

NBT-MDPE (Arbor+Head)

TAPER	Code No.	φD	L	L1	L2	MAX. Depth L3	M	Arbor Code No.	Head Code No.
No.30	NBT30-MDPE16- 75	16	75	45	30	10	37.5	NBT30-MDPE-M 8- 45	M 8-MDPE16-30
	-MDPE20- 75	20						-MDPE-M10- 45	M10-MDPE20-30
	-MDPE25- 80	25	80	35	15	43.4	-MDPE-M12- 45	M12-MDPE25-35	
	-MDPE32- 95	32	95	40	15	52.5	-MDPE-M16- 55	M16-MDPE32-40	
No.40	NBT40-MDPE16- 85,105,120	16	85,105,120	55, 75, 90	30	10	37.4	NBT40-MDPE-M 8- 55, 75, 90	M 8-MDPE16-30
	(NIT40)-MDPE20- 90,105,120	20						60, 75, 90	30
	-MDPE25- 90,105,120	25	90,105,120	35	15	45.3,47.5,47.5	-MDPE-M12- 55, 70, 85	M12-MDPE25-35	
	-MDPE32-105,120,135	32	105,120,135	40	15	52.5	-MDPE-M16- 65, 80, 95	M16-MDPE32-40	
No.50	NBT50-MDPE16-100,120,135	16	100,120,135	70, 90,105	30	10	37.4	NBT50-MDPE-M 8- 70, 90,105	M 8-MDPE16-30
	(NIT50)-MDPE20-105,120,135	20						75, 90,105	30
	-MDPE25-105,120,135	25	105,120,135	35	15	45.3,47.5,47.5	-MDPE-M12- 70, 85,100	M12-MDPE25-35	
	-MDPE32-120,135,150	32	120,135,150	40	15	52.5	-MDPE-M16- 80, 95,110	M16-MDPE32-40	

★2pcs of tip clamp bolt and tip clamp wrench are supplied as standard.
★Insert tip is available as an option . Please refer P.171.
★Centre through tool coolant is available for all series.

★Please refer P.211 for cutting condition.

NBT-MDPE-M (Arbor)

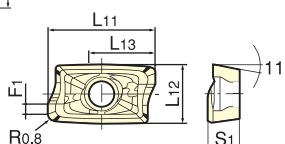
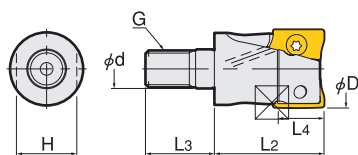
TAPER	Code No.	φD	L1	ID φd	Arbor Front Dia.	ℓ	ℓ1	ℓ2	Screw G
No.30	NBT30-MDPE-M 8- 45	16	45	8.5	14.7	9	11	20	M 8
	-MDPE-M10- 45	20		10.5	18.7		12	21	M10
	-MDPE-M12- 45	25		12.5	23.0		15	24	M12
	-MDPE-M16- 55	32		17.0	30.0		16	25	M16
No.40	NBT40-MDPE-M 8- 55, 75, 90	16	55, 75, 90	8.5	14.7	9	11	20	M 8
	(NIT40)-MDPE-M10- 60, 75, 90	20	60, 75, 90	10.5	18.7		12	21	M10
	-MDPE-M12- 55, 70, 85	25	55, 70, 85	12.5	23.0		15	24	M12
	-MDPE-M16- 65, 80, 95	32	65, 80, 95	17.0	30.0		16	25	M16
No.50	NBT50-MDPE-M 8- 70, 90,105	16	70, 90,105	8.5	14.7	9	11	20	M 8
	(NIT50)-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

★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.

INTERCHANGABLE PRO-ENDMILL HEAD



AOMT (Insert Tip)

Insert Tip Code No.	L11	L12	L13	S1	F1
AOMT123608PEER-M	12	6.6	10	3.6	1.2
AOMT184808PEER-M	18	9	15	4.8	1.4

★Only Nose R = 0.8 is available. Please contact Mitsubishi for the rigid type insert tip and the insert tip with other Nose R.

★Only grade of VP15TF (for steel, cast iron, hardened steel) is available. Please contact Mitsubishi for VP20RT (for stainless steel) and TF15 (for aluminum) .

★Minimum order quantity: 10pcs.

M-MDPE (Head)

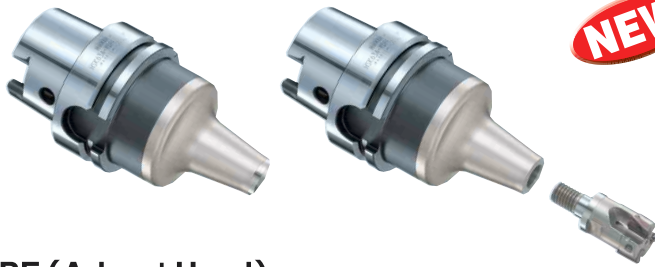
φD	Code No.	L2	L3	MAX. Depth L4	φd	G	No. of Teeth	Insert Tip	Tip Clamp Bolt	Tip Clamp wrench	Spanner Width H
16	M 8-MDPE16-30	30	18	10	8.5	M 8	2	AOMT123608PEER-M	TPS-25	TIP07F	10
20	M10-MDPE20-30		19		10.5	M10	3				14
25	M12-MDPE25-35	35	22	15	12.5	M12	2	AOMT184808PEER-M	TPS-4	TIP15W	19
32	M16-MDPE32-40	40	23		17.0	M16	3				24

★2pcs of tip clamp bolt and tip clamp wrench are supplied as standard.

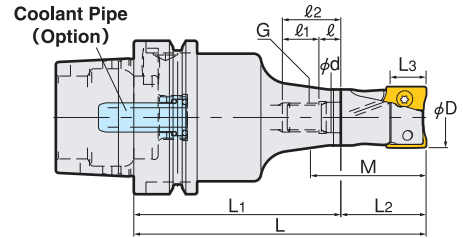
★Please refer P.211 for cutting condition.

★Insert tip is available as an option . Please refer P.171.

★Centre through tool coolant is available for all series.



NEW



HSK-MDPE (Arbor+Head)

TAPER	Code No.	φD	L	L ₁	L ₂	MAX. Depth L ₃	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
	-MDPE25-105,120,135	25		70, 85,100	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	M16-MDPE32-40
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
	-MDPE25-125,140,155	25		90,105,120	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	M16-MDPE32-40

★2pcs of tip clamp bolt and tip clamp wrench are supplied as standard.
★Please refer P.211 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	L ₁	ID φd	Arbor Front Dia.	ℓ	ℓ ₁	ℓ ₂	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	9	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

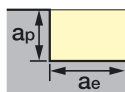
★Head is available as an option. P.171

★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

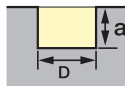
Side Milling



- 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	0.1 (0.1~0.3)		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 (0.07~0.15)		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 frank wear within 0.3mm under normal cutting will be recommended.