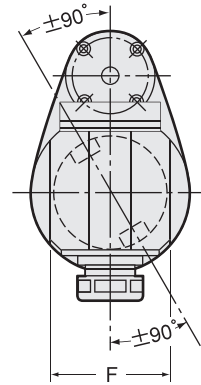
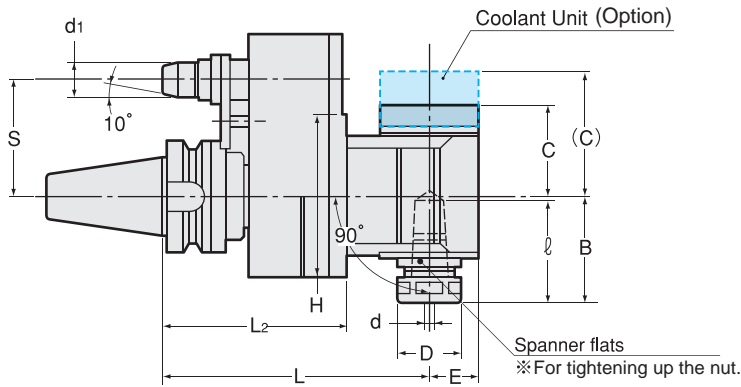


AH, AH-OH

90°

Angle Heads (Fixed Type)



※ Requires a positioning block. Please refer to P.179-180.

Unit : Metric

	Code	Model	d	L	L2	ℓ	d1	D	B	C (C)	E	F	H	S	kg
Milling Chuck	2760 459000 ※※	BT30 -AH0790 -120-50- ※※	0.5 ~ 7.0	120	75.3	40	13	23	42	33	17	45	78	50	1.8
Collet Holder	2760 469000 ※※	BT30 -AH1290 -125-50- ※※	2.5 ~ 12.0	125	75.3	63.5	13	32	58	44.5	22	47	78	50	2.0
"R"-Zero Holder	2760 019000 ※※	BT40 -AH0790 (-AH0790-OH) -150-65- ※※	0.5 ~ 7.0	150	103	40	19.6	23	42	33 (46.5)	17	51	90	65	4.6
Hydraulic Chuck	2760 029000 ※※	-180-65- ※※	0.5 ~ 7.0	180	103	40	19.6	23	42	33 (46.5)	17	51	90	65	5.0
	2760 039000 ※※	-210-65- ※※	0.5 ~ 7.0	210	103	40	19.6	23	42	33 (46.5)	17	51	90	65	5.4
	2760 049000 ※※	-240-65- ※※	0.5 ~ 7.0	240	120	40	19.6	23	42	33 (46.5)	17	51	90	65	5.8
	2760 059000 ※※	-270-65- ※※	0.5 ~ 7.0	270	120	40	19.6	23	42	33 (46.5)	17	51	90	65	6.0
Shrink Fit	2760 069000 ※※	BT40 -AH0990 (-AH0990-OH) -150-65- ※※	2.5 ~ 9.0	150	103	55	19.6	26.3	53.5	44.5 (58.5)	22	58	90	65	4.7
	2760 079000 ※※	-180-65- ※※	2.5 ~ 9.0	180	103	55	19.6	26.3	53.5	44.5 (58.5)	22	58	90	65	5.1
Tapping Chuck	2760 089000 ※※	-210-65- ※※	2.5 ~ 9.0	210	103	55	19.6	26.3	53.5	44.5 (58.5)	22	58	90	65	5.5
	2760 099000 ※※	-240-65- ※※	2.5 ~ 9.0	240	120	55	19.6	26.3	53.5	44.5 (58.5)	22	58	90	65	6.0
Arbors	2760 109000 ※※	BT40 -AH1690 (-AH1690-OH) -150-65- ※※	3.5 ~ 16.0	150	103	59	19.6	36.3	59	51 (64.5)	28	67	90	65	4.8
	2760 119000 ※※	-180-65- ※※	3.5 ~ 16.0	180	103	59	19.6	36.3	59	51 (64.5)	28	67	90	65	5.2
Function Holder	2760 129000 ※※	-210-65- ※※	3.5 ~ 16.0	210	103	59	19.6	36.3	59	51 (64.5)	28	67	90	65	5.6
	2760 139000 ※※	BT50 -AH0790 (-AH0790-OH) -165-80- ※※	0.5 ~ 7.0	165	118	40	28	23	42	33 (46.5)	17	51	90	80	7.6
	2760 149000 ※※	-195-80- ※※	0.5 ~ 7.0	195	118	40	28	23	42	33 (46.5)	17	51	90	80	8.2
Turning Tool	2760 159000 ※※	-225-80- ※※	0.5 ~ 7.0	225	118	40	28	23	42	33 (46.5)	17	51	90	80	8.8
	2760 169000 ※※	-255-80- ※※	0.5 ~ 7.0	255	135	40	28	23	42	33 (46.5)	17	51	90	80	9.4
Retention Stud	2760 179000 ※※	-285-80- ※※	0.5 ~ 7.0	285	135	40	28	23	42	33 (46.5)	17	51	90	80	10.0
	2760 289000 ※※	BT50 -AH0790 (-AH0790-OH) -165-110- ※※	0.5 ~ 7.0	165	118	40	28	23	42	33 (46.5)	17	51	90	110	7.6
Tool Shank Dimensions	2760 299000 ※※	-195-110- ※※	0.5 ~ 7.0	195	118	40	28	23	42	33 (46.5)	17	51	90	110	8.2
	2760 309000 ※※	-225-110- ※※	0.5 ~ 7.0	225	118	40	28	23	42	33 (46.5)	17	51	90	110	8.8
	2760 319000 ※※	-255-110- ※※	0.5 ~ 7.0	255	135	40	28	23	42	33 (46.5)	17	51	90	110	9.4
	2760 329000 ※※	-285-110- ※※	0.5 ~ 7.0	285	135	40	28	23	42	33 (46.5)	17	51	90	110	10.0

Code	Model	d	L	L2	ℓ	d1	D	B	C (C)	E	F	H	S	kg
2760 189000 ※※	BT50 -AH0990 (-AH0990-OH) -165-80- ※※	2.5 ~ 9.0	165	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	80	7.7
2760 199000 ※※	-195-80- ※※	2.5 ~ 9.0	195	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	80	8.3
2760 209000 ※※	-225-80- ※※	2.5 ~ 9.0	225	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	80	8.9
2760 219000 ※※	-255-80- ※※	2.5 ~ 9.0	255	135	55	28	26.3	53.5	44.5 (58.5)	22	58	90	80	9.5
2760 339000 ※※	BT50 -AH0990 (-AH0990-OH) -165-110- ※※	2.5 ~ 9.0	165	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	110	7.7
2760 349000 ※※	-195-110- ※※	2.5 ~ 9.0	195	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	110	8.3
2760 359000 ※※	-225-110- ※※	2.5 ~ 9.0	225	118	55	28	26.3	53.5	44.5 (58.5)	22	58	90	110	8.9
2760 369000 ※※	-255-110- ※※	2.5 ~ 9.0	255	135	55	28	26.3	53.5	44.5 (58.5)	22	58	90	110	9.5
2760 229000 ※※	BT50 -AH1690 (-AH1690-OH) -165-80- ※※	3.5 ~ 16.0	165	118	59	28	36.3	59	51 (64.5)	28	67	90	80	7.8
2760 239000 ※※	-195-80- ※※	3.5 ~ 16.0	195	118	59	28	36.3	59	51 (64.5)	28	67	90	80	8.4
2760 249000 ※※	-225-80- ※※	3.5 ~ 16.0	225	118	59	28	36.3	59	51 (64.5)	28	67	90	80	9.0
2760 379000 ※※	BT50 -AH1690 (-AH1690-OH) -165-110- ※※	3.5 ~ 16.0	165	118	59	28	36.3	59	51 (64.5)	28	67	90	110	7.8
2760 389000 ※※	-195-110- ※※	3.5 ~ 16.0	195	118	59	28	36.3	59	51 (64.5)	28	67	90	110	8.4
2760 399000 ※※	-225-110- ※※	3.5 ~ 16.0	225	118	59	28	36.3	59	51 (64.5)	28	67	90	110	9.0
2760 259000 ※※	BT50 -AH2290 (-AH2290-OH) -180-80- ※※	3.5 ~ 22.0	180	117	65	28	46.3	69	57 (70.5)	34.5	75	113	80	9.5
2760 269000 ※※	-210-80- ※※	3.5 ~ 22.0	210	117	65	28	46.3	69	57 (70.5)	34.5	75	113	80	10.3
2760 279000 ※※	-240-80- ※※	3.5 ~ 22.0	240	117	65	28	46.3	69	57 (70.5)	34.5	75	113	80	11.0
2760 409000 ※※	BT50 -AH2290 (-AH2290-OH) -180-110- ※※	3.5 ~ 22.0	180	117	65	28	46.3	69	57 (70.5)	34.5	75	113	110	9.5
2760 419000 ※※	-210-110- ※※	3.5 ~ 22.0	210	117	65	28	46.3	69	57 (70.5)	34.5	75	113	110	10.3
2760 429000 ※※	-240-110- ※※	3.5 ~ 22.0	240	117	65	28	46.3	69	57 (70.5)	34.5	75	113	110	11.0
2760 439000 ※※	BT50 -AH2590 (-AH2590-OH) -195-80- ※※	9.5 ~ 25.0	195	117	101	28	65	90	73 (86.5)	45	90	113	80	15.0
2760 449000 ※※	-195-110- ※※	9.5 ~ 25.0	195	117	101	28	65	90	73 (86.5)	45	90	113	110	15.0

Model names in brackets show "Coolant type", which are quoted on request.

- ※ is for A dimension. Please refer to P. 179.
- When ordering, please specify plunger size ("A" dimension).
- Plunger is fixed (non-adjustable)
- Collet and spanner are sold separately.
- BT30-AH1290-125-50- ※※ is light cutting only.

Accessories for Angle heads fixed type

Model	Nut	Collet	Spanner for nut	Spanner flats for the head
AH0790	HDP-07A	FDC-07A	S-0	Standard 14mm spanner
AH0990	HDP-09	FDC-09	S-1L	S-1L
AH1290	HDP-12	FDC-12	S-3L	S-3L
AH1690	HDP-16	FDC-16	S-4L	S-4L
AH2290	HDP-22	FDC-22	S-5L	S-5L
AH2590	HPP-25	NTG25	HS2.5-25	HS2.5-25

Collet

P. 086 - 089



Spanner

P. 095



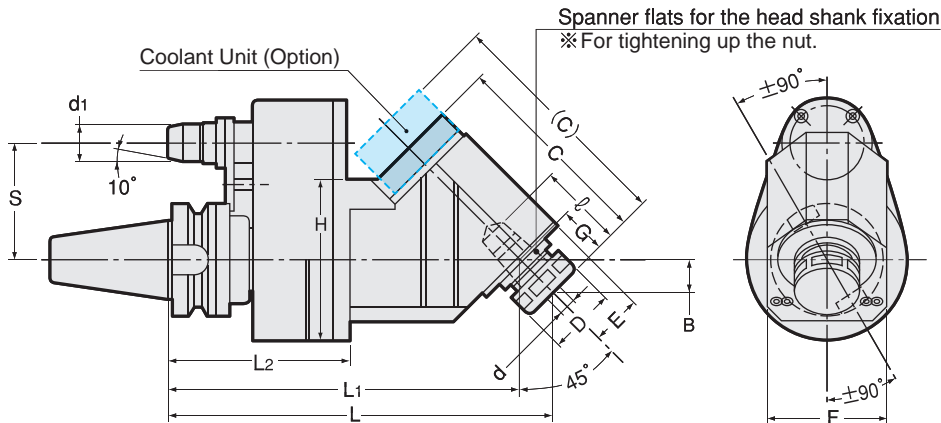
Ordering Example

BT40 - AH 07 90 - 150 - 65 - 06
 Shank size Max. Angle Projection S Dimension
 collet I.D. length (L) A

AH, AH-OH

45°

Angle Heads (Fixed Type)



※ Requires a positioning block. Please refer to P.179-180.

Unit : Metric

Code	Model	d	L	L1	L2	ℓ	d1	D	B	C (C)	E	F	G	H	S	kg
2760 014500 ※※	BT40 -AH0745 (-AH0745-OH) -195-65- ※※	0.5 ~ 7.0	195	179.5	103	35	19.6	23	15.6	88.5 (102)	17	51	22	90	65	4.2
2760 024500 ※※	-215-65- ※※	0.5 ~ 7.0	215	199.5	103	35	19.6	23	15.6	88.5 (102)	17	51	22	90	65	
2760 034500 ※※	-245-65- ※※	0.5 ~ 7.0	245	229.5	103	35	19.6	23	15.6	88.5 (102)	17	51	22	90	65	
2760 044500 ※※	BT40 -AH0945 (-AH0945-OH) -205-65- ※※	2.5 ~ 9.0	205	186.5	103	45	19.6	26.3	19.1	104 (118)	22	58	27	90	65	4.5
2760 054500 ※※	-230-65- ※※	2.5 ~ 9.0	230	211.5	103	45	19.6	26.3	19.1	104 (118)	22	58	27	90	65	
2760 064500 ※※	-260-65- ※※	2.5 ~ 9.0	260	241.5	103	45	19.6	26.3	19.1	104 (118)	22	58	27	90	65	
2760 074500 ※※	BT40 -AH1645 (-AH1645-OH) -215-65- ※※	3.5 ~ 16.0	215	197	103	53	19.6	36.3	18.4	113.5 (127)	28	67	26	90	65	5.3
2760 084500 ※※	-245-65- ※※	3.5 ~ 16.0	245	227	103	53	19.6	36.3	18.4	113.5 (127)	28	67	26	90	65	
2760 094500 ※※	BT50 -AH0745 (-AH0745-OH) -210-80- ※※	0.5 ~ 7.0	210	194.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	80	7.8
2760 104500 ※※	-230-80- ※※	0.5 ~ 7.0	230	214.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	80	
2760 114500 ※※	-260-80- ※※	0.5 ~ 7.0	260	244.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	80	
2760 174500 ※※	BT50 -AH0745 (-AH0745-OH) -210-110- ※※	0.5 ~ 7.0	210	194.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	110	
2760 184500 ※※	-230-110- ※※	0.5 ~ 7.0	230	214.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	110	
2760 194500 ※※	-260-110- ※※	0.5 ~ 7.0	260	244.5	118	35	28	23	15.6	88.5 (102)	17	51	22	90	110	
2760 124500 ※※	BT50 -AH0945 (-AH0945-OH) -220-80- ※※	2.5 ~ 9.0	220	201.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	80	7.8
2760 134500 ※※	-245-80- ※※	2.5 ~ 9.0	245	226.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	80	
2760 144500 ※※	-275-80- ※※	2.5 ~ 9.0	275	256.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	80	
2760 204500 ※※	BT50 -AH0945 (-AH0945-OH) -220-110- ※※	2.5 ~ 9.0	220	201.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	110	
2760 214500 ※※	-245-110- ※※	2.5 ~ 9.0	245	226.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	110	
2760 224500 ※※	-275-110- ※※	2.5 ~ 9.0	275	256.5	118	45	28	26.3	19.1	104 (118)	22	58	27	90	110	
2760 154500 ※※	BT50 -AH1645 (AH1645-OH) -230-80- ※※	3.5 ~ 16.0	230	212	118	53	28	36.3	18.4	113.5 (127)	28	67	26	90	80	
2760 164500 ※※	-260-80- ※※	3.5 ~ 16.0	260	242	118	53	28	36.3	18.4	113.5 (127)	28	67	26	90	80	
2760 234500 ※※	BT50 -AH1645 (AH1645-OH) -230-110- ※※	3.5 ~ 16.0	230	212	118	53	28	36.3	18.4	113.5 (127)	28	67	26	90	110	
2760 244500 ※※	-260-110- ※※	3.5 ~ 16.0	260	242	118	53	28	36.3	18.4	113.5 (127)	28	67	26	90	110	

Model names in brackets show "Coolant type", which are quoted on request.

- ※ is for A dimension. Please refer to P. 179.
- When ordering, please specify plunger size ("A" dimension).
- Plunger is fixed (non-adjustable)
- Collet and spanner are sold separately.

Accessories for Angle heads fixed type

Model	Nut	Collet	Spanner for nut	Spanner flats for the head
AH0745	HDP-07A	FDC-07A	S-0	Standard 14mm spanner
AH0945	HDP-09	FDC-09	S-1L	S-1L
AH1645	HDP-16	FDC-16	S-4L	S-4L

Collet

P. 086 - 089



Spanner

P. 095



Ordering Example

BT40 - AH 07 45 - 195 - 65 - 06

Shank size Max. Angle Projection S Dimension
collet I.D. length (L) A

BT

CAT

AHO

HSK-A/E/F/C

HSK-T

UTS

Specialized
MachineRelated
EquipmentBush &
Chamfering
DrillMilling
ChuckCollet
Holder"R" Zero
HolderHydraulic
ChuckShrink
FitTapping
Chuck

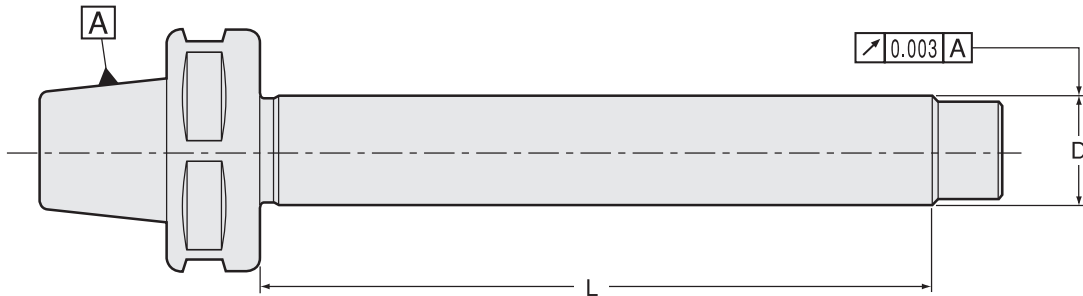
Arbors

Function
HolderTurning
ToolReversion
StudTool Shank
Dimensions

Accessories for ANGLE HEADS

MASTER BAR

MS



Metric Sizes

Unit : Metric

Code	Model	D	L	Applicable Angle Head model Number
2767 00007100	AH07-MS7-100	7	100	AH0790, AH0745, AHS07
2767 00009100	AH09-MS16-100	16	100	AH0990, AH0945, AHS09
2767 00016100	AH16-MS16-100	16	100	AH1690, AH1645, AHS16, AHL16
2767 00022100	AH22-MS22-100	22	100	AH2290, AHL22
2767 00025110	AH25-MS25-110	25	110	AH2590

- 1.Angle Head comes complete with a set of Master bar. Please order an extra Master bar in case you need one.
- 2.With regard to AH07-MS7-100, nut and Master bar are separated. Master bar and nut must be put together before use. (As for other sizes, Master bar and cap nut are already integrated.)

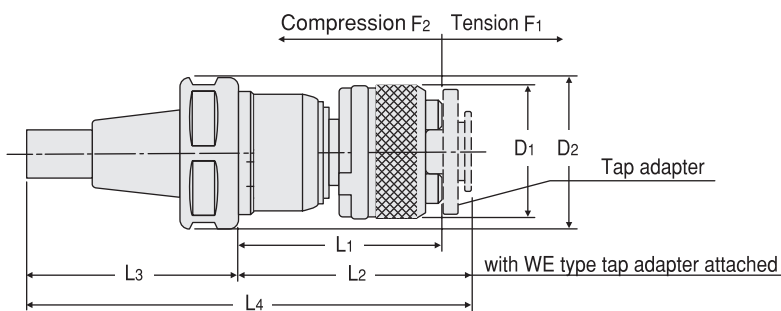
Ordering Example

AH09 - MS16 - 100

Collet size D L

Quick-change tapping attachment

TPC



Ordering Example

TPC22 - 1

Tap adapter size

Metric Sizes

Unit : Metric

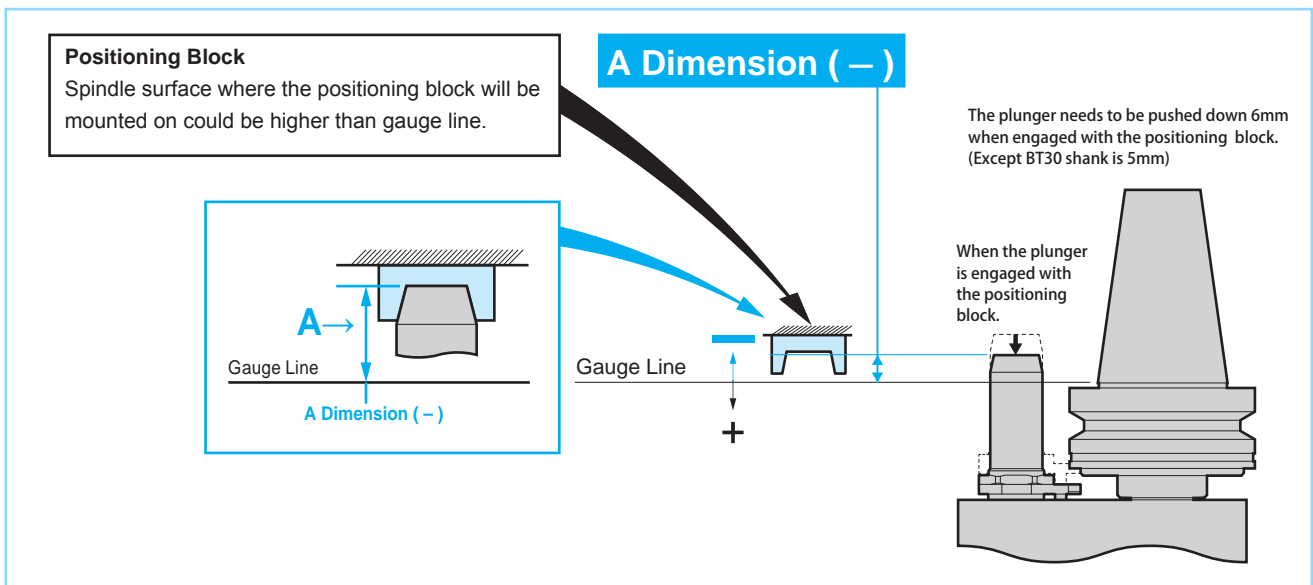
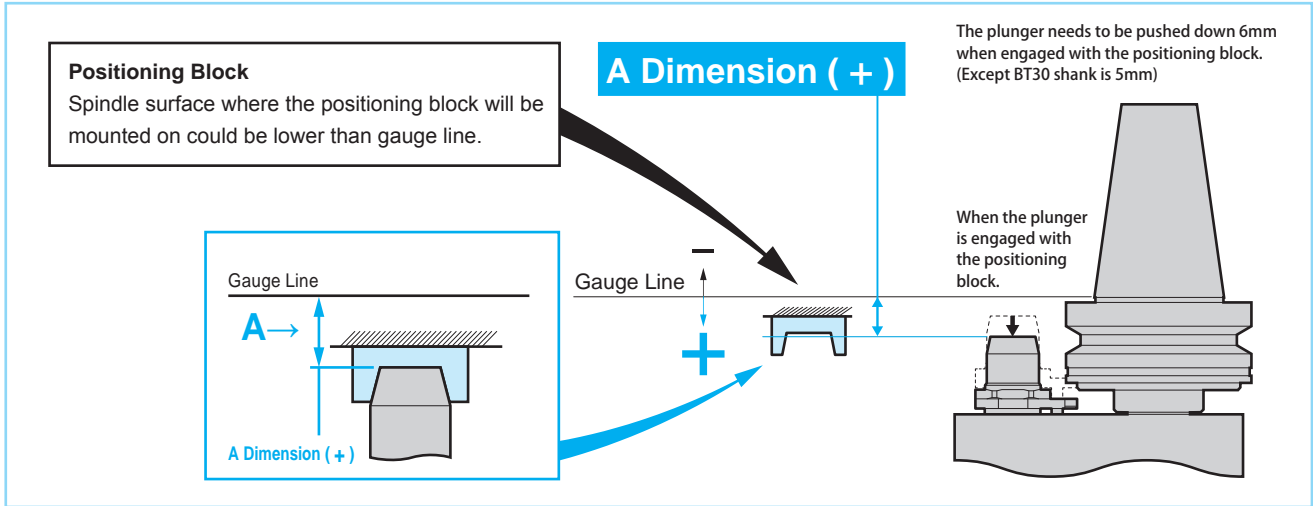
Type	Tap adapter size	Tap size (Please refer to P.463-464.)	L1	L2	L3	L4	D1	D2	Axial compensation		Applicable Angle Head model Number
									F1	F2	
TPC16-1	1	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe (PT,PS,PF) 1/8 ~ 1/4	49.5	56.5	64.5	121	32	36	10	2	AH1645, AH1690, AHS16, AHL16
TPC22-1	1	M3 ~ M12 (M15) U1/4 ~ U7/16 (U9/16) Pipe (PT,PS,PF) 1/8 ~ 1/4	49.5	56.5	70	126.5	32	46	10	2	AH2290, AHL22
TPC22-2	2	M8 ~ M22 U3/8 ~ U7/8	69	80	70	150	50	46	10	2	AH2290, AHL22

Positioning Block

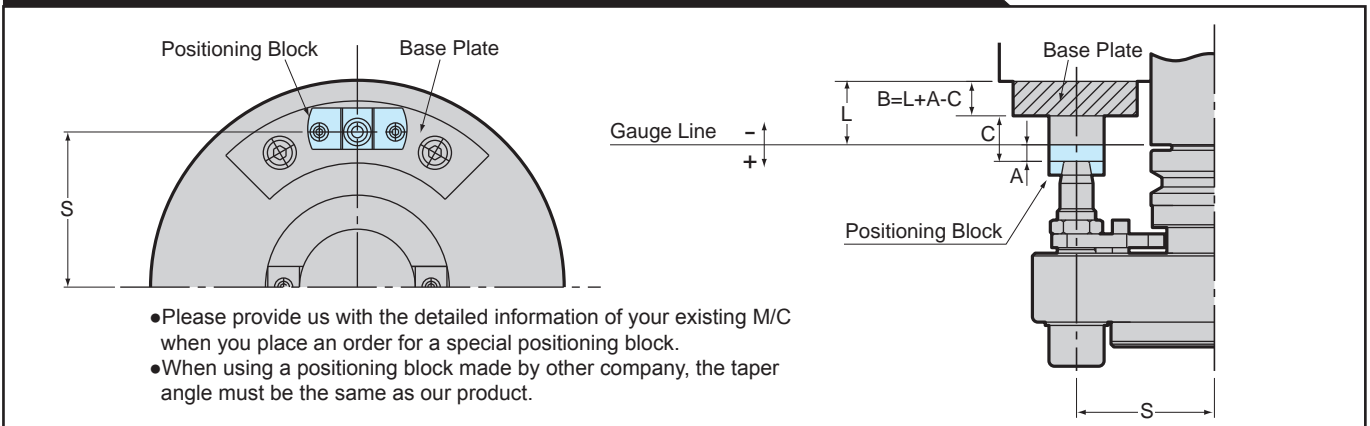
Before using NT's Coolant Inducer, Hyper Spindle or Angle Heads, please install a positioning block to your M/C.

What is "A" dimension?

"A" dimension is an axial distance between your machine's gauge line and the bottom of the groove of the positioning block. This "A" dimension is VERY important to be able to use our plunger products correctly. Using incorrect plunger size may result in damaging the products. NT TOOL can help you measure this "A" dimension. Please call us with this page opened. Also, your "Spindle surface drawing" from your machine manufacturer is helpful.



In order to retrofit NT standard positioning blocks to your existing machine, a base plate shown below must be made. For more details, please contact NT USA.

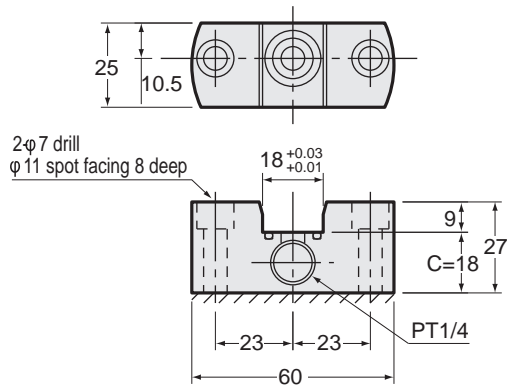


Positioning Blocks Dimensional data

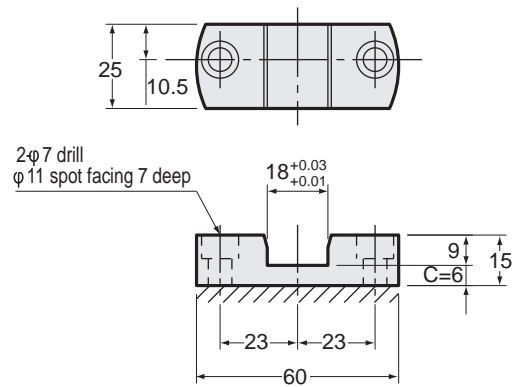
Before using NT's Coolant Inducer, Hyper Spindle or Angle Heads, please install a positioning block to your M/C.

Part Number	Suitable tool holders
IGB-1	40/50 Hyper Spindles
IGB-2	40/50 Coolant Inducer (and Hyper Spindles)
IGB-3	Angle Heads BT30
IGB-4	Angle Heads Fixed types (BT40, CAT40, HSK63A)
IGB-5	Angle Heads Fixed types with center-thru coolant feed (BT40, CAT40, HSK63A)
IGB-6	Angle Heads Fixed types (BT50, CAT50, HSK100A) and Flexible Types (BT40, BT50, CAT40, CAT50, HSK63A, HSK100A)
IGB-7	Angle Heads Fixed Types with center-thru coolant feed (BT50, CAT50, HSK100A)

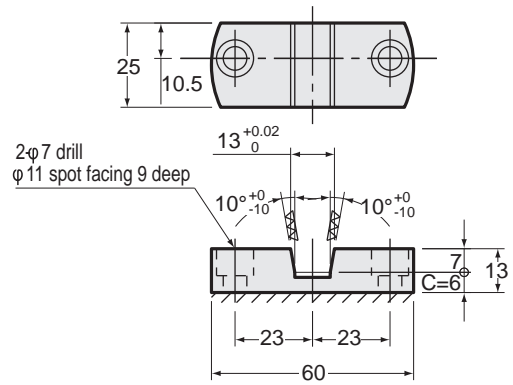
IGB-2 (40/50 Coolant Inducer (and Hyper Spindles)



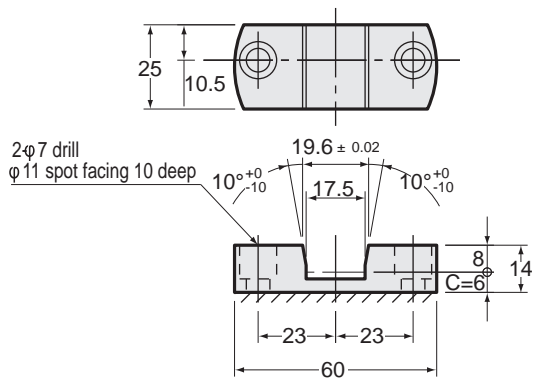
IGB-1 (40/50 Hyper Spindles)



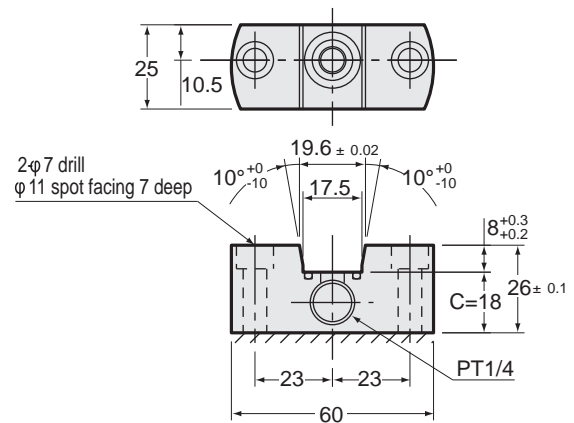
IGB-3 (Angle Heads BT30)



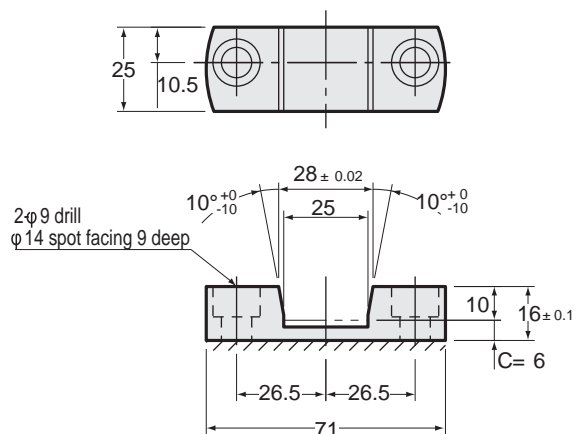
IGB-4 Angle Heads Fixed types (BT40, CAT40, HSK63A)



IGB-5 Angle Heads Fixed types with center-thru coolant feed (BT40, CAT40, HSK63A)



IGB-6 Angle Heads Fixed types (BT50, CAT50, HSK100A) and Flexible Types (BT40, BT50, CAT40, CAT50, HSK63A, HSK100A)



IGB-7 Angle Heads Fixed Types with center-thru coolant feed (BT50, CAT50, HSK100A)

