Swiss-Line

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.

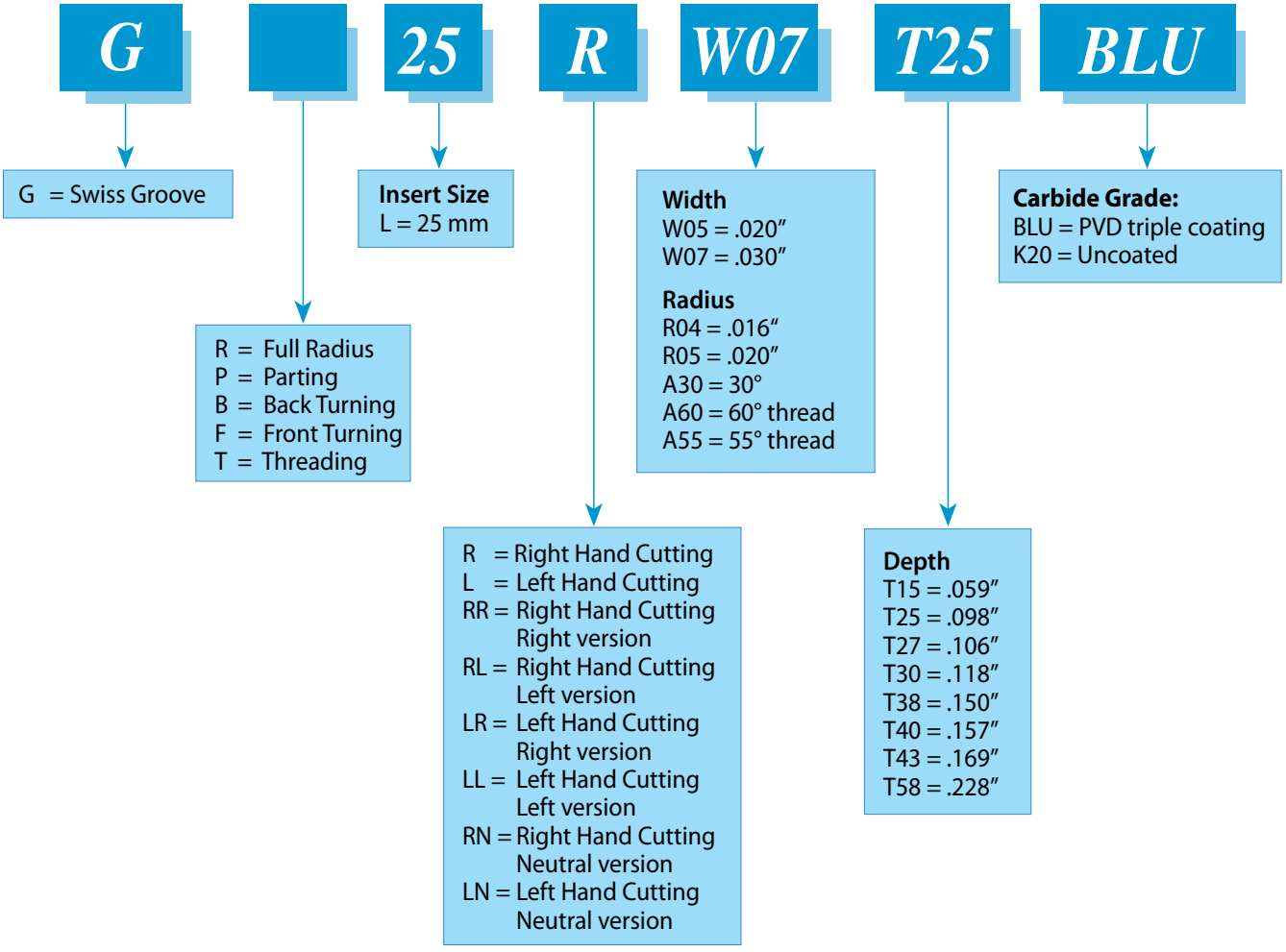
Features

- 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.

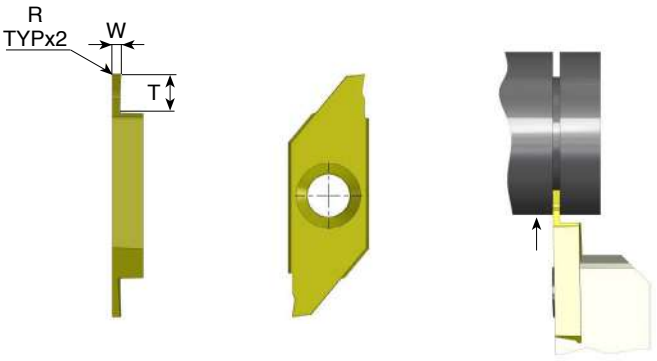
Carbide grades: BLU, K20

Product Identification

Polygon Inserts



Grooving



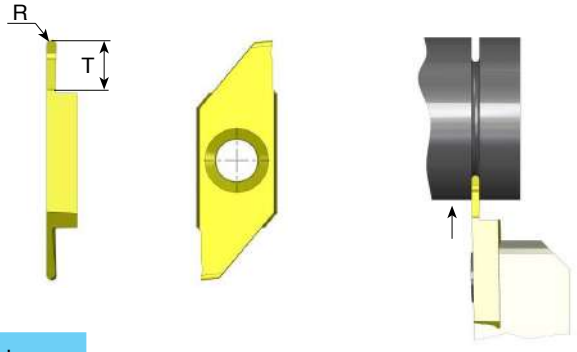
Right hand cutting

Ordering Code	W ±.001	T max	R	Feed Inch/rev
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

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

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

Grooving and Profiling (full radius)



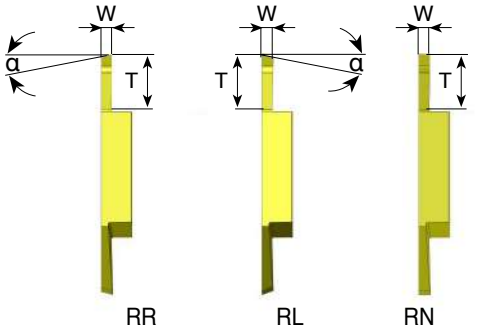
Right hand cutting

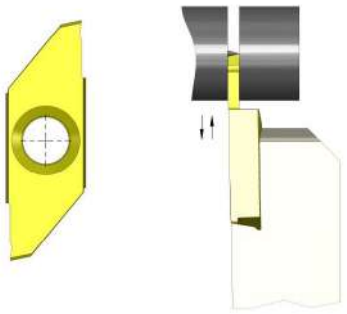
Ordering Code	R±.001	T max	Feed Inch/rev
GR25 R R02 T15	.010	.059	.0004-.002
GR25 R R04 T25	.016	.098	.0004-.003
GR25 R R05 T27	.020	.106	.0004-.004

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

● First choice ○ Alternative

Parting Off





Right hand cutting

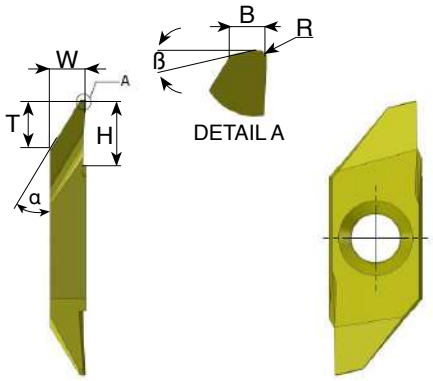
Ordering Code	W	α°	T max	Feed Inch/rev
GP25 RR W07 T43	.028	15	.169	.0008-.003
GP25 RL W07 T43	.028	15	.169	.0008-.003
GP25 RN W07 T43	.028	0	.169	.0008-.003
GP25 RR W10 T58	.039	15	.228	.0008-.005
GP25 RL W10 T58	.039	15	.228	.0008-.005
GP25 RN W10 T58	.039	0	.228	.0008-.005
GP25 RR W15 T58	.059	15	.228	.0008-.005
GP25 RL W15 T58	.059	15	.228	.0008-.005
GP25 RN W15 T58	.059	0	.228	.0008-.005
GP25 RR 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 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

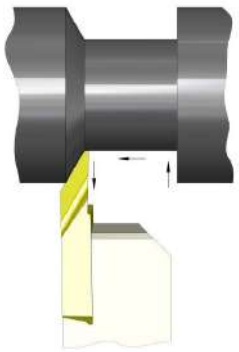
	K20	BLU
P		●
M	●	●
K	●	○
N	●	
S	●	●
H		≤45 HRc

* For L.H, specify GP25 LR instead of GP25 RR
GP25 LL instead of GR25 RL
GP25 LN instead of GR25 RN

● First choice ○ Alternative

Back Turning





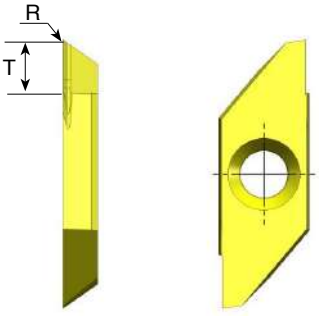
Right hand cutting

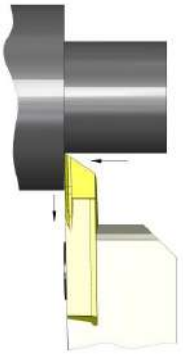
Ordering Code	α°	ß°	R	W	T max	B	H	Feed Inch/rev
GB25 R A30 R03	30	15	.001	.118	.157	.020	.315	.002-.005
GB25 R A30 R10	30	15	.004	.118	.157	.020	.315	.002-.005

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

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

Front Turning





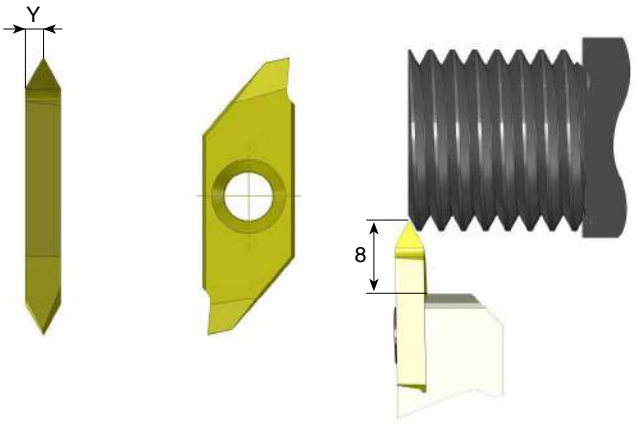
Right hand cutting

Ordering Code	T max	R	Feed Inch/rev
GF25 R T40	.157	.002	.002-.005

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

● First choice ○ Alternative

Threading - Partial Profile 60°



Right hand cutting

Ordering Code	Pitch Range mm	Pitch Range TPI	Y
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	●	○
N	●	
S	●	●
H		≤45 HRc

Threading - Partial Profile 55°

Right hand cutting

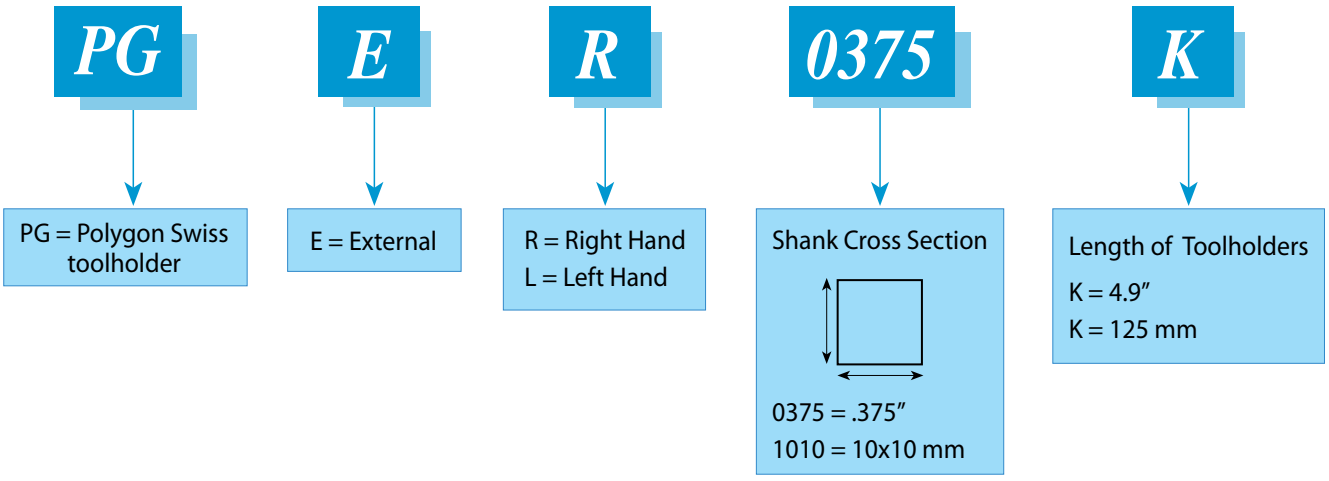
Ordering Code	Pitch Range mm	Pitch Range TPI	Y
GT25 R A55	0.5-1.5	48-16	.039
GT25 R G55	1.75-3.0	14-8	.063

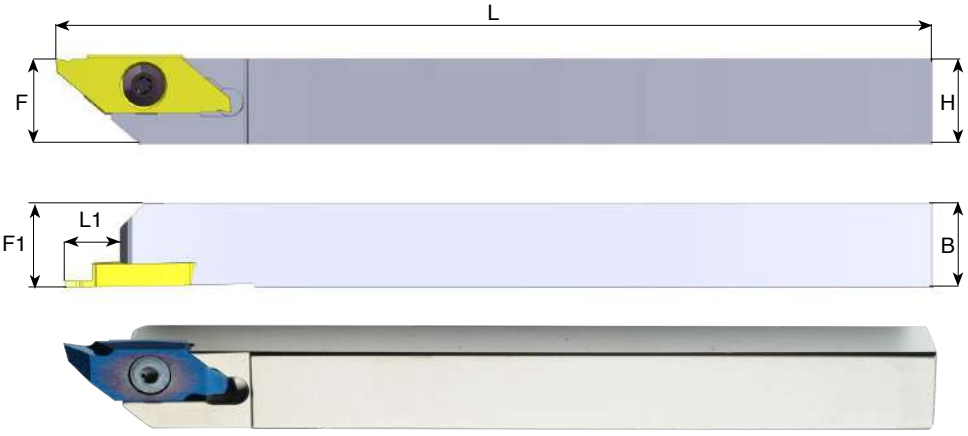
* For L.H, specify GT25 L instead of GT25 R

● First choice ○ Alternative

External Toolholders - Polygon

Product Identification





Right hand - Inch Holders

Ordering Code	B	H	L1	L	F	F1	Insert Screw Torx +	Key Torx +
PGER 0375 K	.375	.375	.31	4.9	.38	.38	S26P	K11P
PGER 0500 K	.500	.500	.31	4.9	.50	.50	S26P	K11P
PGER 0625 K	.625	.625	.31	4.9	.63	.63	S26P	K11P

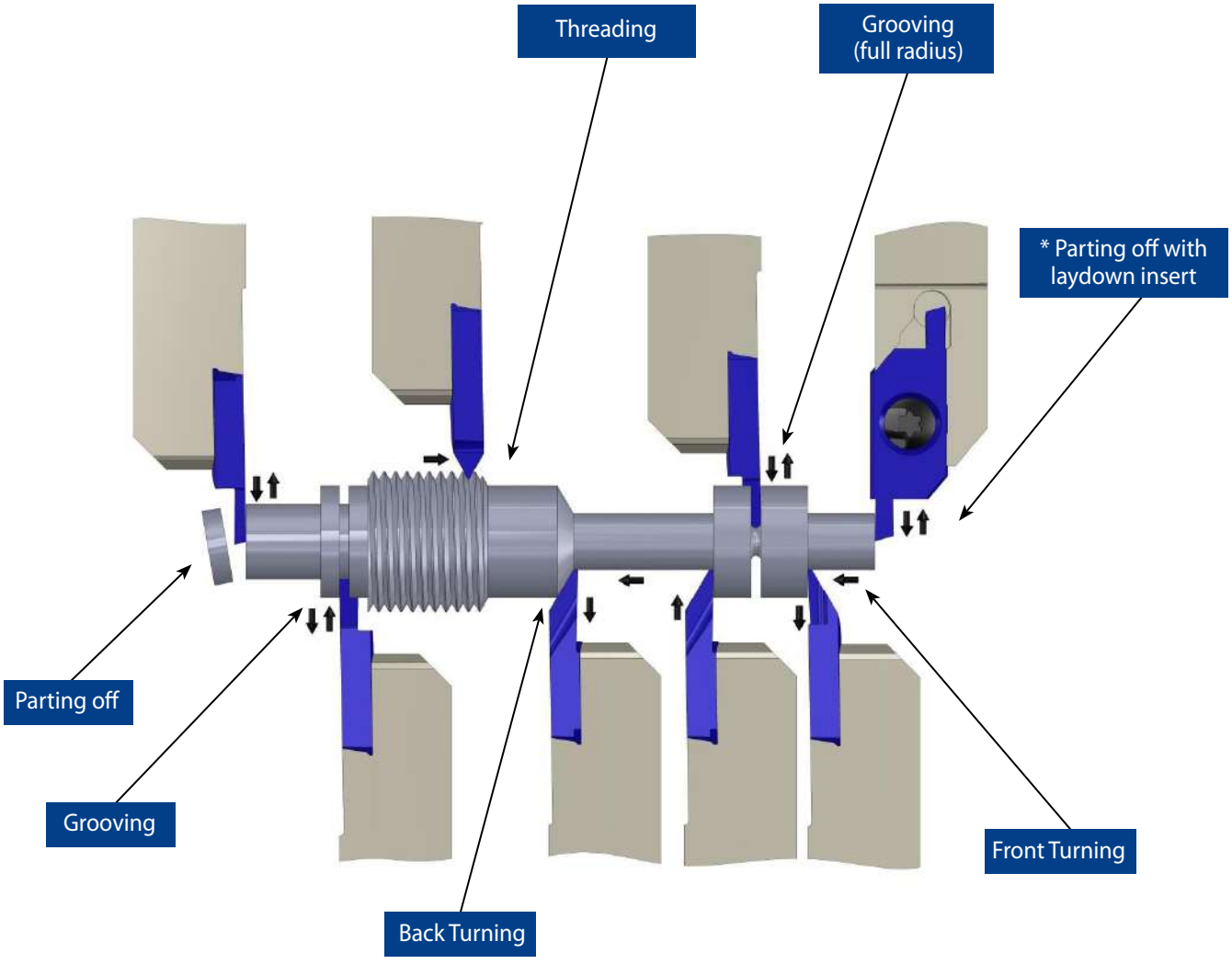
Right hand - Metric Holders

Ordering Code	B	H	L1	L	F	F1	Insert Screw Torx +	Key Torx +
PGER 1010 K	10	10	8	125	10	10	S26P	K11P
PGER 1212 K	12	12	8	125	12	12	S26P	K11P
PGER 1616 K	16	16	8	125	16	16	S26P	K11P

* For L.H, specify PGEL instead of PGER

Coated holders provide high abrasive resistance

Working method



* Available upon request (grooving, parting, threading).

Cutting Data

Polygon Swiss Line

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.

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

6 Cutting Edges Turning Insert - G6

Grooving, parting-off and threading

Benefits

- High productivity and cost efficiency due to six cutti
- One holder for all insert types - Maximum versatility
- High precision thanks to the fully ground profile.

Features

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

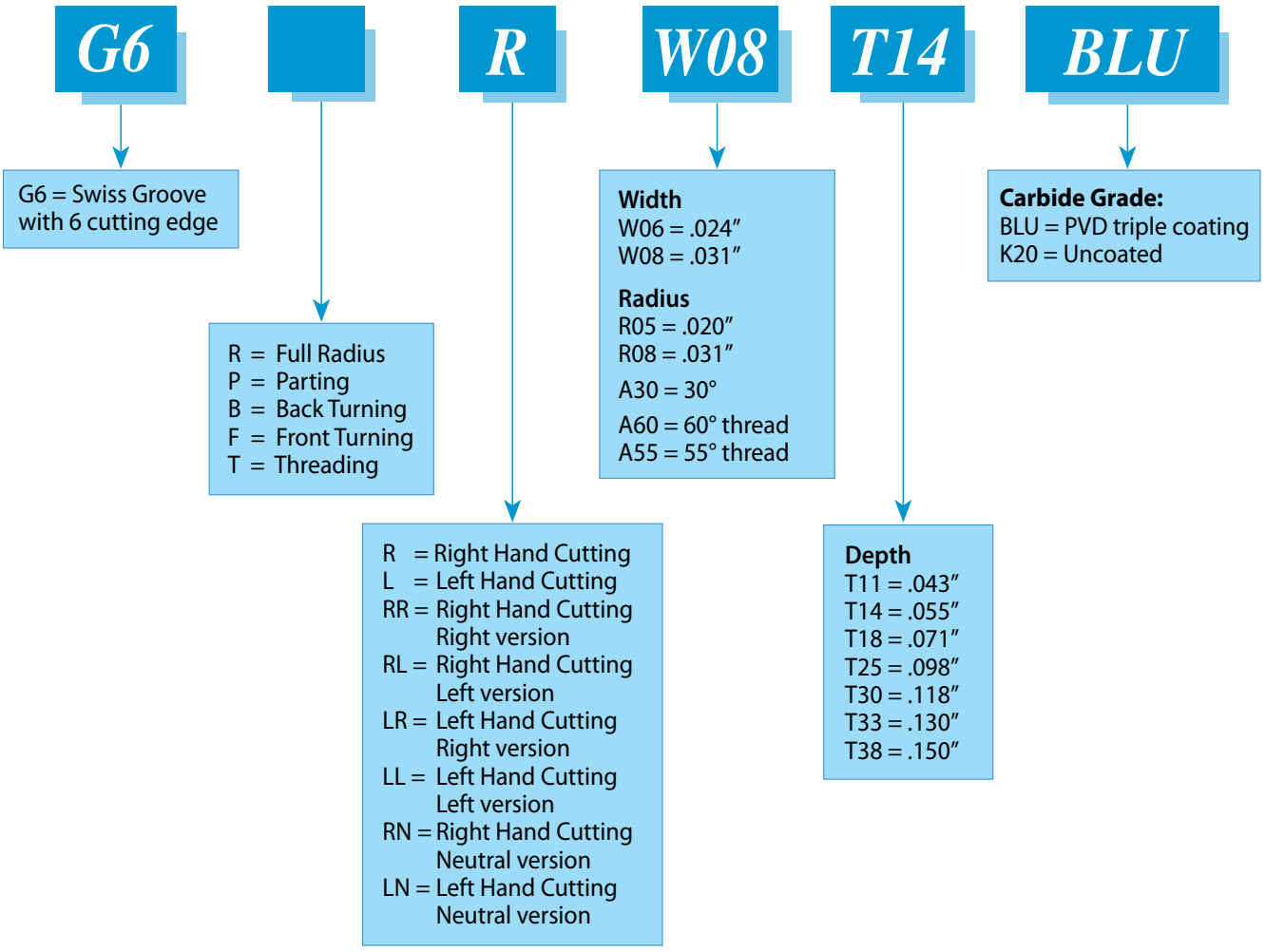
Application

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

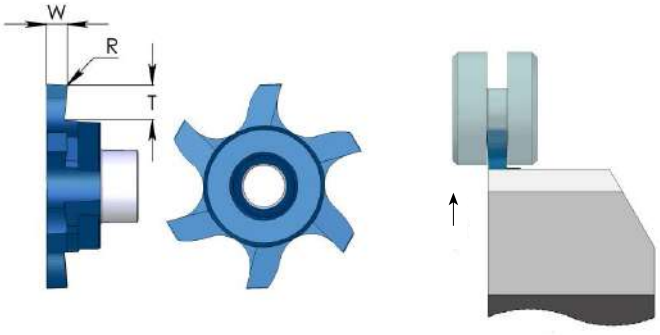
Carbide grades: BLU, K20.

Product Identification

G6 Inserts



Grooving



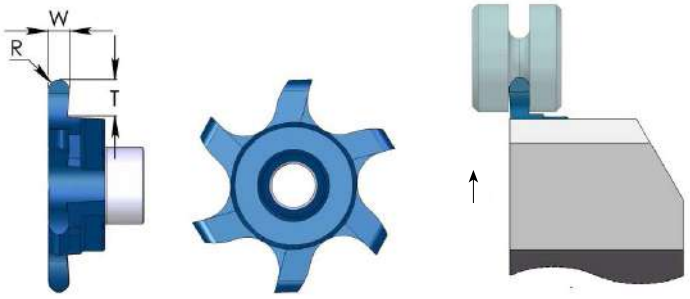
Right hand cutting

Ordering Code	W ±.001	T max	R	Feed Inch/rev
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

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

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

Grooving and Profiling (full radius)



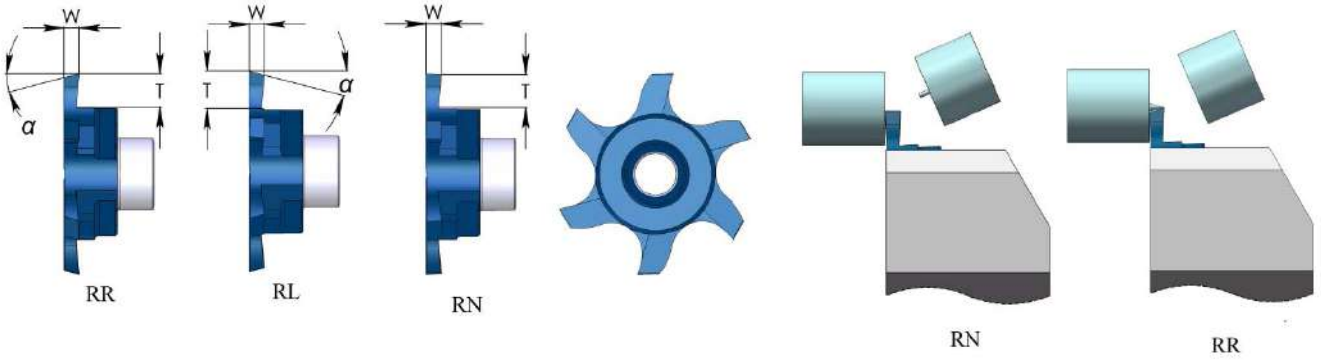
Right hand cutting

Ordering Code	R±.001	W	T max	Feed Inch/rev
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

* For L.H, specify G6R L instead of G6R R

● First choice ○ Alternative

Parting Off



Right hand cutting

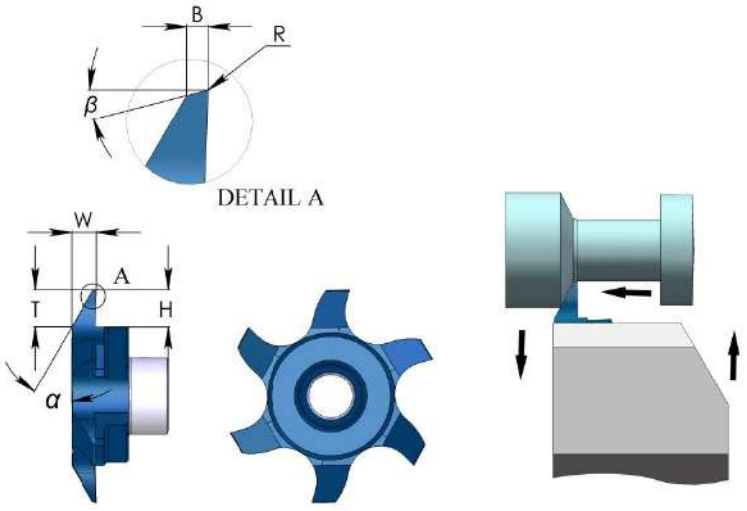
Ordering Code	W	α°	T max	Feed Inch/rev
G6P RR W10 T38	.039	15	.150	.0008-.004
G6P RL W10 T38	.039	15	.150	.0008-.004
G6P RN W10 T38	.039	0	.150	.0008-.004
G6P RR W15 T38	.059	15	.150	.0008-.005
G6P RL W15 T38	.059	15	.150	.0008-.005
G6P RN W15 T38	.059	0	.150	.0008-.005
G6P RR W20 T38	.079	15	.150	.0008-.005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



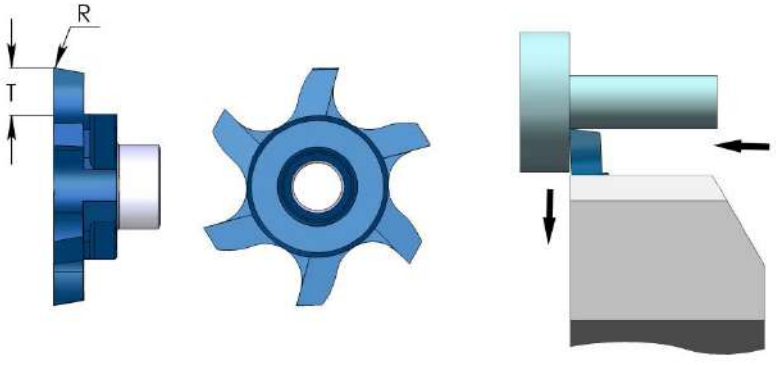
Right hand cutting

Ordering Code	α°	ß°	R	W	T max	B	H	Feed Inch/rev
G6B R A30	30	12	.004	.106	.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



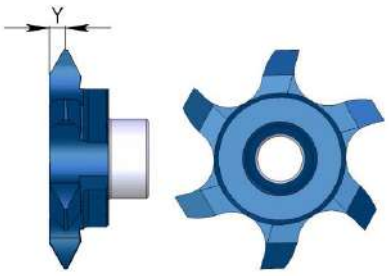
Right hand cutting

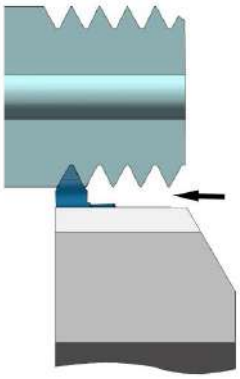
Ordering Code	T max	R	Feed Inch/rev
G6F R T38	.150	.004	.002-.005

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

● First choice ○ Alternative

Threading - Partial Profile 60°





Right hand cutting

Ordering Code	Pitch Range mm	Pitch Range TPI	Y
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 hand cutting

Ordering Code	Pitch Range mm	Pitch Range TPI	Y
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

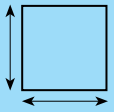
* For L.H, specify G6T L instead of G6T R

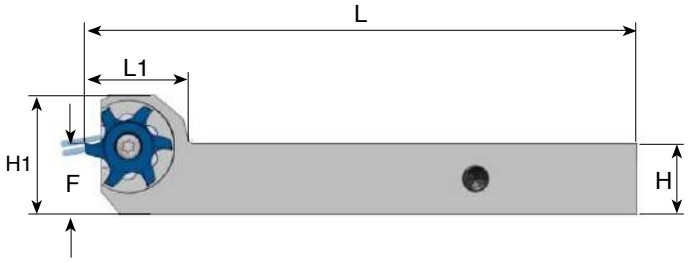
● First choice ○ Alternative

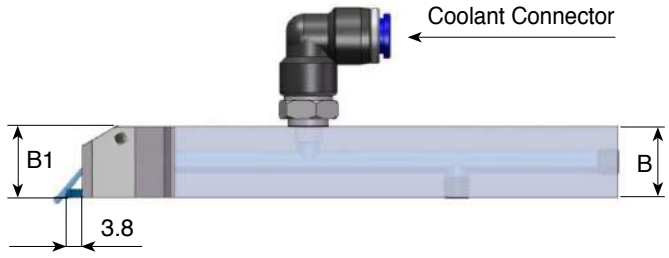
External Toolholders - G6

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

G6	E	R	0500	K
G6 = Swiss toolholder	E = External	R = Right Hand L = Left Hand	Shank Cross Section  0500 = .500" 1212 = 12x12 mm	Length of Toolholders K = 4.9" M= 5.9" K= 125 mm M= 150 mm





Right hand – Inch Holders

Ordering Code	B	H	L1	L	H1	F	B1	Insert Screw Torx +	Torx + Key	**Coolant connector (mm)
*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	1.000	1.000	.8	5.9	1.4	1.000	1.000	S16LP	K16P	Ø4 / Ø6

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

Right hand – Metric Holders

Ordering Code	B	H	L1	L	H1	F	B1	Insert Screw Torx +	Torx + Key	**Coolant connector (mm)
* G6ER 1212 K	12	12	20	125	23	12	16	S16LP	K16P	Ø4 / Ø6
G6ER 1616 K	16	16	20	125	27	16	16	S16LP	K16P	Ø4 / Ø6
G6ER 2020 K	20	20	20	125	31	20	20	S16LP	K16P	Ø4 / Ø6
G6ER 2525 M	25	25	20	150	36	25	25	S16LP	K16P	Ø4 / Ø6

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

Cutting Data

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.

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

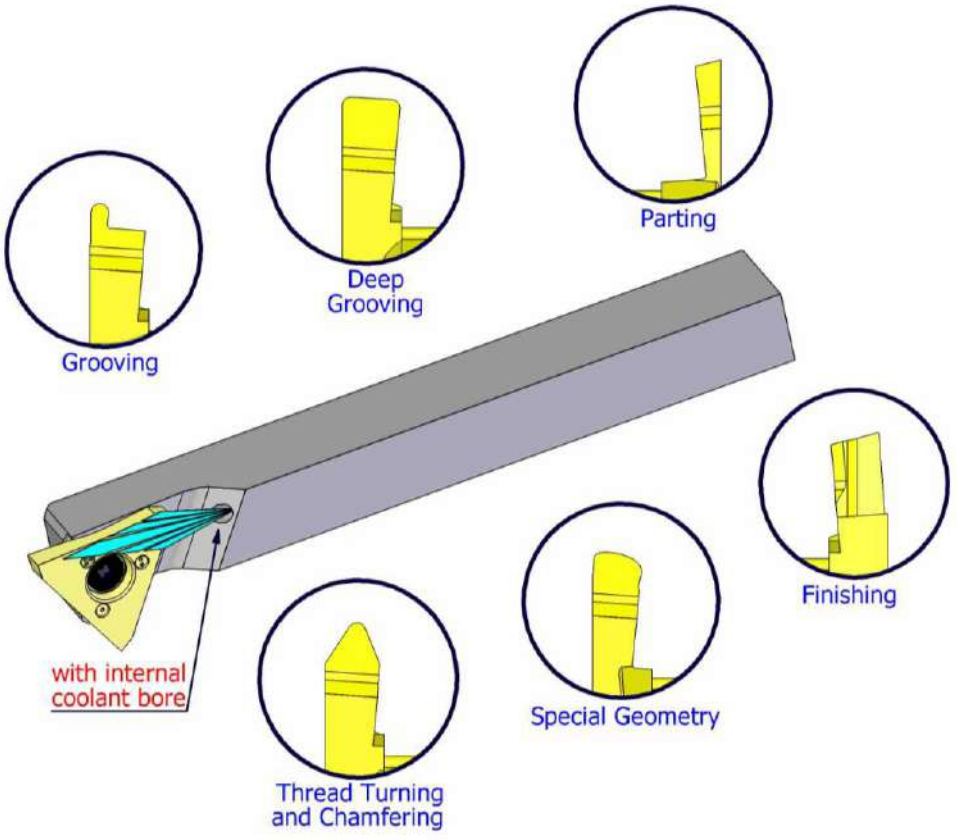
Three cutting edges Swiss-Line

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

Advantages

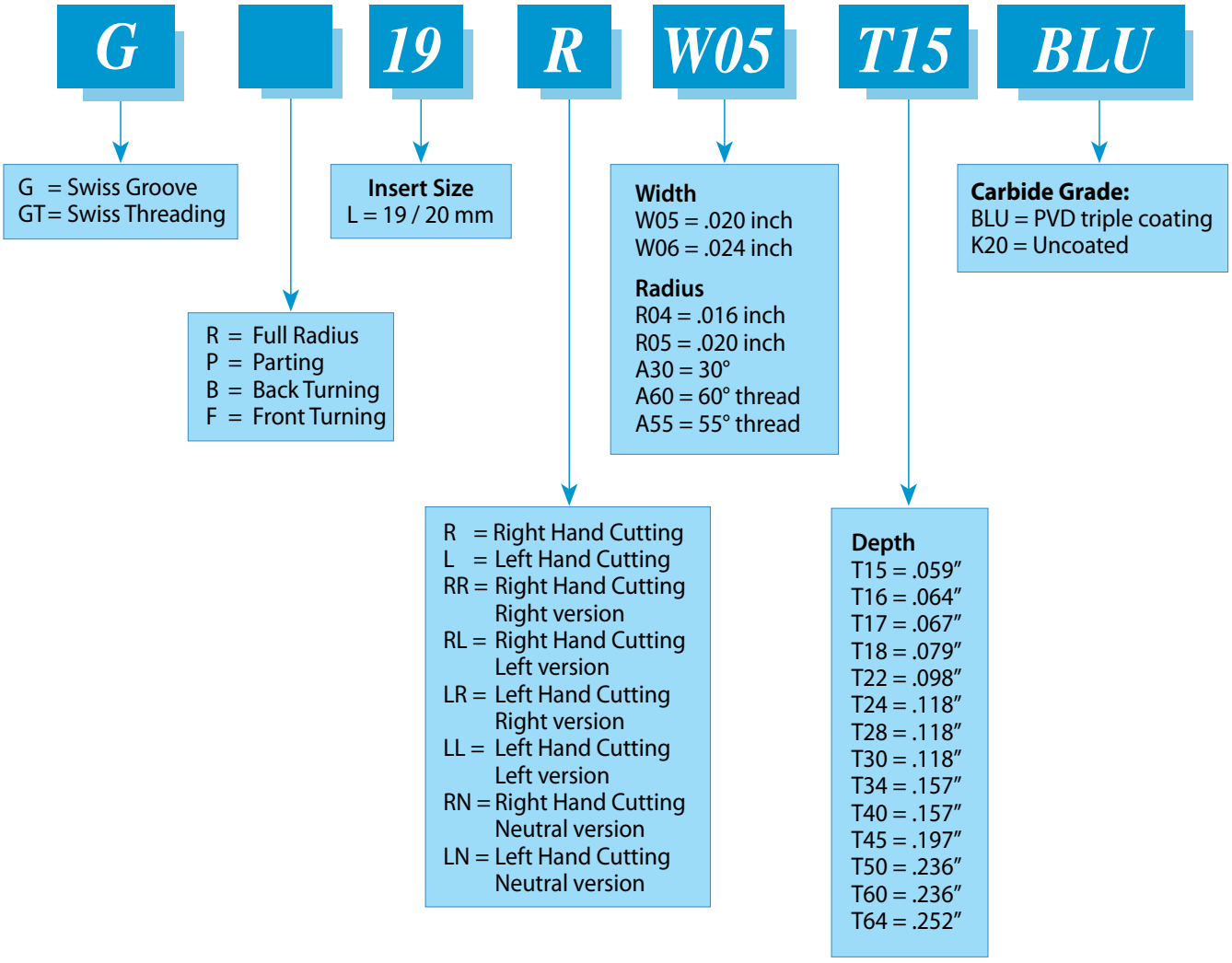
Advanced sub-micron grade (K10-K30) - a combination of strength, toughness, wear resistance and edge sharpness.

- 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.

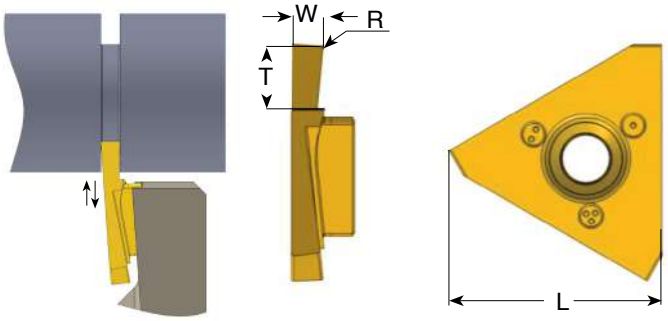


Product Identification

Inserts



Grooving



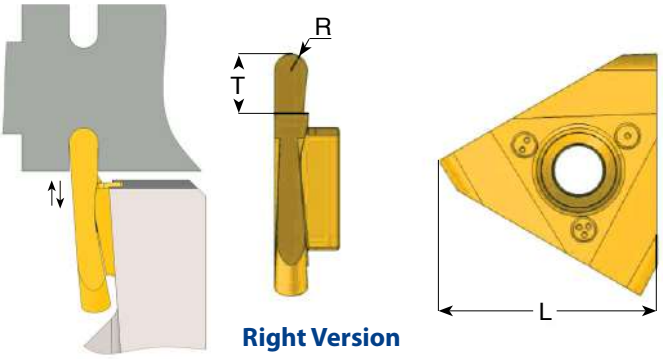
Right hand cutting

L	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

Left hand cutting

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

Grooving and Profiling (full radius)



Right Version

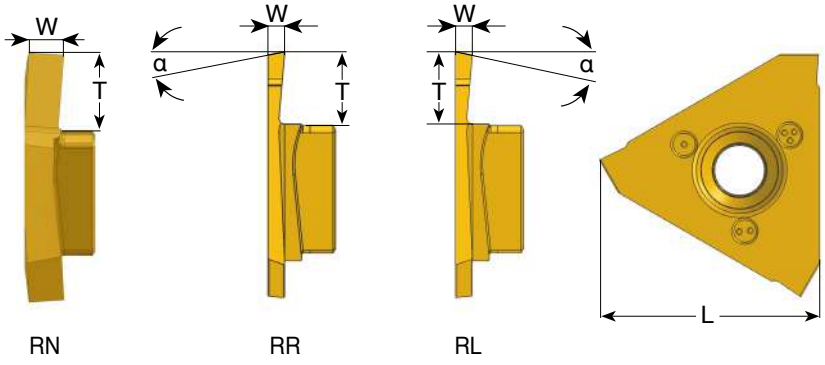
Right hand cutting

L	Ordering Code	R ±.0012	T max	Feed Inch/rev	
				Radial	Axial
19	GR19 R R02 T15	.010	.059	.0004-.003	.001-.004
	GR19 R R04 T18	.016	.079	.0004-.003	.001-.004
	GR19 R R05 T22	.020	.098	.001-.003	.001-.004
	GR19 R R06 T26	.024	.118	.001-.003	.001-.004
	GR19 R R08 T33	.031	.138	.0016-.0035	.001-.008
	GR19 R R10 T40	.040	.158	.002-.004	.001-.008
20	GR20 R R12 T50	.050	.236	.002-.004	.001-.008
	GR20 R R15 T60	.059	.236	.002-.004	.001-.008

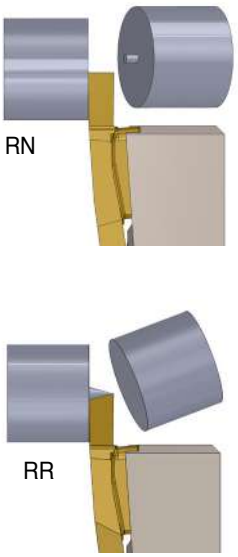
Left hand cutting

L	Ordering Code	R ±.0012	T max	Feed Inch/rev	
				Radial	Axial
19	GR19 L R02 T15	.010	.059	.0004-.003	.001-.004
	GR19 L R04 T18	.016	.079	.0004-.003	.001-.004
	GR19 L R05 T22	.020	.098	.001-.003	.001-.004
	GR19 L R06 T26	.024	.118	.001-.003	.001-.004
	GR19 L R08 T33	.031	.138	.0016-.0035	.001-.008
	GR19 L R10 T40	.040	.158	.002-.004	.001-.008
20	GR20 L R12 T50	.050	.236	.002-.004	.001-.008
	GR20 L R15 T60	.059	.236	.002-.004	.001-.008

Parting Off



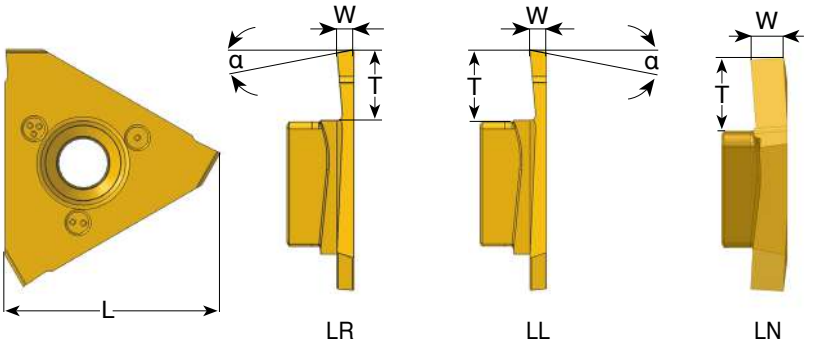
Right Version



Right hand cutting

L	Ordering Code	W	α°	T max	Feed Inch/rev Radial
19	GP19 RR W10 T54	.039	15	.213	.001-.0035
	GP19 RL W10 T54	.039	15	.213	.001-.0035
	GP19 RN W10 T54	.039	0	.213	.001-.0035
	GP19 RR W12 T54	.047	15	.213	.001-.0035
	GP19 RL W12 T54	.047	15	.213	.001-.0035
	GP19 RN W12 T54	.047	0	.213	.001-.0035
20	GP20 RR W15 T64	.059	15	.252	.0016-.004
	GP20 RL W15 T64	.059	15	.252	.0016-.004
	GP20 RN W15 T64	.059	0	.252	.0016-.004
	GP20 RR W18 T64	.071	15	.252	.0016-.004
	GP20 RL W18 T64	.071	15	.252	.0016-.004
	GP20 RN W18 T64	.071	0	.252	.0016-.004
	GP20 RR W20 T64	.079	15	.252	.002-.0047
	GP20 RL W20 T64	.079	15	.252	.002-.0047
	GP20 RN W20 T64	.079	0	.252	.002-.0047
	GP20 RR W25 T64	.098	15	.252	.002-.0047
	GP20 RL W25 T64	.098	15	.252	.002-.0047
	GP20 RN W25 T64	.098	0	.252	.002-.0047
	GP20 RR W30 T64	.118	15	.252	.002-.0047
	GP20 RL W30 T64	.118	15	.252	.002-.0047
	GP20 RN W30 T64	.118	0	.252	.002-.0047

Parting Off

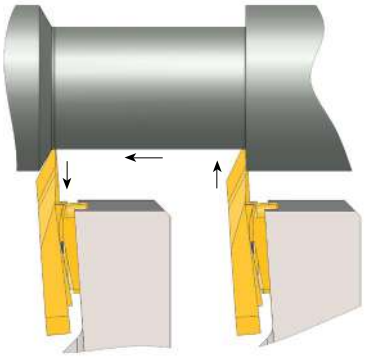


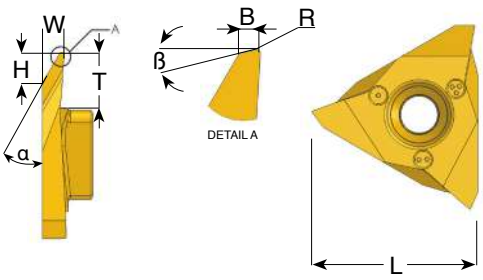
Left Version

Left hand cutting

L	Ordering Code	W	α°	T max	Feed Inch/rev Radial
19	GP19 LR W10 T54	.039	15	.213	.001-.0035
	GP19 LL W10 T54	.039	15	.213	.001-.0035
	GP19 LN W10 T54	.039	0	.213	.001-.0035
	GP19 LR W12 T54	.047	15	.213	.001-.0035
	GP19 LL W12 T54	.047	15	.213	.001-.0035
	GP19 LN W12 T54	.047	0	.213	.001-.0035
20	GP20 LR W15 T64	.059	15	.252	.0016-.004
	GP20 LL W15 T64	.059	15	.252	.0016-.004
	GP20 LN W15 T64	.059	0	.252	.0016-.004
	GP20 LR W18 T64	.071	15	.252	.0016-.004
	GP20 LL W18 T64	.071	15	.252	.0016-.004
	GP20 LN W18 T64	.071	0	.252	.0016-.004
	GP20 LR W20 T64	.079	15	.252	.002-.0047
	GP20 LL W20 T64	.079	15	.252	.002-.0047
	GP20 LN W20 T64	.079	0	.252	.002-.0047
	GP20 LR W25 T64	.098	15	.252	.002-.0047
	GP20 LL W25 T64	.098	15	.252	.002-.0047
	GP20 LN W25 T64	.098	0	.252	.002-.0047
	GP20 LR W30 T64	.118	15	.252	.002-.0047
	GP20 LL W30 T64	.118	15	.252	.002-.0047
	GP20 LN W30 T64	.118	0	.252	.002-.0047

Back Turning





Right Version

Right hand cutting

L	Ordering Code	α°	ß°	R	W	H	B	T	Feed Inch/rev
19	**GB19 R A30**	30	12	.004	.134	.169	.02	.213	.002-.006
20	**GB20 R A30**	30	12	.004	.134	.169	.02	.252	.002-.006

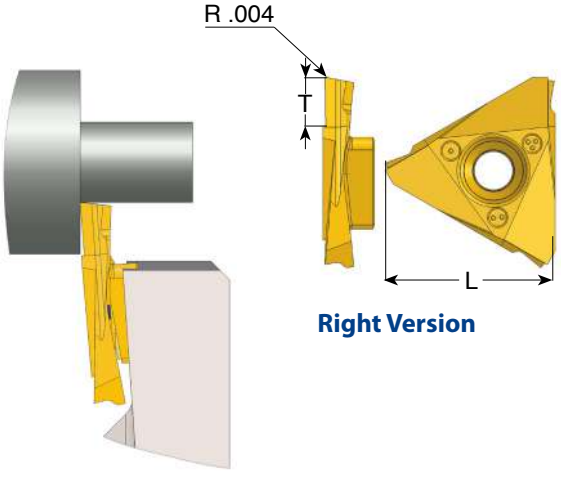
Left hand cutting

L	Ordering Code	α°	ß°	R	W	H	B	T	Feed Inch/rev
19	**GB19 L A30**	30	12	.004	.134	.169	.02	.213	.002-.006
20	**GB20 L A30**	30	12	.004	.134	.169	.02	252	.002-.006

Front Turning

Right hand cutting

L	Ordering Code	T	Feed Inch/rev
19	**GF19 R T54**	.213	.002-.006
20	**GF20 R T64**	.252	.002-.006



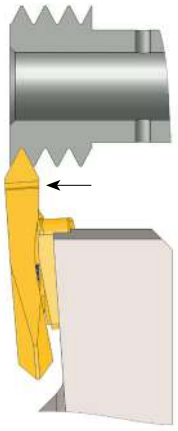
Right Version

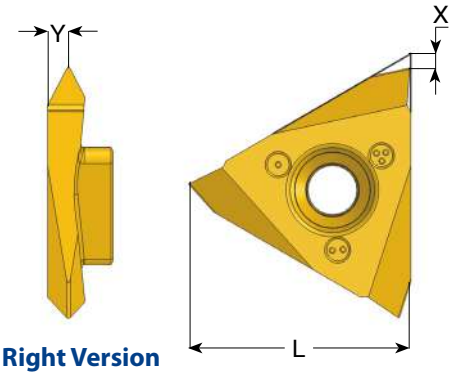
Left hand cutting

L	Ordering Code	T	Feed Inch/rev
19	**GF19 L T54**	.213	.002-.006
20	**GF20 L T64**	.252	.002-.006

Threading - Partial Profile 60°

External Thread





Right Version

Right hand cutting

L	mm	TPI	Ordering Code	X	Y
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

Left hand cutting

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

Threading - Partial Profile 55°

External Thread

Right hand cutting

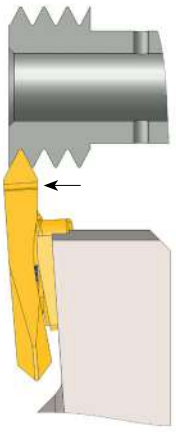
L	mm	TPI	Ordering Code	X	Y
19	0.5-1.5	48-16	**GT19 R A55**	.11	.039
	1.75-3.0	14-8	**GT19 R G55**	.11	.067
	0.5-3.0	48-8	**GT19 R AG55**	.11	.067

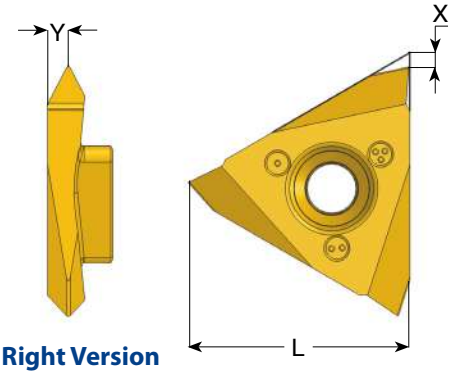
Left hand cutting

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

Threading - ISO metric 60°

External Thread





Right Version

Right hand cutting

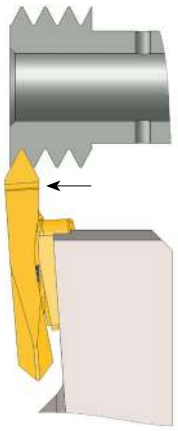
L	mm	Ordering Code	X	Y
19	0.5	GT19 R 0.5 ISO	.11	.024
	0.7	GT19 R 0.7 ISO	.11	.028
	0.75	GT19 R 0.75 ISO	.11	.028
	0.8	GT19 R 0.8 ISO	.11	.028
	1.0	GT19 R 1.0 ISO	.11	.032
	1.25	GT19 R 1.25 ISO	.11	.039
	1.5	GT19 R 1.5 ISO	.11	.043
	1.75	GT19 R 1.75 ISO	.11	.051

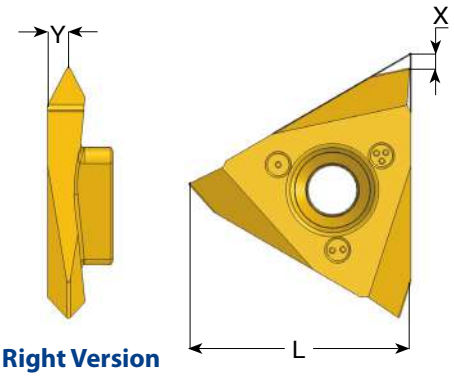
Left hand cutting

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

Threading - UN unified 60°

External Thread





Right Version

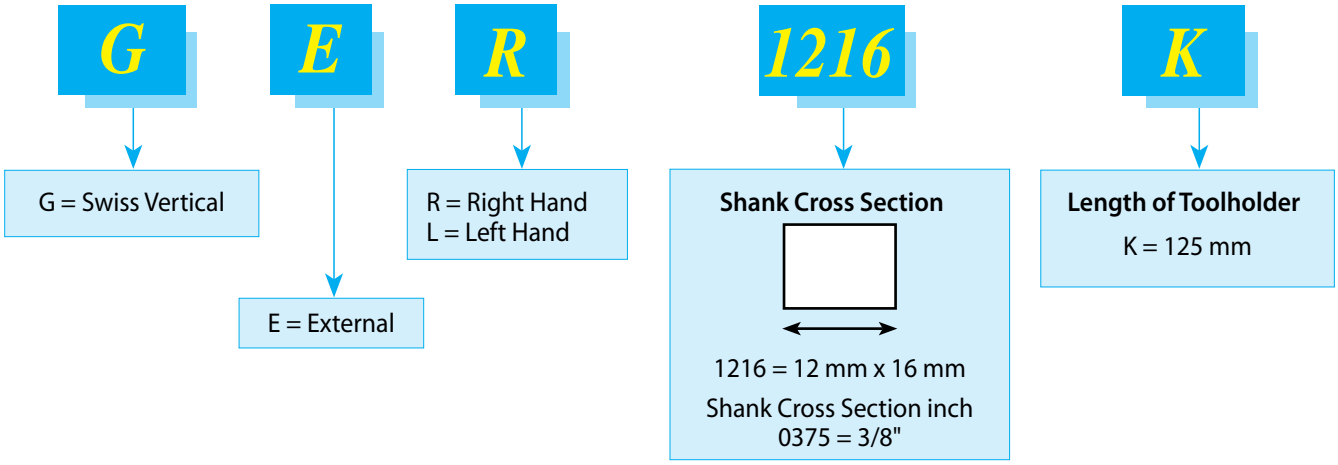
Right hand cutting

L	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
	20	GT19 R 20UN	.11	.039

Left hand cutting

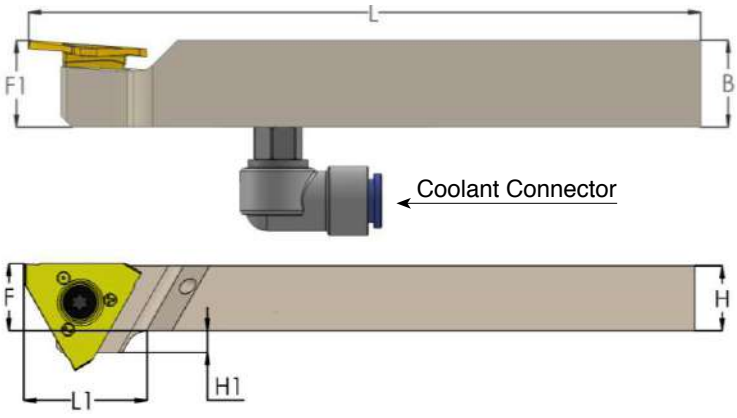
L	TPI	Ordering Code	X	Y
19	72	GT19 L 72UN	.11	.016
	56	GT19 L 56UN	.11	.024
	40	GT19 L 40UN	.11	.028
	32	GT19 L 32UN	.11	.028
	24	GT19 L 24UN	.11	.032
	20	GT19 L 20UN	.11	.039

Product Identification - Toolholders



External Toolholders

- Coolant through toolholders, for external turning in Swiss style lathes.
- 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 a quick setup on the machine.



Right hand - 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	.32	.63	.32	S21	K21	-
GER 1016 K	16	10	.67	4.9	.39	.63	.24	S21	K21	Ø4 / Ø6
GER 1216 K	16	12	.67	4.9	.47	.63	.16	S21	K21	Ø4 / Ø6
GER 1616 K	16	16	-	4.9	.63	.63	0	S21	K21	Ø4 / Ø6
GER 2020 K	20	20	-	4.9	.79	.79	0	S21	K21	Ø4 / Ø6
GER 2525 M	25	25	-	5.9	.98	.98	0	S21	K21	Ø4 / Ø6

* Diameter of coolant pipe
** Without coolant

External Toolholders

Right hand - Inch holders

Ordering Code	B	H	L1	L	F	F1	H1	Insert Screw	Torx Key	*Coolant connector (mm)
GER 0375 K	.625	.375	.67	4.9	.38	.63	.25	S21	K21	Ø4 / Ø6
GER 0500 K	.625	.500	.67	4.9	.50	.63	.13	S21	K21	Ø4 / Ø6
GER 0625 K	.625	.625	-	4.9	.63	.63	0	S21	K21	Ø4 / Ø6
GER 0750 K	.750	.750	-	4.9	.75	.75	0	S21	K21	Ø4 / Ø6
GER 1000 M	1.000	1.000	-	5.9	1.00	1.00	0	S21	K21	Ø4 / Ø6

* Diameter of coolant pipe

Left hand - Metric holders

Ordering Code	B (mm)	H (mm)	L1	L	F	F1	H1	Insert Screw	Torx Key	*Coolant connector (mm)
****GEL 0816 K**	16	8	.67	4.9	.32	.63	.32	S21	K21	-
GEL 1016 K	16	10	.67	4.9	.39	.63	.24	S21	K21	Ø4 / Ø6
GEL 1216 K	16	12	.67	4.9	.47	.63	.16	S21	K21	Ø4 / Ø6
GEL 1616 K	16	16	-	4.9	.63	.63	0	S21	K21	Ø4 / Ø6
GEL 2020 K	20	20	-	4.9	.79	.79	0	S21	K21	Ø4 / Ø6
GEL 2525 M	25	25	-	5.9	.98	.98	0	S21	K21	Ø4 / Ø6

* Diameter of coolant pipe
** Without coolant

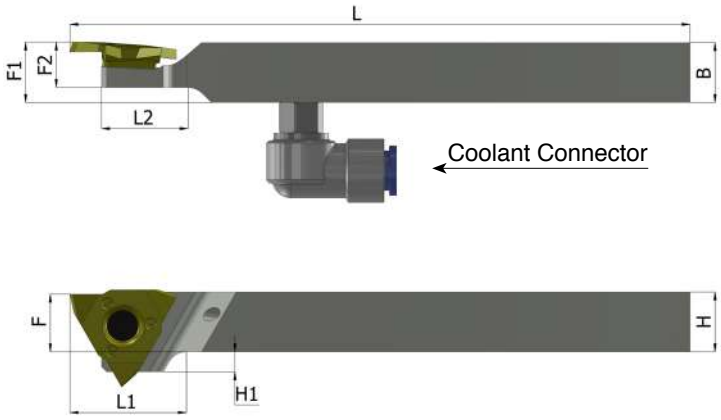
Left hand - Inch holders

Ordering Code	B	H	L1	L	F	F1	H1	Insert Screw	Torx Key	*Coolant connector (mm)
GEL 0375 K	.625	.375	.67	4.9	.38	.63	.25	S21	K21	Ø4 / Ø6
GEL 0500 K	.625	.500	.67	4.9	.50	.63	.13	S21	K21	Ø4 / Ø6
GEL 0625 K	.625	.625	-	4.9	.63	.63	0	S21	K21	Ø4 / Ø6
GEL 0750 K	.750	.750	-	4.9	.75	.75	0	S21	K21	Ø4 / Ø6
GEL 1000 M	1.000	1.000	-	5.9	1.00	1.00	0	S21	K21	Ø4 / Ø6

* Diameter of coolant pipe

Swiss Line Slim Holders

For cut-off when using sub-spindle



Right hand - Metric Shank

Ordering Code	B=H	L1	L2	L	F	F1	F2	H1	Insert Screw	Torx Key	*Coolant connector
GERS 1010 K	10	17	11	125	10	10	10.0	6	S21XS	K21	Ø4 / Ø6
GERS 1212 K	12	17	11	125	12	12	9.5	4	S21XS	K21	Ø4 / Ø6
GERS 1616 K	16	-	11	125	16	16	9.5	0	S21XS	K21	Ø4 / Ø6
GERS 2020 K	20	-	11	125	20	20	9.5	0	S21XS	K21	Ø4 / Ø6

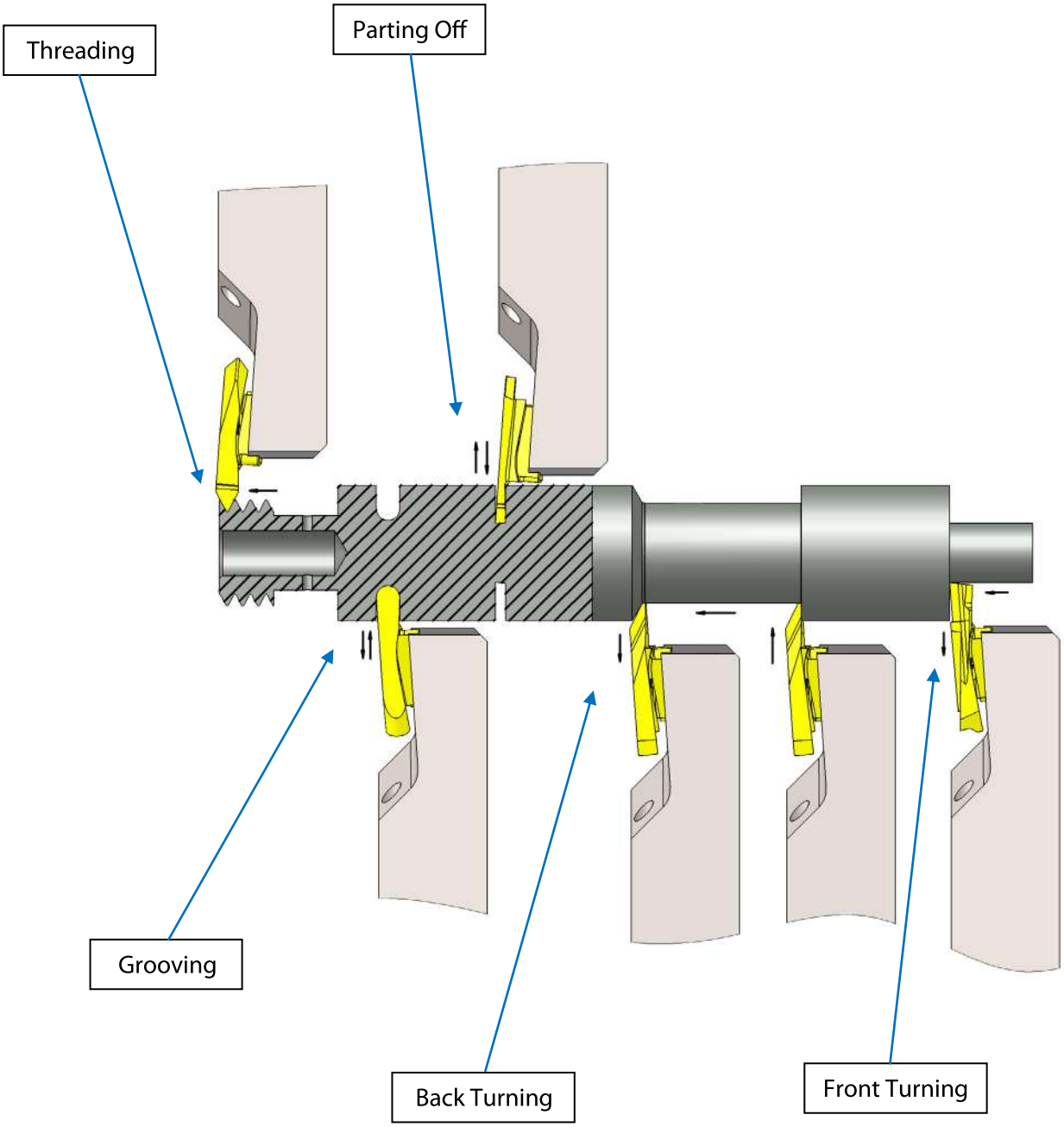
* Diameter of coolant pipe

Right hand - Inch holders

Ordering Code	B=H	L1	L2	L	F	F1	F2	H1	Insert Screw	Torx Key	*Coolant connector
GERS 0375 K	.375	.67	.43	4.9	.375	.375	.375	.250	S21XS	K21	Ø4 / Ø6
GERS 0500 K	.500	.67	.43	4.9	.500	.500	.375	.125	S21XS	K21	Ø4 / Ø6
GERS 0625 K	.625	-	.43	4.9	.625	.625	.375	0	S21XS	K21	Ø4 / Ø6
GERS 0750 K	.750	-	.43	4.9	.750	.750	.375	0	S21XS	K21	Ø4 / Ø6

* Diameter of coolant pipe

Grooving - Parting Off - Turning - Profiling - Threading
Working Method



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	-	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	Aluminium ≤12%Si, Copper	395-820	-
	Aluminium >12%Si	295-656	-
	Synthetics, Duroplastics, Thermoplastics	230-490	-
S	Nickel Alloys, Titanium Alloys	65-165	100-230
H	Hardened Steel, 45-50HRc	-	65-165