Rake Angle		
	Radial	−2°
	Axial	+18°

7mm / 65°

P	M	K	N	N	S	H
○	○	○	○	○		×

General Milling for Aluminum Alloy and Low Carbon Steel

Fig 1

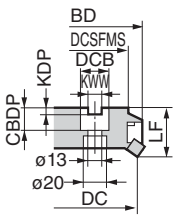


Fig 2

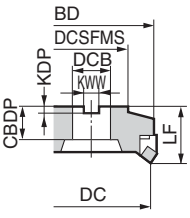


Fig 3

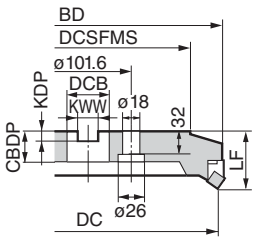
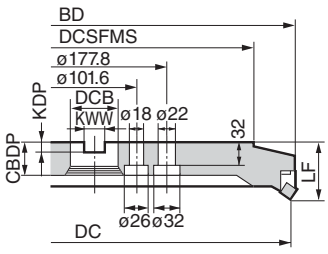


Fig 4



Body

Inch

Dimensions (mm)

Cat. No. (R)	Stock	Cat. No. (L)	Stock	Diameter DC	External Diameter BD	Boss DCSFMS	Height LF	Hole Size DCB	Grooving Width KWW	Grooving Depth KDP	Mounting Depth CBDP	No. of Teeth	Weight (kg)	Fig
APG 4080R	●	**APG 4080L**		*80	90	60	50	**25.4**	9.5	6	25	5	1.6	1
4100R	●	**4100L**		**100**	110	75	60	**31.75**	12.7	8	32	5	2.7	2
4125R	●	**4125L**		**125**	134	75	60	**38.1**	15.9	10	38	6	4.0	2
4160R	●	**4160L**		**160**	169	100	60	**50.8**	19.1	11	38	8	6.5	2
4200R	●	**4200L**		**200**	208	130	60	**47.625**	25.4	13.5	38	10	9.1	3
APG 4250R	●	**APG 4250L**		**250**	258	200	70	**47.625**	25.4	13.5	40	12	18.3	3
4315R	●	**4315L**		**315**	323	240	70	**47.625**	25.4	13.5	40	16	27.6	3
4400R		**4400L**		**400**	408	300	70	**63.5**	25.4	13.5	45	20		4
4500R		**4500L**		**500**	508	400	70	**63.5**	25.4	13.5	45	24		4

Inserts are not included.

*Please use JIS B1176 hexagonal bolt (M12×30 to 35mm) for securing ø80 cutter to the arbor.

Insert

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

Grade	Coated Carbide						Carbide			Cermet		DLC		SUMIDIA		
Application: High Speed/Light	P			K		M		K N		P		N		N	N	
Application: General Purpose		P M	P M	K			P				P	N		N	N	
Application: Roughing		P M	P M		K									N	N	
Cat. No.	ACP100	ACP200	ACP300	ACK200	ACK300	EH20Z	A30N	H1		T1500A	T250A	DL1000		DA1000	DA2200	Fig
SDCH 42TR							●					—		—	—	5
42TL												—		—	—	5
42TR-R											●	—		—	—	5
42TL-R												—		—	—	5
SDC 42R								●				●		—	—	6
NF-SDC 42R	—	—	—	—	—	—	—	—		—	—	—		●	▲	6
SDC 42L								●				—		—	—	6
42TR							●					—		—	—	6
42TL												—		—	—	6
42TR-R											●	—		—	—	6
42TL-R												—		—	—	6
APW 4R										●		—		●	▲	7

Fig 5

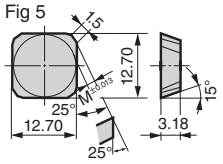


Fig 6

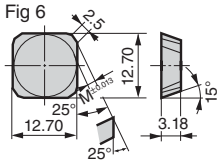
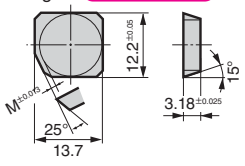
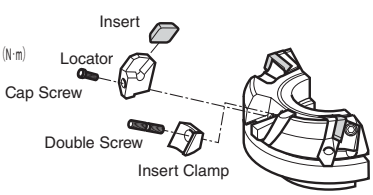


Fig 7 Wiper Insert



Double Screw (Common)	Size	Recommended Tightening Torque (N·m)
	M8	8.0

Cap Screw	Size	Recommended Tightening Torque (N·m)
	M5	5.0



Parts

Applicable Cutters	Locator	Insert Clamp	Double Screw	Cap Screw	Wrench
APG4080R	LAP40R	ATW45R	WB8-20	BXF0520R	TH040
APG4100R to APG4500R	LAP40R	ATW45R	WB8-22TL	BXF0520R	TT27
APG4080L	LAP40L	ATW45L	WB8-20	BXF0520R	TH040
APG4100L to APG4500L	LAP40L	ATW45L	WB8-22T	BXF0520R	TT27

Recommended Cutting Conditions

ISO	Work Material	Hardness	Cutting Speed v_c (m/min) Min.- **Optimum** -Max.	Feed Rate f_z (mm/t) Min.- **Optimum** -Max.	Grade
P	General Steel	180 to 280HB	100-**125**-150	0.10-**0.18**-0.25	A30N
P	Soft Steel	≤180HB	120-**150**-180	0.10-**0.18**-0.25	A30N
P	Die Steel	200 to 220HB	60- **80** -100	0.10-**0.18**-0.25	A30N
M	Stainless Steel	—	120-**150**-180	0.10-**0.18**-0.25	A30N
K	Cast Iron	250HB	60- **90** -120	0.15-**0.23**-0.30	H1
N	Non-Ferrous Metal	—	300-**650**-1000	0.10-**0.20**-0.30	H1

Note: The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

▲ mark : To be replaced by new item (Please confirm stock availability)