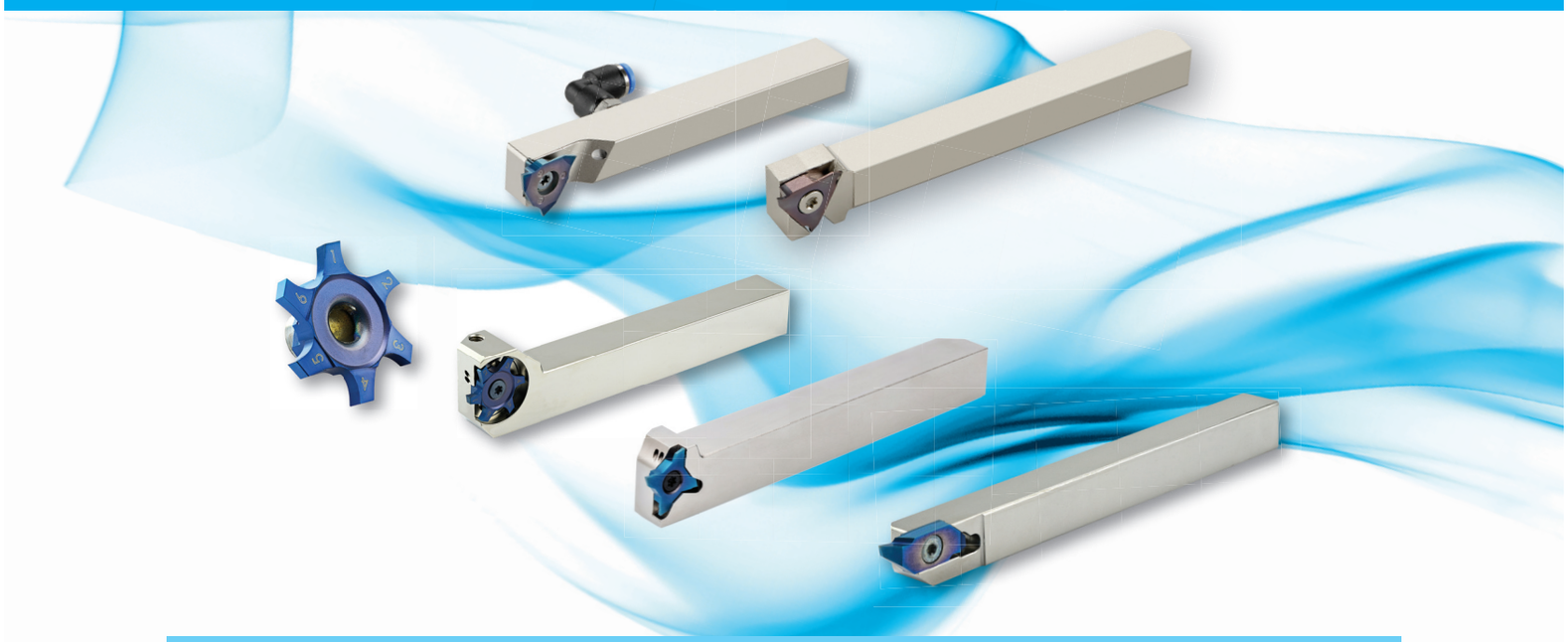
Swiss-Line A08



Swiss-Line

- Swiss style lathes are becoming a popular alternative to large lathes and machining centers in many companies.
- Carmex is introducing a new line of inserts and toolholders, developed for automatic and Swiss style lathes.
- Designed for economic production of parting, grooving, profiling threading and chamfering.

Polygon Swiss Line

Carmex extends the Swiss Line range by offering a new type of polygon inserts and tool holders for external turning, grooving, parting and threading on Swiss-Type machines. Specially designed for small parts machining.

Features

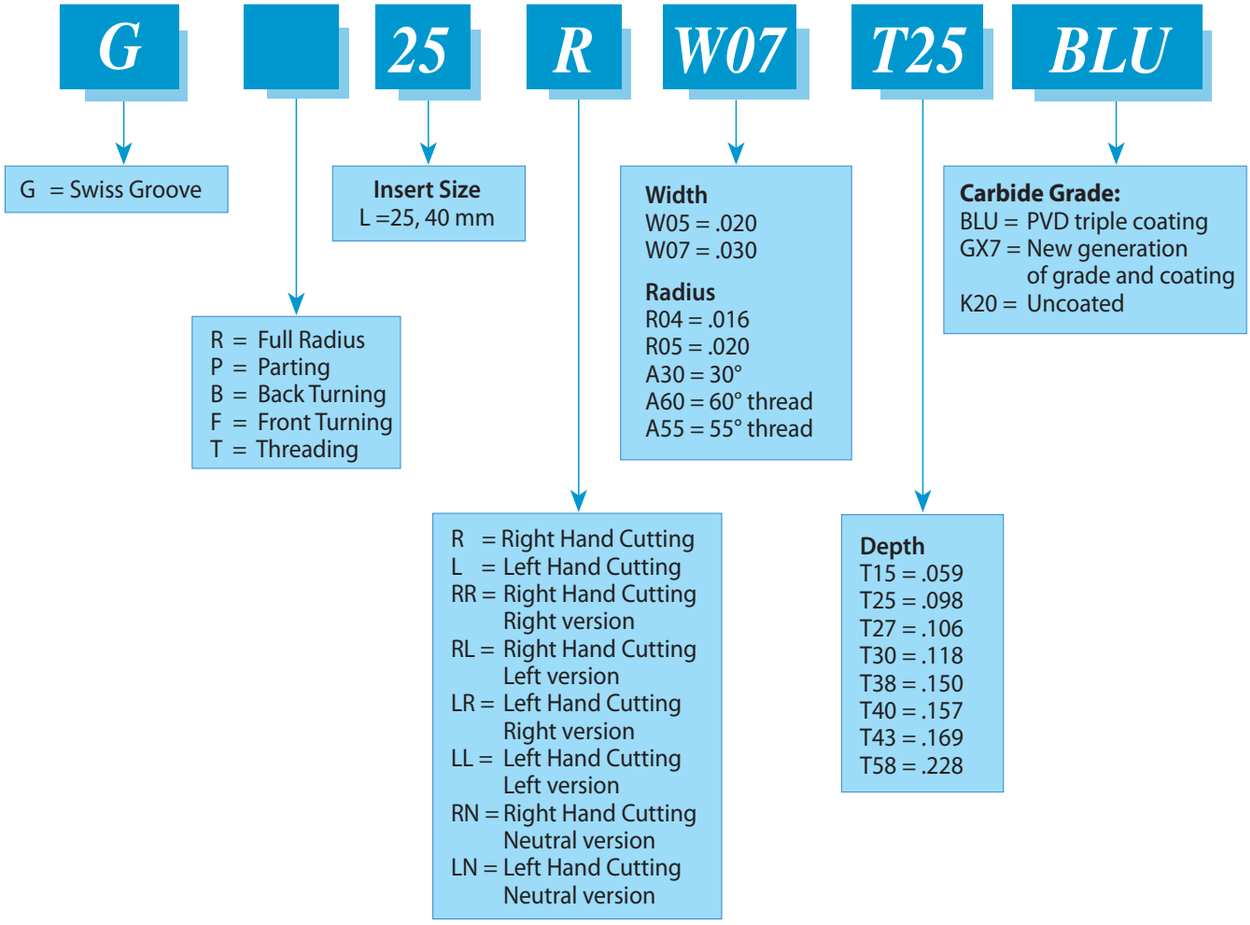
- High precision ground inserts.
- All inserts can be used with same tool holders.
- A combination of the latest carbide and coating technologies guarantees maximum tool life and improved productivity.
- Compatible with a wide range of materials.
- Coated holders provide abrasive resistance.

Carbide grades: BLU, GX7, K20

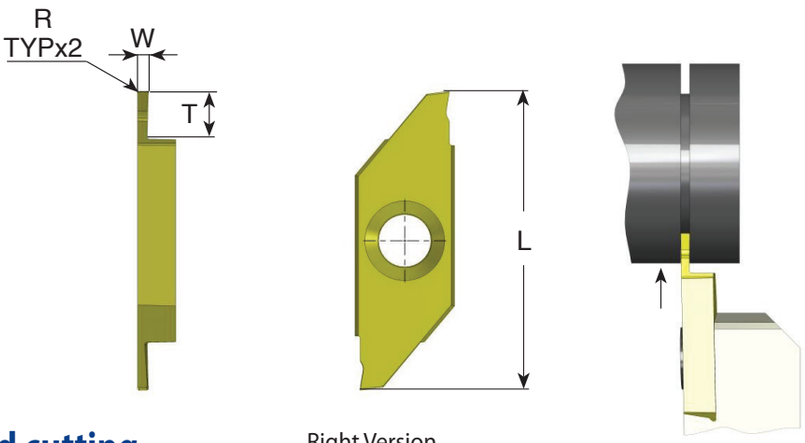
Carmex Precision Tools Ltd.

Product Identification

Polygon Inserts



Grooving and Turning



Right Version

Right hand cutting

Insert Size L mm	Ordering Code	W ± .001	T max	R	Feed inch/rev
25	**G25 R W05 T15**	.020	.059	0	.0004-.002
	G25 R W07 T25	.030	.098	0	.0008-.003
	G25 R W10 T27	.039	.106	.002	.0008-.004
	G25 R W12 T30	.047	.118	.002	.0008-.004
	G25 R W15 T38	.059	.150	.002	.0008-.005
	G25 R W20 T38	.079	.150	.002	.0008-.005
	G25 R W25 T38	.098	.150	.002	.0008-.006
40	**G40 R W30 T80**	.118	.315	.002	.0008-.006
	G40 R W40 T80	.157	.315	.002	.0008-.006

	K20	BLU	GX7*
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

For L.H, specify G25 L instead of G25 R

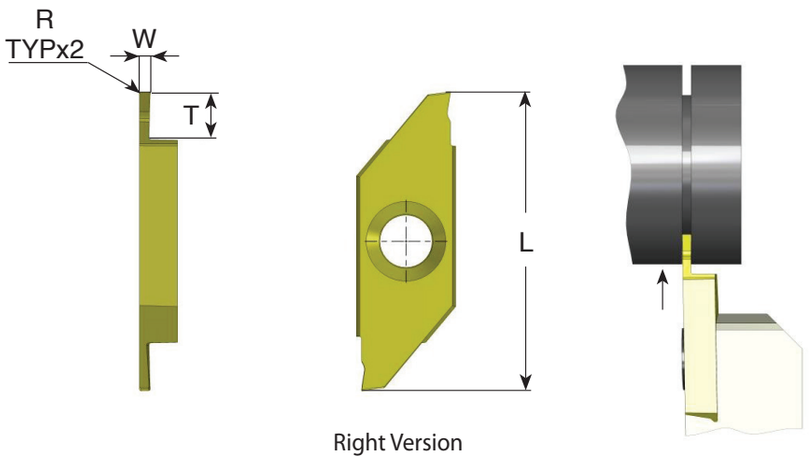
* Available for insert size G25... only

● First choice ○ Alternative

Carmex Precision Tools Ltd.

Grooving, Circlip Ring Grooves

DIN 471/472



Right Version

Right hand cutting

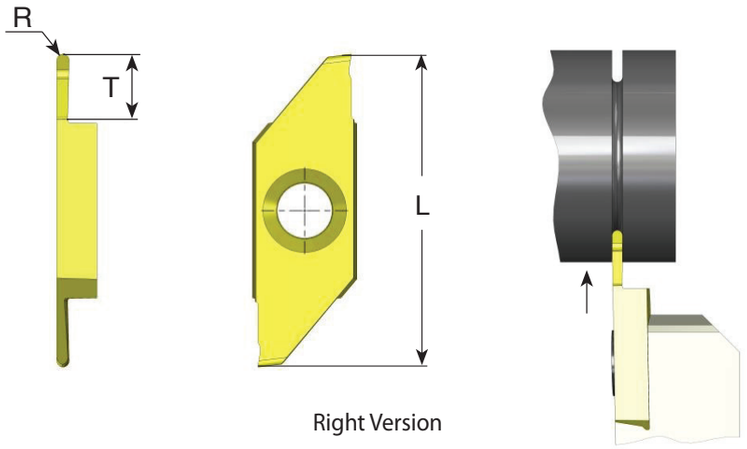
Insert Size L mm	Ordering Code	Nom` groove width	W - .002	T max	R	Feed Inch/rev
25	**GD25 R W05 T16**	.020	.022	.063	0	.0004-.002
	GD25 R W06 T17	.024	.026	.067	0	.0004-.002
	GD25 R W07 T19	.028	.030	.075	0	.0008-.003
	GD25 R W08 T22	.031	.034	.087	0	.0008-.004
	GD25 R W09 T24	.035	.038	.094	0	.0008-.004
	GD25 R W12 T31	.043	.049	.122	.002	.0008-.004
	GD25 R W14 T33	.051	.057	.130	.002	.0008-.005
	GD25 R W17 T33	.063	.069	.130	.002	.0008-.005
	GD25 R W19 T39	.073	.078	.154	.002	.0008-.005
	GD25 R W22 T45	.085	.090	.177	.002	.0008-.006
	GD25 R W27 T55	.104	.110	.217	.002	.0008-.006

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

For L.H, specify GD25 L instead of GD25 R
Nom`= nominal

● First choice ○ Alternative

Grooving and Profiling (full radius)



Right Version

Right hand cutting

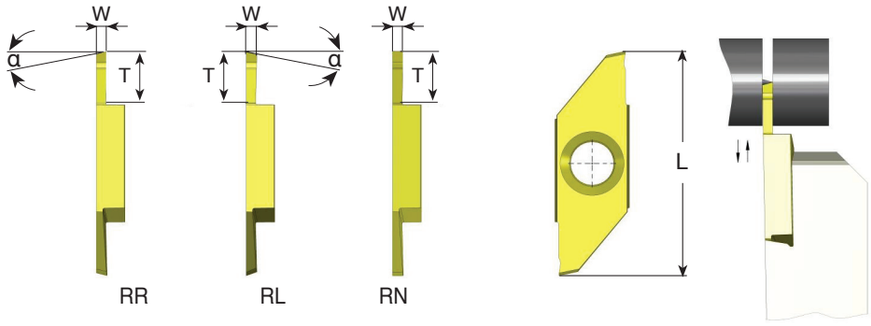
Insert Size L mm	Ordering Code	R±.001	T max	Feed inch/rev
25	**GR25 R R02 T15**	.010	.059	.0004-.002
	GR25 R R04 T25	.016	.098	.0008-.003
	GR25 R R05 T27	.020	.106	.0008-.004
	GR25 R R07 T27	.028	.106	.0008-.004

For L.H, specify GR25 L instead of GR25 R

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

● First choice ○ Alternative

Parting Off and Grooving



Right Version

Right hand cutting

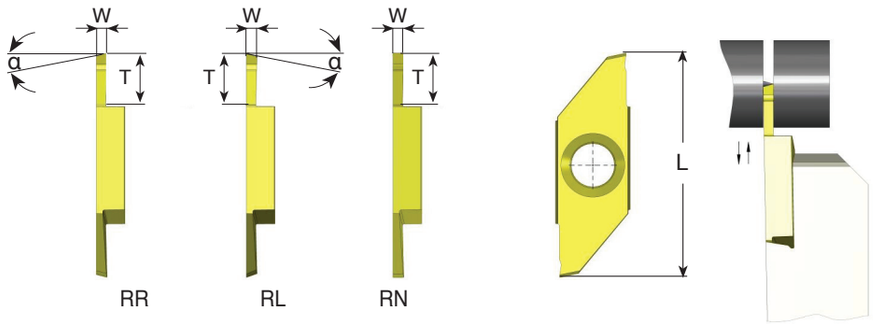
Insert Size L mm	Ordering Code	W	α°	T max	Feed inch/rev
25	**GP25 RR W05 T30**	.020	15	.118	.0008-.002
	GP25 RL W05 T30	.020	15	.118	.0008-.002
	GP25 RN W05 T30	.020	0	.118	.0008-.002
	GP25 RR W07 T43	.028	15	.169	.0008-.005
	GP25 RL W07 T43	.028	15	.169	.0008-.005
	GP25 RN W07 T43	.028	0	.169	.0008-.005
	GP25 RR W08 T50	.031	15	.197	.0008-.005
	GP25 RL W08 T50	.031	15	.197	.0008-.005
	GP25 RN W08 T50	.031	0	.197	.0008-.005
	GP25 RR W10 T58	.039	15	.228	.0008-.005
	GP25 RL W10 T58	.039	15	.228	.0008-.005
	GP25 RN W10 T58	.039	0	.228	.0008-.005
	GP25 RR W12 T58	.047	15	.228	.0008-.005
	GP25 RL W12 T58	.047	15	.228	.0008-.005
	GP25 RN W12 T58	.047	0	.228	.0008-.005
	GP25 RR W15 T58	.059	15	.228	.0008-.005
	GP25 RL W15 T58	.059	15	.228	.0008-.005
	GP25 RN W15 T58	.059	0	.228	.0008-.005
	GP25 RR W18 T58	.071	15	.228	.0008-.005
	GP25 RL W18 T58	.071	15	.228	.0008-.005
	GP25 RN W18 T58	.071	0	.228	.0008-.005
	GP25 RR W20 T58	.079	15	.228	.0008-.005
	GP25 RL W20 T58	.079	15	.228	.0008-.005
	GP25 RN W20 T58	.079	0	.228	.0008-.005
	GP25 RR W20 T75	.079	15	.295	.0008-.005
	GP25 RL W20 T75	.079	15	.295	.0008-.005
	GP25 RN W20 T75	.079	0	.295	.0008-.005
	GP25 RR W25 T58	.098	15	.228	.002 -.005
	GP25 RL W25 T58	.098	15	.228	.002 -.005
	GP25 RN W25 T58	.098	0	.228	.002 -.005

	K20	BLU	GX7
P		●	●
M	●	●	●
K	●	○	○
N	●		
S	○	○	●
H		≤45 HRc	≤58 HRc

For L.H, specify GP25 LR instead of GP25 RR
GP25 LL instead of GP25 RL
GP25 LN instead of GP25 RN

● First choice ○ Alternative

Parting Off and Grooving



Right Version

Right hand cutting

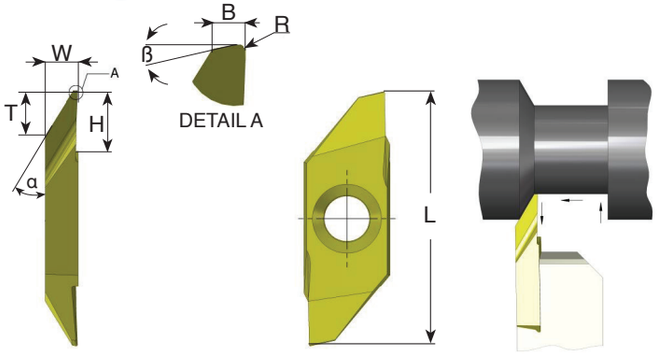
Insert Size L mm	Ordering Code	W	α°	T max	Feed inch/rev
40	**GP40 RR W15 T80**	.059	15	.315	.001-.003
	GP40 RL W15 T80	.059	15	.315	.001-.003
	GP40 RN W15 T80	.059	0	.315	.001-.003
	GP40 RR W18 T95	.071	15	.374	.001-.003
	GP40 RL W18 T95	.071	15	.374	.001-.003
	GP40 RN W18 T95	.071	0	.374	.001-.003
	GP40 RR W20 T110	.079	15	.433	.001-.003
	GP40 RL W20 T110	.079	15	.433	.001-.003
	GP40 RN W20 T110	.079	0	.433	.001-.003
	GP40 RR W25 T130	.098	15	.512	.001-.003
	GP40 RL W25 T130	.098	15	.512	.001-.003
	GP40 RN W25 T130	.098	0	.512	.001-.003
	GP40 RR W30 T130	.118	15	.512	.001-.003
	GP40 RL W30 T130	.118	15	.512	.001-.003
	GP40 RN W30 T130	.118	0	.512	.001-.003

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GP40 LR instead of GP40 RR
GP40 LL instead of GP40 RL
GP40 LN instead of GP40 RN

● First choice ○ Alternative

Back Turning



Right Version

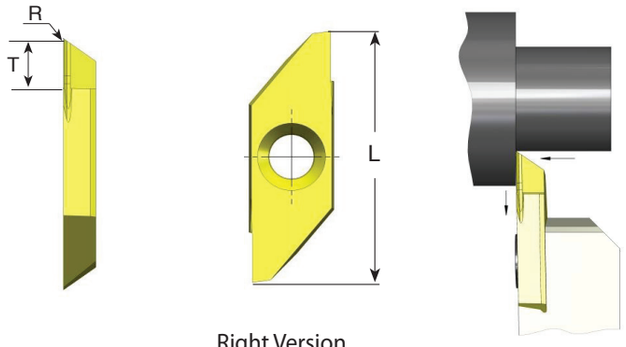
Right hand cutting

Insert Size L mm	Ordering Code	α°	ß°	R	W	T max	B	H	Feed inch/rev
25	**GB25 R A30 R03**	30	15	.001	.118	.157	.020	.315	.002-.005
	GB25 R A30 R10	30	15	.004	.118	.157	.020	.315	.002-.005
	GB25 R A30 R20	30	15	.008	.118	.157	.020	.315	.002-.005

For L.H, specify GB25 L instead of GB25 R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Front Turning



Right Version

Right hand cutting

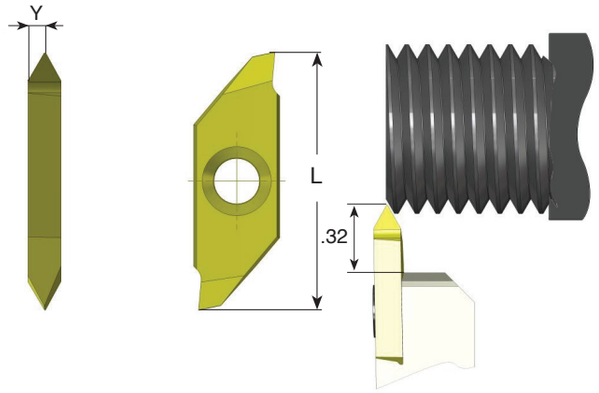
Insert Size L mm	Ordering Code	T max	R	Feed inch/rev
25	**GF25 R T40**	.157	.002	.002-.005
	GF25 R T40 R10	.157	.004	.002-.005
	GF25 R T70	.276	.002	.002-.003

For L.H, specify GF25 L instead of GF25 R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading - Partial Profile 60°



Right Version

Right hand cutting

Insert Size L mm	Ordering Code	Pitch Range mm	Pitch Range TPI	Y
25	**GT25 R A60**	0.25-0.8	100-32	.028
	GT25 R G60	1.0 -3.0	24- 8	.063

For L.H, specify GT25 L instead of GT25 R

	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

Threading - Partial Profile 55°

Right hand cutting

Insert Size L mm	Ordering Code	Pitch Range mm	Pitch Range TPI	Y
25	**GT25 R A55**	0.5 -1.5	48-16	.039
	GT25 R G55	1.75-3.0	14- 8	.063

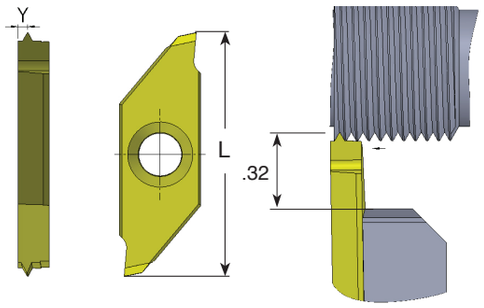
For L.H, specify GT25 L instead of GT25 R

	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

● First choice o Alternative

Threading - ISO metric 60° Full Profile

External thread



Right Version

Right hand cutting

Insert Size L mm	Ordering Code	Pitch mm	Y
25	**GT25 R 0.5ISO**	0.5	.024
	GT25 R 0.6ISO	0.6	.024
	GT25 R 0.7ISO	0.7	.028
	GT25 R 0.75ISO	0.75	.028
	GT25 R 0.8ISO	0.8	.028
	GT25 R 1.0ISO	1.0	.031
	GT25 R 1.25ISO	1.25	.039
	GT25 R 1.5ISO	1.5	.043

	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

For L.H, specify GT25 L instead of GT25 R

Threading - UN unified 60° Full Profile

External thread

Right hand cutting

Insert Size L mm	Ordering Code	Pitch TPI	Y
25	**GT25 R 56UN**	56	.024
	GT25 R 40UN	40	.028
	GT25 R 32UN	32	.028
	GT25 R 24UN	24	.031

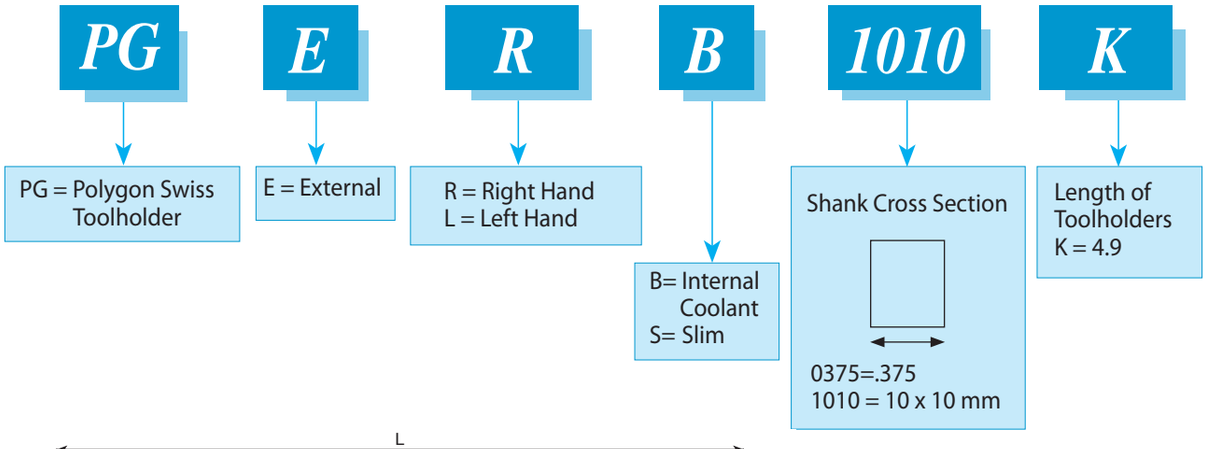
	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

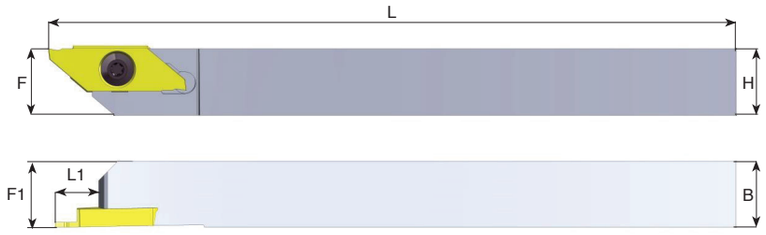
For L.H, specify GT25 L instead of GT25 R

● First choice o Alternative

External Toolholders

Product Identification - Polygon Toolholders





Right Version

Right hand cutting Inch holders

Insert Size L mm	Ordering Code	B	H	L1	L	F	F1	Insert Screw Torx+	Key Torx+
25	**PGER 0315 K**	.315	.315	.31	4.9	.375	.375	S26PD	K11P
	PGER 0375 K	.375	.375	.31	4.9	.375	.375	S26PD	K11P
	PGER 0500 K	.500	.500	.31	4.9	.500	.500	S26PD	K11P
	PGER 0625 K	.625	.625	.31	4.9	.625	.625	S26PD	K11P
	PGER 0750 K	.750	.750	.31	4.9	.750	.750	S26PD	K11P
40	**PGER 0375 K40**	.375	.375	.51	4.9	.375	.375	S26PD	K11P
	PGER 0500 K40	.500	.500	.51	4.9	.500	.500	S26PD	K11P
	PGER 0625 K40	.625	.625	.51	4.9	.625	.625	S26PD	K11P
	PGER 0750 K40	.750	.750	.51	4.9	.750	.750	S26PD	K11P
	PGER 1000 K40	1	1	.51	5.9	1	1	S26PD	K11P

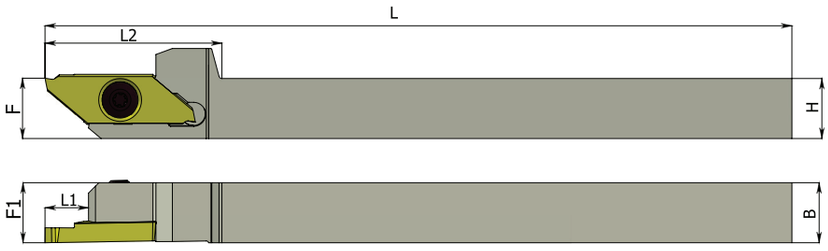
For L.H, specify PGE L instead of PGE R

Right hand cutting Metric holders

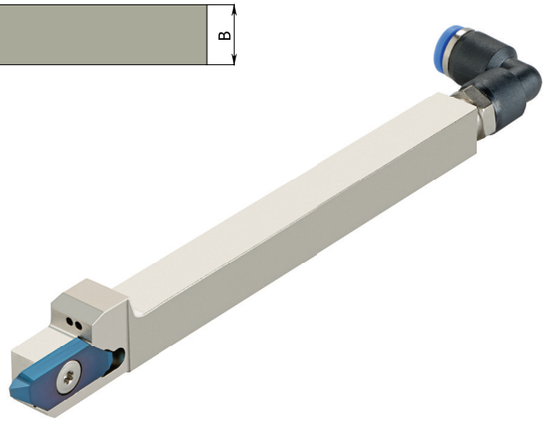
Insert Size L mm	Ordering Code	B mm	H mm	L1	L	F	F1	Insert Screw Torx+	Key Torx+
25	**PGER 0808 K**	8	8	.31	4.9	.394	.394	S26PD	K11P
	PGER 1010 K	10	10	.31	4.9	.394	.394	S26PD	K11P
	PGER 1212 K	12	12	.31	4.9	.472	.472	S26PD	K11P
	PGER 1616 K	16	16	.31	4.9	.630	.630	S26PD	K11P
	PGER 2020 K	20	20	.31	4.9	.787	.787	S26PD	K11P
40	**PGER 1010 K40**	10	10	.51	4.9	.394	.394	S26PD	K11P
	PGER 1212 K40	12	12	.51	4.9	.472	.472	S26PD	K11P
	PGER 1616 K40	16	16	.51	4.9	.630	.630	S26PD	K11P
	PGER 2020 K40	20	20	.51	4.9	.787	.787	S26PD	K11P
	PGER 2525 K40	25	25	.51	5.9	.984	.984	S26PD	K11P

For L.H, specify PGE L instead of PGE R

External Toolholders
with internal coolant



Right Version



Right hand cutting Inch holders

Insert Size L mm	Ordering Code	B	H	L1	L2	L	F	F1	Insert Screw Torx+	Key Torx+	*Coolant connector mm
25	**PGERB 0375 K**	.375	.375	.31	1.18	4.9	.375	.375	S26PD	K11P	Ø4/Ø6
	PGERB 0500 K	.500	.500	.31	1.18	4.9	.500	.500	S26PD	K11P	Ø4/Ø6
	PGERB 0625 K	.625	.625	.31	1.18	4.9	.625	.625	S26PD	K11P	Ø4/Ø6

Right hand cutting Metric holders

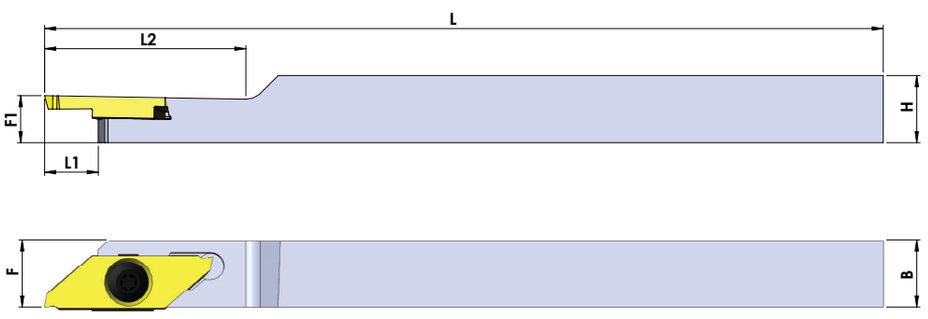
Insert Size L mm	Ordering Code	B mm	H mm	L1	L2	L	F	F1	Insert Screw Torx+	Key Torx+	*Coolant connector mm
25	**PGERB 1010 K**	10	10	.31	1.18	4.9	.394	.394	S26PD	K11P	Ø4/Ø6
	PGERB 1212 K	12	12	.31	1.18	4.9	.472	.472	S26PD	K11P	Ø4/Ø6
	PGERB 1616 K	16	16	.31	1.18	4.9	.630	.630	S26PD	K11P	Ø4/Ø6

For L.H, specify PGE L B instead of PGE R B

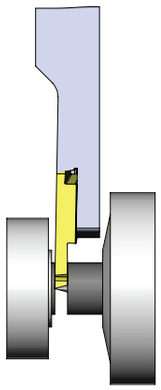
* Coolant pipe diameter

● First choice ○ Alternative

External Toolholders
Slim



Left Version



Left hand cutting Inch holders

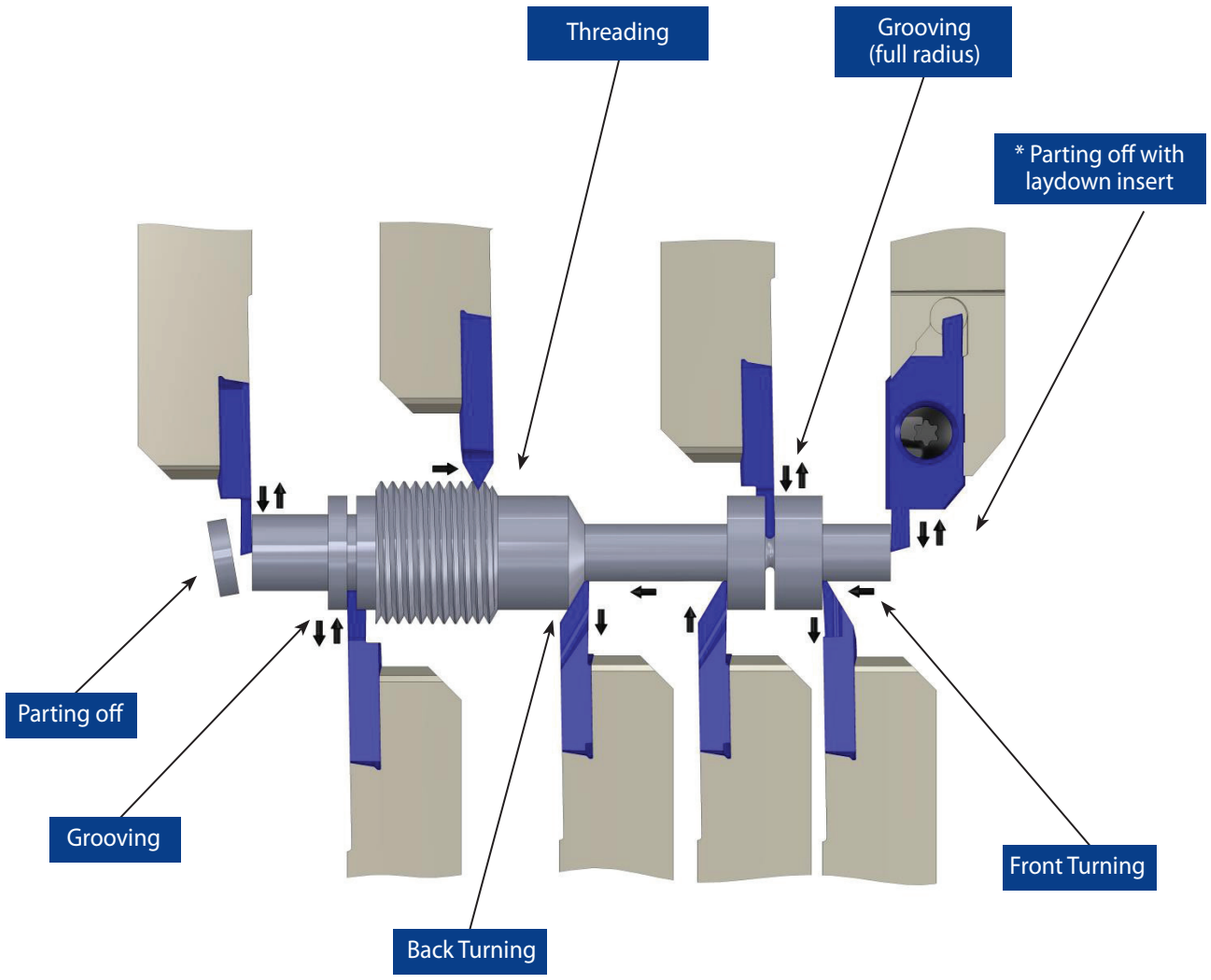
Insert Size L mm	Ordering Code	B	H	L1	L	F	F1	L2	Insert Screw Torx+	Key Torx+
25	**PGELS 0375 K**	.375	.375	.31	4.9	.375	.276	.94	S26PS	K11P
	PGELS 0500 K	.500	.500	.31	4.9	.500	.276	1.18	S26PS	K11P

Left hand cutting Metric holders

Insert Size L mm	Ordering Code	B mm	H mm	L1	L	F	F1	L2	Insert Screw Torx+	Key Torx+
25	**PGELS 0375 K**	10	10	.31	4.9	.394	.276	.94	S26PS	K11P
	PGELS 0500 K	12	12	.31	4.9	.472	.276	1.18	S26PS	K11P

Available only in L.H.
Coated holders provides a high abrasive resistance

Working Method



* Available upon request (grooving, parting, threading)

Polygon Swiss Line

Carbide Grades

BLU

PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials.

GX7

New generation of PVD triple layer coated Sub-Micron grade for wide range of materials as:
Steel, Stainless Steels, Titanium and hard materials up to 58 HRc.
With high toughness for optimized performance.

K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

Cutting Data

ISO Standard	Materials	Cutting Speed ft/min		
		K20	BLU	GX7*
P	Low & Medium Carbon Steels <0.55%C	---	260-490	230-530
	High Carbon Steels ≥0.55%C	---	230-395	200-430
	Alloy Steels, Treated Steels	---	130-260	130-330
M	Stainless Steel-Free Cutting	100-260	200-395	200-460
	Stainless Steel-Austenitic	65-230	100-295	100-390
	Cast Steels	100-260	165-395	165-460
K	Cast Iron	165-395	200-490	200-460
N	Aluminum ≤12%Si, Copper	395-820	---	---
	Aluminum >12%Si	295-656	---	---
	Synthetics, Duroplastics, Thermoplastics	230-490	---	---
S	Nickel Alloys, Titanium Alloys	65-165	100-230	100-460
H	Hardened Steel, 45-50HRc	---	65-165	65-230
	Hardened Steel, 50-58HRc	---	---	65-200

* Available for grooving and parting off, with G25 insert size

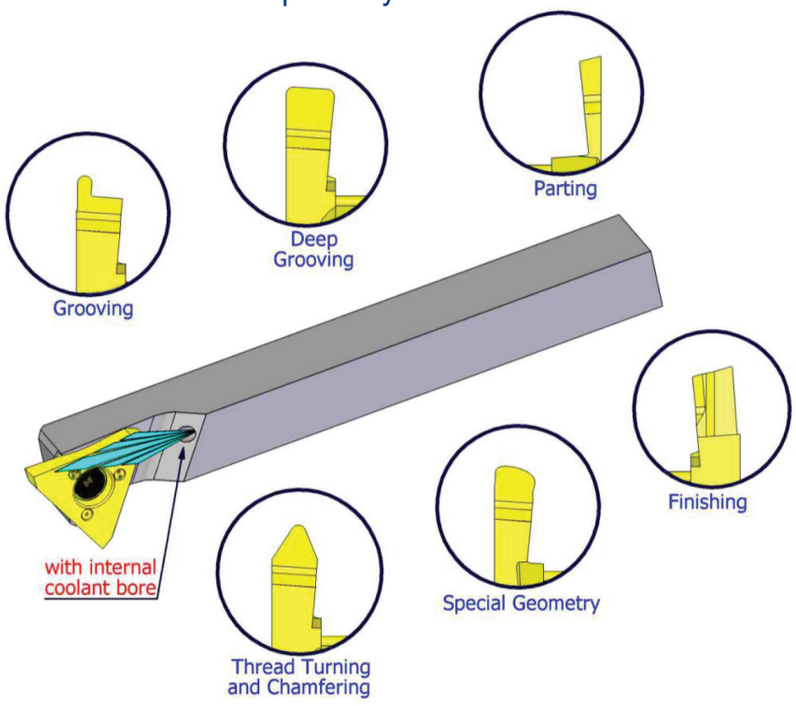
3 Cutting Edges Swiss Line Inserts and Toolholders

- **Swiss style lathes are becoming a popular alternative to large lathes and machining centers in many companies**
- **Carmex offers a large and versatile product line of inserts and toolholders, developed for automatic and Swiss style lathes**
- **Designed for economic production of parting, grooving, profiling and chamfering**

Advantages

Advanced sub-micron grade (K10-K30) - a combination of strength, toughness, wear resistance and edge sharpness

- Grounded cutting edges
- Advanced and unique PVD triple coating, for high wear and heat resistance
- For most types of material, including Stainless Steels, Titanium and Super Alloys

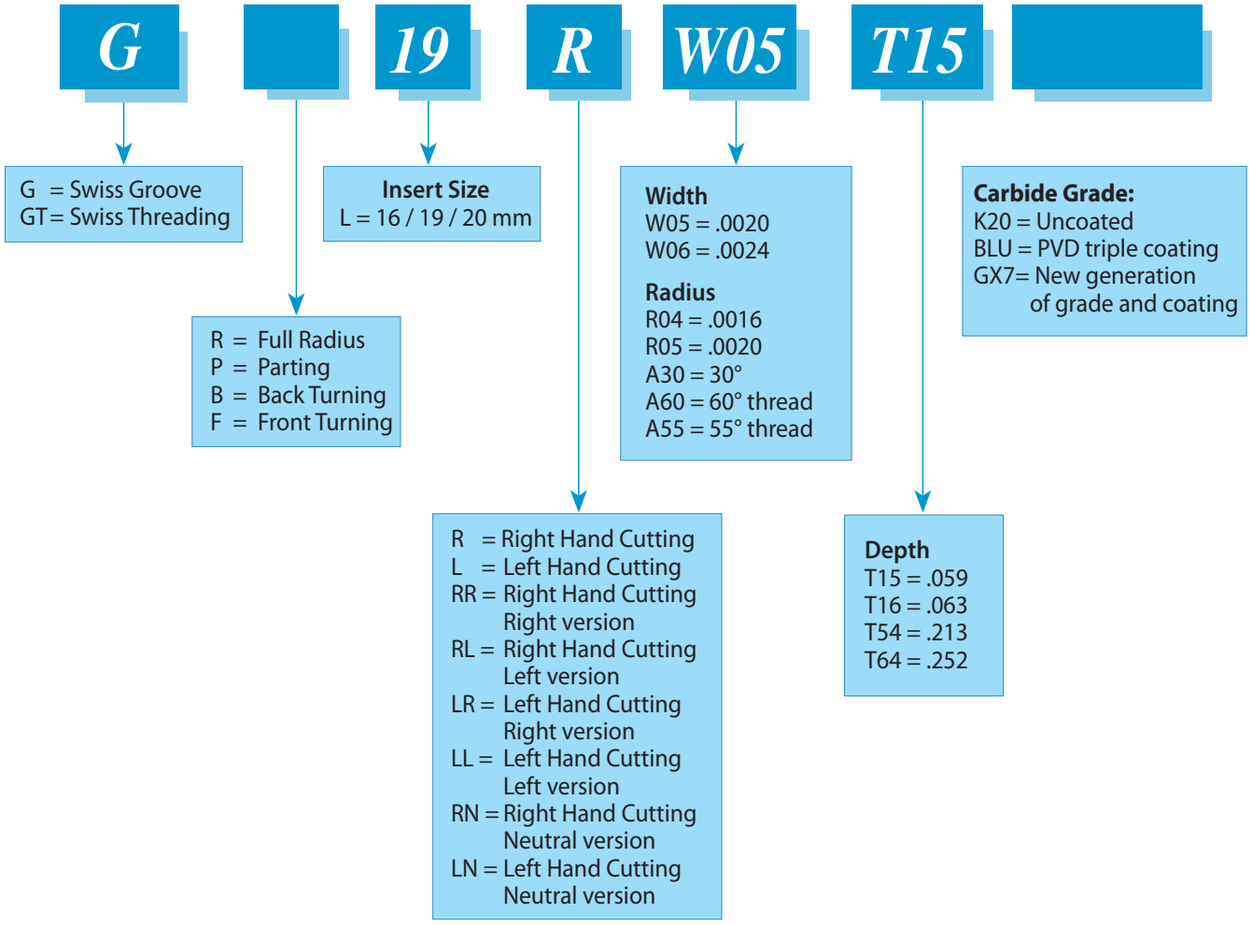


- Three cutting edges
- The insert can be indexed directly on the machine
- Internal coolant to the cutting edge

Carmex Precision Tools Ltd.

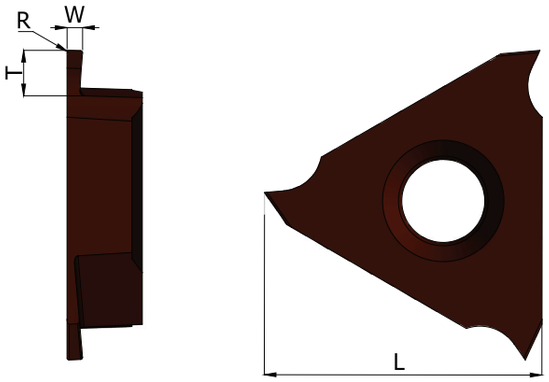
Product Identification

Inserts



16 mm Inserts and Toolholders

Grooving



Right Version

Right hand cutting

Insert Size L mm	Ordering Code	W ± .001	T max	R	Feed inch/rev	
					Radial	Axial
16	**G16 R W05 T12**	.020	.05	.002	.0004-.0024	.0008-.0031
	G16 R W10 T20	.039	.08	.002	.0008-.0028	.0008-.0039
	G16 R W15 T25	.059	.10	.004	.0012-.0031	.0008-.0039
	G16 R W20 T25	.079	.10	.006	.0020-.0039	.0008-.0039
	G16 R W25 T25	.098	.10	.008	.0020-.0039	.0008-.0059

	K20	GX7
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤58 HRc

For L.H, specify G16 L instead of G16 R

Grooving, Circlip Ring Grooves

DIN 471/472

Right hand cutting

Insert Size L mm	Ordering Code	Nom` groove width	W-.002	T max	R	Feed inch/rev	
						Radial	Axial
16	**G16 R W07 T20**	.028	.030	.08	0	.0004-.0024	.0008-.0031
	G16 R W08 T20	.031	.034	.08	0	.0004-.0024	.0008-.0031
	G16 R W09 T25	.035	.038	.10	0	.0008-.0028	.0008-.0039
	G16 R W12 T25	.043	.049	.10	.002	.0008-.0028	.0008-.0039
	G16 R W14 T25	.051	.057	.10	.002	.0012-.0031	.0008-.0039
	G16 R W17 T25	.063	.069	.10	.002	.0012-.0031	.0008-.0039

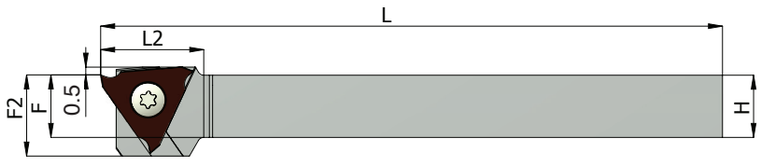
	K20	GX7
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤58 HRc

For L.H, specify G16 L instead of G16 R

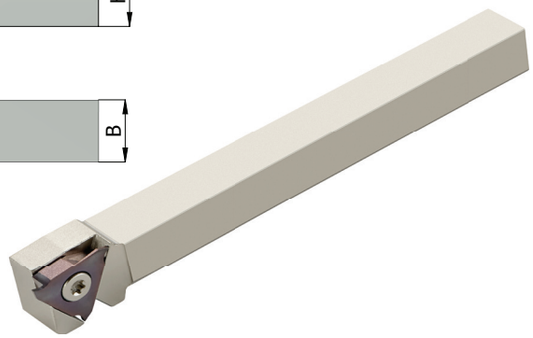
Nom` = nominal

● First choice ○ Alternative

External Toolholders



Right Version



Right hand cutting Inch holders

Ordering Code	B	H	T	L2	L	F	F1	F2	Insert Screw Torx+	Key Torx+
VGER 0315 K	.375	.315	.102	.67	4.9	.315	.375	.51	S16PS	K16P
VGER 0375 K	.375	.375	.102	.67	4.9	.375	.375	.51	S16PS	K16P
VGER 0500 K	.500	.500	.102	.67	4.9	.500	.500	.51	S16P	K16P
VGER 0625 K	.625	.625	.102	.67	4.9	.625	.625	.63	S16P	K16P

For L.H, specify VGE L instead of VGE R

Right hand cutting Inch holders

Ordering Code	B mm	H mm	T	L2	L	F	F1	F2	Insert Screw Torx+	Key Torx+
VGER 0810 K	10	8	.102	.67	4.9	.315	.394	.51	S16PS	K16P
VGER 1010 K	10	10	.102	.67	4.9	.394	.394	.51	S16PS	K16P
VGER 1212 K	12	12	.102	.67	4.9	.472	.472	.51	S16P	K16P
VGER 1616 K	16	16	.102	.67	4.9	.630	.630	.63	S16P	K16P

For L.H, specify VGE L instead of VGE R

3 Cutting Edges Swiss Line Inserts (16 mm)

Carbide Grades

GX7

New generation of PVD triple layer coated Sub-Micron grade for wide range of materials as: Steel, Stainless Steels, Titanium and hard materials up to 58 HRc.
With high toughness for optimized performance.

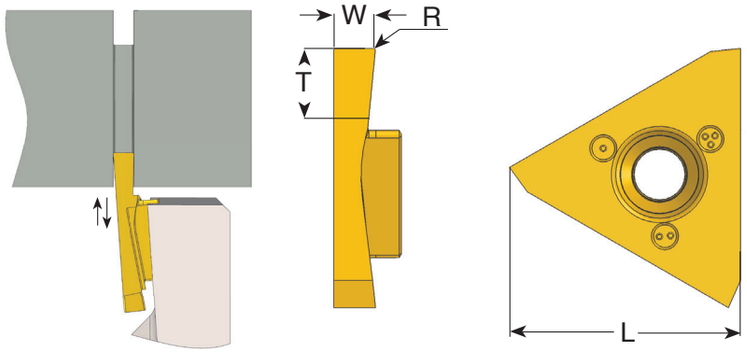
K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

Cutting Data

ISO Standard	Materials	Cutting Speed ft/min	
		K20	GX7
P	Low & Medium Carbon Steels <0.55%C	---	265-495
	High Carbon Steels ≥0.55%C	---	230-395
	Alloy Steels, Treated Steels	---	130-265
M	Stainless Steel-Free Cutting	100-260	200-400
	Stainless Steel-Austenitic	65-230	100-300
	Cast Steels	100-260	165-400
K	Cast Iron	165-395	165-395
N	Aluminum ≤12%Si, Copper	395-820	---
	Aluminum >12%Si	295-650	---
	Synthetics, Duroplastics, Thermoplastics	230-490	---
S	Nickel Alloys, Titanium Alloys	65-165	100-230
H	Hardened Steel, 45-58HRc	---	65-165

Grooving and Turning



Right Version

Right hand cutting

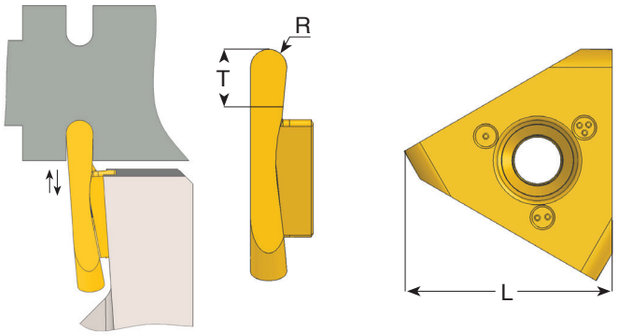
Insert Size L mm	Ordering Code	W ± .001	T max	R	Feed inch/rev	
					Radial	Axial
19	**G19 R W05 T15**	.020	.059	0	.0004-.0024	.001-.004
	G19 R W06 T16	.024	.063	0	.0004-.0024	.001-.004
	G19 R W07 T17	.030	.067	0	.0004-.0024	.001-.004
	G19 R W08 T18	.031	.079	.002	.0004-.0024	.001-.004
	G19 R W10 T22	.040	.098	.002	.001 -.003	.001-.004
	G19 R W12 T24	.047	.118	.002	.001 -.003	.001-.004
	G19 R W14 T28	.055	.118	.002	.001 -.003	.001-.004
	G19 R W15 T30	.059	.118	.002	.001 -.003	.001-.004
	G19 R W17 T34	.067	.157	.002	.0016-.0035	.001-.008
20	**G20 R W20 T40**	.079	.157	.004	.002 -.004	.001-.008
	G20 R W22 T45	.089	.197	.004	.002 -.004	.001-.008
	G20 R W25 T50	.098	.236	.004	.002 -.004	.001-.008
	G20 R W30 T60	.118	.236	.004	.002 -.004	.001-.008

For left hand insert specify G19 L… or G20 L…

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Grooving and Profiling (full radius)



Right Version

Right hand cutting

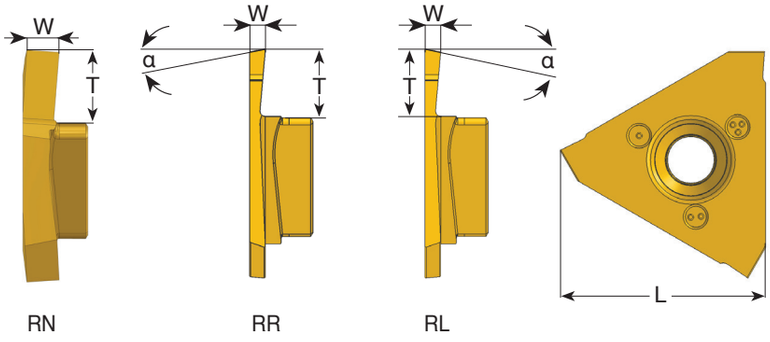
Insert Size L mm	Ordering Code	R ± .0012	T max	Feed mm/rev	
				Radial	Axial
19	**GR19 R R02 T15**	.010	.059	.0004-.0030	.001-.004
	GR19 R R04 T18	.016	.079	.0004-.0030	.001-.004
	GR19 R R05 T22	.020	.098	.0010-.0030	.001-.004
	GR19 R R06 T26	.024	.118	.0010-.0030	.001-.004
	GR19 R R08 T33	.031	.138	.0016-.0035	.001-.008
	GR19 R R10 T40	.040	.158	.0020-.0040	.001-.008
20	**GR20 R R12 T50**	.050	.236	.0020-.0040	.001-.008
	GR20 R R15 T60	.059	.236	.0020-.0040	.001-.008

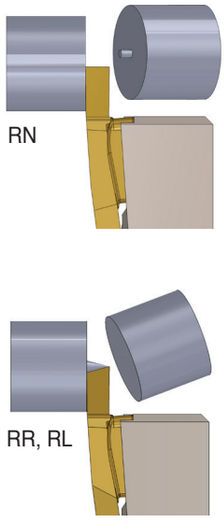
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For left hand insert specify G19 L… or G20 L…

● First choice ○ Alternative

Parting Off





Right Version

Right hand cutting

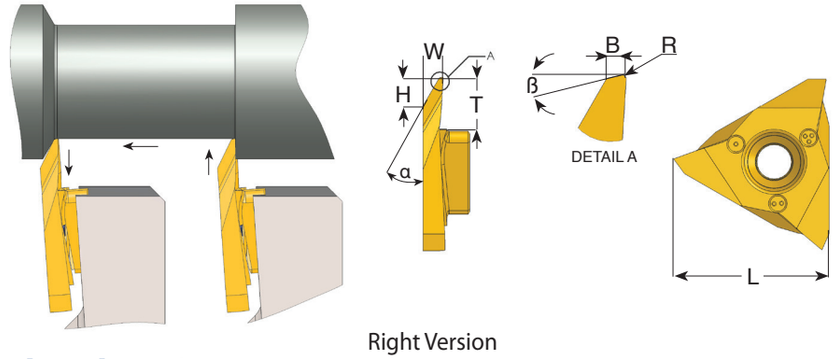
Insert Size L mm	Ordering Code	W	α°	T max	Feed inch/rev Radial
19	**GP19 RR W10 T54**	.039	15	.213	.0010-.0035
	GP19 RL W10 T54	.039	15	.213	
	GP19 RN W10 T54	.039	0	.213	
	GP19 RR W12 T54	.047	15	.213	.0010-.0035
	GP19 RL W12 T54	.047	15	.213	
	GP19 RN W12 T54	.047	0	.213	
20	**GP20 RR W15 T64**	.059	15	.252	.0016-.0040
	GP20 RL W15 T64	.059	15	.252	
	GP20 RN W15 T64	.059	0	.252	
	GP20 RR W18 T64	.071	15	.252	.0016-.0040
	GP20 RL W18 T64	.071	15	.252	
	GP20 RN W18 T64	.071	0	.252	
	GP20 RR W20 T64	.079	15	.252	.0020-.0047
	GP20 RL W20 T64	.079	15	.252	
	GP20 RN W20 T64	.079	0	.252	
	GP20 RR W25 T64	.098	15	.252	.0020-.0047
	GP20 RL W25 T64	.098	15	.252	
	GP20 RN W25 T64	.098	0	.252	
	GP20 RR W30 T64	.118	15	.252	.0020-.0047
	GP20 RL W30 T64	.118	15	.252	
	GP20 RN W30 T64	.118	0	.252	

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For left hand insert specify GP19 LR… or G20 LR…

● First choice ○ Alternative

Back Turning



Right Version

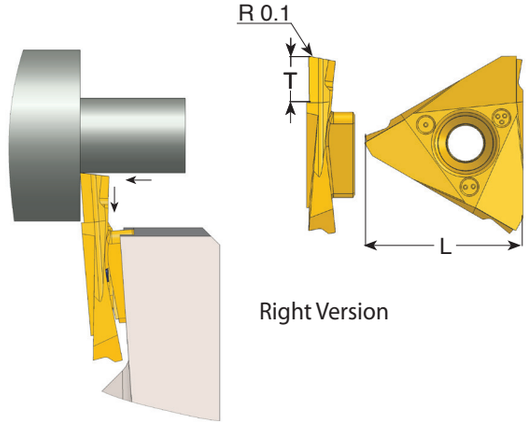
Right hand cutting

Insert Size L mm	Ordering Code	α°	ß°	R	W	H	B	T max	Feed inch/rev
19	**GB19 R A30**	30	12	.004	.134	.169	.002	.213	.002-.006
20	**GB20 R A30**	30	12	.004	.134	.169	.002	.252	.002-.006

For left hand insert specify GB19 L … or GB20 L …

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Front Turning



Right Version

Right hand cutting

Insert Size L mm	Ordering Code	T max	Feed inch/rev
19	**GF19 R T54**	.213	.002-.006
20	**GF20 R T64**	.252	.002-.006

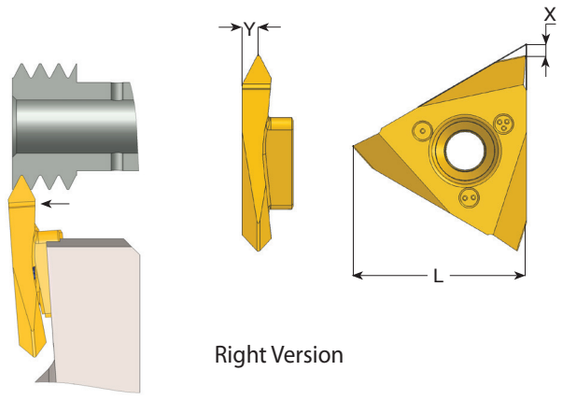
For left hand insert specify GF19 L… or GF20 L…

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading - Partial Profile 60°

External Thread



Right Version

Right hand cutting

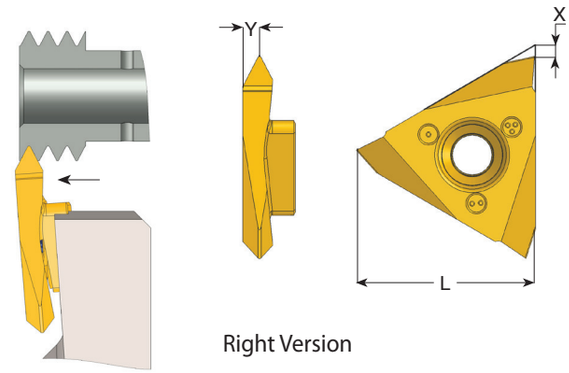
Insert Size L mm	Pitch Range		Ordering Code	X	Y
	mm	TPI			
19	0.5 -1.5	48-16	**GT19 R A60**	.11	.043
	1.75-3.0	14- 8	**GT19 R G60**	.11	.067
	0.5 -3.0	48- 8	**GT19 R AG60**	.11	.067

For left hand insert specify GT19 L

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Threading - Partial Profile 55°

External Thread



Right Version

Right hand cutting

Insert Size L mm	Pitch Range		Ordering Code	X	Y
	mm	TPI			
19	0.5- 1.5	48-16	**GT19 R A55**	.11	.039
	1.75-3.0	14- 8	**GT19 R G55**	.11	.067
	0.5- 3.0	48- 8	**GT19 R AG55**	.11	.067

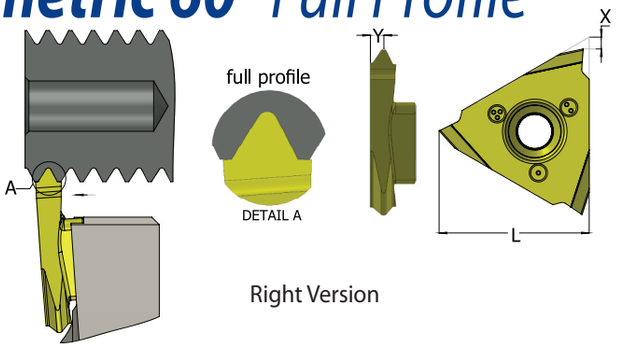
For left hand insert specify GT19 L

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading - ISO metric 60° Full Profile

External Thread



Right Version

Right hand cutting

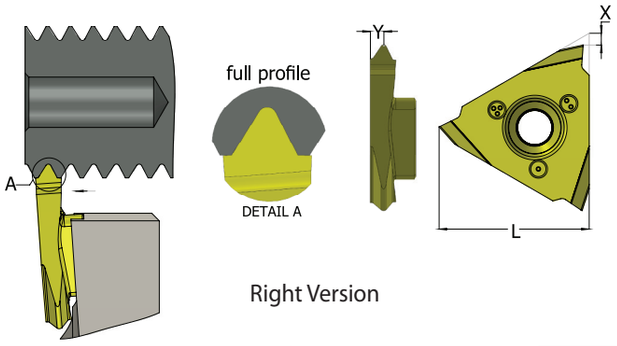
Insert Size L mm	Pitch mm	Ordering Code	X	Y
19	0.5	**GT19 R 0.5 ISO**	. 11	.024
	0.7	**GT19 R 0.7 ISO**	.11	.028
	0.75	**GT19 R 0.75 ISO**	.11	.028
	0.8	**GT19 R 0.8 ISO**	.11	.028
	1.0	**GT19 R 1.0 ISO**	.11	.032
	1.25	**GT19 R 1.25 ISO**	.11	.039
	1.5	**GT19 R 1.5 ISO**	.11	.043
	1.75	**GT19 R 1.75 ISO**	.11	.051

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For left hand insert specify GT19 L

Threading - UN unified 60° Full Profile

External Thread



Right Version

Right hand cutting

Insert Size L mm	Pitch TPI	Ordering Code	X	Y
19	72	**GT19 R 72UN**	. 11	.016
	56	**GT19 R 56UN**	.11	.024
	40	**GT19 R 40UN**	.11	.028
	32	**GT19 R 32UN**	.11	.028
	24	**GT19 R 24UN**	.11	.032
	14	**GT19 R 20UN**	.11	.032
	14	**GT19 R 14UN**	.11	.047

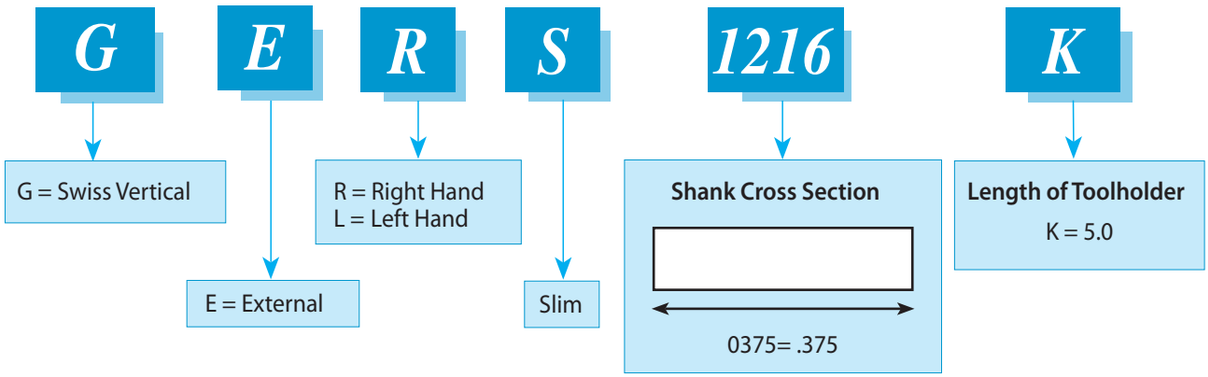
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For left hand insert specify GT19 L

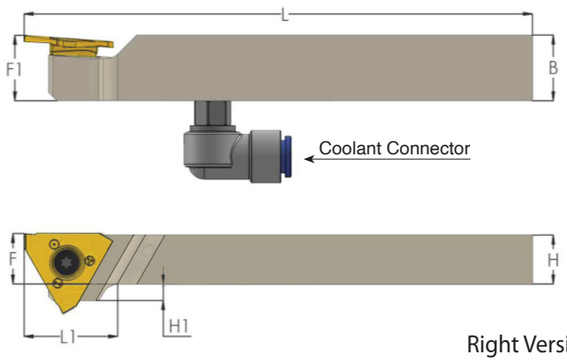
● First choice ○ Alternative

External Toolholders

Product Identification - Ordering Codes



- Coolant through toolholders, for external turning in Swiss type lathes machines.
- The high pressure coolant is directed towards the insert cutting edge, in order to evacuate the chips created and avoid build up edge.
- Includes a coolant connector for fast attachment on the machine.



Right Version

Right hand cutting Metric holders

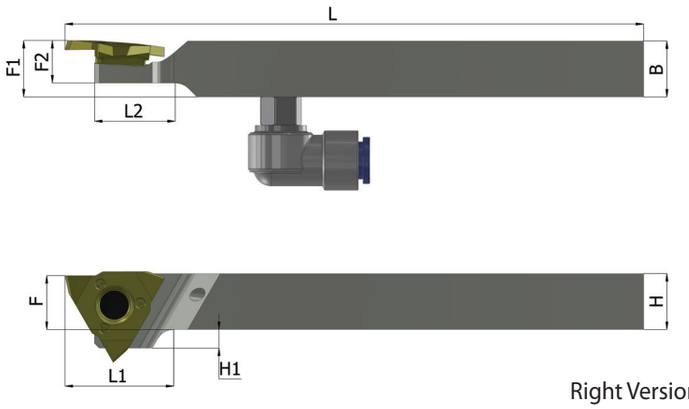
Ordering Code	B mm	H mm	L1	L	F	F1	H1	Insert Screw	Torx Key	*Coolant connector mm
**GER 0816 K	16	8	.67	4.9	.315	.630	.31	S21	K21	---
GER 1016 K	16	10	.67	4.9	.394	.630	.24	S21	K21	Ø4 / Ø6
GER 1216 K	16	12	.67	4.9	.472	.630	.16	S21	K21	Ø4 / Ø6
GER 1616 K	16	16	----	4.9	.630	.630	0	S21	K21	Ø4 / Ø6
GER 2020 K	20	20	----	4.9	.787	.787	0	S21	K21	Ø4 / Ø6
GER 2525 M	25	25	----	5.9	.984	.984	0	S21	K21	Ø4 / Ø6

For left hand Toolholder specify GE L
* Coolant pipe diameter
** Without coolant

Right hand cutting Inch holders

Ordering Code	B	H	L1	L	F	F1	H1	Insert Screw	Torx Key	*Coolant connector mm
GER 0315 K	.625	.315	.67	4.9	.315	.625	.32	S21	K21	Ø4 / Ø6
GER 0375 K	.625	.375	.67	4.9	.394	.625	.24	S21	K21	Ø4 / Ø6
GER 0500 K	.625	.500	.67	4.9	.472	.625	.16	S21	K21	Ø4 / Ø6
GER 0625 K	.625	.625	----	4.9	.625	.625	0	S21	K21	Ø4 / Ø6
GER 0750 K	.750	.750	----	4.9	.750	.750	0	S21	K21	Ø4 / Ø6
GER 1000 M	1	1	----	5.9	1	1	0	S21	K21	Ø4 / Ø6

Slim Holders



Right Version

Right hand cutting Metric holders

Ordering Code	B=H mm	L1	L2	L	F	F1	F2	H1	Insert Screw	Torx Key	*Coolant connector mm
GERS 1010 K	10	.67	.43	4.9	.394	.394	.394	.24	S21S	K21	Ø4 / Ø6
GERS 1212 K	12	.67	.43	4.9	.470	.470	.375	.16	S21S	K21	Ø4 / Ø6
GERS 1616 K	16	----	.43	4.9	.630	.630	.375	0	S21S	K21	Ø4 / Ø6
GERS 2020 K	20	----	.43	4.9	.787	.787	.375	0	S21S	K21	Ø4 / Ø6

For L.H, specify GELS instead of GERS

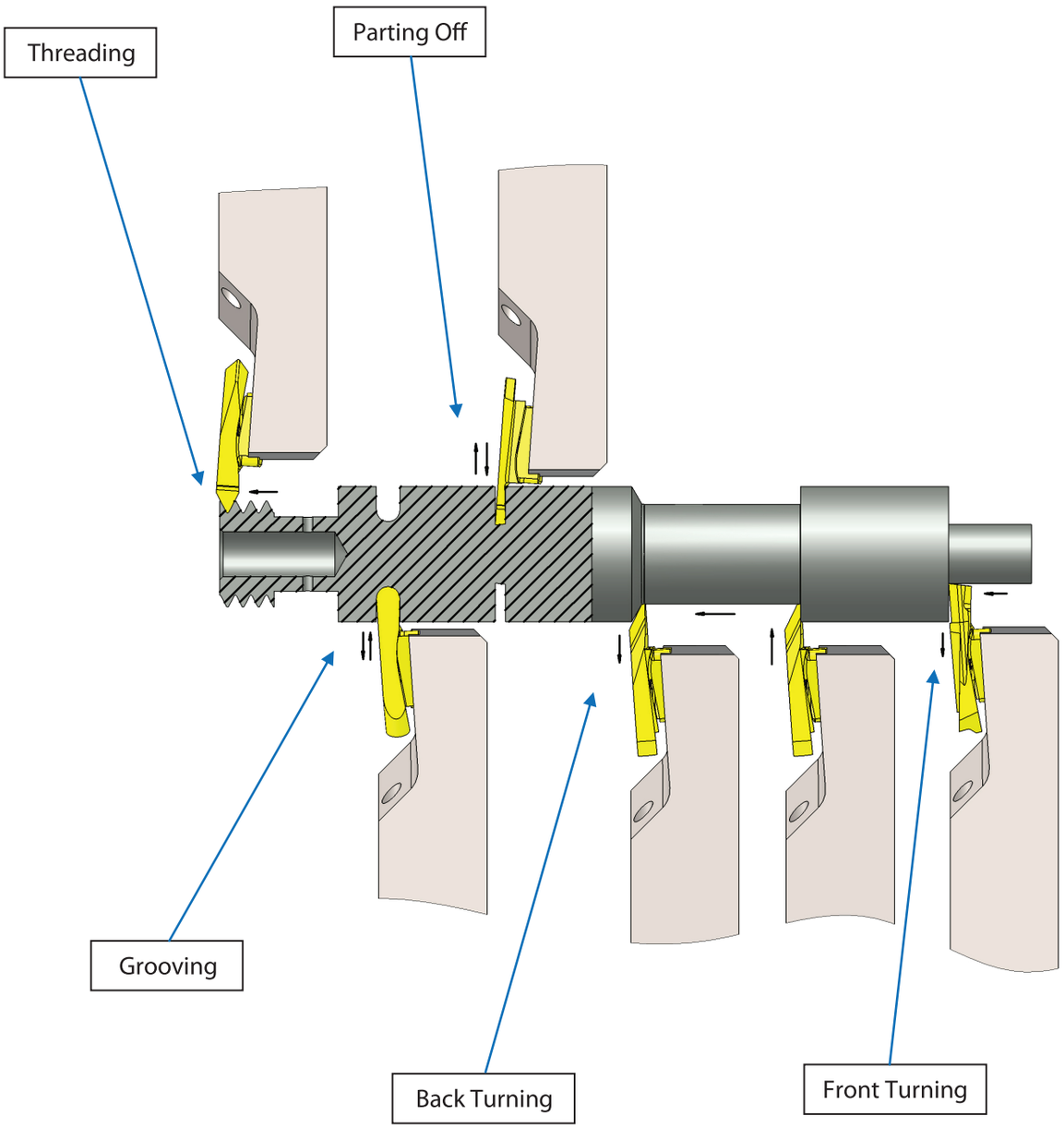
Right hand cutting Inch holders

Ordering Code	B=H	L1	L2	L	F	F1	F2	H1	Insert Screw	Torx Key	*Coolant connector mm
GERS 0375 K	.375	.67	.43	4.9	.375	.375	.375	.24	S21S	K21	Ø4 / Ø6
GERS 0500 K	.500	.67	.43	4.9	.500	.500	.374	.16	S21S	K21	Ø4 / Ø6
GERS 0625 K	.625	----	.43	4.9	.625	.625	.374	0	S21S	K21	Ø4 / Ø6
GERS 0750 K	.750	----	.43	4.9	.750	.750	.374	0	S21S	K21	Ø4 / Ø6

For L.H, specify GELS instead of GERS

Working Method

Grooving - Parting Off - Turning - Profiling - Threading



3 Cutting Edges Swiss Line Inserts (19,20 mm)

Carbide Grades

BLU

PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials.

K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

Cutting Data

ISO Standard	Materials	Cutting Speed ft/min	
		K20	BLU
P	Low & Medium Carbon Steels <0.55%C	---	262-492
	High Carbon Steels ≥0.55%C	---	230-394
	Alloy Steels, Treated Steels	---	131-262
M	Stainless Steel-Free Cutting	98-262	197-394
	Stainless Steel-Austenitic	66-230	98-295
	Cast Steels	98-262	164-394
K	Cast Iron	164-394	---
N	Aluminum ≤12%Si, Copper	394-820	---
	Aluminum >12%Si	295-656	---
	Synthetics, Duroplastics, Thermoplastics	230-492	---
S	Nickel Alloys, Titanium Alloys	66-164	98-230
H	Hardened Steel, 45-50HRc	---	66-164

4 Cutting Edges G4 Turning Inserts and Toolholders

For grooving, parting-off and threading applications

Benefits

- High productivity and cost efficient due to four cutting edges
- High precision thanks to the fully ground profile

Features

- Strong and stable clamping due to the unique insert shape and the holder pocket.
- High repeatability.
- Maximum versatility- a single holder for large range of inserts.
- Can be used with high machining parameters, and provides high surface finish.
- Internal coolant provides the coolant liquid towards the cutting edge.

Application

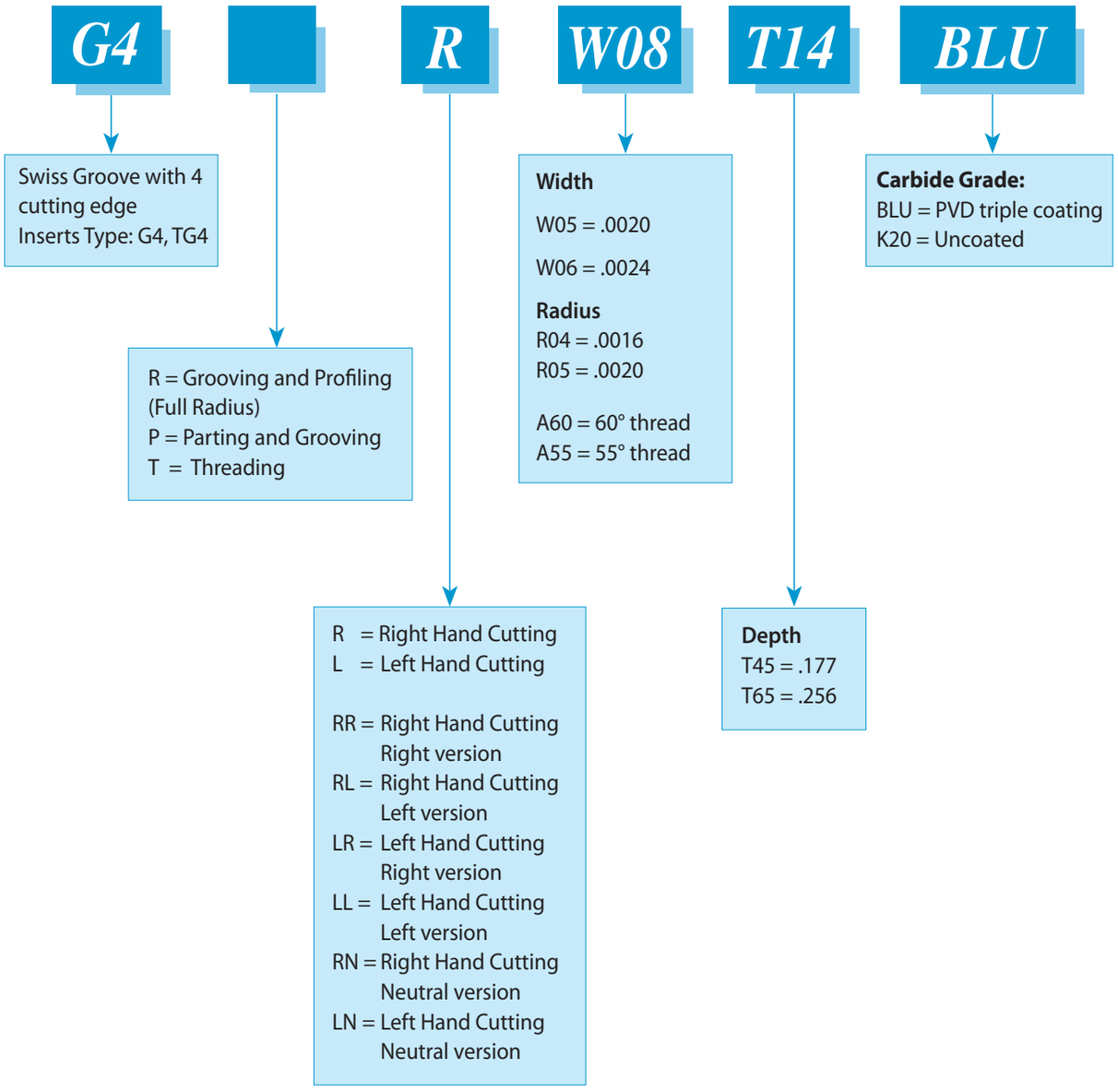
- Multi-function inserts for grooving, parting, turning and threading.
- Fits to a large range of diameters, from very small applications with a thin wall up to 100 mm diameter.

Carbide grades: BLU, K20

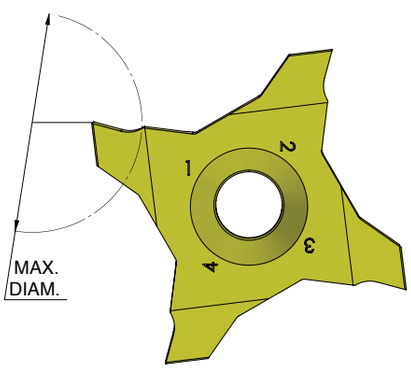
Carmex Precision Tools Ltd.

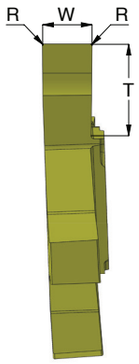
Product Identification - Ordering Codes

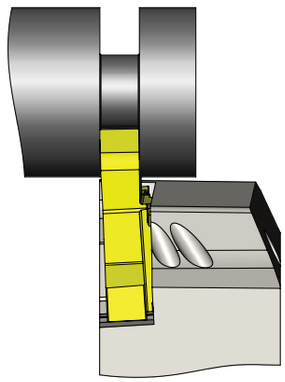
G4 Inserts



Grooving







R.H VERSION

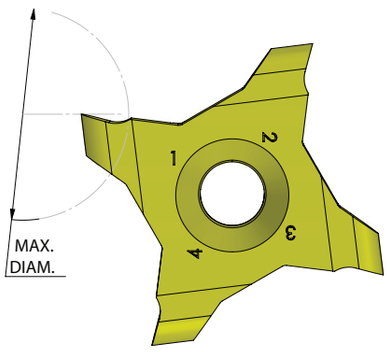
Insert Type	Ordering Code	W±.001	T max	R	MAX DIAM.	Feed inch/rev
G4	**G4 R W05 T16**	.020	.063	0	3.94	.0004-.0024
	G4 R W06 T16	.024	.063	0	3.94	.0004-.0024
	G4 R W07 T18	.028	.071	0	3.94	.0004-.0024
	G4 R W08 T20	.031	.079	0	3.94	.0008-.0028
	G4 R W10 T25	.039	.098	.002	3.94	.0008-.0035
	G4 R W12 T30	.047	.118	.002	3.94	.0008-.0035
	G4 R W14 T30	.055	.118	.002	3.94	.0008-.0047
	G4 R W15 T30	.059	.118	.002	3.94	.0008-.0047
	G4 R W16 T35	.063	.138	.002	3.94	.0008-.0047
	G4 R W17 T40	.067	.157	.002	3.94	.0008-.0047
	G4 R W20 T40	.079	.157	.002	3.94	.0008-.0051
TG4	**TG4 R W22 T50**	.089	.197	.002	3.94	.0008-.0055
	TG4 R W25 T50	.098	.197	.002	3.94	.0008-.0055
	TG4 R W27 T55	.108	.217	.002	3.94	.0008-.0047
	TG4 R W30 T65	.118	.256	.004	3.94	.0008-.0047
	TG4 R W32 T65	.125	.256	.004	3.94	.0008-.0047
	TG4 R W35 T65	.138	.256	.004	3.94	.0008-.0047

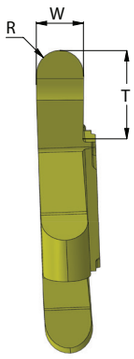
	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

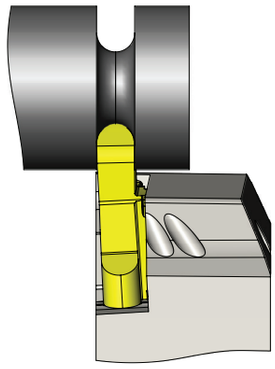
For L.H, specify G4 L instead of G4 R

● First choice o Alternative

Grooving and Profiling (full radius)







R.H VERSION

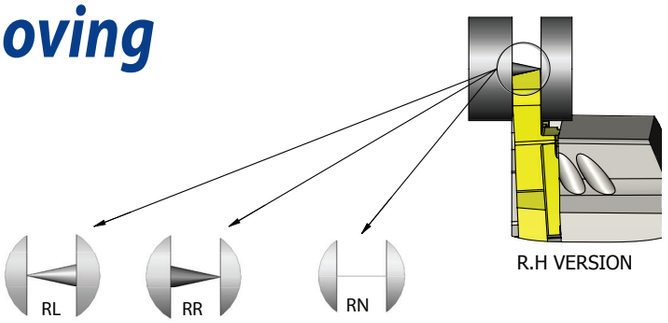
Insert Type	Ordering Code	R±.0012	W	T max	MAX DIAM.	Feed inch/rev
G4	**G4R R R02 T15**	.010	.020	.059	3.94	.0004-.0024
	G4R R R04 T20	.016	.031	.079	3.94	.0004-.0024
	G4R R R05 T25	.020	.039	.098	3.94	.0008-.0035
	G4R R R07 T38	.030	.059	.150	3.94	.0008-.0035
	G4R R R10 T45	.039	.079	.177	3.94	.0008-.0051
TG4	**TG4R R R12 T50**	.049	.098	.197	3.94	.0008-.0051
	TG4R R R15 T65	.059	.118	.256	3.94	.0008-.0047

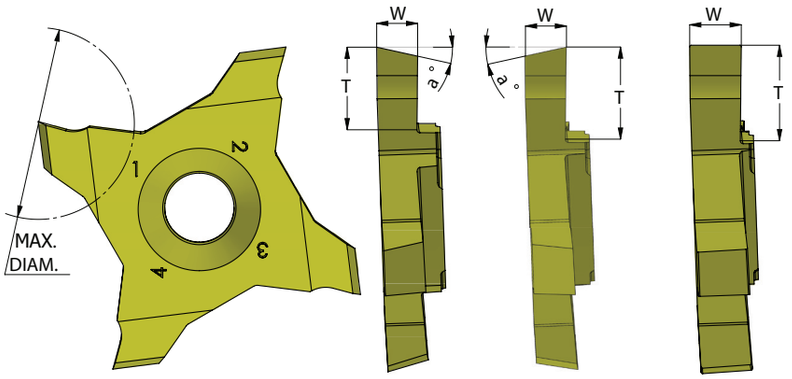
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify TG4R L instead of TG4R R

● First choice ○ Alternative

Parting off and Grooving

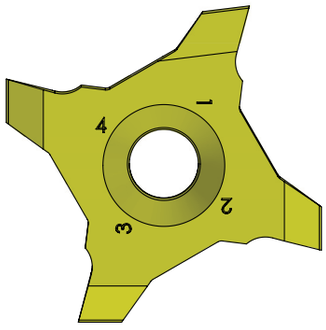


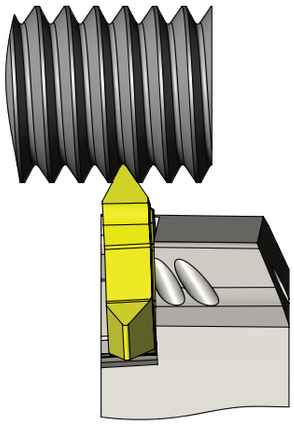


Insert Type	Ordering Code	W	α⁰	T max	MAX DIAM. Parting off	MAX DIAM. Grooving	Feed inch/rev
G4	**G4P RR W05 T30**	.020	15	.118	.24	3.94	.0008-.0024
	G4P RL W05 T30	.020	15	.118	.24	3.94	.0008-.0024
	G4P RN W05 T30	.020	0	.118	.24	3.94	.0008-.0024
	G4P RR W07 T43	.028	15	.169	.32	3.94	.0008-.0035
	G4P RL W07 T43	.028	15	.169	.32	3.94	.0008-.0035
	G4P RN W07 T43	.028	0	.169	.32	3.94	.0008-.0035
	G4P RR W08 T45	.031	15	.177	.35	3.94	.0008-.0035
	G4P RL W08 T45	.031	15	.177	.35	3.94	.0008-.0035
	G4P RN W08 T45	.031	0	.177	.35	3.94	.0008-.0035
TG4	**TG4P RR W10 T58**	.039	15	.228	.46	3.94	.0008-.0035
	TG4P RL W10 T58	.039	15	.228	.46	3.94	.0008-.0035
	TG4P RN W10 T58	.039	0	.228	.46	3.94	.0008-.0035
	TG4P RR W15 T65	.059	15	.256	.51	3.94	.0008-.0051
	TG4P RL W15 T65	.059	15	.256	.51	3.94	.0008-.0051
	TG4P RN W15 T65	.059	0	.256	.51	3.94	.0008-.0051
	TG4P RR W20 T65	.079	15	.256	.51	3.94	.0008-.0051
	TG4P RL W20 T65	.079	15	.256	.51	3.94	.0008-.0051
	TG4P RN W20 T65	.079	0	.256	.51	3.94	.0008-.0051
	TG4P RR W25 T65	.098	15	.256	.51	3.94	.0008-.0051
	TG4P RL W25 T65	.098	15	.256	.51	3.94	.0008-.0051
	TG4P RN W25 T65	.098	0	.256	.51	3.94	.0008-.0051

For L.H, specify G4P LR instead of G4P RR
For L.H, specify G4P LL instead of G4P RL
For L.H, specify G4P LN instead of G4P RN

Grooving and Profiling (full radius)





R.H VERSION

Insert Type	Ordering Code	Pitch		Y
		mm	TPI	
G4	**G4T R AF60**	0.25-0.8	100-32	.028
	G4T R A60	0.5 -1.5	46-16	.043
	G4T R G60	1.75-3.0	14- 8	.055
	G4T R AG60	0.5 -3.0	48- 8	.055

For L.H, specify G4T L instead of G4T R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Threading-Partial profile 55°

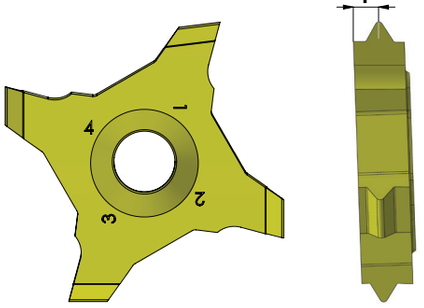
Insert Type	Ordering Code	Pitch		Y
		mm	TPI	
G4	**G4T R A55**	0.5 -1.5	46-16	.043
	G4T R G55	1.75-3.0	14- 8	.055
	G4T R AG55	0.5 -3.0	48- 8	.055

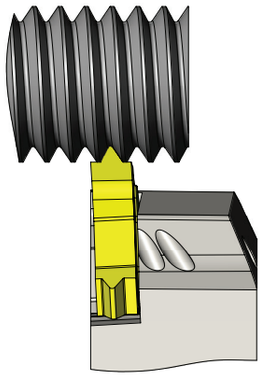
For L.H, specify G4T L instead of G4T R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading-ISO metric 60° Full Profile





R.H VERSION

Insert Type	Ordering Code	Pitch mm	Y
G4	**G4T R 0.5ISO**	0.5	.024
	G4T R 0.6ISO	0.6	.024
	G4T R 0.7ISO	0.7	.028
	G4T R 0.75ISO	0.75	.028
	G4T R 0.8ISO	0.8	.028
	G4T R 1.0ISO	1.0	.031
	G4T R 1.25ISO	1.25	.039
	G4T R 1.5ISO	1.5	.043
TG4	**TG4T R 1.75ISO**	1.75	.047
	TG4T R 2.0ISO	2.0	.051
	TG4T R 3.0ISO	3.0	.067

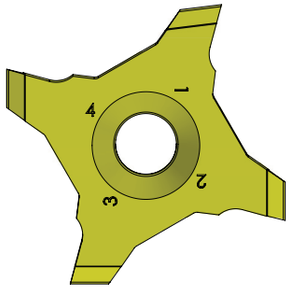
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

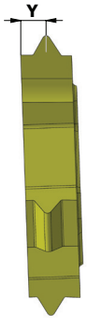
For L.H, specify G4T L instead of G4T R

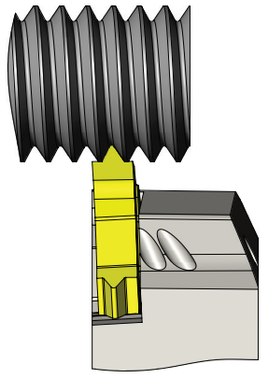
● First choice ○ Alternative

Carmex Precision Tools Ltd.

Threading-UN unified 60° Full Profile







R.H VERSION

Insert Type	Ordering Code	Pitch TPI	Y
G4	**G4T R 72UN**	72	.012
	G4T R 64UN	64	.016
	G4T R 56UN	56	.024
	G4T R 40UN	40	.028
	G4T R 32UN	32	.028
	G4T R 28UN	28	.031
	G4T R 24UN	24	.031
	G4T R 20UN	20	.035
	G4T R 18UN	18	.039
TG4	**TG4T R 16UN**	16	.043
	TG4T R 14UN	14	.047
	TG4T R 13UN	13	.051
	TG4T R 12UN	12	.055

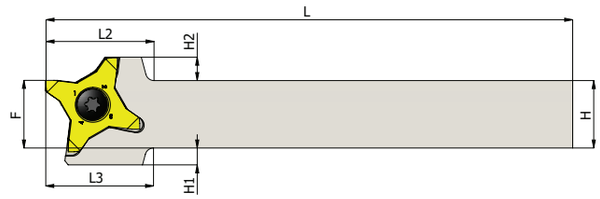
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G4T L instead of G4T R

● First choice ○ Alternative

External Toolholders

Coated holders provide high abrasive resistance



Inch holders

Insert Type	Ordering Code	B	H	L1	L2	L3	L	F	F1	H1	H2	Insert Screw Torx +	Key Torx +	** Coolant connector mm
G4	*G4ER 0500 K	.500	.500	.177	.71	.71	4.9	.500	.500	.16	.16	S16P	IP10	---
	G4ER 0625 K	.625	.625	.177	.71	---	4.9	.625	.625	---	.16	S16P	IP10	Ø4/Ø6
	G4ER 0750 K	.750	.750	.177	.71	---	4.9	.750	.750	---	.16	S16P	IP10	Ø4/Ø6
	G4ER 1000 M	1	1	.177	.71	---	5.9	1	1	---	.16	S16P	IP10	Ø4/Ø6
TG4	TG4ER 0625 K	.625	.625	.256	1.02	1.02	4.9	.625	.625	.16	.24	S22P	IP20	Ø4/Ø6
	TG4ER 0750 K	.750	.750	.256	1.02	---	4.9	.750	.750	---	.24	S22P	IP20	Ø4/Ø6
	TG4ER 1000 M	1	1	.256	1.02	---	5.9	1	1	---	.24	S22P	IP20	Ø4/Ø6

Metric holders

Insert Type	Ordering Code	B mm	H mm	L1	L2	L3	L	F	F1	H1	H2	Insert Screw Torx +	Key Torx +	** Coolant connector mm
G4	*G4ER 1212 K	12	12	.177	.71	.71	4.9	.472	.63	.16	.16	S16P	IP10	---
	G4ER 1616 K	16	16	.177	.71	---	4.9	.630	.63	---	.16	S16P	IP10	Ø4/Ø6
	G4ER 2020 K	20	20	.177	.71	---	4.9	.787	.79	---	.16	S16P	IP10	Ø4/Ø6
	G4ER 2525 M	25	25	.177	.71	---	5.9	.984	.98	---	.16	S16P	IP10	Ø4/Ø6
TG4	TG4ER 1616 K	16	16	.256	1.02	1.02	4.9	.630	.63	.16	.24	S22P	IP20	Ø4/Ø6
	TG4ER 2020 K	20	20	.256	1.02	---	4.9	.787	.79	---	.24	S22P	IP20	Ø4/Ø6
	TG4ER 2525 M	25	25	.256	1.02	---	5.9	.984	.98	---	.24	S22P	IP20	Ø4/Ø6

* Without internal coolant
** Diameter of coolant pipe
For Left Hand:
specify G4EL… instead of G4ER…
specify TG4EL… instead of TG4ER…

Carbide Grades

BLU

PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Super alloys and hard materials up to 45 HRc.

K20

Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

Cutting Data

ISO Standard	Materials	Cutting Speed ft/min	
		K20	BLU
P	Low & Medium Carbon Steels <0.55%C	---	260-490
	High Carbon Steels ≥0.55%C	---	230-390
	Alloy Steels, Treated Steels	---	130-260
M	Stainless Steel-Free Cutting	100-260	200-390
	Stainless Steel-Austenitic	65-230	100-300
	Cast Steels	100-260	165-390
K	Cast Iron	160-390	200-430
N	Aluminium ≤12%Si, Copper	390-820	---
	Aluminium >12%Si	300-660	---
	Synthetics, Duroplastics, Thermoplastics	230-490	---
S	Nickel alloys, Titanium alloys	65-165	100-230
H	Hardened Steel, ≤45 HRc	---	65-165

6 Cutting Edges G6 Turning Inserts and Toolholders

For grooving, parting-off and threading

Benefits

- High productivity and cost efficient due to G6 six cutting edges
- One holder for all inserts type- Maximum versatility
- High precision thanks to the fully ground profile

Features

- Strong and stable clamping due to the unique insert shape
- Can be used with high machining parameters, and provides high surface finish
- Internal coolant provides the cool liquid towards the cutting edge

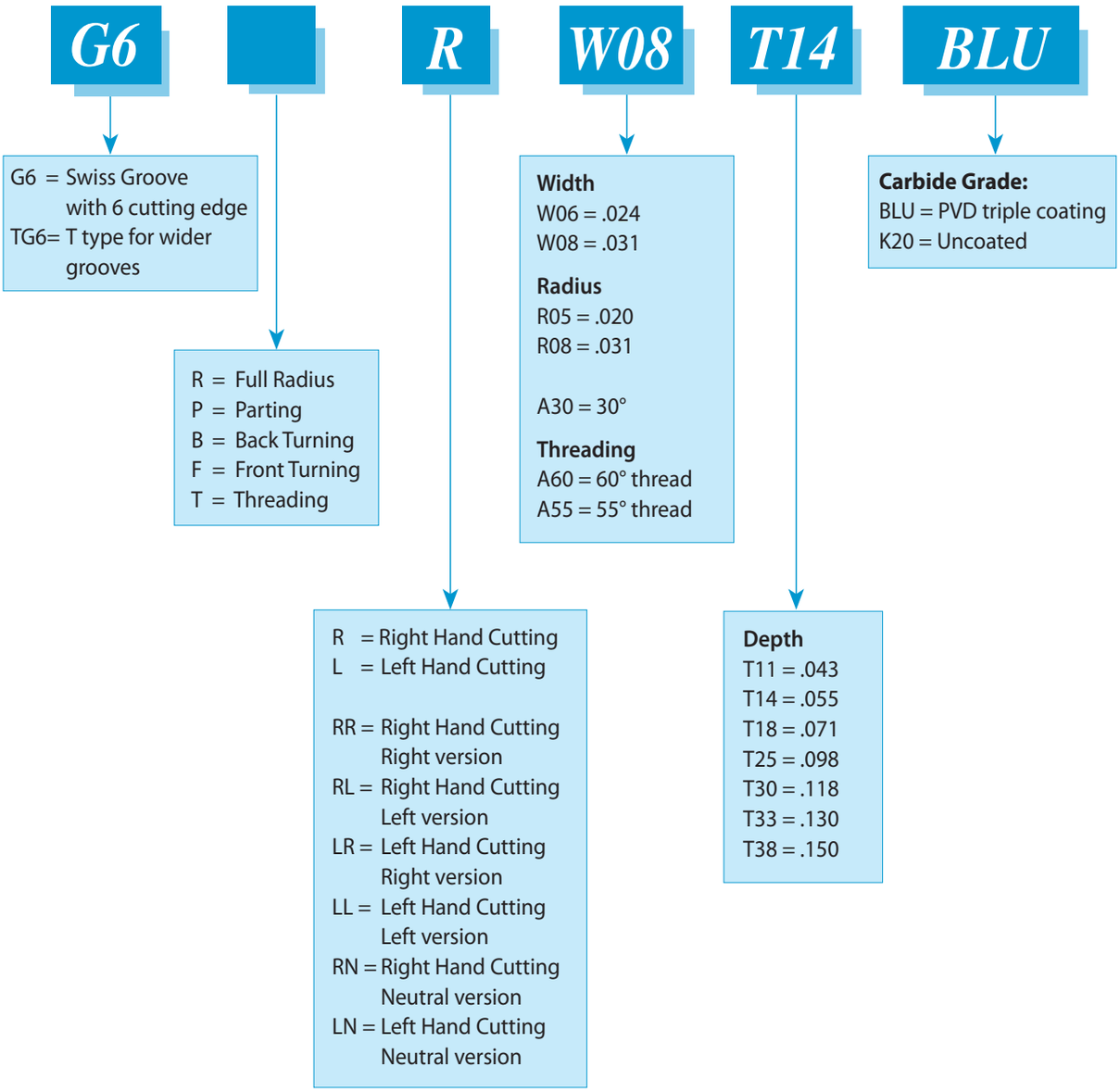
Application

- Multi-function inserts for threading, grooving, parting and turning
- Fit to a large range of diameters, from very small applications with a thin wall up to diameter of 60 mm.

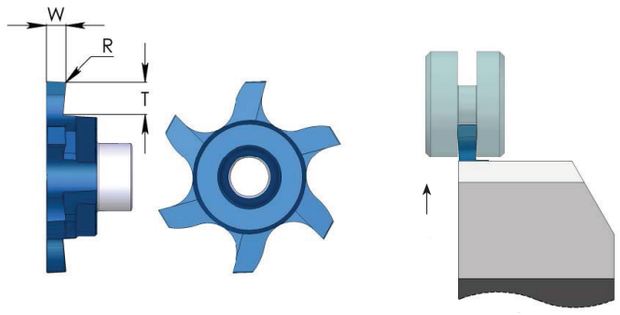
Carbide grades: BLU, K20

Product Identification - Ordering Codes

G6 Inserts



Grooving



Right Version

Right hand cutting

Insert Type	Ordering Code	W±.001	T max	R	Feed inch/rev
G6	**G6 R W06 T11**	.024	.043	0	.0004-.002
	G6 R W08 T14	.031	.055	0	.0008-.003
	G6 R W10 T18	.039	.071	.002	.0008-.004
	G6 R W15 T33	.059	.130	.002	.0008-.005
	G6 R W20 T38	.079	.150	.004	.0008-.005
	G6 R W25 T38	.098	.150	.004	.0008-.006
TG6	**G6 R W30 T38**	.118	.150	.004	.0008-.005
	G6 R W40 T38	.157	.150	.004	.0008-.005

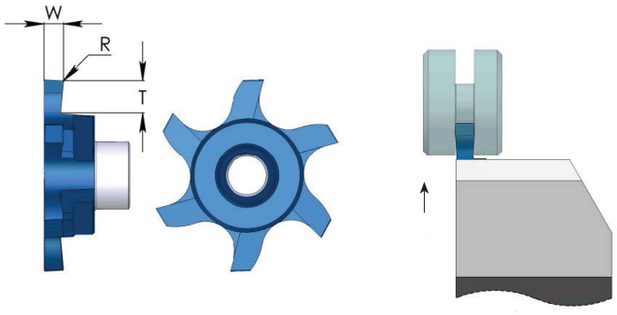
	K20	BLU
P		●
M	●	●
K	●	o
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6 L instead of G6 R

● First choice o Alternative

Grooving, Circlip Ring Grooves

DIN 471/472



Right Version

Right hand cutting

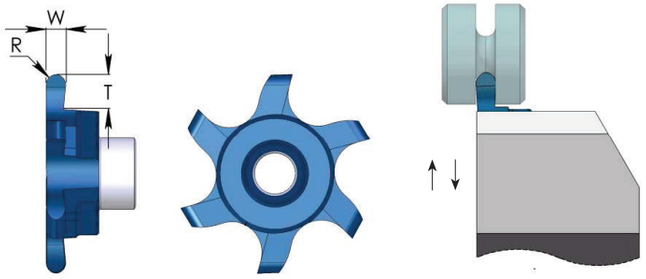
Insert Type	Ordering Code	Nom` groove width	W- .002	T max	R	Feed inch/rev
G6	**G6D R W12 T31**	.043	.049	.122	.0020	.001-.004
	G6D R W14 T33	.051	.057	.130	.0020	.001-.005
	G6D R W17 T33	.063	.069	.130	.0020	.001-.005

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6D L instead of G6D R

Nom`= nominal

Grooving and Profiling (full radius)



Right Version

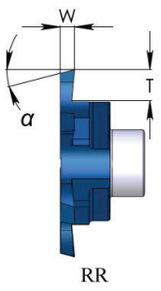
Right hand cutting

Insert Type	Ordering Code	R±.001	W	T max	Feed inch/rev
G6	**G6R R R05 T25**	.020	.039	.098	.0008-.004
	G6R R R08 T30	.031	.063	.118	.0008-.004
	G6R R R10 T38	.039	.079	.150	.0008-.005
	G6R R R12 T38	.049	.098	.150	.0008-.006
TG6	**TG6R R R15 T38**	.059	.118	.150	.0008-.005
	TG6R R R20 T38	.079	.157	.150	.0008-.005

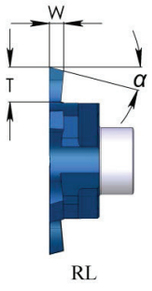
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

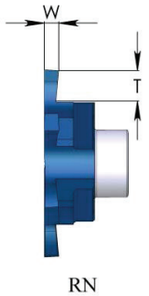
Parting Off and Grooving



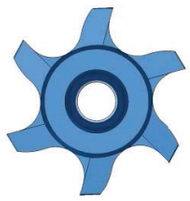
RR

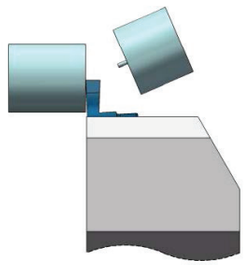


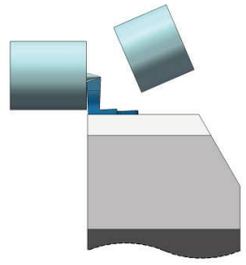
RL



RN


Right Version


RN


RR, RL

Right hand cutting

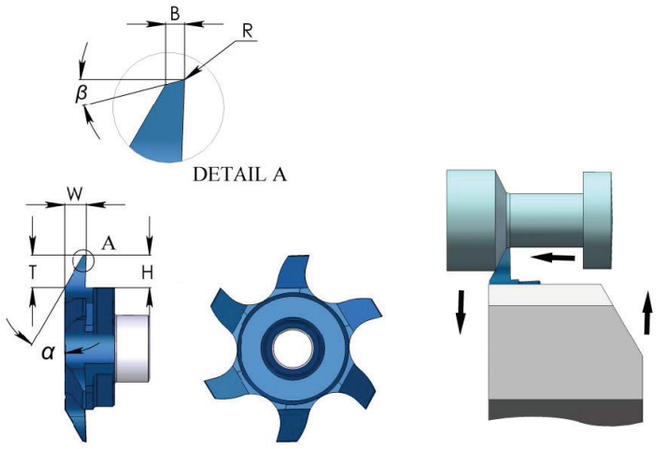
Insert Type	Ordering Code	W	α°	T max	Feed inch/rev
G6	**G6P RR W08 T38**	.039	15	.150	.0008-.004
	G6P RL W08 T38	.039	15	.150	.0008-.004
	G6P RN W08 T38	.039	0	.150	.0008-.004
	G6P RR W10 T38	.059	15	.150	.0008-.005
	G6P RL W10 T38	.059	15	.150	.0008-.005
	G6P RN W10 T38	.059	0	.150	.0008-.005
	G6P RR W15 T38	.079	15	.150	.0008-.005
	G6P RL W15 T38	.079	15	.150	.0008-.005
	G6P RN W15 T38	.079	0	.150	.0008-.005
	G6P RR W20 T38	.039	15	.150	.0008-.005
	G6P RL W20 T38	.039	15	.150	.0008-.005
	G6P RN W20 T38	.039	0	.150	.0008-.005

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

For L.H, specify G6P LR instead of G6P RR
G6P LL instead of G6P RL
G6P LN instead of G6P RN

● First choice ○ Alternative

Back Turning



Right Version

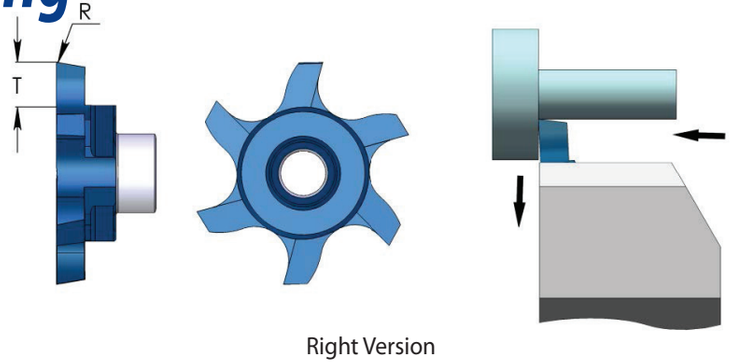
Right hand cutting

Insert Type	Ordering Code	α°	ß°	R	W	H	B	T max	Feed inch/rev
G6	**G6B R A30**	30	12	.004	.102	.150	.02	.150	.002-.005

For L.H, specify G6B L instead of G6B R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Front Turning



Right Version

Right hand cutting

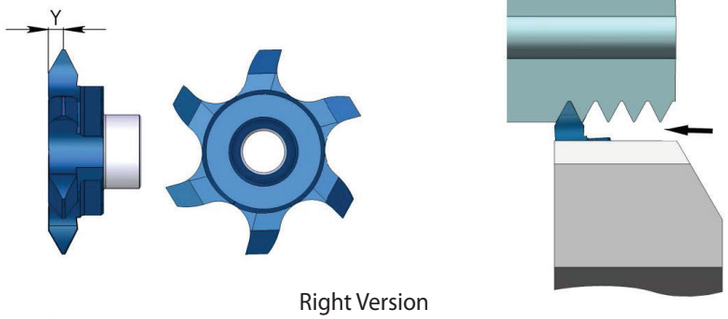
Insert Type	Ordering Code	T max	R	Feed inch/rev
G6	**G6F R T38**	.15	.004	.002-.005

For L.H, specify G6F L instead of G6F R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading - Partial Profile 60°



Right Version

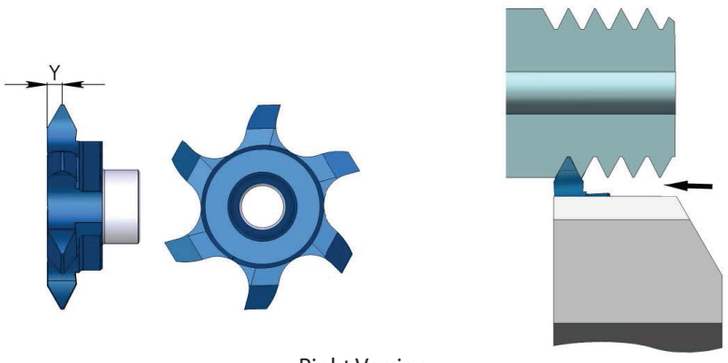
Right hand cutting

Insert Type	Ordering Code	Pitch Range mm	Pitch Range TPI	Y
G6	**G6T R A60**	0.5 -1.5	48-16	.031
	G6T R G60	1.75-3.0	14- 8	.059
	G6T R AG60	0.5 -3.0	48- 8	.059

For L.H, specify G6T L instead of G6T R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Threading - Partial Profile 55°



Right Version

Right hand cutting

Insert Type	Ordering Code	Pitch Range mm	Pitch Range TPI	Y
G6	**G6T R A55**	0.5 -1.5	48-16	.031
	G6T R G55	1.75-3.0	14- 8	.059
	G6T R AG55	0.5 -3.0	48- 8	.059

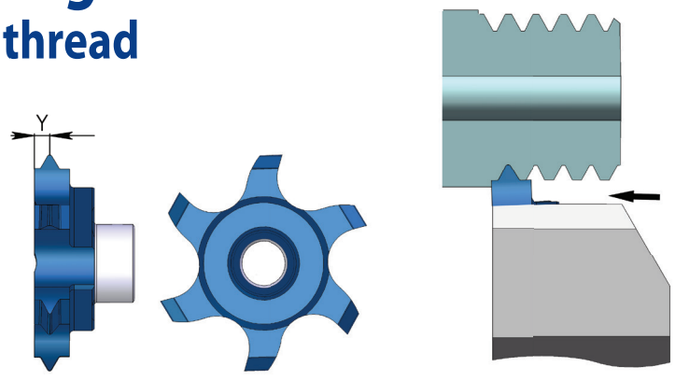
For L.H, specify G6T L instead of G6T R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

● First choice ○ Alternative

Threading - ISO metric 60° Full Profile

External thread



Right Version

Right hand cutting

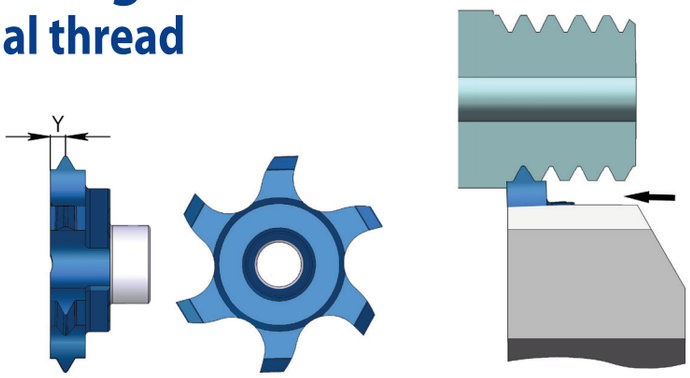
Insert Type	Ordering Code	Pitch mm	Y
G6	**G6T R 1.0ISO**	1.0	.028
	G6T R 1.5ISO	1.5	.039
	G6T R 2.0ISO	2.0	.051

For L.H, specify G6T L instead of G6T R

	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

Threading - UN unified 60° Full Profile

External thread



Right Version

Right hand cutting

Insert Type	Ordering Code	Pitch TPI	Y
G6	**G6T R 56UN**	56	.024
	G6T R 40UN	40	.016
	G6T R 32UN	32	.028
	G6T R 24UN	24	.028

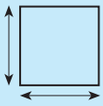
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

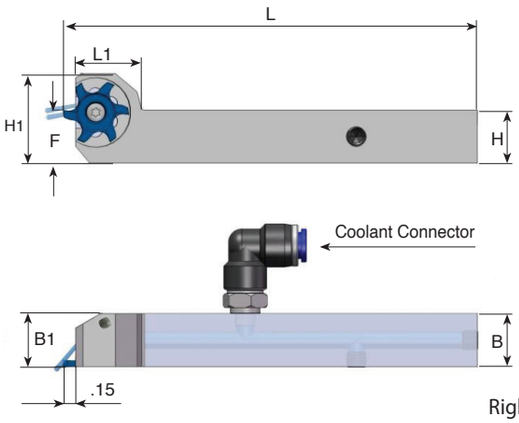
● First choice ○ Alternative

External Toolholders - For G6 Inserts

Coolant through toolholders, for external turning in Swiss type lathes machines. The high pressure coolant is directed towards the insert cutting edge in order to evacuate the chips created and avoid build up edge.
Includes a coolant connector for fast attachment on the machine.

Product Identification - Ordering Codes

T	G6	E	R	1212	K
T =Type	G6 = Swiss toolholder	E = External	R = Right Hand L = Left Hand	Shank Cross Section  0500 = .500 1212 = 12 x 12 mm	Length of Toolholders K = 4.9 M= 5.9 K = 125 mm M= 150 mm



Right Version

Right hand cutting Inch Holders

Insert Type	Ordering Code	B	H	L1	L	H1	F	B1	Insert Screw Torx +	Torx + Key	**Coolant connector (mm)
G6	*G6ER 0500 K	.500	.500	.8	4.9	.9	.500	.63	S16LP	K16P	Ø4 / Ø6
	G6ER 0625 K	.625	.625	.8	4.9	1.1	.625	.63	S16LP	K16P	Ø4 / Ø6
	G6ER 0750 K	.750	.750	.8	4.9	1.2	.750	.75	S16LP	K16P	Ø4 / Ø6
	G6ER 1000 M	1	1	.8	5.9	1.4	1	1	S16LP	K16P	Ø4 / Ø6
TG6	*TG6ER 0500 K	.500	.500	.8	4.9	.9	.500	.71	S16LP	K16P	Ø4 / Ø6
	TG6ER 0625 K	.625	.625	.8	4.9	1.1	.625	.71	S16LP	K16P	Ø4 / Ø6
	TG6ER 0750 K	.750	.750	.8	4.9	1.2	.750	.75	S16LP	K16P	Ø4 / Ø6
	TG6ER 1000 M	1	1	.8	5.9	1.4	1	1	S16LP	K16P	Ø4 / Ø6

* Without internal coolant ** Coolant pipe diameter, standard packing with Ø4 mm
For L.H, specify G6EL instead of G6ER
Coated holders provide high abrasive resistance

Right hand cutting Metric Holders

Insert Type	Ordering Code	B mm	H mm	L1	L	H1	F	B1	Insert Screw Torx +	Torx + Key	**Coolant connector (mm)
G6	*G6ER 1212 K	12	12	.8	4.9	.9	.472	.63	S16LP	K16P	---
	G6ER 1616 K	16	16	.8	4.9	1.1	.630	.63	S16LP	K16P	Ø4 / Ø6
	G6ER 2020 K	20	20	.8	4.9	1.2	.787	.79	S16LP	K16P	Ø4 / Ø6
	G6ER 2525 M	25	25	.8	5.9	1.4	.984	.98	S16LP	K16P	Ø4 / Ø6
TG6	*TG6ER 1212 K	12	12	.8	4.9	.9	.472	.71	S16LP	K16P	---
	TG6ER 1616 K	16	16	.8	4.9	1.1	.630	.71	S16LP	K16P	Ø4 / Ø6
	TG6ER 2020 K	20	20	.8	4.9	1.2	.787	.79	S16LP	K16P	Ø4 / Ø6
	TG6ER 2525 M	25	25	.8	5.9	1.4	.984	.98	S16LP	K16P	Ø4 / Ø6

* Without internal coolant ** Coolant pipe diameter, standard packing with Ø4 mm
For L.H, specify G6EL instead of G6ER
Coated holders provide high abrasive resistance

G6 Inserts

Carbide Grades

BLU PVD triple layer coated Sub-Micron grade for Steel, Stainless Steels, Titanium and hard materials.

K20 Uncoated Sub-Micron carbide grade for Aluminum and non-ferrous materials, Stainless Steels and Titanium.

Cutting Data

ISO Standard	Material	Cutting Speed ft/min	
		K20	BLU
P	Low and Medium Carbon Steels <0.55%C	-	260-490
	High Carbon Steels ≥0.55%C	-	230-395
	Alloy Steels,Treated Steels	-	130-260
M	Stainless Steel-Free Cutting	100-260	200-395
	Stainless Steel-Austenitic	65-230	100-295
	Cast Steels	100-260	165-395
K	Cast Iron	165-395	200-490
N	Aluminum ≤12%Si, Copper	395-820	-
	Aluminum >12%Si	295-656	-
	Synthetics, Duroplastics, Thermoplastics	230-490	-
S	Nickel Alloys, Titanium Alloys.	65-165	100-230
H	Hardened Steel, ≤45 HRc	-	65-165