

Grooving & parting tools



Cutting speed recommendations

Material	Carbon steel S50C\Q235		Alloy steel 25–35HRC 4Cr5MoSiVi/Cr12		Stainless steel SUS304/316/ OCr19Ni9		Cast iron HT250/QT450		Aluminium alloy	
	Vc=m/min	f=mm/rev	Vc=m/min	f=mm/rev	Vc=m/min	f=mm/rev	Vc=m/min	f=mm/rev	Vc=m/min	f=mm/rev
External Circular groove	80–150	0.05–0.30	30–100	0.05–0.30	70–120	0.05–0.30	80–150	0.05–0.30	120–300	0.05–0.30
Internal Circular groove	60–120	0.05–0.30	20–80	0.05–0.30	50–100	0.05–0.30	50–100	0.05–0.30	80–250	0.05–0.30
End face groove	80–150	0.05–0.30	30–100	0.05–0.30	70–120	0.05–0.30	60–120	0.05–0.30	80–250	0.05–0.30

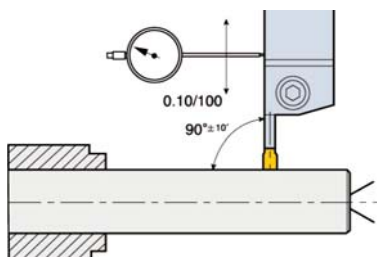
■ Toolholder or blade Size

To minimize risk of vibration and deflection
always choose:

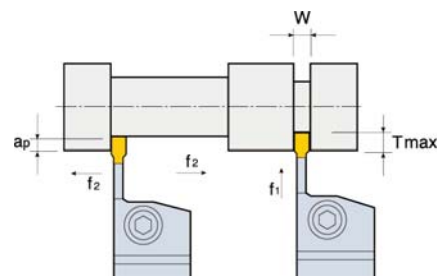
- Toolholder or blade with the smallest possible overhang
- Toolholder with maximum shank dimension

■ 90° Mounting

It is very important that the insert is mounted at 90° to the center line of the workpiece in order to obtain a perpendicular surface and reduce the risk of vibration.



■ Machining Definitions



Grooving

- Vc–Cutting Speed(m/min)
- T–Maximum Depth(mm)
- f₁–Feed in Radial Direction(mm/rev)

Turning

- Vc–Cutting Speed(m/min)
- a_{pmax}–Maximum Depth of Cut(mm)
- f₂–Feed in Lateral Direction(mm/rev)

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

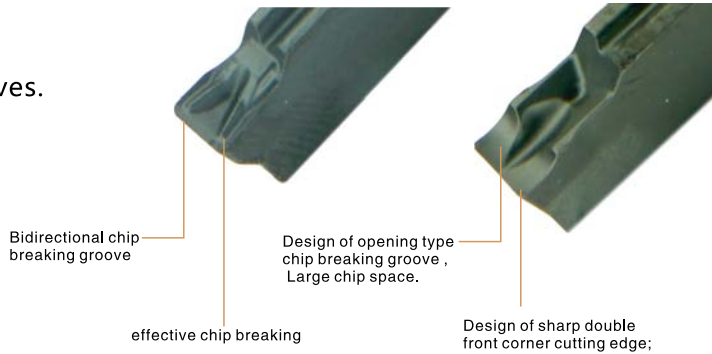
Solid carbide end mills

Solid carbide drill & taps

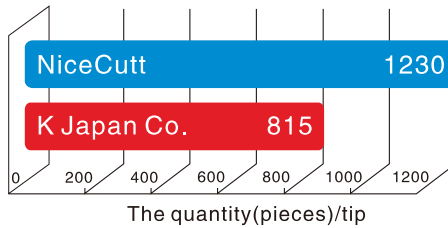
Technical information

MGMN** Case Study

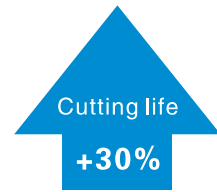
- 1.It has square head and double grooves.
- The notch depth is less than 20mm
- 2.Suitable for P/M/K processing
- 3.Suitable for stainless steel , high temperature alloy steel , titanium alloy steel which used in general industry and aerospace industry.



Workpiece material	316(HB200)Stainless steel
Machining parts	Slot cutters
Insert	MGMN300-T-NS4125

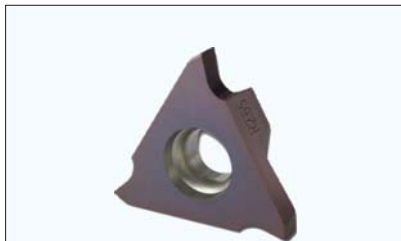


The cutting parameters
 $V_c=106\text{m/min}$
 $f=0.11\text{mm/r}$
 $a_p=3\text{mm}$
 $\phi d=22\text{mm}$

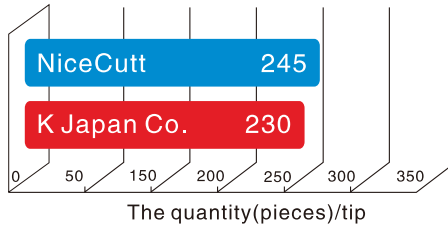


GBA43** Case Study

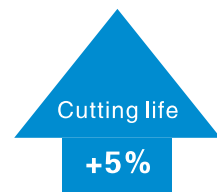
- 1.Fine cutting groove
- 2.E level accuracy
- 3.Suitable for P/M/K processing















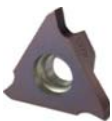











Workpiece material	20CrMnTi(180-220HB)
Machining parts	Slot cutters
Insert	GBA43250-NS4125



The cutting parameters
 $V_c=114\text{m/min}$
 $f=0.10\text{mm/r}$
 $a_p=2.5\text{mm}$
 $\phi d=45\text{mm}$



Grooving & parting tools

<p>GER/L-A</p>  <p>P118</p>	<p>GER/L-AR</p>  <p>P118</p>	<p>GER/L-C</p>  <p>P118</p>	<p>GER/L-D</p>  <p>P118</p>
<p>GER/L-D</p>  <p>P118</p>	<p>GER/L-CR</p>  <p>P119</p>	<p>GER-D</p>  <p>P119</p>	<p>TKF-S</p>  <p>P119</p>
<p>NG2/NG3</p>  <p>P119~P120</p>	<p>NR2/NR3</p>  <p>P120</p>	<p>GBA32R/43R</p>  <p>P120</p>	<p>GBA32</p>  <p>P121</p>
<p>GBA43</p>  <p>P121</p>	<p>T11EN</p>  <p>P121</p>	<p>T16EN</p>  <p>P121~P122</p>	<p>FMM</p>  <p>P122</p>
<p>FGD</p>  <p>P122</p>	<p>MFMN300R</p>  <p>P122</p>	<p>SP-NM</p>  <p>P122</p>	<p>MGGN*L</p>  <p>P122</p>
<p>MGMN*J</p>  <p>P122</p>	<p>MGMN*T</p>  <p>P122</p>	<p>MRMN*M</p>  <p>P123</p>	<p>MRGN*M</p>  <p>P123</p>

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

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Technical information

ZPE-MG



P123

TDJ



P123

TDC



P123

THC-CE



P123

TKFB*M



P123

SIGER/L



P124

SEGER/L**



P124

GNSR/L



P125

GNAR/L**



P125

KTKFR/L



P126

TKGFL



P126

SGWHR/L



P127

MGWHR/L



P127

SPB



P128

ZQR/L



P128

QE*S



P129

SMBB



P129

MGFHRR



P130

MGFHR/L



P130

MGFVR/L



P131

MGNVR/L



P131

FGDHX



P132

MGEHR/L



P133

TTER/L



P134

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- continuous
- light Interruption
- Interruption

P	Steel		
M	Stainless Steel		
K	Cast Iron		
N	Non-ferrous Metal		
S	Heat-resistant Alloy, TiAlloy		

The basic shape of inserts	OrderingCode	Stock		Dimensions(mm)							CVD			PVD		Uncoated	
		R	L	W	R	B	d	L	H	A	NP1115	NP1225	NM1125	NM3125	NS4115	NS4125	NN9115
	GER/L200-100CR	●	○	2.00	1.00	2.50	2.80	11.48	4.05	5.8					●	○	
	GER/L250-125CR	●	○	2.50	1.25	2.50	2.80	11.48	4.05	5.8					●	○	
	GER/L300-150CR	●	○	3.00	1.50	2.50	2.80	11.48	4.05	5.8					●	○	
	GER/L200-100DR	●	○	2.00	1.00	3.20	4.40	16.44	5.05	6.8					●	○	
	GER/L300-150DR	●	○	3.00	1.50	4.50	4.40	16.44	5.05	6.8					●	○	
	GER150DM10-D	●		1.50	0.1	2.5	3.0		5.05	10					●	○	
	GER200DM10-D	●		2.00	0.1	3	3.0		5.05	10					●	○	
	GER250DM15-D	●		2.50	0.2	3.2	3.0		5.05	15					●	○	
	GER300DM15-D	●		3.00	0.2	4.5	3.0		5.05	15					●	○	
	GER400DM15-D	●		4.00	0.2	4.5	3.0		5.05	15					●	○	
	TKF12R/L050-S	●	○	0.5	0.03	3	5	0°	8.7	5					●	○	
	TKF12R/L070-S	●	○	0.7	0.03	3	5	0°	8.7	8					●	○	
	TKF12R/L100-S	●	○	1	0.03	3	5	0°	8.7	12					●	○	
	TKF12R/L150-S	●	○	1.5	0.03	3	5	0°	8.7	12					●	○	
	TKF12R/L200-S	●	○	2	0.03	3	5	0°	8.7	12					●	○	
	TKF12R/L050-S16R	●	○	0.5	0.05	3	5	16°	8.7	5					●	○	
	TKF12R/L070-S16R	●	○	0.7	0.05	3	5	16°	8.7	8					●	○	
	TKF12R/L100-S16R	●	○	1	0.05	3	5	16°	8.7	12					●	○	
	TKF12R/L150-S16R	●	○	1.5	0.05	3	5	16°	8.7	12					●	○	
	TKF12R/L200-S16R	●	○	2	0.05	3	5	16°	8.7	12					●	○	
		TKF16R/L150-S	●	○	1.5	0.05	4	5	0°	9.5	16					●	○
		TKF16R/L200-S	●	○	2	0.05	4	5	0°	9.5	16					●	○
TKF16R/L250-S		●	○	2.5	0.05	4	5	0°	9.5	16					●	○	
TKF16R/L300-S		●	○	3	0.05	4	5	0°	9.5	16					●	○	
TKF16R/L150-S16R		●	○	1.5	0.05	4	5	16°	9.5	16					●	○	
	TKF16R/L200-S16R	●	○	2	0.05	4	5	16°	9.5	16					●	○	
	TKF16R/L250-S16R	●	○	2.5	0.05	4	5	16°	9.5	16					●	○	
	TKF16R/L300-S16R	●	○	3	0.05	4	5	16°	9.5	16					●	○	
	NG2031R/L	○	○	0.79	0.09	1.27	5.56	8.74	3.81								
	NG2M100R/L	●	●	1.00	0.09	1.27	5.56	8.74	3.81						●	○	
	NG2047LR/L	●	●	1.19	0.09	1.27	5.56	8.74	3.81					●	○		
	NG2M120R/L	○	○	1.20	0.09	1.27	5.56	8.74	3.81						○		
	NG2M150R/L	●	●	1.50	0.19	2.79	5.56	8.74	3.81						●		
	NG2062R/L	●	●	1.58	0.19	2.79	5.56	8.74	3.81					●	○		
	NG2M170R/L	○	○	1.70	0.19	2.79	5.56	8.74	3.81						○		
	NG2078R/L	●	●	1.98	0.19	2.79	5.56	8.74	3.81					●	○		
	NG2M200R/L	○	○	2.00	0.19	2.79	5.56	8.74	3.81						○		
	NG2M220R/L	●	●	2.20	0.19	2.79	5.56	8.74	3.81					●	○		
	NG2M250R/L	○	○	2.50	0.19	2.79	5.56	8.74	3.81					●	●		
	NG2M275R/L	○	○	2.75	0.19	2.79	5.56	8.74	3.81								
	NG2M300R/L	○	○	3.00	0.19	2.79	5.56	8.74	3.81						○		
	NG2125R/L	●	●	3.18	0.19	2.79	5.56	8.74	3.81					●	○		
NG2M325R/L	○	○	3.25	0.19	2.79	5.56	8.74	3.81						○			

● Stock ○ Available upon Order

Grooving & parting tools

- continuous
- light Interruption
- Interruption

P	Steel		
M	Stainless Steel		
K	Cast Iron		
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S	Heat-resistant Alloy, TiAlloy		

The basic shape of inserts	OrderingCode	Stock		Dimensions(mm)							CVD		PVD		Uncoated			
		R	L	W	R	B	d	L	H	A	NP1115	NP1225	NM1125	NM3125		NS4115	NS4125	NN9115
			NG3031R/L	●	●	0.79	0.09	1.27	8.74	16.1	4.95					●	○	
NG3M100R/L	●		●	1.00	0.19	1.91	8.74	16.1	4.95				●	○				
NG3047R/L	●		●	1.19	0.19	1.91	8.74	16.1	4.95				●	○				
NG3M120R/L	○		○	1.20	0.19	1.91	8.74	16.1	4.95				●	○				
NG3M150R/L	●		●	1.50	0.19	2.39	8.74	16.1	4.95				●	●				
NG3062R/L	●		●	1.58	0.19	2.39	8.74	16.1	4.95				●	○				
NG3070R/L	○		○	1.78	0.19	2.39	8.74	16.1	4.95				●	○				
NG3078R/L	●		●	1.98	0.19	2.39	8.74	16.1	4.95				●	○				
NG3M200R/L	●		●	2.00	0.19	2.39	8.74	16.1	4.95				●	○				
NG3M220R/L	○		○	2.20	0.19	2.39	8.74	16.1	4.95				●	○				
NG3094R/L	●		●	2.39	0.19	2.39	8.74	16.1	4.95				●	●				
NG3M250R/L	●		●	2.50	0.19	2.39	8.74	16.1	4.95				●	○				
NG3M275R/L	○		○	2.75	0.19	2.39	8.74	16.1	4.95				●	○				
NG3M300R/L	●		●	3.00	0.19	2.39	8.74	16.1	4.95				●	○				
NG3125R/L	●	●	3.18	0.19	2.39	8.74	16.1	4.95				●	●					
NG3M350R/L	●	●	3.50	0.19	2.39	8.74	16.1	4.95				●	○					
	NR2031R/L	○	○	1.58	0.79	1.27	5.56	8.74	3.81					○				
	NR2M100R/L	○	○	2.00	1.00	1.27	5.56	8.74	3.81					○				
	NR2047LR/L	○	○	2.38	1.19	1.27	5.56	8.74	3.81					○				
	NR2M150R/L	○	○	3.00	1.50	1.27	5.56	8.74	3.81					○	○			
	NR2062R/L	○	○	3.18	1.59	1.27	5.56	8.74	3.81					○				
	NR3031R/L	○	○	1.58	0.79	2.39	8.74	16.1	4.95					○				
	NR3M100R/L	●	●	2.00	1.00	2.39	8.74	16.1	4.95				●	○				
	NR3047R/L	○	○	2.38	1.19	2.39	8.74	16.1	4.95					○				
NR3M150R/L	●	●	3.00	1.50	2.39	8.74	16.1	4.95				●	○					
NR3062R/L	●	●	3.18	1.59	2.39	8.74	16.1	4.95				●	○					
	GBA32R050R/L	○	○	1.00	0.10	2.30	4.50		3.18	9.52				○	○			
	GBA32R075R/L	○	○	1.50	0.10	2.30	4.50		3.18	9.52				○	○			
	GBA32R100R/L	○	○	2.00	0.10	2.80	4.50		3.18	9.52				○	○			
	GBA32R125R/L	○	○	2.50	0.10	2.80	4.50		3.18	9.52				○	○			
	GBA32R150R/L	○	○	3.00	0.20	2.80	4.50		3.18	9.52				○	○			
	GBA43R050R/L	○	○	1.00	0.50	2.30	5.40		4.76	12.70				○	○			
	GBA43R075R/L	○	○	1.50	0.75	2.30	5.40		4.76	12.70				○	○			
	GBA43R100R/L	○	○	2.00	1.00	2.80	5.40		4.76	12.70				○	○			
	GBA43R125R/L	○	○	2.50	1.25	2.80	5.40		4.76	12.70				○	○			
	GBA43R150R/L	○	○	3.00	1.50	2.80	5.40		4.76	12.70				○	○			
GBA43R200R/L	○	○	4.00	2.00	5.00	5.40		4.76	12.70				○	○				
	GBA32050R/L	●	○	0.50	0.05	1.30	4.50		3.18	9.52				●	○			
	GBA32075R/L	●	●	0.75	0.10	2.10	4.50		3.18	9.52				●	○			
	GBA32080R/L	●	●	0.80	0.10	2.10	4.50		3.18	9.52				●	○			
	GBA32090R/L	●	○	0.85	0.10	2.10	4.50		3.18	9.52				●	○			
	GBA32100R/L	●	●	1.00	0.10	2.30	4.50		3.18	9.52				●	○			
GBA32110R/L	○	○	1.10	0.10	2.30	4.50		3.18	9.52				○	○				

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		R	L	W	R	B	d	L	H	A	NP1115	NP1225	NM1125	NM3125	NS4115	NS4125	NN9115
	GBA32120R/L	○	○	1.20	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32125R/L	●	●	1.25	0.10	2.30	4.50		3.18	9.52						●	○
	GBA32130R/L	○	○	1.30	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32140R/L	○	○	1.40	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32145R/L	○	○	1.45	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32150R/L	●	●	1.50	0.10	2.30	4.50		3.18	9.52						●	○
	GBA32160R/L	○	○	1.60	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32175R/L	●	○	1.75	0.10	2.30	4.50		3.18	9.52						●	○
	GBA32180R/L	○	○	1.80	0.10	2.30	4.50		3.18	9.52						○	○
	GBA32200R/L	●	●	2.00	0.10	2.80	4.50		3.18	9.52						●	○
	GBA32225R/L	○	○	2.25	0.10	2.80	4.50		3.18	9.52						○	○
	GBA32250R/L	●	●	2.50	0.10	2.80	4.50		3.18	9.52						●	○
	GBA32275R/L	○	○	2.75	0.10	2.80	4.50		3.18	9.52						○	○
	GBA32300R/L	●	○	3.00	0.20	2.80	4.50		3.18	9.52						●	○
	GBA43125R/L	●	○	1.25	0.20	2.00	5.40		4.76	12.70					●	○	
	GBA43140R/L	○	○	1.40	0.20	2.00	5.40		4.76	12.70					○	○	
	GBA43145R/L	○	○	1.45	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43150R/L	●	○	1.50	0.20	3.50	5.40		4.76	12.70					●	○	
	GBA43170R/L	○	○	1.70	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43175R/L	●	○	1.75	0.20	3.50	5.40		4.76	12.70					●	○	
	GBA43185R/L	○	○	1.85	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43195R/L	○	○	1.95	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43200R/L	●	○	2.00	0.20	3.50	5.40		4.76	12.70					●	○	
	GBA43225R/L	○	○	2.25	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43230R/L	○	○	2.30	0.20	3.50	5.40		4.76	12.70					○	○	
	GBA43250R/L	●	○	2.50	0.30	4.00	5.40		4.76	12.70					●	○	
	GBA43265R/L	○	○	2.65	0.30	4.00	5.40		4.76	12.70					○	○	
	GBA43280R/L	○	○	2.80	0.30	4.00	5.40		4.76	12.70					○	○	
GBA43300R/L	●	○	3.00	0.30	4.00	5.40		4.76	12.70					●	○		
GBA43350R/L	○	○	3.50	0.30	5	5.40		4.76	12.70					○	○		
GBA43400R/L	○	○	4.00	0.40	5	5.40		4.76	12.70					○	○		
	T11EN050R/L	○	○	0.50	0.06	1.00	3.00		3.10	6.35					○	○	
	T11EN060R/L	○	○	0.60	0.06	1.00	3.00		3.10	6.35					○	○	
	T11EN080R/L	○	●	0.80	0.06	1.20	3.00		3.10	6.35					●	○	
	T11EN100R/L	○	●	1.00	0.10	1.50	3.00		3.10	6.35					●	○	
	T11EN120R/L	○	○	1.20	0.10	1.50	3.00		3.10	6.35					○	○	
	T11ENR140/L	○	○	1.40	0.10	1.50	3.00		3.10	6.35					○	○	
	T11ENR150/L	○	●	1.50	0.10	1.50	3.00		3.10	6.35					●	○	
	T16EN050R/L	○	○	0.50	0.06	1.50	4.00		3.50	9.52					○	○	
	T16EN060R/L	○	●	0.60	0.06	1.50	4.00		3.50	9.52					●	○	
	T16EN080R/L	○	●	0.80	0.06	1.50	4.00		3.50	9.52					●	○	
	T16EN090R/L	○	○	0.90	0.06	1.50	4.00		3.50	9.52					○	○	
	T16EN100R/L	○	●	1.00	0.06	1.50	4.00		3.50	9.52					●	○	

● Stock ○ Available upon Order

Grooving & parting tools



		P	Steel															
		M	Stainless Steel															
		K	Cast Iron															
		N	Non-ferrous Metal															
		S	Heat-resistant Alloy, TiAlloy															
		● continuous																
		○ light Interruption																
		⊕ Interruption																
The basic shape of inserts	Ordering Code	Stock		Dimensions(mm)							CVD			PVD		Uncoated		
		R	L	W	R	B	d	L	H	A	NP1115	NP1225	NM1125	NM3125	NS4115	NS4125	NN9115	
	T16EN110R/L	○	○	1.10	0.06	1.50	4.00		3.50	9.52						○	○	
	T16EN120R/L	○	●	1.20	0.06	1.50	4.00		3.50	9.52						●	○	
	T16EN125R/L	○	●	1.25	0.06	1.50	4.00		3.50	9.52						●	○	
	T16EN130R/L	○	○	1.3	0.10	1.50	4.00		3.50	9.52						○	○	
	T16EN140R/L	○	○	1.4	0.10	1.8	4.00		3.50	9.52						○	○	
	T16EN150R/L	○	●	1.5	0.10	1.8	4.00		3.50	9.52						●	○	
	T16EN160R/L	○	○	1.6	0.10	1.8	4.00		3.50	9.52						○	○	
	T16EN170R/L	○	○	1.7	0.10	1.8	4.00		3.50	9.52						○	○	
	T16EN175R/L	○	●	1.75	0.10	1.8	4.00		3.50	9.52						●	○	
	T16EN180R/L	○	●	1.80	0.10	1.8	4.00		3.50	9.52						●	○	
	T16EN200R/L	○	●	2.00	0.10	1.8	4.00		3.50	9.52						●	○	
	T16EN215R/L	○	○	2.15	0.10	2.00	4.00		3.50	9.52						○	○	
	T16EN225R/L	○	○	2.25	0.20	2.00	4.00		3.50	9.52						○	○	
	T16EN230R/L	○	●	2.30	0.20	2.00	4.00		3.50	9.52						●	○	
	T16EN250R/L	○	●	2.50	0.20	2.00	4.00		3.50	9.52						●	○	
	FMM300R-03	●		3.00	0.30	2.00		15.00	3.91		○					●		
	FMM400R-03	●		4.00	0.40	3.00		15.00	3.96		○					●		
	FMM500R-04	●		5.00	0.40	4.00		15.00	4.42		○					●		
	FGD300R-03	●		3.00	0.30	2.00		15.00	4.00		○					●		
	FGD400R-03	●		4.00	0.40	3.00		15.00	4.50		○					●		
	FGD500R-04	●		5.00	0.40	4.00		15.00	5.00		○					●		
	MFMN300R	●	○	3.00	0.30	2.1		19.00	5.40		●				●			
	SP200-NM		●	2.2	0.2			9.3			●					●		
	SP300-NM		●	3.1	0.2			11.3			●					●		
	SP400-NM		●	4.1	0.25			11.3			●					●		
	SP500-NM		●	5.1	0.3			11.4			●					●		
	MGGN200L		●	2	0.2	1.5		16	3.5		●				●	●		
	MGGN300L		●	3	0.4	2.35		21	4.8		●				●	●		
	MGGN400L		●	4	0.4	3.3		21	4.8		●				●	●		
	MGGN500L		●	5	0.8	4.12		25.9	5.8		●				●	●		
	MGMN200J		●	2	0.2	1.6		16	3.5		○				●			
	MGMN300J		●	3	0.4	2.35		21	4.8		○				●			
	MGMN400J		●	4	0.4	3.3		21	4.8		○				●			
	MGMN500J		●	5	0.8	4.12		26	5.8		○				●			
	MGMN200T		●	2	0.2	1.6		16	3.5		○				●			
	MGMN300T		●	3	0.4	2.35		21	4.8		○				●			
	MGMN400T		●	4	0.4	3.3		21	4.8		○				●			
	MGMN500T		●	5	0.8	4.12		26	5.8		○				●			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling


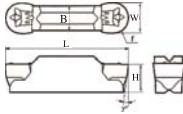

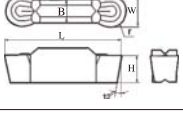

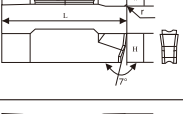

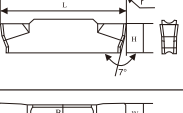

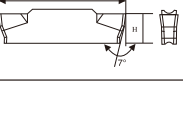

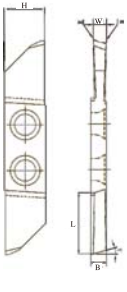

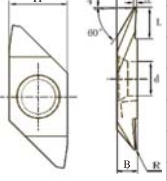


Tool holder

Solid carbide end mills

Solid carbide drill & taps

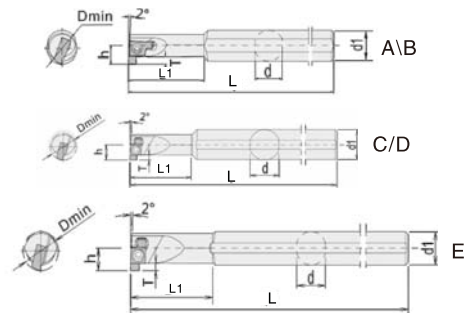
Technical information

- Turning inserts
- External turning
- Internal turning
- Grooving & parting
- Threading
- Milling
- Boring & drilling
- Tool holder
- Solid carbide end mills
- Solid carbide drill & taps
- Technical information

The basic shape of inserts	OrderingCode	Stock	Dimensions(mm)							CVD		PVD		Uncoated		
			W	R	B	d	L	H	A	NP1115	NP1225	NM1125	NM3125		NS4115	NS4125
 	MRMN200M	●	2	1	1.6		16	3.5		●				●		
	MRMN300M	●	3	1.5	2.35		21	4.8		●				●		
	MRMN400M	●	4	2	3.3		21	4.8		●				●		
	MRMN500M	●	5	2.5	4.12		26	5.8		●				●		
	MRGN400M	●	2	1	1.6		16	3.5								●
 	MRGN500M	●	3	1.5	2.35		21	4.8								●
	MRGN600M	●	4	2	3.3		21	4.8								●
	MRGN800M	●	5	2.5	4.12		26	5.8								●
	ZPES02502-MG	●	2.5	0.2			20	3.9		○						●
 	ZPFS0302-MG	●	3	0.2			20	4		○						●
	ZPGS0402-MG	●	4	0.2			20	4		○						●
	ZPHS0503-MG	●	5	0.3			25	4.9		○						●
	TDJ2	●	2	0.2	1.7		20	3.9		○						●
	TDJ3	●	3	0.2	2.4		20	4		○						●
 	TDJ4	●	4	0.3	3		20	4		○						●
	TDJ5	●	5	0.3	4		25	4.9		○						●
	TDC2	●	2	0.2	1.7		20	3.9		○						●
	TDC3	●	3	0.2	2.4		20	4		○						●
	TDC4	●	4	0.3	3		20	4		○						●
 	TDC5	●	5	0.3	4		25	4.9		○						●
	THC42R100-CE	●	1	0.06	3.04		5	7.94	0°						○	○
	THC42R100-CE15R	●	1	0.06	3.04		5	7.94	15°						○	○
	THC42R150-CE	●	1.5	0.06	3.04		8.5	7.94	0°						○	○
	THC42R150-CE15R	●	1.5	0.06	3.04		8.5	7.94	15°						○	○
 	THC42R200-CE	●	2	0.1	3.04		11.5	7.94	0°						○	○
	THC42R200-CE15R	●	2	0.1	3.04		11.5	7.94	15°						○	○
	THC42R250-CE	●	2.5	0.1	3.04		11.5	7.94	0°						○	○
	THC42R250-CE15R	●	2.5	0.1	3.04		11.5	7.94	15°						○	○
	THC42R300-CE	●	3	0.2	3.04		11.5	7.94	0°						○	○
	THC42R300-CE15R	●	3	0.2	3.04		11.5	7.94	15°						○	○
	THC42R200-CN	●	2	0.1	3.04		11.5	7.94	0°						○	○
	THC42R200-CU15R	●	2	0.1	3.04		11.5	7.94	15°						○	○
	THC42R250-CN	●	2.5	0.1	3.04		11.5	7.94	0°						○	○
	THC42R250-CU15R	●	2.5	0.1	3.04		11.5	7.94	15°						○	○
 	THC42R300-CN	●	3	0.2	3.04		11.5	7.94	0°						○	○
	THC42R300-CU15R	●	3	0.2	3.04		11.5	7.94	15°						○	○
	TKFB12R15005M	●	1.5	0.05	3	5.0	2.6	8.7	0.25						○	○
	TKFB12R28005M	●	2.8	0.05	3	5.0	4.6	8.7	0.3						○	○
	TKFB12R28010M	●	2.8	0.1	3	5.0	4.6	8.7	0.3						○	○
 	TKFB16R38005M	●	3.8	0.05	4	5.0	6.3	9.5	0.3						○	○
	TKFB16R38010M	●	3.8	0.1	4	5.0	6.3	9.5	0.3						○	○

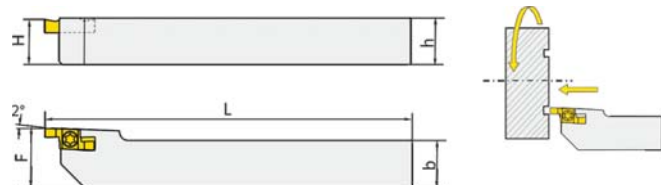
● Stock ○ Available upon Order

SIGER/L



Ordering Code	Stock		Dimensions(mm)							Insert	Screw	Wrench
	R	L	Dimin	d	d1	T	h	L	L1			
SIGER/L0808A	●	○	8	7.2	8	1.5	4.8	100	20	GER/L***A	M2.2*5	T-7
SIGER/L1010B	●	○	10	9	10	2.2	6.2	125	25			
SIGER/L1210B	●	○	12	9	12	2.2	7	125	30	GER/L***B	M2.5*6	T-8
SIGER/L1412C	●	○	14	11.4	14	2.5	8	150	33			
SIGER/L1612C	●	○	16	11.4	16	2.5	8.5	150	20	GER/L***B	M2.5*6	T-8
SIGER/L1616C	●	○	16	15	16	2.5	9	160	36			
SIGER/L2020D	●	○	20	19	20	4.5	12.1	180	40	GER/L***D	M3*8	T-10

SEGER/L**



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Wrench
	R	L	Dimin	H	b	F	L	h			
SEGER/L1010K-D	○	●	10	10	10	10	125	10	GER/L***DM	M3*8	T-10
SEGER/L1212K-D	○	●	10	12	12	12	125	12			
SEGER/L1616H-D	○	●	10	16	16	20	100	16			
SEGER/L2020K-D	○	●	10	20	20	25	125	20			
SEGER/L2525M-D	○	●	10	25	25	32	150	25			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

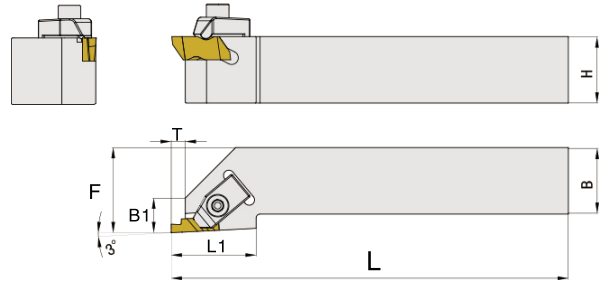
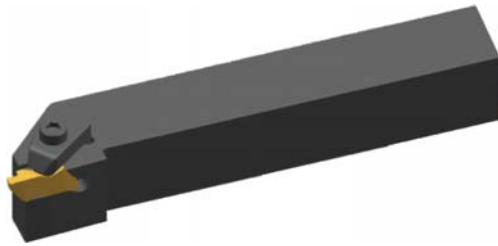
Tool holder

Solid carbide end mills

Solid carbide drill & taps

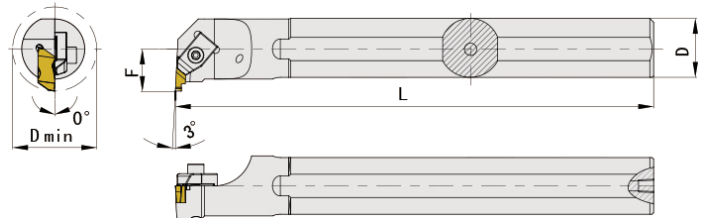
Technical information

GNSR/L



Ordering Code	Stock		Dimensions(mm)							Insert	Clamp	Screw	Wrench
	R	L	H	B	F	L	L1	B1	T				
GNSR/L1616H2	●	○	16	16	20	100	19	9	3.5	NG2***	YBNG2	NG2520	L4.0
GNSR/L2020K2	●	○	20	20	25	125	19	9	3.5				
GNSR/L2525M2	●	○	25	25	32	150	19	9	3.5				
GNSR/L2020K3	●	○	20	20	25	125	32	13	5.3	NG3***	YBNG3	NG3620	L5.0
GNSR/L2525K3	●	○	25	25	32	150	32	13	5.3				

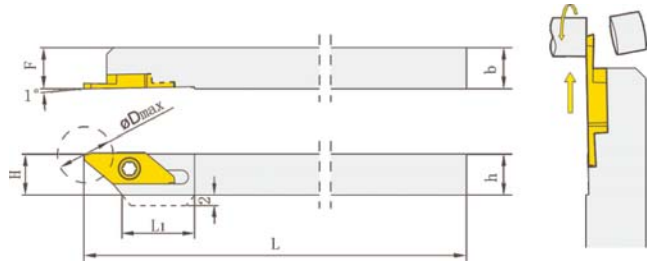
GNAR/L**



Ordering Code	Stock		Dimensions(mm)				Insert	Clamp	Screw	Wrench
	R	L	Dimin	D	F	L				
GNAR/L20Q2	●	○	26	20	13	180	NG2***	YBNG2	NG2520	L4.0
GNAR/L25R2	●	○	34	25	17	200				
GNAR/L25R3	●	○	34	25	17	200	NG3***	YBNG3	NG3620	L5.0

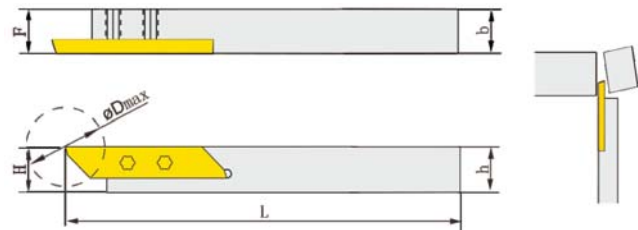
● Stock ○ Available upon Order

KTKFR/L



Ordering Code	Stock		Dimensions(mm)							Insert	Screw	Wrench
	R	L	D	h	b	L	L1	f	H			
KTKFR/L1010K12	●	○	12	10	10	125	15	10	10	TKFT12***	SPM4*10	T-15
KTKFR/L1212M12	●	○	12	12	12	150	15	12	12			
KTKFR/L1616M12	●	○	12	16	16	150	15	16	16			
KTKFR/L1010K16	●	○	16	10	10	125	20	10	10	TKFT16***		
KTKFR/L1212M16	●	○	16	12	12	150	20	12	12			
KTKFR/L1616M16	●	○	16	16	16	150	20	16	16			

THCR



Ordering Code	Stock		Dimensions(mm)							Insert	Screw	Wrench
	R	L	h	b	H	F	L	D				
THCR/L1010J42	○	○	10	10	10	12	85	21	THC42R/L	M4X8	T-15	
THCR/L1212J42	○	○	12	12	12	16	100					
THCR/L1616J42	○	○	16	16	16	20	100					
THCR/L2020K42	○	○	20	20	20	25	125					
THCR/L2525M42	○	○	25	25	25	32	150					

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

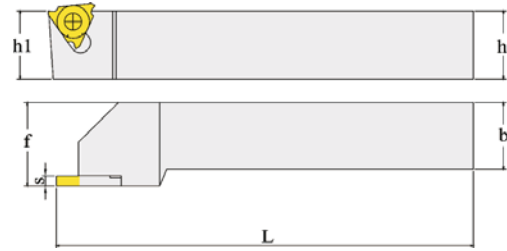
Tool holder

Solid carbide end mills

Solid carbide drill & taps

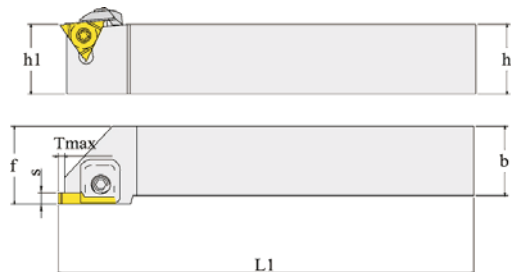
Technical information

SGWHR/L



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Screw
	R	L	h	b	L	f	S	h1			
SGWHR/L1212H3200	●	●	12	12	100	16	0.5–1.8	12	GBA32***		T-15
SGWHR/L1212H3215	●	●	12	12	100	16	1.8–2.3	12			
SGWHR/L1616H3200	●	●	16	16	100	20	0.5–1.8	16			
SGWHR/L1616H3215	●	●	16	16	100	20	1.8–2.3	16			
SGWHR/L2020K3200	●	●	20	20	125	25	0.5–1.8	20			
SGWHR/L2020K3215	●	●	20	20	125	25	1.8–2.3	20			
SGWHR/L2020K3223	●	●	20	20	125	25	2.3–3.3	20			
SGWHR/L2525M3200	●	●	25	25	150	32	0.5–1.8	25			
SGWHR/L2525M3215	●	●	25	25	150	32	1.8–2.3	25			
SGWHR/L2525M3223	●	●	25	25	150	32	2.3–3.3	25			

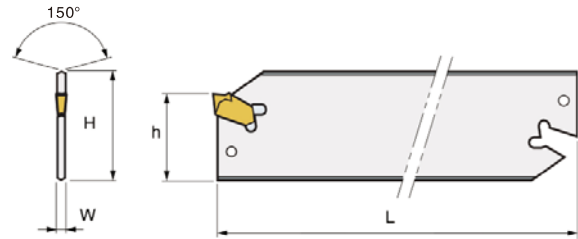
MGWHR/L



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Screw	Spring	Wrench
	R	L	h	b	L	f	S	h1					
MGWHR/L1616H4315A	●	●	16	16	100	20	1.25–1.5	16	GBA43***	NLJ0522	YB1318	DTH0814	L4.0
MGWHR/L1616H4315	●	●	16	16	100	20	1.5–2.3	16					
MGWHR/L1616H4325	●	●	16	16	100	20	2.3–3.3	16					
MGWHR/L2020K4315A	●	●	20	20	125	25	1.25–1.5	20					
MGWHR/L2020K4315	●	●	20	20	125	25	1.5–2.3	20					
MGWHR/L2020K4323	●	●	20	20	125	25	2.3–3.3	20					
MGWHR/L2525K4315A	●	●	25	25	150	32	1.25–1.5	25					
MGWHR/L2525K4315	●	●	25	25	150	32	1.5–2.3	25					
MGWHR/L2525K4323	●	●	25	25	150	32	2.3–3.3	25					
MGWHR/L2525K4333	●	●	25	25	150	32	3.3–4.7	25					

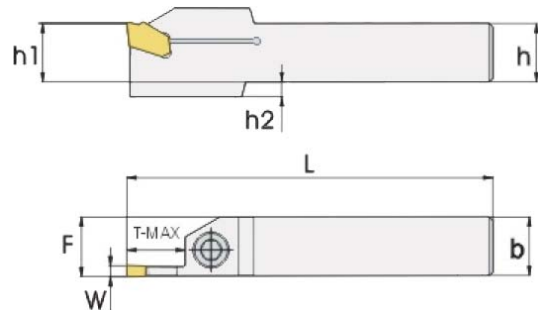
● Stock ○ Available upon Order

SPB



Ordering Code	Stock		Dimensions(mm)				Insert	Screw
	R	W	h	H	L			
SPB226-S	●	1.6	21	26	110	SP200	SW80-S	
SPB326-S	●	2.4	21	26	110	SP300		
SPB426-S	●	3.2	21	26	110	SP400		
SPB526-S	●	4	21	26	110	SP500		
SPB232-S	●	1.6	25	32	150	SP200		
SPB332-S	●	2.4	25	32	150	SP300		
SPB432-S	●	3.2	25	32	150	SP400		
SPB532-S	●	4	25	32	150	SP500		

ZQR/L



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Wrench
	R	L	W	h	H	b	F	L			
ZQR/L1616H-02	●	●	1.6	16	16	16	16.3	100	SP200	NLJ0416	L3.0
ZQR/L2020K-02	●	●	1.6	20	20	20	20.3	125			
ZQR/L1616H-03	●	●	2.4	16	16	16	16.3	100	SP300	NLJ0520	L4.0
ZQR/L2020K-03	●	●	2.4	20	20	20	20.3	125			
ZQR/L2525M-03	●	●	2.4	25	25	25	25.3	150			
ZQR/L3232P-03	●	●	2.4	32	32	32	32.3	170			
ZQR/L1616H-04	●	●	3.2	16	16	16	16.3	100	SP400		
ZQR/L2020K-04	●	●	3.2	20	20	20	20.3	125			
ZQR/L2525M-04	●	●	3.2	25	25	25	25.3	150			
ZQR/L3232P-04	●	●	3.2	32	32	32	32.3	170			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

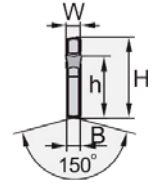
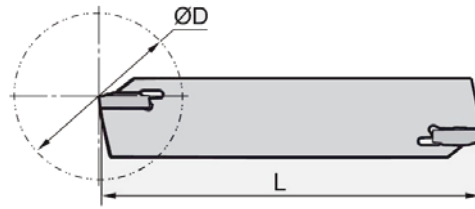
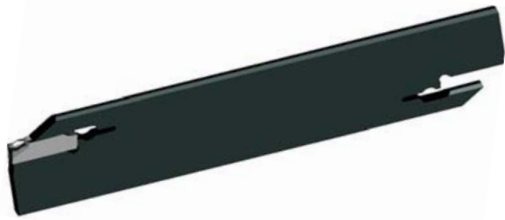
Tool holder



Solid carbide end mills

Solid carbide drill & taps

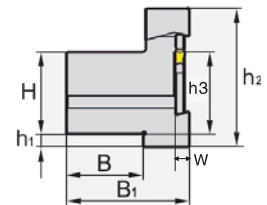
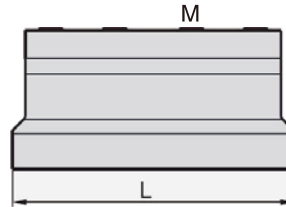
Technical information



QE*S



Ordering Code	Stock		Dimensions(mm)						Insert 	Wrench 
	R	L	L	H	h	B	W	φ D		
QEES226N	●	●	110	26	19	2	2.5	60	ZPES02502-MG	L5.0
QEFS326N	●	●	110	26	19	2.4	3	60	ZPES0302-MG	
QEGS426N	●	●	110	26	19	3.2	4	70	ZPGS0402-MG	
QEHS526N	●	●	110	26	19	4	5	70	ZPHS0503-MG	
QEKS626N	●	●	110	26	19	5	6	70	ZPKS0604-MG	
QEES232N	●	●	150	32	24.6	2	2.5	100	ZPES0202-MG	
QEFS332N	●	●	150	32	24.6	2.4	3	100	ZPFS0302-MG	
QEGS432N	●	●	150	32	24.6	3.2	4	120	ZPGS0402-MG	
QEHS532N	●	●	150	32	24.6	4	5	120	ZPHS0503-MG	
QEKS632N	●	●	150	32	24.6	5	6	120	ZPKS0604-MG	

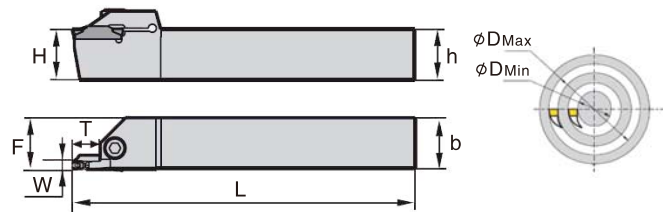
SMBB



Ordering Code	Stock		Dimensions(mm)									Insert 	Wrench 
	R	L	H	B	h3	L	h2	h1	B1	W	M		
SMBB1626	●	●	16	12	26	86	43	13	30	5.3	3-M6	SPB□□□(S) QEES**N	L5.0
SMBB2026	●	●	20	19	26	86	43	9	38	5.3	3-M6		
SMBB2032	●	●	20	19	32	100	50	13	38	5.3	4-M6		
SMBB2526	●	●	25	23	26	86	43	4	42	5.3	3-M6		
SMBB2532	●	●	25	23	32	110	50	8	42	5.3	4-M6		
SMBB3232	●	●	32	30	32	110	54	5	48	5.3	4-M6		

● Stock ○ Available upon Order

MGFHRR



Ordering Code	Stock		Dimensions(mm)								Insert	Screw	Wrench			
	R	L	h	b	L	S	D	H	T	W						
MGFHRR 325-24/35-T10	●		25	25	150	25.6	24-35	25	10	3.0	MFMN300R	NLJ0620	L5.0			
MGFHRR 325-29/40-T10	●						29-40									
MGFHRR 325-34/50-T10	●						34-50									
MGFHRR 325-44/70-T10	●						44-70									
MGFHRR 325-64/99-T10	●						64-99									
MGFHRR 425-62/120-T15	●						62-120							15	4.0	MG*N400
MGFHRR 425-112/200-T15	●						112-200									

MGFHR/L



Ordering Code	Stock		Dimensions(mm)								Insert	Screw	Wrench							
	R	L	h	b	L	F	D	H	T	W										
MGFHR/L 325-24/35-T10	●	○	25	25	150	25.6	24-35	25	10	3.0	MFMN300R	NLJ0620	L5.0							
MGFHR/L 325-29/40-T10	●	○					29-40													
MGFHR/L 325-34/50-T10	●	○					34-50													
MGFHR/L 325-44/70-T10	●	○					44-70													
MGFHR/L 325-64/99-T10	●	○					64-99													
MGFHR/L 320-44/62-T15	●	○					44-62							20	20	125	20.6	20	3.0	MG*N300
MGFHR/L 320-62/120-T15	●	○					62-120													
MGFHR/L 320-112/200-T15	●	○	112-200	25	25	150	25.6	25	15	3.0	MG*N300	NLJ0620	L5.0							
MGFHR/L 325-44/62-T15	●	○	44-62																	
MGFHR/L 325-62/120-T15	●	○	62-120																	
MGFHR/L 325-112/200-T15	●	○	112-200																	
MGFHR/L 420-44/62-T15	●	○	44-62											20	20	125	20.6	20	4.0	MG*N400
MGFHR/L 420-62/120-T15	●	○	62-120																	
MGFHR/L 420-112/200-T15	●	○	112-200																	
MGFHR/L 425-44/62-T15	●	○	25	25	150	25.6	44-62	25	15	4.0	MG*N400	NLJ0620	L5.0							
MGFHR/L 425-62/120-T15	●	○												62-120						
MGFHR/L 425-112/200-T15	●	○												112-200						

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

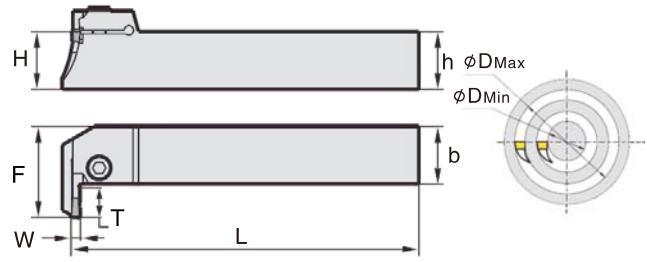
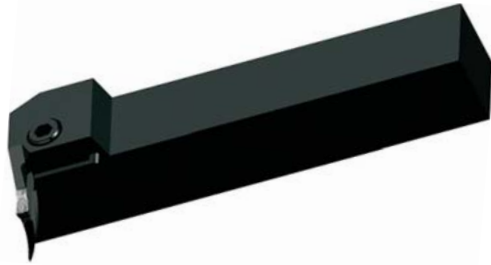
Tool holder

Solid carbide end mills

Solid carbide drill & taps

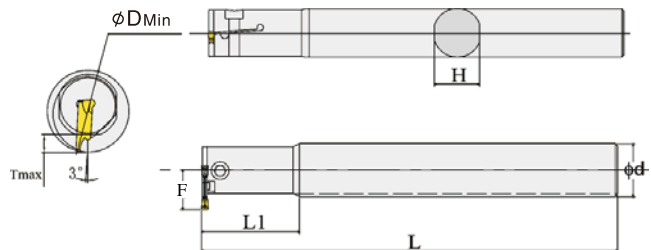
Technical information

MGFVR/L



Ordering Code	Stock		Dimensions(mm)								Insert	Screw	Wrench
	R	L	h	b	L	F	D	H	T	W			
MGFVR/L 320-44/62-T15	●	○	20	20	125	20.6	44-64	20	15	3.0	MG*N300	NLJ0620	L5.0
MGFVR/L 320-62/120-T15	●	○					62-120						
MGFVR/L 320-112/200-T15	●	○					112-200						
MGFVR/L 325-44/62-T15	●	○	25	25	150	25.6	62-120	25	15	4.0	MG*N400	NLJ0620	L5.0
MGFVR/L 325-62/120-T15	●	○					112-200						
MGFVR/L 325-112/200-T15	●	○					62-120						
MGFVR/L 420-44/62-T15	●	○	20	20	125	20.6	62-120	20	15	4.0	MG*N400	NLJ0620	L5.0
MGFVR/L 420-62/120-T15	●	○					112-200						
MGFVR/L 420-112/200-T15	●	○					62-120						
MGFVR/L 425-44/62-T15	●	○	25	25	150	25.6	62-120	25	15	4.0	MG*N400	NLJ0620	L5.0
MGFVR/L 425-62/120-T15	●	○					112-200						
MGFVR/L 425-112/200-T15	●	○					62-120						

MGNVR/L



Ordering Code	Stock		Dimensions(mm)							Insert	Screw	Wrench
	R	L	D	d	L	L1	T	H	F			
MGNVR/L 2016K-2	●	●	20	16	125	35	5	15	12.4	MG*N200	M5*15	T-20
MGNVR/L 2520M-2	●	●	25	20	150	45		18	14			
MGNVR/L 2925R-2	●	●	29	25	200	45		23	17.2			
MGNVR/L 2520M-2.5	●	●	25	20	150	45	6	18	15.1	MG*N250	NLJ0516	L4.0
MGNVR/L 2925R-2.5	●	●	29	25	200	45		23	18.2			
MGNVR/L 2520M-3	●	●	25	20	150	45		18	15.6			
MGNVR/L 3125R-3	●	●	31	25	200	45	8	23	18.9	MG*N300	M5*15	T-20
MGEVR/L 3732S-3	●	●	37	32	250	65		29	21.5			
MGNVR/L 2520M-4	●	●	25	20	150	45		18	15.6			
MGNVR/L 3125R-4	●	●	31	25	200	45	8	23	18.9	MG*N400	M5*15	T-20
MGEVR/L 3732S-4	●	●	27	32	250	65		29	21.5			
MGNVR/L 3125R-5	●	●	31	25	200	45		23	19.4			
MGEVR/L 3732S-5	●	●	37	32	250	65	29	21.5	MG*N500	NLJ0516	L4.0	

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

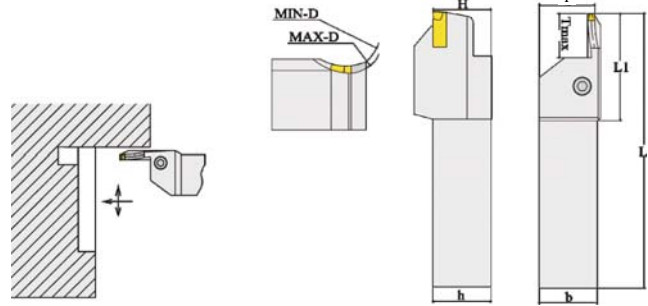
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

FGDHX



Ordering Code	Stock	Dimensions(mm)							Insert	Screw	Wrench
	R	h	b	L	F	D	H	T			
FGDHX2020K25/30-3	●	20	20	125	21.8	25-30	20	12	FMM300	NLJ0520	L4.0
FGDHX2020K30/35-3	●					30-35					
FGDHX2020K35/48-3	●					35-48					
FGDHX2020K48/60-3	●					48-60			FGD300		
FGDHX2020K60/75-3	●					60-75					
FGDHX2020K75/100-3	●					75-100					
FGDHX2020K100/140-3	●					100-140					
FGDHX2525M25/30-3	●	25	25	150	27.8	25-30	25	FMM300	NLJ0520	L4.0	
FGDHX2525M30/35-3	●					30-35					
FGDHX2525M35/48-3	●					35-48					
FGDHX2525M48/60-3	●					48-60		FGD300			
FGDHX2525M60/75-3	●					60-75					
FGDHX2525M75/100-3	●					75-100					
FGDHX2525M100/140-3	●					100-140					
FGDHX2020K25/30-4	●	20	20	125	21.8	25-30	20	FMM400	NLJ0520	L4.0	
FGDHX2020K30/35-4	●					30-35					
FGDHX2020K35/48-4	●					35-48					
FGDHX2020K48/60-4	●					48-60		FGD400			
FGDHX2020K60/75-4	●					60-75					
FGDHX2020K75/100-4	●					75-100					
FGDHX2020K100/140-4	●					100-140					
FGDHX2525M25/30-4	●	25	25	150	27.8	25-30	25	FMM400	NLJ0520	L4.0	
FGDHX2525M30/35-4	●					30-35					
FGDHX2525M35/48-4	●					35-48					
FGDHX2525M48/60-4	●					48-60		FGD400			
FGDHX2525M60/75-4	●					60-75					
FGDHX2525M75/100-4	●					75-100					
FGDHX2525M100/140-4	●					100-140					
FGDHX2020K25/30-5	●	20	20	125	21.8	25-30	20	FMM500	NLJ0520	L4.0	
FGDHX2020K30/35-5	●					30-35					
FGDHX2020K35/48-5	●					35-48					
FGDHX2020K48/60-5	●					48-60		FGD500			
FGDHX2020K60/75-5	●					60-75					
FGDHX2020K75/100-5	●					75-100					
FGDHX2020K100/140-5	●					100-140					
FGDHX2525M25/30-5	●	25	25	150	27.8	25-30	25	FMM500	NLJ0520	L4.0	
FGDHX2525M30/35-5	●					30-35					
FGDHX2525M35/48-5	●					35-48					
FGDHX2525M48/60-5	●					48-60		FGD500			
FGDHX2525M60/75-5	●					60-75					
FGDHX2525M75/100-5	●					75-100					
FGDHX2525M100/140-5	●					100-140					

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

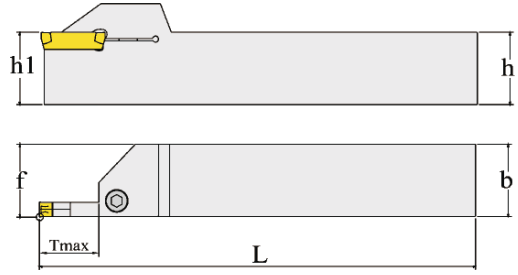
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

MGEHR/L



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Screw
	R	L	h	b	L	f	T	h1			
MGEHR/L1616H-2	●	●	16	16	100	16.25	14.5	16	MG*N200	NLJ0520	L4.0
MGEHR/L2020K-2	●	●	20	20	125	20.25	14.5	20			
MGEHR/L2020K-2-T10	●	●	20	20	125	20.25	10	20			
MGEHR/L2525M-2	●	●	25	25	150	25.25	14.5	25			
MGEHR/L2525M-2-T10	●	●	25	25	150	25.25	10	25			
MGEHR/L3232P-2	●	●	32	32	170	32.25	14.5	32			
MGEHR/L1616H-2.5	●	●	16	16	100	16.25	16	16	MG*N250	NLJ0520	L4.0
MGEHR/L2020K-2.5	●	●	20	20	125	20.25	16	20			
MGEHR/L2020K-2.5-T10	●	●	20	20	125	20.25	10	20			
MGEHR/L2525M-2.5	●	●	25	25	150	25.25	16	25			
MGEHR/L2525M-2.5-T10	●	●	25	25	150	25.25	10	25			
MGEHR/L3232P-2.5	●	●	32	32	170	32.25	16	32			
MGEHR/L1616H-3	●	●	16	16	100	16.25	18	16	MG*N300	NLJ0520	L4.0
MGEHR/L2020K-3	●	●	20	20	125	20.25	18	20			
MGEHR/L2020K-3-T10	●	●	20	20	125	20.25	10	20			
MGEHR/L2525M-3	●	●	25	25	150	25.25	18	25			
MGEHR/L2525M-3-T10	●	●	25	25	150	25.25	10	25			
MGEHR/L3232P-3	●	●	32	32	170	32.25	18	32			
MGEHR/L3232P-3-T10	●	●	16	16	100	16.25	10	32	MG*N400	NLJ0520	L4.0
MGEHR/L2020K-4	●	●	20	20	125	20.25	18	20			
MGEHR/L2020K-4-T10	●	●	20	20	125	20.25	10	20			
MGEHR/L2525M-4	●	●	25	25	150	25.25	18	25			
MGEHR/L2525M-4-T10	●	●	25	25	150	25.25	10	25			
MGEHR/L3232P-4	●	●	32	32	170	32.25	18	32			
MGEHR/L3232P-4-T10	●	●	16	16	100	16.25	10	32	MG*N500	NLJ0520	L4.0
MGEHR/L2020K-5	●	●	20	20	125	20.25	23	20			
MGEHR/L2020K-5-T10	●	●	20	20	125	20.25	10	20			
MGEHR/L2525M-5	●	●	25	25	150	25.25	23	25			
MGEHR/L2525M-5-T10	●	●	25	25	150	25.25	10	25			
MGEHR/L3232P-5	●	●	32	32	170	32.25	23	32			
MGEHR/L3232P-5-T10	●	●	16	16	100	16.25	10	32			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

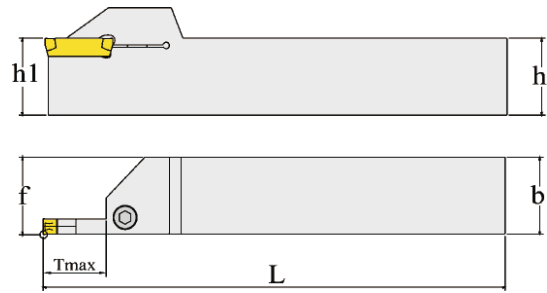
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

TTER/L



Ordering Code	Stock		Dimensions(mm)						Insert	Screw	Screw
	R	L	h	b	L	F	T	h1			
TTER/L1616H-2	●	●	16	16	100	16.1	12	16	TD*200	NLJ0520	L4.0
TTER/L1616H-2-T17	●	●	16	16	125	16.1	17	16			
TTER/L2020K-2	●	●	20	20	125	20.1	12	20			
TTER/L2020K-2-T17	●	●	20	20	150	20.1	17	20			
TTER/L2525M-2	●	●	25	25	150	25.1	12	25			
TTER/L2525M-2-T17	●	●	25	25	170	25.1	17	25			
TTER/L1616H-3	●	●	16	16	100	16.25	12	16	TD*300	NLJ0520	L4.0
TTER/L1616H-3-T20	●	●	16	16	125	16.25	20	16			
TTER/L2020K-3	●	●	20	20	125	20.25	12	20			
TTER/L2020K-3-T20	●	●	20	20	150	20.25	20	20			
TTER/L2525M-3	●	●	25	25	150	25.25	12	25			
TTER/L2525M-3-T20	●	●	25	25	170	25.25	20	25			
TTER/L1616H-4	●	●	16	16	100	16.5	15	16	TD*400	NLJ0520	L4.0
TTER/L1616H-4-T25	●	●	16	16	125	16.5	25	16			
TTER/L2020K-4	●	●	20	20	125	20.5	15	20			
TTER/L2020K-4-T25	●	●	20	20	150	20.5	25	20			
TTER/L2525M-4	●	●	25	25	150	25.5	15	25			
TTER/L2525M-4-T25	●	●	25	25	170	25.5	25	25			
TTER/L2020K-5	●	●	20	20	125	20.6	20	20	TD*500	NLJ0520	L4.0
TTER/L2020K-5-T25	●	●	20	20	150	20.6	25	20			
TTER/L2525M-5	●	●	25	25	150	25.6	20	25			
TTER/L2525M-5-T25	●	●	25	25	170	25.6	25	25			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information