




Internal Grooving SIGE

Applicable Inserts

Description (mm)					P	M	K	N	S	H	Classification of usage		Ref. Page for Toolholder
Description	A	L	H	ød	Carbon Steel / Alloy Steel						☉ : Light Interruption / 1st Choice	☉ : Light Interruption / 2nd Choice	
GE ^{1/2} ...A	6.69	6.5	2.58	2.5							● : Continuous / 1st Choice	○ : Continuous / 2nd Choice	
GER...AR													
GE ^{1/2} ...B	8.46	8.2	3.18	2.7									
GER...BR													
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									

Insert R-hand shown	Description	Dimension (mm)				Cermet		PVD Coated Carbide		Carbide				Applicable Toolholder	Ref. Page for Toolholder			
		W	B	C	rε	TN6020		PR1025		GW15		KW10						
						R	L	R	L	R	L	R	L					
 2-Edge	GE^{1/2}/L 100-005A 120-005A 125-005A 150-010A 200-010A	1.00	1.5	1.8	0.05	●	●	●	●			●	●	SIGE^{1/2}/...A-EH SIGE^{1/2}/...A-WH	G48 G49			
						●	●	●	●			●	●					
						●	●	●	●			●	●					
						●	●	●	●			●	●					
						●	●	●	●			●	●					
	GE^{1/2}/L 100-005B 120-005B 125-005B 145-010B 150-010B 200-010B 250-020B 300-020B	1.00	2.2	2.6	0.05	●	●	●	●			●	●	SIGE^{1/2}/...B-EH SIGE^{1/2}/...B-WH SIGER...B-WH-90	G48 G49 G50			
						●	●	●	●			●	●					
						●	●	●	●			●	●					
						●	●	●	●			●	●					
						●	●	●	●			●	●					
 Full-R	GER 100-050AR 200-100AR	1.00	1.5	1.8	0.5		●					●	SIGER...A-EH SIGER...A-WH	G48 G49				
						●					●							
	GER 100-050BR 200-100BR	1.00	2.2	2.6	1.0		●					●	SIGER...B-EH SIGER...B-WH SIGER...B-WH-90	G48 G49 G50				
						●					●							
 2-Edge Molded Chipbreaker	GER 150-010CM 200-010CM 250-020CM 300-020CM 350-020CM	1.50	2.5	2.7	0.1		●						SIGER...C-EH SIGER...C-WH SIGER...C-WH-90	G48 G49 G50				
						●												
						●												
						●												
	GER 150-010DM 200-010DM 230-020DM 250-020DM 300-020DM 350-020DM	1.50	3.0	4.8	0.1		●						SIGER...D-EH	G48				
						●												
						●												
			GER 150-010EM 200-010EM 250-020EM 300-020EM 350-020EM 400-020EM 450-020EM 500-020EM	1.50	6.8	0.2	0.1		●								SIGER...E-EH	G48
								●										
								●										

• Dimension B: shows available grooving depth

For recommended cutting conditions, see page **G51**

● Comparison of Chip evacuation (Molded Chipbreaker)

Description	15CrMo4 (SCM415) (Minimum Bore Dia. ø16)			Evaluation
	f (mm/rev) 0.05	f (mm/rev) 0.07	f (mm/rev) 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)

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

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

(Internal evaluation)

● : Std. Item □ : Check Availability

Inserts are sold in 10 piece boxes.