

HSK-MDPE (Arbor+Head)

TAPER	Code No.	φD	L	L1	L2	MAX. Depth L3	M	Arbor Code No.	Head Code No.
HSK 63A	HSK 63A-MDPE16-100,120,135	16	100,120,135	70, 90,105	30	10	37.4	HSK 63A-MDPE-M 8- 70, 90,105	M 8-MDPE16-30
	-MDPE20-105,120,135	20	105,120,135	75, 90,105			40.0	-MDPE-M10- 75, 90,105	M10-MDPE20-30
	-MDPE25-105,120,135	25	120,135,150	70, 85,100	35	15	45.3,47.5,47.5	-MDPE-M12- 70, 85,100	M12-MDPE25-35
	-MDPE32-120,135,150	32		80, 95,110			40	52.5	-MDPE-M16- 80, 95,110
HSK 100A	HSK100A-MDPE16-120,140,155	16	120,140,155	90,110,125	30	10	37.4	HSK100A-MDPE-M 8- 90,110,125	M 8-MDPE16-30
	-MDPE20-125,140,155	20	125,140,155	95,110,125			40.0	-MDPE-M10- 95,110,125	M10-MDPE20-30
	-MDPE25-125,140,155	25	140,155,170	90,105,120	35	15	45.3,47.5,47.5	-MDPE-M12- 90,105,120	M12-MDPE25-35
	-MDPE32-140,155,170	32		100,115,130			40	52.5	-MDPE-M16-100,115,130

★2pcs of tip clamp bolt and tip clamp wrench are supplied as standard.  
★Please refer P.219 for cutting condition.

★Insert tip is available as an option . Please refer P.171.  
★Centre through tool coolant is available for all series.

HSK-MDPE-M (Arbor)

TAPER	Code No.	φD	L1	ID φd	Arbor Front Dia.	ℓ	ℓ1	ℓ2	Screw G
HSK 63A	HSK 63A-MDPE-M 8- 70, 90,105	16	70, 90,105	8.5	14.7	9	11	20	M 8
	-MDPE-M10- 75, 90,105	20	75, 90,105	10.5	18.7		12	21	M10
	-MDPE-M12- 70, 85,100	25	70, 85,100	12.5	23.0		15	24	M12
	-MDPE-M16- 80, 95,110	32	80, 95,110	17.0	30.0		16	25	M16
HSK 100A	HSK100A-MDPE-M 8- 90,110,125	16	90,110,125	8.5	14.7		11	20	M 8
	-MDPE-M10- 95,110,125	20	95,110,125	10.5	18.7		12	21	M10
	-MDPE-M12- 90,105,120	25	90,105,120	12.5	23.0		15	24	M12
	-MDPE-M16-100,115,130	32	100,115,130	17.0	30.0		16	25	M16

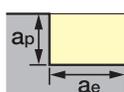
★Head is available as an option. P.171

★Centre through tool coolant is available for all series.

★This is interchangeable with DEPO. When the connection interface (Screw G and ID φd) is same, the cutter head of other carbide makers can be used.

CUTTING CONDITION of PRO-ENDMILL

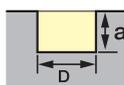
Side Milling



- The bold figures of cutting speed V (mm/min.) show the cutting speed when  $a_e=0.5 \times D$ . V (mm/min.) should be reduced to 80%, when  $a_e=0.75 \times D$ .
- Feed rate per 1 tooth/ 1 revolution f (mm/tooth) should be smaller, when  $a_p$  is getting larger. The feed rate of f (mm/tooth) shows the feed rate when  $a_e=0.5 \times D$  &  $a_p=MAX$ .

Material	Mild Steel (SS400, S10C)	Carbon Steel (S45C, SCM440)	Cast Iron (FC300)	Ductile Cast Iron (FCD450)	Hardened Steel HRC40~55 (SKD)
Cutting Speed V	220(140~270)	170(110~210)	170(110~210)	120(80~150)	85(50~100)
f	MDPE16	0.1(0.1~0.15)		0.07(0.07~0.1)	
	MDPE20	0.1(0.1~0.25)		0.07(0.07~0.2)	0.07(0.07~0.15)
	MDPE25	0.1(0.1~0.3)		0.07(0.07~0.25)	0.07(0.07~0.15)
	MDPE32			0.07(0.07~0.25)	0.07(0.07~0.15)

Groove Milling



- Feed rate per 1 tooth/ 1 revolution f (mm/tooth) should be smaller, when  $a_p$  is getting larger. The feed rate of f (mm/tooth) shows the feed rate when  $a_e=0.5 \times D$  &  $a_p=MAX$ .
- MAX. ramping angle is MDPE16: 15°, MDPE20: 9°, MDPE25: 11°, MDPE32: 7°

Material	Mild Steel (SS400, S10C)	Carbon Steel (S45C, SCM440)	Cast Iron (FC300)	Ductile Cast Iron (FCD450)	Hardened Steel HRC40~55 (SKD)
Cutting Speed V	180(140~210)	140(110~160)	100(80~120)	100(80~120)	70(50~80)
f	MDPE16	0.1		0.07	
	MDPE20	0.07(0.07~0.1)		0.07	
	MDPE25	0.07(0.07~0.15)		0.07	
	MDPE32			0.07	



• Please clamp the insert tip with the suitable torque.  
AOMT123608 : 1.0Nm , AOMT184808 : 4.0Nm

• For the guide line of insert tip life, the flank wear within 0.3mm under normal cutting will be recommended.