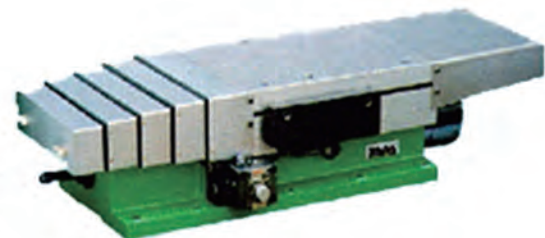




SPINDLE



(주)하이원 앵글스핀들
HIONE ANGLE SPINDLE
www.anglehead.com

MILLING BOLLING GRINDING SPINDLE

ARBOR TYPE

MILLING, BORING, GRINDING SPINDLE



HM s10



HM 10



HM 20



HM 30



HM 40



HM 50



HM 70



HM 90

FLANGE TYPE

MILLING, BORING, GRINDING SPINDLE

HB s10



HB 10



HB 20



HB 30



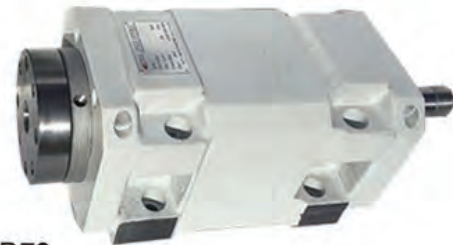
HB 40



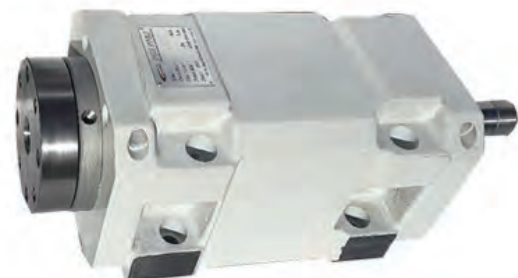
HB 50



HB 70



HB 90



SMALL

MEDIUM-SMALL

MEDIUM

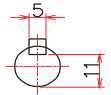
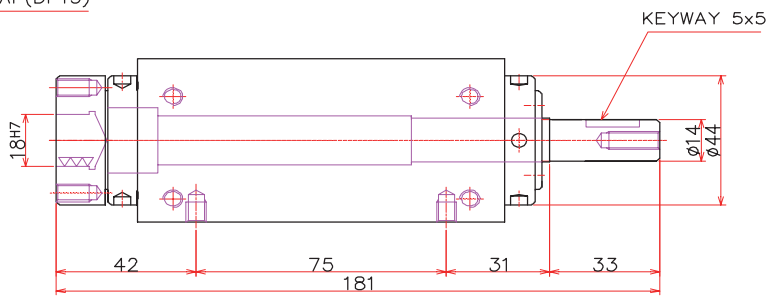
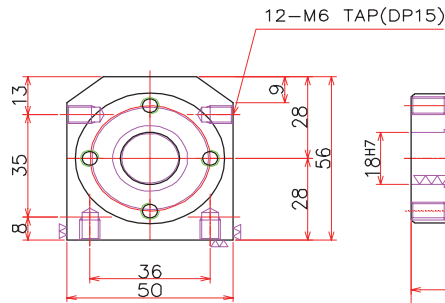
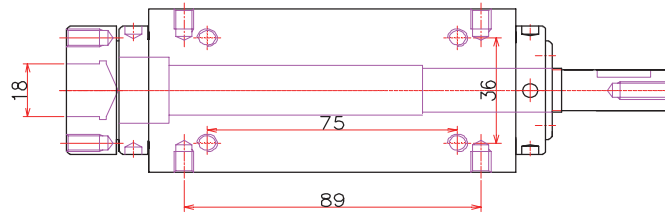
MEDIUM-LARGE

LARGE

MILLING BOLLING GRINDING SPINDLE

Grade => MEDIUM SMALL
 #10-SPINDLE TO MILLING BORING GRINDING

HBs10
 FLANGE TYPE



WEIGHT = 10KG

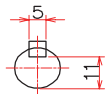
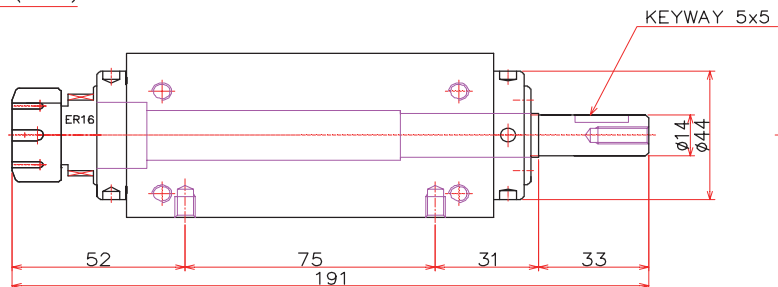
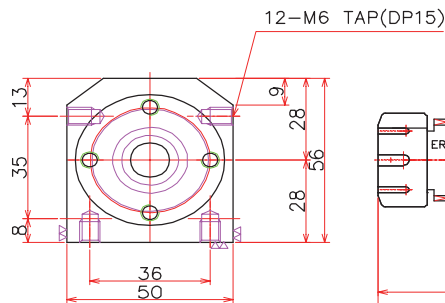
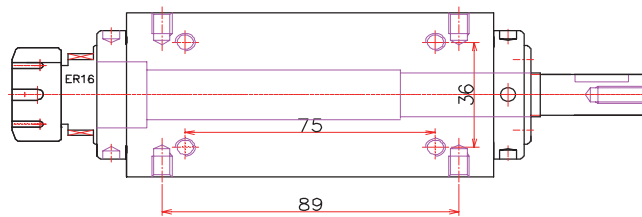
MOTOR	Max. Rpm	
	일반형	고속형
0.5HP	8,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

Grade = SMALL
 #10 - SPINDLE TO MILLING, BORING, GRINDING

HMs10
 COLLET TYPE



WEIGHT = 10KG

MOTOR	Max. Rpm	
	일반형	고속형
0.5HP	8,000	주요형

MODEL HM10 CHUCKING DIA $\phi 1-\phi 10$
 MODEL HM12 CHUCKING DIA $\phi 2-\phi 12$

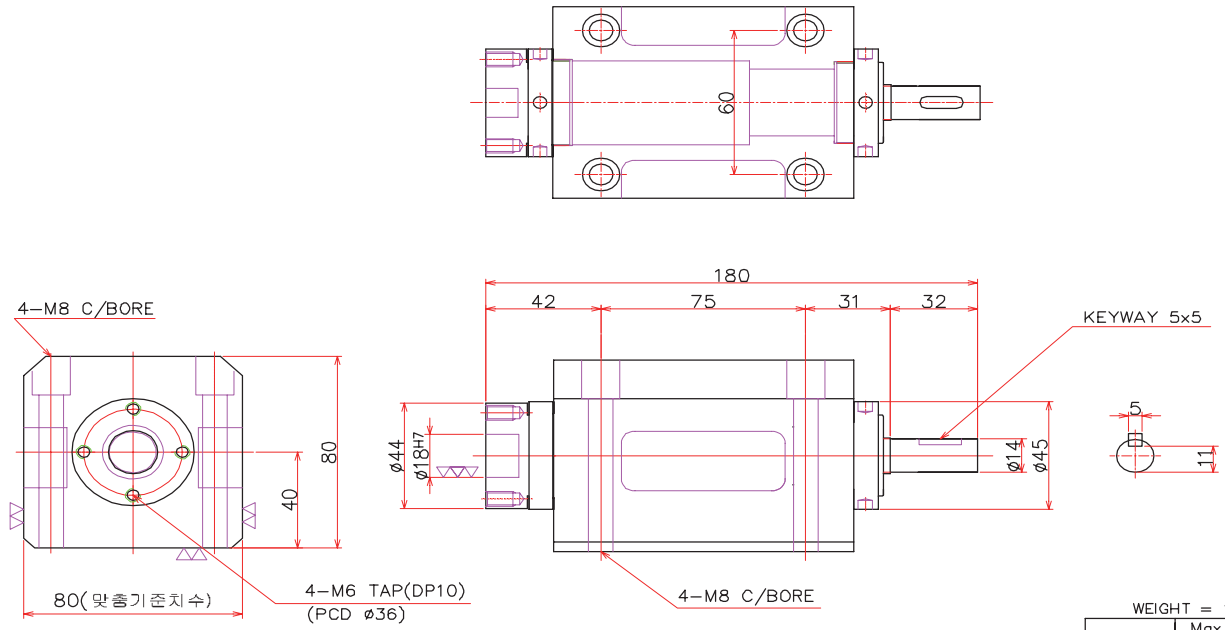
SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE

Grade => MEDIUM SMALL
 #10-SPINDLE TO MILLING BORING GRINDING

HB10
 FLANGE TYPE



WEIGHT = 10KG

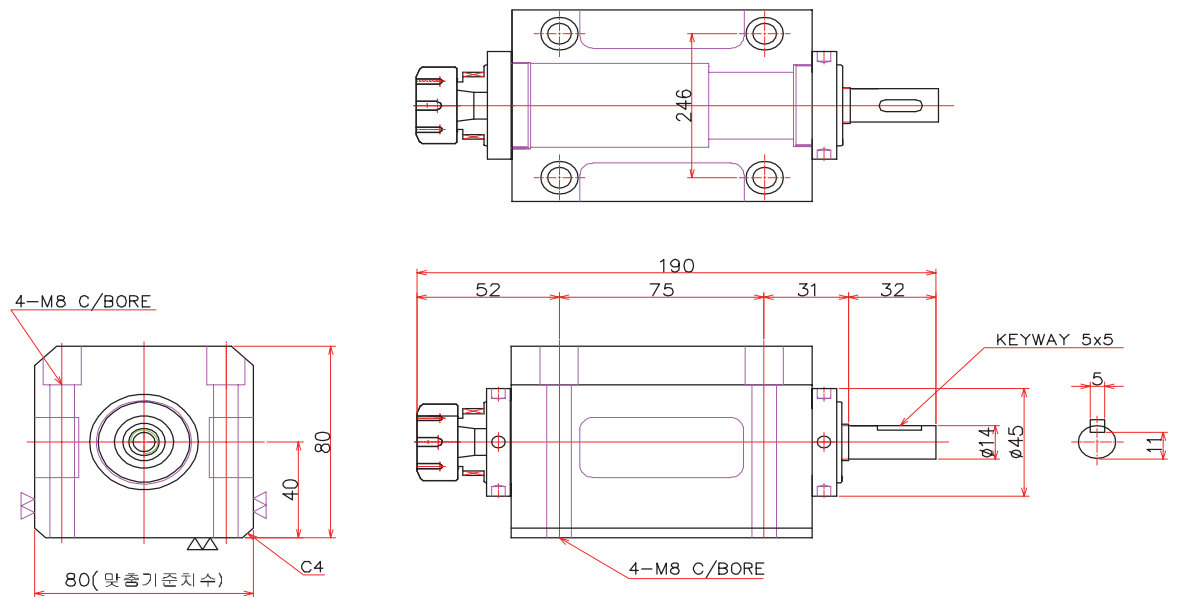
MOTOR	Max. Rpm	
	일반형	고속형
0.5HP	8,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

Grade = SMALL
 #10 - SPINDLE TO MILLING, BORING, GRINDING

HM10
 COLLET TYPE



WEIGHT = 10KG

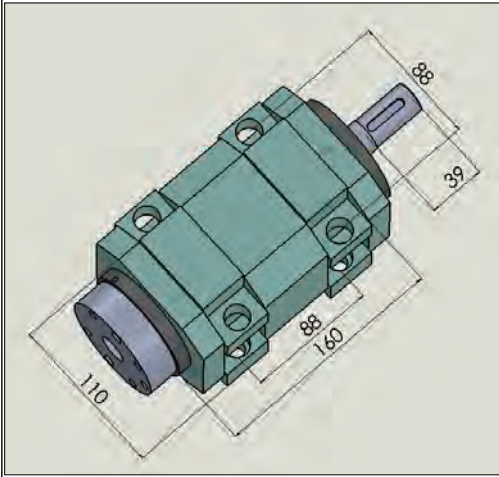
MOTOR	Max. Rpm	
	일반형	고속형
0.5HP	8,000	주요형

MODEL HMS10 CHUCKING DIA ø1-ø10
 MODEL HMS12 CHUCKING DIA ø2-ø12

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

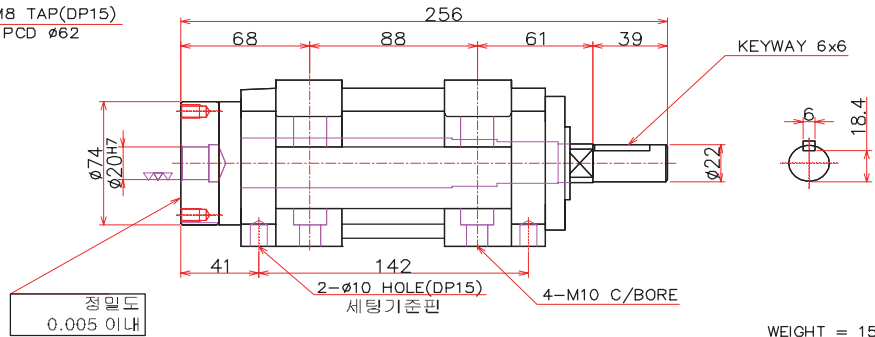
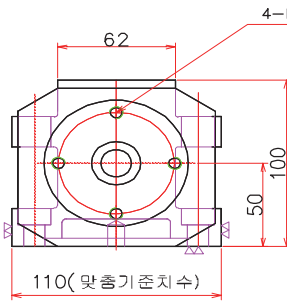
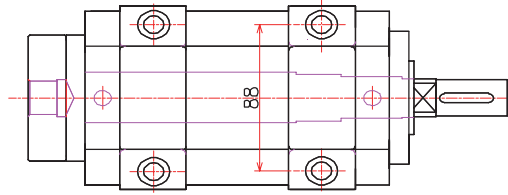
제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



Grade => MEDIUM SMALL
#20-SPINDLE TO MILLING BORING GRINDING

HB20
FLANGE TYPE

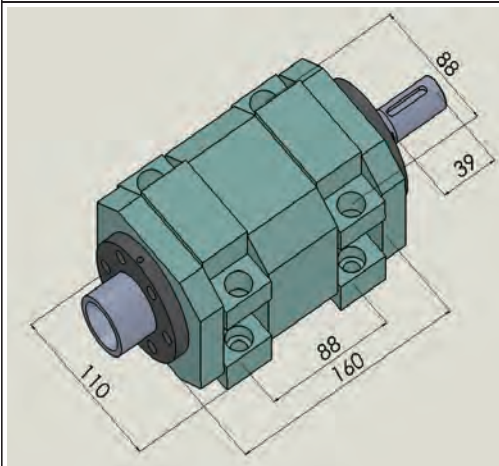


WEIGHT = 15KG

MOTOR	Max. Rpm	
	일반형	고속형
1~2HP	5,000	주요형

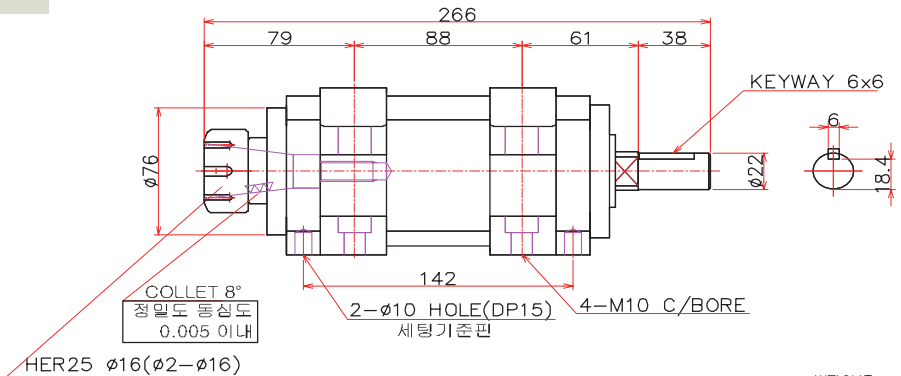
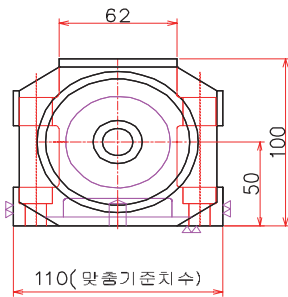
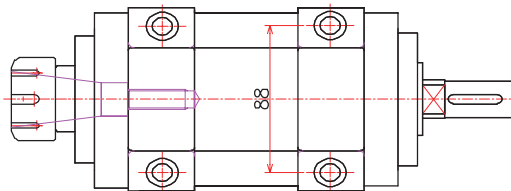
SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.



Grade => MEDIUM SMALL
#20-SPINDLE TO MILLING BORING GRINDING

HM20
COLLET TYPE



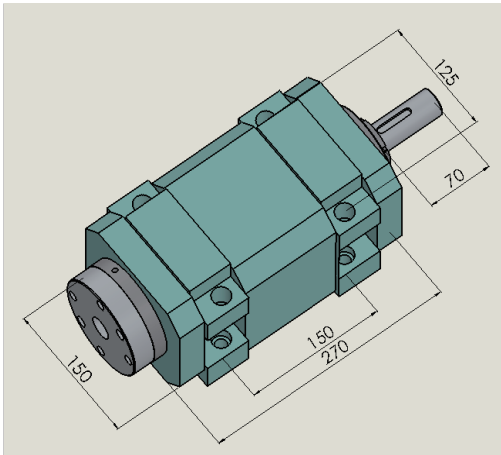
WEIGHT = 15KG

MOTOR	Max. Rpm	
	일반형	고속형
1~2HP	5,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



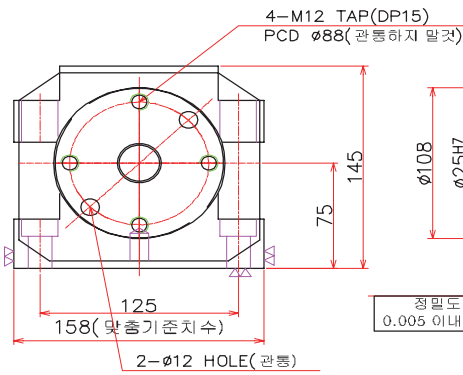
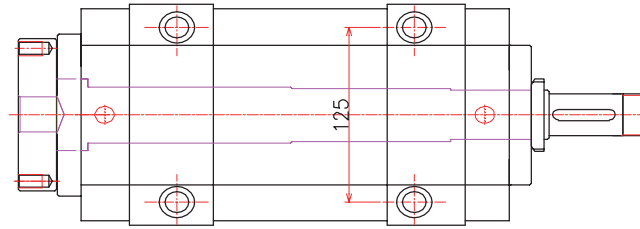
MANUAL TYPE

HB30

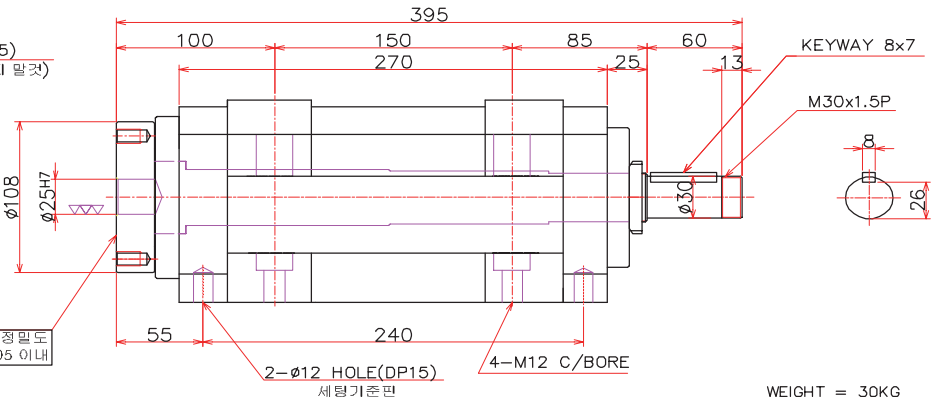
Grade = MEDIUM

#30 - SPINDLE TO MILLING, BORING, GRINDING

FLANGE TYPE



정밀도
0.005 이내

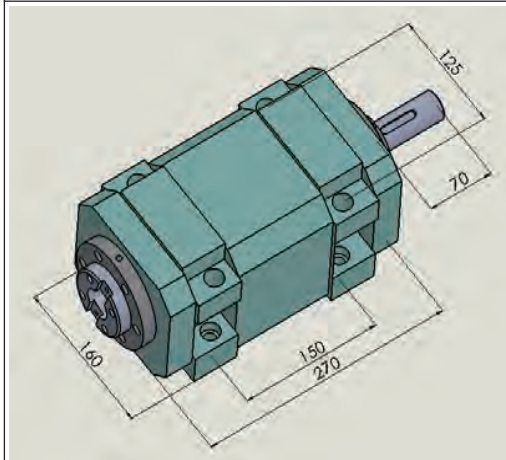


WEIGHT = 30KG

MOTOR	Max. Rpm	
	일반형	고속형
2~3HP	3,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.



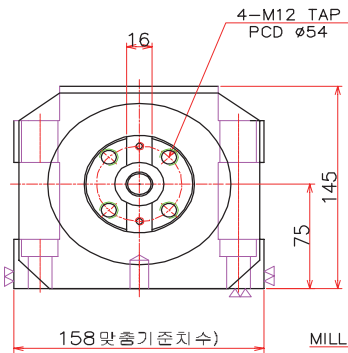
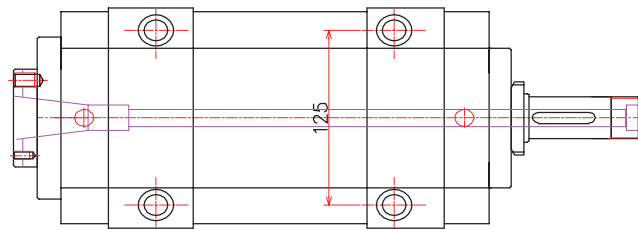
MANUAL TYPE

HM30

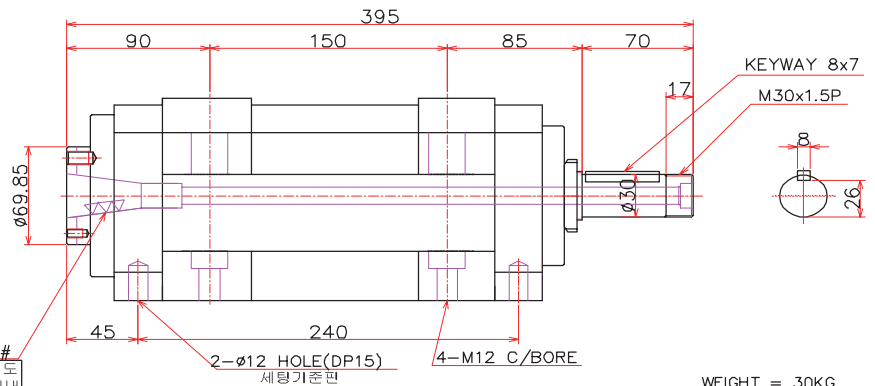
Grade = MEDIUM

BT30 - SPINDLE TO MILLING, BORING, GRINDING

ARBOR TYPE



정밀도 동축도
0.005 이내



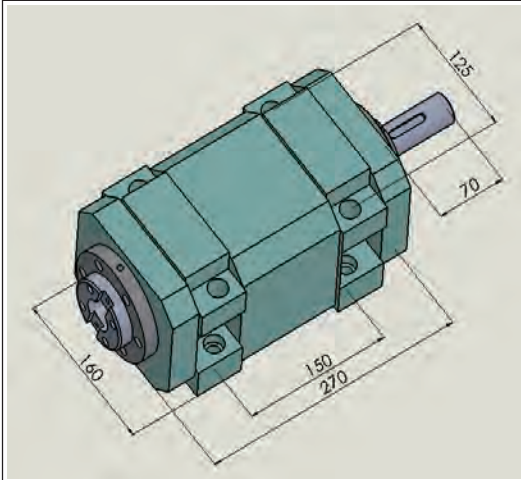
WEIGHT = 30KG

MOTOR	Max. Rpm	
	일반형	고속형
2~3HP	3,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



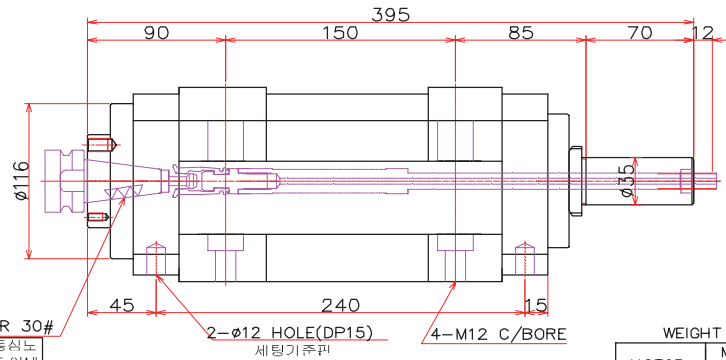
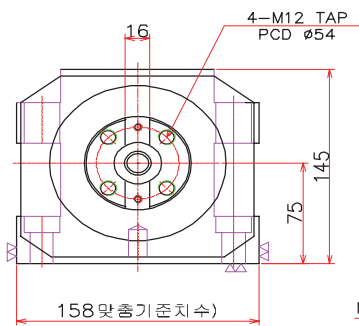
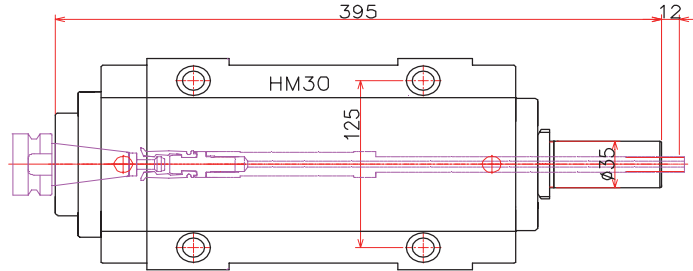
AUTO-CLAMPING TYPE
SPECIAL SPEC.(주문제작)

HM_a30

ARBOR TYPE

Grade = MEDIUM

BT30 - SPINDLE TO MILLING, BORING, GRINDING



MILLING TAPER 30#
정밀도 동식노
0.005 이내

WEIGHT = 30KG

MOTOR	Max. Rpm	
일반형	고속용	
2~3HP	3,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

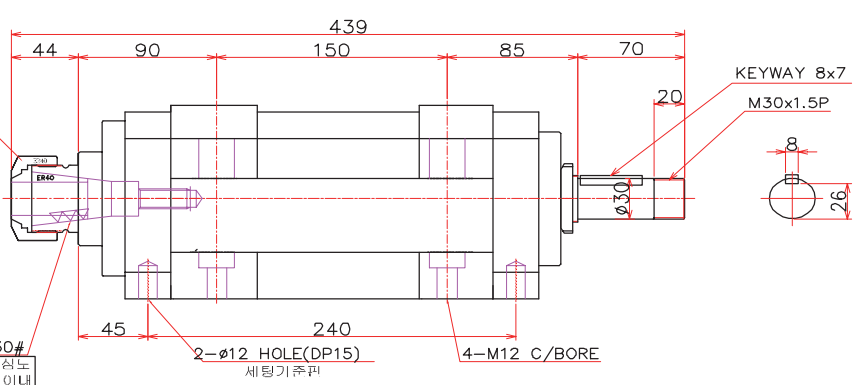
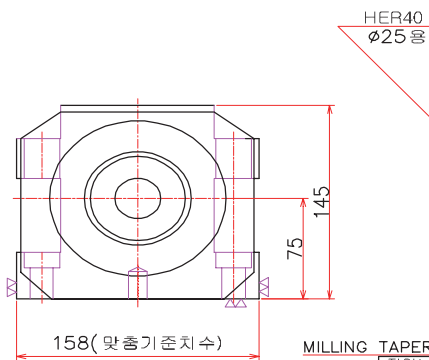
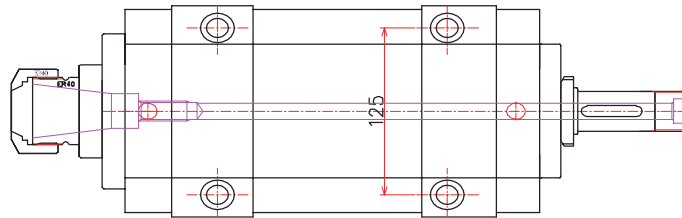
COLLET TYPE

HM_c30

COLLET TYPE

Grade = MEDIUM

BT30 - SPINDLE TO MILLING, BORING, GRINDING



MILLING TAPER 30#
정밀도 동식노
0.005 이내

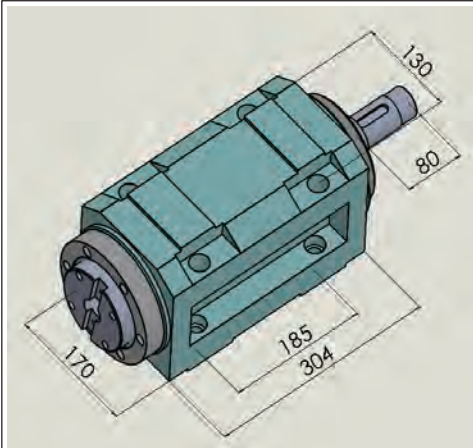
WEIGHT = 30KG

MOTOR	Max. Rpm	
일반형	고속용	
2~3HP	3,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



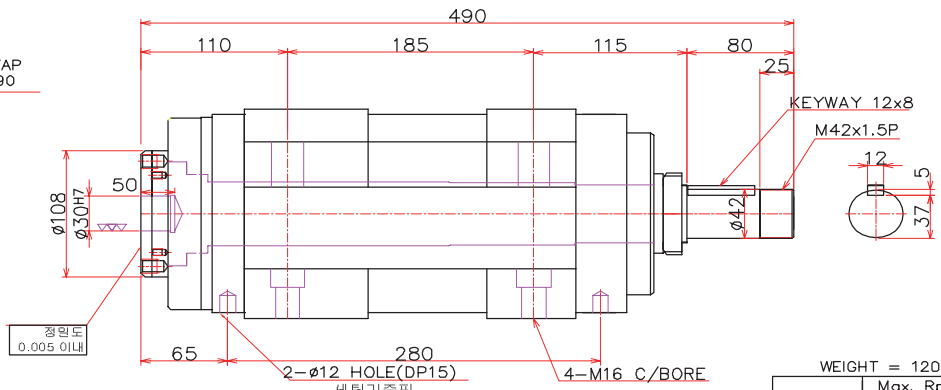
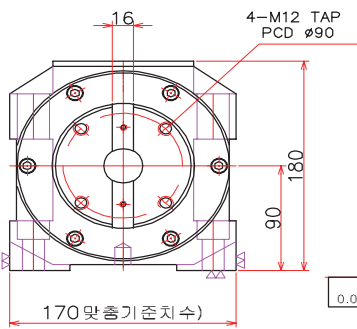
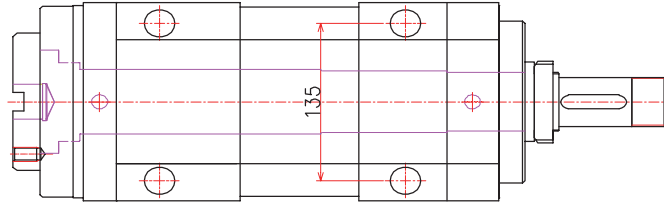
MANUAL TYPE

HB40

FLANGE TYPE

Grade = MEDIUM LARGE

#40 - SPINDLE TO MILLING, BORING, GRINDING

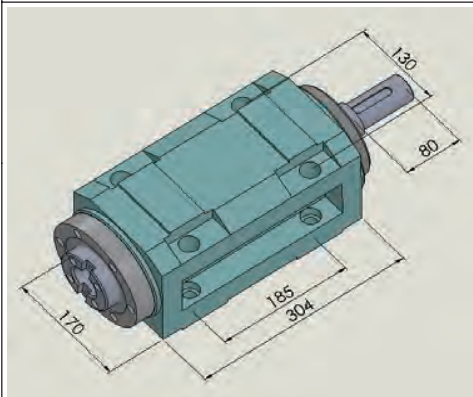


WEIGHT = 120KG

MOTOR	Max. Rpm	
	일반형	고속용
15~20HP	1,500	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.



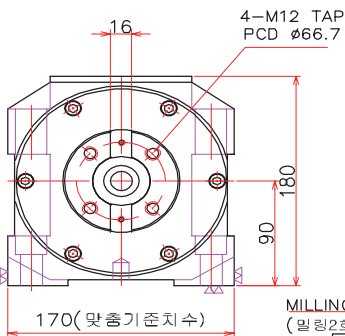
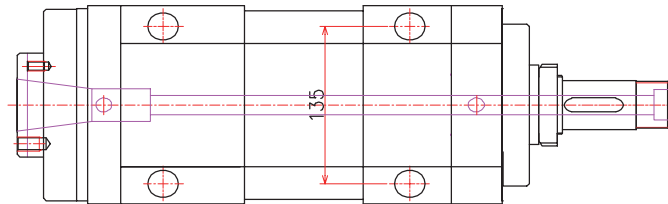
MANUAL TYPE

HM40

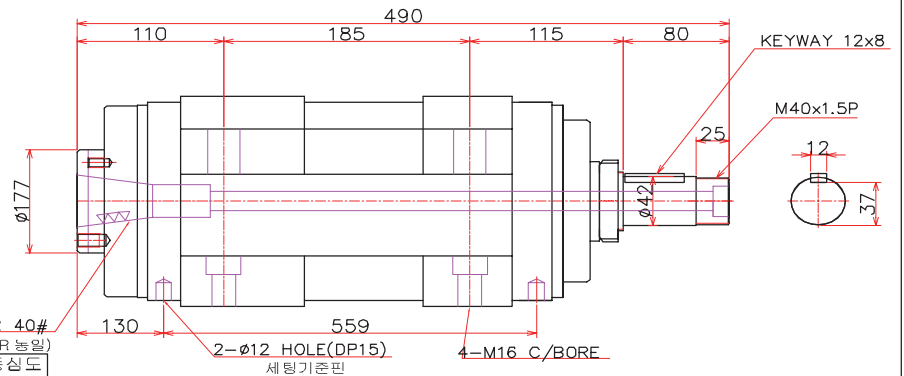
ARBOR TYPE

Grade = MEDIUM LARGE

BT40 - SPINDLE TO MILLING, BORING, GRINDING



MILLING TAPER 40#
(밀링2호기 TAPER 통일)
정밀도 동심도
0.005 이내



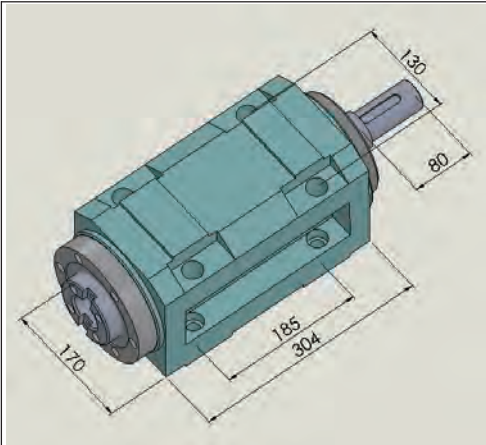
WEIGHT = 120KG

MOTOR	Max. Rpm	
	일반형	고속용
15~20HP	1,500	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



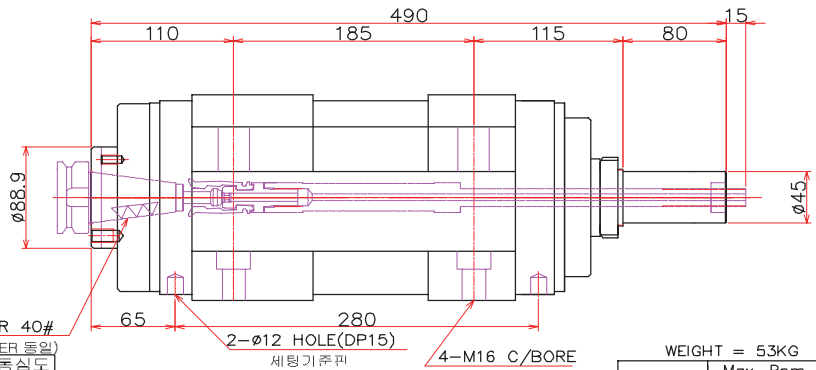
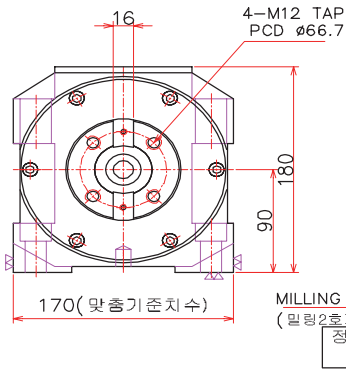
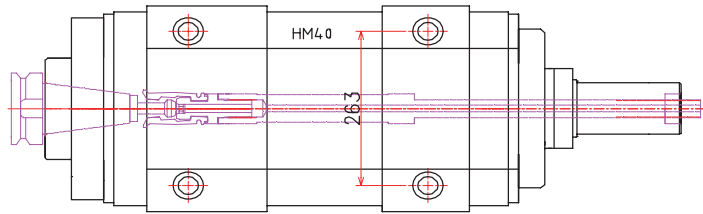
AUTO-CLAMPING TYPE
SPECIAL SPEC.(주문제작)

HM_a40

ARBOR TYPE

Grade = MEDIUM LARGE

BT40 - SPINDLE TO MILLING, BORING, GRINDING



SPINDLE BODY의 COLOR는 IBORY(흰색계통)의

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

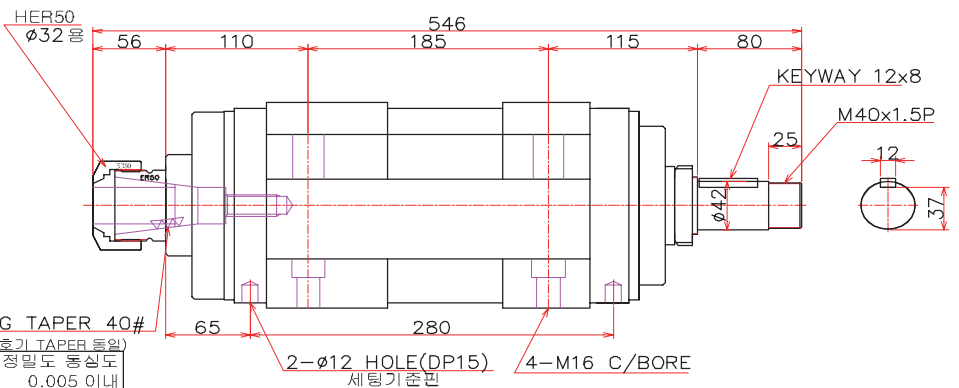
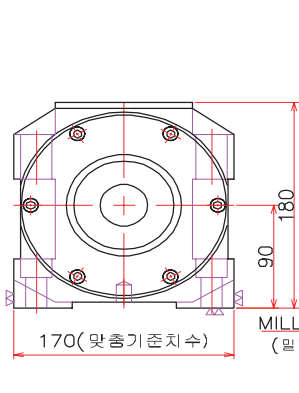
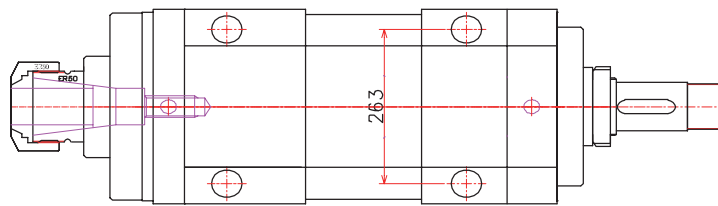
COLLET TYPE

HM_c40

COLLET TYPE

Grade = MEDIUM LARGE

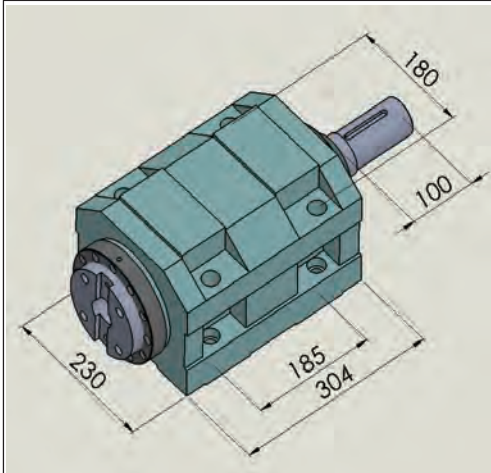
BT40 - SPINDLE TO MILLING, BORING, GRINDING



SPINDLE BODY의 COLOR는 IBORY(흰색계통)의

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE



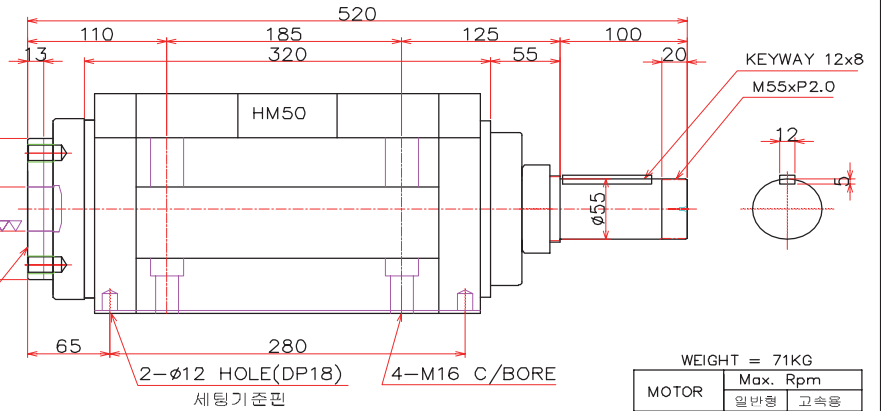
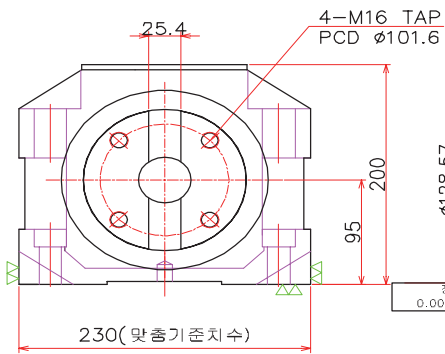
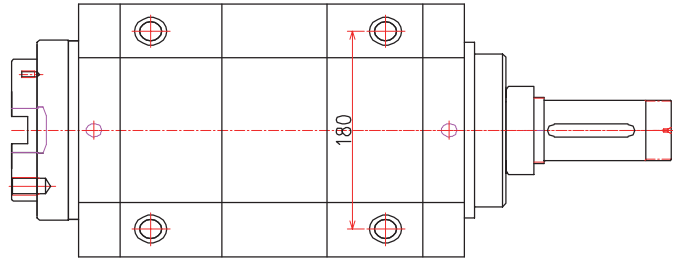
MANUAL TYPE

HB50

FLANGE TYPE

Grade = LARGE

#50 - SPINDLE TO MILLING, BORING, GRINDING

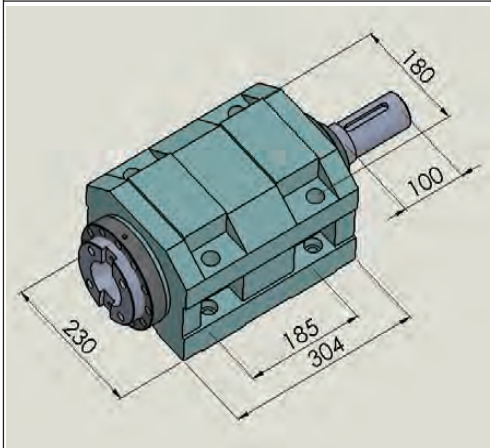


WEIGHT = 71KG

MOTOR	Max. Rpm	
	일반형	고속형
5~7HP	2,000	주유형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.



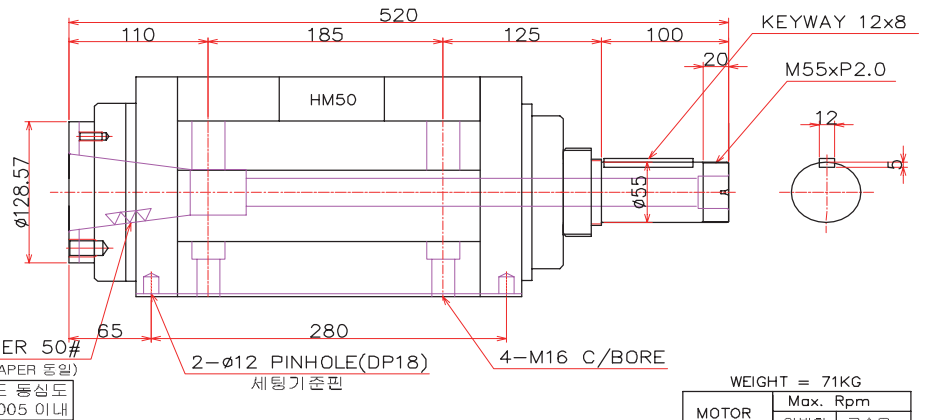
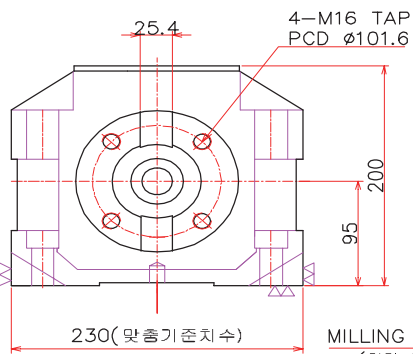
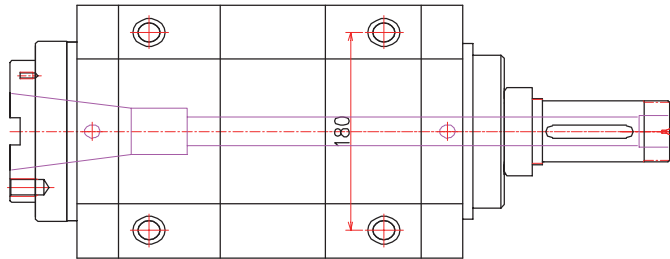
MANUAL TYPE

HM50

ARBOR TYPE

Grade = LARGE

BT50 - SPINDLE TO MILLING, BORING, GRINDING



WEIGHT = 71KG

MOTOR	Max. Rpm	
	일반형	고속형
5~7HP	2,000	주유형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

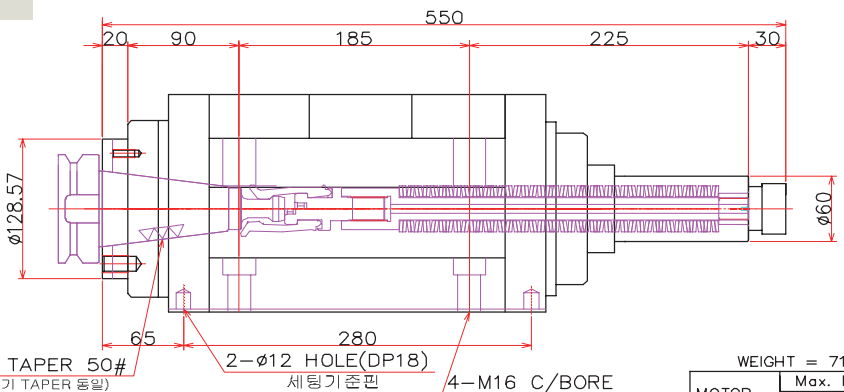
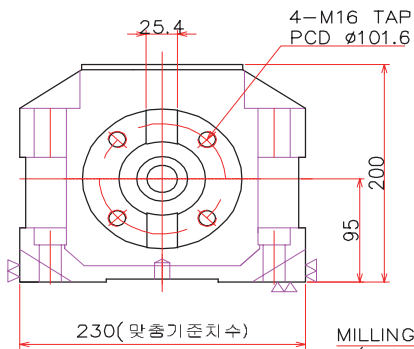
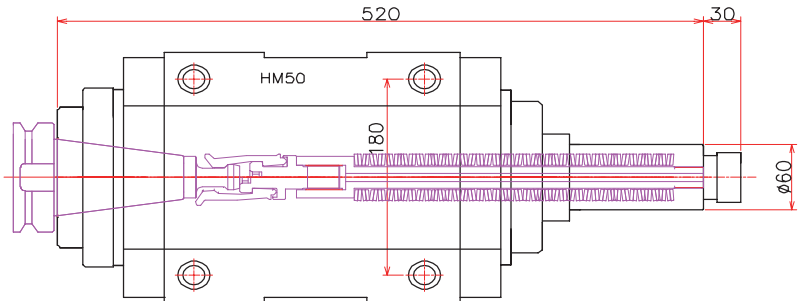
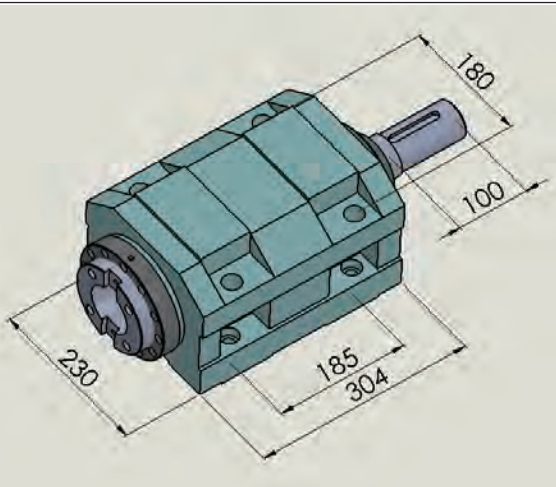
MILLING BOLLING GRINDING SPINDLE

AUTO-CLAMPING TYPE
SPECIAL SPEC.(주문제작)

HM_a50
ARBOR TYPE

Grade = LARGE

BT50 - SPINDLE TO MILLING, BORING, GRINDING



MILLING TAPER 50#
(밀링8호기 TAPER 동일)
정밀도 동상도
0.005 이내

WEIGHT = 71KG

MOTOR	Max. Rpm	
	일반형	고속형
5~7HP	2,000	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

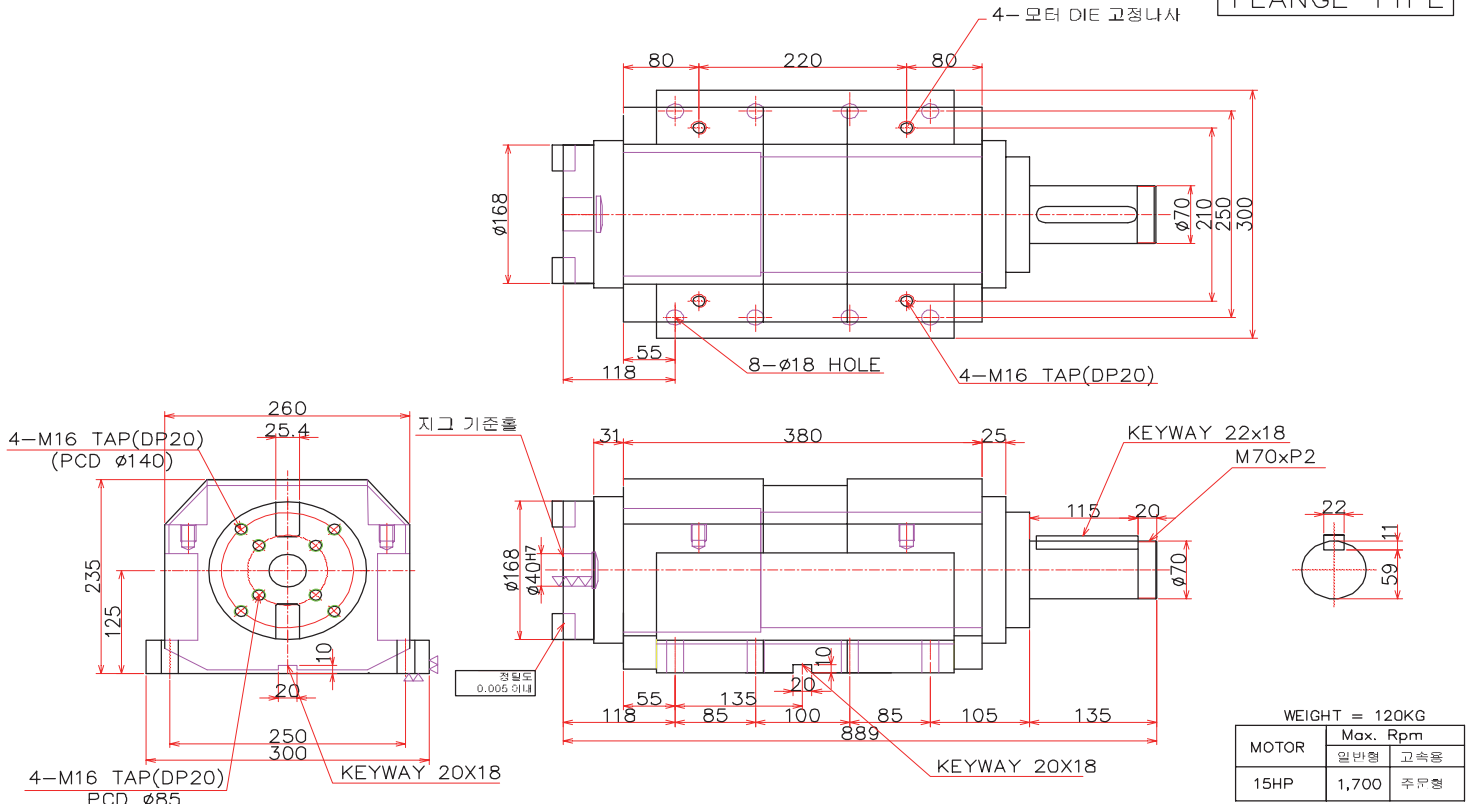
제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.



MILLING BOLLING GRINDING SPINDLE

HB-70

FLANGE TYPE

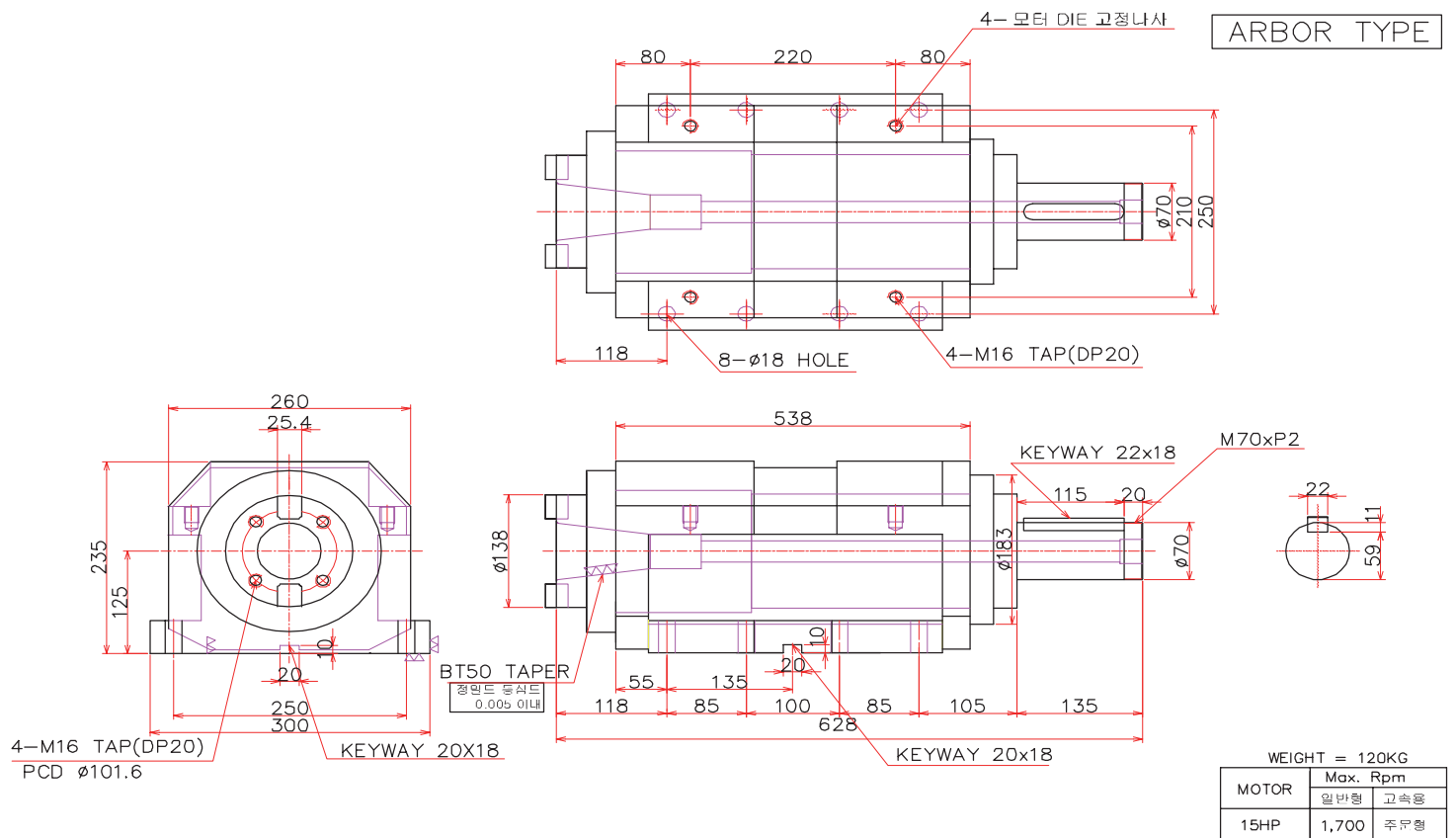


SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

HM-70

ARBOR TYPE



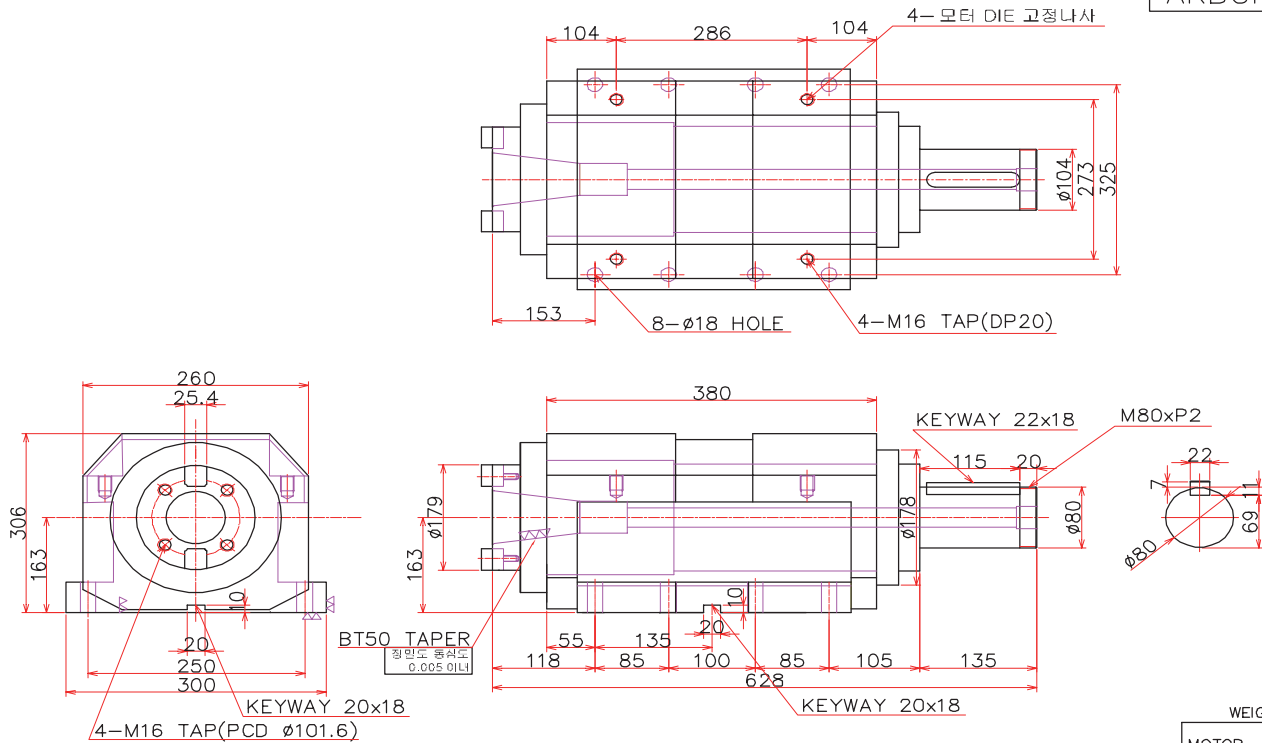
SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

MILLING BOLLING GRINDING SPINDLE

HM-90

ARBOR TYPE



WEIGHT = 120KG

MOTOR	Max. Rpm	
	일반형	고속용
15~20HP	1,500	주요형

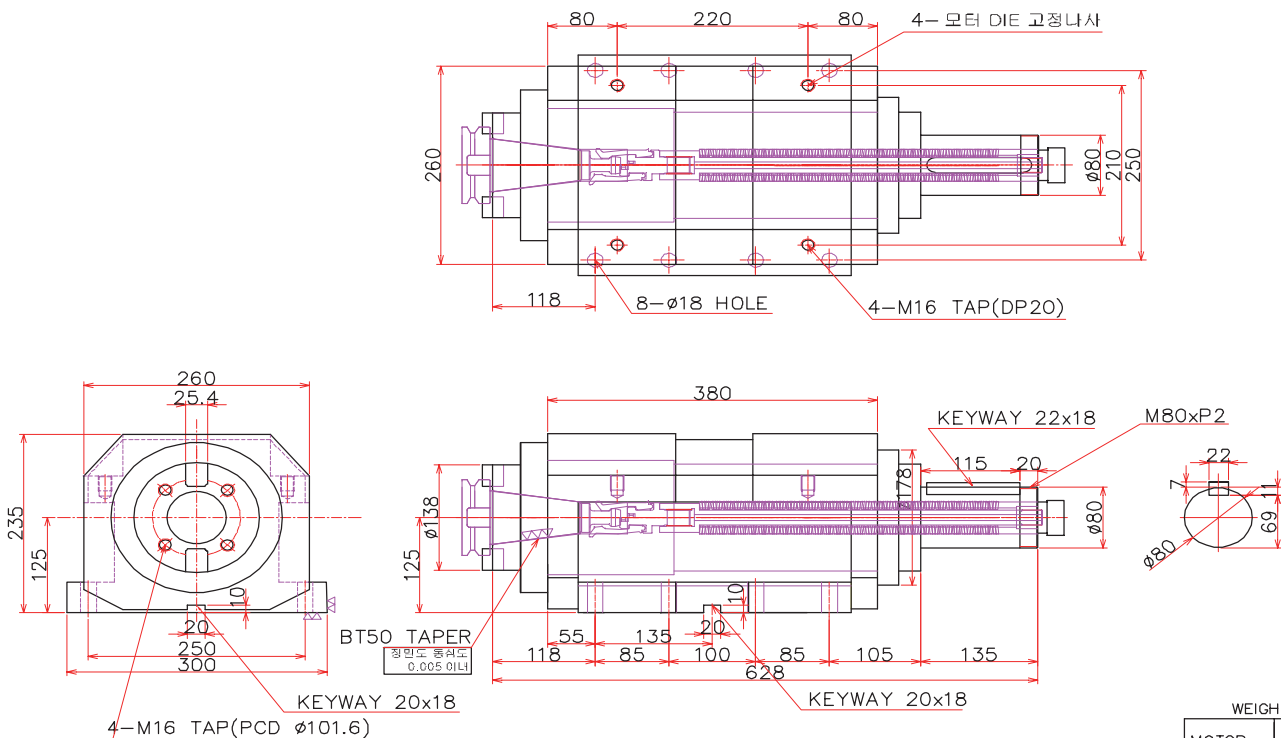
SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

AUTO-CLAMPING TYPE
SPECIAL SPEC.(주문제작)

HM_a-90

ARBOR TYPE



WEIGHT = 120KG

MOTOR	Max. Rpm	
	일반형	고속용
15~20HP	1,500	주요형

SPINDLE BODY의 COLOR는 IBORY(흰색계통)임

제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

COLLET & GRINDING SPINDLE

절삭용 COLLET SPINDLE

CHUCKING DIA.

MODEL

10mm 이내

HSM-10-50



13mm 이내

HSM-13-50



16mm 이내

HSM-16-80



16mm 이내

HSM-16-90



20mm 이내

HSM-20-80



20mm 이내

HSM-20-90



내경 GRINDING SPINDLE

CHUCKING DIA.

MODEL

10mm 이내

HSG-10-50



MT2 TAPER

HSG-MT2-80



MT3 TAPER

HSG-MT3-80



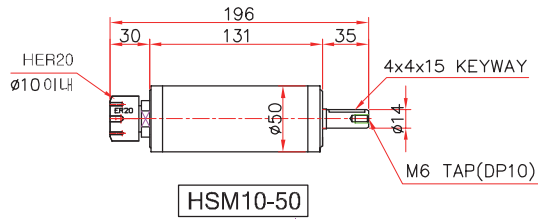
MT3 TAPER

HSG-MT3-90



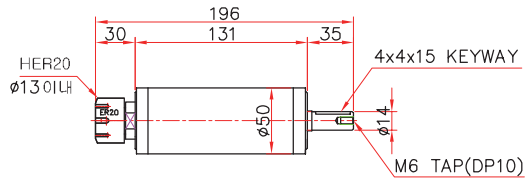
COLLET & GRINDING SPINDLE

절삭용 COLLET 스펀들



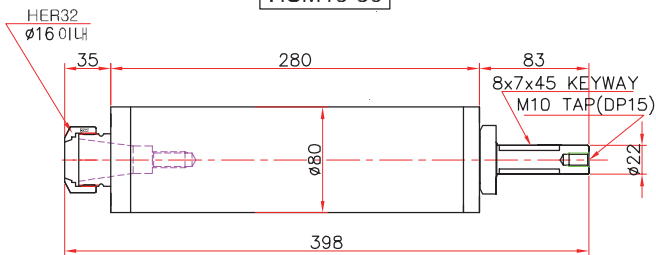
Max. Rpm	
일반형	특수용
12,000	주문사양

HSM10-50



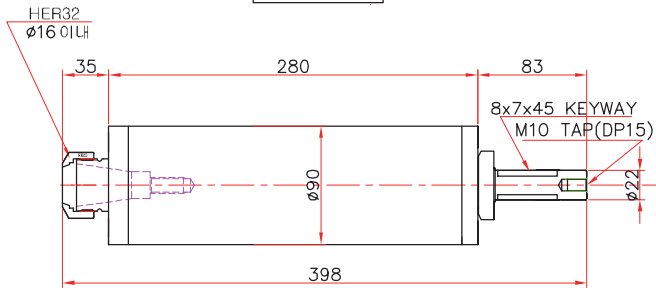
Max. Rpm	
일반형	특수용
12,000	주문사양

HSM13-50



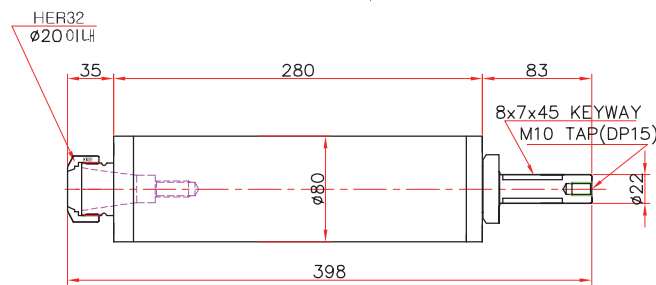
Max. Rpm	
일반형	특수용
9,000	13,000

HSM16-80



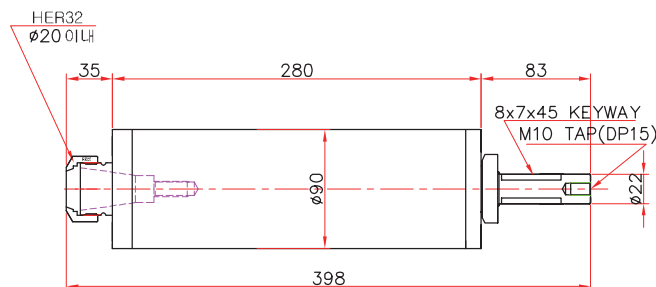
Max. Rpm	
일반형	특수용
8,000	12,000

HSM16-90



Max. Rpm	
일반형	특수용
9,000	13,000

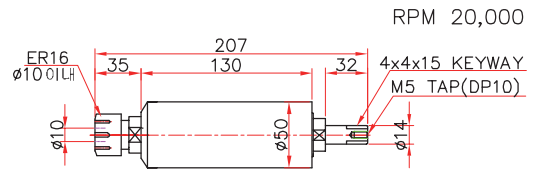
HSM20-80



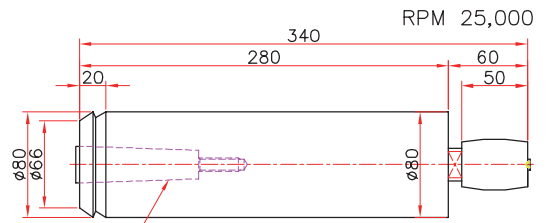
Max. Rpm	
일반형	특수용
8,000	12,000

HSM20-90

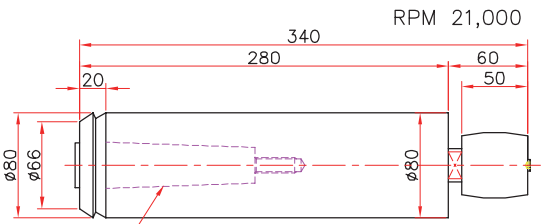
내경 GRINDING 스펀들



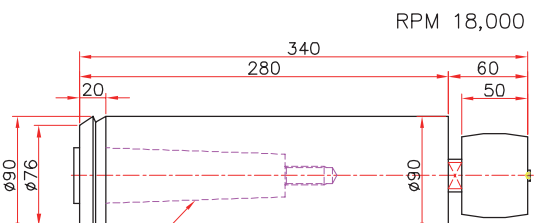
HSG10-50



HSG-MT2-80



HSG-MT3-80

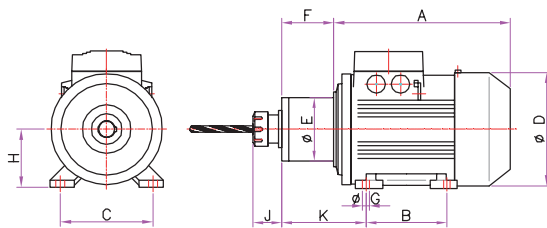


HSG-MT2-90
HSG-MT3-90

주) 제품에 품질향상을 위하여 약간에 변경이 있을 수 있습니다.



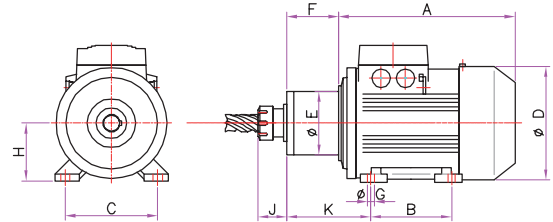
DRILLING TO BUILT IN SPINDLE (HBDS)



치수기준 - 2P/(4P)

MODEL	HBDS 1	HBDS 2	HBDS 3	HBDS 5	HBDS 7.5	HBDS 10
HP / KW	1HP / 0.75Kw	2HP / 1.5Kw	3HP / 2.2Kw	5HP / 3.7Kw	7.5HP / 5.5Kw	10HP / 7.5Kw
RPM	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000
CHUCKING DIA.	ø12 이하	ø16 이하	ø20 이하	ø25 이하	ø32 이하	ø32 이하
COLLET	ER20 이하	ER25 이하	HER32 이하	HER40 이하	HER50 이하	HER50 이하
A	220	253	249(308)	310(326)	347(386)	374(393)
B	100	125	125(140)	140	140	140(178)
C	125	140	140(160)	190	216	216
øD	ø158	ø176	ø176(ø198)	ø198(220)	ø220(ø259)	ø259
øE	ø77	ø87	ø87(ø118)	ø118	ø114(ø118)	ø118(ø125)
F	63	65	82(96)	96(89)	106	106(140)
G	ø10x13.5	ø10x13.5	ø10x13.5(ø12x16)	ø12x16	ø12x16	ø12x16
H	80	90	90(100)	112	132	132
K	116	111	134(164)	164(167)	215	215
J	-	-	-	-	-	-

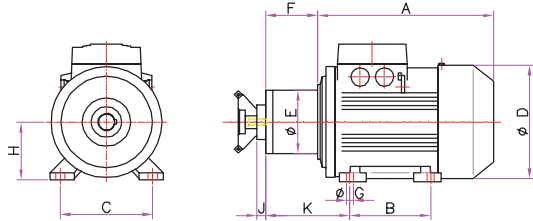
END MILL TO BUILT IN SPINDLE (HBES)



치수기준 - 2P/(4P)

MODEL	HBES 1	HBES 2	HBES 3	HBES 5	HBES 7.5	HBES 10
HP / KW	1HP / 0.75Kw	2HP / 1.5Kw	3HP / 2.2Kw	5HP / 3.7Kw	7.5HP / 5.5Kw	10HP / 7.5Kw
RPM	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000
CHUCKING DIA.	ø12 이하	ø16 이하	ø20 이하	ø25 이하	ø32 이하	ø32 이하
COLLET	ER20 이하	ER25 이하	HER32 이하	HER40 이하	HER50 이하	HER50 이하
A	220	253	249(308)	310(326)	347(386)	374(393)
B	100	125	125(140)	140	140	140(178)
C	125	140	140(160)	190	216	216
øD	ø158	ø176	ø176(ø198)	ø198(220)	ø220(ø259)	ø259
øE	ø77	ø87	ø87(ø118)	ø118	ø114(ø118)	ø118(ø125)
F	63	65	82(96)	96(89)	106	106(140)
G	ø10x13.5	ø10x13.5	ø10x13.5(ø12x16)	ø12x16	ø12x16	ø12x16
H	80	90	90(100)	112	132	132
K	116	111	134(164)	164(167)	215	215
J	-	-	-	-	-	-

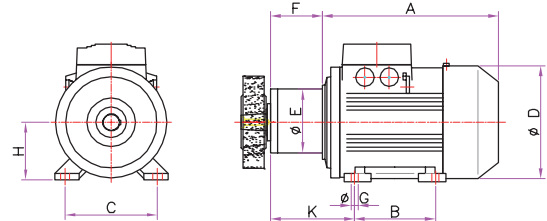
FACE CUTTER TO BUILT IN SPINDLE (HBFS)



치수기준 - 2P/(4P)

MODEL	HBFS 1	HBFS 2	HBFS 3	HBFS 5	HBFS 7.5	HBFS 10
HP / KW	1HP / 0.75Kw	2HP / 1.5Kw	3HP / 2.2Kw	5HP / 3.7Kw	7.5HP / 5.5Kw	10HP / 7.5Kw
RPM	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000
A	220	253	249(308)	310(326)	347(386)	374(393)
B	100	125	125(140)	140	140	140(178)
C	125	140	140(160)	190	216	216
øD	ø158	ø176	ø176(ø198)	ø198(220)	ø220(ø259)	ø259
øE	ø77	ø87	ø87(ø118)	ø118	ø114(ø118)	ø118(ø125)
F	63	65	82(96)	96(89)	106	106(140)
G	ø10x13.5	ø10x13.5	ø10x13.5(ø12x16)	ø12x16	ø12x16	ø12x16
H	80	90	90(100)	112	132	132
K	116	111	134(164)	164(167)	215	215
J	-	-	-	-	-	-

GRINDING TO BUILT IN SPINDLE (HBGS)



치수기준 - 2P/(4P)

MODEL	HBGS 1	HBGS 2	HBGS 3	HBGS 5	HBGS 7.5	HBGS 10
HP / KW	1HP / 0.75Kw	2HP / 1.5Kw	3HP / 2.2Kw	5HP / 3.7Kw	7.5HP / 5.5Kw	10HP / 7.5Kw
RPM	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000	1750 3500 6000
A	220	253	249(308)	310(326)	347(386)	374(393)
B	100	125	125(140)	140	140	140(178)
C	125	140	140(160)	190	216	216
øD	ø158	ø176	ø176(ø198)	ø198(220)	ø220(ø259)	ø259
øE	ø77	ø87	ø87(ø118)	ø118	ø114(ø118)	ø118(ø125)
F	63	65	82(96)	96(89)	106	106(140)
G	ø10x13.5	ø10x13.5	ø10x13.5(ø12x16)	ø12x16	ø12x16	ø12x16
H	80	90	90(100)	112	132	132
K	116	111	134(164)	164(167)	215	215
J	-	-	-	-	-	-

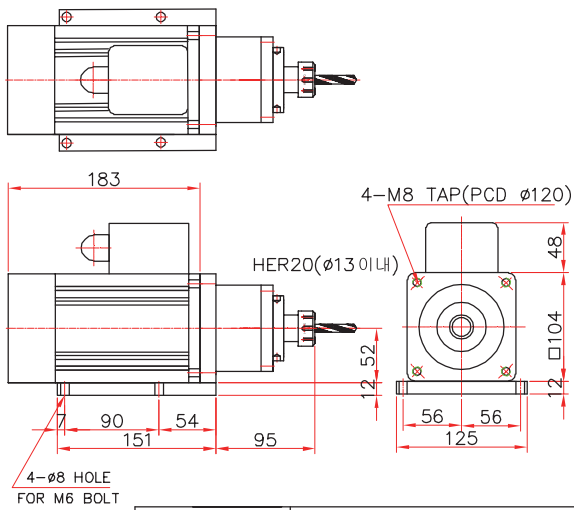
주) 제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

*TOOL은 별매임

BUILT IN SPINDLE

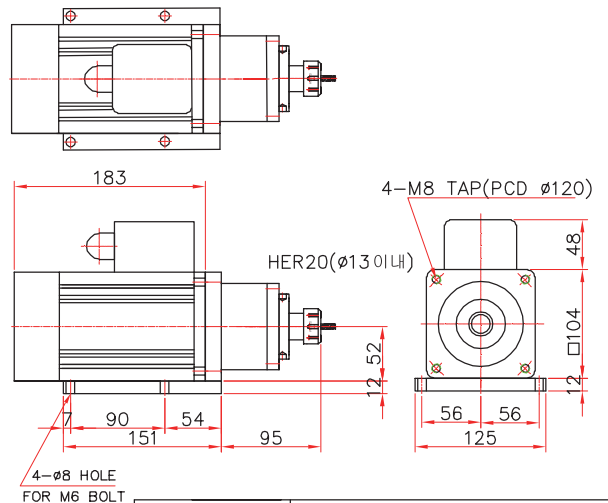


DRILLING TO BUILT IN SPINDLE (HDB)



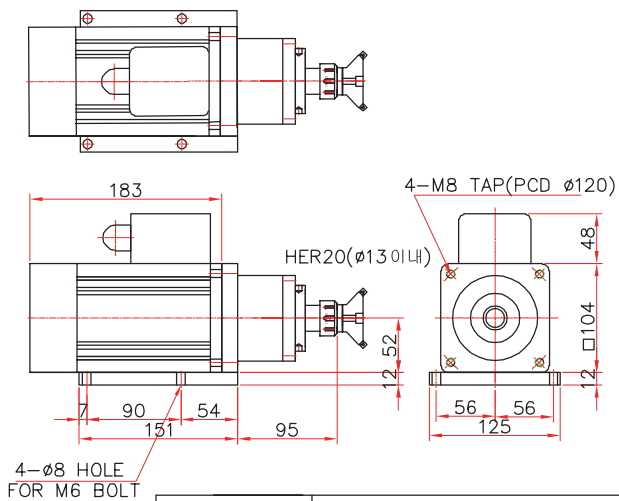
MODEL	HDB0.4
정격출력(W)	400W(101DK6-400F-AT01)
정격속도(RPM)	1,750(기본)/3,500/5,000(주문사항)

END MILL TO BUILT IN SPINDLE (HEB)



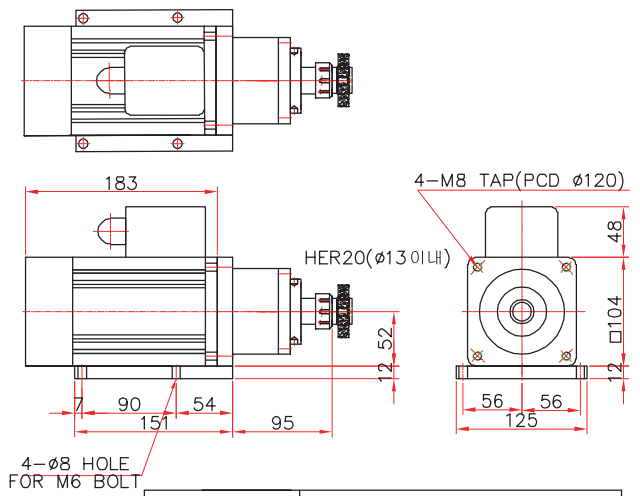
MODEL	HEB0.4
정격출력(W)	400W(101DK6-400F-AT01)
정격속도(RPM)	1,750(기본)/3,500/5,000(주문사항)

FACE CUTTER TO BUILT IN SPINDLE (HFB)



MODEL	HFB0.4
정격출력(W)	400W(101DK6-400F-AT01)
정격속도(RPM)	1,750(기본)/3,500/5,000(주문사항)

GRINDING TO BUILT IN SPINDLE (HGB)



MODEL	HGB0.4
정격출력(W)	400W(101DK6-400F-AT01)
정격속도(RPM)	1,750(기본)/3,500/5,000(주문사항)

주) 제품의 품질향상을 위하여 약간의 변경이 있을수 있습니다.

*TOOL은 별매임



(주)하이원 앵글스핀들

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www.anglehead.com

E-mail : hione88@daum.net



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 서울사무소 : TEL. 02-2616-8844

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