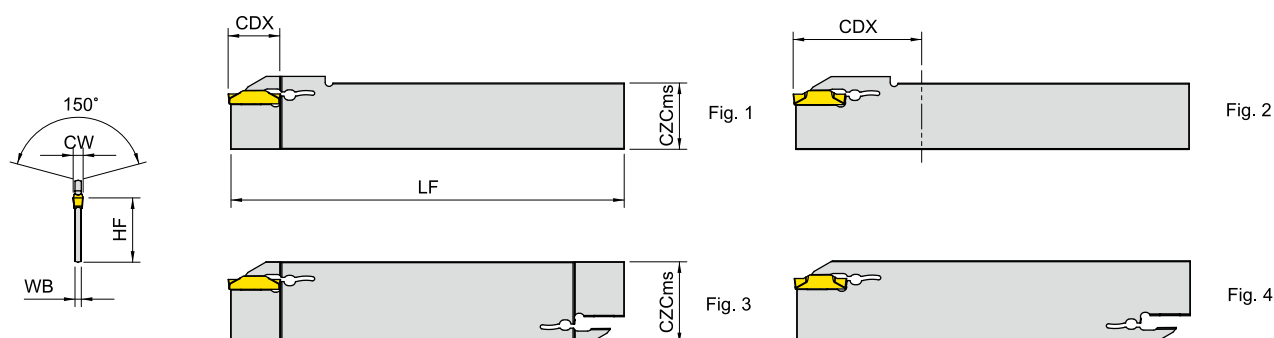
Unit : mm

Designation		EDP 5700.. R L	CW	DMIN	CDX	DCON	H (= HF)	OHN	LF	WF	Insert
YTIR/L16K-D25-2T06-C	●	0590 0682	2	25	6	16	15	40	125	14.5	TD.2..
YTIR/L20N-D27-2T06-C	●	0591 0683	2	27	6	20	18	40	160	16	
YTIR/L25R-D29-2T06-C	●	0592 0684	2	29	6	25	23	40	200	18.5	
YTIR/L20N-D27-3T06-C	●	0593 0685	3	27	6	20	18	40	160	16	TD.3..
YTIR/L25R-D29-3T06-C	●	0594 0686	3	29	6	25	23	40	200	18.5	
YTIR/L32S-D40-3T10-C	●	0595 0687	3	40	10	32	30	60	250	26	
YTIR/L20N-D27-4T06-C	●	0596 0688	4	27	6	20	18	40	160	16	TD.4..
YTIR/L25R-D29-4T06-C	●	0597 0689	4	29	6	25	23	40	200	18.5	
YTIR/L32S-D40-4T10-C	●	0598 0690	4	40	10	32	30	60	250	26	
YTIR/L25R-D31-5T07-C	●	0732 0776	5	31	7	25	23	40	200	19.5	TD.5..
YTIR/L32S-D40-5T10-C	●	0733 0777	5	40	10	32	30	60	250	26	
YTIR/L32S-D31-6T07-C	●	0734 0778	6	31	7	32	28	60	250	23	TD.6..
YTIR/L32S-D40-6T10-C	●	0735 0779	6	40	10	32	30	60	250	26	
YTIR/L32S-D40-8T10-C	●	0736 0780	8	40	10	32	30	60	250	26	TD.8..
YTIR/L40T-D45-8T10-C	●	0737 0781	8	45	10	40	37	65	300	30	

Series	Designation	Information	Screw	Ring	Wrench
YTIR/L	..16.-2T..	Description	SHB-M5X0.8X10L	-	HL-04
		EDP	58000033	-	58000040
	..20.-2/3/4T..	Description	SHB-M5X0.8X12L	-	HL-04
		EDP	58000034	-	58000040
	..25.-2/3/4T..	Description	SHB-M5X0.8X15L	-	HL-04
		EDP	58000035	-	58000040
	..32.-2/3/4T..	Description	SHB-M5X0.8X15L	-	HL-04
		EDP	58000035	-	58000040
	..25.-5T..	Description	SHB-M6X1.0X16L	-	HL-05
		EDP	58000044	-	58000041
	..32.-5/6/8T..	Description	SHB-M6X1.0X20L	-	HL-05
		EDP	58000045	-	58000041
	..40.-8T..	Description	SHB-M6X1.0X25L	-	HL-05
		EDP	58000046	-	58000041

Parting & Grooving - Holder

Blade



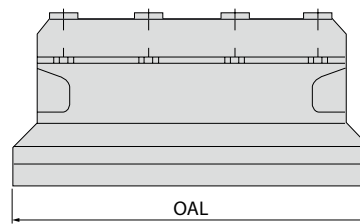
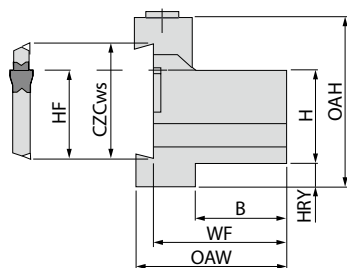
: Refer to p. 139-140 Unit : mm

Designation	EDP 5700..	CZCms	CW	CDX	HF	LF	WB	Insert	Fig
YBT26-2S	0834	26	2	20	21.4	150	1.8	TD.2..	1
YBT26-3S	0835	26	3	50	21.4	150	2.4	TD.3..	2
YBT32-2	0826	32	2	20	25	150	1.8	TD.2..	3
YBT32-3	0827	32	3	50	25	150	2.4	TD.3..	4

Series	Designation	Information	Screw	Ring	Wrench
YBT	..-26/32-..	Description	-	-	KEY-B01
		EDP	-	-	58000048

Parting & Grooving - Holder

Blade Block



: Refer to p. 139-140

Unit : mm

Designation	EDP 5700..	CZCws	H	B	HF	WF	HRy	OAL	OAH	OAW
YGBL20-26	0829	26	20	19	21.4	33	9	86	43	38
YGBL20-32	0830	32	20	19	25	33	13	100	50	38
YGBL25-26	0831	26	25	23	21.4	37	4	110	43	42
YGBL25-32	0828	32	25	23	25	37	8	110	50	42

TURNING

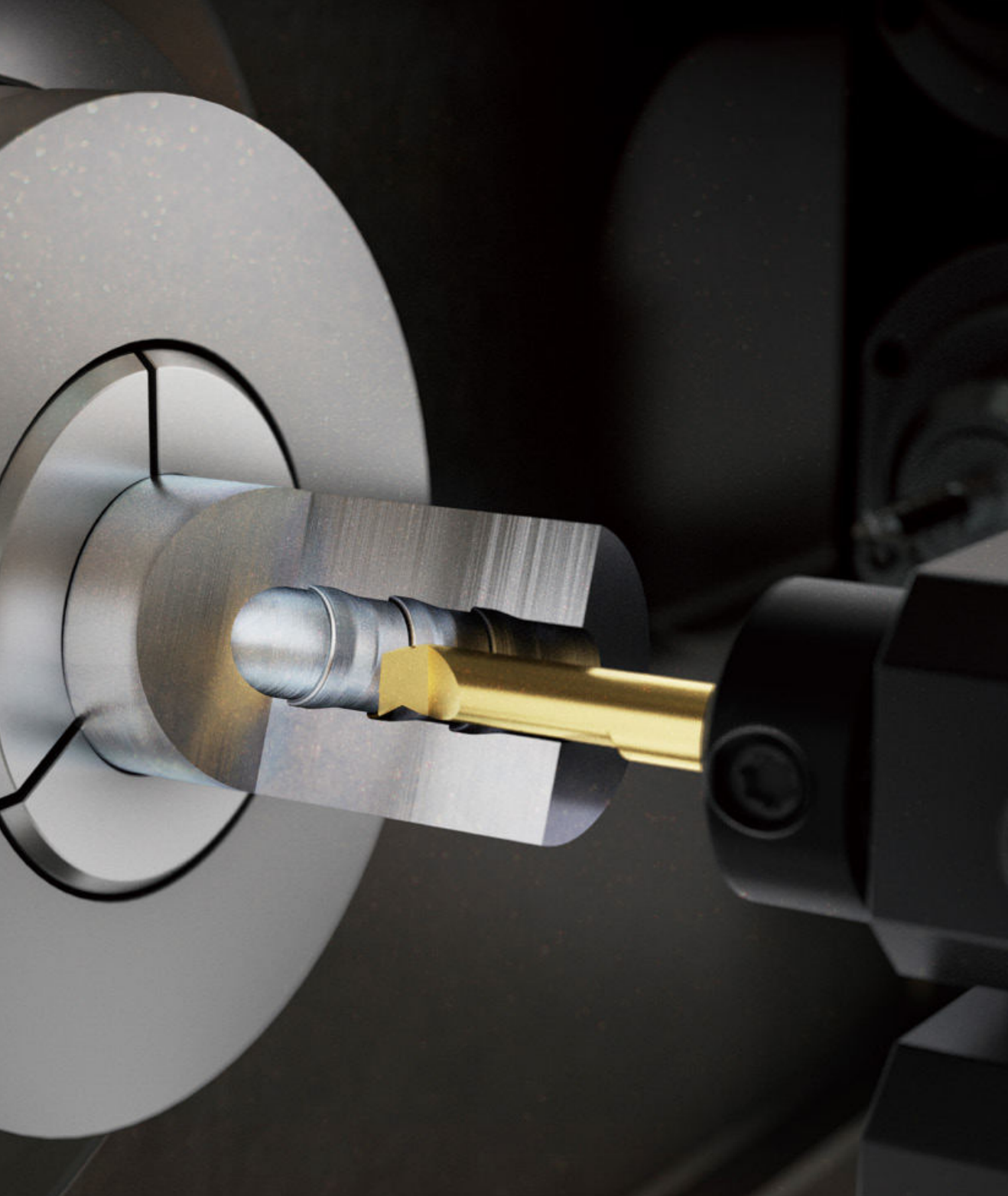
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Series	Designation	Information	Screw	Ring	Wrench
YGBL	..20/25-..	Description	SHB-M6X1.0X15L	-	HL-05
		EDP	58000049	-	58000041



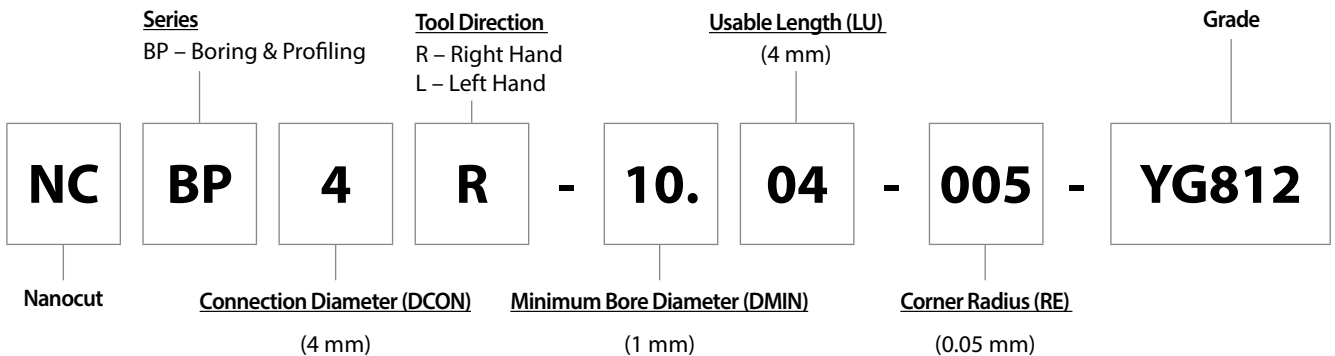
SOLID MINIATURE TURNING for SMALL BORE



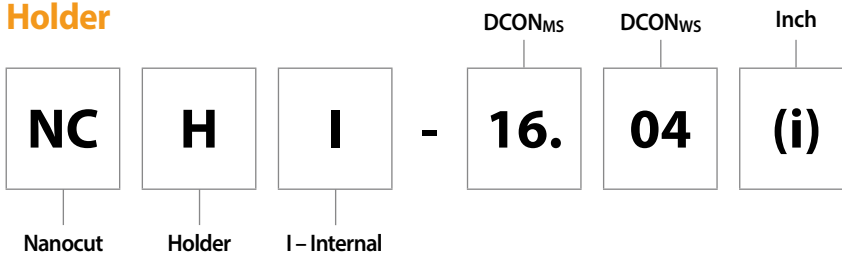
Scan this QR code
to see our
Nanocut
at work.

Code Keys - Boring Tool & Holder

Boring Tool



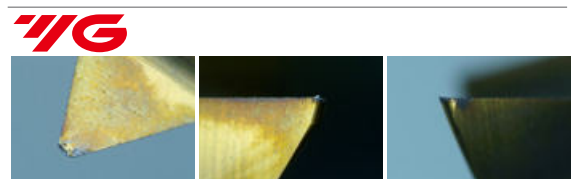
Holder



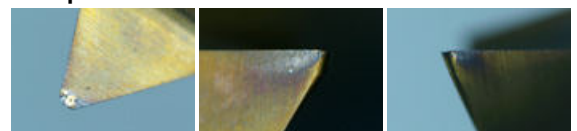
Success Story

Cutting Conditions

Size	Ø 6 mm, R 0.2 mm
Work Material	SCM440 (HRC 20)
Cutting Speed	100 m/min.
RPM	637 rev./min.
Feed per Revolution	0.1 mm/rev.
Boring Depth	Axial: 10 mm Radial: 0.15 mm
Coolant	Wet Cut
Operation	Boring
Machine	Turn Mill



Competitor



Overview

At present, as demand for small parts (camera lens, mobile phone parts) and medical instruments (implants) increases, demand for small-diameter products capable of high-precision processing is increasing.

Application

- Turning of Small Bore Components
- Internal Turning(Boring), Grooving and Threading



Features

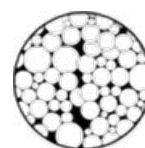
- Minimum Diameter(Boring & Profiling series) : Ø 1 mm
- Internal Coolant for Longer Tool life and Enhanced Chip Evacuation
- Secure Connection Design: Pin + Slant Positioning
- 10 Geometries for Various Applications

Benefits

- Reduced Machine Down Time
- Lower Machining Cost

YG812 - Micro Grain Carbide Grade

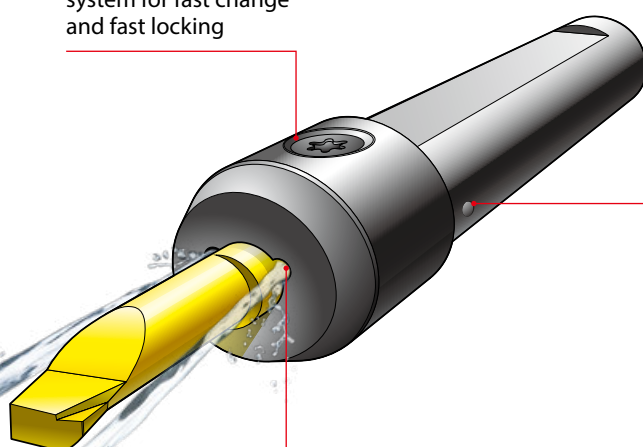
P10 - P20	M20 - M30	Submicron Grade Carbide Substrate Material for high toughness and wear resistance realizes high precision machining
K20 - K30	S10 - S25	



Advantages of Nanocut

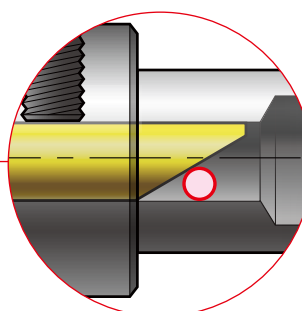
Easy Clamping

Secure and Simple system for fast change and fast locking



Internal Coolant

Helps chip evacuation and improves tool life



Secure Slant Connection

Ensures High repeatability for height and axial position

Overview

Recommended Cutting Conditions : p.258

Series		KAPR (°)	DCON (mm)	Page
BP Boring & Profiling BO Boring with Chipbreaker BF 90° Boring PR Profiling		98	4, 6	154
		98		155
		90		156
		98		157
Series		CW (mm)	DCON (mm)	Page
GR Grooving Round GS Grooving Square FI Face Grooving Internal FE Face Grooving External		1.00 - 2.00	4, 6	158
		0.79 - 2.00		159
		1.00 - 3.00		160
		1.00 - 3.00		160
Series		WF (mm)	DCON (mm)	Page
CH Chamfering TH Threading		0.50 - 1.10	4, 6	161
		2.00 - 2.95		162
Series		DCON _{WS} (mm)	DCON _{MS} (mm)	Page
Holder		4, 6	12-25	163

TURNING

PARTING & GROOVING

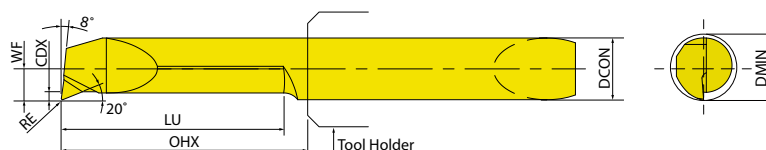
MILLING

DRILLING

TECHNICAL INFORMATION

Boring Tool

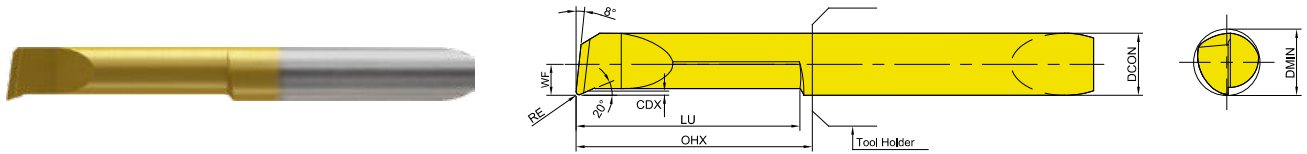
BP - Boring & Profiling


●: Stock item
○: Order made item

KAPR	DCON (mm)	Designation	EDP	Metric (mm)						YG812	
				DMIN	LU	RE	CDX	WF	OHX		OAL
98°	4	NCBP4R - 10.04 - 005 - YG812	NCBP04R1004005T	1	4	0.05	0.1	0.45	13	28	●
		NCBP4R - 10.04 - 010 - YG812	NCBP04R1004010T	1	4	0.10	0.1	0.45	13	28	●
		NCBP4R - 10.06 - 005 - YG812	NCBP04R1006005T	1	6	0.05	0.1	0.45	13	28	●
		NCBP4R - 10.06 - 010 - YG812	NCBP04R1006010T	1	6	0.10	0.1	0.45	13	28	●
		NCBP4R - 17.06 - 005 - YG812	NCBP04R1706005T	1.7	6	0.05	0.2	0.7	13	28	○
		NCBP4R - 17.06 - 010 - YG812	NCBP04R1706010T	1.7	6	0.10	0.2	0.7	13	28	●
		NCBP4R - 17.09 - 005 - YG812	NCBP04R1709005T	1.7	9	0.05	0.2	0.7	13	28	○
		NCBP4R - 17.09 - 010 - YG812	NCBP04R1709010T	1.7	9	0.10	0.2	0.7	13	28	●
		NCBP4R - 22.06 - 005 - YG812	NCBP04R2206005T	2.2	6	0.05	0.2	0.95	13	28	○
		NCBP4R - 22.06 - 010 - YG812	NCBP04R2206010T	2.2	6	0.10	0.2	0.95	13	28	●
		NCBP4R - 22.09 - 005 - YG812	NCBP04R2209005T	2.2	9	0.05	0.2	0.95	13	28	○
		NCBP4R - 22.09 - 010 - YG812	NCBP04R2209010T	2.2	9	0.10	0.2	0.95	13	28	●
		NCBP4R - 22.13 - 010 - YG812	NCBP04R2213010T	2.2	13	0.10	0.2	0.95	18	33	●
		NCBP4R - 27.10 - 005 - YG812	NCBP04R2710005T	2.7	10	0.05	0.2	1.2	13	28	○
		NCBP4R - 27.10 - 015 - YG812	NCBP04R2710015T	2.7	10	0.15	0.2	1.2	13	28	●
		NCBP4R - 27.15 - 005 - YG812	NCBP04R2715005T	2.7	15	0.05	0.2	1.2	18	33	○
		NCBP4R - 27.15 - 015 - YG812	NCBP04R2715015T	2.7	15	0.15	0.2	1.2	18	33	●
		NCBP4R - 32.10 - 015 - YG812	NCBP04R3210015T	3.2	10	0.15	0.2	1.45	13	28	●
		NCBP4R - 32.15 - 015 - YG812	NCBP04R3215015T	3.2	15	0.15	0.2	1.45	18	33	●
		NCBP4R - 32.20 - 005 - YG812	NCBP04R3220005T	3.2	20	0.05	0.2	1.45	23	38	○
		NCBP4R - 32.20 - 015 - YG812	NCBP04R3220015T	3.2	20	0.15	0.2	1.45	23	38	●
		NCBP4R - 42.10 - 015 - YG812	NCBP04R4210015T	4.2	10	0.15	0.3	1.95	13	28	●
		NCBP4R - 42.15 - 005 - YG812	NCBP04R4215005T	4.2	15	0.05	0.3	1.95	18	33	○
		NCBP4R - 42.15 - 015 - YG812	NCBP04R4215015T	4.2	15	0.15	0.3	1.95	18	33	●
	NCBP4R - 42.20 - 005 - YG812	NCBP04R4220005T	4.2	20	0.05	0.3	1.95	23	38	○	
	NCBP4R - 42.20 - 015 - YG812	NCBP04R4220015T	4.2	20	0.15	0.3	1.95	23	38	●	
	NCBP4R - 42.25 - 005 - YG812	NCBP04R4225005T	4.2	25	0.05	0.3	1.95	28	43	○	
	NCBP4R - 42.25 - 015 - YG812	NCBP04R4225015T	4.2	25	0.15	0.3	1.95	28	43	●	
	6	NCBP6R - 62.15 - 020 - YG812	NCBP06R6215020T	6.2	15	0.20	0.5	2.95	20.5	43	●
		NCBP6R - 62.20 - 020 - YG812	NCBP06R6220020T	6.2	20	0.20	0.5	2.95	25.5	48	●
		NCBP6R - 62.25 - 020 - YG812	NCBP06R6225020T	6.2	25	0.20	0.5	2.95	30.5	53	●
		NCBP6R - 62.30 - 020 - YG812	NCBP06R6230020T	6.2	30	0.20	0.5	2.95	35.5	58	●
		NCBP6R - 62.35 - 020 - YG812	NCBP06R6235020T	6.2	35	0.20	0.5	2.95	40.5	63	●
		NCBP6R - 62.40 - 020 - YG812	NCBP06R6240020T	6.2	40	0.20	0.5	2.95	45.5	68	●

Boring Tool

BO - Boring with Chip Breaker

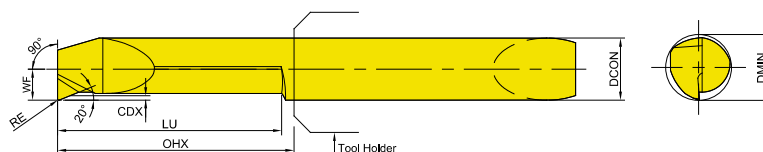


●: Stock item
○: Order made item

KAPR	DCON (mm)	Designation	EDP	Metric (mm)							YG812
				DMIN	LU	RE	CDX	WF	OHX	OAL	
98°	4	NCBO4R - 10.06 - 005 - YG812	NCBO04R1006005T	1	6	0.05	0.1	0.45	13	28	○
		NCBO4R - 10.06 - 010 - YG812	NCBO04R1006010T	1	6	0.10	0.1	0.45	13	28	●
		NCBO4R - 17.09 - 005 - YG812	NCBO04R1709005T	1.7	9	0.05	0.2	0.7	13	28	○
		NCBO4R - 17.09 - 010 - YG812	NCBO04R1709010T	1.7	9	0.10	0.2	0.7	13	28	○
		NCBO4R - 22.09 - 005 - YG812	NCBO04R2209005T	2.2	9	0.05	0.2	0.95	13	28	○
		NCBO4R - 22.09 - 010 - YG812	NCBO04R2209010T	2.2	9	0.10	0.2	0.95	13	28	●
		NCBO4R - 22.13 - 010 - YG812	NCBO04R2213010T	2.2	13	0.10	0.2	0.95	18	33	○
		NCBO4R - 27.15 - 005 - YG812	NCBO04R2715005T	2.7	15	0.05	0.2	1.2	18	33	○
		NCBO4R - 27.15 - 015 - YG812	NCBO04R2715015T	2.7	15	0.15	0.2	1.2	18	33	○
		NCBO4R - 32.15 - 015 - YG812	NCBO04R3215015T	3.2	15	0.15	0.2	1.45	18	33	●
		NCBO4R - 32.20 - 005 - YG812	NCBO04R3220005T	3.2	20	0.05	0.2	1.45	23	38	○
		NCBO4R - 32.20 - 015 - YG812	NCBO04R3220015T	3.2	20	0.15	0.2	1.45	23	38	●
		NCBO4R - 42.20 - 005 - YG812	NCBO04R4220005T	4.2	20	0.05	0.3	1.95	23	38	○
		NCBO4R - 42.20 - 015 - YG812	NCBO04R4220015T	4.2	20	0.15	0.3	1.95	23	38	●
		NCBO4R - 42.25 - 005 - YG812	NCBO04R4225005T	4.2	25	0.05	0.3	1.95	28	43	○
		NCBO4R - 42.25 - 015 - YG812	NCBO04R4225015T	4.2	25	0.15	0.3	1.95	28	43	●
	6	NCBO6R - 62.15 - 020 - YG812	NCBO06R6215020T	6.2	15	0.20	0.5	2.95	20.5	43	●
		NCBO6R - 62.25 - 020 - YG812	NCBO06R6225020T	6.2	25	0.20	0.5	2.95	30.5	53	●
		NCBO6R - 62.30 - 020 - YG812	NCBO06R6230020T	6.2	30	0.20	0.5	2.95	35.5	58	●
		NCBO6R - 62.35 - 020 - YG812	NCBO06R6235020T	6.2	35	0.20	0.5	2.95	40.5	63	●
		NCBO6R - 62.40 - 020 - YG812	NCBO06R6240020T	6.2	40	0.20	0.5	2.95	45.5	68	○

Boring Tool

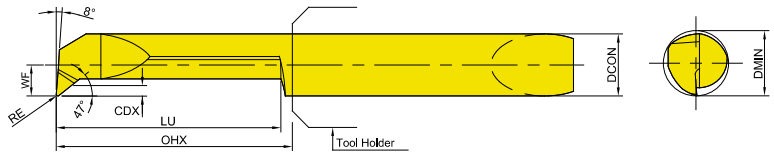
BF - 90° Boring


●: Stock item
○: Order made item

KAPR	DCON (mm)	Designation	EDP	Metric (mm)							YG812
				DMIN	LU	RE	CDX	WF	OHX	OAL	
90°	4	NCBF4R - 10.04 - 010 - YG812	NCBF04R1004010T	1	4	0.10	0.1	0.45	13	28	○
		NCBF4R - 10.06 - 010 - YG812	NCBF04R1006010T	1	6	0.10	0.1	0.45	13	28	○
		NCBF4R - 17.06 - 010 - YG812	NCBF04R1706010T	1.7	6	0.10	0.2	0.7	13	28	○
		NCBF4R - 17.09 - 010 - YG812	NCBF04R1709010T	1.7	9	0.10	0.2	0.7	13	28	○
		NCBF4R - 22.06 - 010 - YG812	NCBF04R2206010T	2.2	6	0.10	0.2	0.95	13	28	○
		NCBF4R - 22.09 - 010 - YG812	NCBF04R2209010T	2.2	9	0.10	0.2	0.95	13	28	○
		NCBF4R - 22.13 - 010 - YG812	NCBF04R2213010T	2.2	13	0.10	0.2	0.95	18	33	○
		NCBF4R - 27.10 - 015 - YG812	NCBF04R2710015T	2.7	10	0.15	0.2	1.2	13	28	○
		NCBF4R - 27.15 - 015 - YG812	NCBF04R2715015T	2.7	15	0.15	0.2	1.2	18	33	○
		NCBF4R - 32.10 - 015 - YG812	NCBF04R3210015T	3.2	10	0.15	0.2	1.45	13	28	○
		NCBF4R - 32.15 - 015 - YG812	NCBF04R3215015T	3.2	15	0.15	0.2	1.45	18	33	○
		NCBF4R - 32.20 - 015 - YG812	NCBF04R3220015T	3.2	20	0.15	0.2	1.45	23	38	○
		NCBF4R - 42.10 - 015 - YG812	NCBF04R4210015T	4.2	10	0.15	0.3	1.95	13	28	○
		NCBF4R - 42.15 - 015 - YG812	NCBF04R4215015T	4.2	15	0.15	0.3	1.95	18	33	○
	6	NCBF4R - 42.20 - 015 - YG812	NCBF04R4220015T	4.2	20	0.15	0.3	1.95	23	38	○
		NCBF4R - 42.25 - 015 - YG812	NCBF04R4225015T	4.2	25	0.15	0.3	1.95	28	43	○
		NCBF6R - 62.15 - 020 - YG812	NCBF06R6215020T	6.2	15	0.20	0.5	2.95	20.5	43	○
		NCBF6R - 62.20 - 020 - YG812	NCBF06R6220020T	6.2	20	0.20	0.5	2.95	25.5	48	○
		NCBF6R - 62.25 - 020 - YG812	NCBF06R6225020T	6.2	25	0.20	0.5	2.95	30.5	53	○
		NCBF6R - 62.30 - 020 - YG812	NCBF06R6230020T	6.2	30	0.20	0.5	2.95	35.5	58	○
		NCBF6R - 62.35 - 020 - YG812	NCBF06R6235020T	6.2	35	0.20	0.5	2.95	40.5	63	○
		NCBF6R - 62.40 - 020 - YG812	NCBF06R6240020T	6.2	40	0.20	0.5	2.95	45.5	68	○

Boring Tool

PR - Profiling

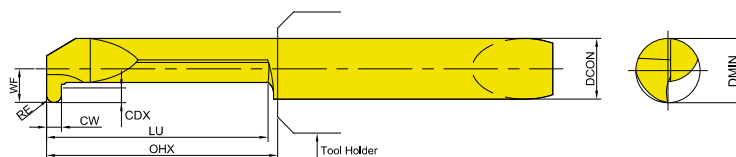


●: Stock item
○: Order made item

KAPR	DCON (mm)	Designation	EDP	Metric (mm)							YG812
				DMIN	LU	RE	CDX	WF	OHX	OAL	
98°	4	NCPR4R - 10.04 - 010 - YG812	NCPR04R1004010T	1	4	0.10	0.1	0.45	13	28	○
		NCPR4R - 10.06 - 010 - YG812	NCPR04R1006010T	1	6	0.10	0.1	0.45	13	28	○
		NCPR4R - 17.06 - 010 - YG812	NCPR04R1706010T	1.7	6	0.10	0.2	0.7	13	28	○
		NCPR4R - 17.09 - 010 - YG812	NCPR04R1709010T	1.7	9	0.10	0.2	0.7	13	28	○
		NCPR4R - 22.06 - 010 - YG812	NCPR04R2206010T	2.2	6	0.10	0.2	0.95	13	28	○
		NCPR4R - 22.09 - 010 - YG812	NCPR04R2209010T	2.2	9	0.10	0.2	0.95	13	28	○
		NCPR4R - 22.13 - 010 - YG812	NCPR04R2213010T	2.2	13	0.10	0.2	0.95	18	33	○
		NCPR4R - 27.10 - 015 - YG812	NCPR04R2710015T	2.7	10	0.15	0.2	1.2	13	28	○
		NCPR4R - 27.15 - 015 - YG812	NCPR04R2715015T	2.7	15	0.15	0.2	1.2	18	33	○
		NCPR4R - 32.10 - 015 - YG812	NCPR04R3210015T	3.2	10	0.15	0.2	1.45	13	28	○
		NCPR4R - 32.15 - 015 - YG812	NCPR04R3215015T	3.2	15	0.15	0.2	1.45	18	33	○
		NCPR4R - 32.20 - 015 - YG812	NCPR04R3220015T	3.2	20	0.15	0.2	1.45	23	38	○
		NCPR4R - 42.10 - 015 - YG812	NCPR04R4210015T	4.2	10	0.15	0.3	1.95	13	28	●
		NCPR4R - 42.15 - 015 - YG812	NCPR04R4215015T	4.2	15	0.15	0.3	1.95	18	33	●
		NCPR4R - 42.20 - 015 - YG812	NCPR04R4220015T	4.2	20	0.15	0.3	1.95	23	38	●
		NCPR4R - 42.25 - 015 - YG812	NCPR04R4225015T	4.2	25	0.15	0.3	1.95	28	43	○
	6	NCPR6R - 62.15 - 020 - YG812	NCPR06R6215020T	6.2	15	0.20	0.5	2.95	20.5	43	●
		NCPR6R - 62.20 - 020 - YG812	NCPR06R6220020T	6.2	20	0.20	0.5	2.95	25.5	48	●
		NCPR6R - 62.25 - 020 - YG812	NCPR06R6225020T	6.2	25	0.20	0.5	2.95	30.5	53	○
		NCPR6R - 62.30 - 015 - YG812	NCPR06R6230015T	6.2	30	0.15	0.5	2.95	35.5	58	●
		NCPR6R - 62.30 - 020 - YG812	NCPR06R6230020T	6.2	30	0.20	0.5	2.95	35.5	58	○
		NCPR6R - 62.35 - 020 - YG812	NCPR06R6235020T	6.2	35	0.20	0.5	2.95	40.5	63	○
		NCPR6R - 62.40 - 020 - YG812	NCPR06R6240020T	6.2	40	0.20	0.5	2.95	45.5	68	○

Boring Tool

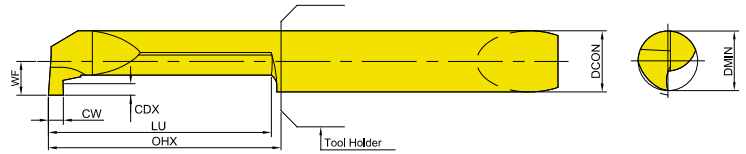
GR - Grooving Round


●: Stock item
○: Order made item

DCON (mm)	Designation	EDP	Metric (mm)								YG812
			DMIN	LU	RE	CW	CDX	WF	OHX	OAL	
4	NCGR4R - 42.15 - 10x08 - YG812	NCGR04R4215100T	4.2	15	0.5	1.0	0.8	1.95	18	33	○
	NCGR4R - 42.15 - 12x08 - YG812	NCGR04R4215120T	4.2	15	0.58	1.2	0.8	1.95	18	33	○
	NCGR4R - 42.15 - 15x08 - YG812	NCGR04R4215150T	4.2	15	0.75	1.5	1	1.95	18	33	○
	NCGR4R - 42.15 - 16x08 - YG812	NCGR04R4215160T	4.2	15	0.81	1.6	1	1.95	18	33	○
6	NCGR6R - 62.25 - 10x18 - YG812	NCGR06R6225100T	6.2	25	0.5	1.0	1.8	2.95	30.5	53	○
	NCGR6R - 62.25 - 15x18 - YG812	NCGR06R6225150T	6.2	25	0.75	1.5	1.8	2.95	30.5	53	○
	NCGR6R - 62.25 - 16x18 - YG812	NCGR06R6225160T	6.2	25	0.81	1.6	1.8	2.95	30.5	53	○
	NCGR6R - 62.25 - 20x18 - YG812	NCGR06R6225200T	6.2	25	1	2.0	1.8	2.95	30.5	53	○

Boring Tool

GS - Grooving Square

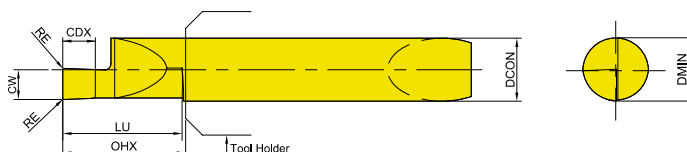


●: Stock item
○: Order made item

DCON (mm)	Designation	EDP	Metric (mm)							YG812
			DMIN	LU	CW	CDX	WF	OHX	OAL	
4	NCGS4R - 42.10 - 079x08 - YG812	NCGS04R4210079T	4.2	10	0.79	0.8	1.95	13	38	○
	NCGS4R - 42.15 - 079x08 - YG812	NCGS04R4215079T	4.2	15	0.79	0.8	1.95	18	43	○
	NCGS4R - 42.20 - 079x08 - YG812	NCGS04R4220079T	4.2	20	0.79	0.8	1.95	23	48	○
	NCGS4R - 42.10 - 100x08 - YG812	NCGS04R4210100T	4.2	10	1.00	0.8	1.95	13	38	●
	NCGS4R - 42.15 - 100x08 - YG812	NCGS04R4215100T	4.2	15	1.00	0.8	1.95	18	43	●
	NCGS4R - 42.20 - 100x08 - YG812	NCGS04R4220100T	4.2	20	1.00	0.8	1.95	23	48	○
6	NCGS6R - 62.10 - 079x18 - YG812	NCGS06R6210079T	6.2	10	0.79	1.8	2.95	15.5	38	○
	NCGS6R - 62.15 - 079x18 - YG812	NCGS06R6215079T	6.2	15	0.79	1.8	2.95	20.5	43	○
	NCGS6R - 62.25 - 079x18 - YG812	NCGS06R6225079T	6.2	25	0.79	1.8	2.95	30.5	53	○
	NCGS6R - 62.35 - 079x18 - YG812	NCGS06R6235079T	6.2	35	0.79	1.8	2.95	40.5	63	○
	NCGS6R - 62.10 - 100x18 - YG812	NCGS06R6210100T	6.2	10	1.00	1.8	2.95	15.5	38	○
	NCGS6R - 62.15 - 100x18 - YG812	NCGS06R6215100T	6.2	15	1.00	1.8	2.95	20.5	43	●
	NCGS6R - 62.25 - 100x18 - YG812	NCGS06R6225100T	6.2	25	1.00	1.8	2.95	30.5	53	●
	NCGS6R - 62.35 - 100x18 - YG812	NCGS06R6235100T	6.2	35	1.00	1.8	2.95	40.5	63	○
	NCGS6R - 62.10 - 117x18 - YG812	NCGS06R6210117T	6.2	10	1.17	1.8	2.95	15.5	38	○
	NCGS6R - 62.15 - 117x18 - YG812	NCGS06R6215117T	6.2	15	1.17	1.8	2.95	20.5	43	○
	NCGS6R - 62.25 - 117x18 - YG812	NCGS06R6225117T	6.2	25	1.17	1.8	2.95	30.5	53	○
	NCGS6R - 62.35 - 117x18 - YG812	NCGS06R6235117T	6.2	35	1.17	1.8	2.95	40.5	63	○
	NCGS6R - 62.10 - 150x18 - YG812	NCGS06R6210150T	6.2	10	1.50	1.8	2.95	15.5	38	●
	NCGS6R - 62.15 - 150x18 - YG812	NCGS06R6215150T	6.2	15	1.50	1.8	2.95	20.5	43	●
	NCGS6R - 62.25 - 150x18 - YG812	NCGS06R6225150T	6.2	25	1.50	1.8	2.95	30.5	53	●
	NCGS6R - 62.35 - 150x18 - YG812	NCGS06R6235150T	6.2	35	1.50	1.8	2.95	40.5	63	○
	NCGS6R - 62.10 - 157x18 - YG812	NCGS06R6210157T	6.2	10	1.57	1.8	2.95	15.5	38	○
	NCGS6R - 62.15 - 157x18 - YG812	NCGS06R6215157T	6.2	15	1.57	1.8	2.95	20.5	43	○
	NCGS6R - 62.25 - 157x18 - YG812	NCGS06R6225157T	6.2	25	1.57	1.8	2.95	30.5	53	○
	NCGS6R - 62.35 - 157x18 - YG812	NCGS06R6235157T	6.2	35	1.57	1.8	2.95	40.5	63	○
	NCGS6R - 62.10 - 198x18 - YG812	NCGS06R6210198T	6.2	10	1.98	1.8	2.95	15.5	38	○
	NCGS6R - 62.15 - 198x18 - YG812	NCGS06R6215198T	6.2	15	1.98	1.8	2.95	20.5	43	○
	NCGS6R - 62.25 - 198x18 - YG812	NCGS06R6225198T	6.2	25	1.98	1.8	2.95	30.5	53	○
	NCGS6R - 62.30 - 198x18 - YG812	NCGS06R6230198T	6.2	30	1.98	1.8	2.95	35.5	58	○
	NCGS6R - 62.10 - 200x18 - YG812	NCGS06R6210200T	6.2	10	2.00	1.8	2.95	15.5	38	●
	NCGS6R - 62.15 - 200x18 - YG812	NCGS06R6215200T	6.2	15	2.00	1.8	2.95	20.5	43	●
	NCGS6R - 62.25 - 200x18 - YG812	NCGS06R6225200T	6.2	25	2.00	1.8	2.95	30.5	53	●

Boring Tool

FI - Face Grooving Internal


●: Stock item
○: Order made item

DCON (mm)	Designation	EDP	Metric (mm)								YG812
			DMIN	LU	RE	CW	CDX	WF	OHX	OAL	
6	NCFI6R - 62.15 - 10x20 - YG812	NCFI06R6215010T	6.2	15	0.1	1.0	2.0	2.95	20.5	43	●
	NCFI6R - 62.15 - 15x30 - YG812	NCFI06R6215015T	6.2	15	0.1	1.5	3.0	2.95	20.5	43	●
	NCFI6R - 62.15 - 20x40 - YG812	NCFI06R6215020T	6.2	15	0.1	2.0	4.0	2.95	20.5	43	●
	NCFI6R - 62.15 - 25x50 - YG812	NCFI06R6215025T	6.2	15	0.1	2.5	5.0	2.95	20.5	43	●
	NCFI6R - 62.15 - 30x60 - YG812	NCFI06R6215030T	6.2	15	0.1	3.0	6.0	2.95	20.5	43	●

TURNING

PARTING & GROOVING

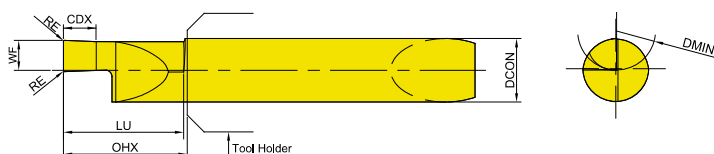
MILLING

DRILLING

TECHNICAL INFORMATION

Boring Tool

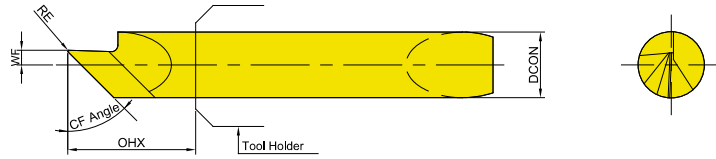
FE - Face Grooving External


●: Stock item
○: Order made item

DCON (mm)	Designation	EDP	Metric (mm)								YG812
			DMIN	LU	RE	CW	CDX	WF	OHX	OAL	
6	NCFE6R - 62.15 - 10x20 - YG812	NCFE06R6215010T	6.2	15	0.1	1.0	2.0	2.95	20.5	43	●
	NCFE6R - 62.15 - 15x30 - YG812	NCFE06R6215015T	6.2	15	0.1	1.5	3.0	2.95	20.5	43	●
	NCFE6R - 62.15 - 20x40 - YG812	NCFE06R6215020T	6.2	15	0.1	2.0	4.0	2.95	20.5	43	●
	NCFE6R - 62.15 - 25x50 - YG812	NCFE06R6215025T	6.2	15	0.1	2.5	5.0	2.95	20.5	43	●
	NCFE6R - 62.15 - 30x60 - YG812	NCFE06R6215030T	6.2	15	0.1	3.0	6.0	2.95	20.5	43	●

Boring Tool

CH - Chamfering



●: Stock item
○: Order made item

KAPR	DCON (mm)	Designation	EDP	Metric (mm)						YG812
				DMIN	RE	CDX	WF	OHX	OAL	
45°	6	NCCH6R - 10.03 - 45 - YG812	NCCH06R103045T	1.0	0.2	3.5	1.1	15.5	38	○
60°		NCCH6R - 10.04 - 60 - YG812	NCCH06R103060T	1.0	0.2	4	0.5	15.5	38	○

TURNING

PARTING & GROOVING

MILLING

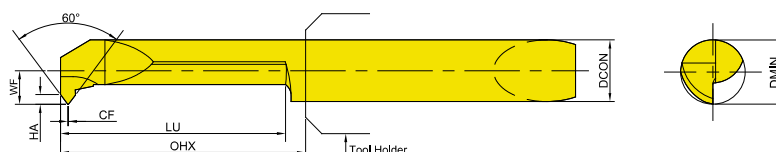
DRILLING

TECHNICAL INFORMATION

Boring Tool

TH - Threading

TURNING



* P-60 : Partial Profile, 60°

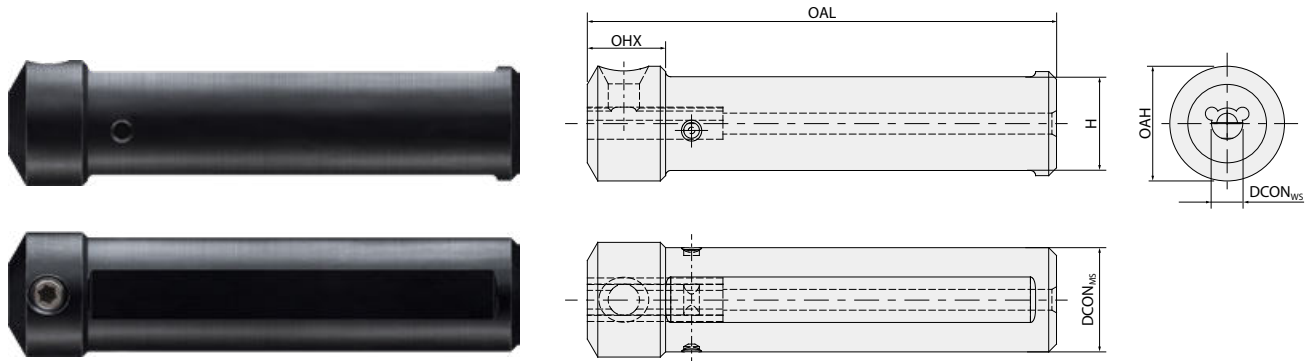
DCON (mm)	Designation	EDP	Metric (mm)									YG812
			DMIN	LU	TPN	TPX	WF	HA	CF	OHX	OAL	
4	NCTH04R - 42.15 - 050 - P - 60 - YG812	NCTV04R4215050T	4.2	15	0.50	0.70	2	0.45	0.06	18	33	○
	NCTH04R - 42.15 - 075 - P - 60 - YG812	NCTV04R4215075T	4.2	15	0.75	1.00	2.35	0.65	0.09	18	33	○
	NCTH04R - 42.15 - 100 - P - 60 - YG812	NCTV04R4215100T	4.2	15	1.00	1.25	2.25	0.8	0.12	18	33	○
6	NCTH06R - 62.15 - 100 - P - 60 - YG812	NCTV06R6215100T	6.2	15	1.00	1.25	2.95	0.8	0.12	20.5	43	○
	NCTH06R - 62.15 - 125 - P - 60 - YG812	NCTV06R6215125T	6.2	15	1.25	1.50	2.3	0.97	0.15	20.5	43	○
	NCTH06R - 62.15 - 150 - P - 60 - YG812	NCTV06R6215150T	6.2	15	1.50	1.75	2.95	1.14	0.18	20.5	43	○

MILLING

DRILLING

TECHNICAL INFORMATION

Boring ToolHolder Holder



Scale	Insert Size (DCON _{MS})	Designation	EDP	DCON _{MS}	OAL	H	OAH	OHX
Metric (mm)	4	NCHI - 12.4	ZBR0400012	12	70	10	15.5	14
		NCHI - 16.4	ZBR0400016	16	75	14	17.5	
		NCHI - 20.4	ZBR0400020	20	90	18	20	
		NCHI - 22.4	ZBR0400022	22	110	20	22	
		NCHI - 25.4	ZBR0400025	25	110	23	25	
	6	NCHI - 12.6	ZBR0600012	12	70	10	16.5	
		NCHI - 16.6	ZBR0600016	16	75	14	18.5	
		NCHI - 20.6	ZBR0600020	20	90	18	22	
		NCHI - 22.6	ZBR0600022	22	110	20	22	
		NCHI - 25.6	ZBR0600025	25	110	23	25	

Information	Screw	Wrench
Description	-	TPWFTP15
EDP	TP156075	18000003

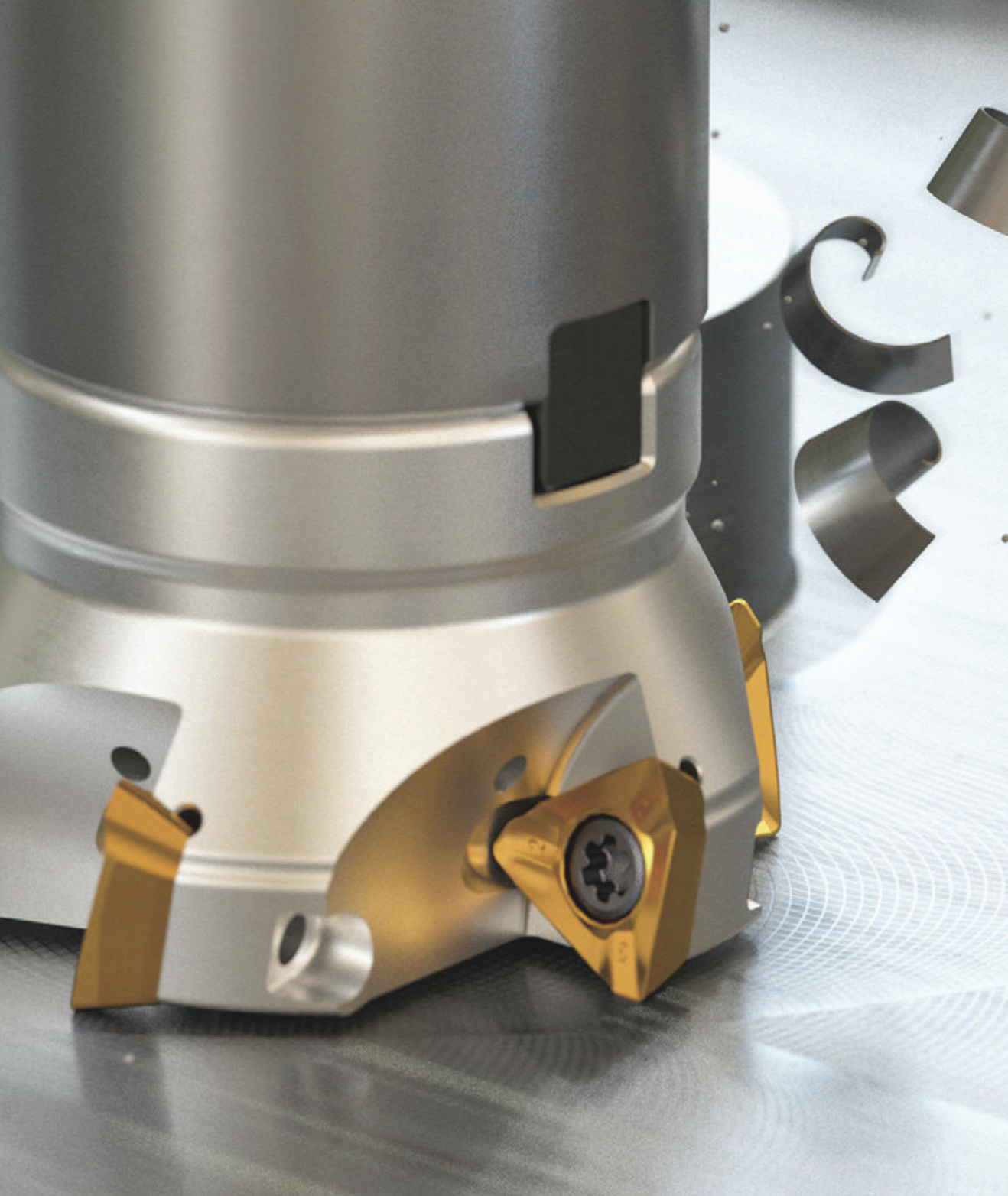
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



MILLING

Product Overview

Application Guide

Milling Inserts Overview

Milling Cutter Overview

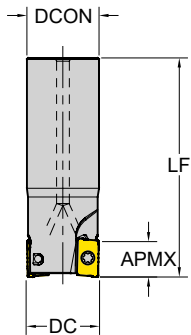


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YG SM3 Mill
at work.

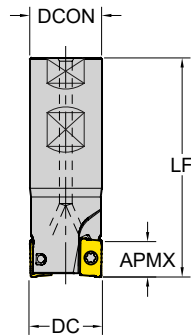


Scan this QR code
to see our
YG HF4 Mill
at work.

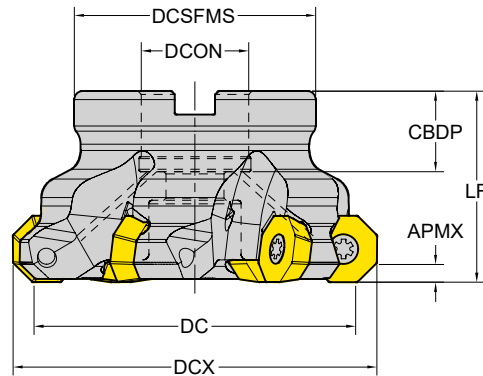
Code Keys - Milling Cutters



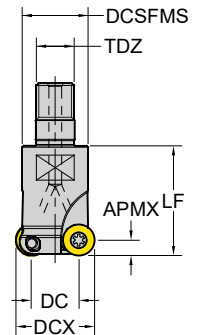
<C> Cylindrical



<W> Weldon



<S> Shellmill



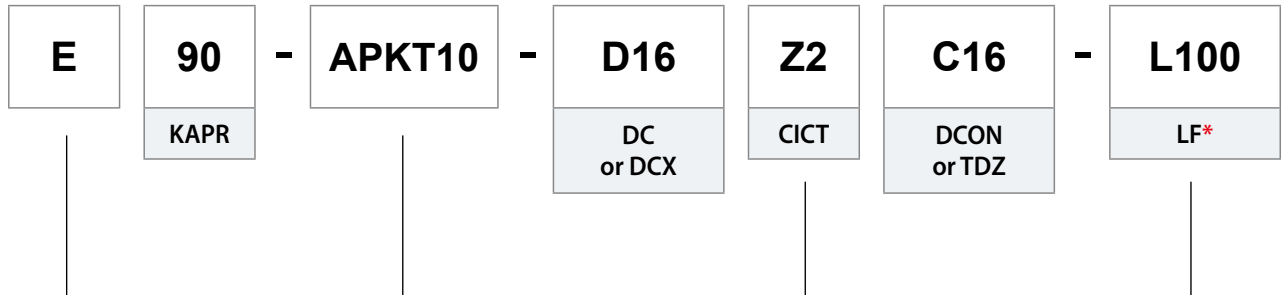
<M> Modular

Entering Cutting Angle
(90°)

Cutter Diameter
(Ø16)

Connection Type and Size

C - Cylindrical W - Weldon
S - Shellmill M - Modular
(Cylindrical Ø16)



* Shank Type Only

Cutter Type
E - Endmill Type
F - Facemill Type
M - Modular Type

Insert Series
(APKT 10)

Number of Teeth
(Z=2)

Functional Length
(100mm)

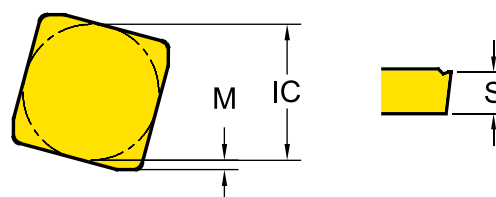
1 A Shape	2 P Relief Angle (AN)	3 K Tolerance	4 T Clamping & Chipbreaker	5 16 Insert Size	6 04 Insert Thickness (S)	7 08 Corner Radius
------------------------	------------------------------------	----------------------------	---	-------------------------------	--	---------------------------------

1 - Shape

Symbol	Shape	
H	Hexagonal	
O	Octagonal	
P	Pentagonal	
S	Square	
T	Triangular	
W	Trigon	
L	Rectangular	
A	Parallelogram 80°	
R	Round	

2 - Relief Angle (AN)

Symbol	Relief Angle (AN)	
N	No Relief Angle	
B	Relief 5°	
C	Relief 7°	
P	Relief 11°	
D	Relief 15°	
E	Relief 20°	
F	Relief 25°	
O	Special	



3 - Tolerance Class

Symbol	Inner Circle IC (mm)	Nose Height M (mm)	Thickness S (mm)
C	± 0.025	± 0.013	± 0.025
E	± 0.025	± 0.025	± 0.025
G	± 0.025	± 0.025	± 0.13
H	± 0.013	± 0.013	± 0.025
K*	± 0.05~0.15*	± 0.013	± 0.025
M*	± 0.05~0.15*	± 0.08~0.2*	± 0.13
U*	± 0.08~0.25*	± 0.13~0.38*	± 0.13

* Tolerance is different by insert IC size. Please see ISO 1832

4 - Clamping & Chipbreaker

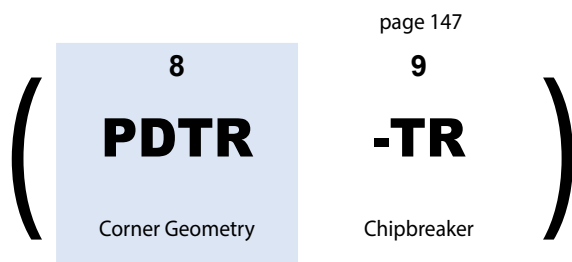
Symbol	Clamping	Chipbreaker	Figure
N	No clamping hole	X	
R		One Face	
W	Screw Hole	X	
T		One Face	
U		Both Faces	
X	Special		

5 - Insert Size

* No Standard for milling insert size

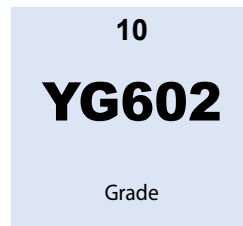
6 - Insert Thickness

* No Standard for milling insert thickness



page 147

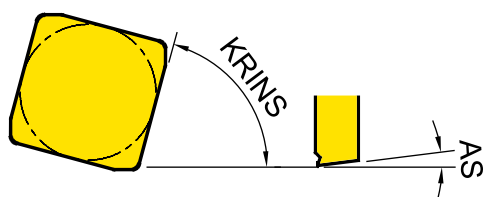
page 146



7 - Corner Radius (RE)

Symbol	Corner Radius - RE(mm)	Symbol	Corner Radius - RE(mm)
04	0.4	16	1.6
08	0.8	20	2.0
12	1.2	24	2.4

8 - Corner Geometry



8-1	8-2	8-3	8-4
P	D	T	R
Cutting Edge Angle (KRINS)	Wiper Edge Clearance (AS)	Edge Condition	Feed Direction

*Refer to page. 147 for -AL, -ST, -TR... types

8-1 - Cutting Edge Angle (KRINS)

Symbol	Cutting Edge Angle (KRINS)
P	90°
A	45°
D	60°
E	75°
F	85°
Z	Special

8-3 - Edge Condition

Symbol	Edge Condition
F	Sharp 
E	Round 
T	Chamfer 
S	Chamfer and Round 

8-2 - Wiper Edge Clearance (AS)

Symbol	Wiper Edge Clearance (AS)
N	0°
P	11°
D	15°
E	20°
F	25°
Z	Special

8-4 - Feed Direction

Symbol	Feed Direction
R	Right-hand Insert 
N	Neutral Insert 
L	Left-hand Insert 

Milling Grades and Chipbreakers

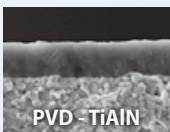
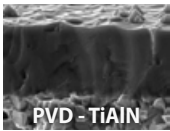
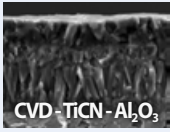
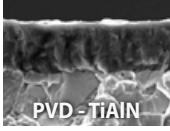
Milling Grades

Milling Grades	P Steel					M Stainless steel				K Cast iron				N Non-ferrous				S Super alloys				H Hardened Steel			
	P05	P15	P25	P35	P45	M05	M15	M25	M35	K05	K15	K25	K35	N05	N15	N25	N35	S05	S15	S25	S35	H05	H15	H25	H35
PVD	YG012	012																				012			
	YG712	712																							
	YG713	713																							
	YG612		612					612											612						
	YG622		622							622															
	YG602		602					602		602									602						
	YG613			613				613																	
	YG501									501															
	YG904																			904					
CVD	YG5020									5020															
Uncoated	YG50													50											

TECHNICAL INFORMATION	YG012 H10 - H30 P10 - P30	 PVD - TiAlN	Optimized Milling Grade for Pre-Hardened & Hardened steel • Applied Extreme Oxidation PVD layer and Crack-free Substrate • Excellent Cutting performance for Die & Mold application
	YG712 P10 - P30	 PVD - TiAlCrN	Milling Grade for Medium of Steel Application • Superior wear resistance and excellent toughness in high speed machining • Coating layer with high hardness and oxidation resistance
	YG713 P15 - P25	 PVD - TiAlN	Milling Grade for General Steel Application • Multi-layer TiAlN structure realizes stronger crater and flank wear resistance • Fine-grained carbide and balanced substrate
	YG622 P20 - P35 K20 - K40	 PVD - AlCrN	Optimized Grade for High Alloyed or Prehardened Steel Excellent for High Temperature Hardness and Oxidation Resistance at High Speed
	YG612 P20 - P40 M20 - M40 S20 - S40	 PVD - TiAlN	Specialized Multi-Nano Coated Grade with high wear resistance and chipping resistance • Special Multi-Nano coating prevent crack and providing predictable tool life • Special universal Grade can achieve stable tool life in any workpiece
	YG602 P20 - P35 K20 - K40 M20 - M40 S15 - S25	 PVD - TiAlN	Universal grade for General Milling Application • Ultra Dense PVD Coating with optimal thermal resistance & strength • Sub-Micron substrate designed for demanding application

Milling Grades and Chipbreakers

Milling Grades

YG613 P30 - P50 M30 - M40		Milling Grade for Stainless Steel Application • New coating layer with lubrication preventing built-up edge on ultra fine grain substrate with high toughness. • The toughest substrate provides excellent cutting performance in stainless steel
YG501 K05 - K25		Hard Milling grade for Cast Iron • Substrate especially designed for high wear resistance • Excellent wear resistance in cast iron milling application
YG5020 K01 - K30		CVD Milling grade for Cast Iron • CVD coating for Excellent wear resistance • Improved Toughness for chipping resistance
NEW YG904 S30 - S45		Excellent performance for machining HRSA(Heat resistant super alloys) • Newly developed substrate improves resistance to chipping and breakage • High-performance PVD coating technology ensures excellent wear resistance for machining HRSA
YG50 N05 - N20		Uncoated Milling Grade for Aluminium • Submicron carbide substrate for high wear resistance • Preventing built up edge with shining surface

Milling Chipbreakers

-AL		• For Aluminum • Very Sharp Geometry
-ST		• For Stainless Steel, Super Alloy • Sharp Geometry
-GN (General Type)		• First Choice for General Application
-TR		• For Hardened Steels • Reinforced Geometry
...W / ...N		• For Hardened Material and Cast Irons



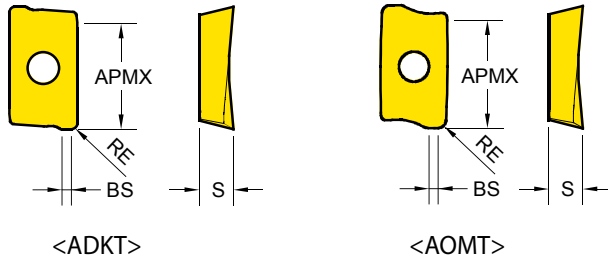
Milling Inserts Overview

Recommended Cutting Conditions : p.259

A 2 Corners	Positive		ADKT	ADKT 1505	p. 171
			AOMT	AOMT 1236	p. 171
			APGT	APGT 1003, 1604	p. 172
			APKT	APKT 1003, 1604	p. 173
			APMT	APMT 1135, 1504, 1604	p. 174
E 4 Corners	Negative		ENMX	ENMX 0402 NEW ENMX 0604 ENMX 0905	p. 175
L 4 Corners	Tangential Milling Negative		LNHU / LNKU NEW	LNHU 1306 LNKU 1306	p. 177
O Octagon	Positive		ODMT / ODMW	ODMT / ODMW 0605	p. 178
			OFER	OFER 0704	p. 179
			OFMT	OFMT 05T3	
O Octagon	Negative		ONMU / ONHU	ONMU / ONHU 0806	p. 180
P 10 Corners	Negative		PNMU	PNMU1206	p. 181
R Round	Positive Round		RDKT / RDKW	RDKT 0802, 10T3, 1204, 1604 RDKW 0501, 0702, 0802, 10T3, 1204	p. 182
			RDMT / RDMW	RDMT 0802, 0803, 10T3, 1204 RDMW 0802, 10T3, 1204	p. 183
			RPMX NEW	RPMX 08T2, 10T3, 1204	p. 184
			RPMT / RPMW	RPMT 08T2, 10T3, 1204 RPMW 1003, 1204	p. 185
S Square	High Feed		SDMT / SDMW	SDMT 1204, SDMW 1204	p. 187
	Positive		SDCN (45°) / SDKN	SDKN, SDCN 1203, 1504	p. 186
			SEGT	SEGT12T3, 1204	p. 188
			SEKR (45°) / SEKN	SEKR, SEKN 1203	p. 191
			SEKT	SEKT 12T3, 1204	p. 189
			SEMT	SEMT1204, 13T3	p. 190
			SPMT	SPMT 1204	p. 195
	Negative		SNGX NEW	SNGX1206	p. 192
			SNMX	SNMX1206	p. 193
	ISO		SPCN(75°) / SPKN / SPKR'	SPKN 1203, 1504 SPKR 1203 SPCN 1203, 1504	p. 194
			SPUN	SPUN 1203	p. 196
T Triangle	Positive 3 Corners		TPCT NEW	TPCT 0703, 1104, 1605	p. 197
			TPKT	TPKT 0703, 1104, TPKT 1605	p. 198
	ISO		TPCN(90°) / TPKN / TPKR	TPKN 1603, 2204 TPKR 1603, 2204 TPCN 2204	p. 199
			TPUN	TPUN 1603	p. 200
W Trigon	Negative 6 Corners		WNEX	WNEX 0403, 0806 NEW	p. 201

Milling - Shoulder Milling - Inserts

ADKT / AOMT - Shoulder Milling Positive (2 Corners)



Series	APMX	IC	S
ADKT 1505	14	9.7	5.8
AOMT 1236	11	6.6	3.6

EDP 1200.. ●: Stock item ○: Order made item

	ADKT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30	M40 S40			
ADKT General 		ADKT 150508 PDTR	0.8	0.05 - 0.24	1.87	14.0	● 0913	YG712	YG713	YG622	● 1053	● 0220				
		ADKT 150516 PDTR	1.6	0.05 - 0.24	1.73	14.0	● 0916					● 0755				
		ADKT 150524 PDTR	2.4	0.05 - 0.24	1.20	14.0	● 0917					● 0756				
		ADKT 150532 PDTR	3.2	0.05 - 0.24	0.30	14.0	● 0918					● 0757				
AOMT General 		AOMT 123604 PDTR	0.4	0.05 ~ 0.14	1.07	11.0						● 0217				
		AOMT 123608 PDTR	0.8	0.05 ~ 0.14	0.91	11.0	○ 0912					● 0218	● 0613			

TURNING

PARTING & GROOVING

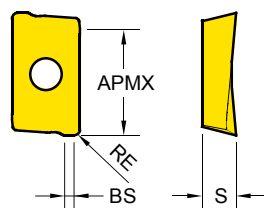
MILLING

DRILLING

TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

APGT - Shoulder Milling Positive (2 Corners)

Refer to
Milling Cutter
p. 204 - 207


Series	APMX	IC	S
APGT 1003	9	6.7	3.6
APGT 1604	14	9.4	5.3

EDP 1200.. ●: Stock item ○: Order made item

APGT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	N15
						P20			K30	M30 S30	M30	M40 S40			
-AL Aluminium	APGT 100305 - AL	0.5	0.05-0.25	1.4	9.0	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50
															● 0730
	APGT 160408 - AL	0.8	0.05-0.25	1.7	14.0										● 0428
	APGT 160430 - AL	3.0	0.05-0.25	0.2	14.0										● 0798



TURNING

PARTING & GROOVING

MILLING

DRILLING

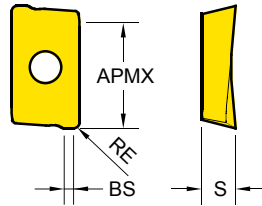
TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

APKT - Shoulder Milling Positive (2 Corners)



Refer to
Milling Cutter
p.204 - 207



Series	APMX	IC	S
APKT 1003	9	6.7	3.6
APKT 1604	14	9.4	5.3

EDP 1200.. ●: Stock item ○: Order made item

						H20	P15	P25	P30	P30	P30	P40	K10	K15	S40	
						P20			K30	M30 S30	M30	M40 S40				
APKT		Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
APKT General		APKT 100305 PDTR	0.5	0.05 - 0.24	0.86	9.0	● 0749		○ 0638	○ 0429	● 0818	● 0005	● 0672			● 1183
		APKT 100308 PDTR	0.8	0.05 - 0.24	0.90	9.0	● 0750		○ 0632	○ 0430	● 0819	● 0004	● 0610			
		APKT 100316 PDTR	1.6	0.05 - 0.24	1.03	9.0					● 0975	● 0713	● 0714			
		APKT 160404 PDTR	0.4	0.05 - 0.25	1.11	14.0			○ 0656		● 0828	● 0003	● 0673			
		APKT 160408 PDTR	0.8	0.05 - 0.25	1.32	14.0	● 0797		○ 0633	○ 0767	● 0820	● 0001	● 0607		● 0796	● 1180
		APKT 160412 PDTR	1.2	0.05 - 0.25	1.13	14.0			○ 0649		● 0980	● 0002				
		APKT 160416 PDTR	1.6	0.05 - 0.25	1.13	14.0			○ 0661		● 0979	● 0006	● 1013			
		APKT 160424 PDTR	2.4	0.05 - 0.25	1.2	14.0			○ 0653		● 0836	● 0255	● 1014			
		APKT 160432 PDTR	3.2	0.05 - 0.25	0.4	14.0	● 0870				● 0977	● 0738				
-ST Stainless Steel Super Alloy		APKT 100305 - ST	0.5	0.05 - 0.12	0.86	9.0					● 0834	● 0278	● 0618			● 1182
		APKT 100312 - ST	1.2	0.05 - 0.12	1.32	9.0					● 0981		● 0776			
		APKT 100316 - ST	1.6	0.05 - 0.12	1.03	9.0					● 0982		● 0719			
		APKT 160408 - ST	0.8	0.05 - 0.12	1.32	14.0					● 0835	● 0270	● 0617			● 1181
-TR Hardened Steel		APKT 160404 - TR	0.4	0.05 - 0.40	2.12	14.0				○ 0505	● 0970	● 0492				
		APKT 160408 - TR	0.8	0.05 - 0.40	1.32	14.0	● 0746	● 0471	○ 0637	○ 0337	● 0821	● 0256				
		APKT 160412 - TR	1.2	0.05 - 0.40	2.40	14.0	● 0914			○ 0523	● 0829	● 0493				
		APKT 160416 - TR	1.6	0.05 - 0.40	2.40	14.0	● 0747			○ 0524	● 0969	● 0472				
		APKT 160424 - TR	2.4	0.05 - 0.40	1.50	14.0	● 0748			○ 0520	● 0971	● 0494				

TURNING

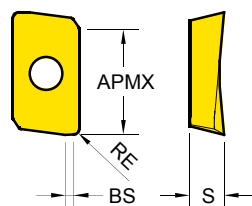
PARTING & GROOVING

MILLING

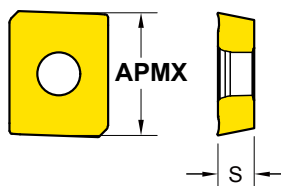
DRILLING

TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

APMT - Shoulder Milling Positive (2 Corners)


<APMT>



<APMT 1504>

Series	APMX	IC	S
APMT 1135	9	6.2	3.50
APMT 1604	14	9.2	4.76
APMT 1504	14	12.7	4.76

EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30	M30	M40			
			S30	S30	S30	S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
● 0752		○ 0655	○ 0400	● 0940	● 0009	● 0669			
		○ 0654		● 0941	● 0010	● 0668			
● 0751	● 0423	○ 0642	○ 0399	● 0939	● 0008	● 0663		● 0464	
			○ 0445	● 0838	● 0276	● 0777			

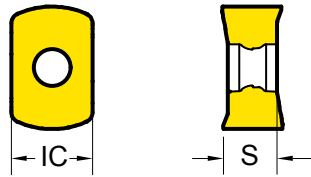
APMT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)
APMT General 	APMT 113504 PDTR	0.4	0.05-0.24	1.26	9.0
	APMT 113508 PDTR	0.8	0.05-0.24	1.07	9.0
	APMT 160408 PDTR	0.8	0.05-0.24	1.11	14.0
APMT 1504 General 	APMT 1504	-	0.05-0.24	-	

Milling - High Feed Milling - Inserts

ENMX - High Feed Negative (4 Corners)



Refer to
Milling Cutter
p.208 - 210



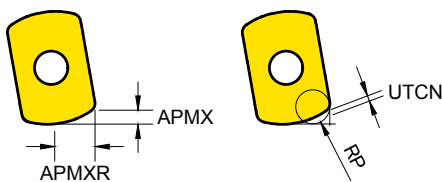
Series	IC	S
ENMX 0402	4.0	2.35
ENMX 0604	6.3	4.21
ENMX 0905	9.0	5.40

EDP 1200.. ●: Stock item ○: Order made item

	ENMX	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
ENMX General		ENMX 0604	0.8	0.3 - 2.0	-	1.0	● 0734				● 0822	● 0474	● 0606			● 1186
		ENMX 0905	1.0	0.3 - 2.5	-	1.5	● 0736				● 0824	● 0702	● 0703			
- ST Stainless Steel		ENMX 0402 - ST	0.5	0.2 - 0.8	-	0.5					● 1064		● 1065			
		ENMX 0604 - ST	0.8	0.1 - 0.8	-	1.0					● 0973	● 0623	● 0625			● 1184
		ENMX 0905 - ST	1.0	0.2 - 1.2	-	1.5					● 0974	● 0705	● 0706			● 1187
- TR Hardened Steel		ENMX 0402 - TR	0.5	0.2 - 1.3	-	0.5	● 1060	● 1062			● 1059		● 1061			
		ENMX 0604 - TR	0.8	0.3 - 2.5	-	1.0	● 0733	● 0504	○ 0636		● 0823	● 0459				● 1185
		ENMX 0905 - TR	1.0	0.3 - 3.0	-	1.5	● 0735				● 0825	● 0600	● 0874			

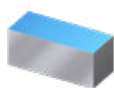
ENMX - High Feed Negative (4 Corners) Technical Information

ENMX 0402



APMXR Radial AP Max
0.5

RP Programmed Corner R	UTCN Uncut Thickness	Overcut
0.8	0	0.25
0.9	0	0.22
1	0.01	0.19



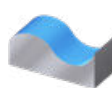
General



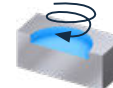
Plunging



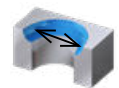
Ramping



Profiling



Helical Interpolation

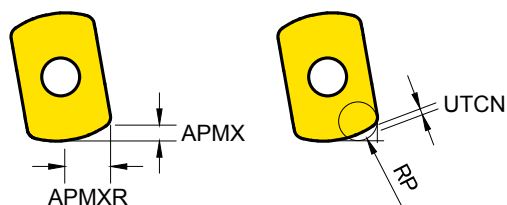


Enlarge Hole

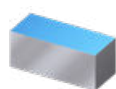
DCX External Cutter Diameter	APMX Maximum Depth of Cut	APMXR Maximum Radial Depth of Cut	RMPX Maximum Ramping Angle(°)	RP Programmed Corner Radius	UTCN Uncut Thickness	Diameter Maximum Cutting Diameter	Pitch Helical Interpolation Pitch	Diameter Minimum Cutting Diameter	Pitch Helical Interpolation Pitch	Ae Enlarge Width
8	0.5	2.4	0.5	0.9	0.22	16	0.2	11.6	0.1	5.6
10	0.5	2.4	0.7	0.9	0.22	20	0.4	15	0.2	7.6
11	0.5	2.4	0.7	0.9	0.22	22	0.4	16.8	0.2	8.6
12	0.5	2.4	1	0.9	0.22	24	0.5	18.4	0.4	9.6
13	0.5	2.4	1.1	0.9	0.22	26	0.5	20	0.5	10.6
16	0.5	2.4	1	0.9	0.22	32	0.5	25.7	0.5	13.6
17	0.5	2.4	1	0.9	0.22	34	0.5	27.6	0.5	14.6
20	0.5	2.4	0.9	0.9	0.22	40	0.5	33.6	0.5	17.6
21	0.5	2.4	0.7	0.9	0.22	42	0.5	35.6	0.5	18.6
25	0.5	2.4	0.7	0.9	0.22	50	0.5	43.4	0.5	22.6
32	0.5	2.4	0.5	0.9	0.22	64	0.5	57.4	0.5	29.6

ENMX 0604

Unit: mm



DCX Cutting Diameter Maximum	APMXR Radial AP Max	RP Programmed Corner R	UTCN Uncut Thickness	Overcut
16	3.5	R2.0	0.31	0.00
16~	3.7	R2.5	0.18	0.18
		R3.0	0.07	0.36



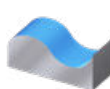
General



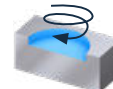
Plunging



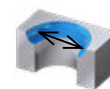
Ramping



Profiling



Helical Interpolation

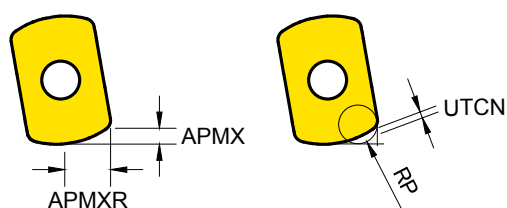


Enlarge Hole

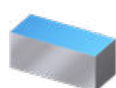
DCX External Cutter Diameter	APMX Maximum Depth of Cut	APMXR Maximum Radial Depth of Cut	RMPX Maximum Ramping Angle(°)	RP Programmed Corner Radius	UTCN Uncut Thickness	Diameter Minimum Cutting Diameter	Diameter Maximum Cutting Diameter	Pitch Helical Interpolation Pitch	Ae Enlarge Width
16	0.9	3.5	2.4°	2.0	0.3	22	32	0.9	12.5
17	0.9	3.5	1.9°	2.0	0.3	24	34	0.9	13.5
20	1	3.7	1.8°	2.0	0.31	29	40	1	16.3
21	1	3.7	1.8°	2.0	0.31	31	42	1	17.3
25	1	3.7	1.2°	2.0	0.31	39	50	1	21.3
26	1	3.7	1.2°	2.0	0.31	41	52	1	22.3
32	1	3.7	0.8°	2.0	0.31	53	64	1	28.3
33	1	3.7	0.8°	2.0	0.31	55	66	1	29.3
40	1	3.7	0.6°	2.0	0.31	69	80	1	36.3
50	1	3.7	0.5°	2.0	0.31	89	98	1	46.3
63	1	3.7	0.4°	2.0	0.31	115	126	1	59.3

ENMX 0905

Unit: mm



APMXR Radial AP Max	RP Programmed Corner R	UTCN Uncut Thickness	Overcut
4.7	R2.5	0.56	0
	R3.0	0.40	0.10
	R3.5	0.24	0.25
	R4.0	0.10	0.41
	R4.5	0	0.49



General



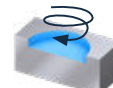
Plunging



Ramping



Profiling



Helical Interpolation



Enlarge Hole

DCX External Cutter Diameter	APMX Maximum Depth of Cut	APMXR Maximum Radial Depth of Cut	RMPX Maximum Ramping Angle(°)	RP Programmed Corner Radius	UTCN Uncut Thickness	Diameter Minimum Cutting Diameter	Diameter Maximum Cutting Diameter	Pitch Helical Interpolation Pitch	Ae Enlarge Width
25	1.5	5	3.8°	2.5	0.56	42	50	1.5	20
26	1.5	5	3.4°	2.5	0.56	44	52	1.5	21
32	1.5	5	2.3°	2.5	0.56	56	64	1.5	27
33	1.5	5	2.2°	2.5	0.56	58	66	1.5	28
40	1.5	5	1.6°	2.5	0.56	72	80	1.5	35
50	1.5	5	1.1°	2.5	0.56	92	100	1.5	45
63	1.5	5	0.8°	2.5	0.56	118	126	1.5	57
80	1.5	5	0.6°	2.5	0.56	152	160	1.5	74

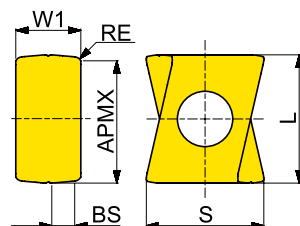
Milling - Shoulder Milling - Inserts

LNHU, LNKU - Tangential Milling Negative (4 Corners)



Refer to
Milling Cutter
p.211

Series	W1	L
LN*U 1306	6.7	13.2



EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30	M30	M40			
				S30		S40			

LNHU	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
NEW LNHU General	LNHU130608R	0.8	0.05-0.3	2.09	12.0	● 0905				● 0723	○ 0640	● 0724	● 0725		



LNKU	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
NEW LNKU General	LNKU130608R	0.8	0.05-0.3	2.09	12.0	● 0906				● 0740		● 0741	● 0742	● 0935	
	LNKU130612R	1.2	0.05-0.3	1.73	12.0	● 0907				● 0764		● 0765	● 0766	● 0936	
	LNKU130616R	1.6	0.05-0.3	1.59	12.0	● 0919				● 1052			● 0782		



TURNING

PARTING & GROOVING

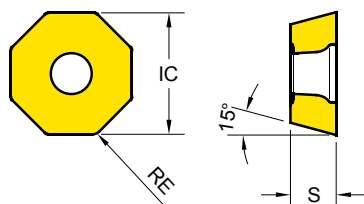
MILLING

DRILLING

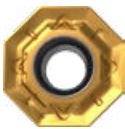
TECHNICAL INFORMATION



Series	IC	S
ODM* 0605	15.9	5.6



EDP 1200.. ●: Stock item ○: Order made item

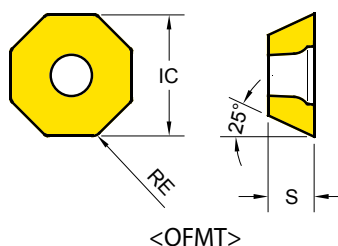
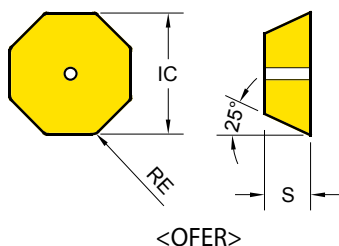
							H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30	M40 S40			
ODMT ODMW	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)		YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
ODMT General 	ODMT 060508	0.8	0.05-0.30	-	3.5		● 1056	● 0513	○ 0659		● 0830	● 0030	● 0675			
ODMW Hard Materials 	ODMW 060508	0.8	0.05-0.30	-	3.5						● 0942	● 0031				

Milling - Face Milling - Inserts

OFER, OFMT - Face Milling Positive (8 Corners)



Refer to
Milling Cutter
p.212



Series	IC	S
OFER 0704	18.05	4.78
OFMT 05T3	12.73	4.06

EDP 1200.. ●: Stock item ○: Order made item

OFER	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
						P20			K30	M30 S30	M30	M40 S40			
	OFER 070405	0.5	0.05-0.30	-	5.0	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
											● 0209				

OFER
General

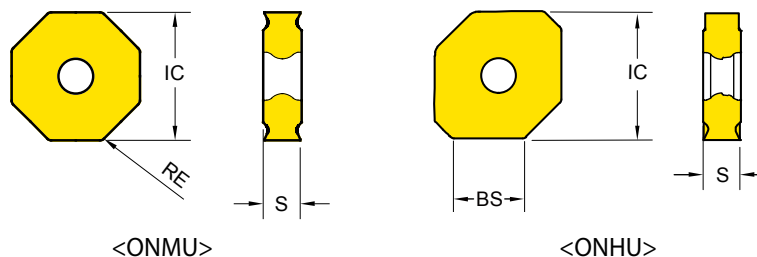


OFMT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
	OFMT 05T308	0.8	0.05-0.20	-	3.3						● 0032				

OFMT
General



Series	IC	S
ON*U 0806	20.2	5.8



EDP 1200.. ●: Stock item ○: Order made item

	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
						P20			K30	M30 S30	M30	M40 S40			
ONMU ONHU						YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
ONHU Wiper Insert 	ONHU 080612	1.2	0.08-0.25	10.6	5.5					● 0899			● 0482	● 0496	
ONMU General 	ONMU 080608	0.8	0.05-0.35	-	5.5	● 0904	● 0609	○ 0657		● 0960	● 0233	● 0670	● 0414		
	ONMU 080612	1.2	0.05-0.35	-	5.5					● 0898		● 0615	● 0542	● 0871	
	ONMU 080620	2.0	0.05-0.35	-	5.5								● 0707		

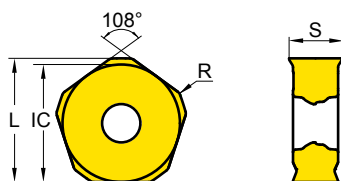
* Wiper Insert can use 4 corners for right handed cutter and 4 corners for left handed cutter

Milling - Face Milling - Inserts

PNMU - Face Milling Negative (10 Corners)



Refer to
Milling Cutter
p.214



Series	KRINS	IC	S
PNMU 1206	36	14.0	5.84

EDP 1200.. ●: Stock item ○: Order made item

	PNMU	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30	M40 S40			
							YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501G	YG904
		PNMU 1206ZNN	0.8	0.05-0.50	2.10	4.0	● 0753	● 0596	○ 0645		● 0826	● 0535	● 0671	● 0534	● 0538	
	PNMU General															
		PNMU 1206 - ST	0.8	0.05-0.30	2.10	4.0					● 0978	● 0761	● 0760			
	- ST Stainless Steel Super Alloy															

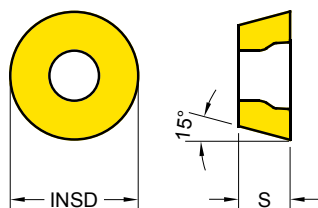
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	INSD	S	Series	INSD	S
RDK* 0501	5	1.4	RDK* 10T3	10	4.0
RDK* 0702	7	2.4	RDK* 1204	12	4.8
RDK* 0802	8	2.4	RDK* 1604	16	4.8

EDP 1200.. ●: Stock item ○: Order made item

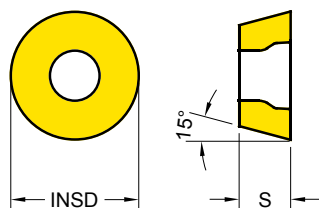
					H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
					P20			K30	M30	M30	M40			
RDKT	Designation	Fz (mm/tooth)	APMX (mm)		YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
RDKT General	RDKT 0802M0	0.05 - 0.25	4.0						● 0943	● 0035				
	RDKT 10T3M0	0.05 - 0.30	5.0				○ 0651		● 0948	● 0041				
	RDKT 1204M0	0.05 - 0.50	6.0				○ 0635		● 0938	● 0034	● 0678			
	RDKT 1604M0	0.05 - 0.50	8.0		● 0915				● 0972	● 0539				
-ST Stainless Steel Super Alloy	RDKT 0802M0 - ST	0.05 - 0.15	4.0						● 0965	● 0292				
	RDKT 10T3M0 - ST	0.05 - 0.20	5.0						● 0966	● 0293	● 0620			
	RDKT 1204M0 - ST	0.05 - 0.30	6.0						● 0967	● 0294	● 0621			
-TR Hardened Steel	RDKT 0802M0 - TR	0.05 - 0.35	4.0		● 0745			○ 0339	● 0837	● 0284				
	RDKT 10T3M0 - TR	0.05 - 0.40	5.0		● 0744			○ 0338	● 0841	● 0285				
	RDKT 1204M0 - TR	0.05 - 0.60	6.0		● 0743		○ 0650	○ 0340	● 0842	● 0272				
RDKW Hard Materials	RDKW 0501M0	0.05 - 0.20	2.5					○ 0412	● 0843	● 0207				
	RDKW 0702M0	0.05 - 0.25	3.5				○ 0652	○ 0439	● 0844	● 0208				
	RDKW 0802M0	0.05 - 0.30	4.0		● 0909			○ 0440	● 0950	● 0043				
	RDKW 10T3M0	0.05 - 0.40	5.0		● 0908			○ 0441	● 0947	● 0040				
	RDKW 1204M0	0.05 - 0.60	6.0				○ 0647	○ 0442	● 0949	● 0042				
	RDKW 1604M0	0.05 - 0.60	8.0		● 0817				● 0720					

Milling - Profiling - Inserts

RDMT / W- Profiling Positive (Round)



Refer to
Milling Cutter
p.215 - 216



Series	INSD	S	Series	INSD	S
RDM* 0602	6	2.38	RDM* 10T3	10	3.97
RDM* 0802	8	2.38	RDM* 1204	12	4.76
RDM* 0803	8	3.18			

EDP 1200.. ●: Stock item ○: Order made item

	RDMT RDMW	Designation	Fz (mm/tooth)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
					P20			K30	M30 S30	M30	M40 S40			
RDMT General		RDMT 0602M0	0.05 - 0.20	3.0	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
									●	●				
										0693				
										●				
										0245				
RDMW Hard Materials		RDMT 0803M0	0.05 - 0.25	4.0						●				
										0225				
		RDMT 10T3M0	0.05 - 0.30	5.0						●				
										0246				
		RDMT 1204M0	0.05 - 0.50	6.0					●	0845	0226			
		RDMW 0802M0	0.05 - 0.30	4.0						●				
										0227				
		RDMW 10T3M0	0.05 - 0.40	5.0						●				
		RDMW 1204M0	0.05 - 0.60	6.0						●				
										0228				
										●				
										0229				

TURNING

PARTING & GROOVING

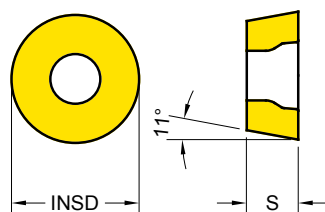
MILLING

DRILLING

TECHNICAL INFORMATION

Milling - Profiling - Inserts

RPMX - Profiling Positive (Round)



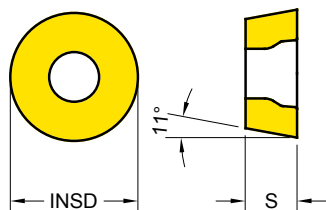
Series	INSD	S
RPM* 0803M0	8	2.78
RPM* 10T3M0	10	3.97
RPM* 1204M0	12	4.76

EDP 1200.. ●: Stock item ○: Order made item

					H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
					P20			K30	M30 S30	M30	M40 S40			
RPMX	Designation	Fz (mm/tooth)	APMX (mm)		YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
NEW -XSF		RPMX 0803M0 - XSF	0.04 - 0.1	4.0										● 1192
		RPMX 10T3M0 - XSF	0.04 - 0.1	5.0										● 1191
		RPMX 1204M0 - XSF	0.04 - 0.1	6.0										● 1189
NEW -XSM		RPMX 0803M0 - XSM	0.04 - 0.12	4.0										● 1193
		RPMX 10T3M0 - XSM	0.04 - 0.12	5.0										● 1190
		RPMX 1204M0 - XSM	0.04 - 0.12	6.0										● 1188

Milling - Profiling - Inserts

RPMT / W - Profiling Positive (Round)



Series	INSD	S	Series	INSD	S
RPM* 08T2	8	2.78	RPM* 10T3	10	3.97
RPM* 1003	10	3.18	RPM* 1204	12	4.76

EDP 1200.. ●: Stock item ○: Order made item

RPMT RPMW		Designation	Fz (mm/tooth)	APMX (mm)	H20 P20	P15	P25	P30 K30	P30 M30 S30	P30 M30	P40 M40 S40	K10	K15	S40
RPMT General		RPMT 08T2M0	0.05 - 0.25	4.0	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
							○ 0660		● 0945	● 0038	● 0676			
		RPMT 10T3M0	0.05 - 0.30	5.0			○ 0644		● 0944	● 0036	● 0665			
		RPMT 1204M0	0.05 - 0.50	6.0		● 0415	○ 0643	○ 0401	● 0831	● 0037	● 0664		● 0462	
-ST Stainless Steel Super Alloy		RPMT 1606M0	0.05 - 0.60	8.0							● 0923			
		RPMT 1204M0 - ST	0.05 - 0.30	6.0					● 0958	● 0230	● 0667			
-TR Hardened Steel		RPMT 1204M0 - TR	0.05 - 0.55	6.0					● 0968					
RPMW Hard Materials		RPMW 1003M0	0.05 - 0.40	5.0	● 0911		○ 0646	○ 0402	● 0957	● 0204				
		RPMW 1204M0	0.05 - 0.60	6.0			○ 0648		● 0946	● 0039				

TURNING

PARTING & GROOVING

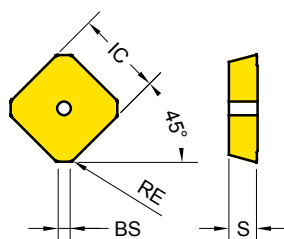
MILLING

DRILLING

TECHNICAL INFORMATION

Milling - Face Milling - Inserts

SDCN, SDKN - Face Milling Positive (4 Corners ISO)



Series	IC	S
SD** 1203	12.70	3.18
SD** 1504	15.88	4.76

EDP 1200.. ●: Stock item ○: Order made item

							H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30	M40 S40			
SDCN SDKN	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)		YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SDCN Ground insert	SDCN 1203 AESN - M	1.0	0.05-0.20	2.04	6.0			● 0135								
	SDCN 1504 AESN - M	1.0	0.05-0.20	2.19	8.0			● 0150								
	SDCN 1504 AESN - MR	1.0	0.05-0.20	2.19	8.0			● 0201								
SDKN Hard Materials	SDKN 1203 AETN	0.5	0.05-0.30	1.85	6.0						● 0954	● 0058				
	SDKN 1203 AETN - PW	0.4	0.05-0.30	1.98	6.0							● 0253				
	SDKN 1203 AETN - GW	1.3	0.05-0.30	1.85	6.0						● 0961	● 0251				
	SDKN 1203 AESN - GW	1.3	0.05-0.30	1.85	6.0		● 0762									
	SDKN 1504 AETN	0.45	0.05-0.30	2.00	8.0						● 0846	● 0059				
	SDKN 1504 AETN - PW	0.4	0.05-0.30	1.95	8.0							● 0288				
	SDKN 1504 AETN - GW	1.3	0.05-0.30	2.05	8.0						● 0937	● 0286				

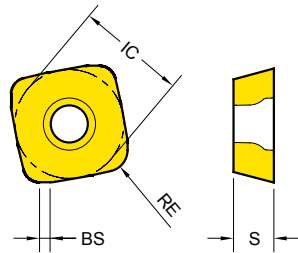
- PW : For Improved Surface Roughness
- GW : Ground Wiper
- M : For Mold & Die
- MR : For Mold & Die Roughing

Milling - High Feed Milling - Inserts

SDMT / W - High Feed Positive (4 Corners)



Refer to
Milling Cutter
p.217

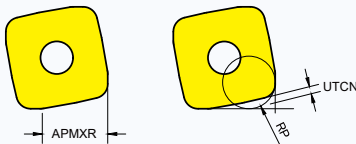


Series	IC	S
SDM* 1204	12.7	4.7

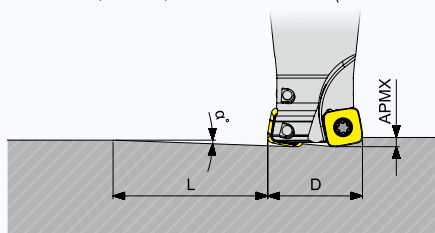
EDP 1200.. ●: Stock item ○: Order made item

	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)										
						YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SDMT															
SDMW															
-ST Stainless Steel Super Alloy	SDMT 120420 - ST	1.9	0.60 - 1.20	1.45	1.8					● 0964	● 0274	● 0666			
SDMW Hard Materials	SDMW 120420	1.9	0.60 - 1.40	1.4	1.8	● 0737	○ 0634	○ 0341	● 0827	● 0273	● 0691				

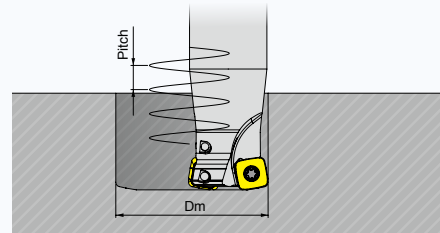
Technical Information



APMXR Radial AP Max	RP Programmed Corner R	UTCN Uncut Thickness
8.6	3.5	0.94

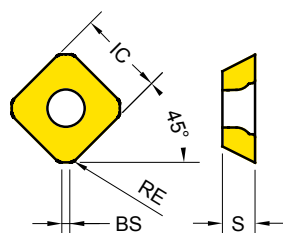


Linear Ramping Data				
	D	α°	APMX	L (cutting length)
Metric	32	2.1	1.8	49
	33	2.0	1.8	52
	35	1.6	1.8	64
	40	2.7	1.8	38
	50	2.0	1.8	52
	63	1.4	1.8	74
	80	1.0	1.8	103
	100	0.8	1.8	129
	125	0.6	1.8	172
	160	0.4	1.8	258
Inch	1.25	2.4	0.071	0.067
	1.5	3.1	0.071	0.052
	2.0	2.0	0.071	0.080
	2.5	1.4	0.071	0.114
	3.0	1.1	0.071	0.145
	4.0	0.8	0.071	0.200
	5.0	0.6	0.071	0.266
	6.0	0.5	0.071	0.320



Helical Interpolation Data					
	D	Dm (max)	Pitch	Dm (minimum)	Pitch
Metric	32	64	1.8	54	1.8
	33	66	1.8	56	1.8
	35	70	1.8	59	1.8
	40	80	1.8	69	1.8
	50	100	1.8	89	1.8
	63	126	1.8	115	1.8
	80	160	1.8	149	1.8
	100	200	1.8	189	1.8
	125	250	1.8	239	1.8
	160	320	1.8	309	1.8
Inch	1.25	2.5	0.071	2.1	0.071
	1.5	3	0.071	2.6	0.071
	2.0	4	0.071	3.6	0.071
	2.5	5	0.071	4.6	0.071
	3.0	6	0.071	5.6	0.071
	4.0	8	0.071	7.6	0.071
	5.0	10	0.071	9.6	0.071
	6.0	12	0.071	11.6	0.071

Series	IC	S
SEGT 1204	12.74	4.91
SEGT 12T3	13.40	4.03



EDP 1200.. ●: Stock item ○: Order made item

SEGT 1204	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	N15
						P20			K30	M30 S30	M30	M40 S40			
						YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50
	SEGT 1204 - AL	1.2	0.05-0.30	2.01	6.0										● 0467

-AL
Aluminium


SEGT 12T3	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50
	SEGT 12T3 - AL	1.2	0.05-0.30	1.94	6.0										● 0468

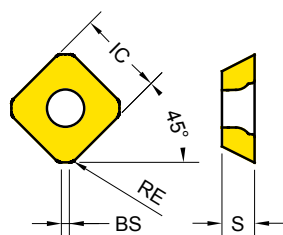
-AL
Aluminium


Milling - Face Milling - Inserts

SEKT - Face Milling Positive (4 Corners)



Refer to
Milling Cutter
p.218



Series	IC	S
SEKT 1204	12.7	4.9
SEKT 12T3	13.4	4

EDP 1200.. ●: Stock item ○: Order made item

SEKT 1204		Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SEKT 1204 General		SEKT 1204 AFTN	1.1	0.20-0.35	1.18	6.0				○ 0416	○ 0833	● 0055				
-ST Stainless Steel Super Alloy		SEKT 1204 -ST	1.1	0.08-0.30	2.00	6.0				● 0962	● 0257	● 0722				

SEKT 12T3		Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SEKT 12T3 General		SEKT 12T3 AGTN	1.5	0.05-0.24	1.30	6.0					● 0953	● 0056				
-ST Stainless Steel Super Alloy		SEKT 12T3 -ST	1.5	0.05-0.12	2.00	6.0					● 0963	● 0271	● 0689			

TURNING

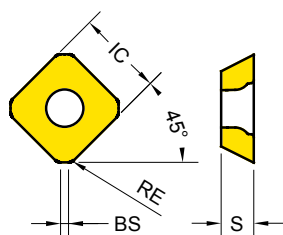
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Milling - Face Milling - Inserts

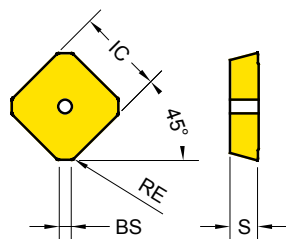
SEMT - Face Milling Positive (4 Corners)


Series	IC	S
SEMT1204	12.92	5.1
SEMT13T3	13.40	4.0

EDP 1200.. ●: Stock item ○: Order made item

SEMT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
						P20			K30	M30 S30	M30	M40 S40			
SEMT 1204 General 	SEMT 1204 AFTN	1.2	0.05-0.24	1.24	6.0	YG012	YG712	YG713	YG622	YG612	YG602 ● 0052	YG613	YG5020	YG501	YG904
SEMT 13T3 General 	SEMT 13T3 AGSN	1.5	0.05-0.24	1.31	6.0						● 0203				

Milling - Face Milling - Inserts

SEKR / N - Face Milling Positive (4 Corners ISO)


Series	IC	S
SEK* 1203	12.7	3.2

EDP 1200.. ●: Stock item ○: Order made item

SEKR SEKN		Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904	
SEKR General		SEKR 1203 AFTN	0.4	0.05-0.23	1.40	6.0					○ 0832	● 0051					
		SEKR 1203 AFTN - PW	0.4	0.05-0.24	2.00	6.0						● 0296					
SEKN Hard Materials		SEKN 1203 AFTN	0.4	0.05-0.30	1.40	6.0					● 0952	● 0054					
		SEKN 1203 AFTN - GW	0.4	0.05-0.33	2.00	6.0	● 0774					● 0304					
		SEKN 1203 AFTN - PW	0.4	0.05-0.33	2.00	6.0						● 0297					

- PW : For Improved Surface Roughness

- GW : Ground Wiper

TURNING

PARTING & GROOVING

MILLING

DRILLING

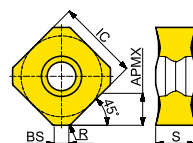
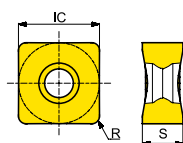
TECHNICAL INFORMATION

Milling - Face Milling - Inserts

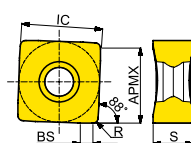
SNGX - Face Milling Negative (8 Corners)

 Refer to
Milling Cutter
p. 220

Series	IC	S
SN** 1206	12.7	6.25



<ANN>



<QNN>

EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30 S30	M30	M40 S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
● 1021				● 1023		● 1024			
● 1079	● 1081			● 1078		● 1080	● 1082	● 1083	
● 1016	● 1121			● 1015		● 1120	● 1122	● 1019	

SNGX

Designation

RE
(mm)

Fz
(mm/tooth)

BS
(mm)

APMX
(mm)

NEW
SNGX
General


SNGX 120612 - GN

1.2

0.05 - 0.35

-

10.5

SNGX 1206 ANN - GN

0.4

0.05 - 0.35

2.3

6.0

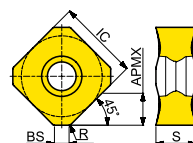
SNGX 1206 QNN - GN

0.8

0.05 - 0.35

2

9.8



<ANN>

EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	N15
P20			K30	M30 S30	M30	M40 S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50
									● 1086

SNGX

Designation

RE
(mm)

Fz
(mm/tooth)

BS
(mm)

APMX
(mm)

NEW
-AL
Aluminium


SNGX 1206 ANN - AL

0.4

0.05 ~ 0.35

2.3

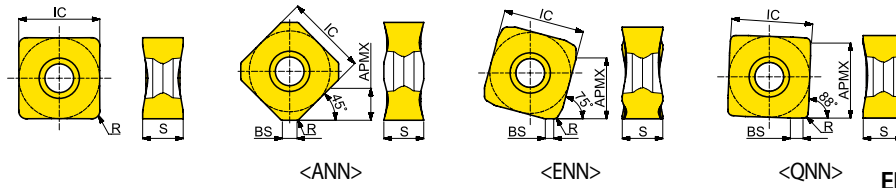
6.0

Milling - Face Milling - Inserts

SNMX - Face Milling Negative (8 Corners)



Refer to
Milling Cutter
p.220



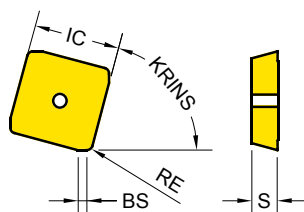
Series	IC	S
SN** 1206	12.7	6.25

EDP 1200.. ●: Stock item ○: Order made item

						H20	P15	P25	P30	P30	P30	P40	K10	K15	S40	
						P20			K30	M30 S30	M30	M40 S40				
SNMX		Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SNMX General		SNMX 1206 ANN	0.8	0.05 - 0.24	1.70	6.0	● 0754		○ 0658		● 0959	● 0231	● 0674	● 0460	● 0461	
		SNMX 1206 QNN	0.8	0.05 - 0.24	1.99	9.8	● 0901	● 0732						● 0731	● 0686	
		SNMX 120612 - GN	1.2	0.05 - 0.35		10.5	● 1018	● 1139			● 1054		● 1138	● 1140	● 1141	
		SNMX 1206 ANN - GN	0.4	0.05 - 0.35	2.3	6.0	● 1071	● 1073			● 1070		● 1072	● 1074	● 1075	
		SNMX 1206 ENN - GN	0.8	0.05 - 0.35	1.3	9.5	● 1093	● 1095			● 1092		● 1094	● 1096	● 1097	
		SNMX 1206 QNN - GN	0.8	0.05 - 0.35	2	9.8	● 1017	● 1113			● 1111		● 1112	● 1114	● 1115	
-ST Stainless Steel Super Alloy		SNMX 1206 ANN - ST	0.4	0.05 - 0.25	2.3	6.0					● 1076		● 1077			
		SNMX 1206 QNN - ST	0.8	0.05 - 0.25	2	9.8					● 1116		● 1117			

Milling - Face Milling - Inserts

SPCN, SPKN / R - Face Milling Positive (4 Corners ISO)

Refer to
Milling Cutter
p. 219


Series	KRINS	IC	S
SP** 1203	75°	12.70	3.18
SP** 1504	75°	15.88	4.76

EDP 1200.. ●: Stock item ○: Order made item

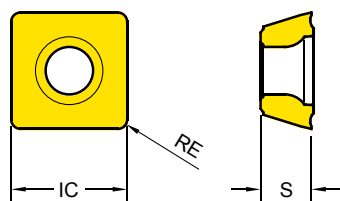
							H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30 S30	M40 S40			
SPCN SPKN SPKR	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)		YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
SPCN Ground insert 	SPCN 1203 EDSR - M	0.8	0.10-0.20	1.82	8.0			● 0081								
	SPCN 1203 EDSR - MR	0.8	0.10-0.20	1.77	8.0			● 0198								
	SPCN 1504 EDSR - M	0.8	0.10-0.20	1.92	12.0			● 0098								
	SPCN 1504 EDSR - MR	0.8	0.10-0.20	1.86	12.0			● 0199								
SPKN Hard Materials 	SPKN 1203 EDTR	0.8	0.05-0.30	1.40	8.0		○ 0910				● 0848	● 0048				
	SPKN 1203 EDTR - GW	0.6	0.05-0.38	1.50	8.0						● 0847	● 0280				
	SPKN 1203 EDTR - PW	0.8	0.05-0.38	1.50	8.0							● 0279				
	SPKN 1504 EDTR	0.8	0.05-0.24	1.30	12.0		○ 0900				● 0850	● 0049				
	SPKN 1504 EDTR - GW	0.8	0.05-0.38	2.20	12.0						● 0849	● 0305				
	SPKN 1504 EDTR - PW	0.8	0.05-0.38	2.13	12.0							● 0299				
SPKR General 	SPKR 1203 EDTR	0.8	0.05-0.24	1.40	8.0						● 0951	● 0050				
	SPKR 1203 EDTR - PW	0.8	0.05-0.11	1.54	8.0							● 0298				

- PW : For Improved Surface Roughness
- GW : Ground Wiper
- M : For Mold & Die
- MR : For Mold & Die Roughing

Milling - Face Milling - Inserts

SPMT - Universal Positive (4 Corners)

Series	AS	IC	S
SPMT 1204	11°	12.7	4.81



EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30 S30	M30	M40 S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
● 0903				● 0851	● 0223	● 0778			

SPMT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)
------	-------------	------------	------------------	------------	--------------

SPMT
General



SPMT 120408	0.8	0.05-0.24	-	10.0

TURNING

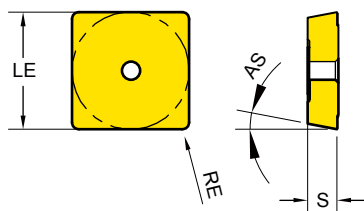
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Milling - Face Milling - Inserts

SPUN - Universal Positive (4 Corners ISO)


Series	AS	IC	S
SPUN 1203	11°	12.7	3.2

EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30	M30	M40			
			S30	S30	S30	S40			

SPUN	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
	SPUN 120308	0.8	0.05-0.29								● 0224				

SPUN
General


TURNING

PARTING & GROOVING

MILLING

DRILLING

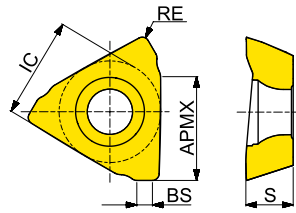
TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

TPCT - Shoulder Milling Positive (3 Corners)



Refer to
Milling Cutter
p.222 - 226



Series	IC	S
TP** 0703	5.51	2.92
TP** 1104	7.54	4.28
TP** 1605	11.66	5.38

EDP 1200.. ●: Stock item ○: Order made item

TPCT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	H20	P15	P25	P30	P30	P30	P40	K10	K15	N15
						P20			K30	M30 S30	M30	M40 S40			
						YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50
	TPCT 070302R - AL	0.2	0.05~0.2	1.35	4.5										● 1008
	TPCT 070304R - AL	0.4	0.05~0.2	1.15	4.5										● 1009
	TPCT 070308R - AL	0.8	0.05~0.2	0.75	4.5										● 1011
	TPCT 110404R - AL	0.4	0.05~0.25	1.5	7.0										● 0894
	TPCT 110408R - AL	0.8	0.05~0.25	1.1	7.0										● 0895
	TPCT 160504R - AL	0.4	0.05~0.5	2.4	11.0										● 0896
	TPCT 160508R - AL	0.8	0.05~0.5	1.9	11.0										● 0897

NEW

-AL
Aluminium



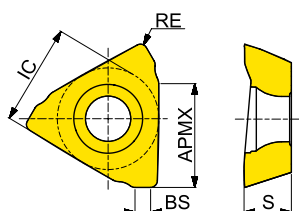
TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION



Series	IC	S
TP** 0703	5.51	2.92
TP** 1104	7.54	4.28
TP** 1605	11.66	5.38

EDP 1200.. ●: Stock item ○: Order made item

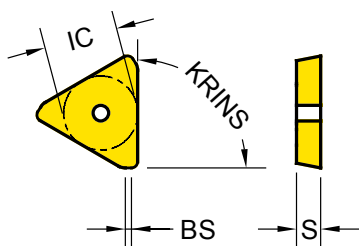
						H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
						P20			K30	M30 S30	M30	M40 S40			
TPKT	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
TPKT General 	TPKT 070302R - GN	0.2	0.05 - 0.2	1	4.5	● 0987	● 0989			● 0986		● 0988			
	TPKT 070304R - GN	0.4	0.05 - 0.2	0.9	4.5	● 0991	● 0993			● 0990		● 0992	● 0994	● 0995	● 1196
	TPKT 070308R - GN	0.8	0.05 - 0.2	0.5	4.5	● 0997	● 0999			● 0996		● 0998	1000	1001	
	TPKT 110404R - GN	0.4	0.05 - 0.24	1.6	7.0	● 0802	● 0807			● 0801			● 0808	● 0928	
	TPKT 110408R - GN	0.8	0.05 - 0.24	1.15	7.0	● 0804	● 0811			● 0803			● 0812	● 0929	● 1194
	TPKT 110412R - GN	1.2	0.05 - 0.24	0.8	7.0	● 1206	● 1207			● 1205			● 1209	● 1208	
	TPKT 110416R - GN	1.6	0.05 - 0.24	0.6	6.5	● 0806	● 0815			● 0805			● 0816	● 0930	
	TPKT 110420R - GN	2	0.05 - 0.24	0.13	6.5	● 1213	● 1214			● 1212			● 1216	● 1215	
	TPKT 160504R - GN	0.4	0.05 - 0.27	2.2	11.0	● 0888	● 0889			● 0887			● 0890	● 0931	
	TPKT 160508R - GN	0.8	0.05 - 0.27	1.79	11.0	● 0781	● 0779			● 0718			● 0780	● 0932	● 1195
	TPKT 160512R - GN	1.2	0.05 - 0.27	1.29	11.0	● 1218	● 1219			● 1217			● 1221	● 1220	
	TPKT 160516R - GN	1.6	0.05 - 0.27	1.2	11.0	● 0785	● 0786			● 0784			● 0787	● 0933	
-ST Stainless Steel Super Alloy 	TPKT 160520R - GN	2	0.05 - 0.27	0.8	11.0	● 1225	● 1226			● 1224			● 1228	● 1227	
	TPKT 160524R - GN	2.4	0.05 - 0.27	0.7	11.0	● 0789	● 0790			● 0788			● 0791	● 0934	
	TPKT 070302R - ST	0.2	0.05 - 0.13	1	4.5					● 1002		● 1003			
	TPKT 070304R - ST	0.4	0.05 - 0.13	0.9	4.5					● 1004		● 1005			
	TPKT 070308R - ST	0.8	0.05 - 0.13	0.5	4.5					● 1006		● 1007			
	TPKT 110404R - ST	0.4	0.05 - 0.15	1.6	7.0					● 0809		● 0810			
	TPKT 110408R - ST	0.8	0.05 - 0.15	1.15	7.0					● 0813		● 0814			
	TPKT 110412R - ST	1.2	0.05 - 0.15	0.8	7.0					● 1210		● 1211			
	TPKT 160504R - ST	0.4	0.05 - 0.15	2.2	11.0					● 0891		● 0892			
	TPKT 160508R - ST	0.8	0.05 - 0.15	1.79	11.0					● 0758		● 0759			
	TPKT 160512R - ST	1.2	0.05 - 0.15	1.29	11.0					● 1222		● 1223			

Milling - Shoulder Milling - Inserts

TPCN / TPKN / KR - Shoulder Milling Positive (3 Corners ISO)



Refer to
Milling Cutter
p.221



Series	KRINS	IC	S
TP** 1603	90	9.53	3.18
TP** 2204	90	12.7	4.85

EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30	M30	M40			
				S30	S30	S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
	● 0180								
	● 0202								
				● 0956	● 0062	● 1012			
					● 0306				
					● 0302				
	● 0902			● 0852	● 0063				
					● 0307				
					● 0303				
				● 0955	● 0060	● 0690			
					● 0300				
				● 0853	● 0061	● 0715			
					● 0301				

TPCN TPKN TPKR

Designation

RE
(mm)

Fz
(mm/tooth)

BS
(mm)

APMX
(mm)

TPCN
Ground insert



TPCN 2204 PDSR - M	0.05 - 0.20	1.76	18.0
TPCN 2204 PDSR - MR	0.05 - 0.20	1.76	18.0

TPKN
Hard
Materials



TPKN 1603 PDTR	0.05 - 0.21	1.2	12.0
TPKN 1603 PDTR - GW	0.05 - 0.15	1.6	12.0
TPKN 1603 PDTR - PW	0.05 - 0.30	1.2	12.0
TPKN 2204 PDTR	0.05 - 0.24	1.7	18.0
TPKN 2204 PDTR - GW	0.05 - 0.45	2.5	18.0
TPKN 2204 PDTR - PW	0.05 - 0.29	1.7	18.0

TPKR
General



TPKR 1603 PDTR	0.15 - 0.28	1.2	12.0
TPKR 1603 PDTR - PW	0.11 - 0.20	1.2	12.0
TPKR 2204 PDTR	0.18 - 0.35	1.7	18.0
TPKR 2204 PDTR - PW	0.18 - 0.35	1.7	18.0

- PW : For Improved Surface Roughness
- GW : Ground Wiper
- M : For Mold & Die
- MR : For Mold & Die Roughing

TURNING

PARTING & GROOVING

MILLING

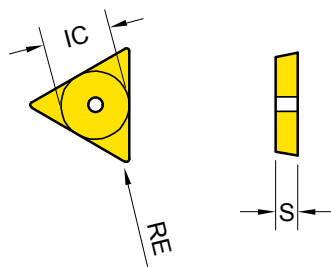
DRILLING

TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

TPUN - Universal Positive (3 Corners ISO)

Series	IC	S
TPUN 1603	9.53	3.18



EDP 1200.. ●: Stock item ○: Order made item

H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
P20			K30	M30	M30	M40			
			S30	S30	S30	S40			
YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904
					● 0064				

TPUN

Designation

RE
(mm)

Fz
(mm/tooth)

BS
(mm)

APMX
(mm)

TPUN 160308

0.8

0.08-0.15

TPUN


TURNING

PARTING & GROOVING

MILLING

DRILLING

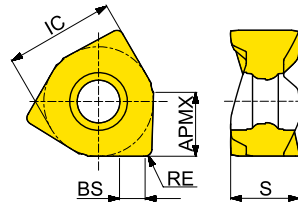
TECHNICAL INFORMATION

Milling - Shoulder Milling - Inserts

WNEX - Shoulder Milling Negative (6 Corners)



Refer to
Milling Cutter
p.227 - 228



Series	IC	S
WNE* 0403	7.0	3.60
WNE* 0806	12.9	6.25

EDP 1200.. ●: Stock item ○: Order made item

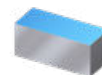
							H20	P15	P25	P30	P30	P30	P40	K10	K15	S40
							P20			K30	M30 S30	M30	M40 S40			
WNEX	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG904	
WNEX General 	WNEX 040304R -GN	0.4	0.05~0.24	2	4.0	● 1029	● 1031			● 1028		● 1030	● 1032	● 1033		
	WNEX 040308R -GN	0.8	0.05~0.24	1.65	4.0	● 1037	● 1039			● 1036		● 1038	● 1040	● 1041		
	WNEX 040312R -GN	1.2	0.05~0.24	1.3	4.0	● 1045	● 1047			● 1044		● 1046	● 1048	● 1049		
	WNEX 080604R -GN	0.4	0.05 - 0.26	3.2	7.0	● 0856	● 0857			● 0855			● 0858	● 0924		
	WNEX 080608R -GN	0.8	0.05 - 0.26	2.8	7.0	● 0859	● 0792			● 0854		● 0793	● 0794	● 0795		
	WNEX 080612R -GN	1.2	0.05 - 0.26	2.4	7.0	● 0877	● 0878			● 0885			● 0879	● 0925		
	WNEX 080616R -GN	1.6	0.05 - 0.26	2.0	7.0	● 0861	● 0862			● 0860			● 0863	● 0926		
	WNEX 080620R -GN	2.0	0.05 - 0.26	1.6	7.0	● 0882	● 0883			● 0886			● 0884	● 0927		
-ST Stainless Steel Super Alloy 	WNEX 040304R -ST	0.4	0.05~0.16	2	4.0					● 1034		● 1035				
	WNEX 040308R -ST	0.8	0.05~0.16	1.65	4.0					● 1042		● 1043				
	WNEX 040312R -ST	1.2	0.05~0.16	1.3	4.0					● 1050		● 1051				
	WNEX 080604R -ST	0.4	0.05 - 0.19	3.6	7.0					● 0864		● 0865				
	WNEX 080608R -ST	0.8	0.05 - 0.19	3.3	7.0					● 0866		● 0867				
	WNEX 080612R -ST	1.2	0.05 - 0.19	2.8	7.0					● 0875		● 0876				
	WNEX 080616R -ST	1.6	0.05 - 0.19	2.4	7.0					● 0868		● 0869				
	WNEX 080620R -ST	2.0	0.05 - 0.19	2.0	7.0					● 0880		● 0881				

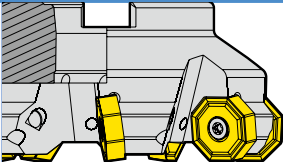
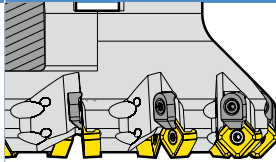
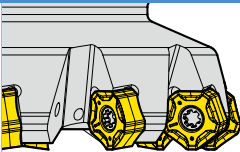
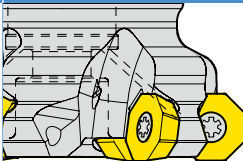
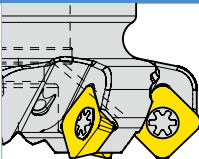
							H20	P15	P25	P30	P30	P30	P40	K10	K15	N15
							P20			K30	M30 S30	M30	M40 S40			
WNEX	Designation	RE (mm)	Fz (mm/tooth)	BS (mm)	APMX (mm)	YG012	YG712	YG713	YG622	YG612	YG602	YG613	YG5020	YG501	YG50	
NEW -AL Aluminium 	WNEX 080604R -AL	0.4	0.05 - 0.4	4	7.0										● 1025	
	WNEX 080608R -AL	0.8	0.05 - 0.4	3.4	7.0										● 1026	

Milling Cutters Overview

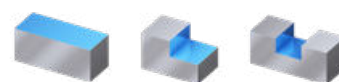
Mounting Bolt : p. 229

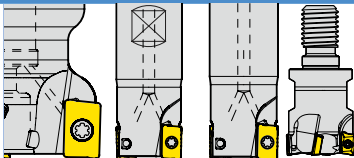
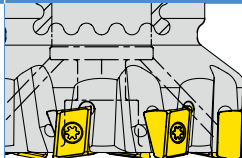
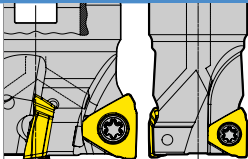
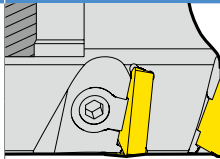
Face Milling



Negative Octagonal					Negative Square				
Cutter			 ONMU 0806				 SNMX 1206		
APMX	5.5		6.0						
DC	Ø63-315		Ø50-200						
page	213		220						
Negative 10 Corner				Positive Octagonal					
Cutter			 PNMU 1206				 ODMT/ ODMW 0605		 OFER 0704
APMX	4.0		3.5		5.0				
DC	Ø50-125		Ø63-125		Ø63-160				
page	214		212		212				
Positive Square					ISO				
Cutter					 SPKN/SPKR/SPCN 1203				
APMX	6.0		6.0		8.0				
DC	Ø40-160		Ø50-160		Ø50-200				
page	218		219						

Shoulder Milling

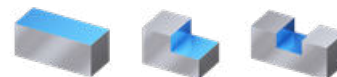


2 Corner Positive					4 Corner Negative	
Cutter						
APMX	9.0 14.0				11.0	
DC	Ø16-100 Ø25-200				Ø40-160	
page	204-205 206-207				211	
3 Corner Positive					ISO	
Cutter						
	 TPKT 0703 TPKT 1104 TPKT 1605				TPKN/TPKR/ TPCN 1603	TPKN/TPKR/ TPCN 2204
APMX	4.5 7.0 11.0				12.0	18.0
DC	12-52 20-63 32-200				Ø50-125	Ø63-315
page	222 224 226				221	221

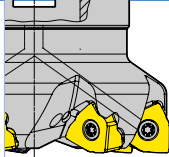
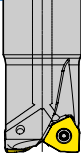
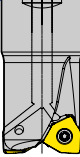
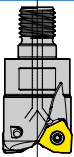
Milling Cutters Overview

Mounting Bolt : p. 229

Shoulder Milling



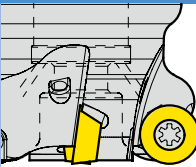
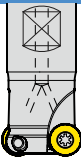
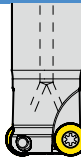
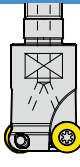
6 Corner Negative

Cutter						
APMX					NEW WEX0403	WEX0806
DC					4.0	7.0
page					Ø20-52	Ø32-125
					227	228

Profiling



Round Positive

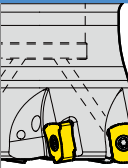
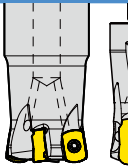
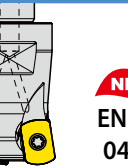
Cutter								
APMX					0802	10T3	1204	
DCX					4.0	5.0	6.0	
page					Ø16-25	Ø20-63	Ø25-100	
					215	215	216	

High Feed Milling



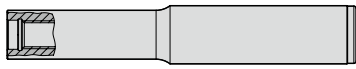
Negative 4 Corner

Positive 4 Corner

Cutter							
APMX				NEW ENMX 0402	ENMX 0604	ENMX 0905	SDMT/SDMW 1204
DCX				0.5	0.9-1.0	1.5	1.3
page				Ø8-32	Ø16-50	Ø25-125	Ø32-100
				208	209	210	217

Modular Shank

Modular Shank for Modular Head

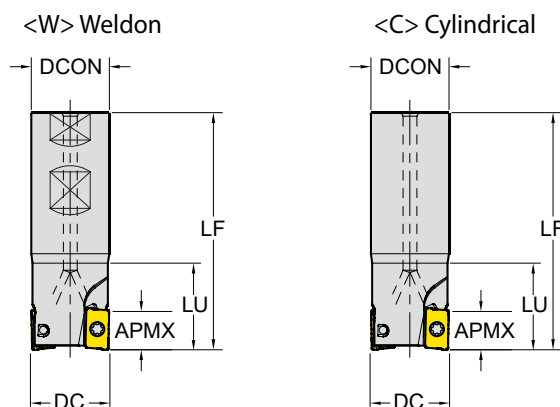
Cutter		M08 - M16
page		229

Milling - Shoulder Milling - Cutter

Cutters for APKT

Entering Angle : 90°

2 Corner Positive


CICT : Number of Inserts
CBDP : Connection Bore Depth

□ : Refer to p. 171

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LU	LF	TYPE	DCON	CBDP	DCSFMS	
APKT 1003	9.0	E90 - APKT10 - D16Z2C16 - L100	0083	16	2	40	100	Cylindrical	16	-	-	●
		E90 - APKT10 - D16Z2C16 - L120	0532	16	2	30	120		16	-	-	●
		E90 - APKT10 - D16Z2C16 - L150	0154	16	2	40	150		16	-	-	●
		E90 - APKT10 - D16Z2C16 - L200	0533	16	2	100	200		16	-	-	●
		E90 - APKT10 - D20Z2C20 - L250	0534	20	2	150	250		20	-	-	●
		E90 - APKT10 - D20Z3C20 - L100	0535	20	3	30	100		20	-	-	●
		E90 - APKT10 - D20Z3C20 - L120	0085	20	3	40	120		20	-	-	●
		E90 - APKT10 - D20Z3C20 - L150	0536	20	3	50	150		20	-	-	●
		E90 - APKT10 - D20Z3C20 - L200	0270	20	3	100	200		20	-	-	●
		E90 - APKT10 - D25Z3C25 - L100	0537	25	3	30	100		25	-	-	●
		E90 - APKT10 - D25Z3C25 - L120	0186	25	3	40	120		25	-	-	●
		E90 - APKT10 - D30Z4C25 - L100	0122	30	4	30	100		25	-	-	●
		E90 - APKT10 - D30Z4C25 - L120	0086	30	4	30	120		25	-	-	●
		E90 - APKT10 - D32Z4C25 - L100	0538	32	4	35	100		25	-	-	●
		E90 - APKT10 - D32Z4C25 - L150 - WOC	0539	32	4	35	150		25	-	-	X
		E90 - APKT10 - D12Z1W16 - L100	0540	12	1	30	100	Weldon	16	-	-	●
		E90 - APKT10 - D14Z1W16 - L100	0541	14	1	30	100		16	-	-	●
		E90 - APKT10 - D16Z2W16 - L100	0542	16	2	30	100		16	-	-	●
		E90 - APKT10 - D16Z2W16 - L85	0082	16	2	-	85		16	-	-	●
		E90 - APKT10 - D18Z2W16 - L100	0543	18	2	30	100		16	-	-	●

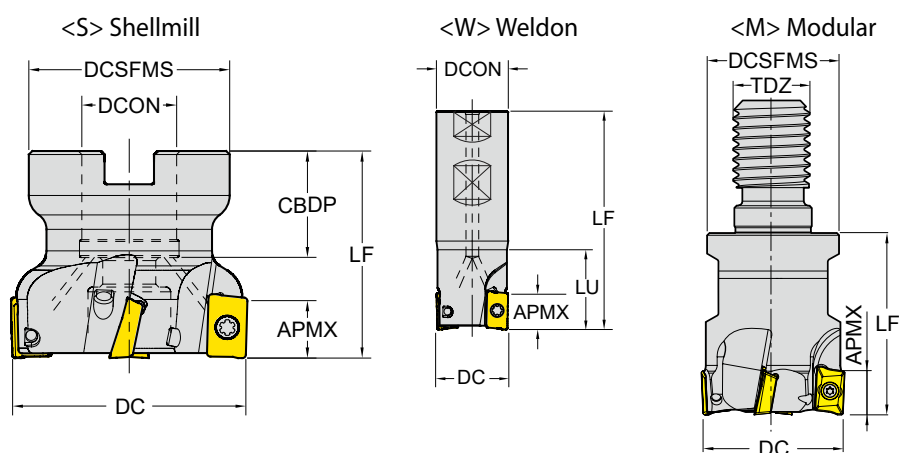
▶ NEXT PAGE

* Clamping Torque (Nm) 1.2Nm

APKT10	Screw (Cutter D16~D20)	Screw (Cutter D20~)	Wrench
Description	TP072505	TP072506	TPWFTP07
EDP	18000016	18000013	18000001

Milling - Shoulder Milling - Cutter Cutters for APKT

Entering Angle : 90°
2 Corner Positive



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 171

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LU	LF	TYPE	DCON	CDBP	DCSFMS	
APKT 1003	9.0	E90 - APKT10 - D20Z3W20 - L100	0461	20	3	30	100	Weldon	20	-	-	●
		E90 - APKT10 - D20Z3W20 - L90	0084	20	3	40	90		20	-	-	●
		E90 - APKT10 - D22Z3W20 - L100	0544	22	3	30	100		20	-	-	●
		E90 - APKT10 - D25Z3W25 - L100	0545	25	3	30	100		25	-	-	●
		E90 - APKT10 - D25Z4W25 - L100	0546	25	4	30	100		25	-	-	●
		E90 - APKT10 - D32Z4W32 - L150 - WOC	0547	32	4	50	150		32	-	-	X
		F90 - APKT10 - D40Z4S16	0087	40	4	-	40	Shellmill	16	18	34	●
		F90 - APKT10 - D40Z5S16	0472	40	5	-	40		16	20	36	●
		F90 - APKT10 - D50Z6S22	0215	50	6	-	40		22	22	42	●
		F90 - APKT10 - D50Z7S22	0088	50	7	-	40		22	20	42	●
		F90 - APKT10 - D63Z7S22	0548	63	7	-	40		22	22	48	●
		F90 - APKT10 - D80Z8S27	0549	80	8	-	50		27	25	58	●
		F90 - APKT10 - D100Z9S32	0550	100	9	-	50		32	26	65	●
		M90 - APKT10 - D16Z2M08	0551	16	2	-	30	Modular	M08	-	14.75	●
		M90 - APKT10 - D20Z3M10	0552	20	3	-	30		M10	-	18	●
		M90 - APKT10 - D25Z3M12	0553	25	3	-	35		M12	-	21	●
		M90 - APKT10 - D32Z4M16	0554	32	4	-	35		M16	-	29	●
		M90 - APKT10 - D40Z5M16	0555	40	5	-	43		M16	-	29	●
		M90 - APKT10 - D42Z5M16	0556	42	5	-	43		M16	-	29	●

* Clamping Torque (Nm) 1.2Nm

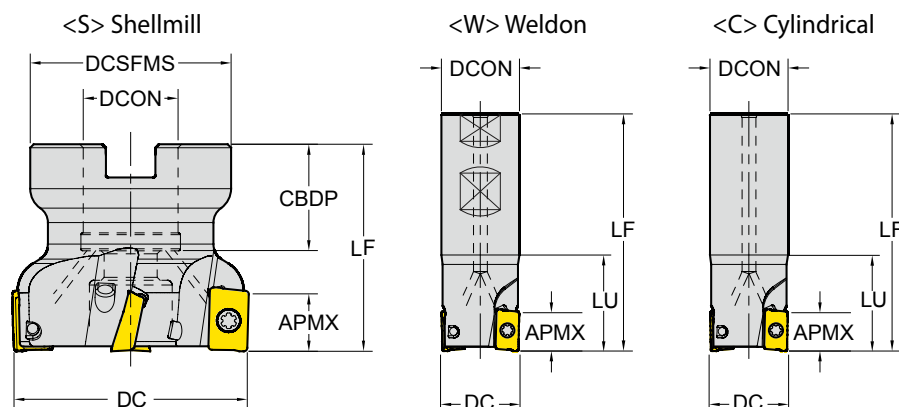
APKT10	Screw (Cutter D16~D20)	Screw (Cutter D20~)	Wrench
Description	TP072505	TP072506	TPWFTP07
EDP	18000016	18000013	18000001

Milling - Shoulder Milling - Cutter

Cutters for APKT

Entering Angle : 90°

2 Corner Positive


CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 171

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LU	LF	TYPE	DCON /TDZ	CDBP	DCSFMS	
APKT 1604	14.0	E90 - APKT16 - D25Z2C20 - L100	0091	25	2	-	100	Cylindrical	20	-	-	●
		E90 - APKT16 - D25Z2C20 - L100 - WOC	0243	25	2	35	100		20	-	-	X
		E90 - APKT16 - D25Z2C25 - L250 - WOC	0557	25	2	100	250		25	-	-	X
		E90 - APKT16 - D32Z2C32 - L250 - WOC	0558	32	2	100	250		32	-	-	X
		E90 - APKT16 - D32Z3C25 - L110	0094	32	3	-	110		25	-	-	●
		E90 - APKT16 - D32Z3C25 - L200	0559	32	3	40	200		25	-	-	●
		E90 - APKT16 - D32Z3C32 - L150 - WOC	0250	32	3	50	150		32	-	-	X
		E90 - APKT16 - D32Z3C32 - L250 - WOC	0560	32	3	100	250		32	-	-	X
		E90 - APKT16 - D40Z4C32 - L150 - WOC	0561	40	4	40	150		32	-	-	X
		E90 - APKT16 - D25Z2W25 - L100	0562	25	2	35	100	Weldon	25	-	-	●
		E90 - APKT16 - D25Z2W25 - L110	0092	25	2	-	110		25	-	-	●
		E90 - APKT16 - D28Z3W25 - L100	0563	28	3	40	100		25	-	-	●
		E90 - APKT16 - D30Z3W25 - L110	0564	30	3	40	110		25	-	-	●
		E90 - APKT16 - D32Z3W25 - L110	0093	32	3	-	110		25	-	-	●
		E90 - APKT16 - D32Z3W32 - L110	0565	32	3	40	110		32	-	-	●
		E90 - APKT16 - D36Z3W32 - L110	0566	36	3	40	110		32	-	-	●

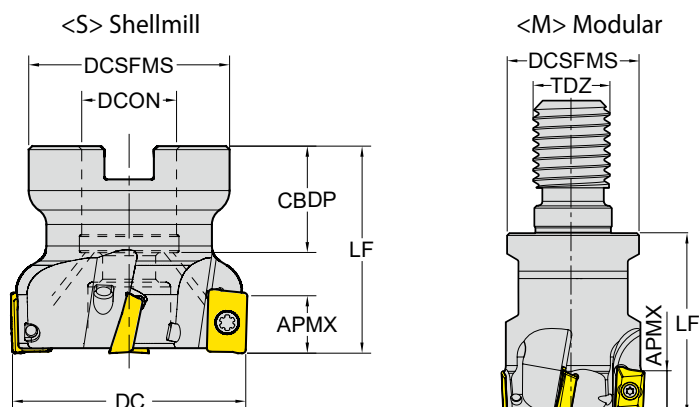
▶ NEXT PAGE

* Clamping Torque (Nm) 3.0Nm

APKT16	Screw	Wrench
Description	TP154008	TPWFTP15
EDP	18000006	18000003

Milling - Shoulder Milling - Cutter Cutters for APKT

Entering Angle : 90°
2 Corner Positive



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 171

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LU	LF	TYPE	DCON /TDZ	CBDP	DCSFMS	
APKT 1604	14.0	F90 - APKT16 - D40Z4S16	0275	40	4	-	40	Shellmill	16	20	36	●
		F90 - APKT16 - D50Z5S22	0095	50	5	-	40		22	20	45	●
		F90 - APKT16 - D52Z5S22	0567	52	5	-	40		22	22	42	●
		F90 - APKT16 - D63Z6S22	0096	63	6	-	40		22	20	50	●
		F90 - APKT16 - D80Z7S27	0097	80	7	-	50		27	23	56	●
		F90 - APKT16 - D100Z8S32	0181	100	8	-	50	Shellmill	32	26	65	●
		F90 - APKT16 - D125Z9S40 - WOC	0238	125	9	-	63		40	32	80	X
		F90 - APKT16 - D160Z10S40 - WOC	0568	160	10	-	63		40	32	110	X
		F90 - APKT16 - D200Z12S60 - WOC	0569	200	12	-	63		60	40	130	X
		M90 - APKT16 - D25Z2M12	0570	25	2	-	43	Modular	M12	-	21	●
		M90 - APKT16 - D32Z3M16	0571	32	3	-	43		M16	-	29	●
		M90 - APKT16 - D42Z4M16	0572	42	4	-	43		M16	-	29	●

Fig. 1

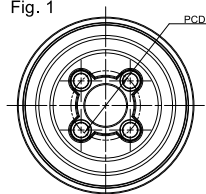
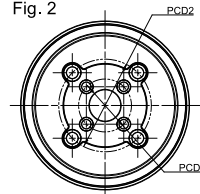


Fig. 2



DC	PCD1	Fig.
Ø160	Ø66.7	1
Ø200/250	Ø101.6	1
	Ø101.6	1

* Clamping Torque (Nm) 3.0Nm

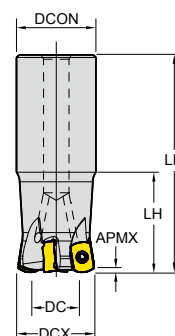
APKT16	Screw	Wrench
Description	TP154008	TPWFTP15
EDP	18000006	18000003

Milling - High Feed Milling - Cutter

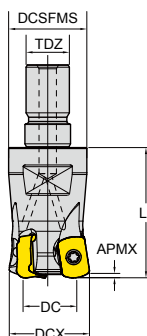
Cutters for ENMX

Entering Angle : 10°
4 Corner Negative

<C> Cylindrical



<M> Modular



CICT : Number of Inserts
CBDP : Connection Bore Depth

: Refer to p. 175

Unit : mm

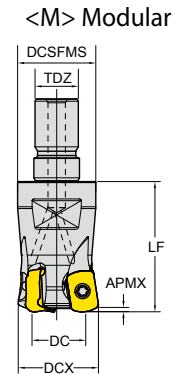
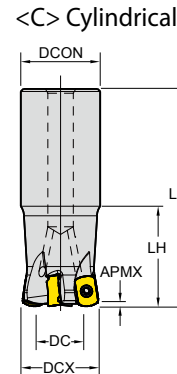
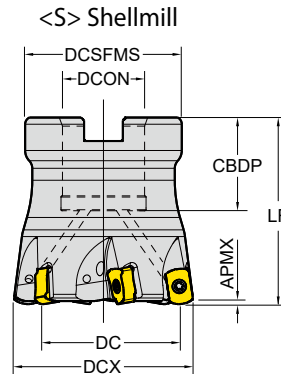
Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	Type	DCON /TDZ	LH	CBDP	DCSFMS	
NEW ENMX 0402	0.5	EHF-EN04-D08Z1C08-L80	1287D	3.18	8	1	80	Cylindrical	08	20	-	-	●
		EHF-EN04-D10Z2C10-L100	1288D	5.18	10	2	100		10	20	-	-	●
		EHF-EN04-D11Z2C10-L100	1289D	6.18	11	2	100		10	20	-	-	●
		EHF-EN04-D12Z3C12-L120	1290D	7.18	12	3	120		12	20	-	-	●
		EHF-EN04-D13Z3C12-L120	1291D	8.18	13	3	120		12	20	-	-	●
		EHF-EN04-D16Z4C16-L150	1292D	11.18	16	4	150		16	40	-	-	●
		EHF-EN04-D17Z4C16-L150	1293D	12.18	17	4	150		16	40	-	-	●
		EHF-EN04-D20Z5C20-L150	1294D	15.18	20	5	150		20	40	-	-	●
		EHF-EN04-D21Z5C20-L150	1295D	16.18	21	5	150	Modular	20	40	-	-	●
		MHF-EN04-D10Z2M06	1296D	5.18	10	2	17		M06	-	-	9.7	●
		MHF-EN04-D11Z2M06	1297D	6.18	11	2	17		M06	-	-	9.7	●
		MHF-EN04-D12Z3M06	1298D	7.18	12	3	17		M06	-	-	11	●
		MHF-EN04-D13Z3M06	1299D	8.18	13	3	17		M06	-	-	11	●
		MHF-EN04-D16Z4M08	1300D	11.18	16	4	23		M08	-	-	13	●
		MHF-EN04-D20Z5M10	1301D	15.18	20	5	23		M10	-	-	18	●
		MHF-EN04-D25Z7M12	1302D	20.18	25	7	27		M12	-	-	21	●
		MHF-EN04-D32Z8M16	1303D	27.18	32	8	27		M16	-	-	29	●

* Clamping Torque (Nm) 0.6Nm

ENMX04	Screw	Wrench	Handle	BIT
Description	TP061804-GS	TPWBTP06	DH-H4	DB-TP06
EDP	18000272	18000277	18000189	18000274

Milling - High Feed Milling - Cutter Cutters for ENMX

Entering Angle : 10°
4 Corner Negative



CICT : Number of Inserts
CBDP : Connection Bore Depth

Refer to p. 175

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	Type	DCON /TDZ	LH	CBDP	DCSFMS	
ENMX 0604	0.9	EHF - ENMX06 - D16Z2C16 - L100	0644	9.0	16	2	100	Cylindrical	16	30	-	-	●
		EHF - ENMX06 - D16Z2C16 - L150	0645	9.0	16	2	150		16	50	-	-	●
		EHF - ENMX06 - D17Z2C16 - L100	0674	10.0	17	2	100		16	20	-	-	●
		EHF - ENMX06 - D17Z2C16 - L150	0473	10.0	17	2	150		16	20	-	-	●
	1	EHF - ENMX06 - D20Z3C20 - L130	0463	12.6	20	3	130	Cylindrical	20	50	-	-	●
		EHF - ENMX06 - D20Z3C20 - L160	0646	12.6	20	3	160		20	80	-	-	●
		EHF - ENMX06 - D21Z3C20 - L150	0475	13.6	21	3	150		20	20	-	-	●
		EHF - ENMX06 - D21Z3C20 - L200	0476	13.6	21	3	200		20	20	-	-	●
		EHF - ENMX06 - D25Z4C25 - L140	0647	17.6	25	4	140		25	60	-	-	●
		EHF - ENMX06 - D25Z4C25 - L180	0464	17.6	25	4	180		25	80	-	-	●
		EHF - ENMX06 - D25Z4C25 - L250	0648	17.6	25	4	250		25	120	-	-	●
		EHF - ENMX06 - D26Z4C25 - L150	0479	18.6	26	4	150		25	30	-	-	●
		EHF - ENMX06 - D26Z4C25 - L200	0480	18.6	26	4	200		25	30	-	-	●
		EHF - ENMX06 - D32Z5C32 - L150	0649	24.6	32	5	150		32	70	-	-	●
		EHF - ENMX06 - D32Z5C32 - L200	0465	24.6	32	5	200		32	100	-	-	●
	0.9	MHF - ENMX06 - D16Z2M08	0691	9.0	16	2	23	Modular	M08		-	13	●
		MHF - ENMX06 - D18Z2M08	0730	11.0	18	2	23		M08		-	13	●
		MHF - ENMX06 - D20Z3M10	0692	12.6	20	3	30	Modular	M10		-	18	●
		MHF - ENMX06 - D25Z4M12	0693	17.6	25	4	35		M12		-	21	●
	1	MHF - ENMX06 - D32Z5M16	0694	24.6	32	5	42		M16		-	29	●
		MHF - ENMX06 - D35Z5M16	0695	27.6	35	5	42		M16		-	29	●
		MHF - ENMX06 - D40Z6M16	0732	32.6	40	6	42		M16		-	29	●
		MHF - ENMX06 - D42Z6M16	0696	34.6	42	6	42		M16		-	29	●
	1	FHF - ENMX06 - D40Z6S16	0482	32.6	40	6	40	Shellmill	16		18	37	●
		FHF - ENMX06 - D50Z6S22	0471	42.6	50	6	50		22		25	42	●

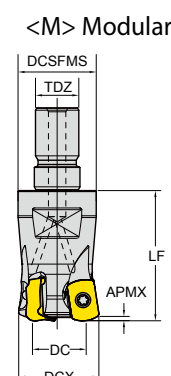
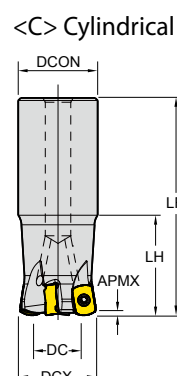
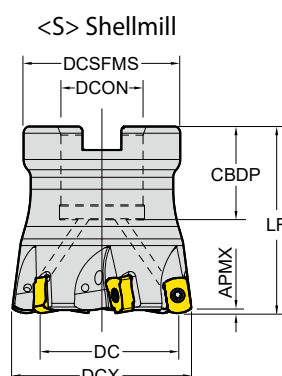
* Clamping Torque (Nm) 1.2Nm

ENMX06	Screw	Wrench	Handle	BIT
Description	TP082507-GS	TPWBTP08	DH-H4	DB-TP08
EDP	18000206	18000218	18000189	18000190

Milling - High Feed Milling - Cutter

Cutters for ENMX

Entering Angle : 10°
4 Corner Negative



CICT : Number of Inserts
CDBP : Connection Bore Depth

: Refer to p. 175

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	Type	DCON /TDZ	LH	CDBP	DCSFMS	
ENMX 0905	1.5	EHF - ENMX09 - D25Z2C25 - L150	0745	15	25	2	150	Cylindrical	25	70	-	-	●
		EHF - ENMX09 - D26Z2C25 - L200	0746	16	26	2	200		25	30	-	-	●
		EHF - ENMX09 - D26Z3C25 - L200	0747	16	26	3	200		25	30	-	-	●
		EHF - ENMX09 - D32Z3C32 - L160	0748	22	32	3	160		32	70	-	-	●
		EHF - ENMX09 - D33Z3C32 - L200	0749	23	33	3	200		32	30	-	-	●
		EHF - ENMX09 - D33Z4C32 - L200	0750	23	33	4	200		32	40	-	-	●
		EHF - ENMX09 - D40Z5C32 - L180	0751	30	40	5	180		32	40	-	-	●
		MHF - ENMX09 - D35Z4M16	0989	25	35	4	42	Modular	M16	-	-	29	●
		FHF - ENMX09 - D50Z3S22	0820	40	50	3	50	Shellmill	22	-	20	42	●
		FHF - ENMX09 - D50Z4S22	0821	40	50	4	50		22	-	20	42	●
		FHF - ENMX09 - D50Z5S22	0752	40	50	5	50		22	-	20	42	●
		FHF - ENMX09 - D63Z4S22	0822	53	63	4	50		22	-	20	48	●
		FHF - ENMX09 - D63Z5S22	0823	53	63	5	50		22	-	20	48	●
		FHF - ENMX09 - D63Z6S22	0753	53	63	6	50		22	-	20	48	●
		FHF - ENMX09 - D63Z7S22	0754	53	63	7	50		22	-	20	48	●
		FHF - ENMX09 - D80Z8S27	0755	70	80	8	50		27	-	23	56	●
		FHF - ENMX09 - D100Z10S32	0824	90	100	10	63		32	-	26	78	●
		FHF - ENMX09 - D125Z12S40	0825	115	125	12	63		40	-	28	89	●

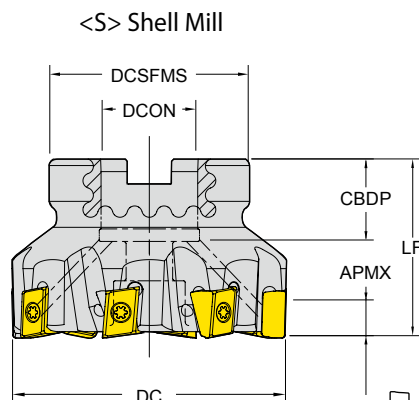
* Clamping Torque (Nm) 2.0Nm

ENMX09	Screw	Wrench	Handle	BIT
Description	TP103509-GS	TPWBTP10	DH-H4	DB-TP10
EDP	18000266	18000280	18000189	18000271

Milling - Shoulder Milling - Cutter

Cutters for LNHU, LNKU

Entry Angle : 90°
4 Corner Negative



ZEFP : Effective Number of Cutting Edges
CDBP : Connection Bore Depth

Refer to p. 177

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
NEW LNHU 1306	11	F90 - LNHU13R - D40Z4S16	0787	40	4	40	Shellmill	16	18	37	●
		F90 - LNHU13R - D40Z5S16	0884	40	5	40		16	18	37	●
		F90 - LNHU13R - D50Z5S22	0793	50	5	40		22	20	42	●
		F90 - LNHU13R - D50Z6S22	0794	50	6	40		22	20	42	●
		F90 - LNHU13R - D63Z6S22	0795	63	6	40		22	20	48	●
		F90 - LNHU13R - D63Z8S22	0796	63	8	40		22	20	48	●
		F90 - LNHU13R - D80Z5S27	0910	80	5	50		27	23	56	●
		F90 - LNHU13R - D80Z7S27	0797	80	7	50		27	23	56	●
		F90 - LNHU13R - D80Z8S27	0798	80	8	50		27	23	56	●
		F90 - LNHU13R - D80Z10S27	0885	80	10	50		27	23	56	●
		F90 - LNHU13R - D100Z6S32	0911	100	6	50		32	26	67	●
		F90 - LNHU13R - D100Z8S32	0845	100	8	50		32	26	67	●
		F90 - LNHU13R - D100Z9S32	0886	100	9	50		32	26	67	●
		F90 - LNHU13R - D100Z13S32	0846	100	13	50		32	26	67	●
		F90 - LNHU13R - D125Z11S40	0887	125	11	63		40	29	89	●
		F90 - LNHU13R - D125Z16S40	0888	125	16	63		40	29	89	●
		F90 - LNHU13R - D160Z13S40	0889	160	13	63		40	40	110	X
		F90 - LNHU13R - D160Z18S40	0890	160	18	63		40	40	110	X

* Clamping Torque (Nm) 3.0Nm

LNHU13	Screw	Wrench	Handle	BIT
Description	TP154012-GS	TPWBTP15	DH-H4	DB-TP15
EDP	18000225	18000217	18000189	18000208

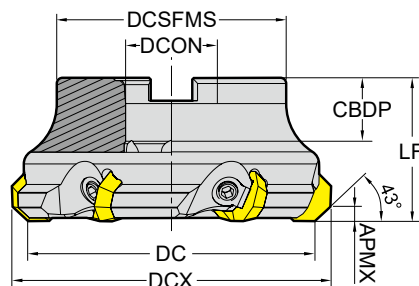
Milling - Face Milling - Cutter

Cutters for OFER

Entering Angle : 43°

8 Corner Positive

<S> Shellmill


CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 179

Unit: mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
OFER 0704	5.0	F43 - OFER07 - D63Z4S22 - WOC	0484	63	75	4	45	Shellmill	22	22	48	X
		F43 - OFER07 - D80Z5S27 - WOC	0485	80	92	5	50		27	25	58	X
		F43 - OFER07 - D100Z6S32 - WOC	0486	100	112	6	50		32	26	80	X
		F43 - OFER07 - D125Z8S40 - WOC	0487	125	137	8	63		40	32	85	X
		F43 - OFER07 - D160Z9S40 - WOC	0488	160	172	9	63		40	32	110	X

Fig. 1

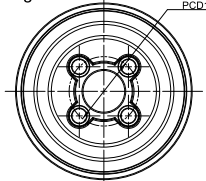
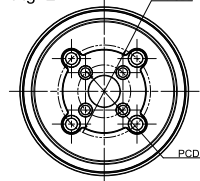


Fig. 2



DC	PCD1	Fig.
Ø160	Ø66.7	1
Ø200/250	Ø101.6	1
	Ø101.6	1

OFER07	Screw	Wrench	Wedge Clamp
Description	YAKV-15-M8x1x20	YAAL-05-4	YACK-11
EDP	18000086	18000062	18000068

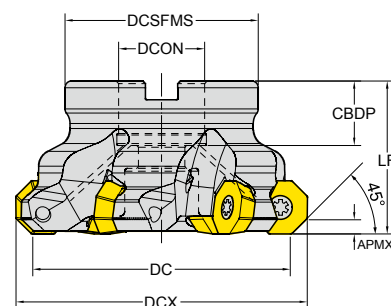
Milling - Face Milling - Cutter

Cutters for ODMT, ODMW

Entering Angle : 45°

8 Corner Positive

<S> Shellmill


CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 178

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
ODMT ODMW 0605	3.5	F43 - ODMT06 - D63Z5S22	0001	63	73	5	40	Shellmill	22	20	50	●
		F43 - ODMT06 - D80Z6S27	0002	80	90	6	50		27	23	56	●
		F43 - ODMT06 - D100Z7S32	0003	100	110	7	50		32	26	78	●
		F43 - ODMT06 - D125Z8S40	0004	125	135	8	63		40	28	89	●

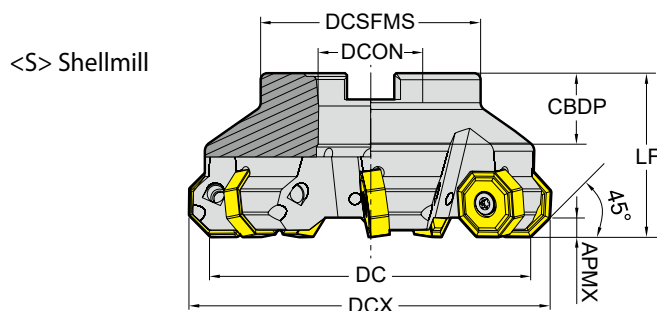
* Clamping Torque (Nm) 5.3Nm

ODMT06	Screw	Wrench
Description	TP205013	TPWFTP20
EDP	18000007	18000004

Milling - Face Milling - Cutter

Cutters for ONMU

Entering Angle: 45°
16 Corner Negative



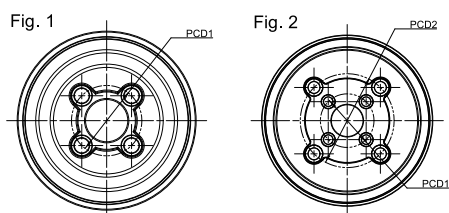
CICT : Number of Inserts
CBDP : Connection Bore Depth

Refer to p. 180

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CBDP	DCSFMS	
ONMU 0806	5.5	F45 - ONMU08 - D63Z5S22	0493	63	75	5	40	Shellmill	22	22	49	●
		F45 - ONMU08 - D80Z6S27	0494	80	92	6	50		27	25	58	●
		F45 - ONMU08 - D100Z7S32	0495	100	112	7	50		32	26	67	●
		F45 - ONMU08 - D125Z8S40 - WOC	0496	125	137	8	63		40	32	87	X
		F45 - ONMU08 - D160Z10S40 - WOC	0497	160	172	10	63		40	32	107	X
		F45 - ONMU08 - D200Z12S60 - WOC	0498	200	212	12	63		60	40	130	X
		F45 - ONMU08 - D315Z16S60 - WOC	0499	315	327	16	63		60	40	220	X

► ONHU is Available for Wiper Insert



DC	DCON	PCD1	PCD2	Fig.
Ø160	Ø40	Ø66.7	-	1
Ø200/250	Ø47.625	Ø101.6	-	1
	Ø60	Ø101.6	-	1
Ø315	Ø60	Ø101.6	Ø177.8	2
	Ø47.625	Ø101.6	Ø177.8	2

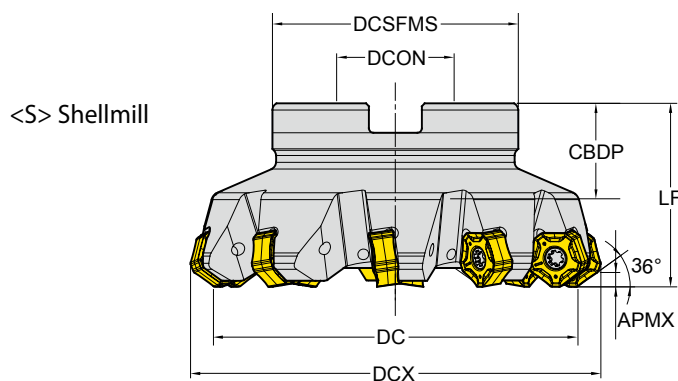
* Clamping Torque (Nm) 5.3Nm

ONMU08	Screw	Wrench
Description	TP205013	TPWFTP20
EDP	18000007	18000004

Milling - Face Milling - Cutter

Cutters for PNMU

Entering Angle : 36°
10 Corner Negative



CICT : Number of Inserts
CDBP : Connection Bore Depth

: Refer to p. 181

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
PNMU 1206	4.0	F36 - PNMU12 - D50Z4S22	0774	50	63.6	4	40	Shellmill	22	20	42	●
		F36 - PNMU12 - D50Z5S22	0785	50	63.6	5	40		22	20	42	●
		F36 - PNMU12 - D63Z5S22	0775	63	76.6	5	40		22	20	48	●
		F36 - PNMU12 - D63Z6S22	0483	63	76.6	6	40		22	20	48	●
		F36 - PNMU12 - D80Z8S27	0466	80	93.6	8	50		27	23	58	●
		F36 - PNMU12 - D100Z10S32	0467	100	113.6	10	50		32	26	67	●
		F36 - PNMU12 - D125Z10S40	0786	125	138.6	10	63		40	29	89	●

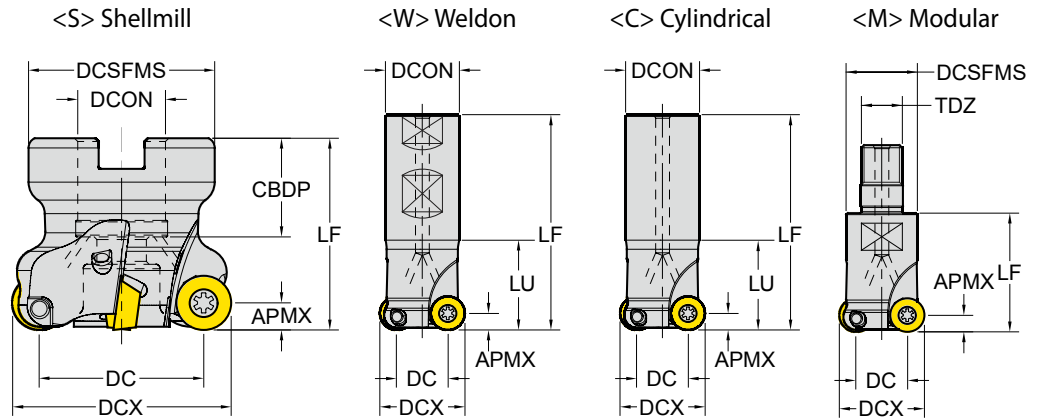
* Clamping Torque (Nm) 3.0Nm

PNMU12	Screw	Wrench	Handle	BIT
Description	TP154008	TPWBTP15	DH-H4	DB-TP15
EDP	18000006	18000217	18000189	18000208

Milling - Profiling - Cutter

Cutters for RDKT, RDKW

Round Positive



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 182

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LU	LF	TYPE	DCON /TDZ	CDBP	DCSFMS	
RDKT RDKW 0802	4.0	E - RDKT08 - D16Z2C16 - L160	0005	8	16	2	-	160	Cylindrical	16	-	-	●
		E - RDKT08 - D20Z2C20 - L180	0007	12	20	2	-	180		20	-	-	●
		E - RDKT08 - D25Z3C20 - L180	0009	17	25	3	-	180		20	-	-	●
		M - RDKT08 - D16Z2M08	0010	8	16	2	-	23	Modular	M08	-	13	●
		M - RDKT08 - D20Z2M10	0011	12	20	2	-	30		M10	-	18	●
		M - RDKT08 - D25Z3M12	0012	17	25	3	-	35		M12	-	21	●
RDKT RDKW 10T3	5.0	E - RDKT10 - D20Z2C20 - L150 - WOC	0576	10	20	2	60	150	Cylindrical	20	-	-	X
		E - RDKT10 - D20Z2C20 - L180	0013	10	20	2	-	180		20	-	-	●
		E - RDKT10 - D25Z2C25 - L150 - WOC	0299	15	25	2	60	150		25	-	-	X
		E - RDKT10 - D25Z2C25 - L180	0015	15	25	2	-	180		25	-	-	●
		E - RDKT10 - D20Z2W20 - L150 - WOC	0577	10	20	2	60	150	Weldon	20	-	-	X
		E - RDKT10 - D25Z2W25 - L150 - WOC	0578	15	25	2	60	150		25	-	-	X
		E - RDKT10 - D32Z3W32 - L150 - WOC	0579	22	32	3	60	150		32	-	-	X
		F - RDKT10 - D40Z5S16	0019	30	40	5	-	40	Shellmill	16	18	34	●
		F - RDKT10 - D50Z5S22	0580	40	50	5	-	50		22	22	42	●
		F - RDKT10 - D50Z6S22	0020	40	50	6	-	50		22	22	42	●
		F - RDKT10 - D63Z6S22	0581	53	63	6	-	50		22	22	48	●
		M - RDKT10 - D20Z2M10	0017	10	20	2	-	30	Modular	M10	-	18	●
		M - RDKT10 - D25Z3M12	0018	15	25	3	-	35		M12	-	21	●

* Clamping Torque (Nm) 1.2Nm

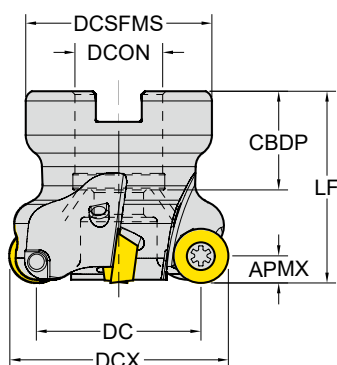
RDKT08	Screw	Wrench
Description	TP082505	TPWFTP08
EDP	18000008	18000002

* Clamping Torque (Nm) 3.0Nm

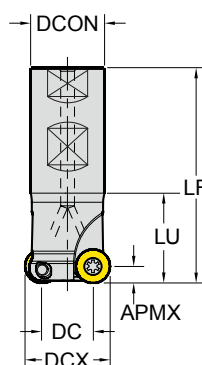
RDKT10	Screw	Wrench
Description	TP154008RD	TPWFTP15
EDP	18000017	18000003

Round Positive

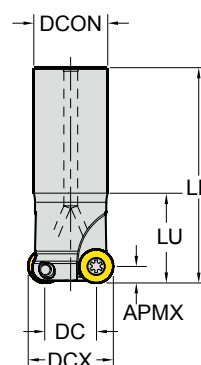
<S> Shellmill



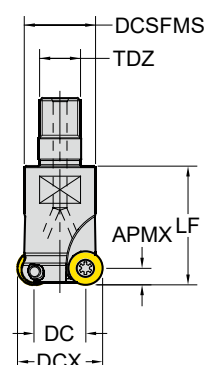
<W> Weldon



<C> Cylindrical



<M> Modular


CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 182

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LU	LF	TYPE	DCON / TDZ	CDBP	DCSFMS	
RDKT RDKW 1204	6.0	E - RDKT12 - D25Z2C25 - L180	0021	13	25	2	80	180	Cylindrical	25	-	-	●
		E - RDKT12 - D32Z2C32 - L200	0023	20	32	2	60	200		32	-	-	●
		E - RDKT12 - D32Z3C32 - L160	0024	20	32	3	60	160		32	-	-	●
		E - RDKT12 - D32Z3C32 - L160 - WOC	0582	20	32	3	70	160		32	-	-	X
		E - RDKT12 - D33Z3C32 - L160 - WOC	0583	21	33	3	70	160		32	-	-	X
		E - RDKT12 - D32Z3W32 - L160 - WOC	0584	20	32	3	50	160	Weldon	32	-	-	X
		F - RDKT12 - D40Z4S16	0028	28	40	4	-	40	Shellmill	16	18	32	●
		F - RDKT12 - D50Z5S22	0029	38	50	5	-	50		22	20	40	●
		F - RDKT12 - D52Z5S22	0585	40	52	5	-	50		22	22	42	●
		F - RDKT12 - D63Z6S22	0030	51	63	6	-	50		22	20	48	●
		F - RDKT12 - D80Z7S27	0586	68	80	7	-	50		27	25	58	●
		F - RDKT12 - D100Z7S32	0587	88	100	7	-	50		32	26	65	●
		F - RDKT12 - D100Z8S32	0588	88	100	8	-	50		32	26	65	●
		M - RDKT12 - D25Z2M12	0026	13	25	2	-	35	Modular	M12	-	21	●
		M - RDKT12 - D32Z3M16	0027	20	32	3	-	42		M16	-	29	●
		M - RDKT12 - D42Z4M16	0589	30	42	4	-	43		M16	-	29	●

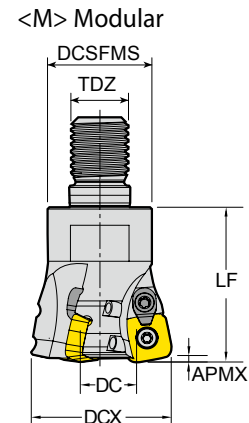
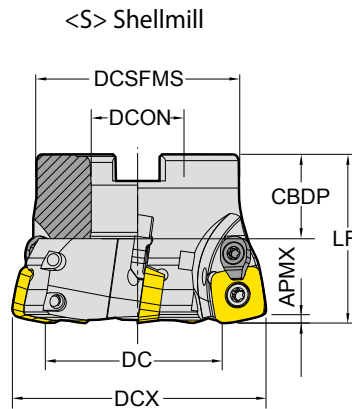
* Clamping Torque (Nm) 3.0Nm

RDKT12	Screw	Wrench	Wedge Clamp
Description	TP154009	TPWFTP15	MTCA - 130813P
EDP	18000010	18000003	18000037

Milling - High Feed Milling - Cutter

Cutters for SDMT, SDMW

Entering Angle : 10°
4 Corner Positive



CICT : Number of Inserts
CDBP : Connection Bore Depth

□ : Refer to p. 187

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON /TDZ	CDBP	DCSFMS	
SDMT SDMW 1204	1.8	FHF - SDMW12 - D50Z4S22	0604	32.4	50	4	40	Shellmill	22	22	42	●
		FHF - SDMW12 - D63Z5S22	0605	45.4	63	5	40		22	22	48	●
		FHF - SDMW12 - D80Z6S27	0606	62.4	80	6	50		27	25	58	●
		FHF - SDMW12 - D100Z8S32	0607	82.4	100	8	50		32	26	65	●
		MHF - SDMW12 - D32Z2M16	0608	14.4	32	2	43	Modular	M16	-	29	●
		MHF - SDMW12 - D40Z3M16	0609	22.4	40	3	43		M16	-	29	●

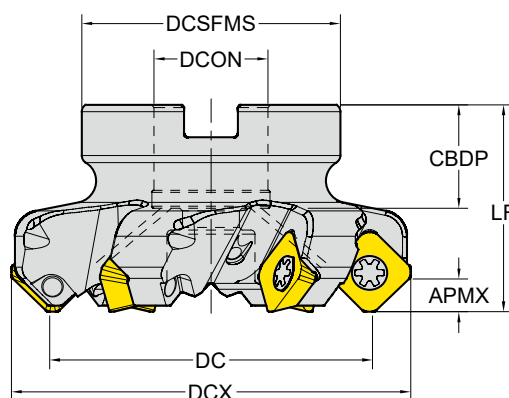
* Clamping Torque (Nm) 3.0Nm			
SDMT12	Screw	Wrench	Wedge Clamp
Description	Y4015-M4x11	Y80-T15	YACK-15
EDP	18000119	18000167	18000069

Milling - Face Milling - Cutter

Cutters for SEGT, SEKT

Entering Angle : 45°
4 Corner Positive

<S> Shellmill



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 188-189

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
SEGT SEKT 12T3	6.0	F45 - SE12T3 - D50Z4S22	0500	50	64	4	40	Shellmill	22	22	48	●
		F45 - SE12T3 - D63Z5S22	0501	63	77	5	40		22	22	48	●
		F45 - SE12T3 - D80Z6S27	0502	80	94	6	50		27	25	58	●
		F45 - SE12T3 - D100Z7S32	0503	100	114	7	50		32	26	65	●
		F45 - SE12T3 - D125Z8S40 - WOC	0504	125	139	8	63		40	32	85	X
		F45 - SE12T3 - D160Z10S40 - WOC	0505	160	174	10	63		40	32	110	X
SEGT SEKT 1204	6.0	F45 - SEKT12 - D40Z4S16	0031	40	54	4	40	Shellmill	16	18	32	●
		F45 - SEKT12 - D50Z5S22	0032	50	64	5	40		22	20	48	●
		F45 - SEKT12 - D63Z4S22	0033	63	77	4	40		22	20	50	●
		F45 - SEKT12 - D63Z6S22	0034	63	77	6	40		22	20	50	●
		F45 - SEKT12 - D80Z4S27	0035	80	94	4	50		27	22	56	●
		F45 - SEKT12 - D80Z7S27	0036	80	94	7	50		27	22	56	●
		F45 - SEKT12 - D100Z8S32	0037	100	114	8	50		32	25	78	●
		F45 - SEKT12 - D125Z10S40	0038	125	139	10	63		40	29	90	●
		F45 - SEKT12 - D160Z12S40	0039	160	174	12	63		40	30	114	X

Fig. 1

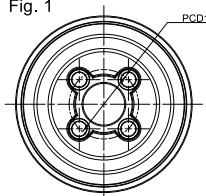
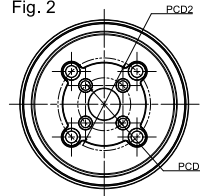


Fig. 2



DC	PCD1	Fig.
Ø160	Ø66.7	1
Ø200/250	Ø101.6	1
	Ø101.6	1

* Clamping Torque (Nm) 2.4Nm

SEKT12T3	Screw	Wrench
Description	Y4015-M3.5x11	Y80-T15
EDP	18000118	18000167

* Clamping Torque (Nm) 5.3Nm

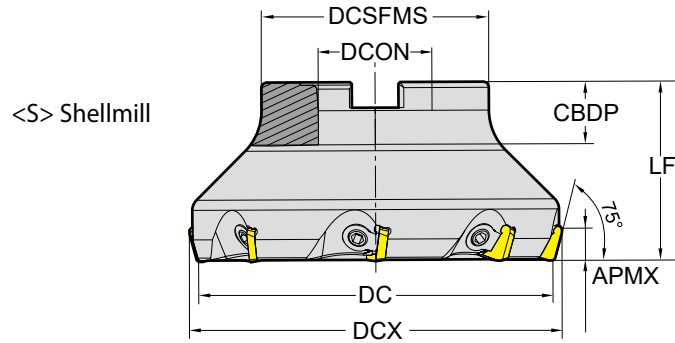
SEKT1204	Screw	Wrench
Description	TP204510	TPWFTP20
EDP	18000011	18000004

Milling - Face Milling - Cutter

Cutters for SPCN, SPKN, SPKR

Entering Angle : 75°

4 Corner Positive ISO



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 194

Unit:mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
SPCN SPKN SPKR 1203	8.0	F75 - SPKN12 - D50Z4S22 - WOC	0611	50	56	4	42	Shellmill	22	22	42	X
		F75 - SPKN12 - D63Z5S22 - WOC	0612	63	69	5	40		22	22	48	X
		F75 - SPKN12 - D80Z6S27 - WOC	0613	80	86	6	50		27	25	58	X
		F75 - SPKN12 - D100Z7S32 - WOC	0614	100	106	7	50		32	26	65	X
		F75 - SPKN12 - D125Z8S40 - WOC	0615	125	131	8	63		40	32	80	X
		F75 - SPKN12 - D160Z9S40 - WOC	0616	160	166	9	63		40	32	110	X
		F75 - SPKN12 - D200Z12S60 - WOC	0617	200	206	12	63		60	40	130	X

Fig. 1

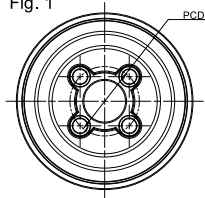
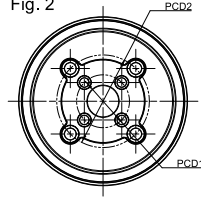


Fig. 2



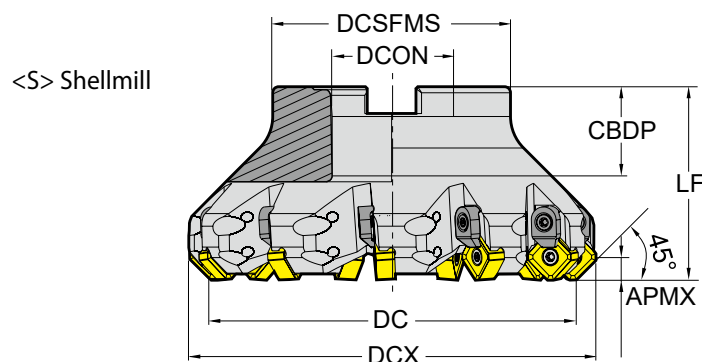
DC	PCD1	Fig.
Ø160	Ø66.7	1
Ø200/250	Ø101.6	1
	Ø101.6	1

SPKN1203	Screw	Wrench	Wedge Clamp
Description	YAKV-22-M8x1x14	YAAL-05-4	YACK-10
EDP	18000089	18000062	18000067
Description	YAKV-13-M8x1x16	-	-
EDP	18000084	-	-

Milling - Face Milling - Cutter

Cutters for SNMX

Entering Angle : 45°
8 Corner Negative



CICT : Number of Inserts
CDBP : Connection Bore Depth

□ : Refer to p. 192-193

Unit: mm

Series	APMX	Designation	EDP 1700..	DC	DCX	CICT	LF	TYPE	DCON	CDBP	DCSFMS	
SNMX 1206 ANN	6.0	F45 - SNMX12 - D50Z4S22	0506	50	63	4	42	Shellmill	22	22	42	●
		F45 - SNMX12 - D50Z5S22	0507	50	63	5	42		22	22	42	●
		F45 - SNMX12 - D63Z6S22	0508	63	76	6	42		22	22	48	●
		F45 - SNMX12 - D63Z7S22	0509	63	76	7	42		22	22	48	●
		F45 - SNMX12 - D80Z7S27	0510	80	93	7	52		27	25	58	●
		F45 - SNMX12 - D80Z8S27	0511	80	93	8	52		27	25	58	●
		F45 - SNMX12 - D100Z10S32	0512	100	113	10	52		32	26	67	●
		F45 - SNMX12 - D100Z8S32	0513	100	113	8	52		32	26	67	●
		F45 - SNMX12 - D125Z11S40 - WOC	0514	125	138	11	65		40	32	80	X
		F45 - SNMX12 - D160Z12S40 - WOC	0515	160	173	12	65		40	32	110	X
		F45 - SNMX12 - D200Z14S60 - WOC	0516	200	213	14	65		60	40	130	X

Fig. 1

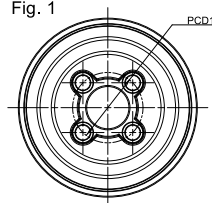
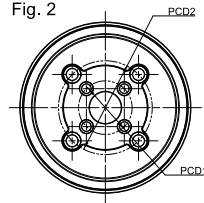


Fig. 2



DC	PCD1	Fig.
Ø160	Ø66.7	1
Ø200/250	Ø101.6	1
	Ø101.6	1

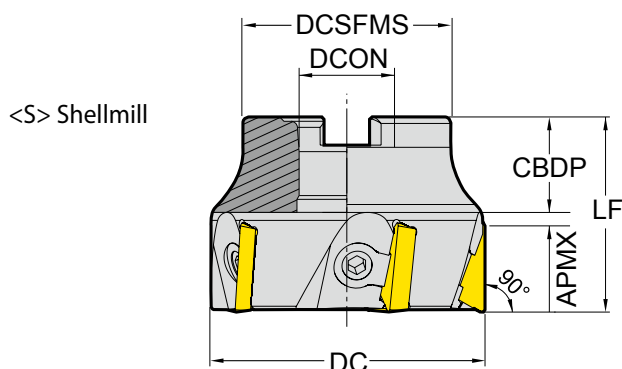
* Clamping Torque (Nm) 3.0Nm

SNMX12	Screw	Wrench	Wedge Clamp
Description	Y4015-M4x11	Y80-T15	Y4015-M4x11
EDP	18000119	18000167	18000119

Milling - Shoulder Milling - Cutter

Cutters for TPCN, TPKN, TPKR

Entering Angle : 90°
3 Corner Positive ISO

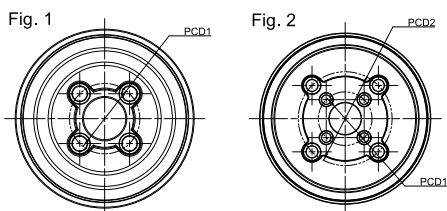


CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 199

Unit: mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LU	LF	TYPE	DCON	CDBP	DCSFMS	
TPCN TPKN TPKR 1603	12.0	F90 - TPKN16 - D50Z4S22 - WOC	0618	50	4	-	40	Shellmill	22	22	42	X
		F90 - TPKN16 - D63Z6S22 - WOC	0619	63	6	-	45		22	22	48	X
		F90 - TPKN16 - D80Z7S27 - WOC	0620	80	7	-	50		27	25	58	X
		F90 - TPKN16 - D125Z8S40 - WOC	0621	125	8	-	63		40	32	80	X
TPCN TPKN TPKR 2204	18.0	F90 - TPKN22 - D63Z5S22 - WOC	0622	63	5	-	45	Shellmill	22	22	48	X
		F90 - TPKN22 - D80Z6S27 - WOC	0623	80	6	-	50		27	25	58	X
		F90 - TPKN22 - D100Z7S32 - WOC	0624	100	7	-	50		32	26	65	X
		F90 - TPKN22 - D125Z8S40 - WOC	0625	125	8	-	63		40	32	80	X
		F90 - TPKN22 - D160Z9S40 - WOC	0626	160	9	-	63		40	32	110	X
		F90 - TPKN22 - D200Z12S60 - WOC	0627	200	12	-	63		60	40	130	X
		F90 - TPKN22 - D250Z15S60 - WOC	0628	250	15	-	63		60	40	160	X
		F90 - TPKN22 - D315Z18S60 - WOC	0629	315	18	-	63		60	40	220	X



DC	DCON	PCD1	PCD2	Fig.
Ø160	Ø40	Ø66.7	-	1
Ø200/250	Ø47.625	Ø101.6	-	1
	Ø60	Ø101.6	-	1
Ø315	Ø60	Ø101.6	Ø177.8	2
	Ø47.625	Ø101.6	Ø177.8	2

TPKN16	Screw	Wrench	Wedge Clamp
Description	YAKV-13-M8x1x16	YAAL-05-4	YACK-10
EDP	18000084	18000062	18000067

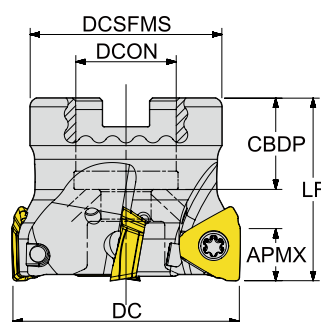
TPKN22	Screw	Wrench	Wedge Clamp
Description	YAKV-14-M8x1x18	YAAL-05-4	YACK-11
EDP	18000085	18000062	18000068

Milling - Shoulder Milling - Cutter

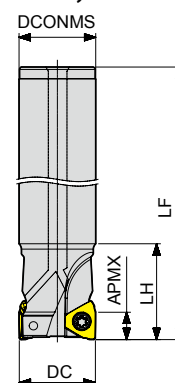
Cutters for TPKT

Entering Angle : 90°
3 Corner Positive

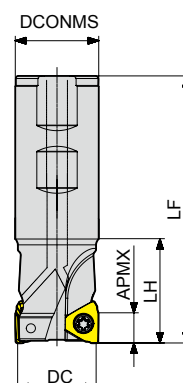
<S> Shellmill



<C> Cylindrical



<W> Weldon



CICT : Number of Inserts
CDBP : Connection Bore Depth

: Refer to p. 197-198

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON	LH	CDBP	DCSFMS	
NEW TPKT 0703	4.5	E90 - TP07 - D12Z1C12 - L80	1136	12	1	80	Cylindrical	12	20	-	-	●
		E90 - TP07 - D14Z1C12 - L80	1137	14	1	80		12	20	-	-	●
		E90 - TP07 - D16Z2C16 - L110	1138	16	2	110		16	25	-	-	●
		E90 - TP07 - D16Z2C16 - L150	1139	16	2	150		16	25	-	-	●
		E90 - TP07 - D16Z3C16 - L150	1140	16	3	150		16	25	-	-	●
		E90 - TP07 - D17Z3C16 - L150	1141	17	3	150		16	25	-	-	●
		E90 - TP07 - D18Z3C16 - L150	1142	18	3	150		16	25	-	-	●
		E90 - TP07 - D20Z3C20 - L160	1143	20	3	160		20	25	-	-	●
		E90 - TP07 - D25Z5C25 - L115	1146	25	5	115	Weldon	25	25	-	-	●
		E90 - TP07 - D42Z8C32 - L130	1161	42	8	130		32	30	-	-	●
		E90 - TP07 - D25Z4W20 - L115	1144	25	4	115		20	25	-	-	●
		E90 - TP07 - D25Z5W25 - L115	1145	25	5	115		25	25	-	-	●
		E90 - TP07 - D32Z6W25 - L130	1147	32	6	130	Shellmill	25	30	-	-	●
		E90 - TP07 - D40Z8W32 - L130	1148	40	8	130		32	30	-	-	●
		F90 - TP07 - D32Z6S16	1149	32	6	32		16	-	18	30	●
		F90 - TP07 - D35Z7S16	1150	35	7	35		16	-	18	30	●
		F90 - TP07 - D40Z7S16	1151	40	7	40		16	-	18	38	●
		F90 - TP07 - D40Z8S16	1152	40	8	40		16	-	18	38	●
		F90 - TP07 - D40Z8S22	1153	40	8	40		22	-	20	38	●
		F90 - TP07 - D50Z9S22	1162	50	9	40		22	-	20	45	●
		F90 - TP07 - D52Z9S22	1163	52	9	40		22	-	20	45	●

► NEXT PAGE

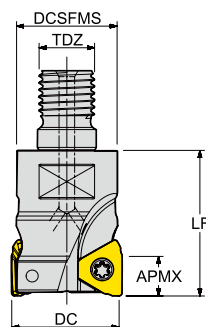
* Clamping Torque (Nm) 0.6Nm

TPKT0703	Screw	Wrench	Handle	BIT
Description	TP062004-GS	TPWBTP06	DH-H4	DB-TP06
EDP	18000252	18000277	18000189	18000274

Milling - Shoulder Milling - Cutter Cutters for TPKT

Entering Angle : 90°
3 Corner Positive

<M> Modular



CICT : Number of Inserts
CBDP : Connection Bore Depth

: Refer to p. 197-198

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON	LH	CBDP	DCSFMS	
NEW TPKT 0703	4.5	M90 - TP07 - D16Z2M08	1154	16	2	40	Modular	M08	23	-	13	●
		M90 - TP07 - D20Z3M10	1155	20	3	55		M10	35	-	18	●
		M90 - TP07 - D22Z4M10	1156	22	4	55		M10	35	-	18	●
		M90 - TP07 - D25Z5M12	1157	25	5	57		M12	35	-	21	●
		M90 - TP07 - D32Z6M16	1158	32	6	68		M16	43	-	29	●
		M90 - TP07 - D40Z7M16	1159	40	7	68		M16	43	-	29	●
		M90 - TP07 - D42Z8M16	1160	42	8	68		M16	43	-	29	●

* Clamping Torque (Nm) 0.6Nm

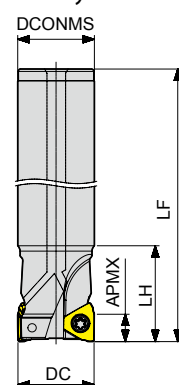
TPKT0703	Screw	Wrench	Handle	BIT
Description	TP062004-GS	TPWBTP06	DH-H4	DB-TP06
EDP	18000252	18000277	18000189	18000274

Milling - Shoulder Milling - Cutter

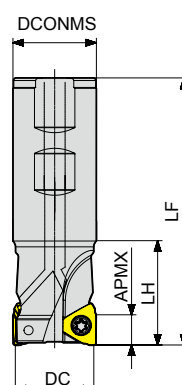
Cutters for TPKT

Entering Angle : 90°
3 Corner Positive

<C> Cylindrical



<W> Weldon



CICT : Number of Inserts
CBDP : Connection Bore Depth

: Refer to p. 197-198

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON /TDZ	LH	CBDP	DCSFMS	
TPKT 1104	7.0	E90 - TP11 - D20Z2C20 - L170	1037	20	2	170	Cylindrical	20	40	-	-	●
		E90 - TP11 - D20Z2C20 - L200	1074	20	2	200		20	60	-	-	●
		E90 - TP11 - D21Z2C20 - L150	1038	21	2	150		20	40	-	-	●
		E90 - TP11 - D21Z2C20 - L200	1039	21	2	200		20	40	-	-	●
		E90 - TP11 - D25Z3C25 - L200	1026	25	3	200		25	60	-	-	●
		E90 - TP11 - D26Z2C25 - L200	1041	26	2	200		25	40	-	-	●
		E90 - TP11 - D26Z2C25 - L250	1042	26	2	200		25	40	-	-	●
		E90 - TP11 - D26Z3C25 - L150	1043	26	3	150		25	40	-	-	●
		E90 - TP11 - D26Z3C25 - L200	1044	26	3	200		25	40	-	-	●
		E90 - TP11 - D32Z3C32 - L230	1045	32	3	230		32	60	-	-	●
		E90 - TP11 - D33Z3C32 - L200	1047	33	3	200		32	40	-	-	●
		E90 - TP11 - D40Z4C32 - L200	1048	40	4	200		32	60	-	-	●
		E90 - TP11 - D20Z2W20 - L90	0995	20	2	90	Weldon	20	40	-	-	●
		E90 - TP11 - D25Z3W25 - L100	1040	25	3	100		25	40	-	-	●
		E90 - TP11 - D32Z4W32 - L110	1046	32	4	110		32	40	-	-	●
		E90 - TP11 - D40Z5W32 - L115	1049	40	5	115		32	40	-	-	●

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* Clamping Torque (Nm) 1.2Nm

TPKT1104 (D20, D21)	Screw	Wrench	Handle	BIT
Description	TP082562-GS	TPWBTP08	DH-H4	DB-TP08
EDP	18000265	18000218	18000189	18000190

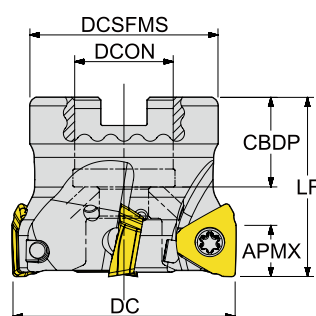
TPKT1104 (over D25)	Screw	Wrench	Handle	BIT
Description	TP082506-GS	TPWBTP08	DH-H4	DB-TP08
EDP	18000259	18000218	18000189	18000190

Milling - Shoulder Milling - Cutter

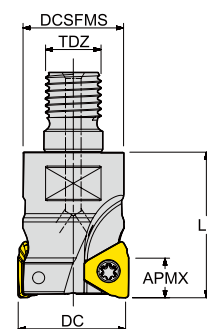
Cutters for TPKT

Entering Angle : 90°
3 Corner Positive

<S> Shellmill



<M> Modular



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 197-198

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON /TDZ	LH	CBDP	DCSFMS	
TPKT 1104	7.0	F90 - TP11 - D40Z5S16	1050	40	5	40	Shellmill	16	-	20	38	●
		F90 - TP11 - D50Z6S22	1051	50	6	40		22	-	20	42	●
		F90 - TP11 - D63Z7S22	1052	63	7	40		22	-	20	48	●
		F90 - TP11 - D63Z8S22	1053	63	8	40		22	-	20	48	●
		M90 - TP11 - D32Z4M16	1095	32	4	43	Modular	M16	68	-	29	●

* Clamping Torque (Nm) 1.2Nm

TPKT1104 (D20, D21)	Screw	Wrench	Handle	BIT
Description	TP082562-GS	TPWBTP08	DH-H4	DB-TP08
EDP	18000265	18000218	18000189	18000190

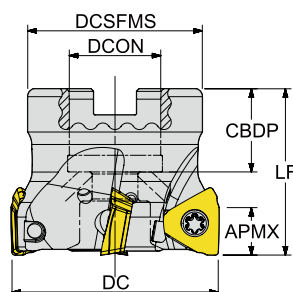
TPKT1104 (over D25)	Screw	Wrench	Handle	BIT
Description	TP082506-GS	TPWBTP08	DH-H4	DB-TP08
EDP	18000259	18000218	18000189	18000190

Milling - Shoulder Milling - Cutter

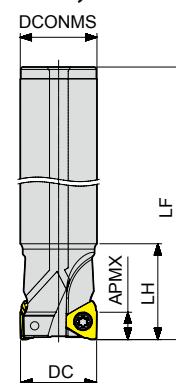
Cutters for TPKT

Entering Angle : 90°
3 Corner Positive

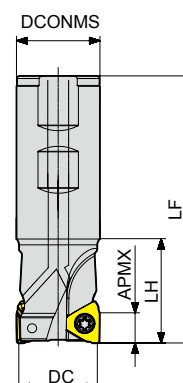
<S> Shellmill



<C> Cylindrical



<W> Weldon



CICT : Number of Inserts
CDBP : Connection Bore Depth

□ : Refer to p. 197-198

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON /TDZ	LH	CDBP	DCSFMS	
TPKT 1605	11.0	E90 - TP16 - D32Z2C32 - L150	0941	32	2	150	Cylindrical	32	40	-	-	●
		E90 - TP16 - D32Z2C32 - L250	0942	32	2	250		32	80	-	-	●
		E90 - TP16 - D33Z2C32 - L200	0929	33	2	200		32	40	-	-	●
		E90 - TP16 - D33Z2C32 - L250	1010	33	2	250		32	40	-	-	●
		E90 - TP16 - D40Z4C32 - L200	0945	40	4	200		32	40	-	-	●
		E90 - TP16 - D40Z3W32 - L110	0944	40	3	110	Weldon	32	40	-	-	●
		F90 - TP16 - D50Z4S22	0931	50	4	40	Shellmill	22	-	20	42	●
		F90 - TP16 - D50Z5S22	1069	50	5	40		22	-	20	42	●
		F90 - TP16 - D63Z5S22	0932	63	5	40		22	-	20	48	●
		F90 - TP16 - D63Z6S22	0947	63	6	40		22	-	20	48	●
		F90 - TP16 - D80Z6S27	0948	80	6	50		27	-	23	56	●
		F90 - TP16 - D80Z7S27	0949	80	7	50		27	-	23	56	●
		F90 - TP16 - D100Z8S32	0950	100	8	50		32	-	26	67	●
		F90 - TP16 - D125Z10S40	0951	125	10	63		40	-	29	89	●
		F90 - TP16 - D125Z12S40	0952	125	12	63		40	-	29	89	●
		F90 - TP16 - D140Z10S40	1073	140	10	63		40	-	29	110	●
		F90 - TP16 - D160Z11S40	0953	160	11	63		40	-	40	110	X
		F90 - TP16 - D200Z11S60	0955	200	11	63		60	-	40	160	X

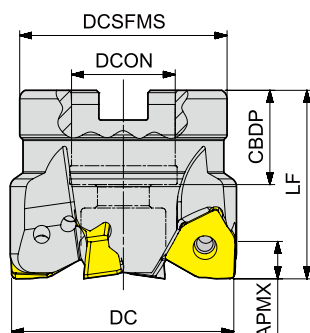
* Clamping Torque (Nm) 5.3Nm

TPKT1605	Screw	Wrench	Handle	BIT
Description	TP2045105	TPWBTP20	DH-H6	DB-TP20
EDP	18000264	18000256	18000210	18000257

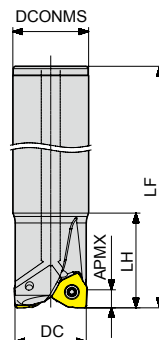
Milling - Shoulder Milling - Cutter Cutters for WNEX

Entering Angle : 90°
6 Corner Negative

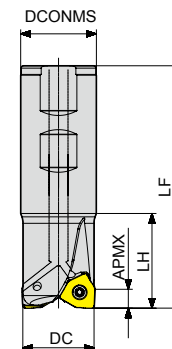
<S> Shellmill



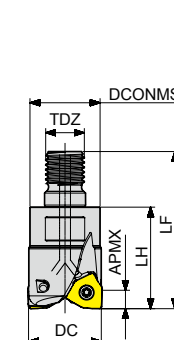
<C> Cylindrical



<W> Weldon



<M> Modular



CICT : Number of Inserts
CDBP : Connection Bore Depth

Refer to p. 201

Unit : mm

Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON /TDZ	LH	CDBP	DCSFMS	
NEW WNEX 0403	4.0	E90 - WN04 - D20Z2C20 - L150	1222	20	2	150	Cylindrical	20	40	-	-	●
		E90 - WN04 - D20Z3C20 - L150	1224	20	3	150		20	40	-	-	●
		E90 - WN04 - D21Z2C20 - L150	1255	21	2	150		20	40	-	-	●
		E90 - WN04 - D25Z3C25 - L150	1226	25	3	150		25	40	-	-	●
		E90 - WN04 - D25Z4C25 - L150	1228	25	4	150		25	40	-	-	●
		E90 - WN04 - D26Z3C25 - L150	1256	26	3	150		25	40	-	-	●
		E90 - WN04 - D32Z5C32 - L150	1230	32	5	150		32	40	-	-	●
		E90 - WN04 - D20Z2W20 - L110	1221	20	2	110	Weldon	20	40	-	-	●
		E90 - WN04 - D20Z3W20 - L110	1223	20	3	110		20	40	-	-	●
		E90 - WN04 - D25Z3W25 - L110	1225	25	3	110		25	40	-	-	●
		E90 - WN04 - D25Z4W25 - L110	1227	25	4	110		25	40	-	-	●
		E90 - WN04 - D32Z5W32 - L110	1229	32	5	110		32	40	-	-	●
		E90 - WN04 - D32Z6W32 - L110	1231	32	6	110		32	40	-	-	●
		F90 - WN04 - D40Z5S16	1232	40	5	40	Shellmill	16	-	18	38	●
		F90 - WN04 - D40Z6S16	1233	40	6	40		16	-	18	38	●
		F90 - WN04 - D40Z7S16	1234	40	7	40		16	-	18	38	●
		F90 - WN04 - D50Z7S22	1235	50	7	40		22	-	20	45	●
		F90 - WN04 - D50Z8S22	1236	50	8	40		22	-	20	45	●
		F90 - WN04 - D50Z9S22	1237	50	9	40		22	-	20	45	●
		F90 - WN04 - D63Z8S22	1238	63	8	40		22	-	20	48	●
		F90 - WN04 - D63Z10S22	1239	63	10	40		22	-	20	48	●
		F90 - WN04 - D63Z11S22	1240	63	11	40		22	-	20	48	●
		F90 - WN04 - D42Z7S16	1257	42	7	40		16	-	18	38	●
		F90 - WN04 - D52Z9S22	1258	52	9	40		22	-	20	45	●
		M90 - WN04 - D20Z2M10	1241	20	2	55	Modular	M10	35	-	18	●
		M90 - WN04 - D20Z3M10	1242	20	3	55		M10	35	-	18	●
		M90 - WN04 - D25Z3M12	1243	25	3	57		M12	35	-	21	●
		M90 - WN04 - D25Z4M12	1244	25	4	57		M12	35	-	21	●
		M90 - WN04 - D32Z5M16	1245	32	5	68		M16	43	-	29	●
		M90 - WN04 - D32Z6M16	1246	32	6	68		M16	43	-	29	●

* Clamping Torque (Nm) 0.7Nm

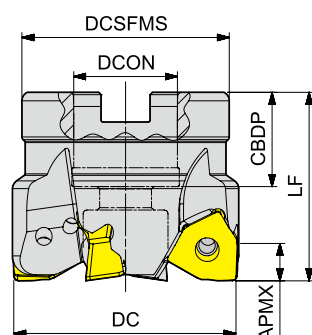
ENMX04	Screw	Wrench	Handle	BIT
Description	TP072557-GS	TPWBTP07	DH-H4	DB-TP07
EDP	18000275	18000289	18000189	18000278

Milling - Shoulder Milling - Cutter

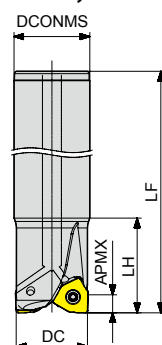
Cutters for WNEX

Entering Angle : 90°
6 Corner Negative

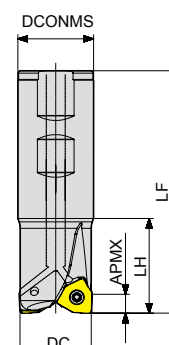
<S> Shellmill



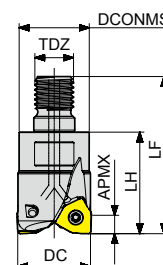
<C> Cylindrical



<W> Weldon



<M> Modular



CICT : Number of Inserts
CBDB : Connection Bore Depth

: Refer to p. 201

Unit : mm

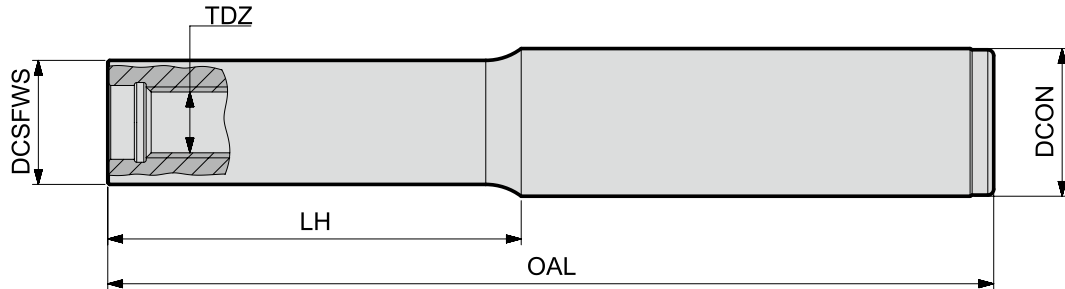
Series	APMX	Designation	EDP 1700..	DC	CICT	LF	TYPE	DCON / TDZ	LH	CBDB	DCSFMS	
WNEX 0806	7.0	E90 - WN08 - D32Z2W32 - L120	0969	32	2	120	Weldon	32	40	-	-	●
		E90 - WN08 - D40Z3W32 - L120	0972	40	3	120		32	40	-	-	●
		E90 - WN08 - D40Z4W32 - L120	0973	40	4	120		32	40	-	-	●
		E90 - WN08 - D50Z4W32 - L120	0974	50	4	120		32	40	-	-	●
		E90 - WN08 - D50Z5W32 - L120	0990	50	5	120		32	40	-	-	●
		E90 - WN08 - D32Z2C32 - L120	0991	32	2	120	Cylindrical	32	40	-	-	●
		E90 - WN08 - D32Z2C32 - L200	0872	32	2	200		32	60	-	-	●
		E90 - WN08 - D33Z2C32 - L200	0873	33	2	200		32	40	-	-	●
		E90 - WN08 - D40Z3C32 - L120	0994	40	3	120		32	40	-	-	●
		E90 - WN08 - D40Z3C32 - L200	0874	40	3	200		32	40	-	-	●
		E90 - WN08 - D40Z4C32 - L120	0996	40	4	120		32	40	-	-	●
		E90 - WN08 - D50Z4C32 - L120	0997	50	4	120		32	40	-	-	●
		E90 - WN08 - D50Z5C32 - L120	0998	50	5	120		32	40	-	-	●
		F90 - WN08 - D50Z4S22	0875	50	4	40	Shellmill	22	-	20	44	●
		F90 - WN08 - D50Z5S22	0976	50	5	40		22	-	20	44	●
		F90 - WN08 - D63Z5S22	0876	63	5	40		22	-	20	48	●
		F90 - WN08 - D63Z6S22	0977	63	6	40		22	-	20	48	●
		F90 - WN08 - D80Z4S27	0999	80	4	50		27	-	20	56	●
		F90 - WN08 - D80Z6S25.4	1000	80	6	50		25.4	-	26.64	56	●
		F90 - WN08 - D80Z7S27	0878	80	7	50		27	-	23	56	●
		F90 - WN08 - D80Z7S25.4	0877	80	7	50		25.4	-	26.64	56	●
		F90 - WN08 - D80Z9S27	0978	80	9	50		27	-	23	56	●
		F90 - WN08 - D100Z8S31.75 - WOC	1002	100	8	50		31.75	-	32	67	X
		F90 - WN08 - D100Z9S32	0979	100	9	50		32	-	26	67	●
		F90 - WN08 - D100Z11S32	0980	100	11	50		32	-	26	67	●
		F90 - WN08 - D125Z10S38.1 - WOC	1003	125	10	63		38.1	-	38	85	X
		F90 - WN08 - D125Z11S40	0981	125	11	63		40	-	29	85	●
		F90 - WN08 - D125Z14S40	0982	125	14	63		40	-	29	85	●
		M90 - WN08 - D32Z2M16	1004	32	2	65	Modular	M16	42	-	29	●
		M90 - WN08 - D40Z3M16	1005	40	3	65		M16	42	-	29	●
		M90 - WN08 - D40Z4M16	0984	40	4	65		M16	42	-	29	●

* Clamping Torque (Nm) 3.0Nm

WNEX0806	Screw	Wrench	Handle	BIT
Description	TP154011-GS	TPWBTP15	DH-H4	DB-TP15
EDP	18000251	18000217	18000189	18000208

Milling - Modular Shank

Modular Shanks



Unit:mm

Series	Designation	EDP 1700..	DCSFWS	TDZ	LF	LH	TYPE	DCON	
M08	EM - M08 - D13C16 - L100	0634	13	M08	100	40	Cylindrical	16	●
	EM - M08 - D15C16 - L130	0635	15	M08	130	70		16	●
M10	EM - M10 - D18C20 - L130	0636	18	M10	130	70	Cylindrical	20	●
M12	EM - M12 - D23C25 - L150	0637	23	M12	150	70	Cylindrical	25	●
	EM - M12 - D23C25 - L200	0638	23	M12	200	100		25	●
	EM - M12 - D23C25 - L250	0639	23	M12	250	150		25	●
M16	EM - M16 - D30C32 - L150	0640	30	M16	150	70	Cylindrical	32	●
	EM - M16 - D30C32 - L200	0641	30	M16	200	100		32	●
	EM - M16 - D30C32 - L250	0642	30	M16	250	150		32	●
	EM - M16 - D30C32 - L300	0643	30	M16	300	200		32	●

Mounting Bolt

DCON	Description	EDP
Ø16	YHBM08-L20	18000224
Ø16 HF	YHBM08-L25	18000238
Ø22	YHBM10-L25	18000239
Ø22 HF	YHBM10-L30	18000240
Ø25.4 (Metric O.D)	YHBM12-L30	18000241
Ø27	YHBM12-L30	18000241
Ø31.75 (Metric O.D)	YMBM16-L42	18000242
Ø32	YMBM16-L42	18000242
Ø32 HF	YMBM16-L50	18000258
Ø38.1 (Metric O.D)	YMBM20-L54	18000243
Ø40	YMBM20-L54	18000243
Ø0.5" (Ø12.7)	YHBU250-L25.4	18000244
Ø0.75" (Ø19.05)	YHBU375-L25.4	18000245
Ø0.75" (Ø19.05) HF	YHBU375-L31.75	18000246
Ø1.0" (Ø25.4)	YHBU500-L38.1	18000247
Ø1.25" (Ø31.75)	YMBU625-L52	18000248
Ø1.5" (Ø38.1)	YMBU750-L60	18000249
Ø2.0" (Ø50.8)	YMBU1000-L70	18000250



DRILLING

Drilling Overview

Drill Holder

X-Drill Inserts (SYMx)

Square Drill Inserts (SPMX)

Triagonal Drilling Inserts (WCMX)



Scan this QR code
to see our
X-Drill
at work.

Drilling Overview

Drilling Grades

Drilling Grades		P Steel					M Stainless steel					K Cast iron				
		P05	P15	P25	P35	P45	M05	M15	M25	M35	M45	K05	K15	K25	K35	K45
PVD	YG713			713					713					713		
	YG602				602					602					602	
	YG613					613					613					

YG713 P15 - P30 M15 - M30 K15 - K30 H20 - H30	PVD - TiAlN 	Drilling Grade for General Steel Application - Multi-layer TiAlN structure realizes stronger crater and flank wear resistance - Fine-grained carbide and balanced substrate
YG602 P20 - P35 M20 - M40 K20 - K40 S15 - S25	PVD - TiAlN 	Universal grade for General Drilling Application - Ultra Dense PVD Coating with optimal thermal resistance & strength - Sub-Micron substrate designed for demanding application
YG613 P30 - P50 M30 - M50	PVD - TiAlN 	Drilling Grade for Stainless Steel Application - New coating layer with lubrication preventing built-up edge on ultra fine grain substrate with high toughness. - The toughest substrate provides excellent cutting performance in stainless steel

Universal Drilling Inserts

	4 Corner	SYMX Series	SYMX	05, 06, 07, 08 NEW 10, 11, 13, 15
	4 Corner	SPMX Series	SPMX	05, 06, 07, 09, 11, 14
	ISO 3 Corner	WCMX Series	WCMX	03, 04, 05, 06, 08

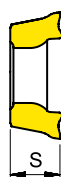
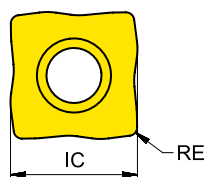
Drilling Chipbreakers

P	M	K
	M	
-ST		
- Sharp Geometry - Sticky Material, Stainless Steel		
P	M	K
General Inserts (No Description)		
First Choice for General Application		

Drilling - Inserts

X-Drill Inserts (SYMX)

Recommended Cutting Conditions : p.259



Series	IC	S	Series	IC	S
SYMX 0502	4.97	2.35	SYMX 10T3	9.99	3.97
SYMX 0602	5.99	2.35	SYMX 1104	11.39	4.00
SYMX 07T2	7.01	2.80	SYMX 1304	13.00	4.76
SYMX 0803	8.30	3.20	SYMX 1505	15.50	5.00

EDP 3200..

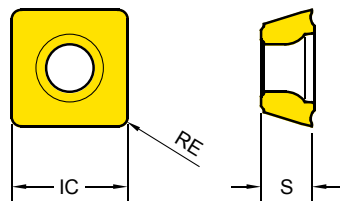
SYMX	Designation	RE (mm)	Fn (mm/rev.)	P25 M25 K30	P20 M20 K20	P40 M40
				YG602	YG713	YG613
SYMX General	SYMX 050204	0.4	0.06~0.12		● 0097	● 0098
	SYMX 060204	0.4	0.06~0.12		● 0093	● 0095
	SYMX 07T206	0.6	0.06~0.12		● 0099	● 0100
	SYMX 080306	0.6	0.08~0.20		● 0101	● 0102
	SYMX 10T308	0.8	0.08~0.2		● 0107	● 0108
	SYMX 110408	0.8	0.08~0.2		● 0109	● 0110
	SYMX 130410	1.0	0.08~0.2		● 0111	● 0112
	SYMX 150512	1.2	0.08~0.22		● 0113	● 0114

● : Stock item ○ : Order made item

Drilling - Inserts

Square Drill Inserts (SPMX)

Recommended Cutting Conditions : p.259



Series	IC	S
SPMX 0502	5.00	2.38
SPMX 0602	6.00	2.41
SPMX 07T3	7.94	3.97
SPMX 0904	9.80	4.30
SPMX 1104	11.50	4.80
SPMX 1405	14.30	5.20

EDP 3200..

SPMX		Designation	RE (mm)	Fn (mm/rev.)	P25 M25 K30	P20 M20 K20	P40 M40
					YG602	YG713	YG613
SPMX General 		SPMX 050204	0.4	0.07~0.14	● 0005	● 0062	● 0077
		SPMX 060204	0.4	0.08~0.14	● 0006	● 0063	● 0078
		SPMX 07T308	0.8	0.08~0.16	● 0007	● 0064	● 0061
		SPMX 090408	0.8	0.08~0.16	● 0008	● 0065	● 0079
		SPMX 110408	0.8	0.10~0.18	● 0009	● 0066	● 0080
		SPMX 140512	1.2	0.10~0.20	● 0010	● 0067	
-ST Stainless Steel 		SPMX 050204 - ST	0.4	0.03~0.10	● 0011		● 0070
		SPMX 060204 - ST	0.4	0.04~0.11	● 0012		● 0071
		SPMX 07T308 - ST	0.8	0.04~0.11	● 0013		● 0068
		SPMX 090408 - ST	0.8	0.05~0.12	● 0014		● 0072
		SPMX 110408 - ST	0.8	0.05~0.12			● 0073
		SPMX 140512 - ST	1.2	0.05~0.16			● 0074

● : Stock item ○ : Order made item

TURNING

PARTING & GROOVING

MILLING

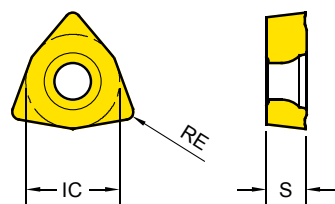
DRILLING

TECHNICAL INFORMATION

Drilling - Inserts

Triagonal Drill Inserts (WCMX)

Recommended Cutting Conditions : p.259



Series	IC	S
WCMX 0302	5.56	2.38
WCMX 0402	6.35	2.38
WCMX 0503	7.94	3.18
WCMX 06T3	9.53	3.97
WCMX 0804	12.70	4.76

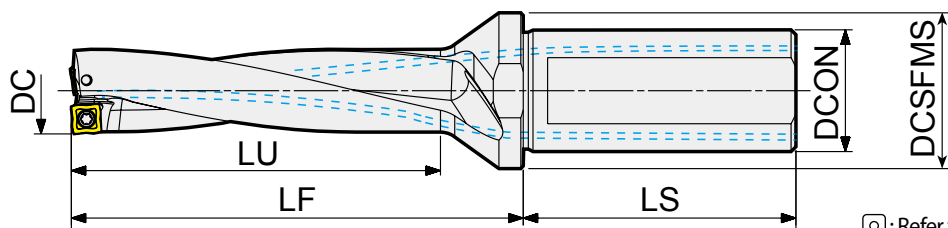
EDP 3200..

WCMX	Designation	RE (mm)	Fn (mm/rev.)	P25 M25 K30	P20 M20 K20	P40 M40
				YG602	YG713	YG613
WCMX General 	WCMX 030208	0.8	0.05 ~ 0.12	● 0031	● 0086	
	WCMX 040208	0.8	0.05 ~ 0.12	● 0003	● 0087	
	WCMX 050308	0.8	0.06 ~ 0.14	● 0001	● 0088	
	WCMX 06T308	0.8	0.08 ~ 0.14	● 0002	● 0089	
	WCMX 080412	1.2	0.08 ~ 0.14	● 0004	● 0090	● 0091

● : Stock item ○ : Order made item

Drilling - Drill Holder

X-Drill Holder (SYM05) (DC 14~16.5)



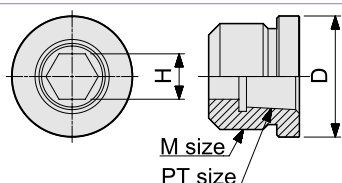
□: Refer to p. 232

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM05	14	28	YGSY2 - 140S20 - 05	1019	46	96.0	20	25	50
		42	YGSY3 - 140S20 - 05	1031	60	110.0			
		56	YGSY4 - 140S20 - 05	1043	74	124.0			
		70	YGSY5 - 140S20 - 05	1055	88	141.5			
	14.5	30	YGSY2 - 145S20 - 05	1134	49	99.0			
		45	YGSY3 - 145S20 - 05	1149	64	114.0			
		60	YGSY4 - 145S20 - 05	1164	79	129.0			
		75	YGSY5 - 145S20 - 05	1179	94	144.0			
	15	30	YGSY2 - 150S20 - 05	1020	49	99.0			
		45	YGSY3 - 150S20 - 05	1032	64	114.0			
		60	YGSY4 - 150S20 - 05	1044	79	129.0			
		75	YGSY5 - 150S20 - 05	1056	94	146.5			
	15.5	32	YGSY2 - 155S20 - 05	1135	52	102.0			
		48	YGSY3 - 155S20 - 05	1150	68	118.0			
		64	YGSY4 - 155S20 - 05	1165	84	134.0			
		80	YGSY5 - 155S20 - 05	1180	100	150.0			
	16	32	YGSY2 - 160S25 - 05	1021	52	102.0			
		48	YGSY3 - 160S20 - 05	1033	68	118.0			
		64	YGSY4 - 160S20 - 05	1045	84	134.0			
		80	YGSY5 - 160S20 - 05	1057	100	151.5			
	16.5	34	YGSY2 - 165S20 - 05	1136	54	104.0			
		51	YGSY3 - 165S20 - 05	1151	72	122.0			
		68	YGSY4 - 165S20 - 05	1166	89	139.0			
		85	YGSY5 - 165S20 - 05	1181	106	155.0			

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON20)



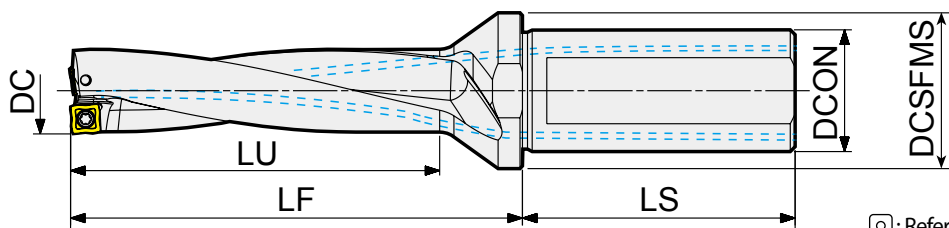
Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M12-1/8	38000001	20	14	M12x1.0	PT 1/8	6

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 0.6Nm

SYM05		Screw		Wrench	
Description		TP062004-GS		TPWFTP06	
EDP		18000252		18000262	
Plug	DCON		Ø 20	Ø 25	Ø 32
	Description		PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4
	EDP		38000001	38000002	38000003

X-Drill Holder (SYM06) (DC 17~20.5)



☐: Refer to p. 232

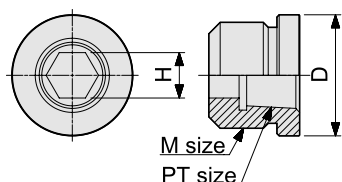
Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM06 060204	17	34	YGSY2 - 170S25 - 06	0851	54	96.0	25	32	56
		51	YGSY3 - 170S25 - 06	0855	71	110.0			
		68	YGSY4 - 170S25 - 06	0859	88	124.0			
		85	YGSY5 - 170S25 - 06	0863	105	141.5			
	17.5	36	YGSY2 - 175S25 - 06	1137	57	99.0			
		54	YGSY3 - 175S25 - 06	1152	75	114.0			
		72	YGSY4 - 175S25 - 06	1167	93	129.0			
		90	YGSY5 - 175S25 - 06	1182	111	144.0			
	18	36	YGSY2 - 180S25 - 06	0852	57	99.0			
		54	YGSY3 - 180S25 - 06	0856	75	114.0			
		72	YGSY4 - 180S25 - 06	0860	93	129.0			
		90	YGSY5 - 180S25 - 06	0864	111	146.5			
	18.5	38	YGSY2 - 185S25 - 06	1138	59	102.0			
		57	YGSY3 - 185S25 - 06	1153	78	118.0			
		76	YGSY4 - 185S25 - 06	1168	97	134.0			
		95	YGSY5 - 185S25 - 06	1183	116	150.0			
	19	38	YGSY2 - 190S25 - 06	0853	59	102.0			
		57	YGSY3 - 190S25 - 06	0857	78	118.0			
		76	YGSY4 - 190S25 - 06	0861	97	134.0			
		95	YGSY5 - 190S25 - 06	0865	116	151.5			
	19.5	40	YGSY2 - 195S25 - 06	1139	63	104.0			
		60	YGSY3 - 195S25 - 06	1154	83	122.0			
		80	YGSY4 - 195S25 - 06	1169	103	139.0			
		100	YGSY5 - 195S25 - 06	1184	123	155.0			

▶ Refer to offset value and hole tolerance: p. 293

▶ NEXT PAGE

PLUG (DCON25)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M14-1/8	38000002	25	16	M14x1.0	PT 1/8	6

* Plug for turning lathe should be ordered separately.

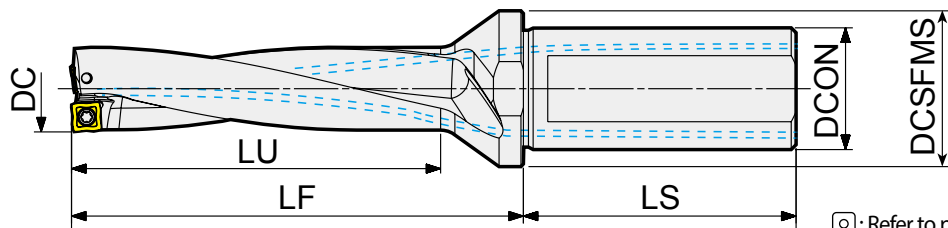
* Clamping Torque (Nm) 0.7Nm

SYM06	Screw	Wrench
Description	TP072205-GS	TPWFTP07
EDP	18000253	18000001

Plug	DCON	Ø 20	Ø 25	Ø 32
Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	
EDP	38000001	38000002	38000003	

Drilling - Drill Holder

X-Drill Holder (SYM06) (DC 17~20.5)



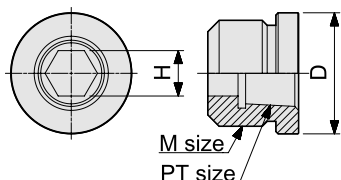
☐: Refer to p. 232

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM06	20	40	YGSY2 - 200S25 - 06	0854	63	119.0	25	32	56
		60	YGSY3 - 200S25 - 06	0858	83	139.0			
		80	YGSY4 - 200S25 - 06	0862	103	159.0			
		100	YGSY5 - 200S25 - 06	0866	123	179.0			
	20.5	42	YGSY2 - 205S25 - 06	1140	65	121.0			
		63	YGSY3 - 205S25 - 06	1155	86	142.0			
		84	YGSY4 - 205S25 - 06	1170	107	163.0			
		105	YGSY5 - 205S25 - 06	1185	128	184.0			

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON25)



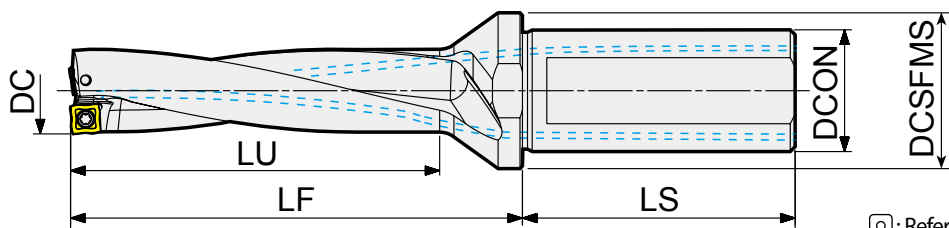
Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M14-1/8	38000002	25	16	M14x1.0	PT 1/8	6

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 0.7Nm

SYM06		Screw		Wrench	
Description		TP072205-GS		TPWFTP07	
EDP		18000253		18000001	
Plug	DCON	Ø 20	Ø 25	Ø 32	
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	
	EDP	38000001	38000002	38000003	

X-Drill Holder (SYM07) (DC 21~23.5)



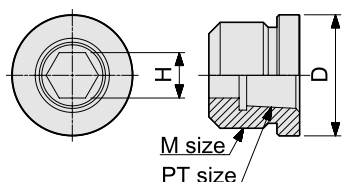
☐: Refer to p. 232

Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM07T206	21	42	YGSY2 - 210S25 - 07	1022	65	121.0	25	32	56
		63	YGSY3 - 210S25 - 07	1034	86	142.0			
		84	YGSY4 - 210S25 - 07	1046	107	163.0			
		105	YGSY5 - 210S25 - 07	1058	128	184.0			
	21.5	44	YGSY2 - 215S25 - 07	1141	67	123.0			
		66	YGSY3 - 215S25 - 07	1156	89	145.0			
		88	YGSY4 - 215S25 - 07	1171	111	167.0			
		110	YGSY5 - 215S25 - 07	1186	133	189.0			
	22	44	YGSY2 - 220S25 - 07	1023	67	123.0			
		66	YGSY3 - 220S25 - 07	1035	89	145.0			
		88	YGSY4 - 220S25 - 07	1047	111	167.0			
		110	YGSY5 - 220S25 - 07	1059	133	189.0			
	22.5	46	YGSY2 - 225S25 - 07	1142	68	124.0			
		69	YGSY3 - 225S25 - 07	1157	91	147.0			
		92	YGSY4 - 225S25 - 07	1172	114	170.0			
		115	YGSY5 - 225S25 - 07	1187	137	193.0			
	23	46	YGSY2 - 230S25 - 07	1024	68	124.0			
		69	YGSY3 - 230S25 - 07	1036	91	147.0			
		92	YGSY4 - 230S25 - 07	1048	114	170.0			
		115	YGSY5 - 230S25 - 07	1060	137	193.0			
	23.5	48	YGSY2 - 235S25 - 07	1143	71	127.0			
		72	YGSY3 - 235S25 - 07	1158	94	150.0			
		96	YGSY4 - 235S25 - 07	1173	118	174.0			
		120	YGSY5 - 235S25 - 07	1188	142	198.0			

▶ Refer to offset value and hole tolerance: p. 293

PLUG (DCON25)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M14-1/8	38000002	25	16	M14x1.0	PT 1/8	6

* Plug for turning lathe should be ordered separately.

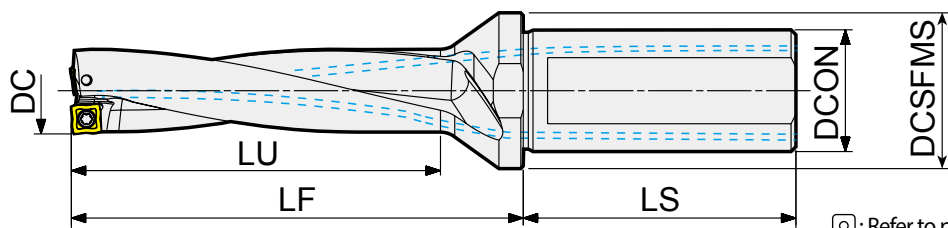
* Clamping Torque (Nm) 0.7Nm

SYM07	Screw	Wrench
Description	TP072205-GS	TPWFTP07
EDP	18000253	18000001

Plug	DCON	Ø 20	Ø 25	Ø 32
Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	
EDP	38000001	38000002	38000003	

Drilling - Drill Holder

X-Drill Holder (SYM08) (DC 24~28.5)



□: Refer to p. 232

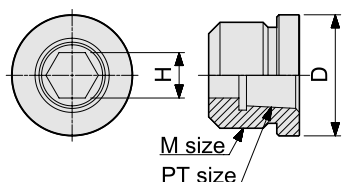
Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM080306	24	48	YGSY2 - 240S32 - 08	1025	70	130.0	32	40	60
		72	YGSY3 - 240S32 - 08	1037	94	154.0			
		96	YGSY4 - 240S32 - 08	1049	118	178.0			
		120	YGSY5 - 240S32 - 08	1061	142	202.0			
	24.5	50	YGSY2 - 245S32 - 08	1144	72	132.0			
		75	YGSY3 - 245S32 - 08	1159	97	157.0			
		100	YGSY4 - 245S32 - 08	1174	122	182.0			
		125	YGSY5 - 245S32 - 08	1189	147	207.0			
	25	50	YGSY2 - 250S32 - 08	1026	72	132.0			
		75	YGSY3 - 250S32 - 08	1038	97	157.0			
		100	YGSY4 - 250S32 - 08	1050	122	182.0			
		125	YGSY5 - 250S32 - 08	1062	147	207.0			
	25.5	52	YGSY2 - 255S32 - 08	1145	73	133.0			
		78	YGSY3 - 255S32 - 08	1160	99	159.0			
		104	YGSY4 - 255S32 - 08	1175	125	185.0			
		130	YGSY5 - 255S32 - 08	1190	151	211.0			
	26	52	YGSY2 - 260S32 - 08	1027	73	133.0			
		78	YGSY3 - 260S32 - 08	1039	99	159.0			
		104	YGSY4 - 260S32 - 08	1051	125	185.0			
		130	YGSY5 - 260S32 - 08	1063	151	211.0			

► Refer to offset value and hole tolerance: p. 293

► NEXT PAGE

PLUG (DCON32)



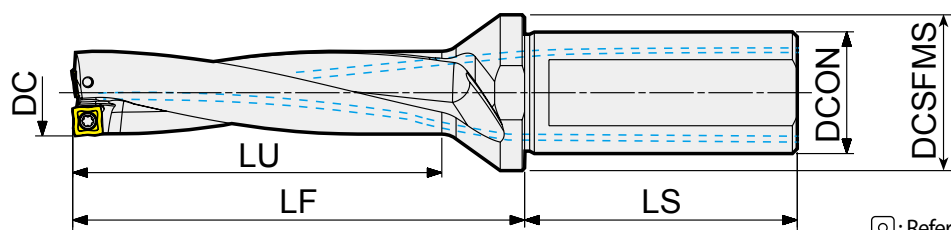
Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M22-1/4	38000003	32	24	M22x1.25	PT 1/4	10

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 1.2Nm

SYM08		Screw		Wrench	
Description		TP072506-GS		TPWFTP07	
EDP		18000261		18000001	
Plug	DCON	Ø 20	Ø 25	Ø 32	
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	
	EDP	38000001	38000002	38000003	

X-Drill Holder (SYM08) (DC 24~28.5)



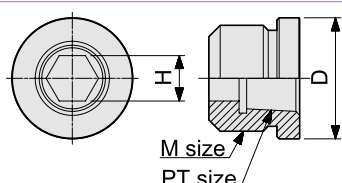
☐: Refer to p. 232

Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SYM08 080306	26.5	54	YGSY2 - 265S32 - 08	1146	77	137.0	32	40	60
		81	YGSY3 - 265S32 - 08	1161	104	164.0			
		108	YGSY4 - 265S32 - 08	1176	131	191.0			
		135	YGSY5 - 265S32 - 08	1191	158	218.0			
	27	54	YGSY2 - 270S32 - 08	1028	77	137.0			
		81	YGSY3 - 270S32 - 08	1040	104	164.0			
		108	YGSY4 - 270S32 - 08	1052	131	191.0			
		135	YGSY5 - 270S32 - 08	1064	158	218.0			
	27.5	56	YGSY2 - 275S32 - 08	1147	79	139.0			
		84	YGSY3 - 275S32 - 08	1162	107	167.0			
		112	YGSY4 - 275S32 - 08	1177	135	195.0			
		140	YGSY5 - 275S32 - 08	1192	163	223.0			
	28	56	YGSY2 - 280S32 - 08	1029	79	139.0			
		84	YGSY3 - 280S32 - 08	1041	107	167.0			
		112	YGSY4 - 280S32 - 08	1053	135	195.0			
		140	YGSY5 - 280S32 - 08	1065	163	223.0			
	28.5	58	YGSY2 - 285S32 - 08	1148	81	141.0			
		87	YGSY3 - 285S32 - 08	1163	110	170.0			
		116	YGSY4 - 285S32 - 08	1178	139	199.0			
		145	YGSY5 - 285S32 - 08	1193	168	228.0			

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON32)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M22-1/4	38000003	32	24	M22x1.25	PT 1/4	10

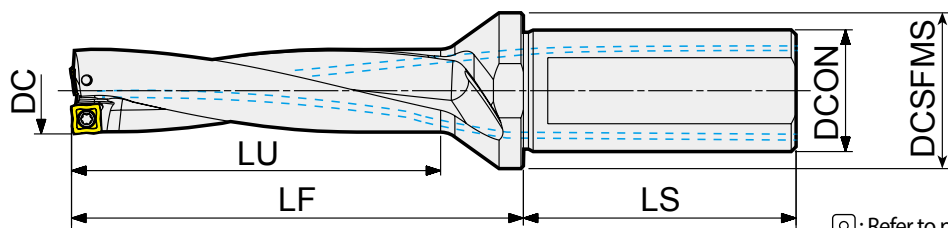
* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 1.2Nm

SYM08		Screw		Wrench	
Description		TP072506-GS		TPWFTP07	
EDP		18000261		18000001	
Plug	DCON	Ø 20	Ø 25	Ø 32	
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	
	EDP	38000001	38000002	38000003	

Drilling - Drill Holder

X-Drill Holder (SYMX10) (DC 29~33.5)



□: Refer to p. 232

Unit: mm

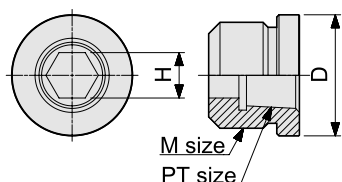
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
NEW SYMX 10T308	29	58	YGSY2-290S32-10	1212	82	142.0	32	40	60
		87	YGSY3-290S32-10	1222	111	171.0			
		116	YGSY4-290S32-10	1232	140	200.0			
		145	YGSY5-290S32-10	1242	169	229.0			
	29.5	60	YGSY2-295S32-10	1213	84	144.0			
		90	YGSY3-295S32-10	1223	114	174.0			
		120	YGSY4-295S32-10	1233	144	204.0			
		150	YGSY5-295S32-10	1243	174	234.0			
	30	60	YGSY2-300S32-10	1214	84	144.0			
		90	YGSY3-300S32-10	1224	114	174.0			
		120	YGSY4-300S32-10	1234	144	204.0			
		150	YGSY5-300S32-10	1244	174	234.0			
	30.5	62	YGSY2-305S32-10	1215	86	146.0			
		93	YGSY3-305S32-10	1225	117	177.0			
		124	YGSY4-305S32-10	1235	148	208.0			
		155	YGSY5-305S32-10	1245	179	239.0			
	31	62	YGSY2-310S32-10	1216	86	146.0			
		93	YGSY3-310S32-10	1226	117	177.0			
		124	YGSY4-310S32-10	1236	148	208.0			
		155	YGSY5-310S32-10	1246	179	239.0			

NEW
SYM X
10T308

► Refer to offset value and hole tolerance: p. 293

► NEXT PAGE

PLUG (DCON32)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M22-1/4	38000003	32	24	M22x1.25	PT 1/4	10

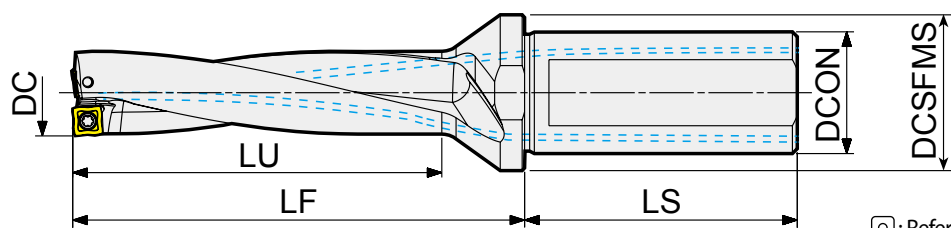
* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 2.0Nm

SYM X10		Screw		Wrench	
Description		TP103509-GS		TPWFTP10	
EDP		18000266		18000284	
Plug	DCON	Ø 20	Ø 25	Ø 32	Ø 40
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	PLUG M26-1/4
	EDP	38000001	38000002	38000003	38000004

Drilling - Drill Holder

X-Drill Holder (SYM10) (DC 29~33.5)



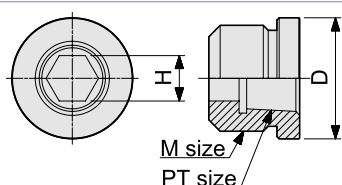
☐: Refer to p. 232

Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
NEW SYM10T308	31.5	64	YGSY2-315S32-10	1217	88	148.0	32	40	60
		96	YGSY3-315S32-10	1227	120	180.0			
		128	YGSY4-315S32-10	1237	152	212.0			
		160	YGSY5-315S32-10	1247	184	244.0			
	32	64	YGSY2-320S32-10	1218	88	148.0			
		96	YGSY3-320S32-10	1228	120	180.0			
		128	YGSY4-320S32-10	1238	152	212.0			
		160	YGSY5-320S32-10	1248	184	244.0			
	32.5	66	YGSY2-325S32-10	1219	89	149.0			
		99	YGSY3-325S32-10	1229	122	182.0			
		132	YGSY4-325S32-10	1239	155	215.0			
		165	YGSY5-325S32-10	1249	188	248.0			
	33	66	YGSY2-330S32-10	1220	89	149.0			
		99	YGSY3-330S32-10	1230	122	182.0			
		132	YGSY4-330S32-10	1240	155	215.0			
		165	YGSY5-330S32-10	1250	188	248.0			
	33.5	68	YGSY2-335S32-10	1221	90	150.0			
		102	YGSY3-335S32-10	1231	124	184.0			
		136	YGSY4-335S32-10	1241	158	218.0			
		170	YGSY5-335S32-10	1251	192	252.0			

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON32)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M22-1/4	38000003	32	24	M22x1.25	PT 1/4	10

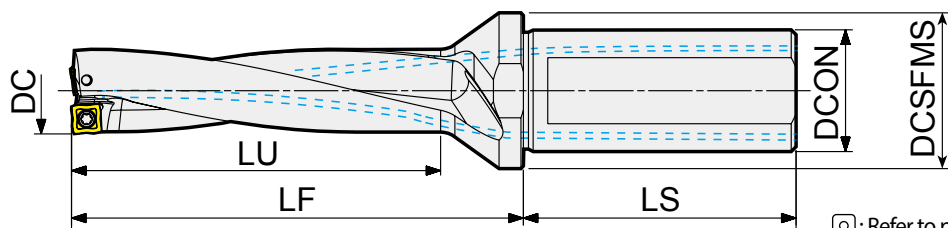
* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 2.0Nm

SYM10		Screw		Wrench	
Description		TP103509-GS		TPWFTP10	
EDP		18000266		18000284	
Plug	DCON	Ø 20	Ø 25	Ø 32	Ø 40
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	PLUG M26-1/4
	EDP	38000001	38000002	38000003	38000004

Drilling - Drill Holder

X-Drill Holder (SYMX11) (DC 34~38)



□: Refer to p. 232

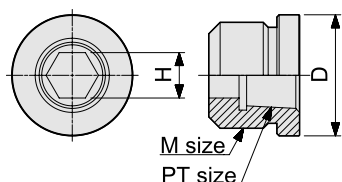
Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
34	68		YGSY2-340S40-11	1252	94	164.0	40	50	70
	102		YGSY3-340S40-11	1257	128	198.0			
	136		YGSY4-340S40-11	1262	162	232.0			
	170		YGSY5-340S40-11	1267	196	266.0			
35	70		YGSY2-350S40-11	1253	96	166.0			
	105		YGSY3-350S40-11	1258	131	201.0			
	140		YGSY4-350S40-11	1263	166	236.0			
	175		YGSY5-350S40-11	1268	201	271.0			
36	72		YGSY2-360S40-11	1254	98	168.0			
	108		YGSY3-360S40-11	1259	134	204.0			
	144		YGSY4-360S40-11	1264	170	240.0			
	180		YGSY5-360S40-11	1269	206	276.0			
37	74		YGSY2-370S40-11	1255	99	169.0			
	111		YGSY3-370S40-11	1260	136	206.0			
	148		YGSY4-370S40-11	1265	173	243.0			
	185		YGSY5-370S40-11	1270	210	280.0			
38	76		YGSY2-380S40-11	1256	101	171.0			
	114		YGSY3-380S40-11	1261	139	209.0			
	152		YGSY4-380S40-11	1266	177	247.0			
	190		YGSY5-380S40-11	1271	215	285.0			

NEW
SYM X
110408

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON40)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M26-1/4	38000004	40	28	M26x1.25	PT 1/4	10

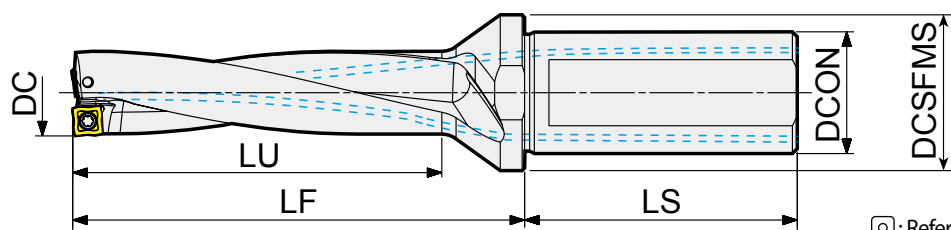
* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 2.0Nm

SYM X11		Screw		Wrench	
Description		TP103509-GS		TPWFTP10	
EDP		18000266		18000284	
Plug	DCON	Ø 20	Ø 25	Ø 32	Ø 40
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	PLUG M26-1/4
EDP		38000001	38000002	38000003	38000004

Drilling - Drill Holder

X-Drill Holder (SYMX13) (DC 39~44)



☐: Refer to p. 232

Unit:mm

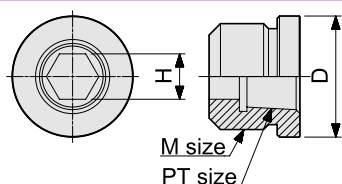
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
39	78		YGSY2-390S40-13	1326	104	174.0	40	50	70
	117		YGSY3-390S40-13	1332	143	213.0			
	156		YGSY4-390S40-13	1338	182	252.0			
	195		YGSY5-390S40-13	1344	221	291.0			
40	80		YGSY2-400S40-13	1327	106	176.0			
	120		YGSY3-400S40-13	1333	146	216.0			
	160		YGSY4-400S40-13	1339	186	256.0			
	200		YGSY5-400S40-13	1345	226	296.0			
41	82		YGSY2-410S40-13	1328	108	178.0			
	123		YGSY3-410S40-13	1334	149	219.0			
	164		YGSY4-410S40-13	1340	190	260.0			
	205		YGSY5-410S40-13	1346	231	301.0			
42	84		YGSY2-420S40-13	1329	110	180.0			
	126		YGSY3-420S40-13	1335	152	222.0			
	168		YGSY4-420S40-13	1341	194	264.0			
	210		YGSY5-420S40-13	1347	236	306.0			
43	86		YGSY2-430S40-13	1330	112	182.0			
	129		YGSY3-430S40-13	1336	155	225.0			
	172		YGSY4-430S40-13	1342	198	268.0			
	215		YGSY5-430S40-13	1348	241	311.0			
44	88		YGSY2-440S50-13	1331	114	184.0			
	132		YGSY3-440S50-13	1337	158	228.0			
	176		YGSY4-440S50-13	1343	202	272.0			
	220		YGSY5-440S50-13	1349	246	316.0			

NEW

SYM X
130410

▶ Refer to offset value and hole tolerance: p. 293

PLUG (DCON40)



Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M26-1/4	38000004	40	28	M26x1.25	PT 1/4	10

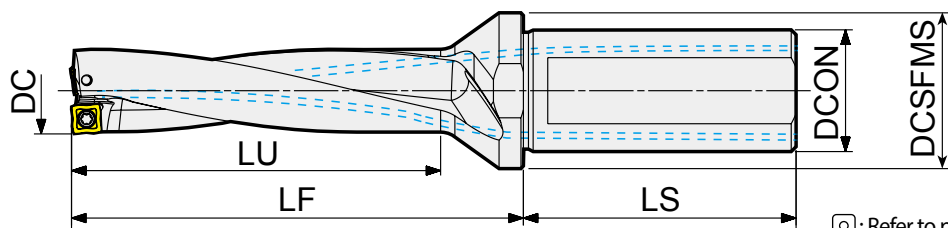
* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 3.0Nm

SYM X13		Screw		Wrench	
Description		TP154010-HS		TPWFTP15	
EDP		18000232		18000003	
Plug	DCON	Ø 20	Ø 25	Ø 32	Ø 40
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	PLUG M26-1/4
	EDP	38000001	38000002	38000003	38000004

Drilling - Drill Holder

X-Drill Holder (SYM15) (DC 45~50)



□: Refer to p. 232

Unit: mm

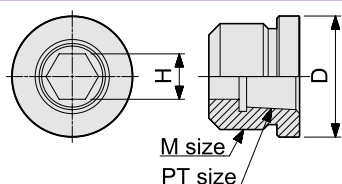
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
45	90		YGSY2-450S40-15	1350	125	195.0	40	60	70
	135		YGSY3-450S40-15	1356	170	240.0			
	180		YGSY4-450S40-15	1362	215	285.0			
	225		YGSY5-450S40-15	1368	260	330.0			
46	92		YGSY2-460S40-15	1351	127	197.0			
	138		YGSY3-460S40-15	1357	173	243.0			
	184		YGSY4-460S40-15	1363	219	289.0			
	230		YGSY5-460S40-15	1369	265	335.0			
47	94		YGSY2-470S40-15	1352	129	199.0			
	141		YGSY3-470S40-15	1358	176	246.0			
	188		YGSY4-470S40-15	1364	223	293.0			
	235		YGSY5-470S40-15	1370	270	340.0			
48	96		YGSY2-480S40-15	1353	131	201.0			
	144		YGSY3-480S40-15	1359	179	249.0			
	192		YGSY4-480S40-15	1365	227	297.0			
	240		YGSY5-480S40-15	1371	275	345.0			
49	98		YGSY2-490S40-15	1354	133	203.0			
	147		YGSY3-490S40-15	1360	182	252.0			
	196		YGSY4-490S40-15	1366	231	301.0			
	245		YGSY5-490S40-15	1372	280	350.0			
50	100		YGSY2-500S40-15	1355	135	205.0			
	150		YGSY3-500S40-15	1361	185	255.0			
	200		YGSY4-500S40-15	1367	235	305.0			
	250		YGSY5-500S40-15	1373	285	355.0			

NEW

SYM15
150512

► Refer to offset value and hole tolerance: p. 293

PLUG (DCON40)



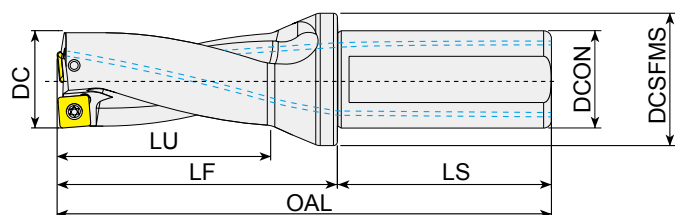
Designation	EDP No.	DCON	ØD	M size	PT size	H
PLUG M26-1/4	38000004	40	28	M26x1.25	PT 1/4	10

* Plug for turning lathe should be ordered separately.

* Clamping Torque (Nm) 3.5Nm

SYM15		Screw		Wrench	
Description		T20590D		TWFT20	
EDP		18000182		18000036	
Plug	DCON	Ø 20	Ø 25	Ø 32	Ø 40
	Description	PLUG M12-1/8	PLUG M14-1/8	PLUG M22-1/4	PLUG M26-1/4
	EDP	38000001	38000002	38000003	38000004

Square Drill Holder (SPMX05) (DC 13~15)


 : Refer to p. 233

Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SPMX 050204	13	26	YGSP2 - 13S20F026 - 05	0001	44	94	20	25	50
		39	YGSP3 - 13S20F039 - 05	0004	57	107			
		65	YGSP5 - 13S20F065 - 05	0007	83	133			
	14	28	YGSP2 - 14S20F028 - 05	0002	46	96			
		42	YGSP3 - 14S20F042 - 05	0005	60	110			
		70	YGSP5 - 14S20F070 - 05	0008	88	138			
	15	30	YGSP2 - 15S20F030 - 05	0003	48	98			
		45	YGSP3 - 15S20F045 - 05	0006	63	113			
		75	YGSP5 - 15S20F075 - 05	0009	93	143			

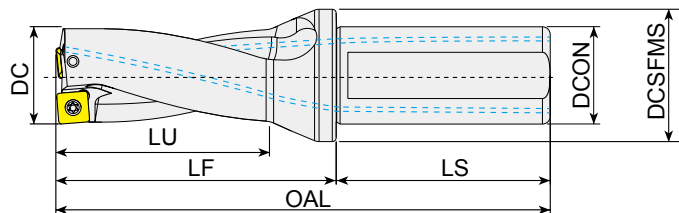
* Call for us DC size increments of 0.5

* Clamping Torque (Nm) 0.6Nm

SPMX05	Screw	Wrench
Description	T062043D	TWFT06
EDP	18000177	18000031

Drilling - Drill Holder

Square Drill Holder (SPMX06) (DC 16~21)



☐: Refer to p. 233

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SPMX 060204	16	32	YGSP2 - 16S25F032 - 06	0010	53	109	25	32	56
		48	YGSP3 - 16S25F048 - 06	0016	69	125			
		80	YGSP5 - 16S25F080 - 06	0022	101	157			
	17	34	YGSP2 - 17S25F034 - 06	0011	55	111			
		51	YGSP3 - 17S25F051 - 06	0017	72	128			
		85	YGSP5 - 17S25F085 - 06	0023	106	162			
	18	87.5	YGSP5 - 17.5S25F87.5 - 06	0846	108	164			
		36	YGSP2 - 18S25F036 - 06	0012	57	113			
		54	YGSP3 - 18S25F054 - 06	0018	75	131			
	19	90	YGSP5 - 18S25F090 - 06	0024	111	167			
		38	YGSP2 - 19S25F038 - 06	0013	59	115			
		57	YGSP3 - 19S25F057 - 06	0019	78	134			
	20	95	YGSP5 - 19S25F095 - 06	0025	116	172			
		40	YGSP2 - 20S25F040 - 06	0014	62	118			
		60	YGSP3 - 20S25F060 - 06	0020	82	138			
	21	100	YGSP5 - 20S25F100 - 06	0026	122	178			
		42	YGSP2 - 21S25F042 - 06	0015	64	120			
		63	YGSP3 - 21S25F063 - 06	0021	85	141			
		105	YGSP5 - 21S25F105 - 06	0027	127	183			

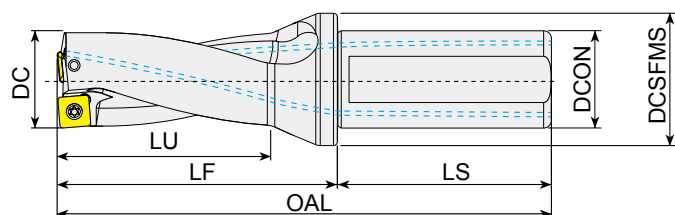
* Call for us DC size increments of 0.5

* Clamping Torque (Nm) 0.7Nm

SPMX06	Screw	Wrench
Description	T072252D	TWFT07
EDP	18000178	18000032

Drilling - Drill Holder

Square Drill Holder (SPMX07) (DC 22~27)



☐: Refer to p. 233

Unit:mm

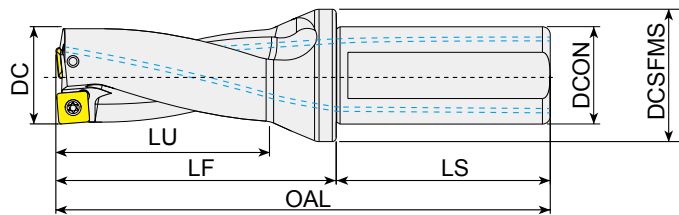
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SPMX 07T308	22	44	YGSP2 - 22S32F044 - 07	0028	74	134	32	45	60
		66	YGSP3 - 22S32F066 - 07	0034	96	156			
		110	YGSP5 - 22S32F110 - 07	0040	140	200			
	23	46	YGSP2 - 23S32F046 - 07	0029	76	136			
		69	YGSP3 - 23S32F069 - 07	0035	99	159			
		115	YGSP5 - 23S32F115 - 07	0041	145	205			
	24	48	YGSP2 - 24S32F048 - 07	0030	78	138			
		72	YGSP3 - 24S32F072 - 07	0036	102	162			
		120	YGSP5 - 24S32F120 - 07	0042	150	210			
	25	50	YGSP2 - 25S32F050 - 07	0031	80	140			
		75	YGSP3 - 25S32F075 - 07	0037	105	165			
		125	YGSP5 - 25S32F125 - 07	0043	155	215			
	26	52	YGSP2 - 26S32F052 - 07	0032	82	142			
		78	YGSP3 - 26S32F078 - 07	0038	108	168			
		130	YGSP5 - 26S32F130 - 07	0044	160	220			
	27	54	YGSP2 - 27S32F054 - 07	0033	84	144			
		81	YGSP3 - 27S32F081 - 07	0039	111	171			
		135	YGSP5 - 27S32F135 - 07	0045	165	225			

* Call for us DC size increments of 0.5

* Clamping Torque (Nm) 1.2Nm

SPMX07	Screw	Wrench
Description	T082564D	TWFT08
EDP	18000179	18000033

Drilling - Drill Holder

Square Drill Holder (SPMX09) (DC 28~33)

☐: Refer to p. 233

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
SPMX 090408	28	56	YGSP2 - 28S32F056 - 09	0046	86	146	32	45	60
		84	YGSP3 - 28S32F084 - 09	0052	114	174			
		140	YGSP5 - 28S32F140 - 09	0058	170	230			
	29	58	YGSP2 - 29S32F058 - 09	0047	88	148			
		87	YGSP3 - 29S32F087 - 09	0053	117	177			
		145	YGSP5 - 29S32F145 - 09	0059	175	235			
	30	60	YGSP2 - 30S32F060 - 09	0048	91	151			
		90	YGSP3 - 30S32F090 - 09	0054	121	181			
		150	YGSP5 - 30S32F150 - 09	0060	181	241			
	31	62	YGSP2 - 31S32F062 - 09	0049	93	153			
		93	YGSP3 - 31S32F093 - 09	0055	124	184			
		155	YGSP5 - 31S32F155 - 09	0061	186	246			
	32	64	YGSP2 - 32S32F064 - 09	0050	95	155			
		96	YGSP3 - 32S32F096 - 09	0056	127	187			
		160	YGSP5 - 32S32F160 - 09	0062	191	251			
	33	66	YGSP2 - 33S32F066 - 09	0051	97	157			
		99	YGSP3 - 33S32F099 - 09	0057	130	190			
		165	YGSP5 - 33S32F165 - 09	0063	196	256			

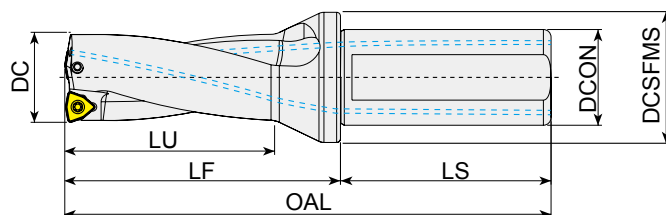
* Call for us DC size increments of 0.5

* Clamping Torque (Nm) 2.4Nm

SPMX09	Screw	Wrench
Description	T103588D	TWFT10
EDP	18000180	18000034

Drilling - Drill Holder

Trigonal Drill Holder (WCMX03) (DC 16~19.5)



: Refer to p. 234 Unit:mm

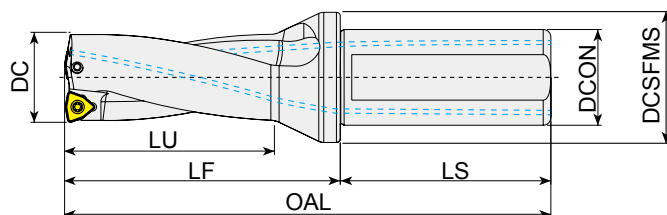
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 030208	16	32	YGWC2 - 16S25F032 - 03	0253	54	110	25	34	56
		48	YGWC3 - 16S25F048 - 03	0296	70	126			
		64	YGWC4 - 16S25F064 - 03	0339	86	142			
	16.5	32	YGWC2 - 16.5S25F032 - 03	0780	54	110			
		48	YGWC3 - 16.5S25F048 - 03	0781	70	126			
		64	YGWC4 - 16.5S25F064 - 03	0782	86	142			
	17	34	YGWC2 - 17S25F034 - 03	0254	56	112			
		51	YGWC3 - 17S25F051 - 03	0297	73	129			
		68	YGWC4 - 17S25F068 - 03	0340	90	146			
	17.5	34	YGWC2 - 17.5S25F034 - 03	0783	56	112			
		51	YGWC3 - 17.5S25F051 - 03	0784	73	129			
		68	YGWC4 - 17.5S25F068 - 03	0785	90	146			
	18	36	YGWC2 - 18S25F036 - 03	0255	58	114			
		54	YGWC3 - 18S25F054 - 03	0298	76	132			
		72	YGWC4 - 18S25F072 - 03	0341	94	150			
	18.5	36	YGWC2 - 18.5S25F036 - 03	0786	58	114			
		54	YGWC3 - 18.5S25F054 - 03	0787	76	132			
		72	YGWC4 - 18.5S25F072 - 03	0788	94	150			
	19	38	YGWC2 - 19S25F038 - 03	0256	60	116			
		57	YGWC3 - 19S25F057 - 03	0299	79	135			
		76	YGWC4 - 19S25F076 - 03	0342	98	154			
	19.5	38	YGWC2 - 19.5S25F038 - 03	0789	60	116			
		57	YGWC3 - 19.5S25F057 - 03	0790	79	135			
		76	YGWC4 - 19.5S25F076 - 03	0791	98	154			

* Clamping Torque (Nm) 0.6Nm

WCMX03	Screw	Wrench
Description	T0622557	TWFT06
EDP	18000183	18000031

Drilling - Drill Holder

Trigonal Drill Holder (WCMX04) (DC 20~23.5)



△: Refer to p. 234

Unit: mm

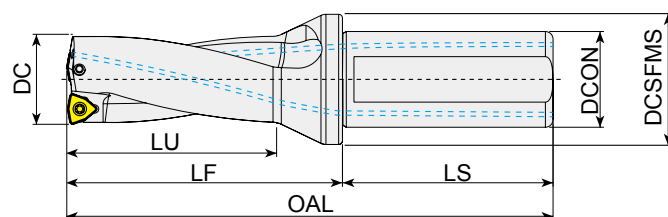
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 040208	20	40	YGWC2 - 20S25F040 - 04	0257	62	118	25	34	56
		60	YGWC3 - 20S25F060 - 04	0300	82	138			
		80	YGWC4 - 20S25F080 - 04	0343	102	158			
	20.5	40	YGWC2 - 20.5S25F040 - 04	0726	62	118			
		60	YGWC3 - 20.5S25F060 - 04	0727	82	138			
	21	42	YGWC2 - 21S25F042 - 04	0258	64	120			
		63	YGWC3 - 21S25F063 - 04	0301	85	141			
		84	YGWC4 - 21S25F084 - 04	0344	106	162			
	21.5	42	YGWC2 - 21.5S25F042 - 04	0728	64	120			
		63	YGWC3 - 21.5S25F063 - 04	0729	85	141			
	22	44	YGWC2 - 22S25F044 - 04	0259	66	122			
		66	YGWC3 - 22S25F066 - 04	0302	88	144			
		88	YGWC4 - 22S25F088 - 04	0345	110	166			
	22.5	44	YGWC2 - 22.5S25F044 - 04	0730	66	122			
		66	YGWC3 - 22.5S25F066 - 04	0731	88	144			
		88	YGWC4 - 22.5S25F088 - 04	0732	110	166			
	23	46	YGWC2 - 23S25F046 - 04	0260	68	124			
		69	YGWC3 - 23S25F069 - 04	0303	91	147			
		92	YGWC4 - 23S25F092 - 04	0346	114	170			
	23.5	46	YGWC2 - 23.5S25F046 - 04	0733	68	124			
		69	YGWC3 - 23.5S25F069 - 04	0734	91	147			

* Clamping Torque (Nm) 1.2Nm

WCMX04	Screw	Wrench
Description	T072565D	TWFT07
EDP	18000184	18000032

Drilling - Drill Holder

Trigonal Drill Holder (WCMX05) (D24 ~29.5)



△: Refer to p. 234 Unit:mm

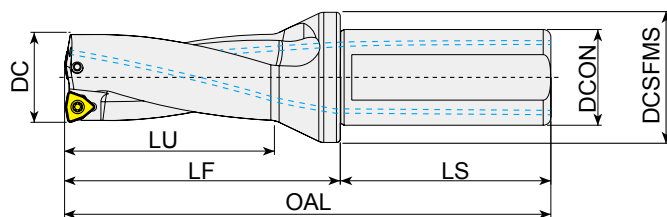
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 050308	24	48	YGWC2 - 24S25F048 - 05	0261	70	126	25	34	56
		72	YGWC3 - 24S25F072 - 05	0304	94	150			
		96	YGWC4 - 24S25F096 - 05	0347	118	174			
	24.5	48	YGWC2 - 24.5S25F048 - 05	0735	70	126			
		72	YGWC3 - 24.5S25F072 - 05	0736	94	150			
		50	YGWC2 - 25S25F050 - 05	0262	72	128			
	25	75	YGWC3 - 25S25F075 - 05	0305	97	153			
		100	YGWC4 - 25S25F100 - 05	0251	122	178			
		50	YGWC2 - 25.5S25F050 - 05	0737	72	128			
	25.5	75	YGWC3 - 25.5S25F075 - 05	0738	97	153			
		52	YGWC2 - 26S25F052 - 05	0263	74	130			
		78	YGWC3 - 26S25F078 - 05	0306	100	156			
	26	104	YGWC4 - 26S25F104 - 05	0349	126	182			
		52	YGWC2 - 26.5S25F052 - 05	0739	74	130			
		78	YGWC3 - 26.5S25F078 - 05	0741	100	156			
	26.5	104	YGWC4 - 26.5S25F104 - 05	0742	126	182			
		54	YGWC2 - 27S25F054 - 05	0264	76	132			
		81	YGWC3 - 27S25F081 - 05	0307	103	159			
	27	108	YGWC4 - 27S25F108 - 05	0350	130	186			
		54	YGWC2 - 27.5S25F054 - 05	0743	76	132			
		81	YGWC3 - 27.5S25F081 - 05	0744	103	159			
	27.5	56	YGWC2 - 28S25F056 - 05	0265	78	134			
		84	YGWC3 - 28S25F084 - 05	0308	106	162			
		112	YGWC4 - 28S25F112 - 05	0351	134	190			
	28	56	YGWC2 - 28.5S25F056 - 05	0745	78	134			
		84	YGWC3 - 28.5S25F084 - 05	0746	106	162			
		112	YGWC4 - 28.5S25F112 - 05	0747	134	190			
	28.5	58	YGWC2 - 29S25F058 - 05	0266	80	136			
		87	YGWC3 - 29S25F087 - 05	0309	109	165			
		116	YGWC4 - 29S25F116 - 05	0352	138	194			
	29	58	YGWC2 - 29.5S25F058 - 05	0748	80	136			
		87	YGWC3 - 29.5S25F087 - 05	0749	109	165			

* Clamping Torque (Nm) 1.6Nm

WCMX05	Screw	Wrench
Description	T693072D	TWFT08
EDP	18000185	18000033

Drilling - Drill Holder

Trigonal Drill Holder (WCMX06) (DC 30~44.5)



△: Refer to p. 234

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 06T308	30	60	YGWC2 - 30S32F060 - 06	0267	87	147	32	44	60
		90	YGWC3 - 30S32F090 - 06	0310	117	177			
		120	YGWC4 - 30S32F120 - 06	0353	147	207			
	30.5	90	YGWC3 - 30.5S32F090 - 06	0750	117	177			
	31	62	YGWC2 - 31S32F062 - 06	0268	89	149			
		93	YGWC3 - 31S32F093 - 06	0311	120	180			
		124	YGWC4 - 31S32F124 - 06	0354	151	211			
	31.5	93	YGWC3 - 31.5S32F093 - 06	0751	120	180			
	32	64	YGWC2 - 32S32F064 - 06	0269	91	151			
		96	YGWC3 - 32S32F096 - 06	0312	123	183			
		128	YGWC4 - 32S32F128 - 06	0252	155	215			
	32.5	96	YGWC3 - 32.5S32F096 - 06	0752	123	183			
	33	66	YGWC2 - 33S32F066 - 06	0753	93	153			
		99	YGWC3 - 33S32F099 - 06	0754	126	186			
		132	YGWC4 - 33S32F132 - 06	0755	159	219			
	33.5	99	YGWC3 - 33.5S32F099 - 06	0756	126	186			
		132	YGWC4 - 33.5S32F132 - 06	0757	159	219			
		68	YGWC2 - 34S32F068 - 06	0271	95	155			
	34	102	YGWC3 - 34S32F102 - 06	0314	129	189			
		136	YGWC4 - 34S32F136 - 06	0357	163	223			
		102	YGWC3 - 34.5S32F102 - 06	0758	129	189			
	35	70	YGWC2 - 35S32F070 - 06	0272	97	157			
		105	YGWC3 - 35S32F105 - 06	0315	132	192			
		140	YGWC4 - 35S32F140 - 06	0358	167	227			
	35.5	105	YGWC3 - 35.5S32F105 - 06	0759	132	192			
	36	72	YGWC2 - 36S32F072 - 06	0273	99	159			
		108	YGWC3 - 36S32F108 - 06	0316	135	195			
		144	YGWC4 - 36S32F144 - 06	0359	171	231			
	36.5	108	YGWC3 - 36.5S32F108 - 06	0760	135	195			
	37	74	YGWC2 - 37S32F074 - 06	0274	101	161			
		111	YGWC3 - 37S32F111 - 06	0317	138	198			
		148	YGWC4 - 37S32F148 - 06	0360	175	235			

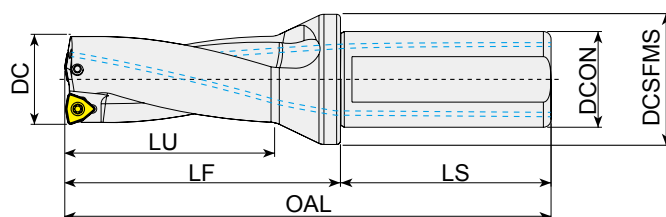
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* Clamping Torque (Nm) 2.4Nm

WCMX06	Screw	Wrench
Description	T103588D	TWFT10
EDP	18000180	18000034

Drilling - Drill Holder

Trigonal Drill Holder (WCMX06) (DC 30~44.5)



: Refer to p. 234 Unit:mm

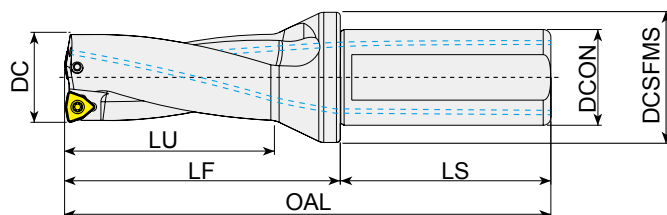
Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 06T308	37.5	111	YGWC3 - 37.5S32F111 - 06	0761	138	198	32	44	60
	76		YGWC2 - 38S32F076 - 06	0275	103	163			
	38	114	YGWC3 - 38S32F114 - 06	0318	141	201			
		152	YGWC4 - 38S32F152 - 06	0361	179	239			
	38.5	114	YGWC3 - 38.5S32F114 - 06	0762	141	201			
		152	YGWC4 - 38.5S32F152 - 06	0763	179	239			
		78	YGWC2 - 39S32F078 - 06	0276	105	165			
	39	117	YGWC3 - 39S32F117 - 06	0319	144	204			
		156	YGWC4 - 39S32F156 - 06	0362	183	243			
	39.5	117	YGWC3 - 39.5S32F117 - 06	0764	144	204			
		80	YGWC2 - 40S32F080 - 06	0277	107	167			
	40	120	YGWC3 - 40S32F120 - 06	0320	147	207			
		160	YGWC4 - 40S32F160 - 06	0363	187	247			
	40.5	120	YGWC3 - 40.5S32F120 - 06	0765	147	207			
		82	YGWC2 - 41S32F082 - 06	0278	109	169			
	41	123	YGWC3 - 41S32F123 - 06	0321	150	210			
		164	YGWC4 - 41S32F164 - 06	0364	191	251			
	41.5	123	YGWC3 - 41.5S32F123 - 06	0766	150	210			
		84	YGWC2 - 42S32F084 - 06	0279	111	171			
	42	126	YGWC3 - 42S32F126 - 06	0322	153	213			
		168	YGWC4 - 42S32F168 - 06	0365	195	255			
	42.5	126	YGWC3 - 42.5S32F126 - 06	0767	153	213			
		86	YGWC2 - 43S32F086 - 06	0280	113	173			
	43	129	YGWC3 - 43S32F129 - 06	0323	156	216			
		172	YGWC4 - 43S32F172 - 06	0366	199	259			
	43.5	129	YGWC3 - 43.5S32F129 - 06	0768	156	216			
		88	YGWC2 - 44S32F088 - 06	0281	115	175			
	44	132	YGWC3 - 44S32F132 - 06	0324	159	219			
		176	YGWC4 - 44S32F176 - 06	0367	203	263			
	44.5	132	YGWC3 - 44.5S32F132 - 06	0769	159	219			

* Clamping Torque (Nm) 2.4Nm

WCMX06	Screw	Wrench
Description	T103588D	TWFT10
EDP	18000180	18000034

Drilling - Drill Holder

Trigonal Drill Holder (WCMX08) (DC 45~60)



⚠: Refer to p. 234

Unit: mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 080412	45	90	YGWC2 - 45S40F090 - 08	0282	122	192	40	54	70
		135	YGWC3 - 45S40F135 - 08	0325	167	237			
		180	YGWC4 - 45S40F180 - 08	0368	212	282			
	45.5	135	YGWC3 - 45.5S40F135 - 08	0770	167	237			
	46	92	YGWC2 - 46S40F092 - 08	0283	124	194			
		138	YGWC3 - 46S40F138 - 08	0326	170	240			
		184	YGWC4 - 46S40F184 - 08	0369	216	286			
	47	94	YGWC2 - 47S40F094 - 08	0284	126	196			
		141	YGWC3 - 47S40F141 - 08	0327	173	243			
		188	YGWC4 - 47S40F188 - 08	0370	220	290			
	48	96	YGWC2 - 48S40F096 - 08	0285	128	198			
		144	YGWC3 - 48S40F144 - 08	0328	176	246			
		192	YGWC4 - 48S40F192 - 08	0371	224	294			
	49	98	YGWC2 - 49S40F098 - 08	0286	130	200			
		147	YGWC3 - 49S40F147 - 08	0329	179	249			
		196	YGWC4 - 49S40F196 - 08	0372	228	298			
	50	100	YGWC2 - 50S40F100 - 08	0287	132	202			
		150	YGWC3 - 50S40F150 - 08	0330	182	252			
		200	YGWC4 - 50S40F200 - 08	0373	232	302			
	51	102	YGWC2 - 51S40F102 - 08	0288	134	204			
		153	YGWC3 - 51S40F153 - 08	0331	185	255			

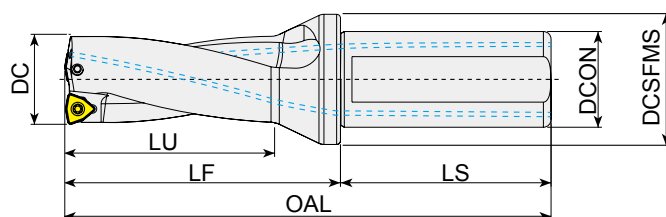
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* Clamping Torque (Nm) 3.0Nm

WCMX08	Screw	Wrench
Description	T154011D	TWFT15
EDP	18000186	18000035

Drilling - Drill Holder

Trigonal Drill Holder (WCMX08) (DC 45~60)

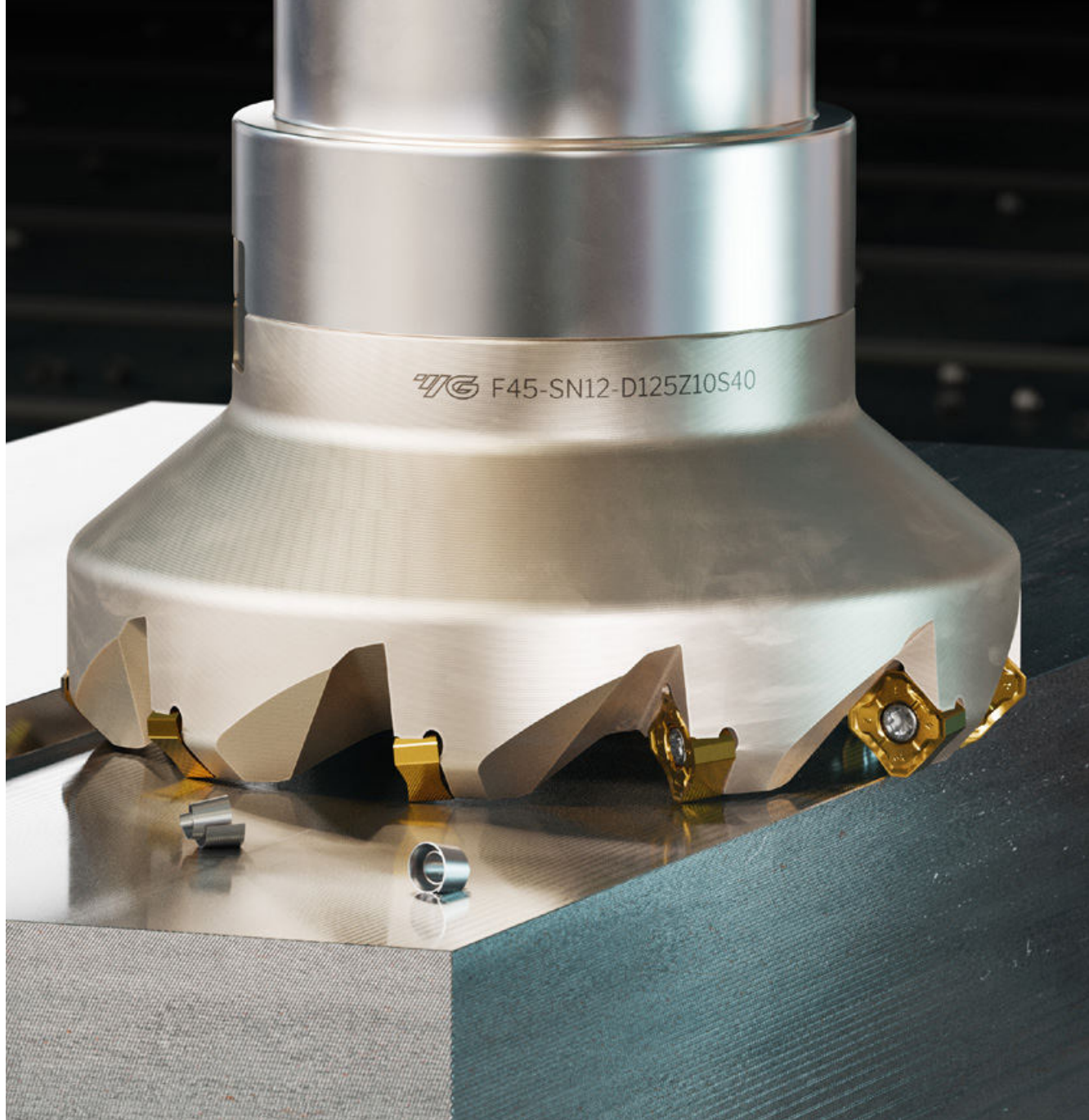


: Refer to p. 234 Unit:mm

Series	DC	LU	Designation	EDP 3700..	LF	OAL	DCON	DCSFMS	LS
WCMX 080412	52	104	YGWC2 - 52S40F104 - 08	0289	136	206	40	54	70
		156	YGWC3 - 52S40F156 - 08	0332	188	258			
	53	106	YGWC2 - 53S40F106 - 08	0290	138	208			
		159	YGWC3 - 53S40F159 - 08	0333	191	261			
	54	108	YGWC2 - 54S40F108 - 08	0291	140	210			
		162	YGWC3 - 54S40F162 - 08	0334	194	264			
	55	110	YGWC2 - 55S40F110 - 08	0292	142	212			
		165	YGWC3 - 55S40F165 - 08	0335	197	267			
	56	112	YGWC2 - 56S40F112 - 08	0293	144	214			
		168	YGWC3 - 56S40F168 - 08	0336	200	270			
	57	114	YGWC2 - 57S40F114 - 08	0294	146	216			
		171	YGWC3 - 57S40F171 - 08	0337	203	273			
	58	116	YGWC2 - 58S40F116 - 08	0295	148	218			
		174	YGWC3 - 58S40F174 - 08	0338	206	276			
	59	118	YGWC2 - 59S40F118 - 08	0771	150	220			
		177	YGWC3 - 59S40F177 - 08	0772	209	279			
	60	120	YGWC2 - 60S40F120 - 08	0773	152	222			
		180	YGWC3 - 60S40F180 - 08	0774	212	282			

* Clamping Torque (Nm) 3.0Nm

WCMX08	Screw	Wrench
Description	T154011D	TWFT15
EDP	18000186	18000035



TECHNICAL INFORMATION

Recommended Cutting Conditions

ISO 13399 Terms

Hardness Conversion Table

Comparison Chart

Formulas

Material Groups

X-Drill(SYMX) Offset Value & Hole Tolerance

ISO ↔ ANSI

Search

Technical Information

Recommended cutting conditions

Turning

Cutting Speed			Vc (m/min.)																			
ISO	VDI	Sub Group	YG1010		YG1001		YG1020		YG3010		YG3015		YG3115		YG3125		YG3020		YG3030		YG801	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	-	-	220	480	-	-	230	450	200	430	180	500	150	400	160	380	130	350	120	200
	6~9	Low-Alloyed Steel	-	-	220	420	-	-	180	380	150	350	170	450	130	350	140	320	130	280	70	200
	10~11	High-Alloyed Steel	-	-	-	-	-	-	60	200	90	180	60	300	60	280	60	130	70	110	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14	Austenitic Stainless Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	15~16	Grey Cast Iron	300	450	250	420	180	350	120	300	-	-	-	-	-	-	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	350	120	300	100	280	120	280	-	-	-	-	-	-	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Turning

Cutting Speed			Vc (m/min.)																			
ISO	VDI	Sub Group	YG2025		YG2035		YG211		YG213		YG214		YG401		YT100		YT100G		YG100		YG10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	-	-	-	-	-	-	-	-	-	-	-	-	150	480	170	500	-	-	-	-
	6~9	Low-Alloyed Steel	-	-	-	-	-	-	-	-	-	-	-	-	160	480	180	500	-	-	-	-
	10~11	High-Alloyed Steel	-	-	-	-	-	-	-	-	-	-	-	-	70	180	100	230	-	-	-	-
M	12~13	Ferritic & Martensitic	170	220	140	180	170	270	120	180	100	150	-	-	150	280	170	300	-	-	-	-
	14	Austenitic Stainless Steel	150	200	120	165	150	230	40	160	100	150	-	-	130	260	140	270	-	-	-	-
K	15~16	Grey Cast Iron	-	-	-	-	-	-	-	-	-	-	-	-	130	450	140	500	-	-	-	-
	17~18	Nodular Cast Iron	-	-	-	-	-	-	-	-	-	-	-	-	100	400	110	440	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	1200	250	800
S	31~37	Superalloys & Titanium	-	-	-	-	30	100	30	70	30	50	30	90	-	-	-	-	-	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parting & Grooving

Cutting Speed			Vc (m/min.)			
ISO	VDI	Sub Group	YG602G (YG602)		YG603	
			Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	120	180	-	-
	6~9	Low-Alloyed Steel	100	140	-	-
	10~11	High-Alloyed Steel	80	110	-	-
M	12~13	Ferritic & Martensitic	70	160	50	90
	14	Austenitic Stainless Steel	55	140	40	80
K	15~16	Grey Cast Iron	110	185	-	-
	17~18	Nodular Cast Iron	110	140	-	-
N	21~30	Non-Ferrous Metals (Al)	250	440	-	-
S	31~37	Superalloys & Titanium	25	45	-	-
H	38~41	Hard Materials	25	50	-	-

Technical Information

Recommended cutting conditions

Nanocut

YG812 GRADE			Cutting Speed		Feed per Revolution (Fn)	
ISO	VDI	Sub Group	Vc (m/min.)		Fn (mm/rev.)	
			Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	170	200	0.015	0.025
	6~9	Low-Alloyed Steel	95	160	0.015	0.025
	10~11	High-Alloyed Steel	85	95	0.015	0.025
M	12~13	Ferritic & Martensitic	105	140	0.015	0.025
	14	Austenitic Stainless Steel	95	130	0.015	0.025
K	15~16	Grey Cast Iron	140	190	0.015	0.025
	17~18	Nodular Cast Iron	140	190	0.015	0.025
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-
S	31~37	Superalloys & Titanium	10	75	0.015	0.025
H	38~41	Hard Materials	-	-	-	-

Milling

Cutting Speed			Vc (m/min.)																							
ISO	VDI	Sub Group	YG012		YG712		YG713		YG622		YG612		YG602		YG613		YG501(G)		YG5020		YG904		YG50			
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		
P	1~5	Non-Alloyed Steel	180	280	170	300	200	300	140	400	180	280	180	270	100	210	-	-	-	-	-	-	-	-		
	6~9	Low-Alloyed Steel	150	250	180	250	170	270	120	320	150	250	150	240	70	180	-	-	-	-	-	-	-	-		
	10~11	High-Alloyed Steel	80	150	100	140	85	145	70	170	70	140	70	130	40	90	-	-	-	-	-	-	-	-		
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	-	-	120	200	120	180	70	180	-	-	-	-	-	-	-	-		
	14	Austenitic Stainless Steel	-	-	-	-	-	-	-	-	130	250	30	230	70	200	-	-	-	-	-	-	-	-		
K	15~16	Grey Cast Iron	-	-	-	-	-	-	120	270	-	-	120	250	-	-	160	300	200	350	-	-	-	-		
	17~18	Nodular Cast Iron	-	-	-	-	-	-	130	240	-	-	120	220	-	-	130	210	150	300	-	-	-	-		
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	800		
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	-	-	25	45	5	45	-	-	-	-	-	-	20	60	-	-		
H	38~41	Hard Materials	70	120	-	-	-	-	40	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Drilling

Cutting Speed			Vc (m/min.)					
ISO	VDI	Sub Group	YG602		YG713		YG613	
			Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	180	380	200	300	100	210
	6~9	Low-Alloyed Steel	120	300	170	270	70	180
	10~11	High-Alloyed Steel	70	150	85	145	40	90
M	12~13	Ferritic & Martensitic	120	200	130	230	70	180
	14	Austenitic Stainless Steel	130	250	130	230	70	200
K	15~16	Grey Cast Iron	120	250	-	-	-	-
	17~18	Nodular Cast Iron	130	220	-	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-

Technical Information

ISO 13399 Terms

TURNING	AN	Clearance angle major	INS D	Insert diameter
	APMX	Maximum depth of cut	KAPR	Tool cutting edge angle
PARTING & GROOVING	AS	Clearance angle wiper edge	KRINS	Cutting edge angle major
	B	Shank width	KWW	Keyway width
MILLING	BS	Wiper edge length	L	Cutting edge length
	CBDP	Connection bore depth	LE	Cutting edge effective length
	CDX	Cutting depth maximum	LF	Functional length
	CICT	Number of Inserts	LH	Head length
DRILLING	CW	Cutting width	LS	Shank length
	CZC	Connection size code	LU	Usable length
	DC	Cutting diameter	LUX	Usable length maximum
	DCON	Connection diameter	M	Nose (or Wiper) Height
TECHNICAL INFORMATION	DCSFMS	Contact surface diameter machine side	OAL	Overall length
	DCX	Cutting diameter maximum	RE	Corner radius
	DMIN	Minimum bore diameter	RMPX	Maximum ramping angle
	DMM	Shank diameter	RPMX	Rotational speed maximum
	EPSR	Insert included angle	S	Insert thickness
	H	Shank height	TDZ	Thread diameter size
	HAND	Hand	WF	Functional width
	IC	Inscribed circle diameter		

Technical Information

Hardness Conversion Table

HB	HRC	HRB	HV	N/mm ²
199	15	93	199	667
203	16	94	201	680
208	17	95	210	696
212	18	95	218	706
216	19	96	222	716
223	20	97	227	755
229	21	98	235	775
233	22	99	241	794
240	23	100	247	824
245	24	100	252	838
250	25	101	255	853
255	26	102	258	870
262	27	103	262	880
264	28	103	271	892
271	29	104	277	941
277	30	105	285	971
290	31	106	292	990
300	32	107	303	1020
308	33	107	311	1035
314	34	108	320	1049
322	35	108	332	1089
331	36	109	342	1118
341	37	109	351	1157
348	38	110	361	1187
360	39	111	376	1236
373	40	111	388	1265
375	41	112	393	1314
388	42	113	406	1363
402	43	114	424	1390
415	44	114	438	1422
419	45	114	448	1447
430	46	115	458	1471
445	47	115	474	1520
456	48	116	490	1569
468	49	117	497	
469	50	117	505	
486	51	118	531	
504	52	118	549	
513	53	119	567	
534	54	120	589	
552	55		649	
572	56		694	
592	57		727	
601	58		746	
613	59			
627	60			
642	61			
658	62			
681	63			
695	64			
HB	HRC	HRB	HV	N/mm ²

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Application Guide

Steel Guide

Grade Recommendation based on Workpiece Material Condition

TURNING		Pre Machined Condition No Outer Skin Uniform hardness on material Has stable machining condition		HARD
PARTING & GROOVING		Welded Condition Soft / No Outer Skin Weld Bead Could be of Different Hardness than Actual Part Stock on Part could even except weld Seam during Machining causing shock loads		YG3115
		Cast Condition Hard Outer Skin Could have Sand Inclusion,- if Green Sand Cast Component could have uneven Stock during machining		YG3125
MILLING		Hot Rolled Condition Soft / No Outer Skin Usually heat treated before machine to reduce Hardness Component could have uneven Stock During Machining		YG3030
DRILLING		Forged Condition Soft Outer Skin Usually heat treated before machine to reduce Hardness Component could have uneven Stock during machining		TOUGH

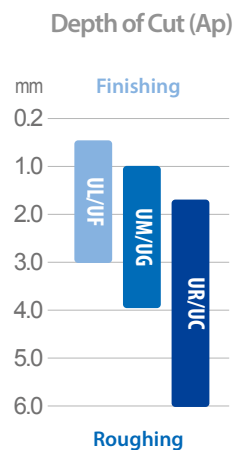
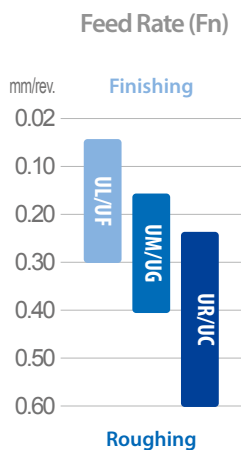
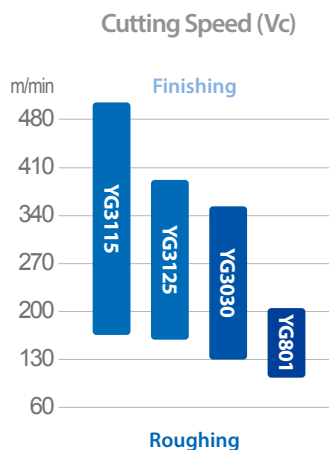
Chipbreaker, Feed Rate and Depth of Cut

		Sharp Edge	General	Strong Edge
	Continuous	 -UF -UL	 -UM -UG	
	General			 -UC
	Heavy Interrupt			 -UR

Application Guide

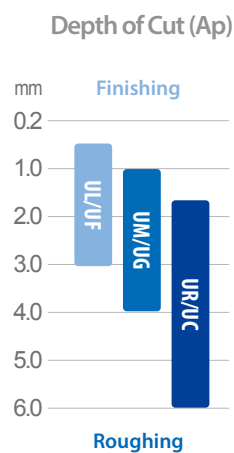
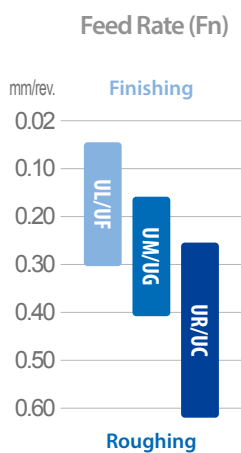
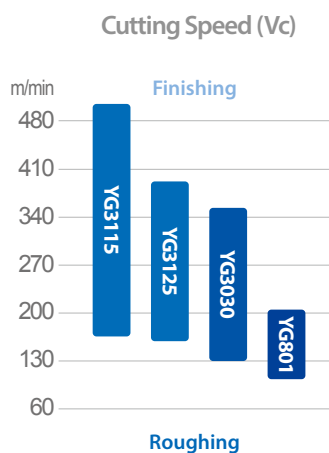
Steel Guide

P	Non Alloy Steel, About 0.15% C (Low Carbon Steel)									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
1	S15C	CK15	1.0401	1015	1350	XC18	C15	F.1110	080M15	15



First Choice Grade and Value
YG3030 - Vc 280m/min

P	Non Alloy Steel, About 0.45% C (Medium Carbon Steel)									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
2~3	S45C	C45	1.0503	1045	1672	XC42H1TS	C45	F.1140	060A47	45



First Choice Grade and Value
YG3125 - Vc 270m/min

Application Guide

Steel Guide

TURNING

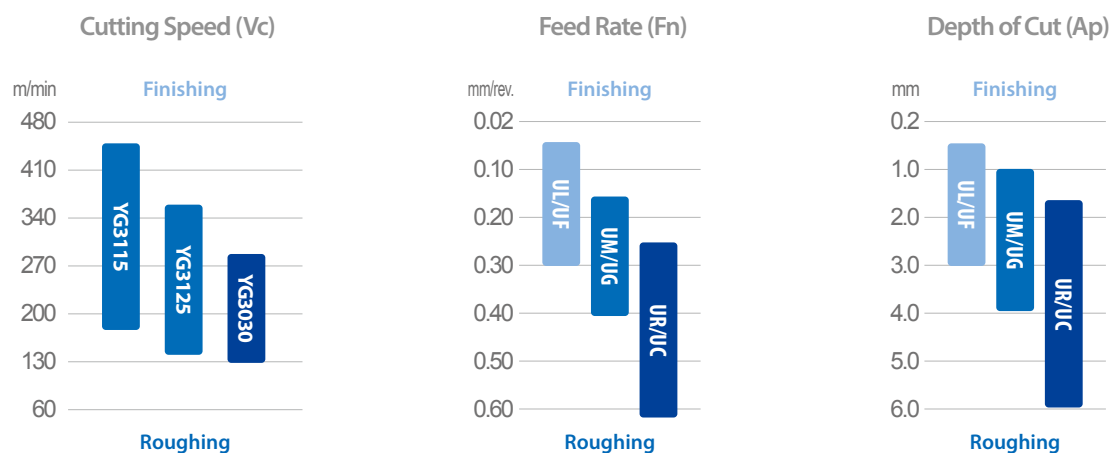
PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

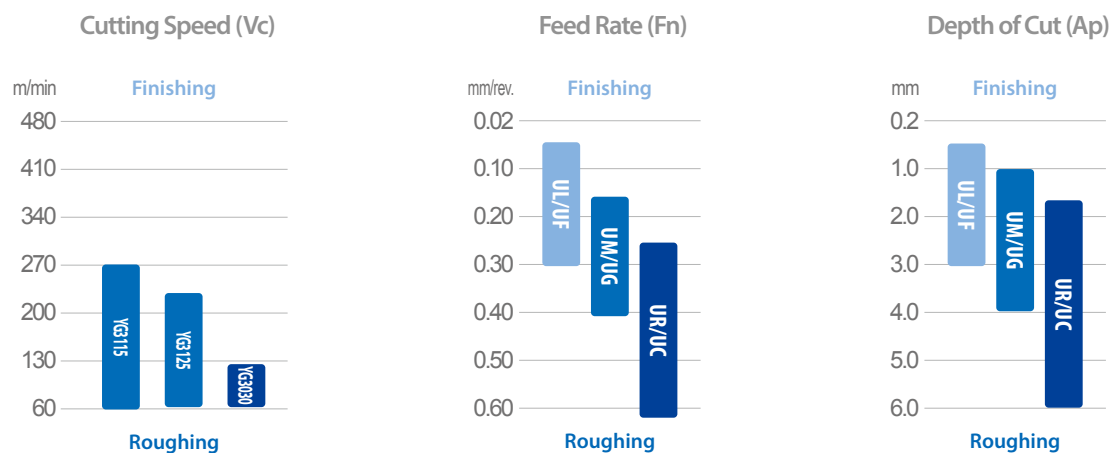
P	Low-alloyed Steel									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
6~9	SCM440	42CrMo4	1.7225	4140	2244	42 CD 4	42CrMo4	F.1252	708M40	38HM



First Choice Grade and Value

YG3125 - Vc 240m/min

P	High Alloyed Steel, and Tool Steel									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
10~11	SKD11	X155CrVMo121	1.2379	D2	2310	Z160CDV12	X165CrMoW12KU	F.5318	BD2	KH12MF



First Choice Grade and Value

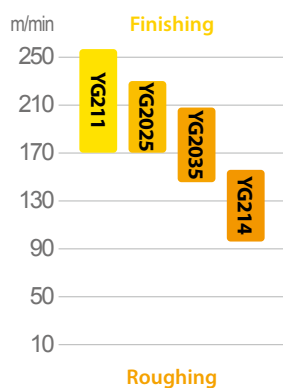
YG3115 - Vc 150m/min

Application Guide

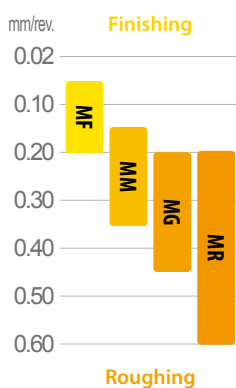
Stainless steel Guide

M	Ferritic / Martensitic Stainless									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
12~13	SUS430	X6Cr17	1.4016	430	2320	Z8C17	Z8C17	F3113	430S15	12C17

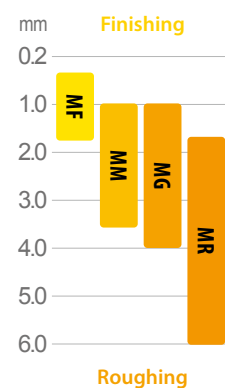
Cutting Speed (Vc)



Feed Rate (Fn)



Depth of Cut (Ap)



First Choice Grade and Value

Ferritic Stainless steel

YG213 - Vc 160m/min

YG2025 - Vc 190m/min

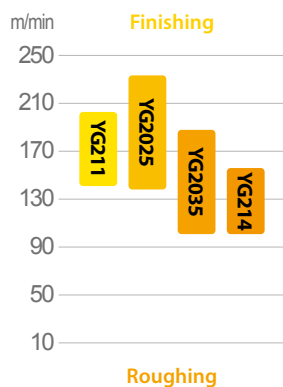
Martensitic

YG213 - Vc 130m/min

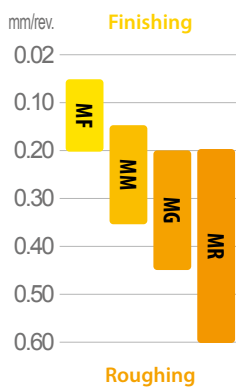
YG2025 - Vc 160m/min

M	Austenitic Stainless steel									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
14	SUS304	X5CrNi18 9	1.4350	304	2332	Z6CN18 09	X5CrNi18 10	F3551	304S15	03KH18N11

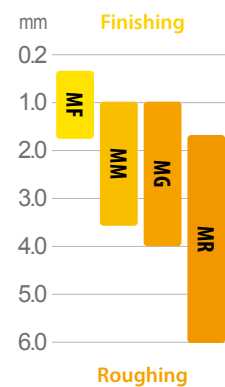
Cutting Speed (Vc)



Feed Rate (Fn)



Depth of Cut (Ap)



First Choice Grade and Value

YG2025 - Vc 190m/min

Application Guide

Cast iron Guide

TURNING

PARTING & GROOVING

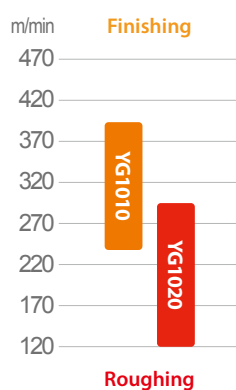
MILLING

DRILLING

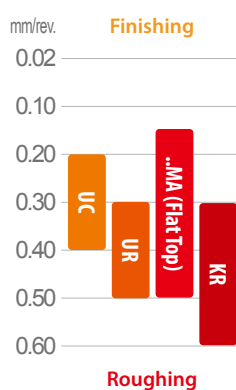
TECHNICAL INFORMATION

K	Grey cast iron									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
15~16	FC250	GG25	0.6025	A48 40 B	0125	Ft 25 D	G25	FG25	Grade 260	Sc 25

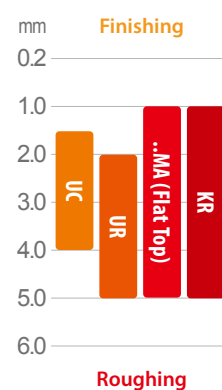
Cutting Speed (Vc)



Feed Rate (Fn)



Depth of Cut (Ap)

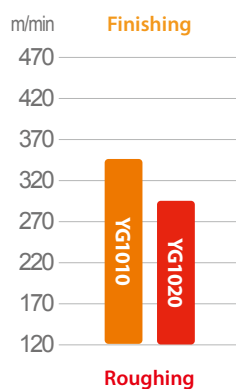


First Choice Grade and Value

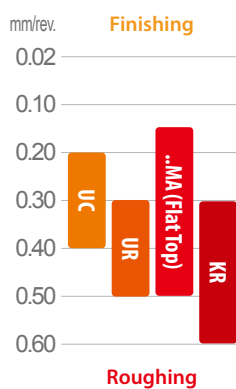
YG1010 - Vc 320m/min

K	Nodular cast iron									
VDI	JIS	DIN	Mat'l No.	AISI/ASTM	SS	AFNOR	UNI	UNE	BS	GOST
17~18	FCD500	GGG50	0.7050	80-55-06	0.7050	FGS 500-7	GS 500-7	FGE50-7	SNG 500-7	Vc 50-2

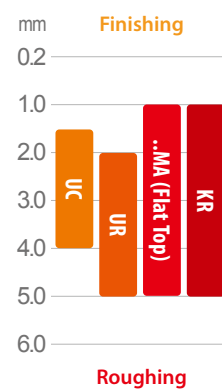
Cutting Speed (Vc)



Feed Rate (Fn)



Depth of Cut (Ap)



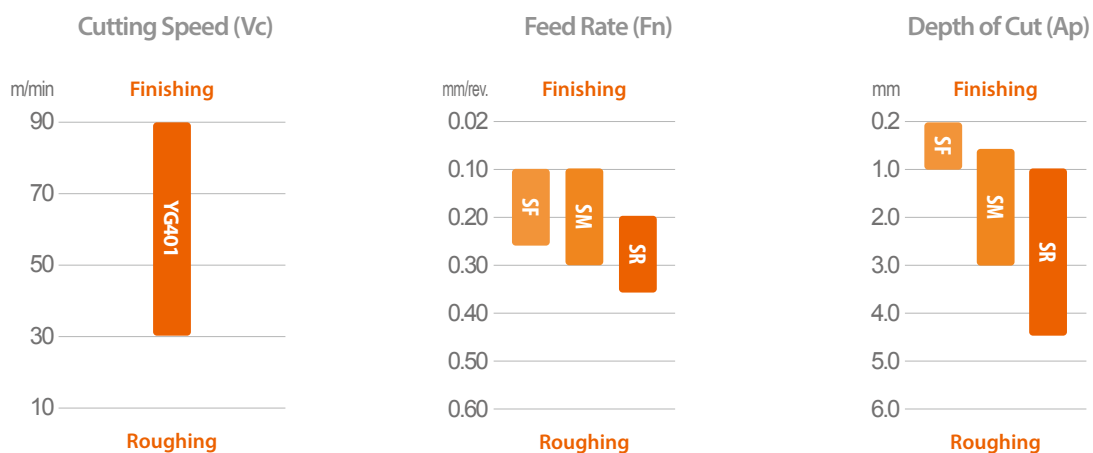
First Choice Grade and Value

YG1020 - Vc 230m/min

Application Guide

HRSA Guide

S	Superalloys & Titanium Alloys									
VDI	DIN	Mat'l No.	AISI/ASTM	AFNOR	BS	UNS	Brands	UNE	BS	GOST
31~37	NiCr19Fe19NbMo	2.4668	5383	NC19eNB	HR8	N07718	Inconel 718	F3113	430S15	12C17



First Choice Grade and Value
YG401 - Vc 50m/min

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

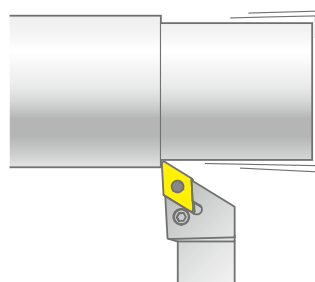
Application Guide

Surface Roughness Guide

Trouble Shooting

Pattern	Reasons	Solutions
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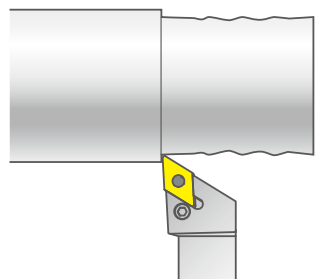
Vibration



- High radial or tangential force
- Unstable condition

- Lower depth of cut (ap)
- Use sharper chipbreaker
- Check stability, and position of tool and workpiece
- Reduce the overhang (bigger and shorter tool)

Bad Surface



- Work material is damaged by chips
- Feed is too high for corner radius

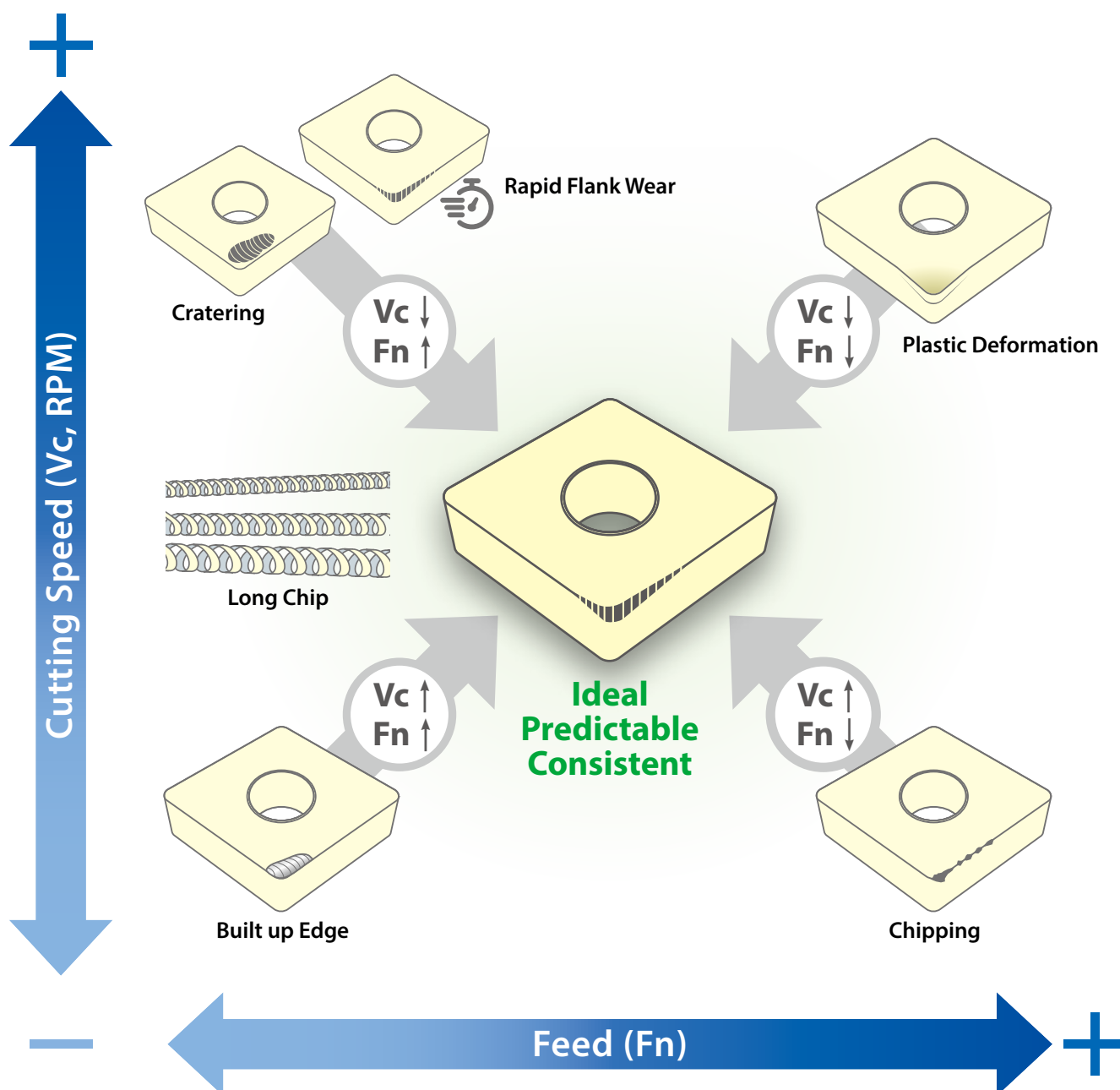
- Different chipbreaker
- Lower depth of cut (ap)
- Lower feed
- Larger corner radius

Theoretical Surface Roughness

Ra / Rz μ m	Insert Corner Radius Code ISO					
	02	04	08	12	16	24
	Feed Rate mm/rev					
0.4 / 1.6	0.05	0.07	0.1	0.12	0.14	0.18
1.6 / 6.3	0.1	0.14	0.2	0.25	0.28	0.35
3.2 / 12.5	0.14	0.2	0.28	0.35	0.4	0.49
6.3 / 25	-	0.28	0.4	0.49	0.57	0.69
8 / 32	-	-	0.45	0.55	0.64	0.78

Trouble Shooting

Trouble Shooting Guide map



TURNING

PARTING & GROOVING

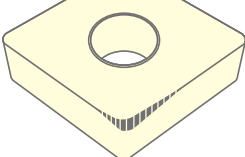
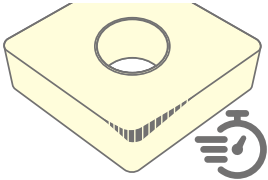
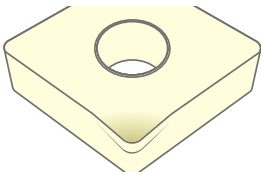
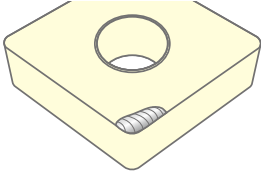
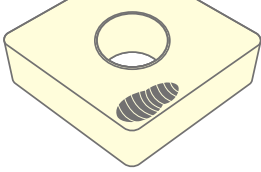
MILLING

DRILLING

TECHNICAL INFORMATION

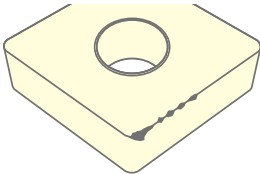
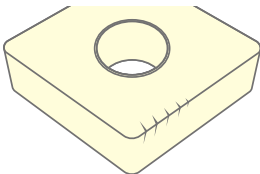
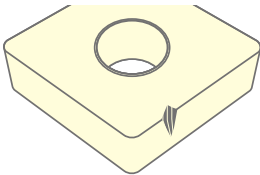
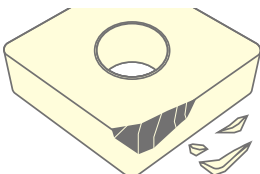
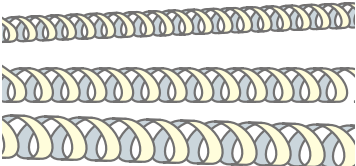
Application Guide

Trouble Shooting

Pattern	Reasons	Solutions
General Flank Wear  Flank face near by corner is abraded	- The most ideal wear - Consistent and predictable - General wear behavior when machining condition is normal	
Rapid Flank Wear  Looks same as general flank wear, but happens quickly	Grade - Not enough wear resistance - Too tough grade Heat - Cutting speed is too high - Not enough coolant	- More wear resistant grade - Reduce the cutting speed (Vc, SFM, RPM or SFPM) - Optimize coolant - Increase Feed (Fn) if feed is low
Plastic Deformation  Deformed Edge	- Excess thermal load - Excess mechanical load	- Reduce cutting temperature - More wear resistant grade - Reduce the cutting speed (Vc, SFM, RPM or SFPM) - Lower feed (Fn) - Lower depth of cut (ap) - Optimize coolant
Built up Edge  Workpiece material is welded on the cutting edge	- Sticky materials (low carbon steel, Stainless steel, non-ferrous metal, heat resistant super alloys) - Too low cutting speed	- Increase cutting speed - Lower feed rate - Sharper chipbreaker & geometry - Use high pressure coolant - Use PVD grade - Use Positive Insert
Cratering 	Heat - Cutting speed is too high - Too tough grade	- Reduce cutting temperature - Lower cutting speed (Vc, SFM, RPM or SFPM) - Adjust Feed (Fn) - Harder grade

Application Guide

Trouble Shooting

Pattern	Reasons	Solutions
Chipping 	- Unstable machining condition (Vibration) - Grade is too hard / brittle - Cutting edge is too sharp	- Focus on stabilizing cutting condition - Reduce overhang (shorter and bigger tool) - Tougher grade - Tougher chipbreaker
Thermal Crack 	- Thermal stress due to rapid change of temperature	- Tougher grade - Lower cutting speed (Vc, SFM, RPM or SFPM) - Lower feed (Fn) - Sharper chipbreaker - Change coolant / dry cut
Notching 	- Improved edge strength work piece has hardened skin	- More wear resistant grade - Reduce the cutting speed (Vc, SFM, RPM or SFPM) - Adjust Feed (Fn) - Lower depth of cut (ap) - Optimize coolant - Go for tougher chipbreaker
Breakage (Mechanical Fracture) 	- Mechanical load is too heavy (feed or depth is too high) - Heavy interrupted cut - Grade is too hard for work material - Unstable machining (vibration) - Cutting speed is too low - Impurities in work material	- Lower feed (Fn) or depth of cut (ap) - Tougher grade - Reduce overhang and check stability of tool and work material - Higher cutting speed (Vc, SFM, RPM or SFPM)
Long Chip 	- Feed is too low for chip breaking - Depth of cut is too shallow for corner radius - Chip area (Fn x Ap) too low	- Higher feed - Sharper chipbreaker - Higher depth of cut - Select a smaller corner radius

TURNING

PARTING & GROOVING

MILLING

DRILLING

TECHNICAL INFORMATION

Technical Information

Comparison Chart - Turning Chipbreakers

	ISO	Application	YG-1	Taegutec	SANDVIK	Kyocera	Tungaloy	Mitsubishi	Sumitomo	Korloy	ISCAR	KENNAMETAL	Seco	Walter	AchTech	ZCC
TURNING	P	Finish	UF	FG, FL, FC, FX	PF, LC	PP	TSE, PS, TS ZF, 11, 17, NS	SH	LU, FE, SU	VE, VB	F3P, NF	FN, K	MF2	NF4, NF3	-	-
		Semi Finish	PSF (Cermet)	FM	XF	PQ, HQ, CJ	AM, NM, TQ, 27	C	-	VQ(Cermet)	TF	-	-	MP3	-	-
			UL	MLP, FT	-	CQ, VC, VF	ZM	SA, SY	SE	VC, CP		LF, CT	-	NS6	PB3, BS	-
		Medium	UM	MC	-	-	-	SX	LP	-	-	-	MF5	MP3	PC3	-
			GM	PC, MGP	PM	PMG, PG	PM, TM	-	GE, GU	MP	-	-	-	-	-	-
			UG	MT	XM, QM, PMC	HK, GS, HS, PS	DM	MP, MA, MH	UG, UX	VM, HM	M3P, GN	MP, MN	M3	NM4, MP5, MUS, NM6	PD3, PL5	PM, DM
		Medium Roughing	UC	MG-	-	MG-	MG-	MG-	-	B2S	MG-	MG-	M5	MG-	PC4	MG-
		Roughing	UR	RGP, RT	PR, XMR	PT, GT, HT, PH	6S, TH, TRS	RP, GH	MU, ME, MX, MP	HR, GR, VR	R3P, NR	RP, RN	MRS, MR6, MR7	NR4, RP5, RP7	PD5	DR
		Heavy Roughing	UH	RX, RH	PR, QR, MR	PX	TRS	HL, HX, HR, HZ, HM	MP, HG	GH	R3P, NM	RM, RP, MR	R4, R5	NRF, NR6, HU3, HU5	PC8, PD8	LR
			UT	HT, HD, HY, HZ	HR	-	TU, TUS	HV	HP, HU, HW, HF	VH, VT	H3P, H4P, H5P	RH	R6 R7, R8, PR6, PR9, R56, R57, R68	NRR, HU7	PC9, PD9	DR, HDR, HPR
MILLING	P	Wiper Finish	PWF	WS, WA	WF, WL	WF, WP	AFW, FW	SW	LUW, SEW	VW	WF	FW	W-MF2	FWS	-	WCF
		Wiper Medium	PWM	WT	WM, WXM	WQ, WE	ASW, SW	MW	GUW	LW	WG	MW, RW	W-M3, W-M6, W-MF5	MW5	-	WGM
		Finish	MF	EA, SF	ME, XF	MQ, SK	SF	LM	SU, EF	VP2	SF, F3M, NF	FF, FP	FF1, MF2	NF4, FM5	SC1, MB2	EF
DRILLING	M	Medium	GM, MM, MG	MK, EM, MM, MP	MM, XM, MMC	MS, MU, (HU)	SS, SM	MM, GM, MA	EX, EG, GU	MM, HS	TF, M3M, VL	MP, UP, MR	MF3, MF4, M3	MMS, MU5	MC3	EM
		Rough	MR	ET	MR, XMR, MRR	SG	SH, S	RM	HM, EM, MU	RM, GS	GN, R3M, NR	RP	MF5, M5	NRS	MC4	ER
		Medium	UC	MT, MG-	KM	KG, MG-, C	CM, MG-	MK, GK, MG-	GZ, UX	MK, B2S	M3P, GN, MG-	-	M5	NM5, RK5	PC4	MG-
	K	Rough	UR	RT, KT	KR	KH, ZS, GC, PH	CH	RK	-	RK, GR	NR	UN, R P	MR7	MV7, RK7	KC4	DR
			KR, MA-	MA-	MA-, KRR	MA-	MA-	MA-	MA-	MA-	MA-	MA-	MA-	MA-RK5, MA-RK7	KD5	-
TECHNICAL INFORMATION	S	Finish	GG-SF	EA, SF	SF, GG-SGF	SQ, MQ, SK	HRF	GG-FJ, LS	EF	VP1	SF, F3M, F3S	FS, GG-FS	M1	NF4	SC1, MB2	GG-NF, GG-NCF
		Medium	SM	MK, MGS, MP	QM, SM, 23	MS, MU	HMM, HRM	MS	EG, EX	VP3	TF, M3M, VL	UP	MF4, MF5	NMS, NMT	SC3	-
		Rough	SR	ET	SR, SMR	SG, (R/L-SX)	-	RS, GJ	MU	VP4	MR	RP	MR4	NRS, NRT	MC4	-

	ISO	Application	YG-1	Taegutec	SANDVIK	Kyocera	Tungaloy	Mitsubishi	Sumitomo	Korloy	ISCAR	KENNAMETAL	Seco	Walter	AchTech	ZCC
TURNING	P	Finish	GT-SF Swiss	GT-SL, GT-SA, GT-SM	GT-UM	GT-CF, GT-GF, GT-SKS GT-GQ, GT-SK	GT-01	GT-SMG	-	GT-FS, GT-VP1	GT-FM, GT-SM	-	FF1	FP4	GT-LF, GT-UF	GT-SF
			PF	FA, FX	PF, UF	PP, XP, GK, GP, DP	PSF	FP, FV	FC, FB, LU, FP, FK	FP	PF	11	FF1	FP4	LF	-
			UF	FG	UM, XF	XQ, GK	TSE, PSS	LP, SV	SI, LB	VE, VL	F3P	UF	F1	FP4, PS5	UF, PB1, BS	HF
		Medium	PM	FM, GT-SH	PM, XM, PMC	HQ, GQ	TM, PS	MT-, MV	SC, SU, GU	HMP, MP	14, SM	LF, FP	MF2, M3	MP4	PC2, M2T	HM
			UG	MT, PC	PR, UR, XR	MT-	PM, TSF, TM	MP	MU	C2S	M3P, 19	MF, MP	F2, M5	FP6, PMS, E47	KC2	HR
		Finish	GT-SF Swiss	GT-SA	GT-UM	GT-CF, GT-GF, GT-GQ	GT-01	GT-SMG	-	GT-FS, GT-MS	GT-FM, GT-SM	GT-LF	GT-F1	-	GT-LF, GT-UF	GT-SF
			MF	FG	ME, UM	MQ, SKS, SK	PSF, PSS, PS	FM, FV, LM, SV	FC, SI LU, SU	VE, VL	SM, TF, F3M, 14	11, UF, FP	F1	FM4	PB1	EF
		Medium	MM	PC	MM, MMC	GQ	PM	MM, MV	MU	HMP, MP	M3M, SM	MP, MF	F2, MF2	MM4, RM4	PC2	EM
		Medium	UG	MT	KM, KR	MT-	CM, MT-	MK, MT-	MU	C2S	SM, 14	MT, C, MP, MF	M3, M5	F2, FK6, MK4, RK6	KC2	HR
		Finish	GT-AL	FL	GX-AL	AP, AH	AL	AZ	AW, AG, AY	AK, AR	AF, AS	HP	AL	MN2	NC2	LC, LH
TECHNICAL INFORMATION	S	Super Finish	GT-SF	GT-FGS, GT-SA	GT-UM	GT-CF, GT-GF, GT-GQ	GT-01	GT-FS, GT-LS	-	GT-FS, GT-MS	GT-FM, GT-SM	GT-LF	GT-F1	GT-PF2	GT-UF	GT-NF, GT-NCF
		Finish	MF	FG	ME, UM	MQ, SKS, SK	PSF	FS	FC, SI	VP1, VL	SM, PF, F3M, 14	FP	F1, F2	PF4, PS5	PB1	NF
		Medium	MM	PC	MM	GQ	PSS, PM	LS, MS	SU, GU	MP	M3M, SM	LF	MF2	PMS	PC2	SNR

Technical Information

Comparison Chart - Turning Grades

	ISO	YG-1	ISCAR	SANDVIK	SECO	PRAMET	KENNAMETAL	TUNGALOY	MITSUBISHI	HITACHI	WALTER	TAEGUTEK	NTK	DIJET	KORLOY	SUMITOMO	KYOCERA
CVD Coated	P	YG3010	IC8150 IC9150 IC9015	GC4415 GC4305 GC4315	TP0501 TP1500 TP1501	T9310 T9315	KCP05B KCP05 KCPK05 KCP10B KCP10	T9205 T9105 T9215 T9115	UE6105 UE6110 MY5015 MC6015	HG8010	WPP10G WPP01 WPP05S WPP10S	TT8105B TT8115B TT8105 TT8115	CP7	-	NC3215	AC8015P AC810P AC700G	CA510 CA515 CA550S CA5515
		YG3115	IC8150 IC9150	GC4315 GC4415	TP1501 TP1500	T9315	KCP10 KCP10B	T9115 T9215	MC9015 MC6115 UE6110		WPP10 WPP10S	TT8115 TT8115B	-	-	NC3215	AC8015P AC820P AC810P	CA515 CA5515
		YG3020	IC8250 IC9250	GC4425 GC4325	TP2500 TP2501	T9325	KCP25 KCP25B	T9225 T9125	MC6025 UE6020	GM8020 HG8025 GM25	WPP20G WPP20S WMP20S	TT8125B TT8125 LC225P	CP5	JC110V JC215V	NC3120 NC3225	AC8025P AC820P	CA025P CA525 CA5525
		YG3125	IC8250 IC8350	GC4325 GC4425	TP2501 TP25 TP200	T9325	KCP25C	T9225 T9125	MC6125 MC6025 UE6020	GM8020 HG8025 GM25	WPP20S WPP20G	TT8125B TT8125	CP1	JC215V	NC3120 NC3225	AC8025P AC820P	CA125P CA025P CA525 CA5525
		YG3030	IC8350 IC9350	GC4235 GC2135 GC4035	TP3500 TP3501	T9335	KCP30B KCP30 KCP40B KCP40	T9235 T9135	MC6035 UE6035 UH6400	GM8035	WPP30G WPP30S WKP30S	-	-	JC325V	NC3030 NC5330	AC8035P AC830P	CA530 CA5535
	M	YG3030	IC6015 IC6025 IC9300 IC520M IC4050 IC635	GC2015 GC2025 GC2035 GC235	TM1501 TM2501 TM3501	T7325 T7330 T7335	KCM15B KCM15 KCM25B KCM25 KCM35B KCM35	T6120 T6020 T6130 T6030	MC7015 MC7025 US7020 US735 UH6400	GM25 GX30 HG8025 GH8035	WMP20S	TT9215 TT9225 TT9235	-	-	NC9115 NC9125 NC9135 NC5330	AC6020M AC610M AC6030M AC630M AC6040M AC830P	CA6515 CA6525
		YG2025	IC9025 IC9325	GC2220	TM2501 TM2000	-	KCM25	T6120 T9125	MC7025 US7020	-	-	TT9225 TT5100	-	-	-	AC6020M AC6030M	CA6525
		YG2035	IC6025	GC2025	TM3501	T7335	KCM35B KCM35	-	US735	GM25 GM8035	WMP20S	TT9225	-	JC525X	NC9135 NC3235	AC6030M	-
	K	YG1010 YG001	IC5005 IC5010 IC4028 IC8150	GC3205 GC3210 GC3215	TK0501 TK1501	TS305 TS315	KCK05 KCK05B KCK15 KCK15B KCK20 KCK20B KCPK05	TS105 TS15 TS115 T1215 T1115 TS125 TS020	MC5005, UC5105, MC5015 UC5115 MY5015	HG3305 HG3315 HG3505 HG3515 GM8020 HG8010 HG8025	WKK105 WKK205 WAK30 WKP305 WKK10 WKK20	TT3005 TT7005 TT7310 TT7015	CP1 CP2 CP5	JC105V JC110V JC215V	NC6310 NC6315 NC5330	AC4010K AC405K AC4015K AC415K AC420K AC8025P	CA310 CA315 CA320 CA450S CA4515
		YG1020	IC5010	GC3225	TK1501	TS315	KCK20B KCK20	TS125 T1215 T1115	MC5125 MC5020	GM8020 HG8025	WKK205 WKP255 WAK20	TT7025	CP1	JC110V JC215V	NC6315 NC5320	AC4015K AC4125K AC420K	CA320 CA4515
PVD Coated	P	YG801	IC807 IC830 IC507 IC908	GC1025	TP1030 TP1020	T6310 T8430 T8345	KU10T KCU10 KT315 KU25T KC5010	AH330 AH725 AH730 SH725 SH730	VP10RT MS6015 VP15TF VP20MF VP20RT UP20M	IP2000 IP3000	WTA43 WTA41	TT4410 TT9020 TT4430 TT9080 TT8080	-	JC5003 JC5015	PC5300 PC5400 PC3035	AC1030U	PR930 PR1225 PR1535 PR1725
	M	YG211	IC3028 IC907	GC1105 GC1115 GC2015	TS2000 TS2050	T6310 T8315	KCU10 KCU5010	AH120 AH140 AH630 AH645	VP10RT	IP505 IP1005 HG8025	WSM21 WSM01 WSM10S	TT5030	ZM3 QM3 VM1 TAS	JC5003 JC5015	PC8105 PC8110	SC520U AC1030U	-
		YG401	IC807	-	-	-	-	-	MP9005	-	-	TT5080	-	-	PC8115	AC5005S	-
		YG213	IC908	GC2025	CP200 CP500	T8330 M6330	KCU25 KCU5025	SH725 AH7025	VP15TF VP20MF VP20RT UP20M MP7025	GM25 GX30	WSM20S	TT9080	-	-	PC5300 PC8120 PC9030	AC530U	PR930 PR1225 PR1535 PR1725
		YG214	IC330 IC830	GC2035	CP600	T8430	-	SH730 GH330 GH730 AH4035	-	-	WSM30S	TT8080 TT8020	-	-	PC5400	-	-
Non Coated	N	YG10	IC20	-	KX	-	K313	-	HT110	-	WK1	-	-	-	H01 H05	H1	KW10
Cermet	P10	YT100G	IC20N IC520N	-	-	-	KT315	NS520	AP25N NX1010 NX2525	-	-	PV3010	-	-	CC1500	T1000A T1500Z	PV710 PV720 PV7040 CCX
		YT100	IC30N	CT5005 CT5015 CT525 GC1525	TP1030 CMP CM	TT010 TT310	KT5020 KT125 KT150	GT730 GT530 NS520 NS720	UP35N	DC610	-	CT3000	T15 Z15 CZ2	AT200	CN1500 CN2500 CC125	T1500A T1000A T2500Z	TN60 TN610 TN620 TC40N

Technical Information

Comparison Chart - Milling Grades

	ISO	YG-1	SANDVIK	SECO	KENAMETAL	ISCAR	WALTER	TUNGALOY	MITSUBISHI	TAEGUTEK	KORLOY	SUMITOMO	KVOCERA	HITACHI	MOLDINO	DUET	ZCC	Achtek
TURNING	P	YG712	GC4220 GC1130	T250M MP3000	KC715M KC522M KC635M	-	WKP25S WKP25 WAM10	T3130 GH330	MP8010 MP6120 MP6130 MP9120	TT7070 TT7080 TT7030	PC3700 PC3600 PC3+M3: M24500	ACP2000 ACZ310	PR730	CY9020 JP4020 TB6045	-	JC5003	YBM251	AP301P AP301U
		YG713	GC4230 GC4330	T350M F25M	KC525M	IC950 IC1008	WAM20 WAM30	AH710 AH120 T3225	-	-	PC210F	ACP200 ACZ330	PR830 PR630	JP4120 CY250	JP4120	JC5015	YBM351	AP351M
		YG602	GC1030 GC4240	F30M	KC725M KC735M	IC900 IC808 IC908 IC330	WKP35G, WKP35S	T3130 AH3035 AH110	VP15TF VP20RT MP9130	TT9030 TT9080	NC5330 PC5300 NCM325 NC5350	ACP3000	PR1025 PR1225	PTH30E JS4060 JP4160	JP4020	JC5030 JC5040	YBG202	AP351U
		YG612	GC1030 GC1130 GC4340	MP3000 F40M F32M	KC522M KC725M KCPK30 KCPM40 KCSM30	IC330 IC928 IC830	WKP25 WKP35 WKP45	AH120 AH140 AH3035 AH3225	MP6130 VP15TF VP30RT UP20M	TT9080 TT8080 TT8020	PC3700 PC5300 PC5400	ACP300 ACP200 ACP3000 ACU2500	PR1525 PR1225 PR1835 PR830	-	JP4160 PTH40H PTH30E JP4120	JP5003	YBC251 YBC152 YBC202	-
		YG613	GC4340 GC1040	F40M T60M	KCPM20 KC935M KCPM40	IC830 IC928	WKP45S, WKP45X WSP45S	AH725 AH730 GH330 AH130 AH140	FH7020 VP30RT F7030	TT8020 TT8025 TT8080	NC5340 PC5400 NCM335	ACP300 ACZ350	PR1525 PR1230 PR660	JM4160 PTH40H	-	-	YGC302 YBG302	-
MILLING	M	YG602	GC2030 GC1030	F25M	KC635M KC522M KC725M	IC330	WAM30 WXM35, WSM35,	AH725 AH120 GH110 AH730	VP15TF MP7130 MP7030	TT9030 TT9080	PC210F PC5300 NCM325 NC5350	XCU2500 ACM100 ACP200 ACM300	PR1025 PR1225 PR1525 PR630	JX1015 TB6020 CY250 GX2160 JX1045	GX2160	JC5003 JC5015 JC5030	YBG205 YBG202 YBG302	AP351M
		YG612	GC1125 GC2140	MP2050	KC522M KC725M KCPM40 KCSM30 KCSM40	IC330 IC328 IC928	WSM35S WSP45	AH3135 AH6235	MP7140 MP9120	TT9030 TT8020	PC5300 PC9030 PC5400 PC6510	ACM300	PR1225	-	JX1060	JC5015	YBM253 YBM153	-
		YG613	GC2040	F30M F40M	KC722	IC928 IC328	WSP45	AH140 GH340	MP9030 MP7140 VP30RT	TT8080 TT8020	PC9530 NCM335 PC5400	ACP300 ACZ350 ACP400	PR660 PR1535 PR660	TB6045 JX1060 TB6060	-	JC5040	YBC302	AP403M
DRILLING	K	YG5020	GC3220 GC1020	MK1500 MP1500	KC915M	DT7150 IC5100 IC418	WAK15	T1015	VP15TF	TT6290 TT7515 TT6800	NC5330 PC8110	XCK2000	PR1510 PR510	-	-	JC5003	YBD152	AP301K
		YG501	GC3040	MK2050 MK2000	KCK15 KC520M	IC910 IC810	WKK25S WKP25	T1115 T1215 AH120	MP8010 MC5020	TT6080 TT6030	PC6510 NC5340	-	PR1210 PR905	-	-	JC5015	YBG102 YBG202	AP351K
		YG622	-	MK3000	-	-	WKP35	GH110	VP20RT	-	NC5350 PC5300	ACK300	CA420M	-	-	-	-	-
TECHNICAL INFORMATION	N	YG50	H10 H13A H10F	H15	K115M K110M K313	IC20 IC08	WK10	TH10	HT10 MT2010	K10 UF10	H01 H05	H1	KW10 GW25	WH10	-	-	YD101	AW100K
	S	YG602	GC1025 GC1040	F40M MM4500	KC510M KCU30M	IC328 IC408	WSM35S	-	VP15TF VP30RT	TT9030 TT8020 TT9540	PC5300 PC5400 PC9540	AC520U	CA6535 PR620	ACS05E	-	-	YBG102	-
		YG613	S30T S40T	MS2500	KC725M	IC903	WSM45S WSM45X	-	MP9130	TT8080 TT3540	UPC845	-	PR660 PR1535	-	-	-	-	-
		YG904	-	-	X700	-	WSP45G WMP45G W3536	-	-	TT3540 TT9540	UPC845 UNC840	-	-	-	-	-	-	-
	H	YG012	GC1130 GC1030	MP1500 MP3000	-	IC1008	-	-	VP15TF	-	-	-	-	-	JP4120	-	-	-

Technical Information

Formulas

Cutting Speed (Vc)	Metric $Vc = D \times RPM \times 0.0031 \text{ (m/min.)}$	Inch $Vc = D \times RPM \times .262 \text{ (ft/min.)}$
	Metric Vc to Inch Vc $\text{Inch Vc} = \text{Metric Vc} \times 3.28 \text{ (ft/min.)}$	
	Inch Vc to Metric Vc $\text{Metric Vc} = \text{Inch Vc} \times .305 \text{ (m/min.)}$	

Turning Formulas

Spindle Speed (RPM)	Metric $RPM = Vc \times 318.3 \div D \text{ (rev./min.)}$	Inch $RPM = Vc \times 3.82 \div D \text{ (rev./min.)}$
Feed Rate (Vf = Table Feed)	$Vf = Fn \times RPM \text{ (mm/min. or in/min.)}$	
Feed per Revolution (Fn)	$Fn = Vf \div RPM \text{ (mm/rev. or in/rev.)}$	
Metal Removal Rate (Q)	Metric $Q = Vc \times Fn \times Ap \text{ (cm}^3\text{/min.)}$	Inch $Q = Vc \times Fn \times Ap \times 12 \text{ (in}^3\text{/min.)}$
Cutting Time	$T = L \div Vf \text{ (min.)}$	

Milling Formulas

Feed per Revolution (Fn)	$Fn = Vf \div RPM \text{ (mm/rev. or in/rev.)}$ $= Fz \times \text{Number of tooth} \text{ (mm/rev. or in/rev.)}$	
Feed per Tooth (Fz)	$Fz = Vf \div RPM \div \text{Number of tooth} \text{ (mm/rev. or in/rev.)}$ $= Fn \div \text{Number of tooth} \text{ (mm/rev. or in/rev.)}$	
Metal Removal Rate (Q)	Metric $Q = Ap \times Ae \times Vf \div 1000 \text{ (cm}^3\text{/min.)}$	Inch $Q = Ap \times Ae \times Vf \text{ (in}^3\text{/min.)}$
Cutting Time	$T = L \div Vf \text{ (min.)}$	
Power Consumption (Pc)	Metric $Pc = Ap \times Ae \times Vf \times Kc \times 0.000000017 \text{ (kW)}$	Inch $Pc = Ap \times Ae \times Vf \times Kc \times 0.00000253 \text{ (Hp)}$

Drilling Formulas

Power Consumption (Pc)	Metric $Pc = Fn \times Vc \times D \times Kc \times 0.0000042 \text{ (kW)}$	Inch $Pc = Fn \times Vc \times D \times Kc \times 0.0000076 \text{ (Hp)}$
Torque (Mc)	Metric $Mc = Pc \times 9554.1 \div RPM \text{ (Nm)}$	Inch $Mc = Pc \times 5255 \div RPM \text{ (lbf ft)}$
Thrust (T)	$T \div 0.5 \times Kc \times DC/2 \times Fn \times \sin KAPR \text{ (N)}$	

Terms

RPM (n)	Spindle Speed (Revolution per minute)
Vc	Cutting Speed
D	Work Diameter
Vf	Feed Rate (Table Feed)
Fn	Feed per Revolution
Ap	Depth of Cut
Q	Metal Removal Rate
L	Length of cut
T	Cutting Time (min.)

Technical Information

Material Groups

	ISO	VDI 3323	Material Description	Composition / Structure / Heat Treatment		HB	HRC	Examples
TURNING PARTING & GROOVING	P	1	Non-alloyed steel	About 0.15% C	Annealed	125		S15C, C15, 1015
		2		About 0.45% C	Annealed	190	13	S45C, C45, 1045
		3		About 0.45% C	Quenched & Tempered	250	25	
		4		About 0.75% C	Annealed	270	28	SK5, Ck75, 1080
		5		About 0.75% C	Quenched & Tempered	300	32	
		6	Low-alloyed Steel		Annealed	180	10	SCM440, 42CrMo4, 410
		7			Quenched & Tempered	275	29	
		8			Quenched & Tempered	300	32	
		9			Quenched & Tempered	350	38	
		10	High-alloyed steel, and tool steel		Annealed	200	15	SKD, D2
		11			Quenched & Tempered	325	35	SKH, SUH, M42
MILLING	M	12	Stainless Steel	Ferritic / Martensitic	Annealed	200	15	SUS 420, X40Cr13, 420
		13		Martensitic	Quenched & Tempered	240	23	
		14		Austenitic		180	10	SUS 316, 316, X5CrNiMo 17 12 2
DRILLING	K	15	Grey cast iron	Pearlitic / Ferritic		180	10	FC, GG, EN-GJL-250
		16		Pearlitic (Martensitic)		260	26	
		17	Nodular cast iron	Ferritic		160	3	FCD, GGG, EN-GJS-500-7
		18		Pearlitic		250	25	
		19	Malleable cast iron	Ferritic		130		FCMW, FCMP, GTS, GJMB350-10
		20		Pearlitic		230	21	
TECHNICAL INFORMATION	N	21	Aluminum-wrought alloy	Not Curable		60		SAE 1000, AlMg 1, 3.3315
		22		Curable	Hardened	100		SAE 7050, AlCuMg 1, 3.1325
		23	Aluminum-cast, alloyed	≤ 12% Si, Not Curable		75		ADC12, G-AlSi12, 3.2581
		24		≤ 12% Si, Curable	Hardened	90		C4BS, G-AlSi10Mg, 3.2381
		25		> 12% Si, Not Curable		130		
		26	Copper and copper alloys (Bronze / Brass)	Cutting Alloys, PB>1%		110		CuZn36Pb 3, 2.0375
		27		CuZn, CuSnZn (Brass)		90		CuZn 15, 2.0240
		28		CuSn, lead-free copper and electrolytic copper		100		G-CuZn40Fe, 2.0590
		29	Non-metallic materials	Duroplastic, Fiber Reinforced Plastic				CFRP
		30		Rubber, Wood, etc.				
	S	31	Heat resistant super alloys	Fe Based	Annealed	200	15	X12 NiCrSi 36-16, 1.4864
		32			Aged	280	30	
		33			Annealed	250	25	Inconel 718, NiCr20TiAl, 2.4631
		34		Ni or Co Based	Aged	350	38	NiCu30Al, 2.4375
		35			Cast	320	34	G-X120Mn12, 1.3401
		36	Titanium alloys	Pure Titanium		400 Rm		
		37		Alpha + Beta Alloys	Hardened	1050Rm		TiAl6V4, 3.7165
	H	38	Hardened steel		Hardened	550	55	SK3
		39			Hardened	630	60	
		40	Chilled cast iron		Cast	400	42	
		41	Hardened cast iron		Hardened	550	55	

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P		VDI 3323 1	Material Description Non-alloyed steel			Composition / Structure / Heat Treatment About 0.15% C, Annealed					HB 125	HRC
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0037	STKM 12 C	St 37-2	-	4360 40 B	S235JR	E24-2	1311	Fe 360 B			16D	
1.0038	STKM 12 A	St 37-3	A570.36	4360 40 C	S275J2G3	E28-3	1312	Fe 360 D FF			ST14KP	
1.0045	SM 490 YA	S 355 JR	-	-	S 1207	E36-2	-	Fe 510 BFN				
1.0050	SS 50	St 50-2	A570 Gr. 50	4360 50 B	E 295	A50-2	2172	Fe 490			ST5PS	
1.0060	SM 58	St 60-2	A572 Gr. 65	4360 55 E	-	A60-2	1650	Fe 60-2			ST6PS	
1.0114		S 235 J0	-	En 40C	S 235 J0	E24-3		Fe 360 CFN				
1.0143		S 275 J0	-	-	S 275 J0	E28-3	1414	Fe 430 C				
1.0144	SM41C, SM400	St 44-3 N	A573 Gr. 81	4360 43C	S 275 J2 G3	E28-3	1412	Fe 430 D FF			ST14KP	
1.0149		Ro St 44-2	-	43C	S 275 J0 H	-	1412	Fe430C				
1.0301	S10C	C10	1010	045M10	C10	34C10, XC10		C10	F.1511	G10100	10	
1.0330	SPCC	St 12	-	DC 01	Fe P01	DC 01/Fe P01	1142	Fe P01			15KP	
1.0335	SPHE	DD 13 (StW 24)	A622(1008)	HS 3	DD 13	3C		FeP13			08KP	
1.0338	SPCE	St 4	A620(1008)	14491CR	Fe P04	Fe 14	1147	DC04/FeP04			08JU	
1.0345	SPV 50	P235 GH	A516 Gr. 65	P 235 GH	P 235 GH	A 37 CP	1330	Fe E 235		K02503		
1.0401	S15C	C15	1015	080M15	-	C18RR, XC18	1350	C15, C16	F.1110	G10170	15	
1.0402	S20C	C22	1020	050 A 20	1 C 22	C20	1450	C 20	F.1120	G10200	20	
1.0425	SPV315	P265GH/HII				A42CP	1430	Fe4101KW		K02801	16K	
1.0443	SC 450	GS-45	A2765-35	A1		E23-45M	1305					
1.0539		S355NH				TSE355-4	2134	Fe510B				
1.0545		S355N		4360-50E		E355R	2334	FeE355KG				
1.0546		S355NL		4360-50EE		E355FP	2135	FeE355KT				
1.0547		S355J0H		4360-50C		TSE355-3	2172	Fe510C				
1.0549		S355NLH					2135	Fe510D				
1.0553	SM 520 M	St52-3U	A14880-40	4360-50C		320-560M	1606	Fe510C				
1.0562	SM490A	St E 355	A633 Gr. C	P 355 N		FeE355KGN	2132	Fe E 355 KG		K12000	15GF	
1.0565		W St E 355		P 355 NH		P 355 NH	2106	Fe E 355 KW		K01600		
1.0566	SLA 37	T St E 355		P 355 NL1		P 355 NL1	2107	Fe E 355 KT				
1.0570	SM 50 YA	St 52-3	1	4360-50 C	S355JR	E36-3	2172	Fe 510 B			17G15	
1.0715	SUM22	95Mn28	1213	230M07		S250	1912	CF5Mn28	F.2111	G12130		
1.0718	SUM22L	95MnPb28	12L13			S250Pb	1914	CF95MnPb28	F.2112	G12134		
1.0721		10S20	1108	10S20		10S20		CF10S20	F.2121	G11080		
1.0722		10SPb20	11L08			10PbF2		CF10SPb20		G11084		
1.0736	SUM25	95Mn36	1215			S300		CF9Mn36	F.2113	G12150		
1.0737		95MnPb36	12L14			S300Pb	1926	CF95MnPb36	F.2114	G12144		
1.0972		S315MC		1501-40F30		E315D						
1.0976		S355MC		1501-43F35		E355D	2642	FeE355TM				
1.0982		S460MC		1501-50F45								
1.0984		S500MC				E490D	2662	FeE490TM				
1.0986		S500MC		1501-60F55		E560D		FeE560TM				
1.1121	S10C	Ck10	1010	040A10		XC10	1265	C10	F.1510	G10100	10	
1.1141	S15	Ck15	1015	040A15	32C	XC15	1370	C15	F.1110	G10150	15	
1.1151	S20C	C22E	1020	055M15		2C22	1450	C20	F.1120	G10230	20	
1.8900	S25C	StE380	A572-60	436055E			2145	FeE390KG				
		St44-2	A36	436043A		NFA35-501E28	1411					
		StE320-3Z		1501160			1421					

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P		VDI 3323 2	Material Description Non-alloyed steel			Composition / Structure / Heat Treatment About 0.45% C, Annealed					HB 190	HRc 13
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0501	S35C	C35	1035	080A32		1C35	1572	C35	F.113	G10350	35	
1.0503	S45C	C45	1045	060A47		XC42H1TS	1672	C45	F.114	G10450	45	
1.0511	S40C	C40	1040	080M40		1C40		C40	F.114.A	G10400	40	
1.0540	S 50 C	C50					1674	C50		G10500		
1.0551		G5-52	A2770-36	A2		280-480M	1505					
1.0553	SM 520 M	St52-3U	A14880-40	4360-50C		320-560M	1606	Fe510C				
1.0577		S 355 J 2 G 4	A738	Fe 510 D 2 FF		A52FP	2107					
1.0726		35S20	1140	212M36	8M	35MF6	1957			G11400	40	
1.0727		45S20	1146			45MF4	1973			G11460		
1.1157		40Mn4	1039	150M36	15	40M5				G10390	40G	
1.1158	S25C	C25E	1025	070M25		XC25		C25	F.1120	G10250	25	
1.1166	SMn433H	34Mn5	1536						TO.B	G15360		
1.1167	SMn438(H)	36Mn5	1335	150M36		40M5	2120	36Mn6	F.1203	G13350	35G2	
1.1170	SCMn1	28Mn6	1330	150M28	14A	20M5		C28Mn	28Mn6	G13300	30G	
1.1178	S 30 C	C30E		080M30		XC32		C30	2C30	G10300		
1.1180		C35R	1035	080A35		3C35	1572		F.1135	G10350		
1.1181	S35C	C35E	1035	080A35		XC38	1572	C36	F.1130	G10340	35	
1.1191	S45C	Ck45	1045	080A46		XC45	1672	C45	F.1140		45	
1.1206	S 50 C	C50E	1050	080M50		2C50	1674	C50		G10500	50	
1.1213	S50C	Cf53	1050	070M55		XC48HTS	1674	C53		G10500	50	

P		VDI 3323 3	Material Description Non-alloyed steel			Composition / Structure / Heat Treatment About 0.45% C, Annealed					HB 250	HRc 25
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0481	SG365	17 Mn 4/P 295 GH	A516 Gr. 70	224-460B	P 295 GH	A 48 CP	2102	Fe E 295	A47RCI	K03501	14G2	
1.0501	S35C	C35	1035	080A32		1C35	1572	C35	F.1130	G10350	35	
1.0503	S45C	C45	1045	060A47		XC42H1TS	1672	C45	F.1140	G10450	45	
1.0614		C76D	1074			XC75				G10750		
1.0616		C86D	1086			XC80		C85		G10860		
1.0618		C92D	1095			XC90				G10950		
1.0726		35S20	1140	212M36	8M	35MF6	1957			G11400	40	
1.1157		40Mn4	1039	150M36	15	40M5				G10390	40G	
1.1165	SMn433H	30Mn5	1036	120M36		35M5		30Mn5	F.8211	K13300	30G2	
1.1167	SMn438(H)	36Mn5	1335	150M36		40M5	2120	36Mn6	F.1203	G13350	35G2	
1.1186	S40C	C40E	1040	060A40		2C40		C40		G10400		
1.1191	S45C	Ck45	1045	080M46		2C45	1672	C45	F.1140		45	
1.1201	S50C	C45R	1049	080M46		3C45	1660	C45	F.1145		38HM	
1.1213	S50C	Cf53	1050	070M55		XC48HTS	1674	C53		G10500	50	
1.7242	SCM418 H	18CrMo4										
1.7337		16CrMo4-4	A387 Gr.12					A18CrMo45KW		K11564	15CM	
1.7362	SCMV 6	12CrMo195		3606-625		Z10CD5-05		16CrMo205		K41545		
		17MnV6	A572-60	4360S5E		NFA35-501E36	2142					

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P		VDI 3323 4	Material Description Non-alloyed steel			Composition / Structure / Heat Treatment About 0.75% C, Annealed					HB 270	HRC 28
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0603	S70 C-CSP	C67	107	080A67		XC65		C67		G10700		
1.0605		C75	1075	144980HS				C75		G10740	75	
1.1203	S55C	Ck55	1055	060A57		2C55	1655	C55	F.1150	G10550	55	
1.1209		C55R	1055	070M55		3C55		C55	F.1155	G10550		
1.1221	S58C	Ck60	1060	060A62	43D	2C60	1678	C60	F.1150	G10640	60	
1.1231	S70 C-CSP	C67E	1070	060A67		XC68	1770	C70	F5103	G10700	65GA	
1.1248	C75	C75E	1074	060A78		XC75	1774	C75	F5107	G10800	75(A)	
1.1269	SK5-CSP	C85E	1086			XC90		C90		G10900	85(A)	
1.1274	SUP4	Ck101	1095	060 A 96	C 100S	XC100	1870	C100	F5117	G10950		
1.1545	SK3	C105W1	W1	BW 2	C 105U	Y1 105	1880	C 100 KU	F5118		U10A	
1.1663	SK2	C125W	W112			Y2120					U13	

P		VDI 3323 5	Material Description Non-alloyed steel			Composition / Structure / Heat Treatment About 0.75% C, Quenched & Tempered					HB 300	HRC 32
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0070		St 70-2	1055	Fe690-2FN	-	A70-2	1655	Fe 690	F.1150		55	
1.0535	S55C	C55	1055	070M55		1C55	1655	C55		J05000	55	
1.0601	S58C	C60	1060	060A62	43D	1C60		C60		G10600	60(G)	
1.1203	S55C	Ck55	1055	060A57		2C55	1655	C55	F.1150	G10550	55	
1.1221	S58C	Ck60	1060	060A62	43D	2C60	1678	C60	F.1150	G10640	60	
1.1274	SUP4	Ck101	1095	060 A 96	C 100S	XC100	1870	C100	F5117	G10950		
1.1545	SK3	C105W1	W1	BW 2	C 105U	Y1 105	1880	C 100 KU	F5118		U10A	
1.1663	SK2	C125W	W112			Y2120					U13	
1.5120		38MnSi4										
1.5710	SNC236	36NiCr6	3135	640A35	111A	35NC6						
1.7701		51CrMoV4						51CrMoV4				

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P		VDI 3323 6	Material Description Low-alloyed Steel			Composition / Structure / Heat Treatment Annealed					HB 180	HRC 10
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0116		St 37-3	A570 Gr. 36	4360-40C	S 235 J2 G3	E24-3	1312	Fe 360 D1(2)	AE235D		ST3KP	
1.0904	SKH 1, SKT 4	55Si7	9255	250A53	45	55S7	2085	55Si8	56Si7	G92550	55S2	
1.0961	SUP 7	60SiCr7	9262			60SC6		60SiCr8	60SiCr8	G92620		
1.2067		100Cr6	L3	BL3		Y100C6			100Cr6			
1.2108		90CrSi5	L1				2092	105WCr5				
1.2210		115CrV3	L2			100C3		107CrV3KU	F.520L		11KHF	
1.2241		51CrV4										
1.2330	SCM435TK	35CrMo4	4135	708A37		34CD4	2234	35CrMo4			35KHM	
1.2419	SKS31	105WCr6		105WC13		105WC13	2140	10WCr6			CWG	
1.2510	SKS3	100MnCrW4	O1	BO1		90 MWCV 5	2140	95 MnWCr 5 KU	F.5220		9KHVG	
1.2542		45WCrV7	S1	BS1			2710	45WCrV8KU			5CW25F	
1.2550		60WCrV7	S1			55WC20	2710	58WCr9KU			5KHV25F	
1.2713	SKT4	55NiCrMoV6	L6			55NCDV7			F.520S		5C NM	
1.2721		50NiCr13	L6			55NCV6	2550		F.528			
1.2842		90MnCrV8	O2	BO2		90MV8				T31502	9G2F	
1.3501		100Cr2	E50100									
1.3505	SUJ2	100Cr6	52100	25135	31	100C6	2258	100Cr6	F.1310		SCC 15	
1.5024		46Si7				45S7		46Si7	F.1451			
1.5025		51Si7	9259H		50Si7	51S7	2090	50Si7	F.1450			
1.5026		55Si7			56Si7	55S7	2085	55Si7	F.1440	G92550	55S2	
1.5027		60Si7	9260	251A60	60Si7	60S7		60Si7	F.1441	G92600	60S2	
1.5028	SUP7	65Si7	9260H									
1.5415	STFA 12	15Mo3	A204GrA	1503-243B		15D3	2912	16Mo3(KG)	F.2601	K11820		
1.5419	SCPH11	20Mo4	4419	1503-243-430			2512	G20Mo5		G44190		
1.5423	SB450M	16Mo5	4520	1503-245-420				16Mo5(KG)	F.2602	K11522		
1.5622		14Ni6	A350-LF5			16N6		14Ni6(KG)	F.2641			
1.5732	SNC415(H)	14NiCr10	3415			14NC11		16NiCr11				
1.5752	SNC815(H)	14NiCr14	3310	655M13	36A	12NC15					20X2H4A	
1.6511	SUP10	36CrNiMo4	9840	816M40	110	40NCD3		36NiCrMo4(KB)			40C N2MA	
1.6523	SNCM220(H)	21NiCrMo2	8620	805M20	362	20NCD2	2506	20NiCrMo2			20C GNM	
1.6546	SNCM240	40NiCrMo2-2	8740	311-Tyre7				40NiCrMo2(KB)			38C GNM	
1.6566		17NiCrMo6-4										
1.6587		17CrNiMo6		820A16		18NCD6		14NiCrMo13				
1.6657		10NiCrMo13-4						14NiCrMo131				
1.7015	SCr415(H)	10Cr3	5015	523M15		12C3				G50150	15C	
1.7033	SCr430(H)	34Cr4	5132	530A32	18B	32C4		34Cr4(KB)		G51300	35C	
1.7035	SCr440(H)	41Cr4	5140	530M40	18	42C4	2245	41Cr4		G51400	40H	
1.7131	SCR415	16MnCr5	5115	527M17		16MC5	2511	16MnCr5		G51150	12KHN2	
1.7139		16MnCr55					2127				18HG	
1.7176	SUP9(A)	55Cr3	5155	527A60	48	55C3	2253	55Cr3			50C GA	
1.7218	SCM420	25CrMo4	4130	CDS110		25CD4	2225	25CrMo4(KB)			20C M	
1.7220	SCM432	34CrMo4	4135	708 A 37		35CD4	2234	34CrMo4			35C M	
1.7223	SNB22-1	41CrMo4	4142					41CrMo4			40C FA	
1.7225	SCM 440 (H)	42CrMo4	4140	708 M 40	42 CrMo 4	42 CD 4	2244	42 CrMo 4	F.1252		38HM	
1.7228		55NiCrMoV6G		823M30	33		2512	653M31				
1.7262	SCM415(H)	15CrMo5				12CD4	2216	12CrMo4				
1.7321		20mOcr4					2625					
1.7335	SCM415(H)	13CrMo4-4	A182-F11	1501-620		15CD4-5	2216	14CrMo45			12C M	
1.7361		32CrMo12		722M24	40B	30CD12	2240	30CrMo12	F.124A			
1.7380		10CrMo9-10	A182F22	1501-622		12CD9-10	2218	12CrMo9			12KH8	

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Material Description
Low-alloyed Steel

Composition / Structure / Heat Treatment
Annealed

HB
180

HRc
10

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.7715		14MoV6-3		1503-660-440				13MoCrV6				
1.8159	SUP 10	50CrV4	6150	735A50	47	50CrV4	2230	50CrV4		G61500	50C GFA	
1.8161		58CrV4										
1.8509	SACM 645	41CrAlMo7	A355A	905M39	41B	40CAD6-12	2940	41CrAlMo7				
1.8523		39CrMoV13-9		897M39	40C			36CrMoV12				

P

VDI 3323
7

Material Description
Low-alloyed Steel

Composition / Structure / Heat Treatment
Quenched & Tempered

HB
275

HRc
29

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.5415	STFA 12	15Mo3	A204GrA	1503-243B		15D3	2912	16Mo3(KG)	F2601	K11820		
1.5423	SB450M	16Mo5	4520	1503-245-420				16Mo5(KG)	F2602	K11522		
1.5622		14Ni6	A350-LF5			16N6		14Ni6(KG)	F2641			
1.5732	SNC415(H)	14NiCr10	3415			14NC11		16NiCr11				
1.5752	SNC815(H)	14NiCr14	3310	655M13	36A	12NC15					20X2H4A	
1.5755	SNC236	31NiCr14		653M31		18NC13	2534		F.1270			
1.6565	SNCM447	40NiCrMo6	4340	817M40	24	35NCD6	2541	35NiCrMo6(KB)			38C 2N2MA	
1.6587		17CrNiMo6		820A16		18NCD6		14NiCrMo13				
1.6657		10NiCrMo13-4						14NiCrMo131				
1.6957		26NiCrMoV14-5										
1.7015	SCr415(H)	10Cr3	5015	523M15		12C3				G50150	15C	
1.7262	SCM415(H)	15CrMo5				12CD4	2216	12CrMo4				
1.7335	SCM415(H)	13CrMo4-4	A182-F11	1501-620		15CD4-5	2216	14CrMo45			12C M	
1.7380		10CrMo9-10	A182F22	1501-622		12CD9-10	2218	12CrMo9			12KH8	
1.7715		14MoV6-3		1503-660-440				13MoCrV6				
1.7733		24CrMoV55				20CDV6		21CrMoV511				
1.7755		GS-45CrMoV10-4										
1.8070		21CrMoV511						35NiCr9				

P

VDI 3323
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Material Description
Low-alloyed Steel

Composition / Structure / Heat Treatment
Quenched & tempered

HB
300

HRc
32

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.1730		C45W3	C45W			XC48						
1.2332	SCM(440)	47CrMo4	4142	708M40	19A	42CD4	2244	42CrMo4				
1.5736	SNC 631 (H)	36NiCr10	3435			30NC11						
1.6523	SNCM220(H)	21NiCrMo2	8620	805M20	362	20NCD2	2506	20NiCrMo2			20C GNM	
1.7033	SCr430(H)	34Cr4	5132	530A32	18B	32C4		34Cr4(KB)		G51300	35C	
1.7218	SCM420	25CrMo4	4130	CDS110		25CD4	2225	25CrMo4(KB)			20C M	
1.8515		32CrMo12		722M24	40B	30CD12	2240	32CrMo12	F.124A			

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P		VDI 3323 9	Material Description Low-alloyed Steel			Composition / Structure / Heat Treatment Quenched & Tempered					HB 350	HRC 38
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0904	SKH 1, SKT 4	55Si7	9255	250A53	45	55S7	2085	55Si8		G92550	55S2	
1.0961	SUP 7	60SiCr7	9262			60SC6		60SiCr8		G92620		
1.2067		100Cr6	L3	BL3		Y100C6		100Cr6				
1.2419	SKS31	105WCr6		105WC13		105WC13	2140	10WCr6			CWG	
1.2542		45WCrV7	S1	BS1			2710	45WCrV8KU			5CW25F	
1.2713	SKT4	55NiCrMoV6	L6			55NCDV7			F5205		5C NM	
1.4882		X50CrMnNiNbN219				Z50CMNNb21-09						
1.5120		38MnSi4										
1.5710	SNC236	36NiCr6	3135	640A35	111A	35NC6						
1.5755	SNC236	31NiCr14		830m31		18NC13	2534		F1270			
1.6511	SUP10	36CrNiMo4	9840	816M40	110	40NCD3		36NiCrMo4(KB)			40C N2MA	
1.6546	SNCM240	40NiCrMo2-2	8740	311-Tyre7				40NiCrMo2(KB)			38C GNM	
1.7035	SCr440(H)	41Cr4	5140	530M40	18	42C4	2245	41Cr4		G51400	40H	
1.7176	SUP9(A)	55Cr3	5155	527A60	48	55C3	2253	55Cr3			50C GA	
1.7220	SCM432	34CrMo4	4135	708Aa37		35CD4	2234	34CrMo4			35C M	
1.7223	SNB22-1	41CrMo4	4142					41CrMo4			40C FA	
1.7225	SCM 440 (H)	42CrMo4	4140	708 M 40	42 CrMo 4	42 CD 4	2244	42 CrMo 4	F1252		38HM	
1.7361		32CrMo12		722M24	40B	30CD12	2240	30CrMo12	F124A			
1.8159	SUP 10	50CrV4	6150	735A50	47	50CrV4	2230	50CrV4	51CrV4	G61500	50C GFA	
1.8161		58CrV4										
1.8509	SACM 645	41CrAlMo7	A355A	905M39	41B	40CAD6-12	2940	41CrAlMo7				
1.8523		39CrMoV13-9		897M39	40C			36CrMoV12				

P		VDI 3323 10	Material Description High-alloyed steel, and tool steel			Composition / Structure / Heat Treatment Annealed					HB 200	HRC 15
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.0347	SPCD	RR St 3	A619	CR3	FeP03	F 13		DC03/FeP03			08JU	
1.0723	SUM32	15S22		210A15			1922		F210F			
1.2080	SKD1	X210Cr12	D3	BD3	X210Cr12	Z200C12		X205Cr12KU		T30403	KH12	
1.2162	SCR 420 H	21MnCr5				20MC5						
1.2311		40CrMnMo7				40CMD8		35CrMo8KU				
1.2312		40CrMnMoS8.6	P20+S			40CMD8S						
1.2316		X36CrMo17			X38CrMo16							
1.2343	SKD 6	X38CrMoV5-1	H11	BH11		Z38CDV5		X37CrMoV51KU		T20811	4C5MFS	
1.2344	SKD61	X40CrMoV5-1	H13	BH13		Z40CDV5	2242	X40CrMoV511KU	F5318	T20813	4C5MF1S	
1.2363	SKD12	X100CrMoV5-1	A2	BA2		Z100CDV5	2260	X100CrMoV51KU	F5227		9KH5VF	
1.2379	SKD11	X155CrVMo121	D2	BD2		Z160CDV12	2310	X165CrMoW12KU		T30402	KH12MF	KRUPP2379
1.2436	SKD 2	X210CrW12	D4(D6)	BD6		Z200CD12	2312	X215CrW121KU	F5213		KH12	

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P		VDI 3323 10	Material Description High-alloyed steel, and tool steel			Composition / Structure / Heat Treatment Annealed					HB 200	HRC 15
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.2510	SKS3	100MnCrW4	O1	BO1		90MnWCV5	2140	95MnWCr5KU	F5220		9KHVG	
1.2581	SKD5	X30WCrV9-3	H21	BH21		Z30WCV9		X30WCrV93KU	F526	T20821	3C2W8F	
1.2601		X165CrMoV12					2310	X160CrMoV12			KH12MF	
1.2606	SKD62	X37CrMoW51	H12	BH12		Z35CWDV5		X35CrMoW05KU	F537	T20812	5CNM	
1.2764		X19NiCrMo4										
1.2767		X45NiCrMo4				45NCD16		40NiCrMoV8KU				
1.2842		90MnCrV8	O2	BO2		90MV8		90MnVCr8KU		T31502	9G2F	
1.3243	SKH55	S6-5-2-5	T15			KCV06-05-05-04-02	2723	HS6-5-2-5			R6M5K5	
1.3249	SKH3	S18-1-2-5	T4	BT4		Z80WKCV18-05-04					R18K5F2	
1.3343	SKH51, SKH9	S6-5-2	M2	BM2		Z85WDCV	2722	HS652	F5604		R6M5	
1.3348	SKH58	S2-9-2	M7			Z100DCWV09-04-02	2782	HS292	F5607			
1.3355	SKH2	S18-0-1	T1	BT1		Z80WCV18-4-01					R18	
1.4718	SUH1	X45CrSi9-3	HNV3	401S45	52	Z45CS9		X45CrSi8	F322		40C952	
1.5662	SL9N60(53)	X8Ni9	ASMA353	502-650		9Ni		X10Ni9	F2645			
1.5680		12Ni19	2515	12Ni19		Z18N5						

P		VDI 3323 11	Material Description High-alloyed steel, and tool steel			Composition / Structure / Heat Treatment Quenched & Tempered					HB 325	HRC 35
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.2080	SKD1	X210Cr12	D3	BD3	X210Cr12	Z200C12		X205Cr12KU		T30403	KH12	
1.2344	SKD61	X40CrMoV5-1	H13	BH13		Z40CDV5	2242	X40CrMoV511KU	F5318	T20813	4C5MF1S	
1.2363	SKD12	X100CrMoV5-1	A2	BA2		Z100CDV5	2260	X100CrMoV51KU	F5227		9KH5VF	
1.2436	SKD2	X210CrW12	D4(D6)	BD6		Z200CD12	2312	X215CrW121KU	F5213		KH12	
1.2581	SKD5	X30WCrV9-3	H21	BH21		Z30WCV9		X30WCrV93KU	F526	T20821	3C2W8F	
1.2601		X165CrMoV12					2310	X160CrMoV12			KH12MF	
1.2714	SKT4	55NiCrMoV7	6F3/L6			55NiCrMoV7			F5205		SKHNV	
1.3202		S12-1-4-5		BT15				HS12-1-5-5				
1.3207		S10-4-3-10		BT42		Z130WKCDV						
1.3243	SKH55	S6-5-2-5	T15			KCV06-05-05-04-02	2723	HS6-5-2-5			R6M5K5	
1.3246		S7-4-2-5	M35			Z110WKCDV07-05-04		HS7-4-2-5				
1.3247	SKH51	S2-10-1-8	M42	BM42		Z110DKCVV09-08-04		HS2-9-1-8			R2AM9K5	
1.3255	SKH3	S18-1-2-5	T4	BT4		Z80WKCV18-05-04					R18K5F2	
1.3343	SKH51, SKH9	S6-5-2	M2	BM2		Z85WDCV	2722	HS652	F5604		R6M5	
1.3348	SKH58	S2-9-2	M7			Z100DCWV09-04-02	2782	HS292	F5607			
1.3355	SKH2	S18-0-1	T1	BT1		Z80WCV18-4-01					R18	
1.4718	SUH1	X45CrSi9-3	HNV3	401S45	52	Z45CS9		X45CrSi8	F322		40C952	
1.4935	SUH616	X20CrMoWV121	422							S42200		
1.5680		12Ni19	2515	12Ni19		Z18N5						

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M		VDI 3323 12	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Stainless steel			Ferritic / Martensitic, Annealed					200	15
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.4000	SUS403	X6Cr13	403	403S17		Z6C13	2301	X6Cr13	F3110	S40300	08C 13	ATI410S
1.4001		X7Cr14	410 S	403S7		Z8C13	2301		F8401		08C 13	
1.4002	SUS 405	X6CrAl13	405	405S17		Z6CA13	2302	X6CrAl13		S40500		
1.4005	SUS416	X12CrS13	416	416S21		Z11CF13	2380	X12CrS13	F3411	S41600		ATI416
1.4006	SUS410	X12Cr13	410	410S21	56A	Z10C13	2302	X12Cr13	F3401	S41000	12C 13	ATI410
1.4016	SUS430	X6Cr17	430	430S15	X8Cr17	Z8C17	2320	X8Cr17	F3113	S43000	12C 17	ATI430
1.4027	SCS 2	GX20Cr14		420C29		Z20C13M					20C 13L	
1.4028	SUS420J2	X30Cr13	420	420S45		Z30C13	2304			S42020	20C 13	
1.4034	SUS420J2	X46Cr13		420S45		Z40C14		X40Cr14	F3405			
1.4057	SUS431	X19CrNi17-2	431	431S29	57	Z15CN16-02	2321	X16CrNi16	F3427	S43100	20C 17N2	431 (HT)
1.4086		GX120Cr29		452C11								
1.4104	SUS430F	X12CrMoS17	430F	420S37		Z10CF17	2383	X10CrS17	F3117	S43020		
1.4112	SUS 440 B	X90CrMoV18	440B							S44003	95KH18	
1.4113	SUS434	X6CrMo17	434	434S17		Z8CD17-01	2325	X8CrMo17		S43400		AL 434
1.4313	SCS5	X3CrNi13-4	CA6-NM	425C11		Z4CND13-04M	2385	(G)X6CrNi304		J91540		
1.4340		GX40CrNi274								J92615		
1.4417		X2CrNiMoS195	S31500				2376			S39215		
1.4418		X4CrNiMo165				Z6CND16-04-01	2387					APX4
1.4510	SUS430LX	X6CrTi17	XM8			Z4CT17		X6CrTi17	F3115	S43035	08C 17T	430 Ti
1.4511	SUS430LK	X6CrNb17				Z4CNb17		X6CrNb17	F3122			AXC525
1.4512	SUH409	X6CrTi12	409	LW19		Z3CT12		X6CrTi12		S40900		
1.4720		X20CrMo13										
1.4724	SUS 405	X10CrAl13	405	403S17		Z10C13		X10CrAl12	F311		10C 13SJU	
1.4742	SUS430	X10CrAl18	430	439S15	60	Z10CA518		X8Cr17	F3113	S43000	15C 13SJU	
1.4747	SUH4	X80CrNiSi20	H1NV6	443S65	59	Z80CSN20-02		X80CrSiNi20	F320B	S65006		
1.4749		X18CrN28	446								15KH28	
1.4762	SUH446	X10CrAl124	446			Z10CA524	2322	X16Cr26		S44600		
1.4871	SUH35,SUH36	X53CrMnNiN21-9	EV8	349S54		Z52CMN21-09		X53CrMnNiN219		S63008	55C 20G9AN4	
		X10CrNi15	429									
		X12CrNi18-9	302	302S31		Z10CN18-09	2330					

M		VDI 3323 13	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Stainless steel			Martensitic, Quenched & Tempered					240	23
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.4000	SUS403	X6Cr13	403	403S17		Z6C13	2301	X6Cr13	F3110	S40300	08C 13	ATI410S
1.4001		X7Cr14	410 S	403S7		Z8C13	2301		F8401		08C 13	
1.4006	SUS410	X12Cr13	410	410S21	56A	Z10C13	2302	X12Cr13	F3401	S41000	12C 13	ATI410
1.4016	SUS430	X6Cr17	430	430S15	X8Cr17	Z8C17	2320	X8Cr17	F3113	S43000	12C 17	ATI430
1.4021	SUS 420J1	X20Cr13	420	420S37		Z20C13	2303	14210	F5261	S42000	20C 13	ATI420
1.4027	SCS 2	GX20Cr14		420C29		Z20C13M					20C 13L	
1.4031	SUS 420 J2	X40Cr13	420			Z40C14	-2304		F3404	S42080	40C 13	
1.4034	SUS420J2	X46Cr13		420S45		Z40C14		X40Cr14	F3405			
1.4057	SUS431	X19CrNi17-2	431	431S29	57	Z15CN16-02	2321	X16CrNi16	F3427	S43100	20C 17N2	431 (HT)
1.4104	SUS430F	X12CrMoS17	430F	420S37		Z10CF17	2383	X10CrS17	F3117	S43020		
1.4113	SUS434	X6CrMo17	434	434S17		Z8CD17-01	2325	X8CrMo17		S43400		AL 434
1.4313	SCS5	X3CrNi13-4	CA6-NM	425C11		Z4CND13-04M	2385	(G)X6CrNi304		J91540		
1.4544		A 700	321	S.524		Z 10 CNT 18 11		X6CrNiTi1811		J92630	08C 18N12T	
1.4546		X5CrNiNb18-10	348	347S31				X6CrNiNb1811		J92640		ATI 348
1.4871	SUH35,SUH36	X53CrMnNiN21-9	EV8	349S54		Z52CMN21-09		X53CrMnNiN219		S63008	55C 20G9AN4	
1.4922		X20CrMnV12-1					2317	x20CrMnOn1201				
1.4923		X22CrMoV121										Jethete X20

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M		VDI 3323 14	Material Description Stainless steel			Composition / Structure / Heat Treatment Austenitic					HB 180	HRC 10
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.4301	SUS 304	X5CrNi18-10	304	304S15		Z5CN18-09	2332		F.3551	S30409	08C 18N10	
1.4305	SUS303	X10CrNiS18-10	303	303S21	58M	Z8CNF18-09	2346	X10CrNiS18.09	F.3508	S30300	30C 18N11	ATI 303
1.4306	SCS19	X2CrNi1911	304L	304C12	X3CrNi1810KD	Z2CN18-09	2352	GX2CrNi1910	F.3503	S30403	03KH18N11	ATI 304L
1.4308	SUS304L	GX6CrNi18-9	CF-8	304C15	58E	Z6CN18-10M	2333					CF-8
1.4310	SUS 301	X10CrNi18-8	301	301S21		Z12CN17-07	2331	X2CrNi1807	F.3517	S30100	07KH16N6	ATI 301
1.4311	SUS304LN	X2CrNiN18 10	304LN	304S62		Z2CN18-10	2371	X2CrNiN1810	F.3541	S30453	03KH18N11	
1.4312	SCS12	GX10CrNi188	305	302C25		Z10CN18-9M					10C 18N9L	ATI 305
1.4350	SUS304	X5CrNi18-9	304	304S15	58E	Z6CN18-09	2332	X5CrNi1810	F.3551	S30400		ATI 304
1.4362		X2CrNiN234	S32304			Z2CN23-04AZ	2327			S32304		ATI 2304TM
1.4371		X3CrMnNiN18887	202	284S16		Z8CMN18-08-05						
1.4401	SUS316	X5CrNiMo17-12-2	316	316S13		Z3CND17-11-01	2347	X5CrNiMo17 12 2	F.3534	S31600	08KH17H13M2T	ATI 316
1.4404	SUS316L	X2CrNiMo17-13-2	316L	316S11		Z2CND17-12	2348	X2CrNiMo1712	F.3533	S31603		ATI 316L
1.4406	SUS316LN	X2CrNiMoN17122	316LN	316S61		Z2CND17-12AZ		X2CrNiMoN1712	F.3542	S31653	07C 18N	ATI 316LN
1.4408	SCS14	GX6CrNiMo18-10	CF-8M	316C16			2343	X7CrNiMo2010	F.8414	J92900	10G2S2MSL	
1.4410	SCS 14 A	GX10CrNiMo18-9				Z5CND20-12M	2328			S32750		
1.4429	SUS316LN	X2CrNiMoN17-13-3	316Ln	316S62		Z2CND17-13AZ	2375	X2CrNiMoN17133	F.3543		03KH16N15M3	
1.4435	SUS316L	X2CrNiMo18143	316L	316S11		Z3CND17-12-03	2375	X2CrNiMo17 13 2	F.3533	S31603	03C 17N14M3	
1.4436	SUS316	X3CrNiMo17-13-3	316	316S19		Z6CND18-12-03	2343	X5CrNiMo17 12 2	F.3543	S31600		
1.4438	SUS317L	X2CrNiMo18164	317L	317S12		Z2CND19-15-04	2367	X2CrNiMo18 16 4	F.3539	S31703		ATI 317L
1.4439		X2CrNiMoN17135	(s31726)			Z3CND18-14-06AZ						
1.4440		X2CrNiMo18-16										
1.4449	SUS317	X5CrNiMo17133	317	317S16				X5CrNiMo1815		S31700		ATI 317
1.4460	SUS 329 J1	X8CrNiMo275	329				2324			S32900		10RE51
1.4462	SUS329J3L	X2CrNiMoN2253		318S13		Z3CND22-05Az	2377			S31803		ATI 2205TM
1.4500		X7NiCrMoCuNb2520				Z3NCUD25-20M				J95150		
1.4521	SUS444	X2CrMoTi18-2	443444				2326	X2CrMoTiNb18 2	F.3123			
1.4539		X1NiCrMoCuN25205				Z2NCUD25-20	2562			N08904		ATI 904L
1.4541	SUS321	X14CrNiTi18-10	321	321S31		Z6CNT18-10	2337	X6CrNiTi18 11	F.3523	S32100	06C 18N10T	ATI 321
1.4542	SUS630	X5CrNiCuNb174	630			Z7CNU15-05						UGIMA 4542
1.4545		Z7CNU15.05	15-5PH							S15500		ATI 15-5
1.4547		X1CrNiMoN20187	S31254				2378			S31254		Uranus B256Mo
1.4550	SUS347	X6CrNiNb18-10	347	347S17	58F	Z6CNNb18-10	2338	X6CrNiNb18 11	F.3552	S34700	08C 18N12B	ATI 347
1.4552	SCS 21	GX7CrNiNb18-9				Z4CNNb19-10M				J92710		
1.4568	SUS 631	X 7 CrNiAl 17 7		316S111		Z 9 CAN 17-7	2388	Z8CNA17-07		S17700	09C 17N1U1	17-7PH
1.4571	SUS 316Ti	X6CrNiMoTi17-12-2	316Ti	320S31	58J	Z6NDT17-12	2350	X6CrNiMoTi17 12	F.3535		10C 17N13M2T	ATI 316Ti
1.4581	SCS 22	GX5CrNiMoNb18		318C17		Z4CNDNb18-12M						
1.4583		X6CrNiMoNb18-12	318	303S21		Z15CNS20-12		X15CrNiSi2 12				
1.4585		GX7CrNiMoCuNb1818						X6CrNiMoTi17 12		J94651		
1.4821		X20CrNiSi254				Z20CNS25-04				S44635		
1.4823		GX40CrNiSi274								J92605		
1.4828	SCS17	X15CrNiSi20-12	309	309S24	58C	Z15CNS20-12			F.8414	S30900	20C 20N14S2	ATI 309
1.4833	SUS 309 S	X6CrNi2213	309S	309S13		Z15CN24-13				J93400		
1.4845	SUH310	X12CrNi25-21	310S	310S24		Z12CN25-20	2361	X6CrNi2520	F.331	S31008	20C 23N18	ATI 310S
1.4878	SUS321	X12CrNiTi18-9	321	321S20	58B	Z6CNT18-12(B)	2337	X6CrNiTi1811	F.3553	S32100		ACX315
1.4891		X5CrNiNb18-10	Ss30415				2372					
1.4893		X8CrNiNb11	S30815				2368					
1.4948		X6CrNi1811	304H	304S51		Z5CN18-09	2333			S30480		
1.4980		X5NiCrTi2515	660				2570			S66286		Incoloy A 286
		X5NiCrN3525										
		X2CrNiMoN18134	S31753									
		X2CrNiMoN25227										

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Material Description

Grey cast iron

Composition / Structure / Heat Treatment

Pearlitic / Ferritic

HB

180

HRC

10

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.6010	FC100	GG10	A48 20 B	Grade 100	GJL-100	Ft 10 D	0100	G10	FG10		Sc 10	
0.6015	FC150	GG15	A48 25 B	Grade 150	GJL-150	Ft 15 D	0115	G15	FG15		Sc 15	
0.6020	FC200	GG20	A48 30 B	Grade 220	GJL-200	Ft 20 D	0120	G20	FG20	W06020	Sc 20	
0.6025	FC250	GG25	A48 40 B	Grade 260	GJL-250	Ft 25 D	0125	G25	FG25		Sc 25	
0.6660		GGL-NiCr 20 2	1050/700/7	Grade F2	GJLA-XNiCr 20-2	L-NC 202	0523	-		F41002		Ni-Resist 2
1.4449	SUS317	X5CrNiMo17133	317	317S16				X5CrNiMo1815		S31700		ATI 317

KVDI 3323
16

Material Description

Grey cast iron

Composition / Structure / Heat Treatment

Pearlitic (Martensitic)

HB

260

HRC

26

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.6025	FC250	GG25	A48 40 B	Grade 260	GJL-250	Ft 25 D	0125	G25	FG25		Sc 25	
0.6030	FC300	GG30	A48 45 B	Grade 300	GJL-300	Ft 30 D	0130	G30	FG30		Sc 30	
0.6035	FC350	GG35	A48 50 B	Grade 350	GJL-350	Ft 35 D	0135	G35	FG35		Sc 35	
0.6040	FC400	GG40	A48 60 B	Grade 400	GJL-400	Ft 40 D	0140	G40	FC40		Sc 40	

KVDI 3323
17

Material Description

Nodular cast iron

Composition / Structure / Heat Treatment

Ferritic

HB

160

HRC

3

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.7033	FCD350-22L	GGG35.3	-	350/22L40	GJS-350-22-LT	FGS 370-17	0717-15	-				
0.7040	FCD400	GGG40	60-40-18	SNG 420-12	GJS-400-15	FCS 400-12	0717-02	GS 400-12	FG E38-17	F32800	Vc 42-12	
0.7043	FCD 370	GGG40.3	60-40-18	SNG 370-17	GJS-400-18-LT	FGS 370-17	0717-12	GSO 42-17			Vc 42-12	
0.6040	FC400	GG40	A48 60 B	Grade 400	GJL-400	Ft 40 D	0140	G40	FC40		Sc 40	

KVDI 3323
18

Material Description

Nodular cast iron

Composition / Structure / Heat Treatment

Pearlitic

HB

250

HRC

25

Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.7050	FCD500	GGG50	80-55-06	SNG 500-7	GJS-500-7	FGS 500-7	0727-02	GS 500-7	FG E50-7	F33100	Vc 50-2	
0.7060	FCD600	GGG60	80-55-06	SNG 600-3	GJS-600-3	FGS 600-3	0732-03	GS 600-3	FG E60-2		Vc 60-2	
0.7070	FCD700	GGG70	100-70-03	SNG 700-2	GJS-700-2	FGS 700-2	0737-01	GS 700-2	FG S70-2	F34800	Vc 70-2	
0.7652	FCDA-NiMn 137	GGG NiMn 13-7	-	Grade S6	GJSA-XNiMn 13-7	FGS Ni13 Mn7	0772	-				Nodumag
0.7660		GGG NiCr 20-2	A436 D2	Grade S2	GJSA-XNiCr 20-2	FGS Ni20 Cr2	0776	-				Ni-Resist D-2

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K		VDI 3323 19	Material Description			Composition / Structure / Heat Treatment					HB	HRC
			Malleable cast iron			Ferritic					130	
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.8135	FCMW330	GTS-35	32510	B 340-12	GJMB350-10	MN 35-10	0815	GMN 35	GTS35		Kc 35-10	

K		VDI 3323 20	Material Description			Composition / Structure / Heat Treatment					HB	HRC
			Malleable cast iron			Pearlitic					230	21
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.8145	FCMW370	GTS-45	A220-40010	P 440-7	GJMB450-6	MN 450	0852	GMN 45				
0.8155	FCMP490	GTS-55	50005	P 510-4	GJMB-550-4	MP 50-5	0854	GMN 55			Kc 60-3	
0.8165	FCMP590	GTS-65	70003	P 570-3	GJMB-650-2	MN 650-3	0856	GMN 65				
0.8170	FCMP690	GTS-70	90001	P 690-2	GJMB-700-2	MN 700-2	0862	GMN 70			Kc 70-2	

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N VDI 3323 21 Material Description Composition / Structure / Heat Treatment HB HRc												
Aluminum-wrought alloy												
Not Curable												
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
3.0205		Al99	Al99									
3.0255	(A1050)	Al99.5	1000	L31		A59050C					D1	
3.3315		AlMg1										

N VDI 3323 22 Material Description Composition / Structure / Heat Treatment HB HRc												
Aluminum-wrought alloy												
Curable, Hardened												
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
3.1325		AlCuMg1									AD35	
3.1655	A2011	AlCuSiPb										
3.2315		AlMgSi1									AK9	
3.4345		AlZnMgCu0.5	7050	L86		AZ4GU/9051		811-04				
3.4365	7075	AlZnMgCu1.5	7075	7075		7075		AlZn5.8MgCuCr			B95	

N VDI 3323 23 Material Description Composition / Structure / Heat Treatment HB HRc												
Aluminum-cast, alloyed												
≤ 12% Si, Not Curable												
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
3.2163		G-AlSi9Cu3									VAL8	
3.2382		GD-AlSi10Mg										
3.2383		G-AlSi0Mg(Cu)	A360.2	LM9			4253					
3.2581		G-AlSi12										
3.3561		G-AlMg5										
3.5101		G-MgZn4sE1Zr1	ZE41	MAG5								
3.5103		MgSE3Zn27r1	EZ33	MAG6		G-TR3Z2						
3.5812		G-MgAl8Zn1	AZ81	NMAG1								
3.5912		G-MgAl9Zn1	AZ91	MAG7								
			A356-72	2789		NFA32-201						
A5052			356.1	LM25			4244				AK7	
		G-AlSi12	A413.2	LM6			4261					
ADC12		G-AlSi12(Cu)	A413.1	LM20			4260				AK12	
A6061		GD-AlSi12	A413.0				4247					
A7075		GD-AlSi8Cu3	A380.1	LM24			4250					

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N		VDI 3323 24	Material Description Aluminum-cast, alloyed			Composition / Structure / Heat Treatment ≤ 12% Si, Curable, Hardened					HB 90	HRC
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.1871		G-AlCu4TiMg										
3.1754		G-AlCu5Ni1,5										
3.2371		G-AlSi7Mg	4218B								AK8	
3.2373	C4BS	G-AlSi9MgWA	SC64D			A-S7G	4251				AK9	
3.2381		G-AlSi10Mg									AK12	
3.5106		G-MgAg3SE2Zr1	QE22	mag12								
		G-ALMG5	GD-AISI12	LM5		A-SU12	4252					

N		VDI 3323 26	Material Description Copper and Copper Alloys (Bronze / Brass)			Composition / Structure / Heat Treatment Cutting alloys, PB>1%					HB 110	HRC
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.0375		CuZn36Pb3									LS60-2	
2.1090		G-CuSn75pb	C93200			U-E7Z5pb4						
2.1096		G-CuSn5ZnPB	c83600	LG2								
2.1098		G-CuSn2Znpb	C83600									
2.1182		G-CuPb15Sn	C23000	LB1		U-pb15E8						

N		VDI 3323 27	Material Description Copper and copper alloys (Bronze / Brass)			Composition / Structure / Heat Treatment CuZn, CuSnZn (Brass)					HB 90	HRC
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.0240	C2300	CuZn15									L90	
2.0321		CuZn37	C27200	c2108		CuZn36,CuZn37		C2700			L63	
2.0590		G-CuZn40Fe										
2.0592		G-CuZn35Al1	C86500	U-Z36N3		HTB1						
2.0596		G-CuZn34Al2	C86200	HTB1		U-Z36N3					LTs23AD	
2.1293		CuCrZr	C18200	CC102		U-Cr0-8Zr						

N		VDI 3323 28	Material Description Copper and copper alloys (Bronze / Brass)			Composition / Structure / Heat Treatment CuSn, lead-free copper and electrolytic copper					HB 100	HRC
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.0060		E-Cu57										
2.0966		CuAl10Ni5Fe4	C63000	Ca104		U-A10N					BrAD	
2.0975		G-CuAl10Ni	B-148-52									
2.1050		G-CuSn10	c90700	CT1								
2.1052		G-CuSn12	C90800	pb2		UE12P						
2.1292		G-CuCrF35	C81500	CC1-FF								

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S		VDI 3323 31	Material Description Heat resistant super alloys			Composition / Structure / Heat Treatment Fe Based, Annealed					HB 200	HRc 15
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.4558	NCF 800TB	X2NiCrAlTi3220	N08800	NA15								
1.4562		X1NiCrMoCu32287	N08031									
1.4563		X1NiCrMoCuN31274	N08028			Z1NCU31-27-03	2584				EK77	
1.4864	SUH330	X12NiCrSi36-16	330	NA17		Z12NCS37-18				N08330		
1.4865	SCH15	GX40NiCrSi38-18		330C40				XG50NiCr3919		J94605		
1.4958		X5NiCrAlTi3120										

S		VDI 3323 32	Material Description Heat resistant super alloys			Composition / Structure / Heat Treatment Fe Based, Aged					HB 280	HRc 30
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.4977		X40CoCrNi2020				Z42CNKDWNb						

S		VDI 3323 33	Material Description Heat resistant super alloys			Composition / Structure / Heat Treatment Ni or Co Based, Annealed					HB 250	HRc 25
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.4360		NiCu30Fe		NA13		NU30				N04400		Monel400
2.4603		NiCr 30 FeMo	5390A			NC22FeD						Hastelloy G-30
2.4610		NiMo16Cr16Ti								N26455		HastelloyC-4
2.4630		NiCr20Ti		HR5,203-4		NC20T				N06075		Nimonic75
2.4631	NCF 80A	NiCr20TiAl		HR40		NC20TA				N07080	KHN777TyUR	Nimonic 80A
2.4642	NCF 690	NiCr29Fe				Nnc30Fe				N06690		Inconel 690
2.4856		NiCr22Mo9Nb		NA21		NC22FeDNb				N06625		Inconel 625
2.4858		NiCr21Mo		NA16		NC21FeDU				N08825	KHN38VT	Incoloy 825

S		VDI 3323 34	Material Description Heat resistant super alloys			Composition / Structure / Heat Treatment Ni or Co Based, Aged					HB 350	HRc 38
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.4375		NiCu30Al	4676	NA18		NU30AT				N05500		MonelK500
2.4662		NiFe35Cr14MoTi	5660			Z5NCDT42				N09901		Incoloy 901
2.4668		NiCr19Fe19NbMo	5383	HR8		NC19eNB				N07718		Inconel 718
2.4670		S-NiCr13A16MoNb	5391	Mar-46		NC12AD						Nimocast 713
2.4694		NiCr16Fe7TiAl								N07751		Inconel 751
2.4955		NiFe25Cr20NbTi										
2.4964		CoCr20W15Ni	5772			KC20WN						Haynes 25
		CoCr22W14Ni	AMS 5772			KC22WN						

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S		VDI 3323 35	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Heat resistant super alloys			Ni or Co Based, Cast					320	34
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.4669		NiCr15Fe7TiAl				NC15TNbA				N07750		Inconel X750
2.4685		G-NiMo28								N10665		Hastelloy B
2.4810		G-NiMo30										Hastelloy C
2.4973		NiCr19Co11MoTi	AMS 5399			NC19KDT					VT5-1	
3.7115		TiAl5Sn2								R54520	VT1-00	ATI Grade 6

S		VDI 3323 36	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Titanium alloys			Pure Titanium					400 Rm	
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
2.4674		NiCo15Cr10MoAlTi	AMS 5397							N13100		IN 100
3.7025		Ti1	R50250	2TA1						R50250		ATI 30 CP Gr. 1
3.7225		Ti1pd	R52250	TP1						R52250		

S		VDI 3323 37	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Titanium alloys			Alpha + Beta Alloys, Hardened					1050 Rm	
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
3.7124		TiCu2		2TA21-24								
3.7145		TiAl6Sn2Zr4Mo2Si	R54620							R54620		
3.7165		TiAl6V4	AMS R56400	TA10-13		T-A6V					VT6	
3.7185		TiAl4Mo4Sn2		TA45-51								
3.7195		TiAl3V2.5								R56320		ATI 3-2.5
		TiAl4Mo4Sn4Si0.5										
		TiAl5Sn2.5	AMS R54520	TA14/17		T-A5E						
		Ti6Al4VELI	AMS R56401	TA11								

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H		VDI 3323 38	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Hardened steel			Hardened					550	55
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
1.1231	S 70 C-CSP	Ck 67	1070	060 A 67	C 675	XC 68	1770	C 70	F5103		70	
1.1248	C 75	Ck 75	1078, 1080	060 A 78	C 755	XC 75	1774	C 75	F5107		75	
1.1274	SUP 4	Ck 101	1095	060 A 96	C 100S	XC100	1870	C100	F5117			
1.1545	SK 3	C 105 W1	W1	BW 2	C 105U	Y1 105	1880	C 100 KU	F5118		U10A	
1.2762		75CrMoNiW67	-	-	-	-	-	-				
1.3401	SCMnH1	GX120Mn12	A128(A)			Z120M12	2183	GX120Mn12	F8251		110G13L	
1.4021	SUS 420 J1	X 20 Cr 13	420	420 S 37	X 20 Cr 13	Z 20 C 13	2303	X 20 Cr 13	F5261		20KH13	ATI 420
1.4109	SUS 440 A	X 65 CrMo 14	440 A	-	X 70 CrMo 15	Z 70 D 14	-	-				ATI 440A
1.4112	SUS 440 B	X 90 CrMoV 18	440 B	409 S 19	X 90 CrMoV 18	Z 2 CND 18 05	2327	X CrTi 12				
1.4125	SUS 440 C	X 105 CrMo 17	440 C	-	X 105 CrMo 17	Z 100 CD 17	-	X 105 CrMo 17			95KH18	ATI 440C
1.6746		32NiCrMo14-5	-	832M31	32nCrMo145	35NCD14	-	-				
1.7176	SUP9(A)	55Cr3	5155	527A60	48	55C3	2253	55Cr3				
1.7225	SCM 440 (H)	42CrMo4	4140	708 M 40	42 CrMo 4	42 CD 4	2244	42 CrMo 4	F1252		38HM	

H		VDI 3323 40	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Chilled cast iron			Cast					400	42
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.9620		GX260NiCr42	A532 IB	Grade 2 A	GJN-HV520	FB Ni4 Cr2 BC	0512	-		F45001		Ni-Hard2
0.9625		GX330NiCr42	A532 IA	Grade 2 B	GJN-HV550	FB Ni4 Cr2 HC	0513	-		F45000		Ni-Hard1
0.9630		GX300 CrNiSi 9 5 2	A532 ID	Grade 2 C	GJN-HV600	FB Cr9 Ni5	0457	-		F45003		Ni-Hard 4
0.9640		GX300CrMoNi1521	-	-	-	-	-	-		F45005		
0.9650		GX260Cr27	-	Grade 3 D		-	0466	-				
0.9655		GX300CrNiMo271	-	Grade 3 E		-	-	-			20C 25N20S2	
1.4841	SUH 310	X15CrNiSi25-20	310	314S31	X 15 CrNiSi 25 20	Z15CNS25-20	-	-		S31400		Cronifer 2520

H		VDI 3323 41	Material Description			Composition / Structure / Heat Treatment					HB	HRc
			Hardened cast iron			Hardened					550	55
Mat'l No.	JIS	DIN	AISI/ASTM/SAE	BS	EN	AFNOR	SS	UNI	UNE / IHA	UNS	GOST	Brands
0.9635		GX300 CrMo 15 3	-	-	-	-	-	-				
0.9645		GX260 CrMoNi 20 21	-	-	-	-	-	-		F45007		

X-Drill(SYMX) Offset Value & Hole Tolerance

Metric

ØDC	Offset
14.0	0.55
14.5	0.45
15.0	0.40
15.5	0.30
16.0	0.25
16.5	0.15
17.0	0.70
17.5	0.65
18.0	0.45
18.5	0.40
19.0	0.30
19.5	0.25
20.0	0.15
20.5	0.05
21.0	0.60
21.5	0.55
22.0	0.45
22.5	0.40
23.0	0.30
23.5	0.25
24.0	0.95
24.5	0.85
25.0	0.80
25.5	0.70
26.0	0.65
26.5	0.55
27.0	0.45
27.5	0.40
28.0	0.30
28.5	0.25
29.0	0.80
29.5	0.70
30.0	0.65
30.5	0.55
31.0	0.45
31.5	0.40
32.0	0.30
32.5	0.25
33.0	0.15
33.5	0.05
34.0	1.05
35.0	0.80
36.0	0.65
37.0	0.45
38.0	0.30
39.0	0.80

Metric

ØDC	Offset
40.0	0.65
41.0	0.45
42.0	0.40
43.0	0.25
44.0	0.15
45.0	1.75
46.0	1.50
47.0	1.25
48.0	1.05
49.0	0.70
50.0	0.40

Inch

ØDC	Offset
.563	.48
.594	.40
.625	.24
.656	.08
.689	.64
.703	.56
.719	.48
.734	.40
.750	.32
.781	.16
.813	.08
.843	.56
.875	.48
.906	.32
.937	.96
.969	.88

Inch

ØDC	Offset
.984	.80
1.000	.72
1.031	.64
1.063	.48
1.094	.36
1.125	.24
1.156	.72
1.187	.64
1.219	.48
1.250	.40
1.281	.24
1.312	.08
1.343	1.04
1.375	.80
1.406	.72
1.437	.64
1.469	.48
1.500	.32
1.513	.16
1.531	.80
1.562	.72
1.594	.56
1.625	.48
1.687	.24
1.719	.32
1.750	.08
1.781	1.76
1.813	1.52
1.875	1.36
1.937	.72
1.969	.40
2.000	.24

X-Drill(SYMX) Hole Tolerance

Unit	L/D	ØDC	Hole Tolerance
Metric	2 – 3D	Ø14 – 28	-0.1 – +0.25
		Ø29 – 50	-0.1 – +0.30
	4 – 5D	Ø14 – 28	-0.1 – +0.35
		Ø29 – 50	-0.1 – +0.40
Inch	2 – 3D	Ø0.563 – 1.125"	-0.004 – +0.010"
		Ø1.156 – 2.000"	-0.004 – +0.012"
	4 – 5D	Ø0.563 – 1.125"	-0.004 – +0.014"
		Ø1.156 – 2.000"	-0.004 – +0.016"

ISO	ANSI
CC.. 060201	CC.. 21.50
CC.. 060202	CC.. 21.50.5
CC.. 060204	CC.. 21.51
CC.. 060208	CC.. 21.52
CC.. 09T301	CC.. 32.50
CC.. 09T302	CC.. 32.50.5
CC.. 09T304	CC.. 32.51
CC.. 09T308	CC.. 32.52
CC.. 120402	CC.. 430.5
CC.. 120404	CC.. 431
CC.. 120408	CC.. 432
CC.. 120412	CC.. 433
CN.. 090308	CN.. 322
CN.. 090312	CN.. 323
CN.. 090408	CN.. 332
CN.. 090412	CN.. 333
CN.. 120401	CN.. 430
CN.. 120402	CN.. 430.5
CN.. 120404	CN.. 431
CN.. 120408	CN.. 432
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