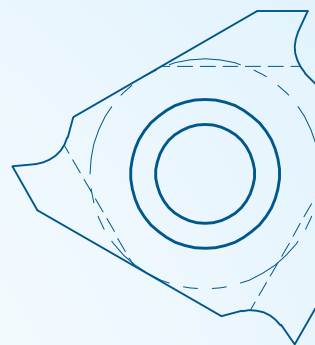
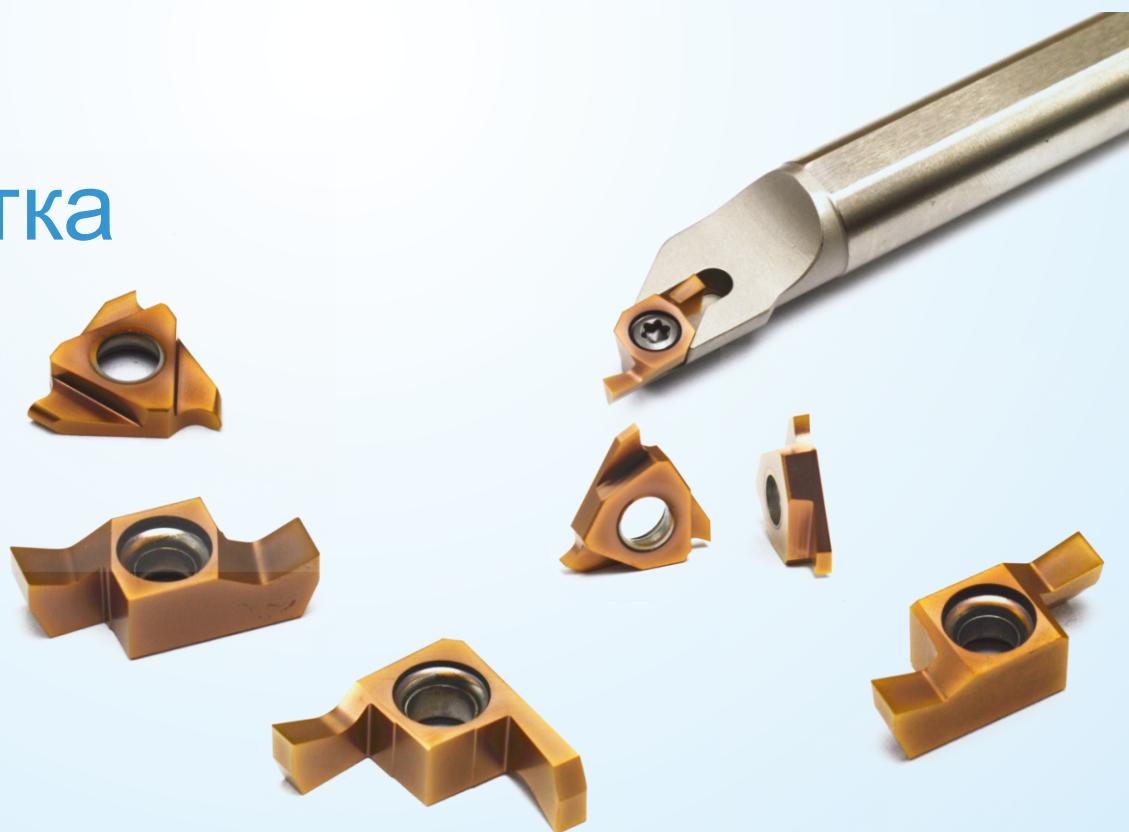
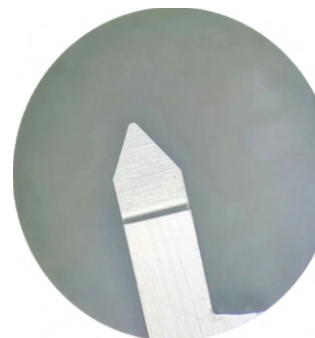
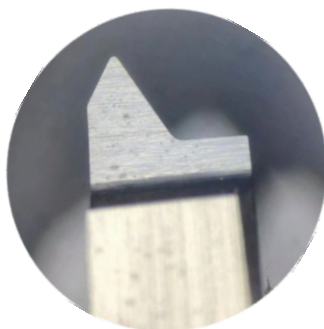
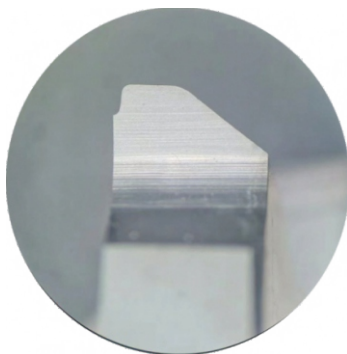
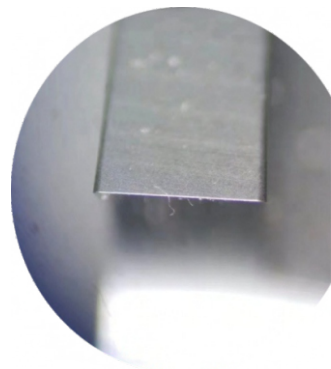
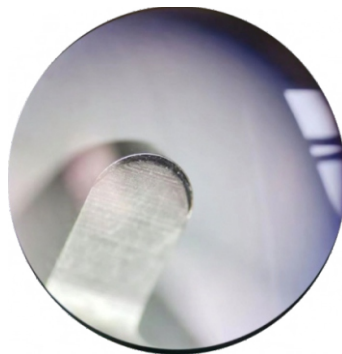
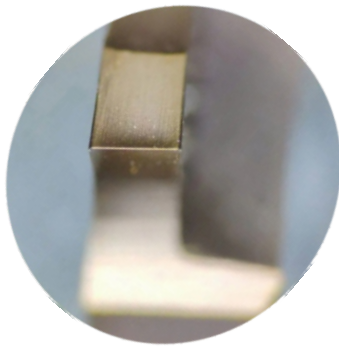
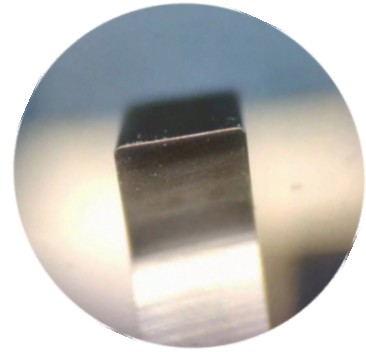
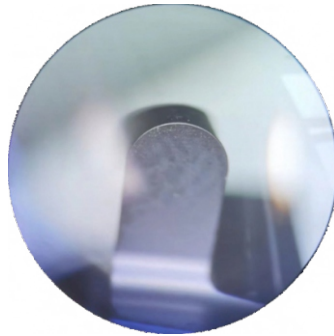
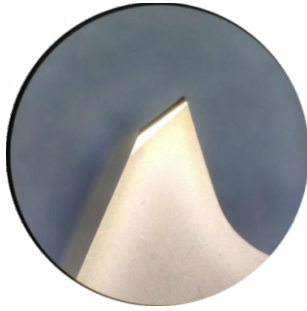




Обработка
канавок
2024



Product details enlarged picture



A

Grooving

B

Threading

C

Turning

D

Drilling

E

Milling

F

Taps

G

Special Tools

H

Technical Info

Ordering code system - carbide grade

W

1

M

2

G

3

0

4

15

5

1 – Brand code

W: WC-Co



2 – Material group

P: Steel

M: Stainless steel

K: Cast iron

N: Non-ferrous metals

S: Heat resistant material

H: Hardened material

G: General material

3 – Application

T – Turning

M – Milling

G – Grooving

D – Drilling

S – Threading

4 – Upgrade code

0 – 0, 1, 2, 3, 4, 5...

5 – Degree of hardness

05 – ISO05

10 – ISO10

15 – ISO15

20 – ISO20

25 – ISO25

30 – ISO30

35 – ISO35

40 – ISO40

Wear-resistant

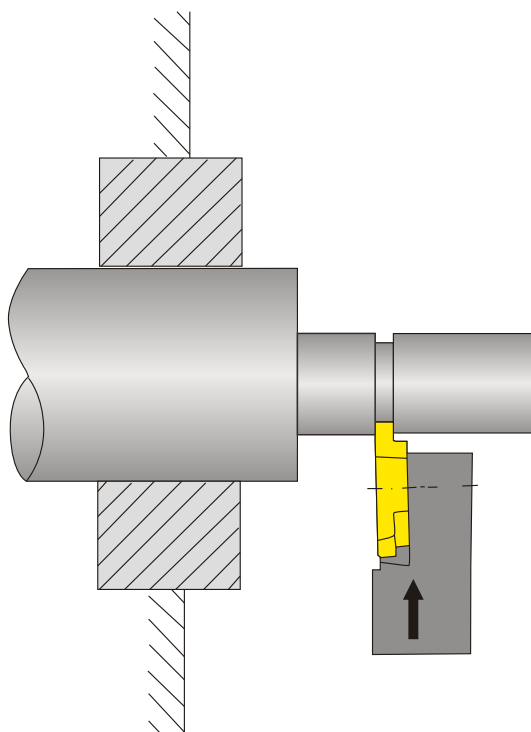


Tough

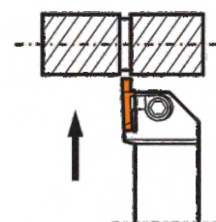
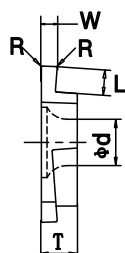
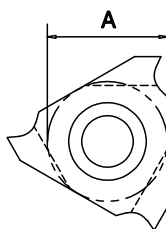
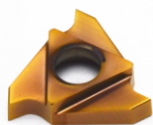
A001



External shallow grooving inserts



TGF32 External shallow grooving inserts



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
TGF32R030-L0.8	TGF32L030-L0.8	9.525	3.18	4.4	0.30	0.8	0.05	★	★	☆
TGF32R040-L0.8	TGF32L040-L0.8				0.40			★	★	☆
TGF32R050-L1.2	TGF32L050-L1.2				0.50	1.2		★	★	★
TGF32R060-L1.4	TGF32L060-L1.4				0.60	1.4		★	★	☆
TGF32R070-L1.4	TGF32L070-L1.4				0.70			★	★	☆
TGF32R075-L2.0	TGF32L075-L2.0				0.75			★	★	☆
TGF32R080-L2.0	TGF32L080-L2.0				0.80			★	★	☆
TGF32R085-L2.0	TGF32L085-L2.0				0.85	2	0.1	★	★	☆
TGF32R090-L2.0	TGF32L090-L2.0				0.90			★	★	☆
TGF32R095-L2.0	TGF32L095-L2.0				0.95			★	★	☆
TGF32R100-L2.2	TGF32L100-L2.2				1.00			★	★	★
TGF32R105-L2.2	TGF32L105-L2.2				1.05			★	★	☆
TGF32R110-L2.2	TGF32L110-L2.2				1.10			★	★	☆
TGF32R115-L2.2	TGF32L115-L2.2				1.15			★	★	☆
TGF32R120-L2.2	TGF32L120-L2.2				1.20	2.2		★	★	☆
TGF32R125-L2.2	TGF32L125-L2.2				1.25			★	★	☆
TGF32R130-L2.2	TGF32L130-L2.2				1.30			★	★	☆
TGF32R135-L2.2	TGF32L135-L2.2				1.35			★	★	☆
TGF32R140-L2.2	TGF32L140-L2.2				1.40			★	★	☆
TGF32R145-L2.2	TGF32L145-L2.2				1.45			★	★	☆
TGF32R150-L2.7	TGF32L150-L2.7				1.50		0.2	★	★	★
TGF32R160-L2.7	TGF32L160-L2.7				1.60			★	★	☆
TGF32R170-L2.7	TGF32L170-L2.7				1.70	2.7		★	★	☆
TGF32R175-L2.7	TGF32L175-L2.7				1.75			★	★	☆
TGF32R180-L2.7	TGF32L180-L2.7				1.80			★	★	☆
TGF32R185-L2.7	TGF32L185-L2.7				1.85			★	★	☆
TGF32R190-L2.7	TGF32L190-L2.7				1.90			★	★	☆
TGF32R200-L3.0	TGF32L200-L3.0				2.00		0.2	★	★	★
TGF32R210-L3.0	TGF32L210-L3.0				2.10			★	★	☆
TGF32R220-L3.0	TGF32L220-L3.0				2.20			★	★	☆
TGF32R225-L3.0	TGF32L225-L3.0				2.25	3		★	★	☆
TGF32R230-L3.0	TGF32L230-L3.0				2.30			★	★	☆
TGF32R240-L3.0	TGF32L240-L3.0				2.40			★	★	☆

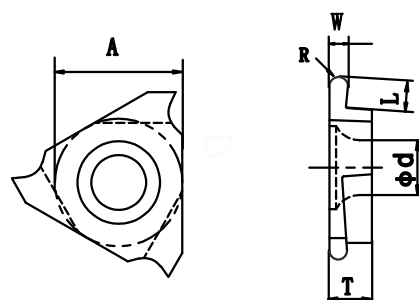
★ Standard stock ☆ Order production

TGF32 External shallow grooving inserts

Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
TGF32R250-L3.4	TGF32L250-L3.4	9.525	3.18	4.4	2.50	3.4	0.2	★	☆	☆
TGF32R260-L3.4	TGF32L260-L3.4				2.60			★	☆	☆
TGF32R265-L3.4	TGF32L265-L3.4				2.65			★	☆	☆
TGF32R270-L3.4	TGF32L270-L3.4				2.70			★	☆	☆
TGF32R275-L3.4	TGF32L275-L3.4				2.75			★	☆	☆
TGF32R280-L3.4	TGF32L280-L3.4				2.80			★	☆	☆
TGF32R285-L3.4	TGF32L285-L3.4				2.85			☆	☆	☆
TGF32R290-L3.4	TGF32L290-L3.4				2.90			☆	☆	☆
TGF32R295-L3.4	TGF32L295-L3.4				2.95			☆	☆	☆
TGF32R300-L3.4	TGF32L300-L3.4				3.00			★	☆	★
* TGF32R310-L3.4	* TGF32L310-L3.4				3.10			★	☆	☆
* TGF32R315-L3.4	* TGF32L315-L3.4				3.15			☆	☆	☆
* TGF32R320-L3.4	* TGF32L320-L3.4				3.20			☆	☆	☆

★ Standard stock ☆ Order production

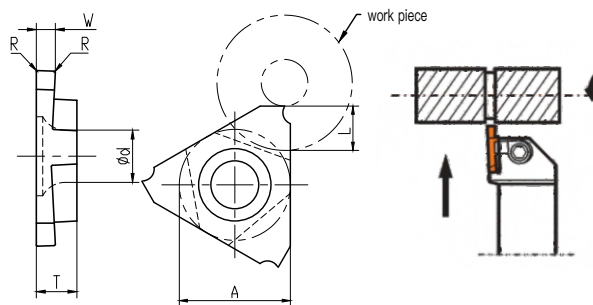
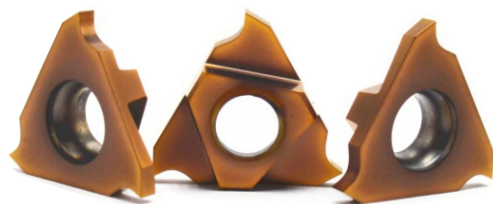
TGF32 Shallow grooving inserts(Round)



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
TGF32R040-R020-L0.8	TGF32L040-R020-L0.8	9.525	3.18	4.4	0.40	0.80	0.20	★	☆	☆
TGF32R050-R025-L1.2	TGF32L050-R025-L1.2				0.50	1.20	0.25	★	☆	☆
TGF32R060-R030-L1.4	TGF32L060-R030-L1.4				0.60	1.40	0.30	★	☆	☆
TGF32R080-R040-L2.0	TGF32L080-R040-L2.0				0.80	2.00	0.40	★	☆	☆
TGF32R100-R050-L2.2	TGF32L100-R050-L2.2				1.00	2.20	0.50	★	☆	☆
TGF32R120-R060-L2.2	TGF32L120-R060-L2.2				1.20		0.60	★	☆	☆
TGF32R150-R075-L2.7	TGF32L150-R075-L2.7				1.50	2.70	0.75	★	☆	☆
TGF32R200-R100-L3.0	TGF32L200-R100-L3.0				2.00	3.00	1.00	★	☆	☆
TGF32R250-R125-L3.4	TGF32L250-R125-L3.4				2.50	3.40	1.25	★	☆	☆
TGF32R300-R150-L3.4	TGF32L300-R150-L3.4				3.00		1.50	★	☆	☆

★ Standard stock ☆ Order production

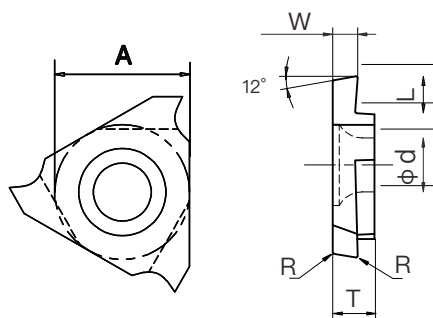
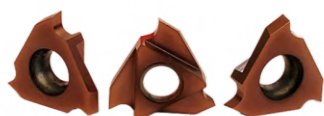
TGF32 External grooving inserts (Deep grooving)



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
TGF32R050-S-L1.8	TGF32L050-S-L1.8	9.525	3.18	4.4	0.50	1.80	0.05	★	☆	☆
TGF32R070-S-L2.0	TGF32L070-S-L2.0				0.70	2.00		★	☆	☆
TGF32R100-S-L3.0	TGF32L100-S-L3.0				1.00	3.00	0.10	★	☆	☆
TGF32R120-S-L3.2	TGF32L120-S-L3.2				1.20	3.20		★	☆	☆
TGF32R150-S-L3.5	TGF32L150-S-L3.5				1.50	3.50		★	☆	☆
TGF32R200-S-L4.0	TGF32L200-S-L4.0				2.00	4.00		★	☆	☆
TGF32R250-S-L4.0	TGF32L250-S-L4.0				2.50		0.20	★	☆	☆

★ Standard stock ☆ Order production

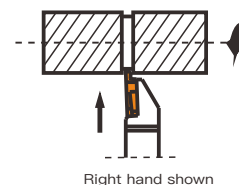
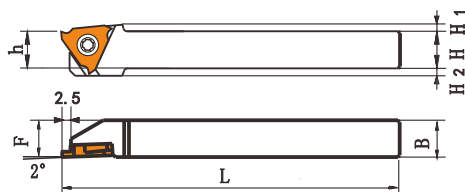
TGF32 24° External hydraulic pipe skewed slot grooving inserts



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
TGF32R150-S24R-L2.7	TGF32L150-S24R-L2.7	9.525	3.18	4.4	1.50	2.70	0.10	☆	☆	☆
TGF32R180-S24R-L2.7	TGF32L180-S24R-L2.7				1.80			☆	☆	☆
TGF32R190-S24R-L2.7	TGF32L190-S24R-L2.7				1.90			☆	☆	☆
TGF32R195-S24R-L2.7	TGF32L195-S24R-L2.7				1.95			☆	☆	☆
TGF32R200-S24R-L3.0	TGF32L200-S24R-L3.0				2.00	3.00		☆	☆	☆
TGF32R205-S24R-L3.0	TGF32L205-S24R-L3.0				2.05			☆	☆	☆
TGF32R210-S24R-L3.0	TGF32L210-S24R-L3.0				2.10			☆	☆	☆
TGF32R220-S24R-L3.0	TGF32L220-S24R-L3.0				2.20			☆	☆	☆
TGF32R230-S24R-L3.0	TGF32L230-S24R-L3.0				2.30			☆	☆	☆
TGF32R250-S24R-L3.0	TGF32L250-S24R-L3.0				2.50			☆	☆	☆
TGF32R260-S24R-L3.0	TGF32L260-S24R-L3.0				2.60			☆	☆	☆
TGF32R270-S24R-L3.0	TGF32L270-S24R-L3.0				2.70			☆	☆	☆
TGF32R280-S24R-L3.0	TGF32L280-S24R-L3.0				2.80			☆	☆	☆
TGF32R290-S24R-L3.0	TGF32L290-S24R-L3.0				2.90			☆	☆	☆
TGF32R300-S24R-L3.0	TGF32L300-S24R-L3.0				3.00			☆	☆	☆
TGF32R310-S24R-L3.0	TGF32L310-S24R-L3.0				3.10			☆	☆	☆
TGF32R320-S24R-L3.0	TGF32L320-S24R-L3.0				3.20			☆	☆	☆

★ Standard stock ☆ Order production

KTGF-F Grooving tool holder

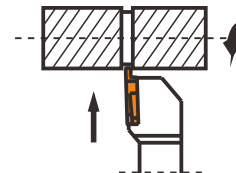
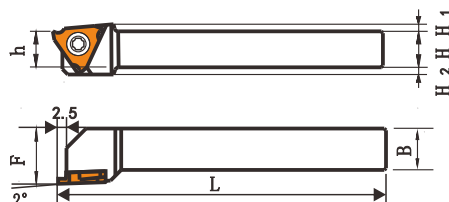


Right hand shown

Right hand	Left hand	H	H1	H2	h	B	F	L	Inserts	Screw	Wrench
KTGFR1010H-16F	KTGFL1010H-16F	10	2.5	4	10	10	10	100	TGF32R***	M4*8	T15
KTGFR1212H-16F	KTGFL1212H-16F	12		2	12	12	12		TGF32L***		
KTGFR1616H-16F	KTGFL1616H-16F	16			16	16	16				

Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

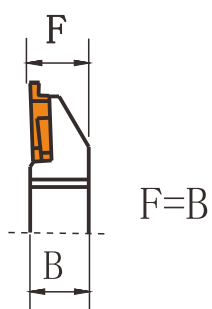


Right hand shown

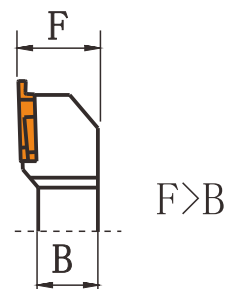
Right hand	Left hand	H	H1	H2	h	B	F	L	Inserts	Screw	Wrench
KTGFR1010H-16	KTGFL1010H-16	10	2.5	4	10	10	12	100	TGF32R***	M4*8	T15
KTGFR1212H-16	KTGFL1212H-16	12		2	12	12	16		TGF32L***		
KTGFR1616H-16	KTGFL1616H-16	16			16	16	20				
KTGFR2020K-16	KTGFL2020K-16	20			20	20	25	125			
KTGFR2525M-16	KTGFL2525M-16	25			25	25	32	150			

Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

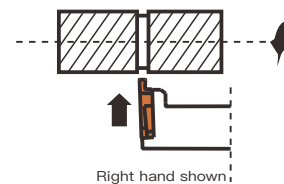
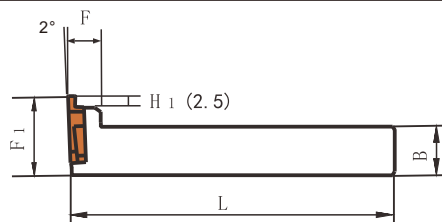


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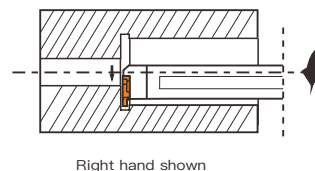
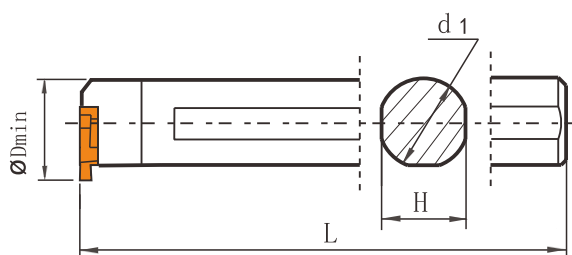


F>B

TGF Grooving tool holder



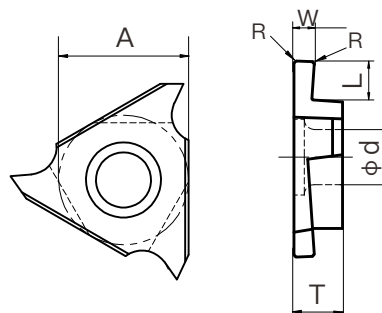
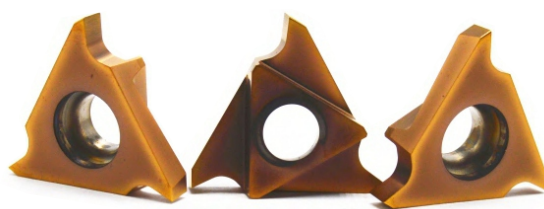
Right hand	Left hand	H	H1	B	F	F1	L	Inserts	Screw	Wrench
B-KTGFR1212H16	B-KTGFL1212H16	12	2.5	12	16	20	100	TGF32R***	M4*8	T15
B-KTGFR1616H16	B-KTGFL1616H16	16		16	20	24		TGF32L***		
B-KTGFR2020K16	B-KTGFL2020K16	20		20	25	30	125			
B-KTGFR2525M16	B-KTGFL2525M16	25		25	32	35	150			



Right hand	Left hand	H	d1	L	Dmin	Inserts	Screw	Wrench
S16N-KTGFR16	S16N-KTGFL16	15	16	160	20	TGF32R***	M4*8	T15
S20Q-KTGFR16	S20Q-KTGFL16	19	20	180	24	TGF32L***		
S25R-KTGFR16	S25R-KTGFL16	23	25	200	29			
S32S-KTGFR16	S32S-KTGFL16	30	32	250	36			

Right-hand Insert for Left-hand Toolholder
Left-hand Insert for Right-hand Toolholder

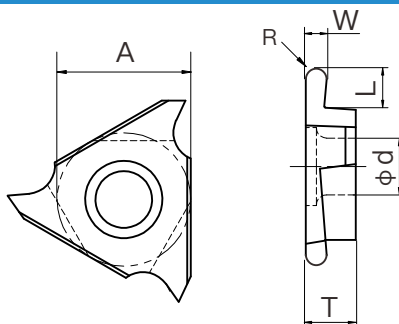
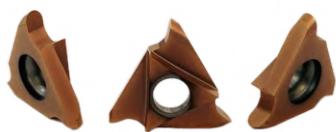
GBA43 External shallow grooving inserts



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
GBA43R100-L2.2	GBA43L100-L2.2	12.7	4.76	5.4	1.00	2.2	0.1	★	☆	☆
GBA43R120-L2.2	GBA43L120-L2.2				1.20			★	☆	☆
GBA43R125-L2.2	GBA43L125-L2.2				1.25			★	☆	☆
GBA43R140-L3.5	GBA43L140-L3.5				1.40			★	☆	☆
GBA43R145-L3.5	GBA43L145-L3.5				1.45			★	☆	☆
GBA43R150-L3.5	GBA43L150-L3.5				1.50			★	☆	☆
GBA43R170-L3.5	GBA43L170-L3.5				1.70	3.5	0.2	★	☆	☆
GBA43R175-L3.5	GBA43L175-L3.5				1.75			★	☆	☆
GBA43R185-L3.5	GBA43L185-L3.5				1.85			★	☆	☆
GBA43R200-L3.5	GBA43L200-L3.5				2.00			★	☆	☆
GBA43R225-L3.5	GBA43L225-L3.5				2.25			★	☆	☆
GBA43R230-L3.5	GBA43L230-L3.5				2.30			★	☆	☆
GBA43R250-L5.0	GBA43L250-L5.0				2.50	5.0	0.3	★	☆	☆
GBA43R265-L5.0	GBA43L265-L5.0				2.65			★	☆	☆
GBA43R280-L5.0	GBA43L280-L5.0				2.80			★	☆	☆
GBA43R300-L5.0	GBA43L300-L5.0				3.00			★	☆	☆
GBA43R330-L5.0	GBA43L330-L5.0				3.30			★	☆	☆
GBA43R350-L5.0	GBA43L350-L5.0				3.50			★	☆	☆
GBA43R360-L5.0	GBA43L360-L5.0				3.60			★	☆	☆
GBA43R400-L5.0	GBA43L400-L5.0				4.00			★	☆	☆
GBA43R420-L5.0	GBA43L420-L5.0				4.20			★	☆	☆
GBA43R450-L5.0	GBA43L450-L5.0				4.50			★	☆	☆
GBA43R480-L5.0	GBA43L480-L5.0				4.80			★	☆	☆

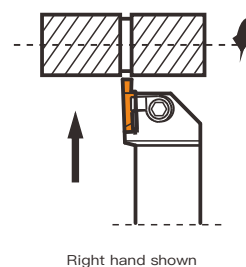
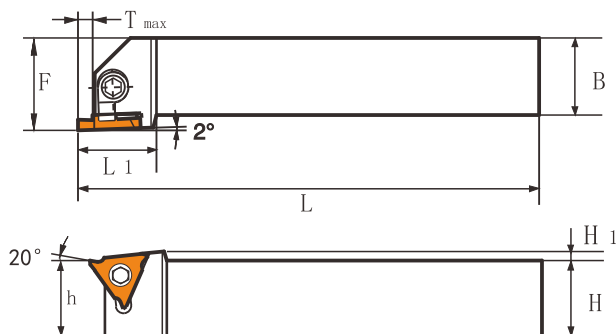
★ Standard stock ☆ Order production

GBA43 External shallow grooving inserts(Round)



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010
GBA43R100-R050-L2.2	GBA43L100-R050-L2.2	12.7	4.76	5.4	1.00	2.2	0.50	★	☆	☆
GBA43R120-R060-L2.2	GBA43L120-R060-L2.2				1.20		0.60	★	☆	☆
GBA43R150-R075-L3.5	GBA43L150-R075-L3.5				1.50	3.5	0.75	★	☆	☆
GBA43R200-R100-L3.5	GBA43L200-R100-L3.5				2.00		1.00	★	☆	☆
GBA43R250-R125-L5.0	GBA43L250-R125-L5.0				2.50	5.0	1.25	★	☆	☆
GBA43R300-R150-L5.0	GBA43L300-R150-L5.0				3.00		1.50	★	☆	☆
GBA43R350-R175-L5.0	GBA43L350-R175-L5.0				3.50		1.75	★	☆	☆
GBA43R400-R200-L5.0	GBA43L400-R200-L5.0				4.00		2.00	★	☆	☆

★ Standard stock ☆ Order production

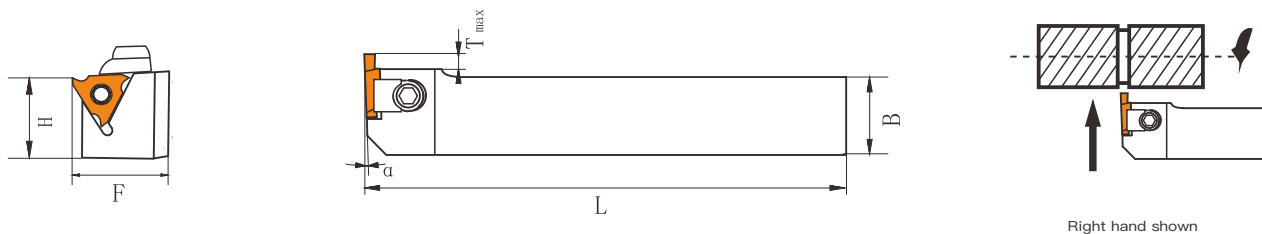


Right hand	Left hand	H	B	h	H1	L	L1	F	Tmax	Screw	Wrench	Clamp	Lock Screw
KGBAR2020K22	KGBAL2020K22	20	20	20		125		25					
KGBAR2525M22	KGBAL2525M22	25	25	25	4	150	25	32	5.2	M5*11	T20	HI1814	MI0625
KGBAR3232P22	KGBAL3232P22	32	32	32		170		40					

Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

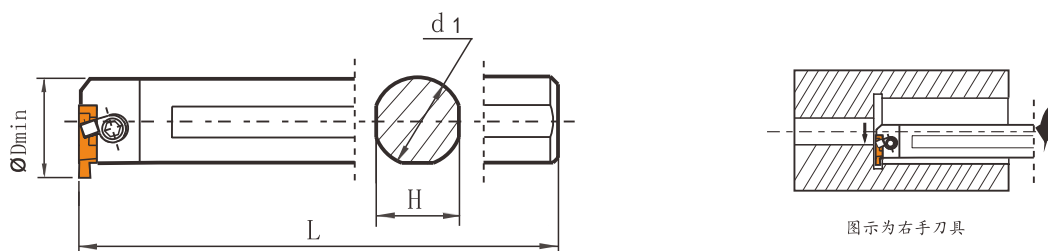
KGBA Grooving tool holder



Right hand	Left hand	H	B	F	L	a	T _{max}	Screw	Wrench	Clamp	Lock Screw
KGBASR2020K22	KGBASL2020K22	20	20	25	125	2°	5.2	M5*11	T20	H11814	MI0625
KGBASR2525M22	KGBASL2525M22	25	25	32	150						
KGBASR3232P22	KGBASL3232P22	32	32	40	170						

Right-hand Insert for Left-hand Toolholder

Left-hand Insert for Right-hand Toolholder



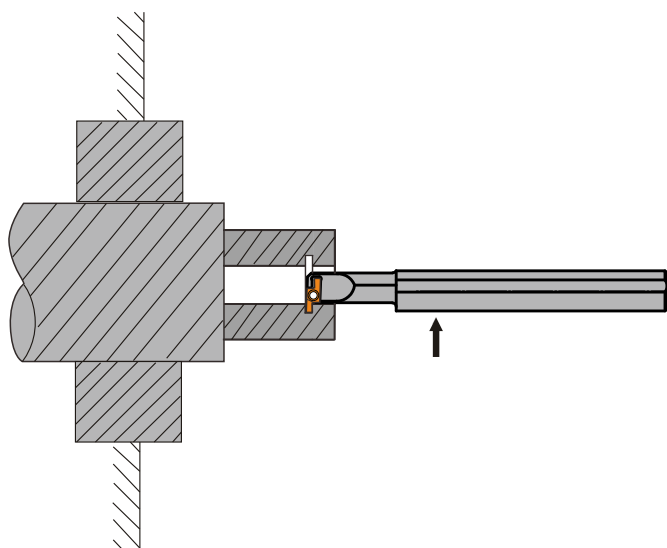
图示为右手刀具

Right hand	Left hand	H	d1	L	Dmin	Inserts	Screw	Wrench
S20Q-KGBAR43-29	S20Q-KGBAL43-29	18	20	180	29	GBA43R*** GBA43L***	M5*11	T20
S25R-KGBAR43-32	S25R-KGBAL43-32	23	25	200	36			
S32S-KGBAR43-39	S32S-KGBAL43-39	30	32	250	39			

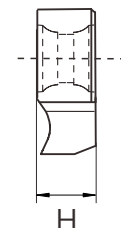
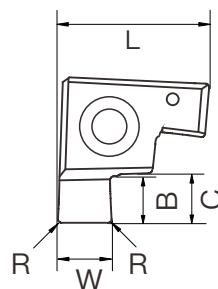
Right-hand Insert for Left-hand Toolholder

Left-hand Insert for Right-hand Toolholder

Internal grooving inserts



DN-L08 Internal grooving inserts

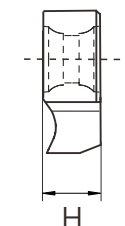
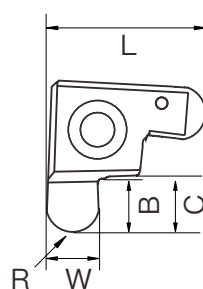


Right hand shown

Right hand	Left hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNR050-L08-B0.8	DNL050-L08-B0.8	6.69	2.58	1.7	0.50	0.8	0.05	★	☆	☆
DNR060-L08-B1.0	DNL060-L08-B1.0				0.60	1.0		★	☆	☆
DNR070-L08-B1.0	DNL070-L08-B1.0				0.70			★	☆	☆
DNR075-L08-B1.0	DNL075-L08-B1.0				0.75			★	☆	☆
DNR080-L08-B1.5	DNL080-L08-B1.5				0.80	1.5		★	☆	☆
DNR090-L08-B1.5	DNL090-L08-B1.5				0.90			★	☆	☆
DNR100-L08-B1.5	DNL100-L08-B1.5				1.00		0.10	★	☆	★
DNR110-L08-B1.5	DNL110-L08-B1.5				1.10			★	☆	☆
DNR120-L08-B1.5	DNL120-L08-B1.5				1.20			★	☆	☆
DNR125-L08-B1.5	DNL125-L08-B1.5				1.25			★	☆	☆
DNR130-L08-B1.5	DNL130-L08-B1.5				1.30			★	☆	☆
DNR140-L08-B1.5	DNL140-L08-B1.5				1.40			★	☆	☆
DNR150-L08-B1.5	DNL150-L08-B1.5				1.50			★	☆	★
DNR160-L08-B1.5	DNL160-L08-B1.5				1.60			★	☆	☆
DNR170-L08-B1.5	DNL170-L08-B1.5				1.70			★	☆	☆
DNR175-L08-B1.5	DNL175-L08-B1.5				1.75			★	☆	☆
DNR180-L08-B1.5	DNL180-L08-B1.5				1.80			★	☆	☆
DNR190-L08-B1.5	DNL190-L08-B1.5				1.90			★	☆	☆
DNR200-L08-B1.5	DNL200-L08-B1.5				2.00	★		☆	★	

★ Standard stock ☆ Order production

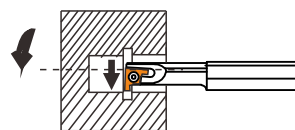
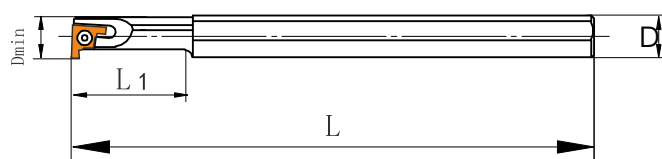
DN-L08 Internal grooving inserts(Round)



Right hand shown

Right hand	Left hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNL050-025L08R-B0.8	DNR050-025L08R-B0.8	6.69	2.58	1.7	0.50	0.8	0.25	★	☆	☆
DNL080-040L08R-B1.5	DNR080-040L08R-B1.5				0.80	1.5	0.40	★	☆	☆
DNL100-050L08R-B1.5	DNR100-050L08R-B1.5				1.00		0.50	★	☆	★
DNL120-060L08R-B1.5	DNR120-060L08R-B1.5				1.20		0.60	★	☆	★
DNL150-075L08R-B1.5	DNR150-075L08R-B1.5				1.50		0.75	★	☆	★
DNL200-100L08R-B1.5	DNR200-100L08R-B1.5				2.00		1.00	★	☆	★

★ Standard stock ☆ Order production

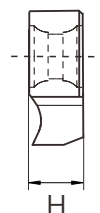
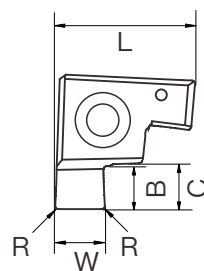


Right hand shown

Right hand	Left hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR0808-L08T	SDNL0808-L08T	8	22	100	8	DNR***L08 DNL***L08	M2.2*5	T6

Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

DN-L10 Internal grooving inserts

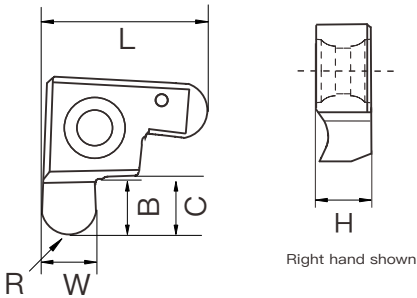


Right hand shown

Right hand	Left hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNR080-L10-B1.8	DNL080-L10-B1.8	8.46	3.18	2.5	0.80	1.8	0.05	★	☆	☆
DNR100-L10-B2.2	DNL100-L10-B2.2				1.00	2.2	0.10	★	☆	☆
DNR110-L10-B2.2	DNL110-L10-B2.2				1.10			★	☆	★
DNR120-L10-B2.2	DNL120-L10-B2.2				1.20			★	☆	★
DNR125-L10-B2.2	DNL125-L10-B2.2				1.25			★	☆	☆
DNR130-L10-B2.2	DNL130-L10-B2.2				1.30			★	☆	★
DNR140-L10-B2.2	DNL140-L10-B2.2				1.40			★	☆	★
DNR145-L10-B2.2	DNL145-L10-B2.2				1.45			☆	☆	☆
DNR150-L10-B2.2	DNL150-L10-B2.2				1.50			★	☆	★
DNR160-L10-B2.2	DNL160-L10-B2.2				1.60			★	☆	☆
DNR170-L10-B2.2	DNL170-L10-B2.2				1.70			★	☆	☆
DNR175-L10-B2.2	DNL175-L10-B2.2				1.75			★	☆	☆
DNR180-L10-B2.2	DNL180-L10-B2.2				1.80			★	☆	☆
DNR185-L10-B2.2	DNL185-L10-B2.2				1.85			★	☆	☆
DNR190-L10-B2.2	DNL190-L10-B2.2				1.90			★	☆	☆
DNR195-L10-B2.2	DNL195-L10-B2.2				1.95			★	☆	☆
DNR200-L10-B2.2	DNL200-L10-B2.2				2.00			★	☆	★
DNR215-L10-B2.2	DNL215-L10-B2.2				2.15	0.20	0.20	☆	☆	☆
DNR225-L10-B2.2	DNL225-L10-B2.2				2.25			☆	☆	☆
DNR230-L10-B2.2	DNL230-L10-B2.2				2.30			★	☆	☆
DNR240-L10-B2.2	DNL240-L10-B2.2				2.40			☆	☆	☆
DNR250-L10-B2.2	DNL250-L10-B2.2				2.50			★	☆	★
DNR260-L10-B2.2	DNL260-L10-B2.2				2.60			★	☆	☆
DNR265-L10-B2.2	DNL265-L10-B2.2				2.65			☆	☆	☆
DNR270-L10-B2.2	DNL270-L10-B2.2				2.70			★	☆	☆
DNR275-L10-B2.2	DNL275-L10-B2.2				2.75			★	☆	☆
DNR300-L10-B2.2	DNL300-L10-B2.2				3.00			★	☆	★

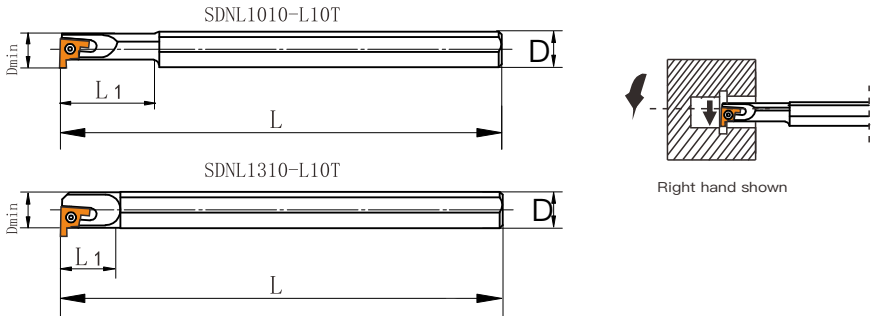
★ Standard stock ☆ Order production

DN-L10 Internal grooving inserts(Round)



Right hand	Left hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNR100-050L10R-B2.2	DNL100-050L10R-B2.2	8.46	3.18	2.5	1.00	2.2	0.50	★	☆	★
DNR120-060L10R-B2.2	DNL120-060L10R-B2.2				1.20		0.60	★	☆	★
DNR150-075L10R-B2.2	DNL150-075L10R-B2.2				1.50		0.75	★	☆	★
DNR160-080L10R-B2.2	DNL160-080L10R-B2.2				1.60		0.80	★	☆	★
DNR200-100L10R-B2.2	DNL200100L10R-B2.2				2.00		1.00	★	☆	☆
DNR250-125L10R-B2.2	DNL250-125L10R-B2.2				2.50		1.25	★	☆	★
DNR300-150L10R-B2.2	DNL300-150L10R-B2.2				3.00		1.50	★	☆	★

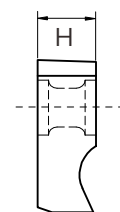
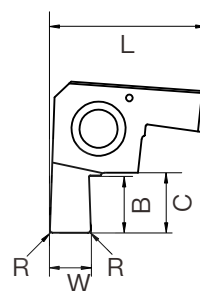
★ Standard stock ☆ Order production



Right hand	Left hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR1010-L10T	SDNL1010-L10T	10	25	125	10.0	DNR***L10	M2.5*6	T7
SDNR1310-L10T	SDNL1310-L10T	10	22	125	12.5	DNL***L10		

Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

DN-L14 Internal grooving inserts

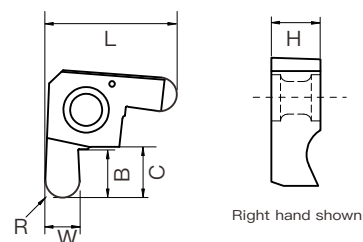
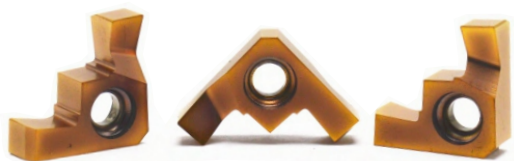


Right hand shown

Right hand	L	H	C	W	B	R	WMG015	WPG020	WNG010	
DNR100-L14-B3.0	11	3.97	4.5	1.00	3.0	0.10	★	☆	★	
DNR110-L14-B3.0				1.10			★	☆	☆	
DNR120-L14-B3.0				1.20			★	☆	☆	
DNR125-L14-B3.0				1.25			★	☆	☆	
DNR130-L14-B3.0				1.30			★	☆	☆	
DNR140-L14-B3.0				1.40			★	☆	☆	
DNR150-L14-B3.5				1.50	3.5		0.20	★	☆	★
DNR160-L14-B3.5				1.60				★	☆	☆
DNR170-L14-B3.5				1.70				★	☆	☆
DNR175-L14-B3.5				1.75				★	☆	☆
DNR180-L14-B3.5				1.80				★	☆	☆
DNR190-L14-B3.5				1.90				★	☆	☆
DNR200-L14-B4.0				2.00	4.0	★		☆	★	
DNR225-L14-B4.0				2.25		★		☆	☆	
DNR230-L14-B4.0				2.30		★		☆	☆	
DNR250-L14-B4.0				2.50		★		☆	★	
DNR265-L14-B4.0				2.65		★		☆	☆	
DNR270-L14-B4.0				2.70		★		☆	☆	
DNR275-L14-B4.0				2.75		★	☆	☆		
DNR280-L14-B4.0				2.80		★	☆	☆		
DNR300-L14-B4.0				3.00		★	☆	★		
DNR350-L14-B4.0				3.50		★	☆	☆		

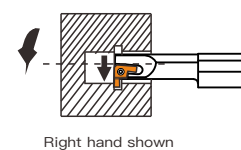
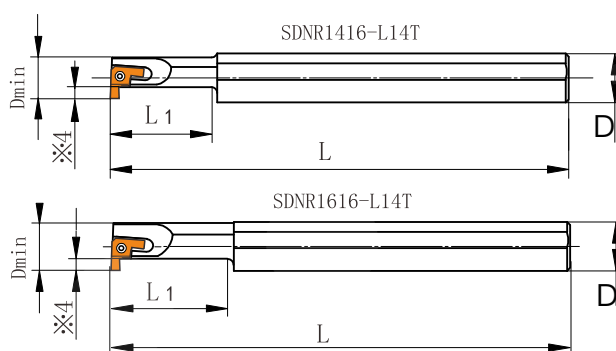
★ Standard stock ☆ Order production

DN-L14 Internal grooving inserts(Round)



Right hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNR100-050L14R-B3.0	11	3.97	4.5	1.00	3.0	0.50	★	☆	☆
DNR120-060L14R-B3.0				1.20		0.60	★	☆	☆
DNR150-075L14R-B3.5				1.50	3.5	0.75	★	☆	☆
DNR200-100L14R-B4.0				2.00	4.0	1.00	★	☆	☆
DNR250-125L14R-B4.0				2.50		1.25	★	☆	☆
DNR300-150L14R-B4.0				3.00		1.50	★	☆	☆
DNR350-175L14R-B4.0				3.50		1.75	★	☆	☆

★ Standard stock ☆ Order production

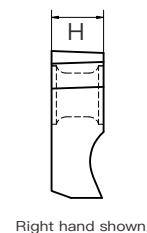
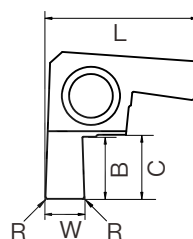


Right hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR1416-L14T	16	35	150	14.0	DNR***-L14	M2.5*6	T7
SDNR1616-L14T	16	40	150	16.0			
*SDNR1416-L14T-2.0	16	35	150	14.0			
*SDNR1616-L14T-2.0	16	40	150	16.0			

Without * suitable for inserts width ≤ 2.0

With * suitable for inserts width > 2.0

DN-L18 Internal grooving inserts

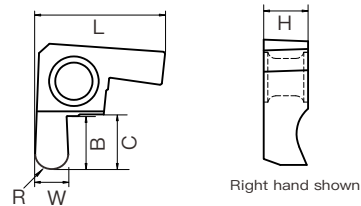


Right hand shown

Right hand	L	H	C	W	B	R	WMG015	WPG020	WNG010	
DNR100–L18–B3.0	15	5.35	6.6	1.00	3.0	0.10	☆	☆	☆	
DNR110–L18–B3.0				1.10			☆	☆	☆	
DNR120–L18–B3.0				1.20			☆	☆	☆	
DNR125–L18–B3.0				1.25			☆	☆	☆	
DNR130–L18–B3.0				1.30			☆	☆	☆	
DNR140–L18–B3.0				1.40			☆	☆	☆	
DNR150–L18–B4.0				1.50	4.0		0.10	☆	☆	☆
DNR160–L18–B4.0				1.60				☆	☆	☆
DNR170–L18–B4.0				1.70				☆	☆	☆
DNR175–L18–B4.0				1.75				☆	☆	☆
DNR180–L18–B4.0				1.80				☆	☆	☆
DNR190–L18–B4.0				1.90				☆	☆	☆
DNR200–L18–B4.0				2.00	4.5	0.20		★	☆	☆
DNR215–L18–B4.5				2.15				☆	☆	☆
DNR225–L18–B4.5				2.25				☆	☆	☆
DNR230–L18–B4.5				2.30				★	☆	☆
DNR240–L18–B4.5				2.40				☆	☆	
DNR250–L18–B5.0				2.50	5.0			★	☆	☆
DNR265–L18–B5.0				2.65			☆	☆	☆	
DNR270–L18–B5.0				2.70			☆	☆	☆	
DNR280–L18–B5.0				2.80			☆	☆	☆	
DNR300–L18–B6.0				3.00	6.0		0.20	★	☆	☆
DNR320–L18–B6.0				3.20				☆	☆	☆
DNR330–L18–B6.0				3.30				☆	☆	☆
DNR350–L18–B6.0				3.50				★	☆	☆
DNR360–L18–B6.0				3.60				☆	☆	☆
DNR380–L18–B6.0				3.80				☆	☆	☆
DNR400–L18–B6.0				4.00				★	☆	☆

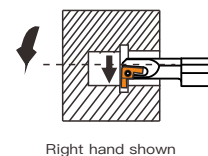
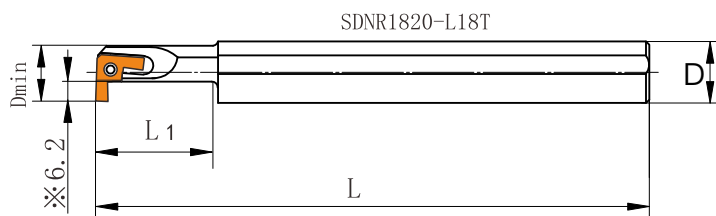
★ Standard stock ☆ Order production

DN-L18 Internal grooving inserts(Round)



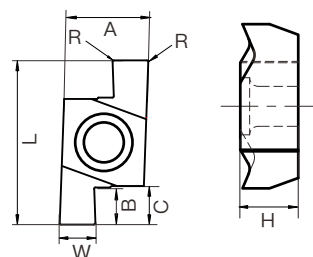
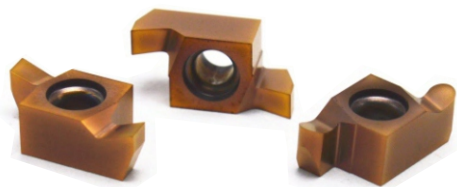
Right hand	L	H	C	W	B	R	WMG015	WPG020	WNG010
DNR100-050L18R-B3.0	15	5.35	6.6	1.00	3.0	0.50	☆	☆	☆
DNR120-060L18R-B3.0				1.20		0.60	☆	☆	☆
DNR150-075L18R-B4.0				1.50	4.0	0.75	☆	☆	☆
DNR160-080L18R-B4.0				1.60		0.80	☆	☆	☆
DNR200-100L18R-B4.5				2.00	4.5	1.00	☆	☆	☆
DNR250-125L18R-B5.0				2.50	5.0	1.25	☆	☆	☆
DNR300-150L18R-B6.0				3.00	6.0	1.50	☆	☆	☆
DNR350-175L18R-B6.0				3.50		1.75	☆	☆	☆
DNR400-200L18R-B6.0				4.00		2.00	☆	☆	☆

★ Standard stock ☆ Order production



Right hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR1820-L18T	20	35	180	18.0	Right-hand Insert for Right-hand Toolholder	M4*10	T15

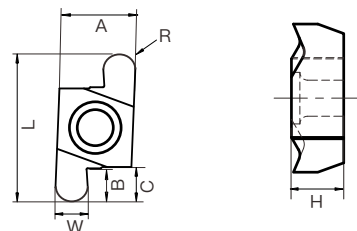
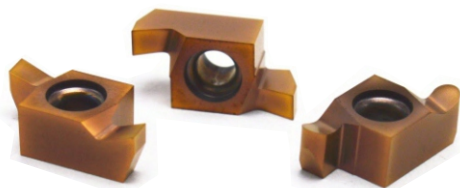
DN-Z14 Internal grooving inserts



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010	
DNR050–Z14 –B1.0	DNL050–Z14 –B1.0	11.48	4.05	2.70	5.80	0.50	1.0	0.05	★	☆	☆	
DNR060–Z14 –B1.0	DNL060–Z14 –B1.0					0.60			☆	☆	☆	
DNR070–Z14 –B1.5	DNL070–Z14 –B1.5					0.70	1.5		☆	☆	☆	
DNR075–Z14 –B1.5	DNL075–Z14 –B1.5					0.75			☆	☆	☆	
DNR080–Z14 –B2.2	DNL080–Z14 –B2.2					0.80	2.2		★	☆	☆	
DNR090–Z14 –B2.5	DNL090–Z14 –B2.5					0.90			☆	☆	☆	
DNR100–Z14 –B2.5	DNL100 –Z14 –B2.5					1.00	0.10	★	☆	★		
DNR110 –Z14 –B2.5	DNL110 –Z14 –B2.5					1.10		★	☆	☆		
DNR120–Z14 –B2.5	DNL120 –Z14 –B2.5					1.20		★	☆	☆		
DNR125–Z14 –B2.5	DNL125 –Z14 –B2.5					1.25		★	☆	☆		
DNR130–Z14 –B2.5	DNL130 –Z14 –B2.5					1.30		★	☆	☆		
DNR140–Z14 –B2.5	DNL140 –Z14 –B2.5					1.40		★	☆	☆		
DNR150–Z14 –B2.5	DNL150 –Z14 –B2.5					1.50		★	☆	★		
DNR160–Z14 –B2.5	DNL160 –Z14 –B2.5					1.60		★	☆	☆		
DNR170–Z14 –B2.5	DNL170 –Z14 –B2.5					1.70		★	☆	☆		
DNR175–Z14 –B2.5	DNL175 –Z14 –B2.5					1.75		★	☆	☆		
DNR180–Z14 –B2.5	DNL180 –Z14 –B2.5					1.80		2.5	☆	☆	☆	
DNR190–Z14 –B2.5	DNL190 –Z14 –B2.5					1.90			☆	☆	☆	
DNR200–Z14 –B2.5	DNL200–Z14 –B2.5					2.00			★	☆	★	
DNR225–Z14 –B2.5	DNL225–Z14 –B2.5					2.25			0.20	☆	☆	☆
DNR230–Z14 –B2.5	DNL230–Z14 –B2.5					2.30				★	☆	☆
DNR250–Z14 –B2.5	DNL250–Z14 –B2.5					2.50				★	☆	★
DNR265–Z14 –B2.5	DNL265–Z14 –B2.5					2.65				★	☆	☆
DNR270–Z14 –B2.5	DNL270–Z14 –B2.5					2.70				☆	☆	☆
DNR275–Z14 –B2.5	DNL275–Z14 –B2.5					2.75				☆	☆	☆
DNR280–Z14 –B2.5	DNL280–Z14 –B2.5					2.80				☆	☆	☆
DNR300–Z14 –B2.5	DNL300–Z14 –B2.5					3.00				★	☆	★
DNR320–Z14 –B2.5	DNL320–Z14 –B2.5					3.20				☆	☆	☆
DNR330–Z14 –B2.5	DNL330–Z14 –B2.5					3.30		☆		☆	☆	
DNR350–Z14 –B2.5	DNL350–Z14 –B2.5					3.50		★	☆	☆		

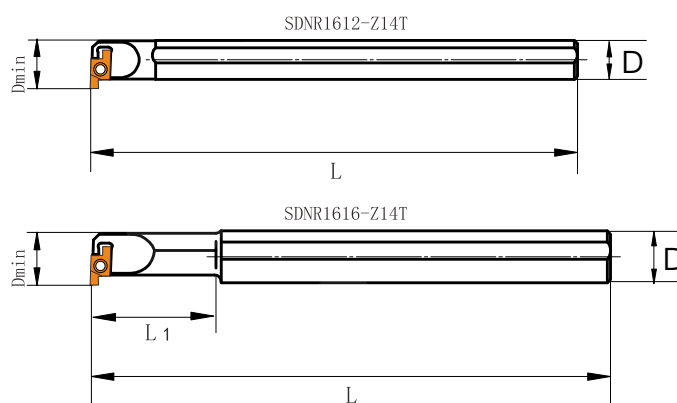
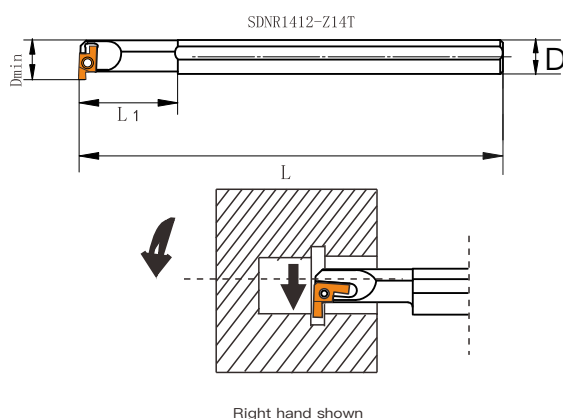
★ Standard stock ☆ Order production

DN-Z14 Internal grooving inserts(Round)



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010
DNR080-040Z14R-B2.2	DNL080-040Z14R-B2.2	11.48	4.05	2.70	5.80	0.80	2.2	0.40	★	☆	☆
DNR100-050Z14R-B2.5	DNL100-050Z14R-B2.5					1.00	2.5	0.50	★	☆	☆
DNR120-060Z14R-B2.5	DNL120-060Z14R-B2.5					1.20		0.60	★	☆	☆
DNR150-075Z14R-B2.5	DNL150-075Z14R-B2.5					1.50		0.75	★	☆	☆
DNR200-100Z14R-B2.5	DNL200-100Z14R-B2.5					2.00		1.00	★	☆	☆
DNR250-125Z14R-B2.5	DNL250-125Z14R-B2.5					2.50		1.25	★	☆	☆
DNR300-150Z14R-B2.5	DNL300-150Z14R-B2.5					3.00		1.50	★	☆	☆
DNR350-175Z14R-B2.5	DNL350-175Z14R-B2.5					3.50		1.75	☆	☆	☆

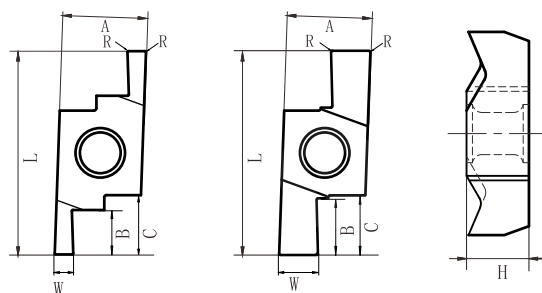
★ Standard stock ☆ Order production



Right hand	Left hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR1412-Z14T	SDNL1412-Z14T	12	33	150	14.0	DNR***Z14	M2.5*6	T8
SDNR1612-Z14T	SDNL1612-Z14T	12	40	150	15.0	DNL***Z14		
SDNR1616-Z14T	SDNL1616-Z14T	16		160	16.0			

Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

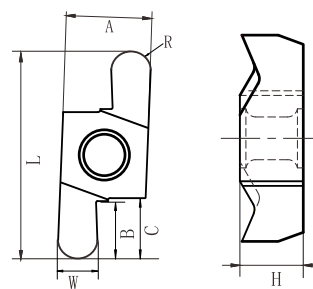
DN-Z20 Internal grooving inserts



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010	
DNR100-Z20-B2.5	DNL100-Z20-B2.5	16.44	5.05	4.8	6.8	1.00	2.5	0.10	★	☆	★	
DNR110-Z20-B2.5	DNL110-Z20-B2.5					1.10			☆	☆	☆	
DNR120-Z20-B2.5	DNL120-Z20-B2.5					1.20			★	☆	☆	
DNR125-Z20-B2.5	DNL125-Z20-B2.5					1.25			★	☆	☆	
DNR130-Z20-B2.5	DNL130-Z20-B2.5					1.30			☆	☆	☆	
DNR140-Z20-B2.5	DNL140-Z20-B2.5					1.40			★	☆	☆	
DNR150-Z20-B3.0	DNL150-Z20-B3.0					1.50	3.0		0.10	★	☆	★
DNR160-Z20-B3.0	DNL160-Z20-B3.0					1.60				★	☆	☆
DNR170-Z20-B3.0	DNL170-Z20-B3.0					1.70				★	☆	☆
DNR175-Z20-B3.0	DNL175-Z20-B3.0					1.75				★	☆	☆
DNR180-Z20-B3.0	DNL180-Z20-B3.0					1.80				☆	☆	☆
DNR190-Z20-B3.0	DNL190-Z20-B3.0					1.90				☆	☆	☆
DNR200-Z20-B4.5	DNL200-Z20-B4.5					2.00	4.5	0.20		★	☆	★
DNR225-Z20-B4.5	DNL225-Z20-B4.5					2.25				☆	☆	☆
DNR230-Z20-B4.5	DNL230-Z20-B4.5					2.30				★	☆	☆
DNR250-Z20-B4.5	DNL250-Z20-B4.5					2.50				★	☆	★
DNR265-Z20-B4.5	DNL265-Z20-B4.5					2.65				☆	☆	☆
DNR270-Z20-B4.5	DNL270-Z20-B4.5					2.70				☆	☆	☆
DNR275-Z20-B4.5	DNL275-Z20-B4.5					2.75			★	☆	☆	
DNR280-Z20-B4.5	DNL280-Z20-B4.5					2.80			☆	☆	☆	
DNR300-Z20-B4.5	DNL300-Z20-B4.5					3.00			★	☆	★	
DNR320-Z20-B4.5	DNL320-Z20-B4.5					3.20			☆	☆	☆	
DNR330-Z20-B4.5	DNL330-Z20-B4.5					3.30			★	☆	☆	
DNR350-Z20-B4.5	DNL350-Z20-B4.5					3.50			★	☆	★	
DNR400-Z20-B4.5	DNL400-Z20-B4.5					3.50			★	☆	★	

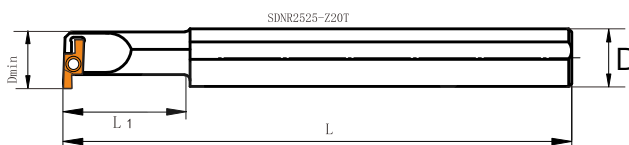
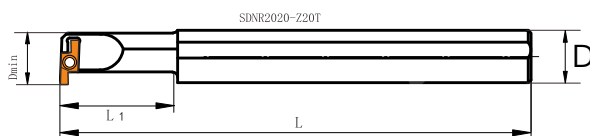
★ Standard stock ☆ Order production

DN-Z20 Internal grooving inserts(Round)



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010
DNR100-050Z20R-B2.5	DNL100-050Z20R-B2.5	16.44	5.05	4.8	6.8	1.00	2.5	0.50	★	☆	☆
DNR120-060Z20R-B3.0	DNL120-060Z20R-B3.0					1.20		0.60	★	☆	☆
DNR150-075Z20R-B3.5	DNL150-075Z20R-B3.5					1.50	3.0	0.75	★	☆	☆
DNR200-100Z20R-B4.5	DNL200-100Z20R-B4.5					2.00	4.5	1.00	★	☆	☆
DNR250-125Z20R-B4.5	DNL250-125Z20R-B4.5					2.50		1.25	★	☆	☆
DNR300-150Z20R-B4.5	DNL300-150Z20R-B4.5					3.00		1.50	★	☆	☆
DNR350-175Z20R-B4.5	DNL350-175Z20R-B4.5					3.50		1.75	★	☆	☆
DNR400-200Z20R-B4.5	DNL400-200Z20R-B4.5					4.00		2.00	★	☆	☆

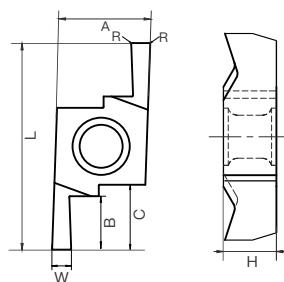
★ Standard stock ☆ Order production



Right hand	Left hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR2020-Z20T	SDNL2020-Z20T	20	42	180	20.0	DNR***Z20	M3*10	T10
SDNR2525-Z20T	SDNL2525-Z20T	25	48	200	25.0	DNL***Z20		

Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

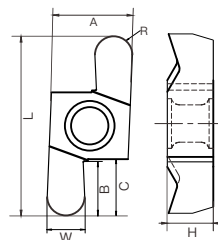
DN-Z25 Internal grooving inserts



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010
DNR100-Z25-B3.0	DNL100-Z25-B3.0	21.66	5.44	6.80	9.54	1.00	3.0	0.10	★	☆	☆
DNR110-Z25-B3.0	DNL110-Z25-B3.0					1.10			☆	☆	☆
DNR120-Z25-B3.5	DNL120-Z25-B3.5					1.20	3.5		☆	☆	☆
DNR125-Z25-B3.5	DNL125-Z25-B3.5					1.25			☆	☆	☆
DNR130-Z25-B3.5	DNL130-Z25-B3.5					1.30			☆	☆	☆
DNR140-Z25-B3.5	DNL140-Z25-B3.5					1.40			☆	☆	☆
DNR150-Z25-B4.0	DNL150-Z25-B4.0					1.50	4.0		★	☆	★
DNR160-Z25-B4.5	DNL160-Z25-B4.5					1.60	4.5		☆	☆	☆
DNR175-Z25-B4.5	DNL170-Z25-B4.5					1.70			☆	☆	☆
DNR175-Z25-B4.5	DNL175-Z25-B4.5					1.75			☆	☆	☆
DNR200-Z25-B5.5	DNL200-Z25-B5.5					2.00	5.5	0.20	★	☆	☆
DNR230-Z25-B5.5	DNL230-Z25-B5.5					2.30			☆	☆	☆
DNR250-Z25-B6.0	DNL250-Z25-B6.0					2.50	6.0		★	☆	★
DNR270-Z25-B6.0	DNL270-Z25-B6.0					2.70			☆	☆	☆
DNR275-Z25-B6.0	DNL275-Z25-B6.0					2.75			☆	☆	☆
DNR280-Z25-B6.0	DNL280-Z25-B6.0					2.80			☆	☆	☆
DNR300-Z25-B6.5	DNL300-Z25-B6.5					3.00	6.5		★	☆	★
DNR330-Z25-B6.5	DNL330-Z25-B6.5					3.30			☆	☆	☆
DNR350-Z25-B6.5	DNL350-Z25-B6.5					3.50			★	☆	★
DNR360-Z25-B6.5	DNL360-Z25-B6.5					3.60			☆	☆	☆
DNR370-Z25-B6.5	DNL370-Z25-B6.5					3.70			☆	☆	☆
DNR400-Z25-B6.5	DNL400-Z25-B6.5					4.00			★	☆	★
DNR420-Z25-B6.5	DNL420-Z25-B6.5					4.20			☆	☆	☆
DNR450-Z25-B6.5	DNL450-Z25-B6.5					4.50			★	☆	☆
DNR470-Z25-B6.5	DNL470-Z25-B6.5					4.70			☆	☆	☆
DNR500-Z25-B6.5	DNL500-Z25-B6.5					5.00			★	☆	☆

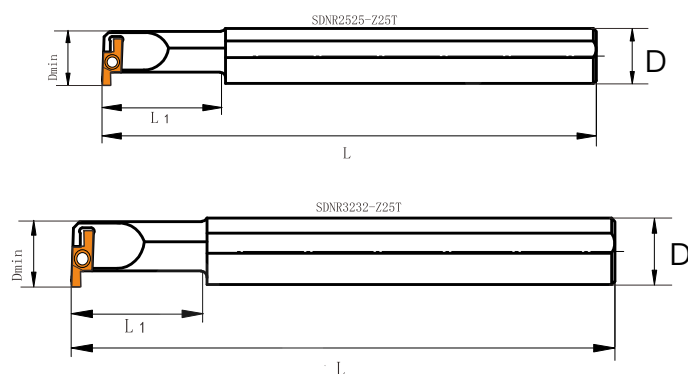
★ Standard stock ☆ Order production

DN-Z25 Internal grooving inserts(Round)



Right hand	Left hand	L	H	C	A	W	B	R	WMG015	WPG020	WNG010
DNR100-050Z25R-B3.0	DNL100-050Z25R-B3.0	21.66	5.44	6.80	9.54	1.00	3.00	0.50	☆	☆	☆
DNR120-060Z25R-B3.5	DNL120-060Z25R-B3.5					1.20	3.50	0.60	☆	☆	☆
DNR150-075Z25R-B4.0	DNL150-075Z25R-B4.0					1.50	4.00	0.75	☆	☆	☆
DNR200-100Z25R-B5.5	DNL200-100Z25R-B5.5					2.00	5.50	1.00	☆	☆	☆
DNR250-125Z25R-B6.0	DNL250-125Z25R-B6.0					2.50	6.00	1.25	☆	☆	☆
DNR300-150Z25R-B6.5	DNL300-150Z25R-B6.5					3.00	6.50	1.50	☆	☆	☆
DNR350-175Z25R-B6.5	DNL350-175Z25R-B6.5					3.50		1.75	☆	☆	☆
DNR400-200Z25R-B6.5	DNL400-200Z25R-B6.5					4.00		2.00	☆	☆	☆
DNR450-225Z25R-B6.5	DNL450-225Z25R-B6.5					4.50		2.25	☆	☆	☆
DNR500-250Z25R-B6.5	DNL500-250Z25R-B6.5					5.00		2.50	☆	☆	☆

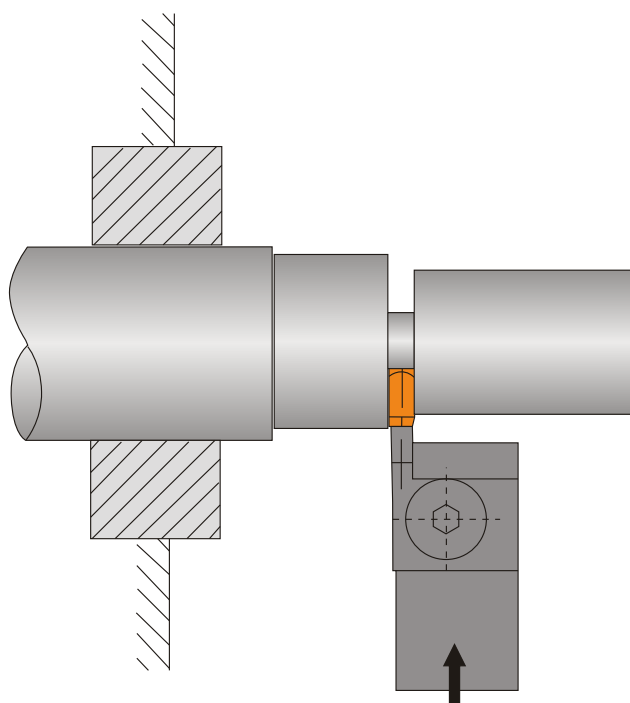
★ Standard stock ☆ Order production



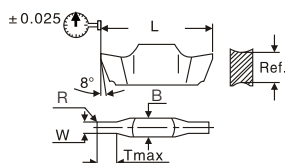
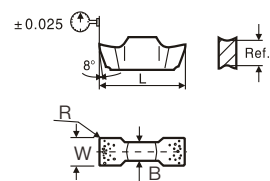
Right hand	Left hand	D	L1	L	Dmin	Inserts	Screw	Wrench
SDNR2525-Z25T	SDNL2525-Z25T	25	45	200	25.0	DNR***Z25	M4*6	T15
SDNR3232-Z25T	SDNL3232-Z25T	32	55	220	32.0	DNL***Z25		

Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

Deep grooving inserts



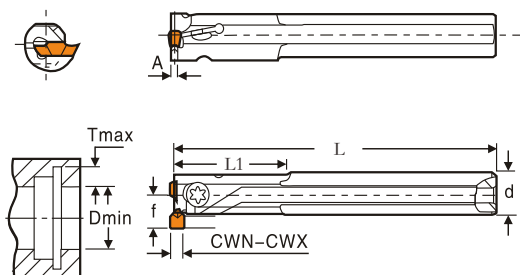
MIMN Grooving inserts

 $w < 2$  $w \geq 2$

Insert	L	B	W	Tmax	R	WMG015	WPG020	WNG010
10MIMN080–R0.05	10.0	1.80	0.80	1.50	0.05	☆	☆	☆
10MIMN100–R0.10			1.00	1.60	0.10	☆	★	☆
10MIMN120–R0.10			1.20	1.80		☆	★	☆
10MIMN125–R0.10			1.25	2.00		☆	☆	☆
10MIMN140–R0.10			1.40			☆	★	☆
10MIMN150–R0.10			1.50	2.50		☆	★	☆
10MIMN170–R0.10			1.70			☆	☆	☆
10MIMN180–R0.10			1.80			☆	☆	☆
10MIMN190–R0.10			1.90			☆	☆	☆
10MIMN200–R0.20		1.80	2.00	0.20	0.10	☆	★	☆
10MIMN220–R0.20			2.20			☆	☆	☆
10MIMN250–R0.20		2.20	2.50			☆	★	☆
10MIMN260–R0.20			2.60			☆	☆	☆
10MIMN270–R0.20			2.70			☆	☆	☆
10MIMN300–R0.20			3.00			☆	★	☆
10MIMN200–R1.00		1.80	2.00		1.00	☆	★	☆
10MIMN300–R1.50		2.20	3.00		1.50	☆	★	☆
10MIMN220–R0.20			2.20			☆	☆	☆
10MIMN250–R0.20		2.20	2.50			☆	★	☆
10MIMN260–R0.20			2.60			☆	☆	☆
10MIMN270–R0.20			2.70			☆	☆	☆
10MIMN300–R0.20			3.00			☆	★	☆
10MIMN200–R1.00		1.80	2.00		1.00	☆	★	☆
10MIMN300–R1.50		2.20	3.00		1.50	☆	★	☆

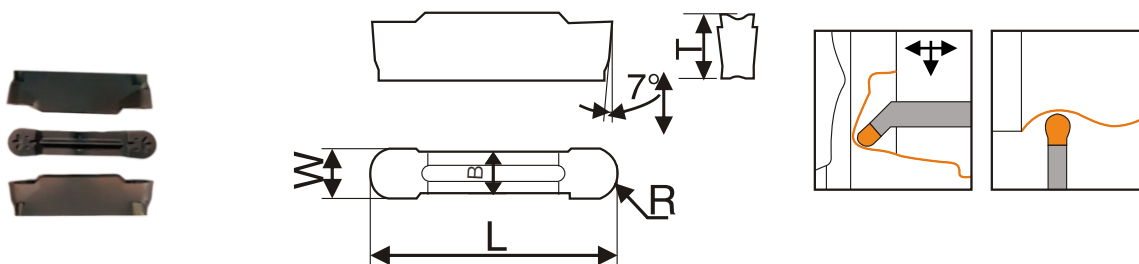
★ Standard stock ☆ Order production

MIMN Grooving tool holder



Right hand	Left hand	d	Dmin	Tmax	L	L1	f	A	CWN	CWX	Inserts	Screw	Wrench
SMIMNR1620-D08-2-2.0		16	8.0	2.0	120	20	5.6	1.8	2.0	2.5	10MIMN***	M4*10	T15
SMIMNR1625-D10-2-3.0			10.0	3.0		25	7.8						
SMIMNR1625-D12-2-3.5	SMIMNL1625-D12-2-3.5		11.5	3.5			8.8	1.6	1.9	2.3			
SMIMNR1630-D14-2-4.0	SMIMNL1630-D14-2-4.0		14.0	4.0	30	10.3							
SMIMNR1635-D15-2-6.0	SMIMNL1635-D15-2-6.0		15.0	6.0	150	35	12.3						
SMIMNR1630-D14-3-4.0	SMIMNL1630-D14-3-4.0		14.0	4.0	120	30	10.3	2.0	2.4	3.0			
SMIMNR1625-D15-3-6.0			15.0	6.0		25	12.3						
SMIMNR1635-D15-3-6.0	SMIMNL1635-D15-3-6.0					35							
SMIMNR1640-D20-3-8.0	SMIMNL1640-D20-3-8.0		20.0	8.0	150	40	16.1						

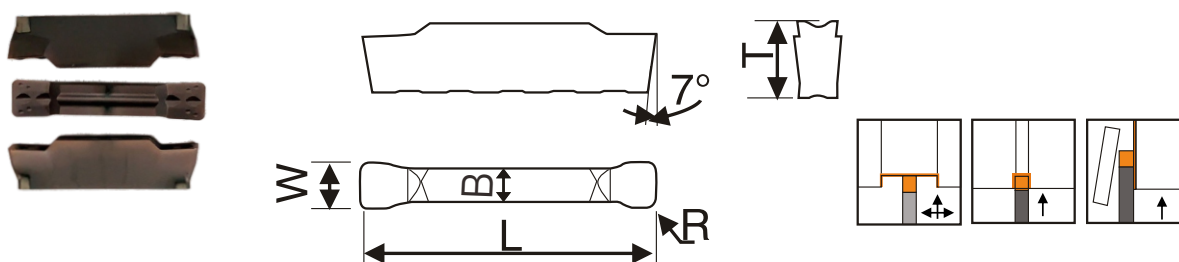
MRMN Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MRMN200-M	16	1.5	2.0	3.5	1.0	☆	★	☆
MRMN300-M	21	2.35	3.0	4.8	1.5	☆	★	☆
MRMN400-M		3.3	4.0		2.0	☆	★	☆
MRMN500-M	26	4.1	5.0	5.8	2.5	☆	★	☆

★ Standard stock ☆ Order production

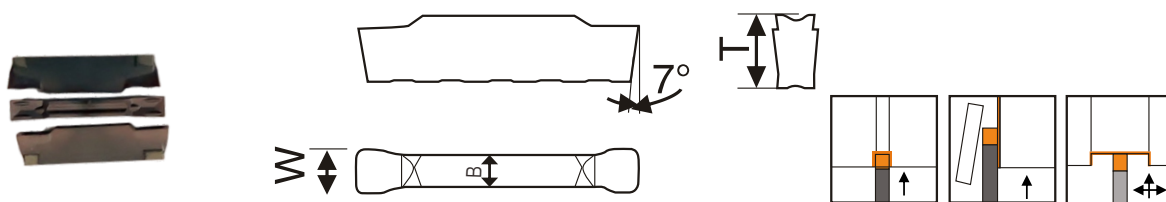
MGMN-M Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGMN300-M	21	2.35	3.0	4.8	0.4	☆	★	☆
MGMN400-M		3.30	4.0			☆	★	☆
MGMN500-M	26	4.10	5.0	5.8	0.8	☆	★	☆
MGMN600-M	26	5.00	6.0	5.8	0.8	☆	★	☆

★ Standard stock ☆ Order production

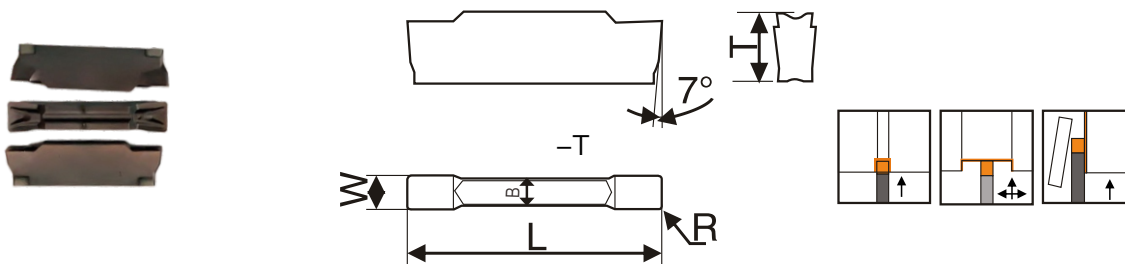
MGMN-G Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGMN150-G	16.0	1.20	1.5	3.50	0.15	☆	★	☆
MGMN200-G		1.60	2.0		0.20	☆	★	☆
MGMN250-G	18.5	2.00	2.5	3.85		☆	★	☆

★ Standard stock ☆ Order production

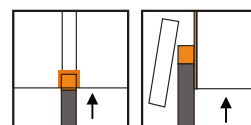
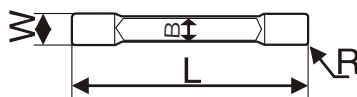
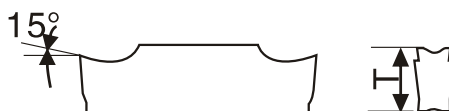
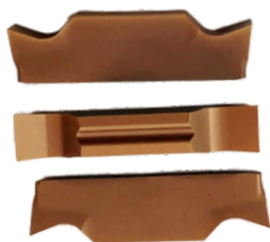
MGMN-T Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGMN200-T	16.0	1.60	2.0	3.50	0.20	☆	★	☆
MGMN250-T	18.5	2.00	2.5	3.85		☆	★	☆
MGMN300-T	21.0	2.35	3.0	4.80	0.40	☆	★	☆
MGMN400-T		3.30	4.0			☆	★	☆
MGMN500-T	26.0	4.10	5.0	5.80	0.80	☆	★	☆

★ Standard stock ☆ Order production

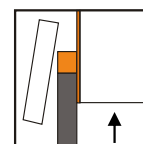
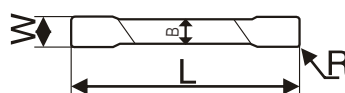
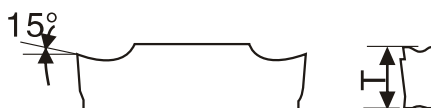
MGGN-V Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGGN150-V	16.0	1.20	1.5	3.50	0.15	★	☆	★
MGGN200-V		1.60	2.0		0.20	★	☆	★
MGGN250-V	18.5	2.00	2.5	3.85		★	☆	★
MGGN300-V	21.0	2.35	3.0	4.80	0.40	★	☆	★
MGGN400-V		3.30	4.0			★	☆	★
MGGN500-V	26.0	4.10	5.0	5.80	0.80	★	☆	★
MGGN600-V		5.00	6.0			★	☆	★

★ Standard stock ☆ Order production

MGGN-VL Grooving inserts



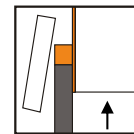
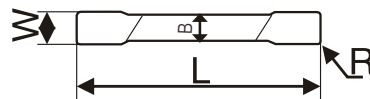
Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGGN150-VL	16.0	1.20	1.5	3.50	0.15	★	☆	☆
MGGN200-VL		1.60	2.0		0.20	★	☆	☆
MGGN250-VL	18.5	2.00	2.5	3.85		★	☆	☆
MGGN300-VL	21.0	2.35	3.0	4.80	0.40	★	☆	☆
MGGN400-VL		3.30	4.0			★	☆	☆
MGGN500-VL	26.0	4.10	5.0	5.80	0.80	★	☆	☆
MGGN600-VL		5.00	6.0			★	☆	☆

★ Standard stock ☆ Order production

A

Grooving

MGGN-VR Grooving inserts



Insert	L	B	W	T	R	WMG015	WPG020	WNG010
MGGN150-VR	16.0	1.20	1.5	3.50	0.15	★	☆	☆
MGGN200-VR		1.60	2.0		0.20	★	☆	☆
MGGN250-VR	18.5	2.00	2.5	3.85		★	☆	☆
MGGN300-VR	21.0	2.35	3.0	4.80	0.40	★	☆	☆
MGGN400-VR		3.30	4.0			★	☆	☆
MGGN500-VR	26.0	4.10	5.0	5.80	0.80	★	☆	☆
MGGN600-VR		5.00	6.0			★	☆	☆

★ Standard stock ☆ Order production

B

Threading

C

Turning

D

Drilling

E

Milling

F

Taps

G

Special Tools

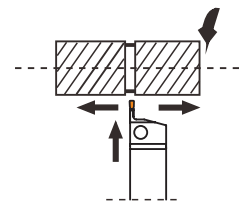
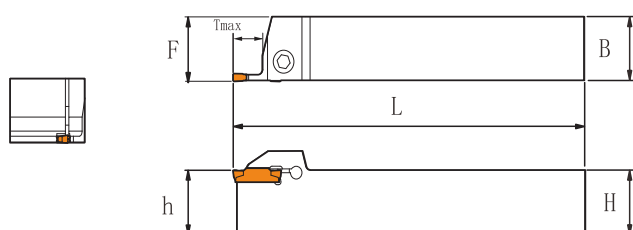
H

Technical Info

A033



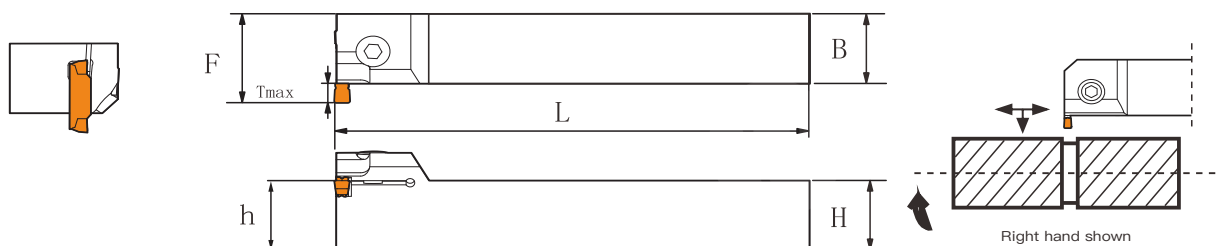
MGEH Grooving tool holder



Right hand	Left hand	H	B	h	F	L	Tmax	Inserts	Screw	Wrench
MGEHR1616-1.5	MGEHL1616-1.5	16	16	16	16.20	100	14	MGMN150 MGGN150	LTX0514	L2.0
MGEHR2020-1.5	MGEHL2020-1.5	20	20	20	20.20	125				
MGEHR2525-2.0	MGEHL2525-1.5	25	25	25	25.25	150		MGMN200 MGGN200 MRMN200	MHA0512	L4.0
MGEHR1212-2.0	MGEHL1212-2.0	12	12	12	14.25	100				
MGEHR1616-2.0	MGEHL1616-2.0	16	16	16	16.25	125				
MGEHR2020-2.0	MGEHL2020-2.0	20	20	20	20.25	125	16	MGMN250 MGGN250		
MGEHR2525-2.5	MGEHL2525-2.0	25	25	25	25.25	150				
MGEHR1616-2.5	MGEHL1616-2.5	16	16	16	16.30	100				
MGEHR2020-2.5	MGEHL2020-2.5	20	20	20	20.30	125	18	MGMN300 MGGN300 MRMN300		
MGEHR2525-3.0	MGEHL2525-2.5	25	25	25	25.30	150				
MGEHR1616-3.0	MGEHL1616-3.0	16	16	16	16.35	100				
MGEHR2020-3.0	MGEHL2020-3.0	20	20	20	20.40	125				
MGEHR2020-3.0-10T	MGEHL2020-3.0-10T	20	20	20	20.40	125	10			
MGEHR2525-3.0	MGEHL2525-3.0	25	25	25	25.40	150	18			
MGEHR2525-3.0-10T	MGEHL2525-3.0-10T	25	25	25	25.40	150	10			
MGEHR3232-3.0	MGEHL3232-3.0	32	32	32	32.40	170	18	MGMN400 MGGN400 MRMN400		
MGEHR3232-3.0-10T	MGEHL3232-3.0-10T	32	32	32	32.40	170	10			
MGEHR2020-4.0	MGEHL2020-4.0	20	20	20	20.40	125	18			
MGEHR2020-4.0-10T	MGEHL2020-4.0-10T	20	20	20	20.40	125	10			
MGEHR2525-4.0	MGEHL2525-4.0	25	25	25	25.40	150	18	MGMN500 MGGN500 MRMN500		
MGEHR2525-4.0-10T	MGEHL2525-4.0-10T	25	25	25	25.40	150	10			
MGEHR3232-4.0	MGEHL3232-4.0	32	32	32	32.40	170	18			
MGEHR3232-4.0-10T	MGEHL3232-4.0-10T	32	32	32	32.40	170	10			
MGEHR2020-5.0	MGEHL2020-5.0	20	20	20	20.50	125	23			
MGEHR2020-5.0-10T	MGEHL2020-5.0-10T	20	20	20	20.50	125	15			
MGEHR2525-5.0	MGEHL2525-5.0	25	25	25	25.50	150	23			
MGEHR2525-5.0-10T	MGEHL2525	25	25	25	25.50	150	15			
MGEHR3232-5.0	MGEHL3232	32	32	32	32.50	170	23			
MGEHR3232-5.0-10T	MGEHL3232-5.0-10T	32	32	32	32.50	170	15			
MGEHR2020-6.0	MGEHL2020-6.0	20	20	20	20.60	125	23			
MGEHR2020-6.0-10T	MGEHL2020-6.0-10T	20	20	20	20.60	125	15			
MGEHR2525-6.0	MGEHL2525-6.0	25	25	25	25.60	150	23	MGMN600 MGGN600 MRMN600		
MGEHR2525-6.0-10T	MGEHL2525-6.0-10T	25	25	25	25.60	150	15			
MGEHR3232-6.0	MGEHL3232-6.0	32	32	32	32.60	170	23			
MGEHR3232-6.0-10T	MGEHL3232-6.0-10T	32	32	32	32.60	170	15			

★ Standard stock ☆ Order production

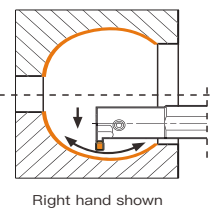
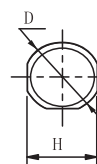
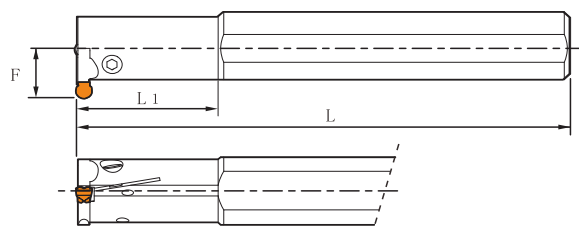
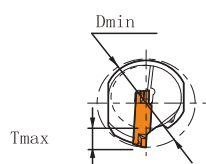
MGEV Grooving tool holder



Right hand	Left hand	H	B	h	F	L	Tmax	Inserts	Screw	Wrench
MGEVR2020-1.5	MGEVL2020-1.5	20	20	20	23.0	125	3.0	MGMN150- MGGN150 -	LTX0514	L2.0
MGEVR2525-1.5	MGEVL2525-1.5	25	25	25	28.0	150				
MGEVR3232-1.5	MGEVL3232-1.5	32	32	32	35.0	170				
MGEVR2020-2.0	MGEVL2020-2.0	20	20	20	23.5	125	3.5	MGMN200- MGGN200- MRMN200-*	BHA0616	L5.0
MGEVR2525-2.0	MGEVL2525-2.0	25	25	25	28.5	150				
MGEVR3232-2.0	MGEVL3232-2.0	32	32	32	35.5	170				
MGEVR2020-2.5	MGEVL2020-2.5	20	20	20	24.0	125	4.0	MGMN250- MGGN250-*		
MGEVR2525-2.5	MGEVL2525-2.5	25	25	25	29.0	150				
MGEVR3232-2.5	MGEVL3232-2.5	32	32	32	36.0	170				
MGEVR2020-3.0	MGEVL2020-3.0	20	20	20	25.5	125	5.0	MGMN300- MGGN300- MRMN300-*		
MGEVR2525-3.0	MGEVL2525-3.0	25	25	25	30.5	150				
MGEVR3232-3.0	MGEVL3232-3.0	32	32	32	37.5	170				
MGEVR2020-4.0	MGEVL2020-4.0	20	20	20	25.5	125		MGMN400- MGGN400- MRMN400-*		
MGEVR2525-4.0	MGEVL2525-4.0	25	25	25	30.5	150				
MGEVR3232-4.0	MGEVL3232-4.0	32	32	32	37.5	170				
MGEVR2020-5.0	MGEVL2020-5.0	20	20	20	27.0	125	7.0	MGMN500- MGGN500- MRMN500-*		
MGEVR2525-5.0	MGEVL2525-5.0	25	25	25	32.0	150				
MGEVR3232-5.0	MGEVL3232-5.0	32	32	32	39.0	170				
MGEVR2020-6.0	MGEVL2020-6.0	20	20	20	27.0	125		MGMN600- MGGN600- MRMN600-*		
MGEVR2525-6.0	MGEVL2525-6.0	25	25	25	32.0	150				
MGEVR3232-6.0	MGEVL3232-6.0	32	32	32	39.0	170				

★ Standard stock ☆ Order production

MGIV Grooving tool holder

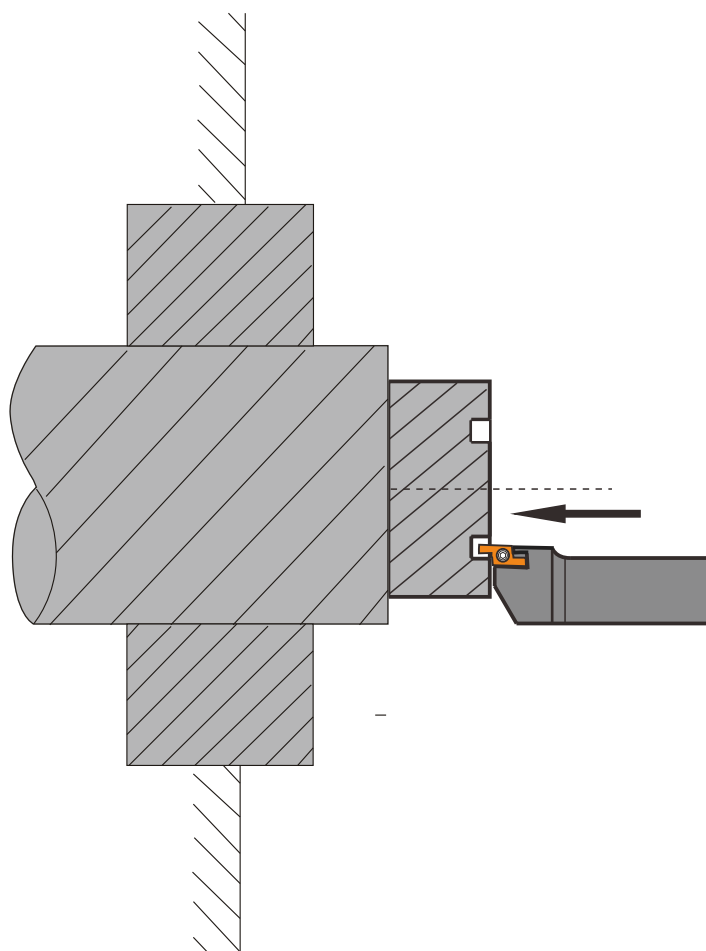


Right hand shown

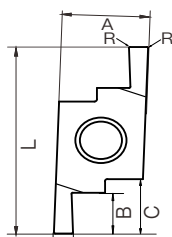
Right hand	Left hand	H	D	F	L	L1	Dmin	Tmax	Inserts	Screw	Wrench		
MGIVR2016-1.5	MGIVL2016-1.5	15	16	11.3	125	35	20	3.5	MGMN150- * MGGN150- *	MHB0310	L3.0		
MGIVR2520-1.5	MGIVL2520-1.5	18	20	13.1	100	45	25			MHA0512	L4.0		
MGIVR2925-1.5	MGIVL2925-1.5	23	25	16.2	200	45	29						
MGIVR2016-2.0	MGIVL2016-2.0	15	16	12.4	125	35	20	4.5	MGMN200- * MGGN200- * MRMN200- *	MHB0310	L3.0		
MGIVR2520-2.0	MGIVL2520-2.0	18	20	14.0	100	45	25			MHA0512	L4.0		
MGIVR2925-2.0	MGIVL2925-2.0	23	25	17.2	200	45	29						
MGIVR2016-2.5	MGIVL2016-2.5	15	16	12.5	125	35	20		MGMN250- * MGGN250- *	MHB0310	L3.0		
MGIVR2520-2.5	MGIVL2520-2.5	18	20	15.1	100	45	25						
MGIVR2925-2.5	MGIVL2925-2.5	23	25	18.2	200	45	29						
MGIVR2520-3.0	MGIVL2520-3.0	18	20	15.6	150	45	25	5	MGMN300- * MGGN300- * MRMN300- *	MHA0512	L4.0		
MGIVR3125-3.0	MGIVL3125-3.0	23	25	18.9	200	45	31						
MGIVR3732-3.0	MGIVL3732-3.0	30	32	21.5	250	65	37						
MGIVR2520-4.0	MGIVL2520-4.0	18	20	15.6	150	45	25	6	MGMN400- * MGGN400- * MRMN400- *				
MGIVR3125-4.0	MGIVL3125-4.0	23	25	18.9	200	45	31						
MGIVR3732-4.0	MGIVL3732-4.0	30	32	21.5	250	65	37						
MGIVR3125-5.0	MGIVL3125-5.0	23	25	19.4	200	45	31	8	MGMN500- * MGGN500- * MRMN500- *	BHA0616	L5.0		
MGIVR3732-5.0	MGIVL3732-5.0	30	32	21.5	250	65	37			BHA0620			
MGIVR3125-6.0	MGIVL3125-6.0	23	25	19.4	200	45	31		MGMN600- * MGGN600- * MRMN600- *	BHA0616			
MGIVR3732-6.0	MGIVL3732-6.0	30	32	21.5	250	65	37			BHA0620			

★ Standard stock ☆ Order production

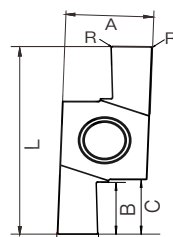
End face shallow grooving inserts



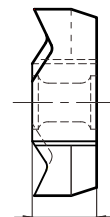
GEF-D End face shallow grooving inserts



W=0.5-1.8



W>2.0

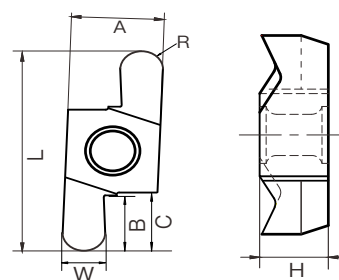


Right hand shown

Right hand	Left hand	A	L	H	W	B	C	R	Dmin	Dmax	WMG015	WPG020	WNG010
GEFR0710-D-L1.5	GEFL0710-D-L1.5	6.8	16.44	5.05	0.70	1.50	4.8	0.03	10	+∞	★	☆	☆
GEFR0810-D-L1.5	GEFL0810-D-L1.5				0.80						★	☆	☆
GEFR1010-D-L2.5	GEFL1010-D-L2.5				1.00	2.50		0.10			★	☆	☆
GEFR1210-D-L2.5	GEFL1210-D-L2.5				1.20						★	☆	☆
GEFR1510-D-L3.5	GEFL1510-D-L3.5				1.50	★					☆	☆	
GEFR1710-D-L3.5	GEFL1710-D-L3.5				1.70	3.50					★	☆	☆
GEFR1810-D-L3.5	GEFL1810-D-L3.5				1.80	★	☆				☆		
GEFR2010-D-L4.5	GEFL2010-D-L4.5				2.00	4.50	0.20				★	☆	☆
GEFR2310-D-L4.5	GEFL2310-D-L4.5				2.30			★			☆	☆	
GEFR2510-D-L4.5	GEFL2510-D-L4.5				2.50			★			☆	☆	
GEFR3010-D-L4.5	GEFL3010-D-L4.5				3.00			★			☆	☆	
GEFR3510-D-L4.5	GEFL3510-D-L4.5				3.50			★			☆	☆	
GEFR4010-D-L4.5	GEFL4010-D-L4.5				4.00			★			☆	☆	

★ Standard stock ☆ Order production

GEF-D End face shallow grooving inserts

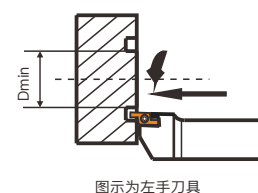
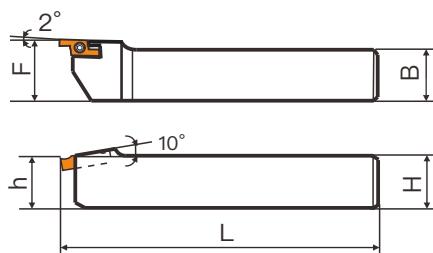
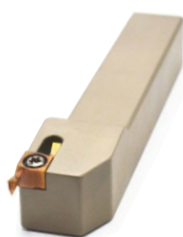


Right hand shown

Right hand	Left hand	A	L	H	W	B	C	R	Dmin	Dmax	WMG015	WPG020	WNG010
GEFR1010-050DR-L2.5	GEFL1010-050DR-L2.5	6.8	16.44	5.05	1.00	2.50	4.8	0.50	10	+∞	★	☆	☆
GEFR1210-060DR-L2.5	GEFL1210-060DR-L2.5				1.20			0.60			★	☆	☆
GEFR1510-075DR-L3.5	GEFL1510-075DR-L3.5				1.50	3.50		0.75			★	☆	☆
GEFR2010-100DR-L4.5	GEFL2010-100DR-L4.5				2.00	4.50		1.00			★	☆	☆
GEFR2510-125DR-L4.5	GEFL2510-125DR-L4.5				2.50			1.25			★	☆	☆
GEFR3010-150DR-L4.5	GEFL3010-150DR-L4.5				3.00			1.50			★	☆	☆
GEFR3510-175DR-L4.5	GEFL3510-175DR-L4.5				3.50			1.75			★	☆	☆
GEFR4010-200DR-L4.5	GEFL4010-200DR-L4.5				4.00			2.00			★	☆	☆

★ Standard stock ☆ Order production

SGE-D Shallow grooving tool holder

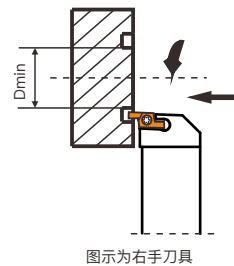
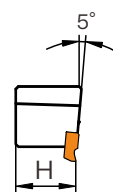
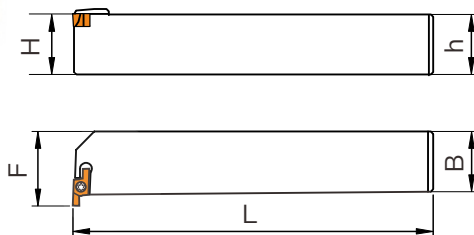


Right hand	Left hand	H	B	h	F	L	Dmin	Inserts	Screw	Wrench
SGER1212H-D	SGEL1212H-D	12	12	12	16	100	10	GEFR***-D GEFL***-D	M3*8	T10
SGER1616H-D	SGEL1616H-D	16	16	16	20	100				
SGER2020K-D	SGEL2020K-D	20	20	20	25	125				
SGER2525M-D	SGEL2525M-D	25	25	25	32	150				

Right-hand Insert for Left-hand Toolholder

Left-hand Insert for Right-hand Toolholder

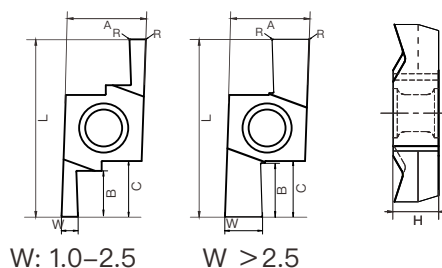
B-SGE-D Grooving tool holder



Right hand	Left hand	H	B	h	F	L	Dmin	Inserts	Screw	Wrench
B-SGER1212H -D	B-SGEL1212H -D	12	12	12	17	100	10	GEFR*** -D	M3*8	T10
B-SGER1616H -D	B-SGEL1616H -D	16	16	16	21	100		GEFL*** -D		
B-SGER2020K-D	B-SGEL2020K-D	20	20	20	25	125				
B-SGER2525M-D	B-SGEL2525M-D	25	25	25	30	150				

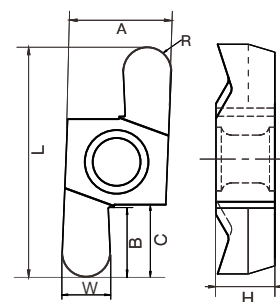
Right-hand Insert for Right-hand Toolholder
Left-hand Insert for Left-hand Toolholder

GEF-E End face shallow grooving inserts



Right hand	A	L	H	W	B	C	R	Dmin	Dmax	WMG015	WPG020	WNG010
GEFR1020-E-L3.0	9.54	21.66	5.55	1.00	3.0	6.8	0.10	10	+∞	★	☆	☆
GEFR1220-E-L3.0				1.20						★	☆	☆
GEFR1520-E-L4.0				1.50						4.0	★	☆
GEFR2010-E-L5.5				2.00	5.5					★	☆	☆
GEFR2510-E-L5.5				2.50			★			☆	☆	
GEFR3010-E-L6.5				3.00	6.5	0.20	★			☆	☆	
GEFR3510-E-L6.5				3.50			★			☆	★	
GEFR4010-E-L6.5				4.00			★			☆	☆	
GEFR4510-E-L6.5				4.50			★			☆	☆	
GEFR5010-E-L6.5				5.00			★			☆	☆	

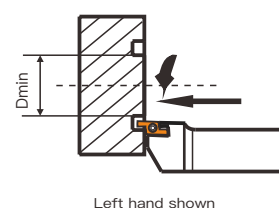
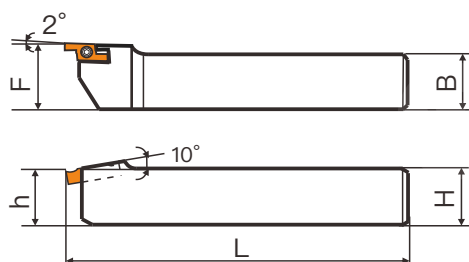
★ Standard stock ☆ Order production



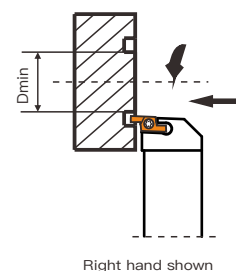
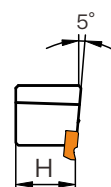
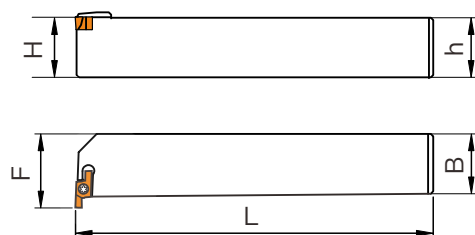
Right hand	A	L	H	W	B	C	R	Dmin	Dmax	WMG015	WPG020	WNG010
GEFR1020-050ER-L3.0	9.54	21.66	5.55	1.00	3.0	6.8	0.50	10	+∞	☆	☆	☆
GEFR1220-060ER-L3.0				1.20	3.0		0.60			☆	☆	☆
GEFR1520-075ER-L4.0				1.50	4.0		0.75			☆	☆	☆
GEFR2010-100ER-L5.5				2.00	5.5		1.00			☆	☆	☆
GEFR2510-125ER-L5.5				2.50	5.5		1.25			☆	☆	☆
GEFR3010-150ER-L6.5				3.00	6.5		1.50			☆	☆	☆
GEFR3510-175ER-L6.5				3.50			1.75			☆	☆	☆
GEFR4010-200ER-L6.5				4.00			2.00			☆	☆	☆
GEFR4510-225ER-L6.5				4.50			2.25			☆	☆	☆
GEFR5010-250ER-L6.5				5.00			2.50			☆	☆	☆

★ Standard stock ☆ Order production

SGE-E Grooving tool holder

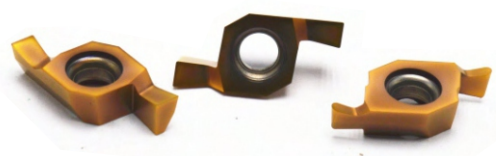


Left hand	H	B	h	F	L	Dmin	Inserts	Screw	Wrench
SGEL1212H-E	12	12	12	16	100	10	GEFR***-E	M4*10	T15
SGEL1616H-E	16	16	16	20	100				
SGEL2020K-E	20	20	20	25	125				
SGEL2525M-E	25	25	25	32	150				

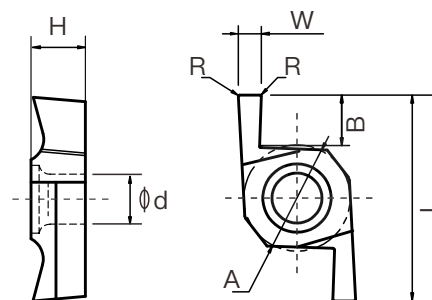


Left hand	H	B	h	F	L	Dmin	Inserts	Screw	Wrench
B-SGER1212H-E	12	12	12	19	100	10	GEFR***-E	M4*10	T15
B-SGER1616H-E	16	16	16	23	100				
B-SGER2020K-E	20	20	20	27	125				
B-SGER2525M-E	25	25	25	32	150				

GNF-D Internal end face shallow grooving inserts



Right hand shown

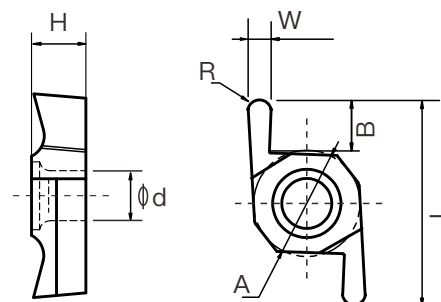


Right hand	A	L	φd	H	W	B	R	Dmin	WMG015	WPG020	WNG010
GNFR1016 –D–L2.5	9.3	18	4.4	4.8	1.00	2.5	0.10	18	★	☆	☆
GNFR1516 –D–L3.5					1.50	3.5			★	☆	☆
GNFR2016–D–L4.5					2.00	4.5			0.20	★	☆
GNFR2516–D–L4.5					2.50		★			☆	☆
GNFR3016–D–L4.5					3.00		★			☆	☆
GNFR3516–D–L4.5					3.50		★			☆	☆
GNFR4016–D–L4.5					4.00	★	☆		☆		

★ Standard stock ☆ Order production



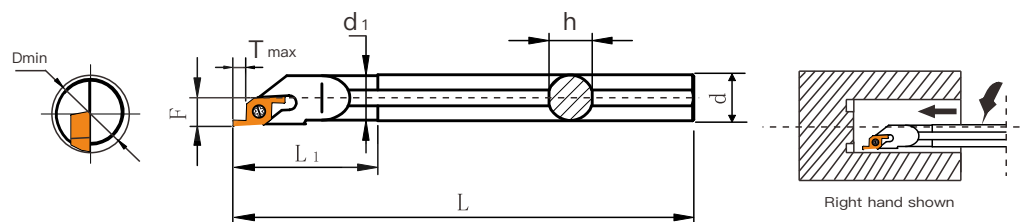
Right hand shown



Right hand	A	L	φd	H	W	B	R	Dmin	WMG015	WPG020	WNG010
GNFR1016 -050DR-L2.5	9.3	18	4.4	4.8	1.00	2.5	0.50	18	★	☆	☆
GNFR1516 -075DR-L3.5					1.50	3.5	0.75		★	☆	☆
GNFR2016 -100DR-L4.5					2.00	4.5	1.00		★	☆	☆
GNFR2516 -125DR-L4.5					2.50		1.25		★	☆	☆
GNFR3016 -150DR-L4.5					3.00		1.50		★	☆	☆
GNFR4016 -200DR-L4.5					4.00		2.00		★	☆	☆

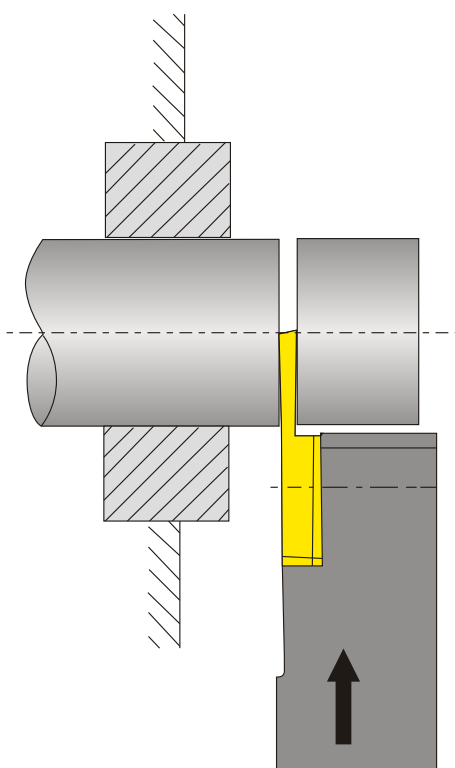
★ Standard stock ☆ Order production

GNF-D Grooving tool holder

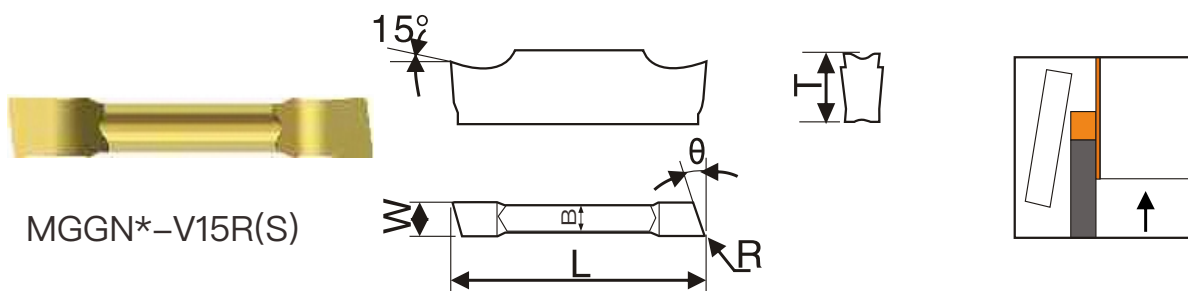


Right hand	F	h	d1	d	L1	L	Tmax	Dmin	Inserts	Screw	Wrench
SGIVR1816-D	9.5	15	15.5	16	50	160	4.5	18	GNFR***D	M3.5*8	T15
SGIVR2420-D	13.5	19	19	20				24			
SGIVR3025-D	16.5	24	24	25	60	200		30			
SGIVR3632-D	19	31	31	32	70	250		36			

Cut-off inserts



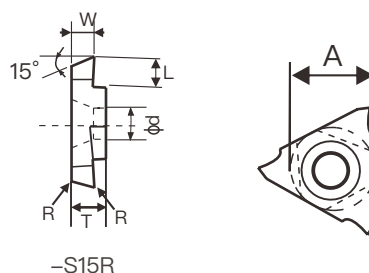
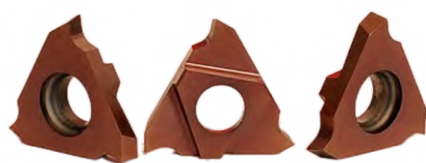
MGGN-V15 Cut-off inserts



Inserts		L	W	B	T	R	θ	WMG015	WPG020	WNG010
MGGN150 – V15RS	MGGN150 – V15LS	16.0	1.50	1.2	3.50	0.05	15°	★	☆	★
MGGN200 – V15RS	MGGN200 – V15LS		2.00	1.6				★	☆	★
MGGN250 – V15RS	MGGN250 – V15LS	18.5	2.50	2.0	3.85			★	☆	★
MGGN300 – V15RS	MGGN300 – V15LS	21.0	3.00	2.35	4.80	★		☆	★	
MGGN400 – V15RS	MGGN400 – V15LS		4.00	3.3		★		☆	★	
MGGN150 – V15R	MGGN150 – V15L	16.0	1.50	1.2	3.50	0.15		★	☆	☆
MGGN200 – V15R	MGGN200 – V15L		2.00	1.6		0.20		★	☆	☆
MGGN250 – V15R	MGGN250 – V15L	18.5	2.50	2.0	3.85			★	☆	☆
MGGN300 – V15R	MGGN300 – V15L	21.0	3.00	2.35	4.80	0.40		★	☆	☆
MGGN400 – V15R	MGGN400 – V15L		4.00	3.3				★	☆	☆

★ Standard stock ☆ Order production

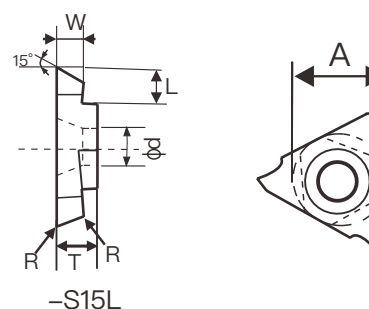
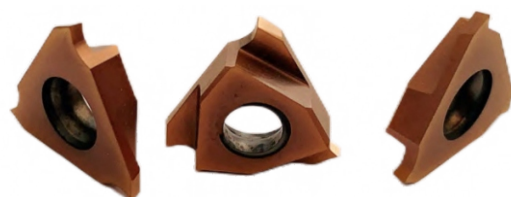
TGF32-S15R Grooving inserts



Right hand	Left hand	A	T	φd	W	L	R	WMG015	WPG020	WNG010
TGF32R050-S15R-L1.8	TGF32L050-S15R-L1.8	9.525	3.18	4.4	0.50	1.8	0.05	★	☆	☆
TGF32R070-S15R-L2.0	TGF32L070-S15R-L2.0				0.70	2.0		★	☆	☆
TGF32R100-S15R-L3.0	TGF32L100-S15R-L3.0				1.00	3.0		★	☆	☆
TGF32R120-S15R-L3.2	TGF32L120-S15R-L3.2				1.20	3.2		★	☆	☆
TGF32R150-S15R-L3.5	TGF32L150-S15R-L3.5				1.50	3.5	0.10	★	☆	☆
TGF32R200-S15R-L4.0	TGF32L200-S15R-L4.0				2.00	4.0		★	☆	☆
TGF32R250-S15R-L4.0	TGF32L250-S15R-L4.0				2.50	4.0		★	☆	☆

★ Standard stock ☆ Order production

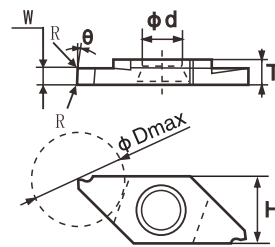
TGF32-S15L Grooving inserts



Right hand	Left hand	A	T	φd	W	L	R	WMG015	WPG020	WNG010
TGF32R050-S15L-L1.8	TGF32L050-S15L-L1.8	9.525	3.18	4.4	0.50	1.8	0.05	☆	☆	☆
TGF32R070-S15L-L2.0	TGF32L070-S15L-L2.0				0.70	2.0		☆	☆	☆
TGF32R100-S15L-L3.0	TGF32L100-S15L-L3.0				1.00	3.0		☆	☆	☆
TGF32R120-S15L-L3.2	TGF32L120-S15L-L3.2				1.20	3.2		☆	☆	☆
TGF32R150-S15L-L3.5	TGF32L150-S15L-L3.5				1.50	3.5	0.10	☆	☆	☆
TGF32R200-S15L-L4.0	TGF32L200-S15L-L4.0				2.00	4.0		☆	☆	☆
TGF32R250-S15L-L4.0	TGF32L250-S15L-L4.0				2.50	4.0		☆	☆	☆

★ Standard stock ☆ Order production

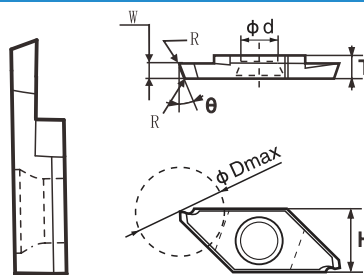
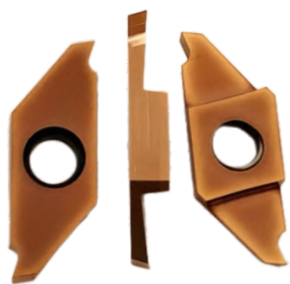
TKF12/16-S Grooving and Cut-off inserts



Right hand	Left hand	W	Dmax	T	H	φd	θ	R	WMG015	WPG020	WNG010
TKF12R050-S-L2.5	TKF12L050-S-L2.5	0.50	5	3	8.7	5	0°	0.03	★	☆	★
TKF12R070-S-L4.0	TKF12L070-S-L4.0	0.70	8						★	☆	★
TKF12R100-S-L6.0	TKF12L100-S-L6.0	1.00	12						★	☆	★
TKF12R120-S-L6.0	TKF12L120-S-L6.0	1.20							★	☆	★
TKF12R150-S-L6.0	TKF12L150-S-L6.0	1.50							★	☆	★
TKF12R200-S-L6.0	TKF12L200-S-L6.0	2.00							★	☆	★
TKF16R100-S-L8.0	TKF16L100-S-L8.0	1.00	16	4	9.5	5	0°	0.05	★	☆	★
TKF16R120-S-L8.0	TKF16L120-S-L8.0	1.20							★	☆	★
TKF16R150-S-L8.0	TKF16L150-S-L8.0	1.50							★	☆	★
TKF16R200-S-L8.0	TKF16L200-S-L8.0	2.00							★	☆	★
TKF16R250-S-L8.0	TKF16L250-S-L8.0	2.50							★	☆	★
TKF16R300-S-L8.0	TKF16L300-S-L8.0	3.00							★	☆	★

★ Standard stock ☆ Order production

TKF12/16-S16R Grooving and Cut-off inserts

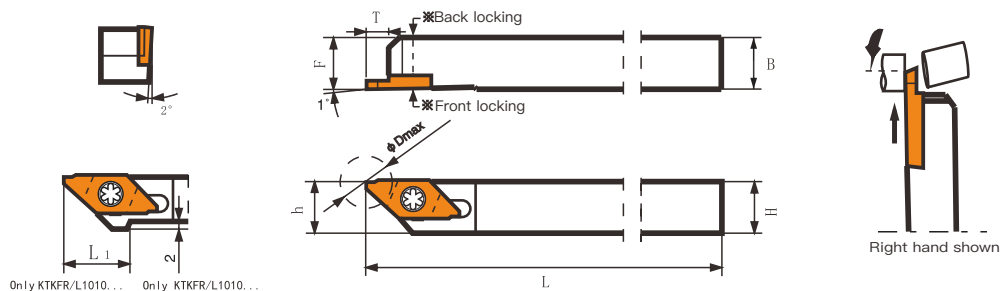


-S16R

Right hand	Left hand	W	Dmax	T	H	φd	θ	R	WMG015	WPG020	WNG010
TKF12R050-S16R-L2.5	TKF12L050-S16R-L2.5	0.50	5	3	8.7	5	16°	0.03	★	☆	★
TKF12R070-S16R-L4.0	TKF12L070-S16R-L4.0	0.70	8						★	☆	★
TKF12R100-S16R-L6.0	TKF12L100-S16R-L6.0	1.00	12						★	☆	★
TKF12R120-S16R-L6.0	TKF12L120-S16R-L6.0	1.20							★	☆	★
TKF12R150-S16R-L6.0	TKF12L150-S16R-L6.0	1.50							★	☆	★
TKF12R200-S16R-L6.0	TKF12L200-S16R-L6.0	2.00							★	☆	★
TKF16R100-S16R-L8.0	TKF16L100-S16R-L8.0	1.00	16	4	9.5	5	16°	0.05	★	☆	★
TKF16R120-S16R-L8.0	TKF16L120-S16R-L8.0	1.20							★	☆	★
TKF16R150-S16R-L8.0	TKF16L150-S16R-L8.0	1.50							★	☆	★
TKF16R200-S16R-L8.0	TKF16L200-S16R-L8.0	2.00							★	☆	★
TKF16R250-S16R-L8.0	TKF16L250-S16R-L8.0	2.50							★	☆	★
TKF16R300-S16R-L8.0	TKF16L300-S16R-L8.0	3.00							★	☆	★

★ Standard stock ☆ Order production

KTKF Grooving tool holder

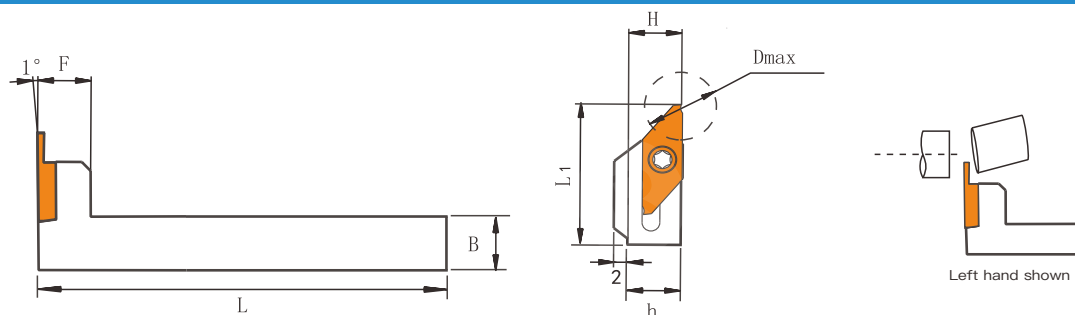


Right hand	Left hand	H	B	h	F	L	L1	T	Dmax	Inserts	Screw	Wrench
KTKFR1010K-12	KTKFL1010K-12	10	10	10	10	125	15	6	12	TKF12R*** TKF12L***	M4*10	T15
KTKFR1212K-12	KTKFL1212K-12	12	12	12	12							
KTKFR1616K-12	KTKFL1616K-12	16	16	16	16							
KTKFR2020K-12	KTKFL2020K-12	20	20	20	20							
KTKFR1010K-16	KTKFL1010K-16	10	10	10	10	125	20	8	16	TKF16R*** TKF16L***	M4*10	T15
KTKFR1212K-16	KTKFL1212K-16	12	12	12	12							
KTKFR1616K-16	KTKFL1616K-16	16	16	16	16							
KTKFR2020K-16	KTKFL2020K-16	20	20	20	20							
KTKFR2525K-16	KTKFL2525K-16	25	25	25	25							

Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

B-KTKF Grooving tool holder

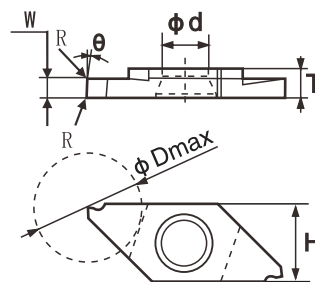
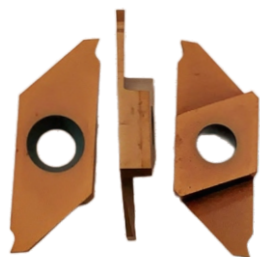


Right hand	Left hand	H	B	h	F	L	L1	Dmax	Inserts	Screw	Wrench		
B-KTKFR1010K –12	B-KTKFL1010K –12	10	10	10	10		16	12	TKF12R*** TKF12L***	M4*10	T15		
B-KTKFR1212K –12	B-KTKFL1212K –12	12	12	12	12		20						
B-KTKFR1616K –12	B-KTKFL1616K –12	16	16	16	16		24						
B-KTKFR2020K-12	B-KTKFL2020K-12	20	20	20	20		30						
B-KTKFR1010K –16	B-KTKFL1010K –16	10	10	10	10	125	16	16	TKF16R*** TKF16L***				
B-KTKFR1212K –16	B-KTKFL1212K –16	12	12	12	12		20						
B-KTKFR1616K –16	B-KTKFL1616K –16	16	16	16	16		24						
B-KTKFR2020K-16	B-KTKFL2020K-16	20	20	20	20		30						
B-KTKFR2525K-16	B-KTKFL2525K-16	25	25	25	25		36						

Right-hand Insert for Left-hand Toolholder

Left-hand Insert for Right-hand Toolholder

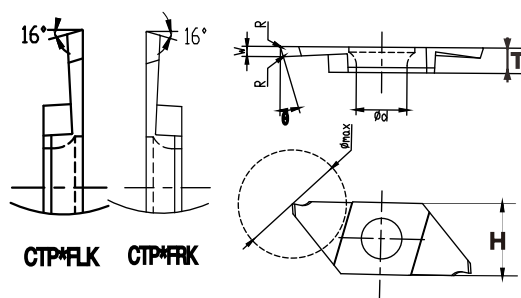
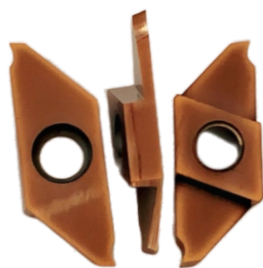
CTP(A)F*N Grooving and Cut-off inserts



Right hand	Left hand	W	Dmax	T	H	φd	θ	R	WMG015	WPG020	WNG010
CTP05FRN-L2.5	CTP05FLN-L2.5	0.50	5	2.5	8	5	0°	0.03	★	☆	★
CTP07FRN-L4.0	CTP07FLN-L4.0	0.70	8						★	☆	★
CTP10FRN-L6.0	CTP10FLN-L6.0	1.00	12						★	☆	★
CTP12FRN-L6.0	CTP12FLN-L6.0	1.20							★	☆	★
CTP15FRN-L6.0	CTP15FLN-L6.0	1.50							★	☆	★
CTP20FRN-L6.0	CTP20FLN-L6.0	2.00							★	☆	★
CTPA10FRN-L8.0	CTPA10FLN-L8.0	1.00	16	3.5	9.4	5	0°	0.05	★	☆	★
CTPA15FRN-L8.0	CTPA15FLN-L8.0	1.50							★	☆	★
CTPA20FRN-L8.0	CTPA20FLN-L8.0	2.00							★	☆	★
CTPA25FRN-L8.0	CTPA25FLN-L8.0	2.50							★	☆	★
CTPA30FRN-L8.0	CTPA30FLN-L8.0	3.00							★	☆	★

★ Standard stock ☆ Order production

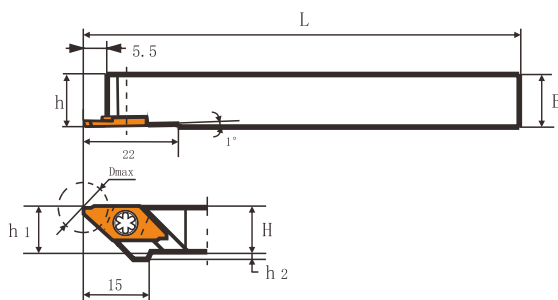
CTP(A)F Grooving and Cut-off inserts



Right hand	Left hand	W	Dmax	T	H	φd	θ	R	WMG015	WPG020	WNG010
CTP05FRK–L2.5	CTP05FLK–L2.5	0.50	5	2.5	8	5	16°	0.03	★	☆	★
CTP07FRK–L4.0	CTP07FLK–L4.0	0.70	8						★	☆	★
CTP10FRK–L6.0	CTP10FLK–L6.0	1.00	12						★	☆	★
CTP12FRK–L6.0	CTP12FLK–L6.0	1.20							★	☆	★
CTP15FRK–L6.0	CTP15FLK–L6.0	1.50							★	☆	★
CTP20FRK–L6.0	CTP20FLK–L6.0	2.00							★	☆	★
CTPA10FRK–L8.0	CTPA10FLK–L8.0	1.00	16	3.5	9.4	5	16°	0.05	★	☆	★
CTPA15FRK–L8.0	CTPA15FLK–L8.0	1.50							★	☆	★
CTPA20FRK–L8.0	CTPA20FLK–L8.0	2.00							★	☆	★
CTPA25FRK–L8.0	CTPA25FLK–L8.0	2.50							★	☆	★
CTPA30FRK–L8.0	CTPA30FLK–L8.0	3.00							★	☆	★

★ Standard stock ☆ Order production

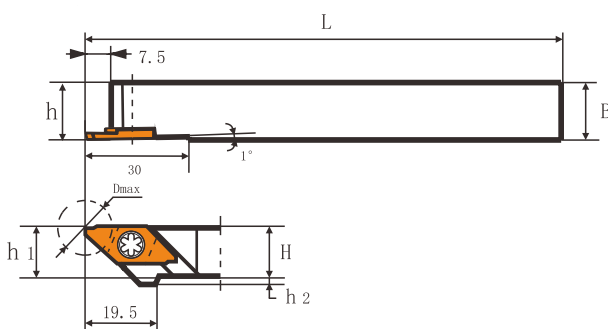
CTP Grooving and Cut-off tool holder



Right hand	Left hand	H	B	h	h1	h2	L	Dmax	Inserts	Screw	Wrench
CTPR08	CTPL08	8	8	8	8	4	120	12	CTP**FR CTP**FL	M4*10	T15
CTPR10	CTPL10	10	10	10	10	2					
CTPR12	CTPL12	12	12	12	12						
CTPR16	CTPL16	16	16	16	16						

Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

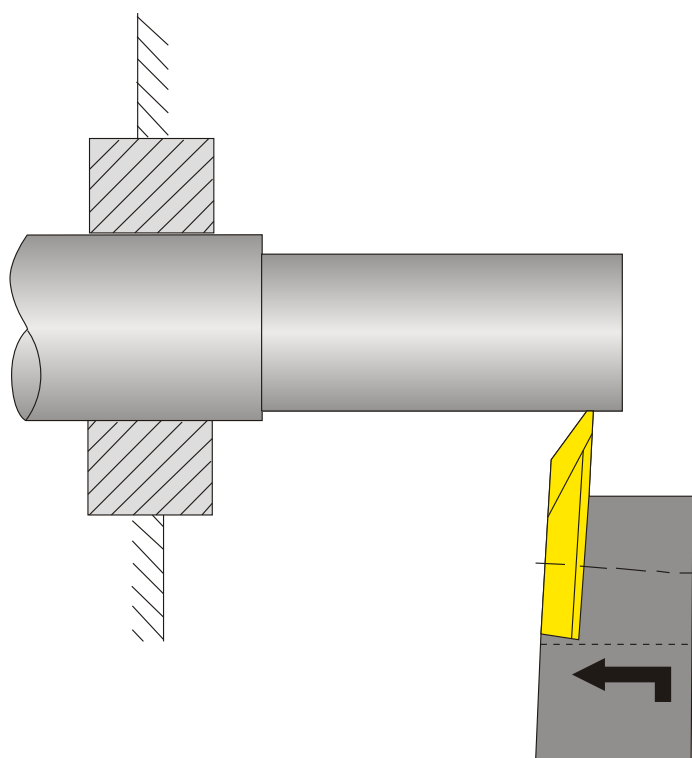


Right hand	Left hand	H	B	h	h1	h2	L	Dmax	Inserts	Screw	Wrench
CTPAR10	CTPAL10	10	10	10	10	2	120	16	CTPA**FR CTPA**FL	M4*10	T15
CTPAR12	CTPAL12	12	12	12	12						
CTPAR16	CTPAL16	16	16	16	16						
CTPAR20	CTPAL20	20	20	20	20						
CTPAR25	CTPAL25	25	25	25	25						

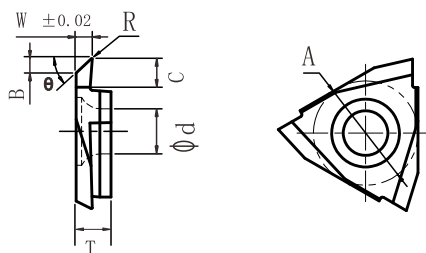
Right-hand Insert for Right-hand Toolholder

Left-hand Insert for Left-hand Toolholder

Back turning inserts

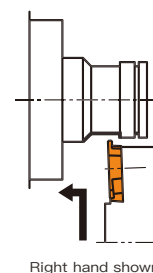
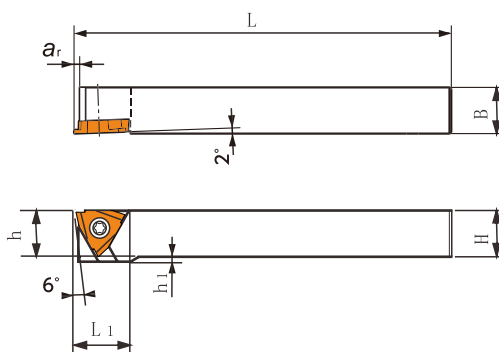


TBMH32 Back turning inserts



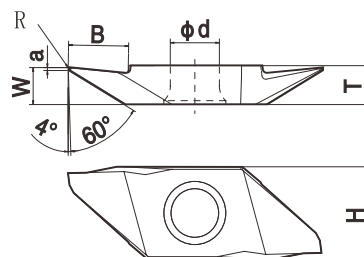
Inserts	A	T	φd	B	C	W	θ	R	Tool holder	WMG015	WPG020	WNG010
TBMH32100R05-45-L1.8	9.525	3.18	4.4	0.9	1.8	1.0	45°	0.05	GTTP****	★	☆	★
TBMH32150R05-45-L2.6				1.3	2.6	1.5				★	☆	★
TBMH32100R05-22-L1.8				0.3	1.8	1.0	22°			★	☆	★
TBMH32150R05-22-L2.7				0.5	2.7	1.5				★	☆	★

★ Standard stock ☆ Order production



Tool holder	H	B	h	h1	L1	L	ar	Inserts	Screw	Wrench
GTTR08K00	08	08	08	5	15	125	1.6	TBMH32	M4*8	T10
GTTR10K00	10	10	10	3						
GTTR12K00	12	12	12	1						
GTTR16K00	16	16	16							
GTTR20K00	20	20	20							
GTTR25K00	25	25	25							
						2.7				

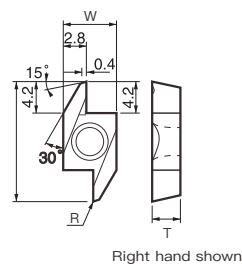
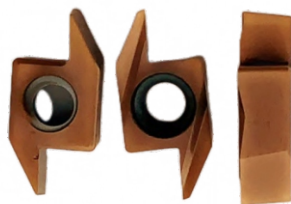
TKFB Back turning inserts



Right hand	Left hand	W	B	T	H	φd	a	R	WMG015	WPG020	WNG010
TKFB12R15005–L2.6	TKFB12L15005 –L2.6	1.5	2.6	3	8.7	5.2	0.25	0.05	★	☆	★
TKFB12R28005–L4.6	TKFB12L28005–L4.6	2.8	4.6						★	☆	★
TKFB12R28010 –L4.6	TKFB12L28010 –L4.6						0.30	0.10	★	☆	★
TKFB16R38005–L6.3	TKFB16L38005–L6.3	3.8	6.3	4	9.5			0.05	★	☆	★
TKFB16R38010 –L6.3	TKFB16L38010 –L6.3							0.10	★	☆	★

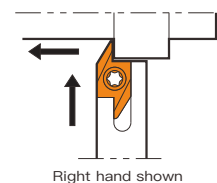
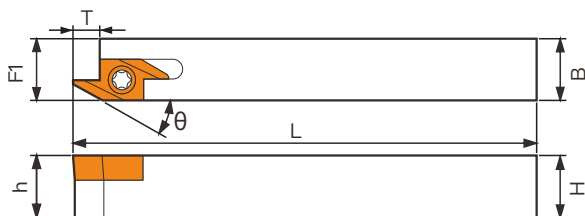
★ Standard stock ☆ Order production

ABS Back turning inserts



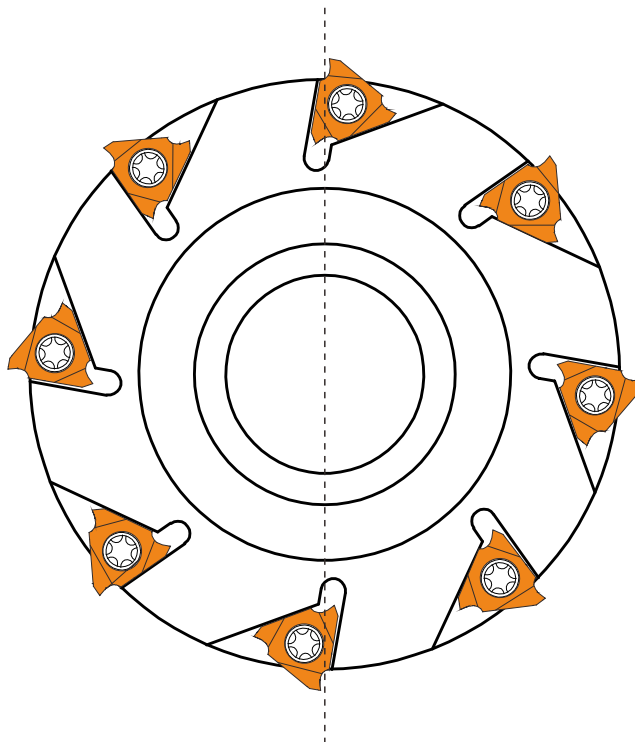
Inserts	L	W	T	R	WMG015	WPG020	WNG010
ABS15R4005	15.4	7.0	3.97	0.05	★	☆	★
ABS15R4015				0.15	★	☆	★

★ Standard stock ☆ Order production

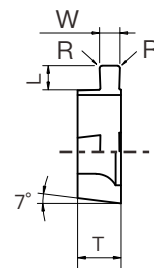
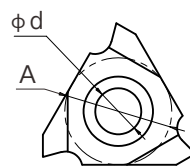
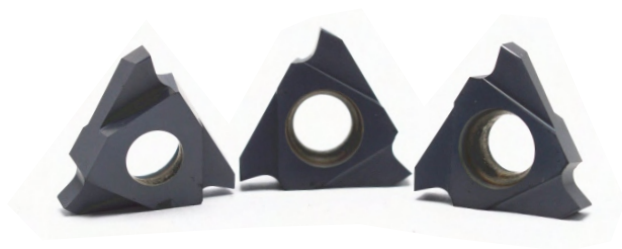


Tool holder	H	h	B	F1	T	L	θ	Inserts	Screw	Wrench
SABSR1010K-40F	10	10	10	10.2	4.2	125	30°	ABS15R****	M3*8	T10
SABSR1212K-40F	12	12	12	12.2						
SABSR1616K-40F	16	16	16	16.2						
SABSR2020K-40F	20	20	20	20.2						

Shallow groove milling inserts



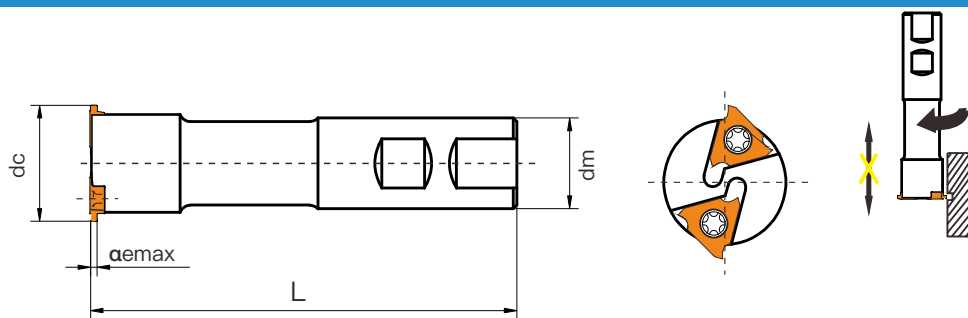
TC11/16 Shallow groove milling inserts



Right hand	Left hand	A	T	d	W	L	R	WMG015	WPG020	WNG010	
TC1102R110–L1.5	TC1102L110 –L1.5	6.35	2.38	2.8	1.10	1.5	0.1	☆	☆	☆	
TC1102R130–L1.5	TC1102L130–L1.5				1.30			☆	☆	☆	
TC16T3R110–L1.5	TC16T3L110–L1.5	9.525	3.97	4.4	1.10	2.0		0.2	☆	☆	☆
TC16T3R130 –L2.0	TC16T3L130 –L2.0				1.30				☆	☆	☆
TC16T3R150 –L2.2	TC16T3L150 –L2.2				1.50				☆	☆	☆
TC16T3R160 –L2.2	TC16T3L160 –L2.2				1.60	2.2	0.2		☆	☆	☆
TC16T3R185 –L2.2	TC16T3L185 –L2.2				1.85				☆	☆	☆
TC16T3R200–L2.7	TC16T3L200–L2.7				2.00	2.7		0.2	☆	☆	☆
TC16T3R215 –L2.7	TC16T3L215 –L2.7				2.15		☆		☆	☆	
TC16T3R250–L2.7	TC16T3L250–L2.7				2.50		☆		☆	☆	
TC16T3R265–L2.7	TC16T3L265–L2.7				2.65		☆		☆	☆	
TC16T3R300–L2.7	TC16T3L300–L2.7				3.00		0.3		☆	☆	☆

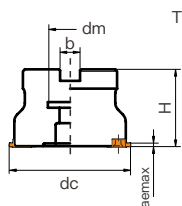
★ Standard stock ☆ Order production

Indexable shallow groove milling cutter

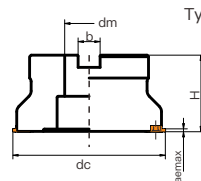
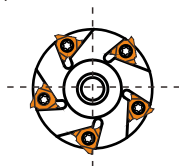


Tool holder	aemax	dm	dc	L	Teeth		Inserts	Screw	Wrench
20R2TC11-B16	2.38	16	20	80	2		TC1102L***	M2.5*6	T7
25R1TC16-B20	3.97	20	25	100	1		TC16T3L***	M4*8	T15
32R2TC16-B25		25	32	120	2				
40R3TC16-B32		32	40	150	3				

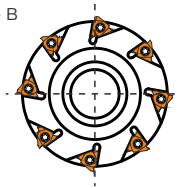
Indexable shallow groove milling cutter



Type A

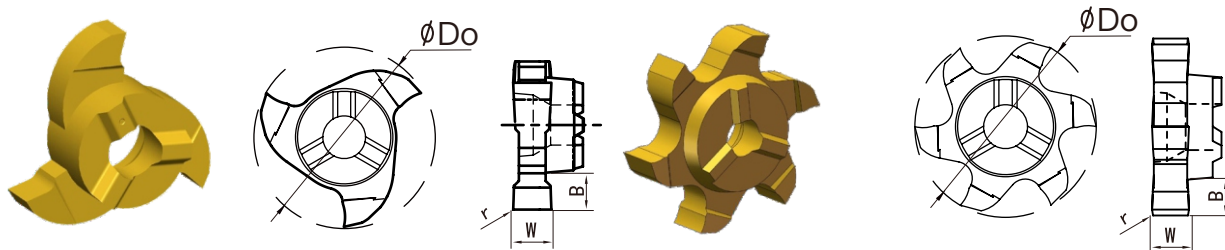


Type B



Tool holder	aemax	dm	dc	b	H	Teeth	Type	Inserts	Screw	Wrench
54R4TC16-P22	3.97	22	50	10.4	40	2	A	TC16T3L***	M4*8	T15
63R5TC16-P22		22	63	10.4		1				
80R6TC16-P27		27	80	12.4	50	2				
100R8TC16-S32		32	100	14.4		3	B			

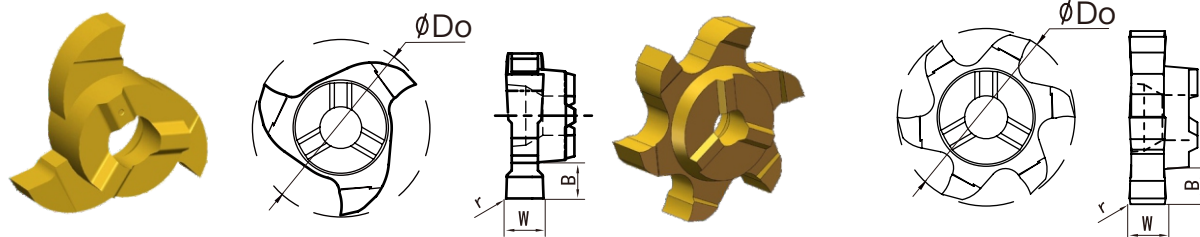
FS Slotting inserts



Inserts	Teeth	Do	W	B	r	WPG020	WMG015	Tool holder
FS3-09D18-100	3	17.7	1.0	4.2	0.1	★	★	FS18-★★
FS3-09D18-120			1.2			★	★	
FS3-09D18-150			1.5			★	★	
FS3-09D18-175			1.75			★	★	
FS3-09D18-180			1.8		0.2	★	★	
FS3-09D18-200			2.0			★	★	
FS3-09D18-230			2.3			★	★	
FS3-09D18-250			2.5			★	★	
FS3-09D18-280			2.8			★	★	
FS3-09D18-300			3.0			★	★	
FS3-09D18-330			3.3			★	★	
FS3-09D18-350			3.5			★	★	
FS3-09D18-400			4.0			★	★	
FS3-11D22-150	3	21.7	1.5	4.6	0.2	★	★	FS22-★★
FS3-11D22-175			1.75			★	★	
FS3-11D22-180			1.8			★	★	
FS3-11D22-200			2.0			★	★	
FS3-11D22-230			2.3			★	★	
FS3-11D22-250			2.5			★	★	
FS3-11D22-280			2.8			★	★	
FS3-11D22-300			3.0			★	★	
FS3-11D22-330			3.3			★	★	
FS3-11D22-350			3.5			★	★	
FS3-11D22-400			4.0			★	★	
FS3-11D22-450			4.5			★	★	
FS3-11D22-500			2.0			★	★	
FS6-11D22-150	6	21.7	1.5	4.6	0.2	★	★	FS22-★★
FS6-11D22-175			1.75			★	★	
FS6-11D22-180			1.8			★	★	
FS6-11D22-200			2.0			★	★	
FS6-11D22-230			2.3			★	★	
FS6-11D22-250			2.5			★	★	
FS6-11D22-280			2.8			★	★	
FS6-11D22-300			3.0			★	★	
FS6-11D22-330			3.3			★	★	
FS6-11D22-350			3.5			★	★	
FS6-11D22-400			4.0			★	★	
FS6-11D22-450			4.5			★	★	
FS6-11D22-500			2.0			★	★	

★ Standard stock ☆ Order production

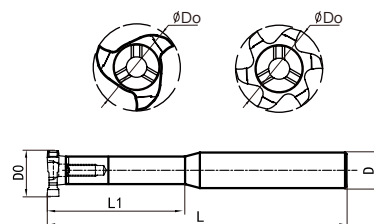
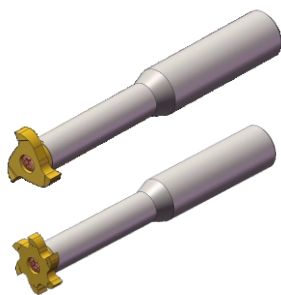
FS Slotting inserts



Inserts	Teeth	Do	W	B	r	WPG020	WMG015	Tool holder
FS3-14D28-200	3	27.7	2.0	6.3	0.2	★	☆	FS28-**
FS3-14D28-230			2.3			★	☆	
FS3-14D28-250			2.5			★	☆	
FS3-14D28-280			2.8			★	☆	
FS3-14D28-300			3.0			★	☆	
FS3-14D28-330			3.3			★	☆	
FS3-14D28-350			3.5			★	☆	
FS3-14D28-400			4.0			★	☆	
FS3-14D28-450			4.5			★	☆	
FS3-14D28-500			5.0			★	☆	
FS3-14D28-600			6.0			★	☆	
FS6-14D28-200	6	27.7	2.0	6.3	0.2	★	☆	FS28-**
FS6-14D28-230			2.3			★	☆	
FS6-14D28-250			2.5			★	☆	
FS6-14D28-280			2.8			★	☆	
FS6-14D28-300			3.0			★	☆	
FS6-14D28-330			3.3			★	☆	
FS6-14D28-350			3.5			★	☆	
FS6-14D28-400			4.0			★	☆	
FS6-14D28-450			4.5			★	☆	
FS6-14D28-500			5.0			★	☆	
FS6-14D28-600			6.0			★	☆	
FS3-14D32-200	3	31.7	2.0	8.2	0.2	☆	☆	FS32-**
FS3-14D32-230			2.3			☆	☆	
FS3-14D32-250			2.5			☆	☆	
FS3-14D32-280			2.8			☆	☆	
FS3-14D32-300			3.0			☆	☆	
FS3-14D32-330			3.3			☆	☆	
FS3-14D32-350			3.5			☆	☆	
FS3-14D32-400			4.0			☆	☆	
FS3-14D32-450			4.5			☆	☆	
FS3-14D32-500			5.0			☆	☆	
FS3-14D32-600			6.0			☆	☆	
FS6-14D32-200	6	31.7	2.0	8.2	0.2	☆	☆	FS32-**
FS6-14D32-230			2.3			☆	☆	
FS6-14D32-250			2.5			☆	☆	
FS6-14D32-280			2.8			☆	☆	
FS6-14D32-300			3.0			☆	☆	
FS6-14D32-330			3.3			☆	☆	
FS6-14D32-350			3.5			☆	☆	
FS6-14D32-400			4.0			☆	☆	
FS6-14D32-450			4.5			☆	☆	
FS6-14D32-500			5.0			☆	☆	
FS6-14D32-600			6.0			☆	☆	

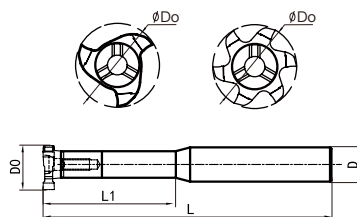
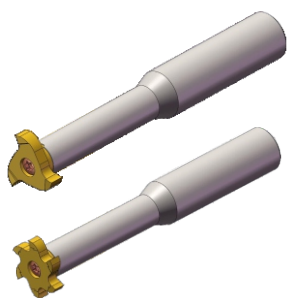
★ Standard stock ☆ Order production

FS Slot milling tool holder



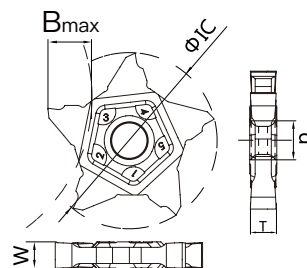
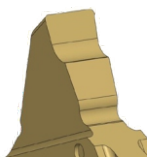
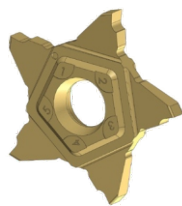
Tool holder	Inserts	Do	D	L1	L	Screw	Wrench
FS18-12F	FS3-09D18-***	17.7	12	25	80	L60M4*12*D5.7	T-15
FS18-16G			16	25	90		
FS18-20J			20	25	110		
FS22-12F	FS3-11D22-*** FS6-11D22-***	21.7	12	30	80	L60M5*14*D6.6	T-20
FS22-16G			16	30	90		
FS22-20J			20	30	110		
FS28-16G	FS3-14D24-*** FS6-14D28-***	27.7	16	38	90	L60M5*14*D6.6	T-20
FS28-20H			20	38	100		
FS28-25K			25	38	120		
FS32-16G	FS3-14D32-*** FS6-14D32-***	31.7	16	38	90	L60M5*14*D6.6	T-20
FS32-20H			20	38	100		
FS32-25K			25	38	120		

FS Slot milling tool holder



Tool holder	Inserts	Do	D	L1	L	Screw	Wrench
FS18-12F-WHC	FS3-09D18-***	17.7	12	32	85	L60M4*12*D5.7	T-15
FS18-12H-WHC			12	45	100		
FS18-12K-WHC			12	64	120		
FS18-16G-WHC			16	32	94		
FS18-16J-WHC			16	45	110		
FS18-16K-WHC			16	64	125		
FS22-12H-WHC	FS3-11D22-*** FS6-11D22-***	21.7	12	42	100	L60M5*14*D6.6	T-20
FS22-12K-WHC			12	60	120		
FS22-16H-WHC			16	42	100		
FS22-16K-WHC			16	60	125		
FS22-16M-WHC			16	85	150		
FS28-16H-WHC	FS3-14D24-*** FS6-14D28-***	27.7	16	42	100	L60M5*14*D6.6	T-20
FS28-16K-WHC			16	60	130		
FS28-16M-WHC			16	85	160		
FS28-20H-WHC			20	42	100		
FS28-20K-WHC			20	60	130		
FS28-20M-WHC			20	85	160		
FS32-16H-WHC	FS3-14D32-*** FS6-14D32-***	31.7	16	42	100	L60M5*14*D6.6	T-20
FS32-16K-WHC			16	60	130		
FS32-16M-WHC			16	85	160		
FS32-20H-WHC			20	42	100		
FS32-20K-WHC			20	60	130		
FS32-20M-WHC			20	85	160		

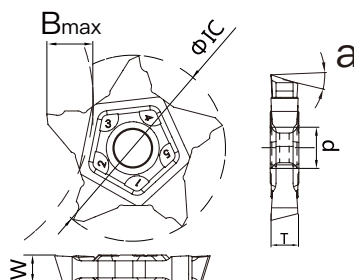
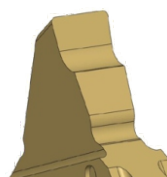
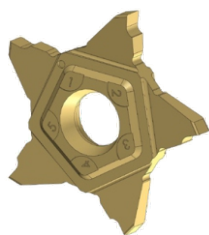
PEN Grooving Insert



Inserts	W	Bmax	r	WMG015	WKG010	IC	T	d
PEN24-050S	0.5	2.9	0.1	★	☆	24	4	5.6
PEN24-080S	0.8	2.9	0.1	★	☆			
PEN24-100S	1.0	4.9	0.1	★	☆			
PEN24-120S	1.2	4.9	0.1	★	☆			
PEN24-125S	1.25	4.9	0.1	★	☆			
PEN24-140S	1.4	4.9	0.1	★	☆			
PEN24-150S	1.5	4.9	0.1	★	☆			
PEN24-175S	1.75	4.9	0.1	★	☆			
PEN24-180S	1.8	4.9	0.1	★	☆			
PEN24-200S	2.0	4.9	0.2	★	☆			
PEN24-230S	2.3	4.9	0.2	★	☆			
PEN24-250S	2.5	4.9	0.2	★	☆			
PEN24-280S	2.8	4.9	0.2	★	☆			
PEN24-300S	3.0	4.9	0.2	★	☆			
PEN24-320S	3.2	6.4	0.2	★	☆			
PEN24-330S	3.3	6.4	0.2	★	☆			
PEN24-350S	3.5	6.4	0.2	★	☆			
PEN24-400S	4.0	6.4	0.2	★	☆			

★ Standard stock ☆ Order production

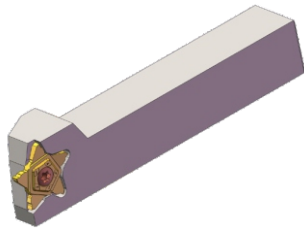
PEN Cut-off Insert



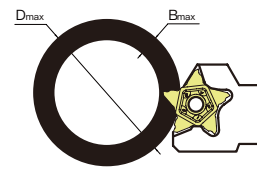
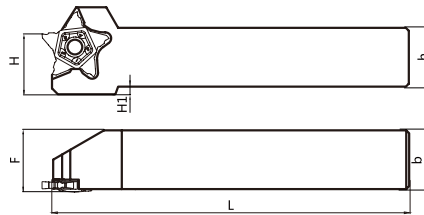
Inserts		a	W	Bmax	r	WMG015	WKG010	IC	T	d
PEN24-050S10R		10	0.5	2.9	0.1	☆	☆	24	4	5.6
PEN24-080S10R		10	0.8	2.9	0.1	☆	☆			
PEN24-100S10R		10	1.0	4.9	0.1	☆	☆			
PEN24-120S10R		10	1.2	4.9	0.1	☆	☆			
PEN24-125S10R		10	1.25	4.9	0.1	☆	☆			
PEN24-150S10R		10	1.5	4.9	0.1	☆	☆			
PEN24-140S10R		10	1.4	4.9	0.1	☆	☆			
PEN24-175S10R		10	1.75	4.9	0.1	☆	☆			
PEN24-180S10R		10	1.8	4.9	0.1	☆	☆			
PEN24-200S10R		10	2.0	4.9	0.2	☆	☆			
PEN24-230S10R		10	2.3	4.9	0.2	☆	☆			
PEN24-250S10R		10	2.5	4.9	0.2	☆	☆			
PEN24-280S10R		10	2.8	4.9	0.2	☆	☆			
PEN24-300S10R		10	3.0	4.9	0.2	☆	☆			
PEN24-320S10R		10	3.2	6.4	0.2	☆	☆			
PEN24-330S10R		10	3.3	6.4	0.2	☆	☆			
PEN24-350S10R		10	3.5	6.4	0.2	☆	☆			
PEN24-400S10R		10	4.0	6.4	0.2	☆	☆			
PEN24-050S10L		10	0.5	2.9	0.1	☆	☆			
PEN24-080S10L		10	0.8	2.9	0.1	☆	☆			
PEN24-100S10L		10	1.0	4.9	0.1	☆	☆			
PEN24-120S10L		10	1.2	4.9	0.1	☆	☆			
PEN24-125S10L		10	1.25	4.9	0.1	☆	☆			
PEN24-140S10L		10	1.4	4.9	0.1	☆	☆			
PEN24-150S10L		10	1.5	4.9	0.1	☆	☆			
PEN24-175S10L		10	1.75	4.9	0.1	☆	☆			
PEN24-180S10L		10	1.8	4.9	0.1	☆	☆			
PEN24-200S10L		10	2.0	4.9	0.2	☆	☆			
PEN24-230S10L		10	2.3	4.9	0.2	☆	☆			
PEN24-250S10L		10	2.5	4.9	0.2	☆	☆			
PEN24-280S10L		10	2.8	4.9	0.2	☆	☆			
PEN24-300S10L		10	3.0	4.9	0.2	☆	☆			
PEN24-320S10L		10	3.2	6.4	0.2	☆	☆			
PEN24-330S10L		10	3.3	6.4	0.2	☆	☆			
PEN24-350S10L		10	3.5	6.4	0.2	☆	☆			
PEN24-400S10L		10	4.0	6.4	0.2	☆	☆			

★ Standard stock ☆ Order production

PEN Grooving tool holder

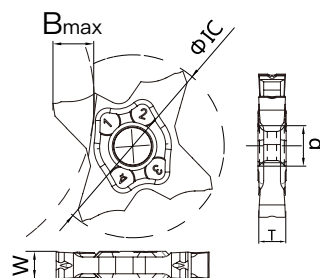


Right hand shown



Right hand	Left hand	Inserts		h	b	H	F	L	H1	Screw	Wrench
PCHR1010H24	PCHL1010H24	PEN24**		10	10	10	10	100	6	L44M5X13A	T-20
PCHR1212H24	PCHL1212H24			12	12	12	12	100	4		
PCHR1616H24	PCHL1616H24			16	16	16	16	110	–		
PCHR2020K24	PCHL2020K24			20	20	20	20	125	–		
PCHR2525M24	PCHL2525M24			25	25	25	25	150	–		

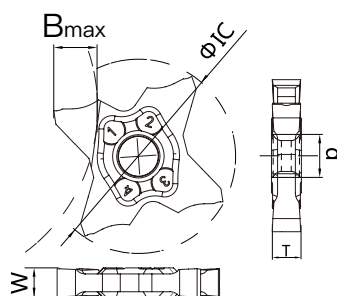
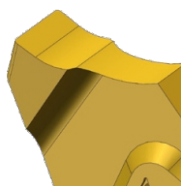
TDG Grooving inserts



Inserts	W	Bmax	r	WMG015	WKG010	IC	T	d
TDG27-100-0.1	1.0	4.0	0.1	☆	☆	27	4	5.6
TDG27-120-0.1	1.2	4.0	0.1	☆	☆			
TDG27-125-0.1	1.25	4.0	0.1	☆	☆			
TDG27-150-0.2	1.5	5.7	0.2	★	☆			
TDG27-175-0.2	1.75	5.7	0.2	★	☆			
TDG27-180-0.2	1.8	5.7	0.2	☆	☆			
TDG27-200-0.2	2.0	6.4	0.2	★	☆			
TDG27-230-0.2	2.3	6.4	0.2	☆	☆			
TDG27-250-0.2	2.5	6.4	0.2	☆	☆			
TDG27-250-0.3	2.5	6.4	0.3	★	☆			
TDG27-280-0.2	2.8	6.4	0.2	☆	☆			
TDG27-300-0.2	3.0	6.4	0.2	★	☆			
TDG27-300-0.4	3.0	6.4	0.4	★	☆			
TDG27-330-0.2	3.3	6.4	0.2	☆	☆			
TDG27-350-0.2	3.5	6.4	0.2	★	☆			
TDG27-400-0.2	4.0	6.4	0.2	★	☆			

★ Standard stock ☆ Order production

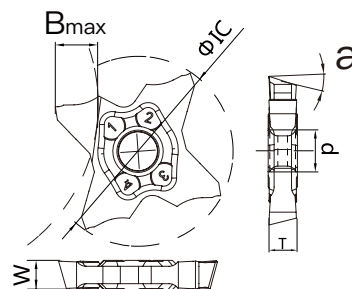
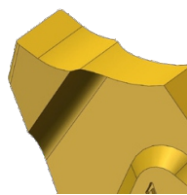
TDG Grooving inserts



Inserts	W	Bmax	r	WMG015	WKG010	IC	T	d
TDG27-100S	1.0	3.5	0.1	☆	☆	27	4	5.6
TDG27-120S	1.2	3.5	0.1	☆	☆			
TDG27-125S	1.25	3.5	0.1	☆	☆			
TDG27-140S	1.4	3.5	0.1	☆	☆			
TDG27-150S	1.5	5.7	0.2	★	☆			
TDG27-175S	1.75	5.7	0.2	★	☆			
TDG27-180S	1.8	5.7	0.2	☆	☆			
TDG27-200S	2.0	6.4	0.2	★	☆			
TDG27-230S	2.3	6.4	0.2	☆	☆			
TDG27-250S	2.5	6.4	0.2	★	☆			
TDG27-280S	2.8	6.4	0.2	☆	☆			
TDG27-300S	3.0	6.4	0.2	★	☆			
TDG27-330S	3.3	6.4	0.2	★	☆			
TDG27-350S	3.5	6.4	0.2	★	☆			
TDG27-400S	4.0	6.4	0.2	★	☆			

★ Standard stock ☆ Order production

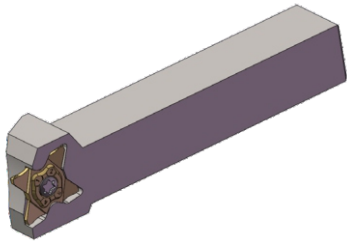
TDG Cut-off inserts



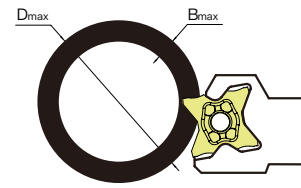
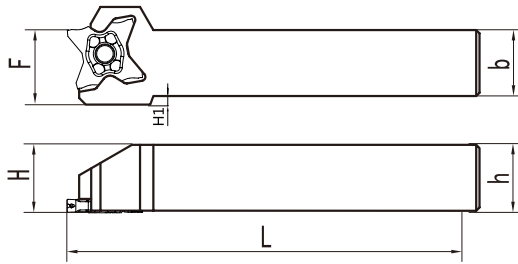
Inserts		a	W	Bmax	r	WMG015	WKG010	IC	T	d
TDG27-100S10R		10	1.0	3.5	0.1	☆	☆	27	4	5.6
TDG27-120S10R		10	1.2	3.5	0.1	☆	☆			
TDG27-125S10R		10	1.25	3.5	0.1	☆	☆			
TDG27-140S10R		10	1.4	3.5	0.1	☆	☆			
TDG27-150S10R		10	1.5	5.7	0.2	☆	☆			
TDG27-175S10R		10	1.75	5.7	0.2	☆	☆			
TDG27-180S10R		10	1.8	5.7	0.2	☆	☆			
TDG27-200S10R		10	2.0	6.4	0.2	☆	☆			
TDG27-230S10R		10	2.3	6.4	0.2	☆	☆			
TDG27-250S10R		10	2.5	6.4	0.2	☆	☆			
TDG27-280S10R		10	2.8	6.4	0.2	☆	☆			
TDG27-300S10R		10	3.0	6.4	0.2	☆	☆			
TDG27-330S10R		10	3.3	6.4	0.2	☆	☆			
TDG27-350S10R		10	3.5	6.4	0.2	☆	☆			
TDG27-400S10R		10	4.0	6.4	0.2	☆	☆			
TDG27-100S10L		10	1.0	3.5	0.1	☆	☆			
TDG27-120S10L		10	1.2	3.5	0.1	☆	☆			
TDG27-125S10L		10	1.25	3.5	0.1	☆	☆			
TDG27-140S10L		10	1.4	3.5	0.1	☆	☆			
TDG27-150S10L		10	1.5	5.7	0.2	☆	☆			
TDG27-175S10L		10	1.75	5.7	0.2	☆	☆			
TDG27-180S10L		10	1.8	5.7	0.2	☆	☆			
TDG27-200S10L		10	2.0	6.4	0.2	☆	☆			
TDG27-230S10L		10	2.3	6.4	0.2	☆	☆			
TDG27-250S10L		10	2.5	6.4	0.2	☆	☆			
TDG27-280S10L		10	2.8	6.4	0.2	☆	☆			
TDG27-300S10L		10	3.0	6.4	0.2	☆	☆			
TDG27-330S10L		10	3.3	6.4	0.2	☆	☆			
TDG27-350S10L		10	3.5	6.4	0.2	☆	☆			
TDG27-400S10L		10	4.0	6.4	0.2	☆	☆			

★ Standard stock ☆ Order production

TDG Grooving tool holder

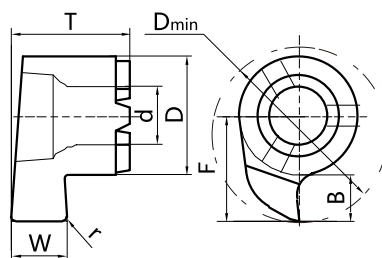
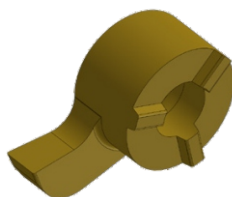
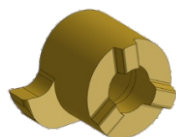


Right hand shown



Right hand	Left hand	Inserts		h	b	H	F	L	H1	Screw	Wrench
TDHR1010H27	TDHL1010H27	TDG27**		10	10	10	10	100	9	L44M5X13A	T-20
TDHR1212H27	TDHL1212H27			12	12	12	12	100	8		
TDHR1616H27	TDHL1616H27			16	16	16	16	110	6		
TDHR2020K27	TDHL2020K27			20	20	20	20	125	2		
TDHR2525M27	TDHL2525M27			25	25	25	25	150	–		

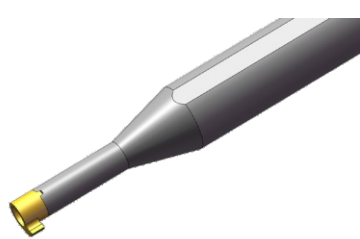
Internal deep grooving inserts



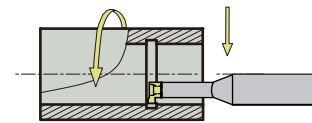
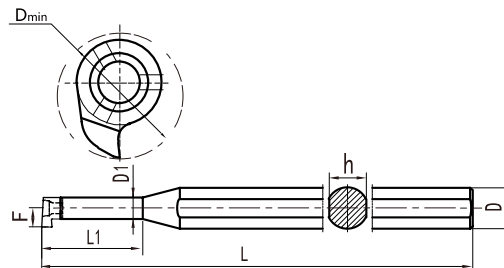
Inserts		W	B	r	WMG015	WKG010	Tool holder	F	D	T	d
GK7R100-L1.5	7	1.0	1.5	0.1	☆	☆	KGK7R0012H075 KGK7R0016K075 KGK7R0020M075	4.1	5.2	5.2	2.7
GK7R120-L1.5		1.2		0.1	☆	☆					
GK7R125-L1.5		1.25		0.1	☆	☆					
GK7R150-L1.5		1.5		0.1	☆	☆					
GK7R175-L1.5		1.75		0.1	☆	☆					
GK7R200-L1.5		2.0		0.1	☆	☆					
GK7R100	7.5	1.0	2	0.1	★	☆	KGK7R0012H075 KGK7R0016K075 KGK7R0020M075	4.6	5.2	5.2	2.7
GK7R120		1.2		0.1	★	☆					
GK7R125		1.25		0.1	★	☆					
GK7R150		1.5		0.1	★	☆					
GK7R175		1.75		0.1	★	☆					
GK7R200		2.0		0.1	★	☆					
GK7R225		2.25		0.1	★	☆					
GK7R250		2.5		0.1	★	☆					
GK7R300		3.0		0.1	★	☆					
GK12R150	12	1.5	4.3	0.1	★	☆	KGK12R0012H12 KGK12R0016K12 KGK12R0020M12	8.05	7.3	5.9	3.6
GK12R160		1.6		0.1	★	☆					
GK12R200		2.0		0.1	★	☆					
GK12R225		2.25		0.2	★	☆					
GK12R240		2.4		0.2	★	☆					
GK12R250		2.5		0.2	★	☆					
GK12R280		2.8		0.2	★	☆					
GK12R300		3.0		0.2	★	☆					
GK12R350		3.5		0.2	★	☆					
GK12R400		4.0		0.2	☆	☆					
GK12R480		4.8		0.2	☆	☆					
GK18R200	18.5	2.0	7	0.2	★	☆	KGK18R0016L18.5 KGK18R0020M18.5 KGK18R0025N18.5	12.7	11.2	7.9	5.1
GK18R225		2.25		0.2	★	☆					
GK18R240		2.4		0.2	★	☆					
GK18R250		2.5		0.2	★	☆					
GK18R280		2.8		0.2	★	☆					
GK18R300		3.0		0.2	★	☆					
GK18R350		3.5		0.2	★	☆					
GK18R400		4.0		0.2	★	☆					
GK18R480		4.8		0.2	☆	☆					
GK18R500		5.0		0.2	☆	☆					

★ Standard stock ☆ Order production

KGK Internal grooving tool holder



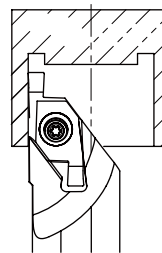
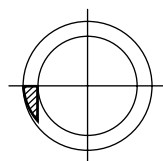
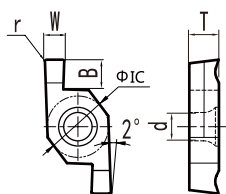
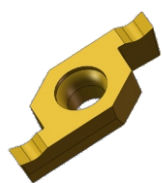
Right hand shown



Tool holder	Inserts	Dmin	L1	L	D1	D	h	F	Screw	Wrench
KGK7R0012H075	GK7R	same with Inserts Dmin	18	100	5.2	12	11	same with Inserts F	L60M2.2*7.5*D3	T-7
KGK7R0016K075			18	125	5.2	16	15		L60M2.2*7.5*D3	T-7
KGK7R0020M075			18	150	5.2	20	19		L60M2.2*7.5*D3	T-7
KGK12R0012H12	GK12R		25	100	7.3	12	11		L60M3*12*D4	T-10
KGK12R0016K12			25	125	7.3	16	15		L60M3*12*D4	T-10
KGK12R0020M12			25	150	7.3	20	19		L60M3*12*D4	T-10
KGK18R0016L18.5	GK18R		38	135	11.2	16	15		L60M4.5*16*D6.6	T-20
KGK18R0020M18.5			38	150	11.2	20	19		L60M4.5*16*D6.6	T-20
KGK18R0025N18.5			38	160	11.2	25	24		L60M4.5*16*D6.6	T-20

VC Internal end face grooving inserts

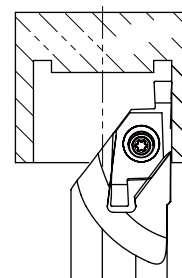
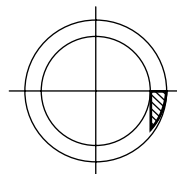
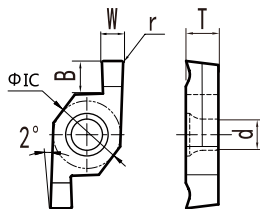
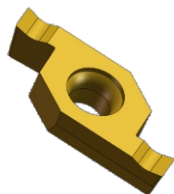
Right hand



Inserts	End face diameter range	W	B	r	WMG015	WKG010	IC	d	T
VC16R100-DM20L	>20mm	1.00	2.5	0.1	★	☆	9.525	4.4	4.6
VC16R125-DM20L	>20mm	1.25	2.5	0.1	★	☆			
VC16R150-DM20L	>20mm	1.50	4.8	0.2	★	☆			
VC16R175-DM20L	>20mm	1.75	4.8	0.2	★	☆			
VC16R200-DM20L	>20mm	2.00	4.8	0.2	★	☆			
VC16R225-DM20L	>20mm	2.25	4.8	0.2	★	☆			
VC16R250-DM20L	>20mm	2.50	4.8	0.2	★	☆			
VC16R275-DM20L	>20mm	2.75	4.8	0.2	★	☆			
VC16R300-DM20L	>20mm	3.00	4.8	0.2	★	☆			

★ Standard stock ☆ Order production

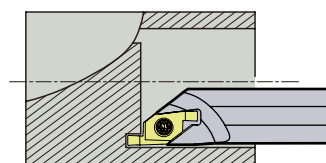
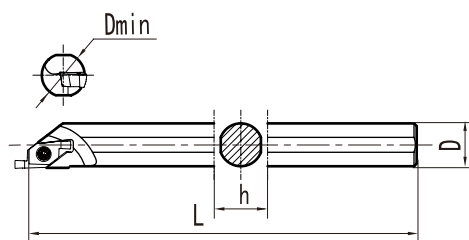
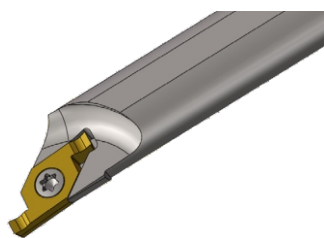
Left hand



Inserts	End face diameter range	W	B	r	WMG015	WKG010	IC	d	T
VC16L100-DM20R	>20mm	1.00	2.5	0.1	☆	☆	9.525	4.4	4.6
VC16L125-DM20R	>20mm	1.25	2.5	0.1	☆	☆			
VC16L150-DM20R	>20mm	1.50	4.8	0.2	☆	☆			
VC16L175-DM20R	>20mm	1.75	4.8	0.2	☆	☆			
VC16L200-DM20R	>20mm	2.00	4.8	0.2	☆	☆			
VC16L225-DM20R	>20mm	2.25	4.8	0.2	☆	☆			
VC16L250-DM20R	>20mm	2.50	4.8	0.2	☆	☆			
VC16L275-DM20R	>20mm	2.75	4.8	0.2	☆	☆			
VC16L300-DM20R	>20mm	3.00	4.8	0.2	☆	☆			

★ Standard stock ☆ Order production

SVFPR Grooving tool holder

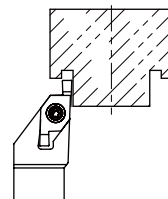
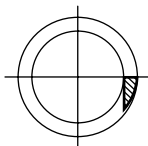
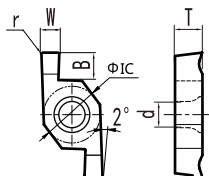


Right hand shown

Tool holder		Inserts	Dmin	D	L	h	Screw	Wrench
Right hand	S16M-SVFPR16-18	VC16R**-DM20L	18	16	150	15	L60M4*8.5*D5.7	T-15
	S20Q-SVFPR16-22		22	20	180	19	L60M4*8.5*D5.7	T-15
	S25R-SVFPR16-27		27	25	200	24	L60M4*8.5*D5.7	T-15
	S32S-SVFPR16-34		34	32	250	30	L60M4*8.5*D5.7	T-15
Left hand	S16M-SVFPL16-18	VC16L**-DM20R	18	16	150	15	L60M4*8.5*D5.7	T-15
	S20Q-SVFPL16-22		22	20	180	19	L60M4*8.5*D5.7	T-15
	S25R-SVFPL16-27		27	25	200	24	L60M4*8.5*D5.7	T-15
	S32S-SVFPL16-34		34	32	250	30	L60M4*8.5*D5.7	T-15

VC End face grooving inserts

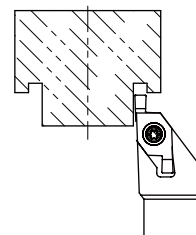
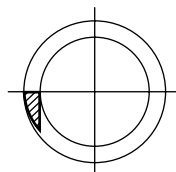
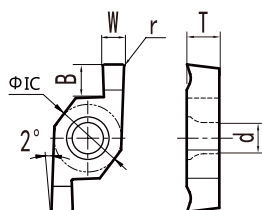
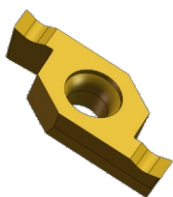
Right hand



Inserts	End face diameter range	W	B	r	WMG015	WKG010	IC	d	T
VC16R100-DM20R	>20mm	1.00	2.5	0.1	☆	☆	9.525	4.4	4.6
VC16R125-DM20R	>20mm	1.25	2.5	0.1	☆	☆			
VC16R150-DM20R	>20mm	1.50	4.8	0.2	☆	☆			
VC16R175-DM20R	>20mm	1.75	4.8	0.2	☆	☆			
VC16R200-DM20R	>20mm	2.00	4.8	0.2	☆	☆			
VC16R225-DM20R	>20mm	2.25	4.8	0.2	☆	☆			
VC16R250-DM20R	>20mm	2.50	4.8	0.2	☆	☆			
VC16R275-DM20R	>20mm	2.75	4.8	0.2	☆	☆			
VC16R300-DM20R	>20mm	3.00	4.8	0.2	☆	☆			

★ Standard stock ☆ Order production

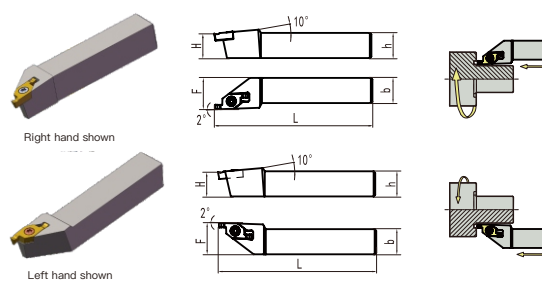
Left hand



Inserts	End face diameter range	W	B	r	WMG015	WKG010	IC	d	T
VC16L100-DM20L	>20mm	1.00	2.5	0.1	☆	☆	9.525	4.4	4.6
VC16L125-DM20L	>20mm	1.25	2.5	0.1	☆	☆			
VC16L150-DM20L	>20mm	1.50	4.8	0.2	☆	☆			
VC16L175-DM20L	>20mm	1.75	4.8	0.2	☆	☆			
VC16L200-DM20L	>20mm	2.00	4.8	0.2	☆	☆			
VC16L225-DM20L	>20mm	2.25	4.8	0.2	☆	☆			
VC16L250-DM20L	>20mm	2.50	4.8	0.2	☆	☆			
VC16L275-DM20L	>20mm	2.75	4.8	0.2	☆	☆			
VC16L300-DM20L	>20mm	3.00	4.8	0.2	☆	☆			

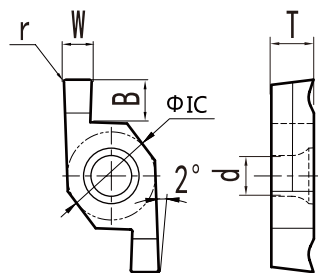
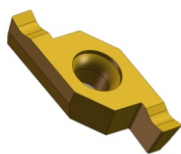
★ Standard stock ☆ Order production

SVFC Grooving tool holder



Tool holder		Inserts	h	b	L	F	H	Screw	Wrench
Right hand	SVFCR1616H-16	VC16R**-DM20R	16	16	100	20	16	L60M4*8.5*D5.7	T-15
	SVFCR2020K-16		20	20	125	25	20	L60M4*8.5*D5.7	T-15
	SVFCR2525M-16		25	25	150	32	25	L60M4*8.5*D5.7	T-15
Left hand	SVFCL1616H-16	VC16L**-DM20L	16	16	100	20	16	L60M4*8.5*D5.7	T-15
	SVFCL2020K-16		20	20	125	25	20	L60M4*8.5*D5.7	T-15
	SVFCL2525M-16		25	25	150	32	25	L60M4*8.5*D5.7	T-15

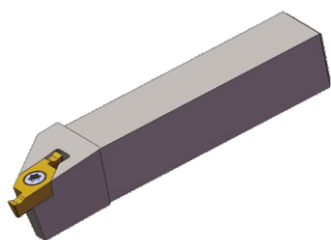
VC Grooving inserts



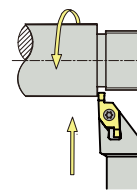
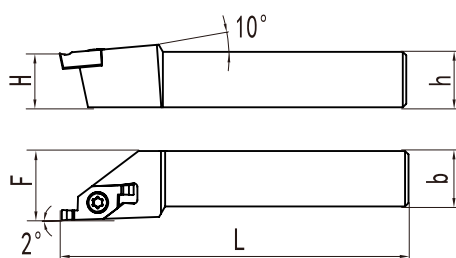
Inserts	W	B	r	WMG015	WKG010	IC	d	T
VC16R100	1.00	2.5	0.1	☆	☆	9.525	4.4	4.6
VC16R125	1.25	2.5	0.1	☆	☆			
VC16R150	1.50	4.8	0.2	☆	☆			
VC16R175	1.75	4.8	0.2	☆	☆			
VC16R200	2.00	4.8	0.2	☆	☆			
VC16R225	2.25	4.8	0.2	☆	☆			
VC16R250	2.50	4.8	0.2	☆	☆			
VC16R275	2.75	4.8	0.2	☆	☆			
VC16R300	3.00	4.8	0.2	☆	☆			
VC16L100	1.00	2.5	0.1	☆	☆			
VC16L125	1.25	2.5	0.1	☆	☆			
VC16L150	1.50	4.8	0.2	☆	☆			
VC16L175	1.75	4.8	0.2	☆	☆			
VC16L200	2.00	4.8	0.2	☆	☆			
VC16L225	2.25	4.8	0.2	☆	☆			
VC16L250	2.50	4.8	0.2	☆	☆			
VC16L275	2.75	4.8	0.2	☆	☆			
VC16L300	3.00	4.8	0.2	☆	☆			

★ Standard stock ☆ Order production

SVFC Grooving tool holder



Right hand shown

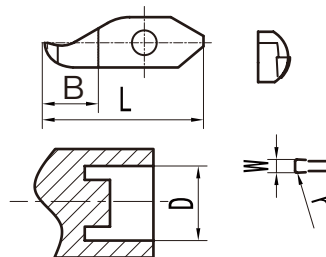


Tool holder		Inserts	h	b	L	F	H	Screw	Wrench
Right hand	SVFCR1616H-16	VC16R**	16	16	100	20	16	L60M4*8.5*D5.7	T-15
	SVFCR2020K-16		20	20	125	25	20	L60M4*8.5*D5.7	T-15
	SVFCR2525M-16		25	25	150	32	25	L60M4*8.5*D5.7	T-15
Left hand	SVFCL1616H-16	VC16L**	16	16	100	20	16	L60M4*8.5*D5.7	T-15
	SVFCL2020K-16		20	20	125	25	20	L60M4*8.5*D5.7	T-15
	SVFCL2525M-16		25	25	150	32	25	L60M4*8.5*D5.7	T-15

SPDR End face grooving inserts



Right hand shown



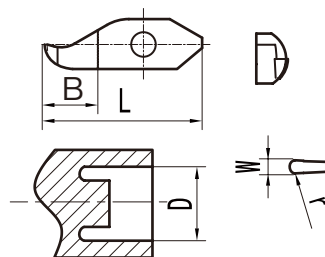
Inserts	min	max	W	B	r	L	WMG015	WKG010	Tool holder
SPDR080DM06A	6	∞	0.8	4.5	0.1	13.6	★	☆	KSPDR0010F06A KSPDR0012F06A
SPDR100DM06A	6	∞	1.0	6	0.15		★	☆	
SPDR120DM06A	6	∞	1.2	6	0.15		★	☆	
SPDR150DM06A	6	∞	1.5	6	0.15		★	☆	
SPDR175DM06A	6	∞	1.75	6	0.15		★	☆	
SPDR200DM06A	6	∞	2.0	6	0.15		★	☆	
SPDR100DM10	10	32	1.0	5.4	0.2	25.1	★	☆	KSPDR0012F10 KSPDR0016F10 KSPDR0020F10
SPDR150DM10	10	32	1.5	6.4	0.2		★	☆	
SPDR200DM10	10	∞	2.0	7.8	0.2		★	☆	
SPDR250DM10	10	∞	2.5	9.9	0.2		★	☆	
SPDR300DM10	10	∞	3.0	9.9	0.2		★	☆	

★ Standard stock ☆ Order production

SPDR End face grooving inserts(Round)



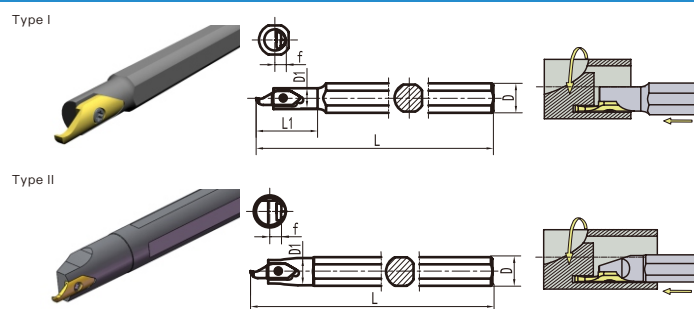
Right hand shown



Inserts	min	max	W	B	r	L	WMG015	WKG010	Tool holder
SPDR080DM06A-R0.40	6	∞	0.80	4.5	0.40	13.6	★	☆	KSPDR0010F06A KSPDR0012F06A
SPDR100DM06A-R0.50	6	∞	1.00	6.0	0.50		★	☆	
SPDR120DM06A-R0.60	6	∞	1.20	6.0	0.60		★	☆	
SPDR150DM06A-R0.75	6	∞	1.50	6.0	0.75		★	☆	
SPDR180DM06A-R0.90	6	∞	1.80	6.0	0.90		★	☆	
SPDR200DM06A-R1.00	6	∞	2.00	6.0	1.00		★	☆	
SPDR100DM10-R0.50	10	32	1.00	5.4	0.50	25.1	★	☆	KSPDR0012F10 KSPDR0016F10 KSPDR0020F10
SPDR150DM10-R0.75	10	32	1.50	6.4	0.75		★	☆	
SPDR200DM10-R1.00	10	∞	2.00	7.8	1.00		★	☆	

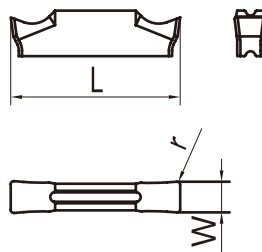
★ Standard stock ☆ Order production

Internal end face grooving tool holder



Tool holder	Inserts	Type	D	D1	L	L1	f	Screw	Wrench
KSPDR0010F06A	SPDR**DM06A	Type I	10	6	90	18	3	L60M2*6*D2.8	T-6
KSPDR0012H06A			12	6	100	18	3	L60M2*6*D2.8	T-6
KSPDR0016K06A			16	6	125	18	3	L60M2*6*D2.8	T-6
KSPDR0012H10	SPDR**DM10		12	10	100	32	5.2	L60M3*8*D4	T-10
KSPDR0016K10			16	10	125	36	5.2	L60M3*8*D4	T-10
KSPDR0020M10			20	10	150	42	5.2	L60M3*8*D4	T-10
KSPDR0012K10F		Type II	12	11.5	125	—	6.8	L60M3*8*D4	T-10
KSPDR0016M10F			16	15.5	150	—	8.8	L60M3*8*D4	T-10
KSPDR0020P10F			20	19.5	170	—	10.8	L60M3*8*D4	T-10

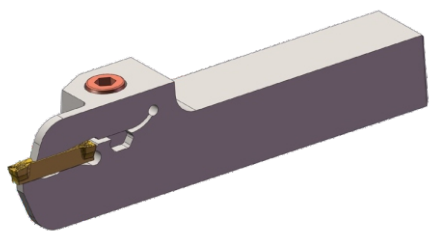
GX Grooving and Cut-off inserts



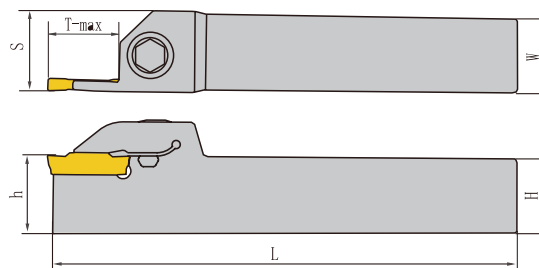
	Inserts	W	r	L	WMG015	WKG010
	GX22E200N02-IS	2.0	0.2	22	★	☆
	GX22E250N02-IS	2.5	0.2	22		
	GX22E300N03-IS	3.0	0.3	22	★	☆
	GX25E400N04-IS	4.0	0.35	25	★	☆
	GX25E500N04-IS	5.0	0.4	25	★	☆
	GX25E600N04-IS	6.0	0.4	25		

★ Standard stock ☆ Order production

GX Grooving tool holder

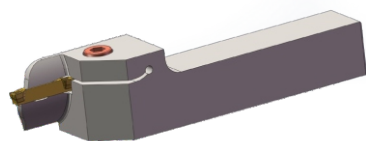


Right hand shown

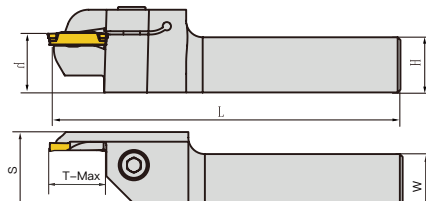
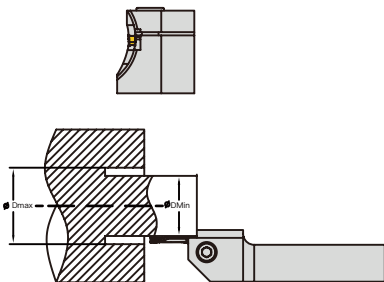


Left hand	Right hand	Inserts	Tmax	H	W	L	S	Screw	Wrench
KGXR2020K200	KGXL2020K200	GX22E200*	20	20	20	128	20.5	M6-1.0*22*D10	S5L
KGXR2525M200	KGXL2525M200			25	25	150	25.5		
KGXR3232P200	KGXL3232P200			32	32	170	32.5		
KGXR2020K300	KGXL2020K300	GX22E300*	20	20	20	128	20.5		
KGXR2525M300	KGXL2525M300			25	25	150	25.5		
KGXR3232P300	KGXL3232P300			32	32	170	32.5		
KGXR2020K400	KGXL2020K400	GX22E400*	23	20	20	128	20.5		
KGXR2525M400	KGXL2525M400			25	25	150	25.5		
KGXR3232P400	KGXL3232P400			32	32	170	32.5		
KGXR2020K500	KGXL2020K500	GX22E500*	23	20	20	128	20.5		
KGXR2525M500	KGXL2525M500			25	25	150	25.5		
KGXR3232P500	KGXL3232P500			32	32	170	32.5		

GX Grooving tool holder

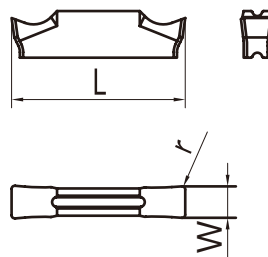
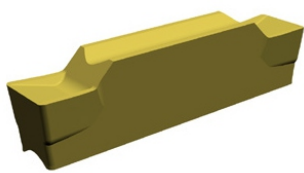


Right hand shown



Tool holder	Inserts	Dmin	Dmax	Tmax	h	H	W	L	Screw	Wrench
KGXR2020K300-DM30-51	GX22E300*	30	51	20	22.6	20	20	128	M6-1.0*22*D10	S5L
KGXR2020K300-DM45-71		45	71		22	20	20	128		
KGXR2020K300-DM65-106		65	106		22	20	20	128		
KGXR2020K300-DM100-186		100	186		22	20	20	128		
KGXR2525M300-DM30-51	GX22E300*	30	51	20	27.6	25	25	150		
KGXR2525M300-DM45-71		45	71		27	25	25	150		
KGXR2525M300-DM65-106		65	106		27	25	25	150		
KGXR2525M300-DM100-186		100	186		27	25	25	150		
KGXR2020K400-DM30-51	GX22E400*	30	51	20	22	20	20	128		
KGXR2020K400-DM45-71		45	71		22	20	20	128		
KGXR2020K400-DM65-106		65	106		22	20	20	128		
KGXR2020K400-DM100-186		100	186		22	20	20	128		
KGXR2525M400-DM30-51	GX22E400*	30	51	20	27	25	25	150		
KGXR2525M400-DM45-71		45	71		27	25	25	150		
KGXR2525M400-DM65-106		65	106		27	25	25	150		
KGXR2525M400-DM100-186		100	186		27	25	25	150		

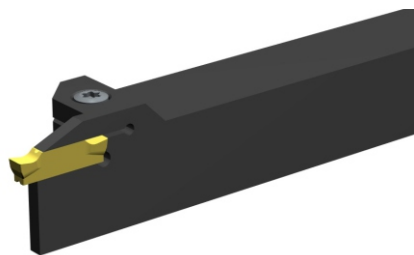
TD Grooving and Cut-off inserts



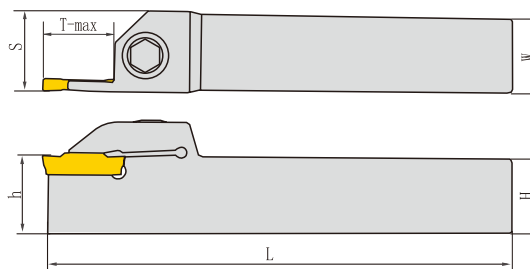
Chipbreaker		Inserts	W	r	WMG015	WPG020	WKG010	L	S	D
		TDC2-LH	2	0.2	★	★		20	3.9	1.7
		TDC3-LH	3	0.2	★	★		20	4	2.4
		TDC4-LH	4	0.3	★	★		20	4.05	3
		TDC5-LH	5	0.3	★	★		25	4.89	4
		TDJ2	2	0.2	★	★		20	3.9	1.7
		TDJ3	3	0.2	★	★		20	4	2.4
		TDJ4	4	0.3	★	★		20	4.05	3
		TDJ5	5	0.3	★	★		25	4.89	4
		TDC2	2	0.2	★	★		20	3.9	1.7
		TDC3	3	0.2	★	★		20	4	2.4
		TDC4	4	0.3	★	★		20	4.05	3
		TDC5	5	0.3	★	★		25	4.89	4
		TDT3	3	0.2	★	★		20	4	2.4
		TDT4	4	0.3	★	★		20	4.05	3
		TDT5	5	0.3	★	★		25	4.89	4

★ Standard stock ☆ Order production

TD Grooving tool holder



Right hand shown

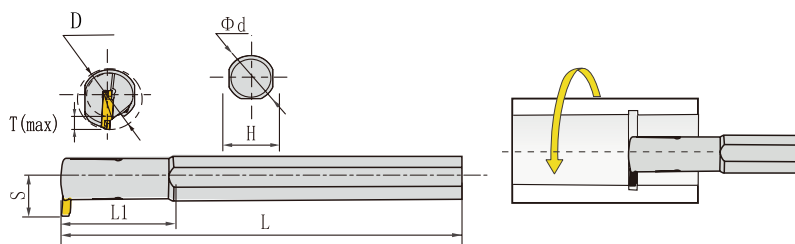


Right hand	Left hand	Inserts	Tmax	H	W	L	S	Screw	Wrench
TTER1616-2.0	TTEL1616-2.0	TD*2	17	16	16	125	15.1	M5-0.8*16*D8.5	S4L
TTER2020-2.0	TTEL2020-2.0			20	20	125	19.1	M6-1.0*16*D10	S6L
TTER2525-2.0	TTEL2525-2.0			25	25	150	24.1	M6-1.0*16*D10	S6L
TTER1616-3.0	TTEL1616-3.0	TD*3	20	16	16	125	14.8	M5-0.8*16*D8.5	S4L
TTER2020-3.0	TTEL2020-3.0			20	20	125	18.8	M6-1.0*16*D10	S6L
TTER2525-3.0	TTEL2525-3.0			25	25	150	23.8	M6-1.0*16*D10	S6L
TTER2020-4.0	TTEL2020-4.0	TD*4	20	20	20	125	18.5	M6-1.0*16*D10	S6L
TTER2525-4.0	TTEL2525-4.0			25	25	150	23.5	M6-1.0*16*D10	S6L
TTER2525-5.0	TTEL2525-5.0	TD*5	25	25	25	150	23.1	M6-1.0*16*D10	S6L
TTER3232-5.0	TTEL3232-5.0			32	32	170	29.1	M8-1.25*20*D13	S7L

TD Grooving tool holder

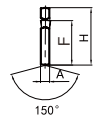
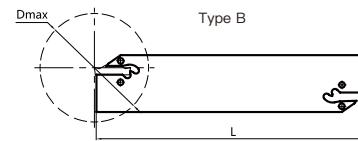
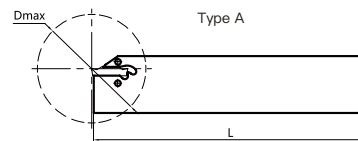


Right hand shown



Right hand	Left hand	Inserts	Tmax	Dmin	L1	L	F	A	d	Screw	Wrench
TTIR16-2C	TTIL16-2C	TD*2	8.5	25	—	150	16.5	1.8	16	M4-0.7*10*D7	S3L
TTIR20-2C	TTIL20-2C		6.0	25	40	180	15.8	1.6	20	M5-0.8*16*D8.5	S4L
TTIR25-2C	TTIL25-2C		8.5	25	40	200	17.5	1.6	25	M5-0.8*16*D8.5	S4L
TTIR20-3C	TTIL20-3C	TD*3	6.0	25	40	180	15.8	2.1	20	M5-0.8*16*D8.5	S4L
TTIR25-3C	TTIL25-3C		8.5	25	40	200	17.5	2.1	25	M5-0.8*16*D8.5	S4L
TTIR32-3C	TTIL32-3C		10	31	60	250	19.8	2.1	32	M6-1.0*16*D10	S5L
TTIR20-4C	TTIL20-4C	TD*4	6.0	25	40	180	15.8	2.9	20	M5-0.8*16*D8.5	S4L
TTIR25-4C	TTIL25-4C		8.5	25	40	200	17.5	2.9	25	M5-0.8*16*D8.5	S4L
TTIR32-4C	TTIL32-4C		4.7	31	60	250	20.8	2.9	32	M6-1.0*16*D10	S5L
TTIR25-5C	TTIL25-5C	TD*5	5.2	31	40	200	17.3	3.9	25	M5-0.8*16*D8.5	S4L
TTIR32-5C	TTIL32-5C		4.7	31	60	250	20.8	3.9	32	M6-1.0*16*D10	S5L

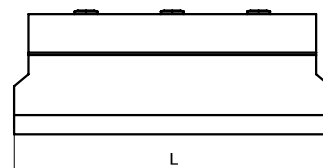
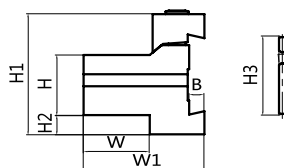
TD Grooving and Cut-off Blade



Toolholder	Type	Inserts	Dmax	H	L	F	A	Wrench	Block
TGB26-2	A	TD*2	40	26	150	21.4	1.8	EDG-33B	TTBN**-26
TGB32-2	B		50	32		24.9	1.8		TTBN**-32
TGB26-3	A	TD*3	50	26		21.4	2.4		TTBN**-26
TGB32-3	B		100	32		24.9	2.4		TTBN**-32
TGB26-4	A	TD*4	80	26		21.4	3.2		TTBN**-26
TGB32-4	B		100	32		24.6	3.2		TTBN**-32
TGB32-5	B	TD*5	120	32		24.6	4.0		TTBN**-32
TGB32-6	B	TD*6					5.2		

EDG-33B wrench needs to be ordered separately .

TD Grooving and Cut-off tool holder



Toolholder	Type	H	W	H3	L	H1	H2	W1	B	Screw	Wrench
TTBU20-26	TGB 26-**	20	21.5	26	86	44	9	38	5	M5-0.8*16*D8.5	S4L
TTBU25-26		25	23	26	86	45	5	42	5	M5-0.8*16*D8.5	S4L
TTBU20-32	TGB 32-**	20	19	32	110	50	13	38	5.3	M6-1.0*16*D10	S5L
TTBU25-32		25	23	32	110	50	8	42	5.3	M6-1.0*16*D10	S5L
TTBU32-32		32	29	32	110	54	5	48	5.3	M6-1.0*16*D10	S5L



WC-Co

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