

Standard

Code	Type	Installation	Handwheel		Handle		Handle Thread	
			Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
HBA01	With Revolving Handle	Round Hole	A5056	Shot Blasted Black Anodize	PA6(Black)	—	SUM22L	Black Oxide
HBA02				Shot Blasted Clear Anodize				
HBA11		Hole + Tap	A5056	Shot Blasted Black Anodize	PA6(Black)	—	SUM22L	Black Oxide
HBA12				Shot Blasted Clear Anodize				
HBA16			SUS304	—	SUS304	—	SUS304	—



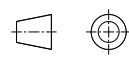
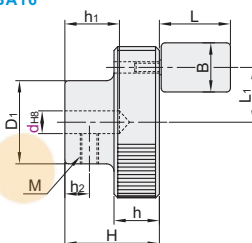
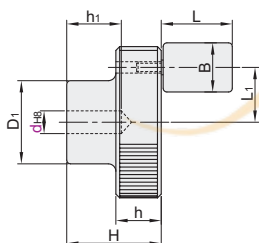
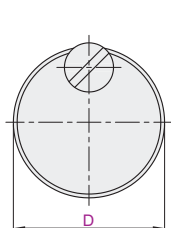
Inventory

Round Hole

HBA01
HBA02

Hole + Tap

HBA11
HBA12
HBA16



The first perspective

Part Number		d	L	L1	B	H	h	h1	h2	D1	M	Reference Weight(kg/pcs)	
Code	D											A5056	SUS304
HBA01 HBA02	40	6*	18.8	14.5	13	25	12	15	6.5	22	5	0.05	0.15
		8*										0.09	0.26
		10*										0.16	0.46
HBA11 HBA12 HBA16	63	10*	20.8	23	14	32	14	22	9	35	6	0.30	0.86
		12*											
		16*											

① With*spec only apply to HBA11.



Please order as shown

Part Number		d
Code	D	
HBA01	40	6
HBA02	40	8

HBA01—D40—d8



Discount price	
Per	Price
1~9	100%
10~	Additional quotation



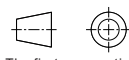
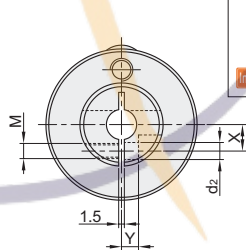
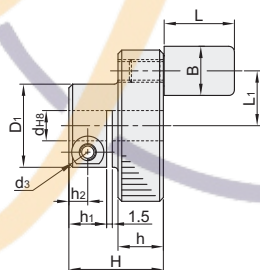
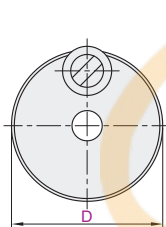
Delivery	
Per	Price
1~9	100%
10~	Additional quotation

Slit

Code	Type	Installation	Handwheel		Handle		Handle Thread	
			Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
HBA41	With Revolving Handles	Screw Clamp	A5056	Shot Blasted Black Anodize	PA6(Black)	—	SUM22L	Black Oxide



Inventory



The first perspective

Part Number		d	L	L1	B	H	h	h1	h2	D1	d2	d3	M	X	Y	Reference Weight (kg/pcs)
Code	D															
HBA41	40	8	18.8	14.5	13	25	12	10	5	22	4.5	8.5	4	7	4.5	0.05
	50	10														0.09
	63	12														0.16



Please order as shown

Part Number		d
Code	D	
HBA41	40	8
HBA41	50	10

HBA41—D40



Discount price	
Per	Price
1~9	100%
10~	Additional quotation



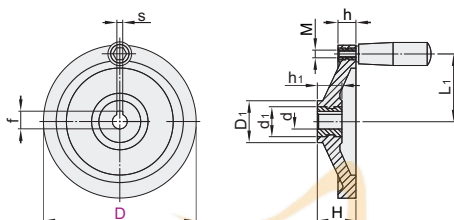
Delivery	
Per	Price
1~9	100%
10~	Additional quotation

Plastic Solid Handwheels ▶

Revolving Handle

Handwheels

Code	Type	Installation	Hub	Handwheel	Handle Mounting	Handle	Handle Thread	
			Material	Material	Hole	Material	Material	Surface Treatment
HAM31	With Revolving Handle	Keyway	S45C	PF	Brass	PF	S45C	Zinc-plated



Inventory



The first perspective

Part Number		d	d ₁	L ₁	M	H	h	h ₁	D ₁	f	s	Reference Weight (kg/pcs)
Code	D											
HAM31	63	8	16	24		20.5	13	16	28	9.5	3	0.07
	80	10	18	32.5	M6	21	13	16	30	11.4	3	0.11
	100	12	22	40		26	15	15	40	13.8	4	0.2
	125			52	M8	30	18	18	46			0.39
	160	16	25	68		38	21	20	53	18.3	5	0.57
	200	18	28	88	M10	44	22	25	64	20.8	6	0.99
	250	22	32	112	M12	52	27	28	70	24.8	6	1.38



Please order as shown

Part Number	
Code	D
HAM31	63
	80
HAM31—D63	



Discount price	
Per	1~9 10~
Price	100% Additional quotation



Delivery	
	6



Inventory

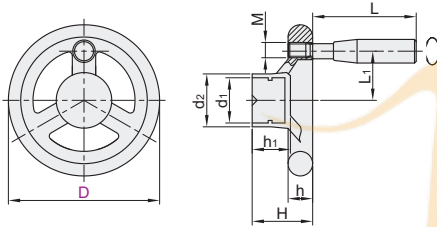
Standard

Code	Type	Installation	Hub		Handwheel	Handle Mounting Hole	Handle	Handle Thread	
			Material	Surface Treatment				Material	Surface Treatment
HAL81	Standard	Without Hole*	HT200	Black Oxide	PF	Brass	PF	SUM21	Zinc-plated
HAL83		Hole + Tap	SUS303	—					
HAL84			HT200	Black Oxide					
HAL86		Keyway + Tap	SUS303	—					
HAL87			HT200	Black Oxide					
HAL89		Square Hole	HT200	Black Oxide					

* is a "Without Hole" Type, but there is a pilot hole for manufacturing.

D80 through 125: Ø6, with depth of around 10mm.

D140~200: Ø6 through Ø8, with depth of around 10mm.



Shaft Bore Config. Selection			
Without Hole	Hole + Tap	Keyway + Tap	Square Hole

Without Hole

Part Number	D	L	L1	H	h	h1	d1	d2	M	Reference Weight (kg/pcs)
HAL81	80	40	26	32	13	25	20	28	8	0.14
	100		37	36		28	25	35		0.20
	125	55	50	40	17	30		40		0.33
	140		55	41	18		30	45		0.41
	160	67	65	47	20	35			10	0.49
	180		73	50	23		35	50		0.64
	200	74	80	54		40				0.78

Keyway Size

d	d Tol.	f	s
10	+0.036 0	11.4	3
12		13.8	4
15	+0.043 0	17.3	5
16		18.3	5

Hole + Tap/Keyway + Tap

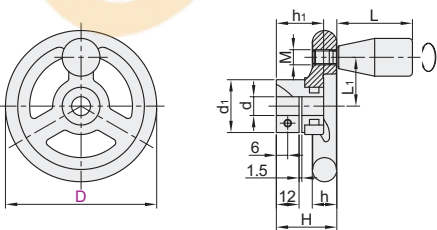
Part Number	D	d	M1	L	L1	H	h	h1	d1	d2	M	Reference Weight (kg/pcs)
Hole + Tap	80	10 12 14	5	40	26	32	13	25	20	28	8	0.14
	100	10 12 15			37	36		28	25	35		0.20
	125	12		55	50	40	17	30		40		0.33
	140	15			55	41	18		30	45		0.41
Keyway + Tap	160		6	67	65	47	20		35		10	0.49
	180	16 18 20			73	50						0.64
	200			74	80	54	23	40	35	50		0.78

Square Hole

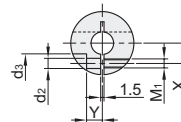
Part Number	D	W	L	L1	H	h	h1	d1	d2	M	Reference Weight (kg/pcs)
HAL89	80	10	40	26	32	13	25	20	28	8	0.14
	100			37	36		28	25	35		0.20
	125	12	55	50	40	17			40		0.33
	140	14		55	41	18	30		45		0.41
	160		67	65	47	20	35			10	0.49
	180	14		73	50	23		35	50		0.64
	200	17	74	80	54		40				0.78

Slit

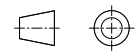
Code	Type	Installation	Hub		Handwheel	Handle Mounting Hole	Handle	Handle Thread	
			Material	Surface Treatment				Material	Surface Treatment
HAL91	Slit	Screw Clamp	S45C	Black	PP	Brass	PF	SUM21	Zinc-plated



Clamping position detailed size



Inventory



The first perspective

Part Number	D	H	h	h1	L	L1	d	d1	d2	d3	M	M1	X	Y	Reference Weight (kg/pcs)
HAL91	80	32	13	25	40	26	10	28	4.5	8.5	8	4	9	7	0.14
	100	36			37										0.20
	125	40	17	28	55	50	12	35	5.5	10		5	10	9	0.33

Standard(Without Hole)

Part Number	D	L
HAL81	80	40

HAL81—D80

Standard(Hole + Tap)

Part Number	D	d
HAL83	80	10 12 14

HAL83—D80—d10

Standard(Square Hole)

Part Number	D	W
HAL89	80	10

HAL89—D80—W10



Please order as shown



Discount price
Per 1~9 10~
Price 100% Additional quotation



Delivery
6

Dual Spoked Handwheels ▶

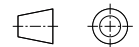
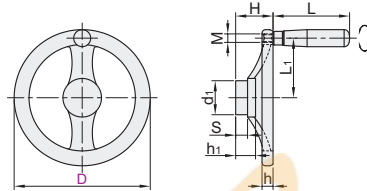
Revolving Handle

Handwheels

Code	Type	Installation	Handwheel		Handle		Handle Thread	
			Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
HAM76	With Revolving Handle	Without Hole	SUS316	Shot Blasted	SUS304	Electrolytic Polishing	SUS304	Electrolytic Polishing



Inventory



The first perspective

Ⓜ This product can be remachined as hole + tap type , keyway+tap type and square hole type.

Part Number		L	L ₁	M	H	h	h ₁	d ₁	S	Reference Weight (kg/pcs)
Code	D									
HAM76	80	45	35.6	5	22	6.5	11.7	20	7	0.43
	100		43.5		27	7.5	14.6	25	8.7	0.61
	125	57	54.7	6	32	8	18.3	31	10.9	0.76
	140		62.5		36	9	20.5	35	12.2	0.94
	160	68	71.5	8	40	9	23.4	40	14	1.30
	200	80	90	10	50	11.3	32	50	17.4	2.18



Please order as shown

Part Number		L
Code	D	
HAM76	80	45
	100	57

HAM76—D80



● Discount price

Per	1~9	10~
Price	100%	Additional quotation



Delivery

6



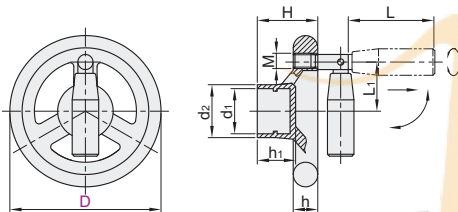
Inventory

Code	Type	Installation	Hub		Handwheel	Handle Mounting Hole	Handle	Handle Thread	
			Material	Surface Treatment	Material	Material	Material	Material	Surface Treatment
HAN61	Fold-Down Revolving Handle	Without Hole*	HT200	Black Oxide	PF	Brass	PF	SUM21	Zinc-plated
HAN63		Hole + Tap							
HAN66		Keyway + Tap							
HAN69		Square Hole							

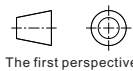
* is a "Without Hole" Type, but there is a pilot hole for manufacturing.

D80 through 125: Ø6, with depth of around 10mm.

D140~200: Ø6 through Ø8, with depth of around 10mm.



Shaft Bore Config. Selection			
Without Hole	Hole + Tap	Keyway + Tap	Square Hole



The first perspective

Without Hole

Part Number		L	L ₁	H	h	h ₁	d ₁	d ₂	M	Reference Weight (kg/pcs)
Code	D									
HAN61	80	55	26	32	13	25	20	28		0.18
	100		37	36		28	25	35	8	0.24
	125		50	40	17			40		0.41
	140	104	55	41	18	30	30	45		0.57
	160		65	47	20				10	0.64
	180		73	50	23	35				0.80
	200		80	54		40	35	50		0.94

Keyway Size

d	d Tol.	f	s
10	+0.036 0	11.4	3
12		13.8	4
15	+0.043 0	17.3	
16		18.3	5

Hole + Tap/Keyway + Tap

Part Number		d	M ₁	L	L ₁	H	h	h ₁	d ₁	d ₂	M	Reference Weight (kg/pcs)
Code	D	Apply to HAN63	Apply to HAN66									
Hole + Tap HAN63	80	12 14	10									0.18
	100	10 15		5	55	26	32	13	25	20	28	0.24
	125	16 18	12		81.5	37	36		28	25	35	0.41
	140	18 20	15			50	40	17	30	30	40	0.57
Keyway + Tap HAN66	160	18 20				55	41	18			45	0.64
	180	18 20	16	6	104	65	47	20	35			0.80
	200	18 20				73	50	23		35	50	0.94
						80	54		40			

Square Hole

Part Number		W	L	L ₁	H	h	h ₁	d ₁	d ₂	M	Reference Weight (kg/pcs)
Code	D										
HAN69	80	10		26	32		25	20	28		0.18
	100		55	37	36	13	28	25	35	8	0.24
	125	12	81.5	50	40	17			40		0.41
	140	14		55	41	18	30	30	45		0.57
	160		104	65	47	20				10	0.64
	180	14		73	50	23	35				0.80
	200	17		80	54		40	35	50		0.94

Without Hole

Part Number	D
HAN61	80
HAN63	100

HAN61—D80

Hole + Tap/Keyway + Tap

Part Number	D	d
HAN63	80	12 14
HAN66	100	10 15

HAN63—D80—d14

Square Hole

Part Number	D	W
HAN69	80	10
HAN69	100	12 14

HAN69—D80—W10



Please order as shown



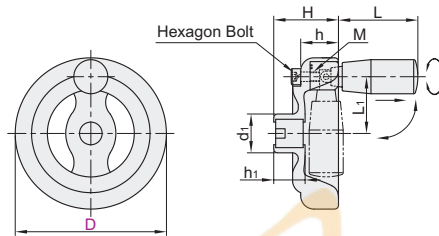
Discount price			
Per	1~9	10~	
Price	100%	Additional quotation	



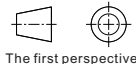
Delivery	
	6

□ Dual Spoke Handwheels

Code	Type	Installation	Hub		Handwheel		Handle		Handle Thread	
			Material	Surface Treatment	Material	Surface Treatment	Material	Material	Surface Treatment	
HAN41	Fold-Down Revolving Handle	Without Hole	SS400	Black Oxide	PF	—	SS400	Alloy Steel	Zinc-plated	



Inventory



① This product can be remachined as hole + tap type, keyway+tap type and square hole type.

Part Number	D	L	L ₁	H	h	h ₁	d ₁	M	Reference Weight (kg/pcs)
HAN41	80	42	30	34.2	20	16.5	20.5	5	0.16
	100		39	37.5		18.5	25.2		0.21
	125	67.5	50.5	48	25.5	26	32	6	0.47
	140		54	50.5		29	36		0.52
	160	82.5	62.7	56.9	28.5	33	40.5	8	0.76



Please order as shown

Part Number	D	L
Code	D	
HAN41	<80	42
	100	

HAN41—D80



Discount price
Per 1~9 10~
Price 100% Additional quotation



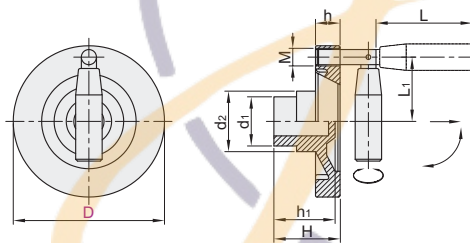
Delivery
6

□ Metal Solid Handwheels

Code	Type	Installation	Hub		Handwheel		Handle Mounting Hole	Handle	Handle Thread	
			Material	Surface Treatment	Material	Surface Treatment	Material	Material	Material	Surface Treatment
HBD01	Fold-Down Revolving Handle	Without Hole	HT200	Black Oxide	PF	—	Brass	PF	SUM21	Zinc-plated
HBD02			AC7A	Buff Polished	AC7A	Buff Polished	AC7A			
HBD06		Hole + Tap	HT200	Black Oxide	PF	—	Brass			
HBD07			AC7A	Buff Polished	AC7A	Buff Polished	AC7A			
HBD11		Keyway + Tap	HT200	Black Oxide	PF	—	Brass			
HBD12			AC7A	Buff Polished	AC7A	Buff Polished	AC7A			

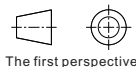


Inventory



Shaft Bore Config. Selection		
Without Hole	Hole + Tap	Keyway + Tap

① HBD02/07/12 aluminum handwheels, no D175, D200 specs.



□ Without Hole

Part Number	D	L	L ₁	H	h	h ₁	d ₁	d ₂	M	Reference Weight (kg/pcs)
HBD01	80	55	34	35	13	30	28	36	8	0.20
	100		41	40	15	36	32	39		0.30
	125	81.5	52	44	18	38	39	46	10	0.43
	150		64	48	19	43	48	56		0.62
	175	104	74	53	21	48	57	61		0.91
HBD02	200		86	57						1.06

□ Keyway Size

d	d Tol.	f	s
10	+0.036 0	11.4	3
12		13.8	4
15	+0.043 0	17.3	5
16		18.3	

□ Hole + Tap/Keyway + Tap

Part Number		d		M ₁	L	L ₁	H	h	h ₁	d ₁	d ₂	M	Reference Weight (kg/pcs)		
Code	D	Apply to HBD06/07	Apply to HBD11/12												
Hole + Tap	80	10	10	5	55	34	35	13	30	28	36	8	0.20		
	HBD06	100	12			12	41	40	15	36	32		39	0.30	
	HBD07	125	12 16			12	52	44	15	38	39		46	0.43	
Keyway + Tap	150	15	20	6	104	64	48	18	43	48	48	10	0.62		
	HBD11	175	16			20	16	74			53		19	56	0.91
	HBD12	200	16			20	16	86			57		21	61	1.06



Please order as shown

□ Without Hole

Part Number	D	L
Code	D	
HBD01	<80	
HBD02	150	

HBD01—D125

□ Hole + Tap

Part Number	D	d
Code	D	d
HBD06	<75	<16 20
HBD07	200	16 20

HBD06—D175—d16



Discount price
Per 1~9 10~
Price 100% Additional quotation

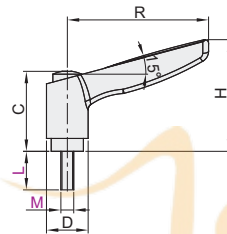


Delivery
6

Straight Rod Shaped ▶

Clamp Levers

Code	Type		Lever		Screw	
			Material	Surface Treatment	Material	Surface Treatment
HAD36	Straight Rod Shaped	Threaded	ZDC	Baked Paint Finish	S45C	Black Oxide
HAD37						
HAD38			SUS304	Buff Polished	SUS304	—



Part Number		L	Lever Color	R	C	D	H	Reference Weight(kg/pcs)		
Code	M							HAD36	HAD37	HAD38
HAD36 HAD37	4	12 16 20 25	E(Black)	44	25.4	13	34.5	0.03	0.03	
	5	12 16 20 25 32						0.03	0.03	
	6	12 16 20 25 32 40						0.04	0.04	
	8	16 20 25 32 40 50	J(Orange)	62.5	32.7	17.5	44.8	0.07	0.07	—
	10	20 25 32 40 50						0.15	0.15	
	12	25 32 40 50						0.22	0.22	
HAD38	4	12 16 20 25	—	44	25.4	13	34.5	—	—	0.035
	5	12 16 20 25 32						—	—	0.035
	6	12 16 20 25 32						—	—	0.045



Part Number		L	Lever Color
Code	M		
HAD36	5	12 16 20 25 32	E J Y
HAD37	6	12 16 20 25 32 40	

HAD36—M5—L20—E



Discount price		
Per	1~9	10~
Price	100%	Additional quotation



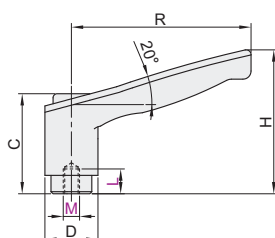
Delivery	
	6

Clamp Levers ◀ Resin Clamp Levers

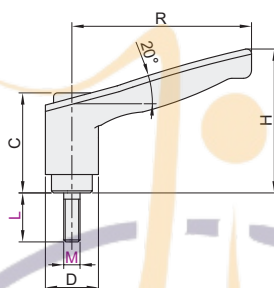
Code	Type	Lever		Screw	
		Material	Surface Treatment	Material	Surface Treatment
HAD41	Resin Clamp Levers	PA6	Matt Black	1215MS	Black Oxide
HAD46				SUS304	—
HAD52					



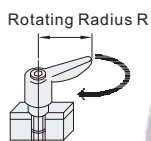
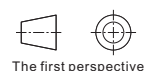
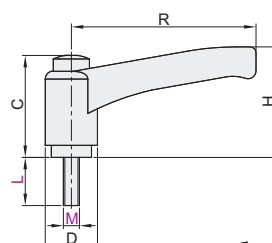
Tapped
HAD41



Threaded
HAD46



Threaded
HAD52



How to Use

1. To unlock the Clamp, disengage the serrations by pulling up on the lever.

2. Turn the unlocked lever to desired position.

3. When the lever is released, the return spring automatically engages serrations and locks again.

Part Number		L		R	C	D	H	Reference Weight(kg/pcs)	
Code	M	HAD41	HAD46					HAD41	HAD46
Tapped HAD41	4		12 16 20 25	45	25.4	13	35.5	0.016	0.018
	5	8	12 16 20 25 32						
	6		12 16 20 25 32 40						
Threaded HAD46	8	10	16 20 25 32 40 50	63	32.7	17.5	46.3	0.030	0.040
	10	14	20 25 32 40 50	78	37.7	21	55.4	0.050	0.080
	12	17	25 32 40 50	92	45.6	25	66	0.070	0.120

Part Number		L		R	C	D	H	Reference Weight(kg/pcs)	
Code	M								
Threaded HAD52	4		12 16 20 25	48	25.4	13	35	0.025	
	5		12 16 20 25 32					0.025	
	6		12 16 20 25 32 40					0.03	
	8		16 20 25 32 40 50	65	32.7	18	44.5	0.05	
	10		20 25 32 40 50	82	37.7	21	54	0.09	
	12		25 32 40 50	92	45.6	25	64	0.13	



Part Number		L	
Code	M		
HAD52	5	12 16 20 25 32	
	6	12 16 20 25 32 40	

HAD52—M5—L20



Discount price			
Per	1~9	10~	
Price	100%	Additional quotation	



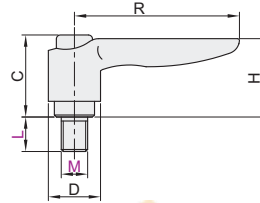
Delivery	
	6

Clamp Levers

- Flat Clamp Levers/Clamp Levers with Washers
- Clamp Levers with Pad /Clamp Levers with SR Tip

Flat Clamp Levers

Code	Type	Lever		Screw	
		Material	Surface Treatment	Material	Surface Treatment
HAD81	Flat Clamp Levers	ZDC	Powder Coating	S45C	Black Oxide
HAD82				SUS303	—

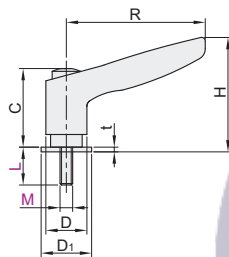


The first perspective

Part Number		L	Lever Color	R	C	D	H	Reference Weight (kg/pcs)
Code	M							
HAD81 HAD82	4	12 16 20 25	E(Black)	45	25.5	13	22.5	0.033
	5	12 16 20 25 32	J(Orange)					0.034
	6	12 16 20 25 32	Y(Silver Gray)					0.040

Clamp Levers with Washers

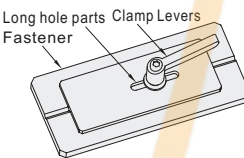
Code	Type	Lever		Screw		Washer	
		Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
HAD86	Clamp Levers with Washers	ZDC	Baked Paint Finish	1215MS	Zinc-plated(Black)	SUS304	—



EX

Example

Suitable for fastening of long holes parts



Precautions for use
Before tightening the handle, as shown in Figure 1, make sure the flat washer located at the neck processing part. As shown in Figure 2, tightening with the flat washer stuck on the thread may cause the flat washer to deform.

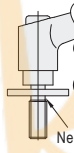


Figure 1

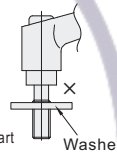
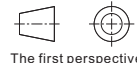


Figure 2



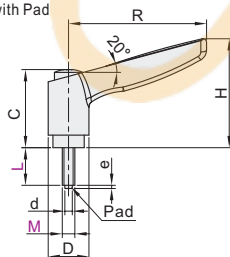
The first perspective

Part Number		L	Lever Color	R	C	D	H	D1	t	Max. Load (N)	Max. Tightening Force (KN)	Reference Weight (kg/pcs)
Code	M											
HAD86	6	12 16 20 25 32	E(Black)	45	25.8	13	40	16	1.5	95	3.6	0.039
	8	16 20 25 32 40		63.5	32.3	17.5	50.5	22	2	171	6.8	0.090
	10	20 25 32 40 50		78.5	37.6	21	60.5	28	2.5	221	10.8	0.182
	12	25 32 40 50		93	45.6	24	74.5	35	3	277	16.1	0.227

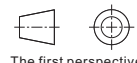
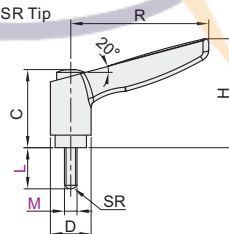
Clamp Levers with Pad /Clamp Levers with SR Tip

Code	Type	Main body		Screw		Stopper
		Material	Surface Treatment	Material	Surface Treatment	Material
HAD91	Clamp Levers with Pad	ZDC	—	SUS303	—	POM(White)
HAD96	Clamp Levers with SR Tip			1215MS	Zinc-plated(Black)	—

Clamp Levers with Pad
HAD91



Clamp Levers with SR Tip
HAD96



The first perspective

Part Number		L	Lever Color	R	C	D	H	d	SR	e	Max. Load (N)	Max. Tightening Force (KN)	Reference Weight (kg/pcs)
Code	M												
HAD91 HAD96	5	12 16 20 25 32	E(Black)	45	25.8	13	35	3	5	1	74	3.3	0.034
	6	12 16 20 25 32	J(Orange)					4	6	1	126	4.7	0.040
	8	16 20 25 32 40	Y(Silver Gray)	63.5	32.3	17.5	45	6	8	2	217	8.6	0.070
	10	20 25 32 40	L(Chrome Plating) T(Satin Nickel) Chrome Plating)					8	10	2	347	13.6	0.152

Clamp Levers with Pad /Clamp Levers with SR Tip

Part Number		L	Lever Color
Code	M		
HAD91	6	12 16 20 25 32	E
HAD96	8	16 20 25 32 40	

HAD91—M6—L20—E



Please order as shown



Discount price	
Per	1~9 10~
Price	100% Additional quotation



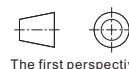
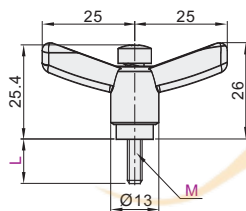
Delivery	
6	

Double Arm Clamp Levers Cam Levers

Wing Shaped Clamp Levers

Double Arm Clamp Levers(Wing Shaped Clamp Levers)

Code	Type	Main Body		Screw	
		Material	Surface Treatment	Material	Surface Treatment
HAJ26	Wing Shaped Clamp Levers	ZDC	Baked Paint	S45C	Black Oxide
HAJ27				SUS304	—



The first perspective

Part Number		L	Lever Color	Reference Weight(kg/pcs)	
Code	M			HAJ26	HAJ27
HAJ26 HAJ27	4	12 16 20 25	E(Black) J(Orange) Y(Silver Gray)	0.03	0.03
	5	12 16 20 25 32			
	6	12 16 20 25 32			



Part Number		L		Lever Color		
Code	M					
HAJ26	4	12	16	20	25	E J Y
	5	12	16	20	25	

HAJ26 — M4 — L12 — E

HAJ26 — M4 — L12 — E



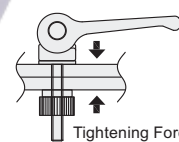
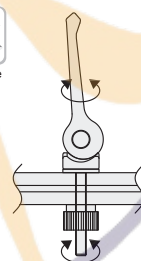
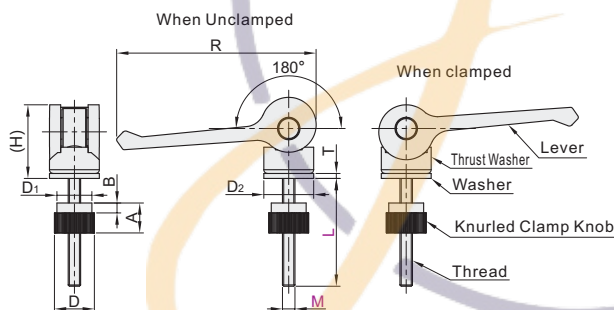
Discount price			
Per	1~9	10~	
Price	100%	Additional quotation	



Delivery	
Per	6

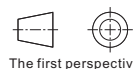
Cam Levers(Quick Levers)

Code	Type		Main Body		Screw		Washer		Thrust washer
			Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material
HAG01	Quick Levers	with Washer	ZDC	Electrostatic Coating	SS400	Nickel Plating	S45C	Nickel Plating	PA(Black)



1. Decide on the direction to which the lever is pushed down and adjust torque with the clamp knob.

2. Push down the lever to clamp.



The first perspective

Part Number		L		Lever Color	D	D ₁	D ₂	H	R	T	A	B	Tightening Force (N)	Lever Load (N)	Reference Weight (kg/pcs)	
Code	M															
HAG01	5	30	40	E(Black)	16	14					12	4	1000	18	0.122	
	6		40		50	19	16	20	29.5	80	2	14	4	2000	36	0.136
	8				50	60	24	20					17	5	3000	78



Part Number		L		Lever Color
Code	M			
HAG01	5	30	40	E (Black)
	6	40	50	

HAG01—M5—L30—E

HAG01 — M5 — L30 — E



Discount price			
Per	1~9	10~	
Price	100%	Additional quotation	

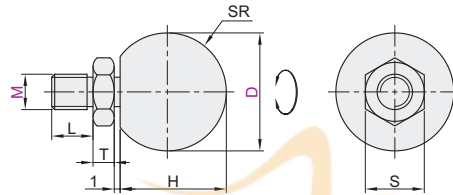


Delivery	
Per	6

Rotating Ball Knobs

Code	Type	Screw		Ball
		Material	Surface Treatment	Material
HAJ91	Rotating Ball Knobs	1215MS	Nickel Plating	PF

 The handle part can be rotated 360 degree according to the axis.



Part Number		D	H	L	S	T	Reference Weight (kg/pcs)
Code	M						
HAJ91	6	20	18				0.012
		25	23	7	10	3.6	0.017
		30	28				0.025
	8	20	18				0.019
		25	23	8	13	5	0.025
		30	28				0.033
	10	30	28	10	17	6	0.049



Part Number		D
Code	M	
HAJ91	10	30

HAJ91—M8—D30



Discount price	
Per	1~9
Price	100%
	10~
	Additional quotation



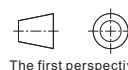
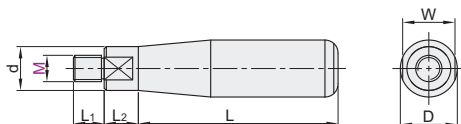
Delivery	
	6

Handles

Handle Stationary Type

Stainless Steel Stationary Handles

Code	Type	Grip		Screw	
		Material	Surface Treatment	Material	Surface Treatment
HAA01	Stainless Steel Stationary Handles	SUS304	Electrolytic Polishing	SUS304	Electrolytic Polishing



The first perspective

Part Number		L	L ₁	L ₂	D	d	W	Reference Weight (kg/pcs)
Code	M							
HAA01	5	39	6	6	10	8	6.5	0.025
	6	50	7	7	13	10	8	0.055
	8	60	8	8	16	13	10	0.100
	10	70	10	10	20	16	12	0.180



Please order as shown

Part Number		L
Code	M	
HAA01	6	50
	8	60

HAA01—M6



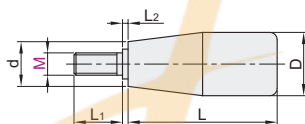
Discount price		
Per	1~9	10~
Price	100%	Additional quotation



Delivery	
	6

Plastic Stationary Handles

Code	Type	Grip		Screw	
		Material	Color	Material	Surface Treatment
HAA11	Plastic Stationary Handles	PF	Black	SUM24L	Zinc-plated
HAA12				SUS303	—



The first perspective

Part Number		L	L ₁	L ₂	h	h ₁	h ₂	D	D ₁	d	d ₁	Reference Weight (kg/pcs)
Code	M											
HAA11 HAA12	6	40	13	1.5	1.8	20	12	17	19	12	6.5	0.016
	8	50	16		4.5	26	16	21	24	17	8.5	0.032
	10	65	20	2		33	20	25		20	10.5	0.061
	12	85	25	2.5	5	40	24	28	28	21	12.5	0.100



Please order as shown

Part Number		L
Code	M	
HAA11	6	40
	8	50

HAA11—M6



Discount price		
Per	1~9	10~
Price	100%	Additional quotation

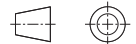
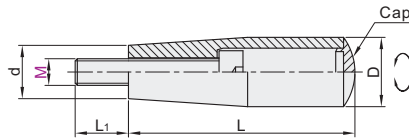


Delivery	
	6

Rotating Handle with Cap

Code	Type	Grip		Screw	
		Material	Color	Material	Surface Treatment

HAB51	Rotating Handle with Cap	PA6	Black	SCM435	Zinc-plated
--------------	--------------------------	-----	-------	--------	-------------



The first perspective

Part Number		L	L ₁	D	d	Reference Weight (kg/pcs)
Code	M					
HAB51	5	55	10	18	13	0.025
	6		13			0.030
	8	85	15	26	20	0.060
	10		20			0.100



Please order as shown

Part Number	
Code	M
HAB51	5
	6

HAB51—M6



Discount price	
Per	1~9
Price	100%

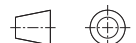
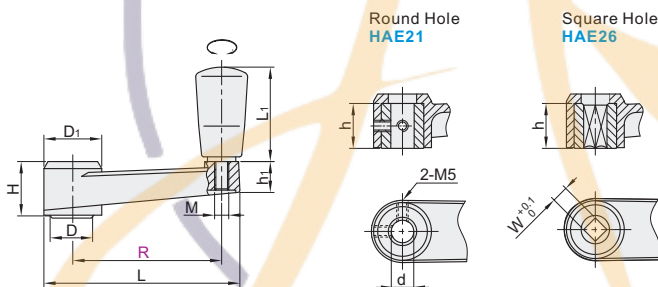


Delivery	
Per	1~9
Price	100%

Crank Handles(Rotation Handle)

Code	Type	Main Body/Grip	Grip Thread Part		Bushes	
			Material	Surface Treatment	Material	Surface treatment

HAE21	Crank Handles	Round Hole	PA+GF30	SS400	Zinc-plated	SS400	Black Oxide
HAE26		Square Hole					



The first perspective

Part Number		L	L ₁	D	D ₁	H	h	h ₁	M	d	W	Reference Weight (kg/pcs)
Code	R											
Round Hole HAE21	64.5	85.5	40	18	24.5	23	19	13	6	8	—	0.075
	80	105	50	22	27.5	26	22	12.5	6	10	—	0.100
	100	128	64.5	27	31	30	27	15.5	8	12	—	0.182
Square Hole HAE26	64.5	85.5	40	18	24.5	23	19	13	6	—	8	0.076
	80	105	50	22	27.5	26	22	12.5	6	—	10	0.102
	100	128	64.5	27	31	30	27	15.5	8	—	12	0.184
	130.5	161.5		30	36.2	35	30	16	—	—	14	0.259
	161	196	88.5	34	40.5	40	34	18	10	—	17	0.369



Please order as shown

Part Number	
Code	R
HAE21	64.5
	80
	100

HAE21—R80



Discount price	
Per	1~9
Price	100%



Delivery	
Per	1~9
Price	100%

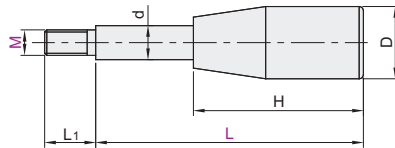
Long Handle/Ball Handle ▶

Rotating Type

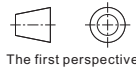
Handles

Long Handle

Code	Type	Grip Material	Screw Material	Screw Surface Treatment
HAC03	Long Handle	PF	1215MS	Chrome Plating



Inventory



Part Number	L	Grip Color	L1	d	D	H	Reference Weight (kg/pcs)
Code	M						
HAC03	6	63	10	8	16	35	0.06
		80					0.09
		100					0.12
	8	80	12	10	18	40	0.08
		100					0.10
		125					0.14
	10	100	14	12	22	50	0.12
		125					0.14
		160					0.17
	12	125	16	16	27	60	0.16
		160					0.19
		200					0.25



Part Number	L	Grip Color
Code	M	
HAC03	6	E
	80	F

HAC03—M6—L63—E





Discount price

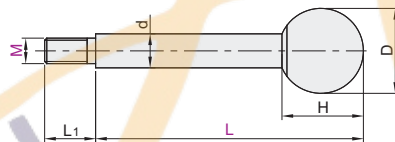
Per	1~9	10~
Price	100%	Additional quotation



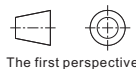
Delivery
6

Ball Handle

Code	Type	Grip Material	Screw Material	Screw Surface Treatment
HAC06	Ball Handle	PF	1215MS	Chrome Plating



Inventory



Part Number	L	Grip Color	L1	d	D	H	Reference Weight (kg/pcs)
Code	M						
HAC06	6	63	10	8	25	25	0.06
		80					0.08
		100					0.11
	8	80	12	10	30	30	0.07
		100					0.09
		125					0.13
	10	100	14	12	35	35	0.11
		125					0.13
		160					0.10
	12	125	16	16	40	40	0.15
		160					0.18
		200					0.23



Part Number	L	Grip Color
Code	M	
HAC06	6	E
	80	F

HAC06—M6—L63—E



Discount price

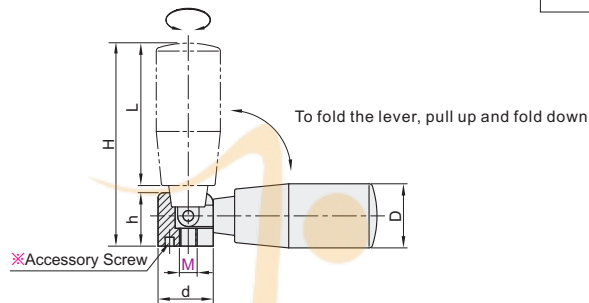
Per	1~9	10~
Price	100%	Additional quotation



Delivery
6

Flat-Foldable Handles

Code	Type	Grip		Base Part	
		Material	Color	Material	Surface Treatment
HAC52	Tapped	PF	Black	Q235	Chrome Plating



The first perspective

Part Number		L	D	d	H	h	Accessory Screw	Reference Weight (kg/pcs)
Code	M							
HAC52	5	40	18	15.5	57	15	M5-L10	0.055
	6	65.3	23	18.5	87	19.5	M6-L10	0.115
	8	80.3	26		102		M8-L14	0.137



Please order as shown

Part Number		L
Code	M	
HAC52	5	40
	6	65.3

HAC52—M5



Discount price

Per	1~9	10~
Price	100%	Additional quotation

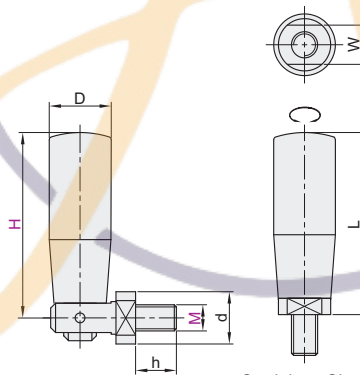


Delivery

6

Flat-Foldable Handles, with Wrench Flats

Code	Type	Grip		Base Part	
		Material	Color	Material	Surface Treatment
HAC64	with Wrench Flats	PA	Black	S45C	Chrome Plating



The first perspective

- ① To fold the lever, pull up and fold down.
② Folding angle is 90°.

Part Number		H	L	D	h	d	W	Reference Weight (kg/pcs)
Code	M							
HAC64	8	55	55.5	19	12.5	16	12	0.042
		81	80					0.080
	10	104	103.5	22	16	18	14	0.155



Please order as shown

Part Number		H
Code	M	
HAC64	8	55
	10	104

HAC64—M8—H81



Discount price

Per	1~9	10~
Price	100%	Additional quotation



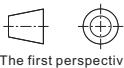
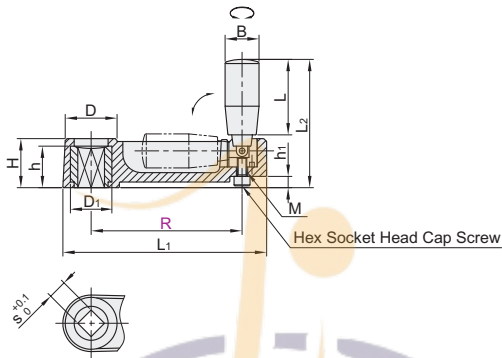
Delivery

6

Square Hole Crank Handles

Foldable

Handles



The first perspective

Part Number		s	M	L	L ₁	L ₂	B	D	D ₁	H	h	h ₁	Reference Weight (kg/pcs)
Code	R												
HAC72	80	10	5	40	108	68	18	27.5	22	26	22	6	0.145
	100	12			130	72		31	27	30	27	10	0.210
	130.5	14	6	65.3	164.5	102.5	23	36.2	30	35	30	9	0.310
	161	17	8	80.3	198.5	122.5	26	40.5	34	40	34	12	0.420



Part Number		s
Code	R	
HAC72	80	10
	100	12

HAC72 — R80



Discount price	
Per	100%
Price	Additional quotation



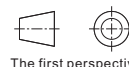
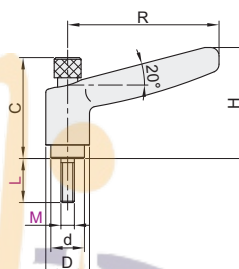
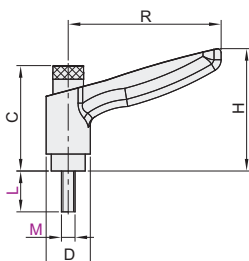
Delivery
6

Code	Type	Lever		Screw	
		Material	Surface Treatment	Material	Surface Treatment
HAD02	Push Button Clamp Levers	ZDC	Baked Paint Finish	S45C	Black Oxide
HAD06				SUS304	
HAD08		SUS304	Buff Polished	SUS303	—



Material:ZDC
HAD02
HAD06

Material:SUS304
HAD08



The first perspective

Material:ZDC

Part Number		L	Lever Color	R	C	D	H	Reference Weight(kg/pcs)	
Code	M							HAD02	HAD06
HAD02 HAD06	4	16 20 25	E(Black)	44	30	13	35	0.04	0.05
	5	12 16 20 25 32	J(Orange)						
	6	12 16 20 25 32	Y(Silver Gray)						
	8	16 20 25 32 40							
				62.5	36	17.5	45	0.08	0.08

Material:SUS304

Part Number		L	R	C	D	d	H	Max. Load (N)	Max. Tightening Force (KN)	Reference Weight (kg/pcs)
Code	M									
HAD08	4	16 20 25	45	30	13	10	35.5	48	1.8	0.040
	5	12 16 20 25 32						65	2.9	0.040
	6	12 16 20 25 32						110	4.1	0.041

Material:ZDC

Part Number		L	Lever Color
Code	M		
HAD02	4	16 20 25	E J Y
	5	12 16 20	

HAD02—M4—L16—E

Material:SUS304

Part Number		L
Code	M	
HAD08	4	16 20 25
	5	12 16 20 25 32
HAD08—M4—L20		



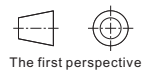
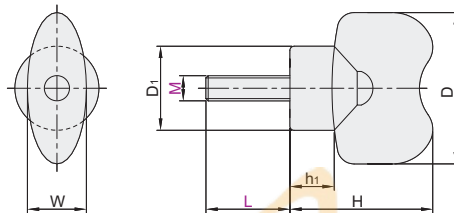
Discount price		
Per	1~9	10~
Price	100%	Additional quotation



Delivery	
	6

Threaded

Code	Type	Knobs	Screw	
		Material	Material	Surface Treatment
HAR51	Threaded	Phenol	SS400	Zinc-plated



Part Number		L	D	D1	H	h1	W	Reference Weight (kg/pcs)
Code	M							
HAR51	3	10	18	10	17	5	7	0.005
	4	10 15						0.010
	5	10 15						0.013



Part Number		
Code	M	L
HAR51	3	10
	4	10 15
HAR51—M4—L10		

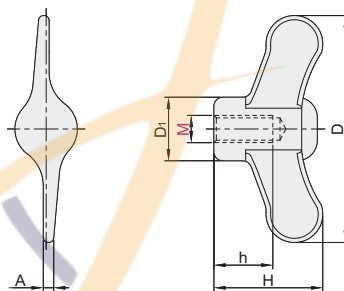


Discount price		
Per	1~9	10~
Price	100%	Additional quotation

Delivery	
	6

Tapped

Code	Type	Material	Surface Treatment
HAR56	Tapped	SUS316	Buff Polished



Part Number		D	D1	H	h	A	Reference Weight (kg/pcs)
Code	M						
HAR56	5	50	14	24	13	2.3	0.030
	6						0.049
	8	75	21	35	16	3.4	0.113
	10						



Part Number		
Code	M	D
HAR56	6	50
	8	75
HAR56—M8		

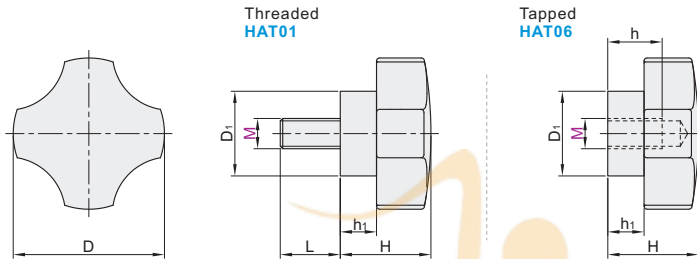


Discount price		
Per	1~9	10~
Price	100%	Additional quotation

Delivery	
	6



Code	Type	Knobs		Screw	
		Material	Material	Surface Treatment	
HAT01	Star Shaped Plastic Knobs	PA6(Gloss)	SS400	Zinc-plated	
HAT06			Gunmetal (Insert)	—	



Threaded

Part Number		Knob Color	L	D	D ₁	H	h ₁	Reference Weight(kg/pcs)
Code	M							
HAT01	5	E(Black) F(Red)	25	25	14	15	6	0.011
	6		30	33	15	16.5	7	0.017
	8		40	40	18	20	8	0.037
	10		40	45	20	20	8	0.060
	12			50	22	24	10	0.080

Tapped

Part Number		Knob Color	D	D ₁	H	h	h ₁	Reference Weight(kg/pcs)
Code	M							
HAT06	5	E(Black) F(Red)	25	14	15	9	6	0.010
	6		33	15	16.5	9.5	7	0.012
	8		40	18	20	12	8	0.018
	10		45	20	20	12	8	0.025
	12		50	22	24	14	10	0.040

Threaded

Part Number		Knob Color
Code	M	
HAT01	6	E
HAT01	8	F

HAT01—M8—E

Tapped

Part Number		Knob Color
Code	M	
HAT06	6	E
HAT06	8	F

HAT06—M8—E

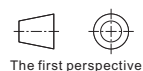
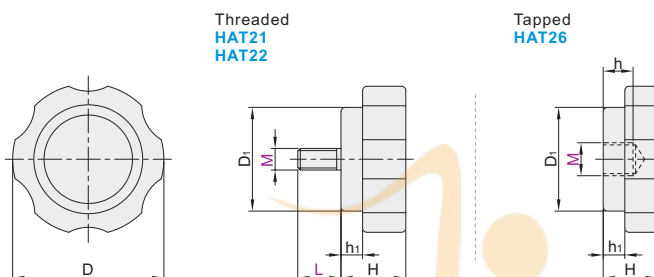


Discount price	
Per	100%
1~9	Additional quotation
10~	





Code	Type	Knobs			Screw	
		Material	Material	Surface Treatment		
HAT21	Six Lobed Plastic Knobs	ABS	SS400	Zinc-plated		
HAT22			SUS304	—		
HAT26			Brass	—		



Thru

Part Number		L		D	D ₁	H	h ₁	Reference Weight (kg/pcs)
Code	M							
HAT21	5	10	15 20 25 30	35	24	15	5	0.01
	6	10	15 20 25 30					0.02
	8	15	20 25 30 40 50	42	26	17	7	0.03
	10		30 40 50	45	30	18	8	0.05
	12		30 40 50	50	33	20	9	0.07
HAT22	6	20	30	35	24	15	5	0.02
	8	20	30 40	42	26	17	7	0.03
	10		30 40	45	30	18	8	0.04
	12		30 40 50	50	33	20	9	0.07

Tapped

Part Number		D	D ₁	H	h	h ₁	Reference Weight (kg/pcs)
Code	M						
HAT26	5						0.01
	6	35	24	15	7	5	0.01
	8	42	26	17	9	7	0.02
	10	45	30	18	10	8	0.02
	12	50	33	20	12	9	0.03

Thru

Part Number		L
Code	M	
HAT21	6	20 30
HAT22	8	20 30

HAT22—M8—L20

Tapped

Part Number		D
Code	M	
HAT26	6	35
HAT26	8	42

HAT26—M8



Discount price	
Per	1~9 10~
Price	100% Additional quotation



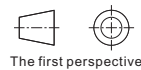
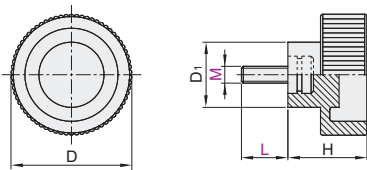
Delivery	
	6

Grooved Knurled Plastic Knob ▶ Knurled Plastic Knob,with Pad ▶

Knobs

Grooved Knurled Plastic Knob

Code	Type	Knobs Material	Bushes Material
HAU81	Grooved Knurled Plastic Knob	PA6	1215MS
HAU82			SUS304



The first perspective

Part Number		L	D	D ₁	H	Reference Weight (kg/pcs)
Code	M					
HAU81 HAU82	4	10	20	12	13	0.01
	5	15				
		20				
	6	15	25	15	19	0.02
		30				
	8	40	30	18	21	0.02
		30				
		25	35	21	28	



Please order as shown

Part Number	L
HAU81	4 5 6 10 15
HAU82	6 15
HAU81—M4—L10	



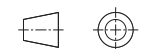
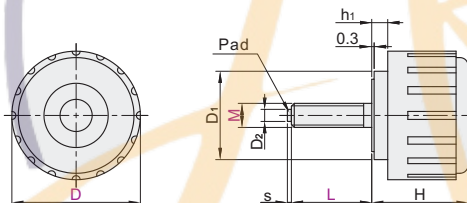
Discount price
Per 1~9 10~
Price 100% Additional quotation



Delivery
6

Knurled Plastic Knob,with Pad

Code	Type	Knobs Material	Screw Material	Pad Material
HAV96	Threaded	ABS	SUS304	POM(White)



The first perspective

Part Number		D	L	Knob Color	D ₁	D ₂	H	h ₁	s	Reference Weight (kg/pcs)
Code	M									
HAV96	3	16	10 15	E(Black)	11	1.5	12	2	0.5	0.04
	4	16	10 15							
	4	16	10 15 20							
	5	20	15 20	E(Black)	15	3	14	4	1	0.07
	5	25	20 25							
	5	20	10 15 20							
	6	25	15 20 25	E(Black)	19	4	18	6	2	0.14
	6	32	20 25							
	8	32	15 25							
	8	32	15 25	E(Black)	24	6	18	6	2	0.20
	8	32	15 25							



Please order as shown

Part Number	D	L	Knob Color
HAV96	5 25 20 25	20 25	E(Black)
HAV96	6 20 10 15 20	10 15 20	E(Black)
HAV96—M6—D20—L10—E			



Discount price
Per 1~9 10~
Price 100% Additional quotation



Delivery
6

Knobs

◀ Twill Knurled Knobs

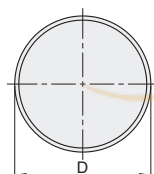
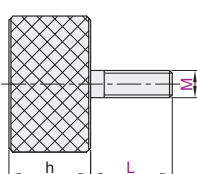
Standard

Code	Type		Material	Surface Treatment
HAX51	Standard	No Stepped	1215MS	Buff Polished+Chrome Plating
HAX52			SUS303	Brushed Finish
HAX61		with Stepped	1215MS	Buff Polished+Chrome Plating
HAX62			SUS303	Brushed Finish

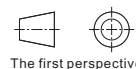
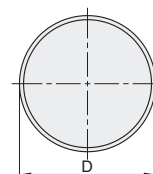
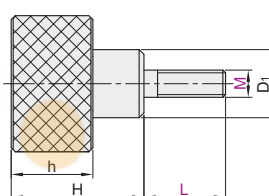


Inventory

No Stepped
HAX51
HAX52



with Stepped
HAX61
HAX62



☑ No Stepped

Part Number		L	D	h	Reference Weight (kg/pcs)
Code	M				
HAX51 HAX52	3	6 10	12	10	0.01
	4	6 10 16	16	11	
	5	10 16 20	20	12	0.02

☑ with Stepped

Part Number		L	D	D ₁	H	h	Reference Weight (kg/pcs)
Code	M						
HAX61 HAX62	3	6 10	12	6	15	10	0.01
	4	6 10 16	16	8	17	11	0.02
	5	10 16 20	20	10	19.5	12	0.03



Please order as shown

Part Number		
Code	M	L
HAX51	3	6 10
HAX52	4	6 10 16

HAX51 - M3 - L10



Discount price

Per	1~9	10~
Price	100%	Additional quotation



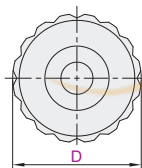
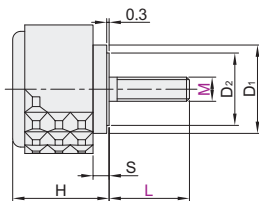
Delivery

6

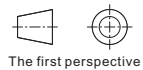
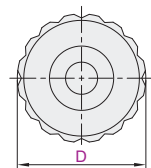
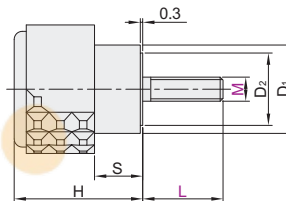


Code	Type			Knobs	Screw	
				Material	Material	Surface Treatment
HAX71	Diamond Cut Knurled Knobs	No Stepped	Threaded	ABS	Q235	Chrome Plating
HAX72		with Stepped			SUS304	—
HAX81					Q235	Chrome Plating
HAX82					SUS304	—

No Stepped
HAX71
HAX72



with Stepped
HAX81
HAX82



The first perspective

No Stepped

Part Number		D	L	H	D ₁	D ₂	S	Reference Weight (kg/pcs)
Code	M							
HAX71 HAX72	3		10 15					
	4	16	10 15	12	11	9	2	0.01
			10 15 20					
	5	20	15 20	14	15		4	
		25	20 25	18	19		6	0.02
		20	10 15 20	14	15	10	4	
	6	25	15 20 25		19			
		32	20 25	18			6	0.03
	8	32	15 25		24	12		

with Stepped

Part Number		D	L	H	D ₁	D ₂	S	Reference Weight (kg/pcs)
Code	M							
HAX81 HAX82	3		10 15					
	4	16	10 15	16	11	9	6	0.01
			10 15 20					
	5	20	15 20	22	15		12	
		25	20 25	27	19		15	0.02
		20	10 15 20	22	15	10	12	
	6	25	15 20 25		19			
		32	20 25	27			15	0.03
	8	32	15 25		24	12		



Part Number		D	L
Code	M		
HAX81	20	15	20
HAX82	25	20	25

HAX81 — M5 — D20 — L20



Discount price	
Per	Price
1~9	100%
10~	Additional quotation



Delivery	
6	

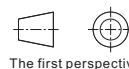
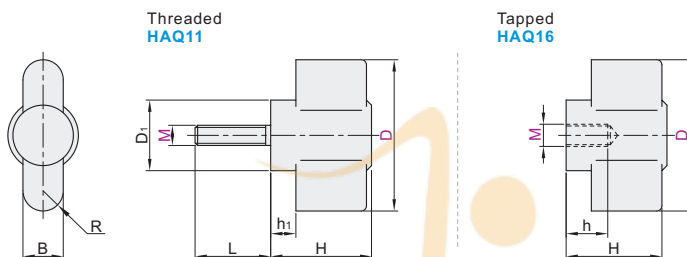
Knobs

Wing Shaped Plastic Knobs

Code	Type	Knobs		Screw	
		Threaded	Anti Aging	Material	Surface Treatment
HAQ11	Wing Shaped Plastic Knobs	Threaded	Anti Aging	ABS Resin	1215MS
HAQ16		Tapped		(Matt Black)	Zinc-plated
				Brass	—



Inventory



Part Number		D	L	B	D ₁	H	h	h ₁	R	Reference Weight(kg/pcs)	
Code	M									HAQ11	HAQ16
Threaded HAQ11	4	30	15	8	14	20	10	5	4	0.010	0.006
	5	30		9	16					0.012	
	6	40		10	19					0.015	
Tapped HAQ16	8	50	25	11	22	28	19	8	5	0.030	0.013
	8	65								0.035	



Please order as shown

Part Number		D
Code	M	
HAQ11	4	30
HAQ16	6	40

HAQ11 — M5 — D30



Discount price	
Per	1~9
Price	100%



Delivery	
Per	1~9
Price	100%