

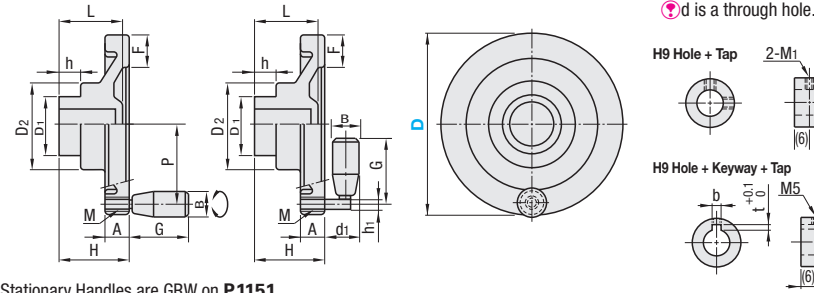
Solid Disk Handwheels / Adjusting Collars

Spoked Handwheels - Retractable Handle / No Handle

■ Solid Disk Handwheels



Shaft Bore Config.	Type		Hub		Handwheel	Handle Mounting Hole	Handle	Handle Thread	
	Stationary Handles	Folding Handle	M Material	S Surface Treatment	M Material	M Material	M Material	M Material	S Surface Treatment
No Hole	PHSN	PHSFN	EN-JL 1030 Equiv.	Black Oxide	Phenol	Brass	Phenol	EN 1.0711 Equiv.	Trivalent Chromate
	AHSN	AHSFN	EN-AC-51300 Equiv.	-	EN-AC-51300 Equiv.	EN AC-51300 Equiv.			
H9 Hole +	PHSM	PHSFM	EN-JL 1030 Equiv.	Black Oxide	Phenol	Brass			
Tap	AHSM	AHSFM	EN-AC-51300 Equiv.	-	EN-AC-51300 Equiv.	EN AC-51300 Equiv.			
H9 Hole +	PHSK	PHSFK	EN-JL 1030 Equiv.	Black Oxide	Phenol	Brass	Phenol	EN 1.0711 Equiv.	Trivalent Chromate
Keyway + Tap	AHSK	AHSFK	EN-AC-51300 Equiv.	-	EN-AC-51300 Equiv.	EN AC-51300 Equiv.			

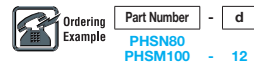


❗ Folding Handles are GRMBM on **P.1151**.

💡 Both Stationary Handles and Folding Handles make rotation.

Part Number		PHSM, PHSM AHSM, AHSFM		PHSK, PHSK AHSK, AHSFK			H	A	F	D1	D2	h	L	d1	h1	M (Coarse)	P	B		G		Reference Mass (g)				
Type	D	d Selection	M1 (Coarse)	d	b	t												PHS AHS	PHSF AHSF	PHS AHS	PHSF AHSF	PHS	AHS	PHSF	AHSF	
(Phenol)	PHSM PHSM PHSK PHSK	80	10	5	10	3	1.4	35	13	15	28	36	14	30	24	9	8	34	20	20	40	55	181	201	200	220
(Aluminum)		100	12		12	4	1.8	40	15	17	32	39	15	36	30	9		41			52	277	324	296	343	
AHSN		125	12, 16		44	19	39	46	38	30	9	52	55	81	405	468		428			491					
AHSN		150	15, 20		48	18	21	48	15	31	11	64	67	104	570	729		618			777					
AHSN	AHSFM AHSFM AHSK	*175	16, 20	6	15	5	2.3	53	19	24	56	48	43	31	11	10	74	23	23	67	104	859	-	907	-	
AHSK		*200	16, 20		16	57	21	27	61	43	86	23	75	1017	-	1062	-									

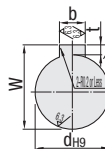
⊗ * D175 and D200 are not available for Aluminum Type.



D	Unit Price											
	PHSN	PHSFN	PHSM	PHSFM	PHSK	PHSFK	AHSN	AHSFN	AHSM	AHSFM	AHSK	AHSFK
80												
100												
125												
150												
175	-						-	-	-	-	-	-
200							-	-	-	-	-	-

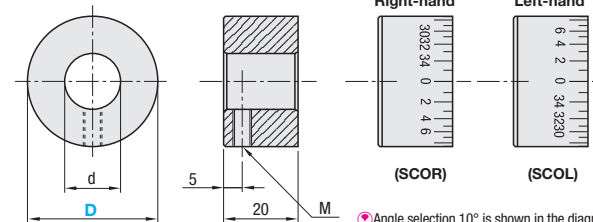
New JIS (B1301) Keyway Dimensions

dH9		W	bJS9		$t_0^{+1.0}$
10	$+0.036_0$	11.4	3	± 0.0125	1.4
12	$+0.043_0$	13.8	4	± 0.0150	1.8
15		17.3	5		2.3
16		18.3			



■ Adjusting Collars **RoHS10**

Type		Material	Surface Treatment
Right-hand	Left-hand		
SCOR	SCOL	EN AW-5056 Equiv.	Black Anodize



! Angle selection 10° is shown in the diagram.

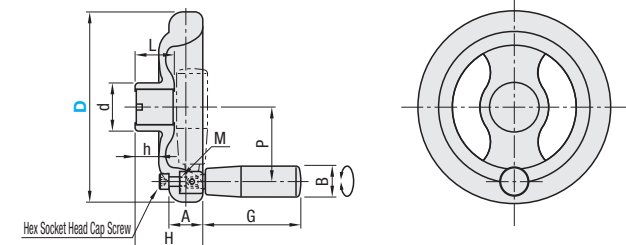
Part Number		Angle Selection	d	M	Mass (g)	Unit Price
Type	D					
SCOL (Left) SCOR (Right)	22	10 15	8	M4	20	
	27		12	M4	25	
	35		15	M5	40	
	45		16	M5	72	



■ **Spoked Handwheels - Retractable Handle**



Type	Handwheel		Hub		Handle	Handle Thread		Included Screw	
	M Material	S Surface Treatment	M Material	S Surface Treatment		M Material	S Surface Treatment	M Material	S Surface Treatment
PHSLN	Phenol	-	EN 1.0038 Equiv.	Black Oxide	Phenol	EN 1.0038 Equiv.	Trivalent Chromate	Structural Alloy Steel	Trivalent Chromate
AHSLN	EN-JS 1050 Equiv.	Chrome Plating	EN-JS 1050 Equiv.	Chrome Plating					

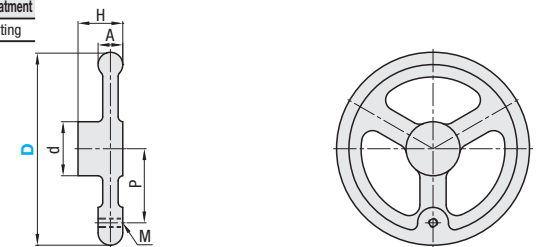


⚠ Handles are GRMLM on **P.1152**.

Part Number		H	A	d	L		h	M (Coarse)	P		B	G	Mass (g)		Unit Price	
Type	D				PHSLN	AHSLN			PHSLN	AHSLN			PHSLN	AHSLN		
PHSLN (Phenol Resin) AHSLN (EN-JS 1050 Equiv.)	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		
	140	50.5	25.5	36	29	28.5	17.5	6	54		23	67.5	524	1670		
	160	56.9	28.5	40.5	33	33	19.9	8	62.7		26	82.5	757	2500		

■ Spoked Handwheels - No Handle

Type	Handwheel	
	M Material	S Surface Treatment
AHNF	EN-JL 1030 Equiv.	Chrome Plating



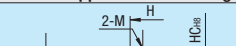
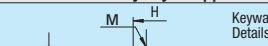
⚠ Handles are sold separately.

Part Number Type		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		37	618			
	125	29	16	35	6	48	985		GRMK16	
	140	30	17			55	1287			
	160	33	18	38	8	62.5	1735		GRMK20	
	180	35	20			71.5	2313			
	200	37	22	40	10	78.5	3511		GRMK25	



⚠ No alternations are available to handles with D=180 or 200 in AHNF.

⚠ No KC alternation is available to the handle with $D=80$ in PHSLN.

No alteration is available to alternate with Ø-0.01in-HV.																
Alterations	H8 Hole + Tapped Hole Machining					H8 Hole + Keyway + Tapped Hole Machining					Square Bore Machining					
																
Code	HC					KC					SC					
Spec.	Adds an H8 hole at hub center, and two tapped setscrew holes. HC=1mm Increment															
	Ordering Code															
	HC16															
	D	HC(H8)	M	hC(H8)	M (Coarse)	D	KC(H8)	M	h	KC(H8)	b	t	D	SC	SC Tolerance	
	80	6~10	6	6~9	4	80	10	5	6	8~10	3	±0.0125	1.4	80	10~14	+0 ^{-0.1}
	100	6~13	7	10~16	5	100	10	5	7	8~10	3	±0.0125	1.4	100	10	+0 ^{-0.1}
	125	6~14	7	17~19	6	125	10~12	5	7	11, 12	4	±0.015	1.8	125	10	+0 ^{-0.1}
140	6~22	8	20~23	8	140	10~17	5	8	13~17	5	±0.015	2.3	140	10~12	+0 ^{-0.1}	
160	6~23	8			160	10~20	6	8	18~20	6	±0.015	2.8	160	10~14		
No satin nickel chrome plating alteration is available to PH5UN0R.																

⚠ No satin nickel chrome plating alternation is available to PHSLN80.