

Solid Disk Handwheels / Adjusting Collars

Spoked Handwheels - Retractable Handle / No Handle

Solid Disk Handwheels RoHS 10

Shaft Bore Config.	Type		Hub		Handwheel	Handle Mounting Hole	Handle	Handle Thread	
	Stationary Handles	Folding Handle	Material	Surface Treatment	Material	Material	Material	Surface Treatment	
No Hole	PHSN	PHSFN	FC200	Black Oxide	Phenol	Brass	Phenol	SUM21	Trivalent Chromate
	AHSN	AHSFN	Aluminum Alloy	-	Aluminum Alloy	Aluminum Alloy			
H9 Hole + Tap	PHSM	PHSFM	FC200	Black Oxide	Phenol	Brass	Phenol	SUM21	Trivalent Chromate
	AHSM	AHSFM	Aluminum Alloy	-	Aluminum Alloy	Aluminum Alloy			
H9 Hole + Keyway + Tap	PHSK	PHSKF	FC200	Black Oxide	Phenol	Brass	Phenol	SUM21	Trivalent Chromate
	AHSK	AHSKF	Aluminum Alloy	-	Aluminum Alloy	Aluminum Alloy			

\odot d is a through hole.

Stationary Handles are GRW on P.1151.
 Folding Handles are GRMBM on P.1151. \odot Both Stationary Handles and Folding Handles make rotation.

Part Number	PHSM, PHSFM		PHSK, PHSKF		H	A	F	D1	D2	h	L	d1	h1	M (Coarse)	P	Reference Mass (g)				
	Type	D	d Selection	M1 (Coarse)												d	b	t	PHS	AHS
(Phenol)	PHSN	PHSFN	5	10	3	1.4	35	13	15	28	36	14	30	24	9	34	181	201	200	220
	AHSN	AHSFN		12	4	1.8	40	15	17	32	39		36		8	41	277	324	296	343
(Aluminum)	PHSM	PHSFM		15	5	2.3	44	19	19	39	46		38		10	52	405	468	428	491
	AHSM	AHSFM		16	5	2.3	48	18	21	39	48		43		11	64	570	729	618	777
	AHSK	AHSKF		175	6	2.3	53	19	24	48	56		31		10	74	859	-	907	-
	AHSK	AHSKF		200	6	2.3	57	21	27	48	61		43		10	86	1017	-	1062	-

\odot D175 and D200 are not available for Aluminum Type.

Ordering Example: Part Number - d
 PHSN80 - 12

D	Unit Price											
	PHSN	PHSFN	PHSM	PHSFM	PHSK	PHSKF	AHSN	AHSFN	AHSM	AHSFM	AHSK	AHSKF
80												
100												
125												
150												
175												
200												

New JIS (B1301) Keyway Dimensions

dH9	W	bJS9	t ^{0.1}	
10	+0.036	11.4	3 ±0.0125	1.4
12	+0.043	13.8	4 ±0.0150	1.8
15	+0.043	17.3	5 ±0.0150	2.3
16	+0.043	18.3	5 ±0.0150	2.3

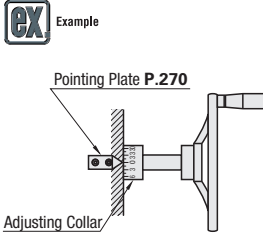
Adjusting Collars RoHS 10

Type	Material	Surface Treatment
Right-hand / Left-hand	A5056	Black Anodize

The scale engraving angle can be selected from either 10° or 15°. \odot Angle selection 10° is shown in the diagram.

Part Number	D	Angle Selection	d	M	Mass (g)	Unit Price
SCOL (Left)	22	10 15	8	M4	20	
SCOR (Right)	27		12	M4	25	
	35		15	M5	40	
	45		16	M5	72	

Ordering Example: Part Number - Angle
 SCOR35 - 10



Spoked Handwheels - Retractable Handle RoHS 10

Type	Handwheel	Hub	Handle	Handle Thread	Included Screw				
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment			
PHSLN	Phenol	-	SS400	Black Oxide	Phenol	SS400	Trivalent Chromate	Structural Alloy Steel	Trivalent Chromate
AHSLN	FCD500	Chrome Plating	FCD500	Chrome Plating	Phenol	SS400	Trivalent Chromate	Structural Alloy Steel	Trivalent Chromate

Hex Socket Head Cap Screw
 \odot Handles are GRMLM on P.1152.

Part Number	Type	D	H	A	d	L		h	M (Coarse)	P		B	G	Mass (g)		Unit Price	
						PHSLN	AHSLN			PHSLN	AHSLN			PHSLN	AHSLN	PHSLN	AHSLN
PHSLN (Phenol Resin)		80	34.2	20	20.5	16.5	16.5	10	5	30	29	18	42	161	410		
		100	37.5	20	25.2	18.5	18.5	12.2	5	39	38	18	42	214	640		
		125	48	25.5	32	26	26	15.7	6	50.5	48.5	23	67.5	473	1250		
AHSLN (FCD500)		140	50.5	25.5	36	29	28.5	17.5	6	54	54	23	67.5	524	1670		
		160	56.9	28.5	40.5	33	33	19.9	8	62.7	62.7	26	82.5	757	2500		

Spoked Handwheels - No Handle RoHS 10

Type	Handwheel	
	Material	Surface Treatment
AHNF	FC200	Chrome Plating

\odot Handles are sold separately.

Part Number	D	H	A	d	M	P	Reference Mass (g)	Unit Price	Applicable Handle
AHNF	80	24	14	25	5	26.5	386		GRMK13
	100	25	15	30	5	37	618		
	125	29	16	35	6	48	985		GRMK16
	140	30	17	35	6	55	1287		
	160	33	18	38	8	62.5	1735		GRMK20
	180	35	20	38	8	71.5	2313		
	200	37	22	40	10	78.5	3511		GRMK25

Ordering Example: Part Number
 PHSLN80
 AHSLN100
 AHNF140

Alterations: Part Number - (HC, KC, SC)
 PHSLN125 - SC10
 AHSLN160 - KC20
 AHNF140 - HC10

\odot No alterations are available to handles with D=180 or 200 in AHNF.
 \odot No KC alteration is available to the handle with D=80 in PHSLN.

Alterations	H8 Hole + Tapped Hole Machining		H8 Hole + Keyway + Tapped Hole Machining		Square Bore Machining								
	HC	KC	HC	KC	SC								
Spec.	Adds an H8 hole at hub center, and two tapped setscrew holes. HC=1mm Increment (Ordering Code) HC16		Adds an H8 hole at hub center, a key groove and its tapped hole. KC=1mm Increment (Ordering Code) KC15		Adds a square bore at hub center. SC=1mm Increment (Ordering Code) SC12								
	D	HC(H8)	h	HC(H8)	M (Coarse)	h	KC(H8)	M (Coarse)	h	b	Dimension	Tolerance	t
	80	6-10	6	6-9	4	8-10	5	7	8-10	3	±0.0125	1.4	
	100	6-13	7	10-16	5	10-12	5	7	11-12	4	±0.015	1.8	
	125	6-14	7	17-19	6	14-17	5	8	13-17	5	±0.015	2.3	
	140	6-22	8	20-23	8	16-20	6	8	18-20	6	±0.015	2.8	
	160	6-23	8										

\odot No satin nickel chrome plating alteration is available to PHSLN80.