

Internal Grooving SIGE

Applicable Inserts

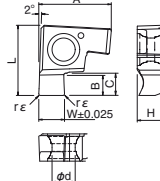
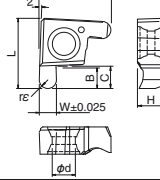
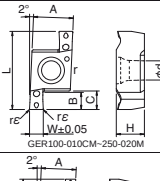
Description	A	L	H	ød
GE ^{R/L} ...-A	6.69	6.5	2.58	2.5
GER...-AR				
GE ^{R/L} ...-B				
GER...-BR	8.46	8.2	3.18	2.7
GER...-CM	5.8	11.48	4.05	2.8
GER...-DM	6.8	16.44	5.05	3.4
GER...-EM	9.54	21.66	5.55	4.4

(mm)

P	Carbon Steel / Alloy Steel		●		
M	Stainless Steel		●		
K	Cast Iron				☺
N	Non-ferrous Metals				●
S	Titanium Alloy				●
H	Hard materials (under 40HRC)		●		
	Hard materials (over 40HRC)				

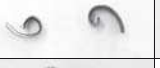
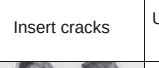
Classification of usage

- : Light Interruption / 1st Choice
 ☺ : Light Interruption / 2nd Choice
 ● : Continuous / 1st Choice
 ○ : Continuous / 2nd Choice

Insert		Description	Dimension (mm)				Cermet		PVD Coated Carbide		Carbide		Applicable Toolholder	Ref. Pa		
			W	B	C	rε	TN6020		PR1025		GW15				KW10	
							R	L	R	L	R	L			R	L
R-hand shown																
 2-Edge	 A 2° L rε W±0.025 H φd	GE ^{R/L}	100-005A	1.00	1.5	1.8	0.05	●	●	●	●		●	●	SIGE ^{R/L} ...A-EH SIGE ^{R/L} ...A-WH	
			120-005A	1.20				●	●	●	●		●	●		
			125-005A	1.25				●	●	●	●		●	●		
			150-010A	1.50				●	●	●	●		●	●		
		GE ^{R/L}	200-010A	2.00	2.2	2.6	0.1	●	●	●	●		●	●		SIGE ^{R/L} ...B-EH SIGE ^{R/L} ...B-WH
			100-005B	1.00				●	●	●	●		●	●		
			120-005B	1.20				●	●	●	●		●	●		
			125-005B	1.25				●	●	●	●		●	●		
			145-010B	1.45				●	●	●	●		●	●		
			150-010B	1.50				●	●	●	●		●	●		
			200-010B	2.00				●	●	●	●		●	●		
			250-020B	2.50				●	●	●	●		●	●		
300-020B	3.00	●	●	●	●		●	●								
 Full-R	 A 2° L rε W±0.025 H φd	GER	100-050AR	1.00	1.5	1.8	0.5		●			●	SIGER...A-EH SIGER...A-WH			
			200-100AR	2.00			1.0		●		●					
		GER	100-050BR	1.00	2.2	2.6	0.5		●			●	SIGER...B-EH SIGER...B-WH			
			200-100BR	2.00			1.0		●		●					
 C-EH	 A 2° L rε W±0.05 H φd GER100-010CM-250-020M	GER	150-010CM	1.50	2.5	2.7	0.1		●					SIGER...C-EH SIGER...C-WH		
			200-010CM	2.00					●							
			250-020CM	2.50					●							
			300-020CM	3.00					●							
		GER	350-020CM	3.50		●								SIGER...D-EH		
			150-010DM	1.50	3.0	4.8	0.2		●							
			200-010DM	2.00					●							
			230-020DM	2.30					●							
			250-020DM	2.50					●							
			300-020DM	3.00					●							
			350-020DM	3.50					●							
			400-020DM	4.00					●							
		GER	150-010EM	1.50				3.0	6.8	0.1		●				
			200-010EM	2.00		●										
			250-020EM	2.50		●										
			300-020EM	3.00		●										
			350-020EM	3.50		●										
			400-020EM	4.00		●										
			450-020EM	4.50		●										
			500-020EM	5.00		●										

• Dimension B: shows available grooving depth

Comparison of Chip evacuation (Molded Chipbreaker)

Description	15CrMo4 (SCM415) (Minimum Bore Dia. ø16)			Evaluation
	0.05	0.07	0.1	
SIGER1612C-EH GER300-020CM(PR1025)				Good Chip Control
Competitor A Width: 3mm				Insert cracks Unstable chip control and biting
Competitor B Width: 3mm				Unstable chip control and biting

[Vc = 100m/min, ap = 2.0mm, Wet]

(Internal evaluation)

Comparison of Chip evacuation (Min. Bore Dia.: ø8)

f (mm/rev)		15CrMo4 (JIS:SCM415)	Evaluation
Description	0.02		
SIGER0808A-EH GER200-010A (PR1025)			
Competitor C Width: 2mm			 Chipping

[Vc = 50m/min, ap = 1.25mm, Wet]

(Internal evaluation)

● : Std. Item ○ : Check Availability

R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)