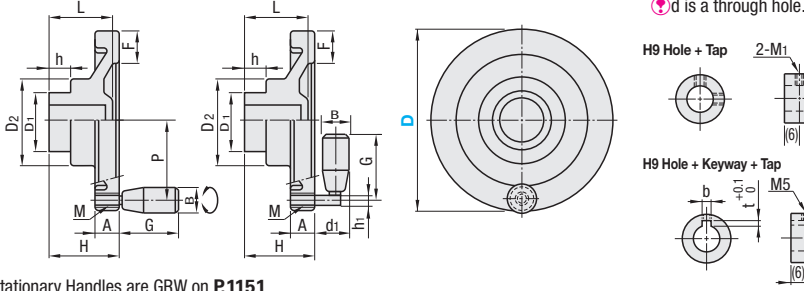
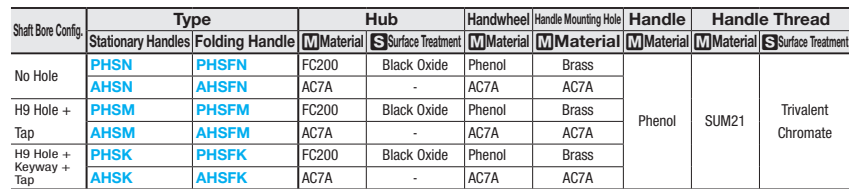


Spoked Handwheels - Retractable Handle / No Handle

RoHS10

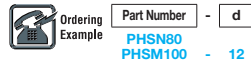


⚠ Folding Handles are GRMBM on **P.1151**.

💡 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	Mr (Coarse)	d	b	t													PHS AHS	PHSF AHSF	PHS AHS	PHSF AHSF	PHS	AHS	PHSF	AHSF
(Phenol)	PHSFM PHSM PHSK PHSFK	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
PHSM		100	12		12	4	1.8	40	15	17	32	39	36	30	9	41		277					324	296	343	
PHSK		125	12, 16					44	19	39	46	38				52		55					81	405	468	428
(Aluminum)		AHSFM AHSN AHSK	150	15, 20	15	5	2.3	48	18	21	48	15	31	11	10	64	23	23	67	104	570	729	618	777		
AHSN	*175	16, 20	16	53	19			24	56	43	74					86					23	859	-	907	-	
AHSK	*200	16, 20		57	21			27	61															1017	-	1062

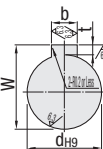
⊗* D175 and D200 are not available for Aluminum Type.



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

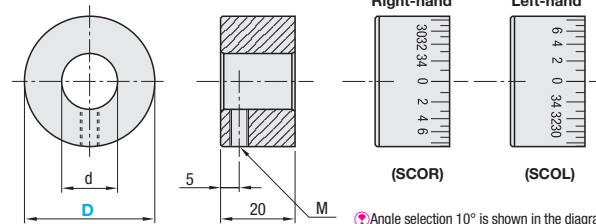
dH9		W	bJS9		$t_0^{+1.0}$
10	$+0.036_0$	11.4	3	± 0.0125	1.4
12	$+0.043_0$	13.8	4	± 0.0150	1.8
15		17.3	5		2.3
16		18.3			



RoHS10



Type		Material	Surface Treatment
Right-hand	Left-hand		
SCOR	SCOL	A5056	Black Anodize



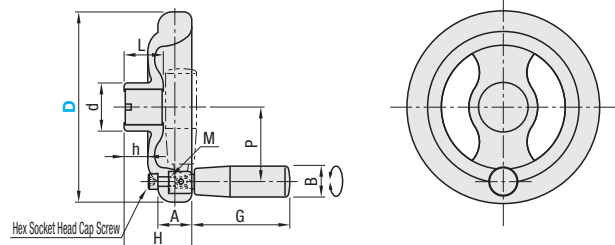
Angle selection 10° is shown in the diagram.

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	



RoHS1

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

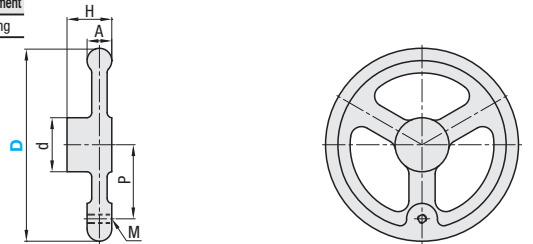


💡 Handles are GRMLM on **P.1152**.

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 (FCD500)	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		

RoHS1

Type	Handwheel	
	M Material	S Surface Treatment
AHNF	FC200	Chrome Plating



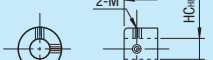
💡 Handles are sold separately.

Part Number		D	H	A	d	M	P	Reference Mass (g)	Unit Price	Applicable Handle
Type										
AHNF	80	24	14	25	5	26.5	386			GRMK13
	100	25	15	30		37	618			
	125	29	16	35	48	985			GRMK16	
	140	30	17		55	1287				
	160	33	18	38	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.

Alterations	H8 Hole + Tapped Hole Machining 	H8 Hole + Keyway + Tapped Hole Machining 	Square Bore Machining 																																																																																																
	HC	KC	SC																																																																																																
Code																																																																																																			
Spec.	Adds an H8 hole at hub center, and two tapped setscrew holes. HC=1mm Increment Ordering Code: HC16 <table><tr><th>D</th><th>HC(H8)</th><th>h</th><th>HC(H8)</th><th>M (Coarse)</th></tr><tr><td>80</td><td>6-10</td><td>6</td><td>6-9</td><td>4</td></tr><tr><td>100</td><td>6-13</td><td>7</td><td>10-16</td><td>5</td></tr><tr><td>125</td><td>6-14</td><td>7</td><td>17-19</td><td>6</td></tr><tr><td>140</td><td>6-22</td><td>8</td><td>20-23</td><td>8</td></tr><tr><td>160</td><td>6-23</td><td>8</td><td></td><td></td></tr></table>	D	HC(H8)	h	HC(H8)	M (Coarse)	80	6-10	6	6-9	4	100	6-13	7	10-16	5	125	6-14	7	17-19	6	140	6-22	8	20-23	8	160	6-23	8			Adds an H8 hole at hub center, a key groove and its tapped hole. KC=1mm Increment Ordering Code: KC15 <table><tr><th>D</th><th>KC(H8)</th><th>M</th><th>h</th><th>KC(H8)</th><th>b</th><th>t</th></tr><tr><td>80</td><td>10</td><td>5</td><td>6</td><td>8-10</td><td>3</td><td>±0.0125 1.4</td></tr><tr><td>100</td><td>10</td><td>5</td><td>7</td><td>11, 12</td><td>4</td><td>±0.015 1.8</td></tr><tr><td>125</td><td>10-12</td><td>5</td><td>7</td><td>13-17</td><td>5</td><td>±0.015 2.3</td></tr><tr><td>140</td><td>10-17</td><td>5</td><td>8</td><td>18-20</td><td>6</td><td>±0.015 2.8</td></tr><tr><td>160</td><td>10-20</td><td>6</td><td>8</td><td></td><td></td><td></td></tr></table>	D	KC(H8)	M	h	KC(H8)	b	t	80	10	5	6	8-10	3	±0.0125 1.4	100	10	5	7	11, 12	4	±0.015 1.8	125	10-12	5	7	13-17	5	±0.015 2.3	140	10-17	5	8	18-20	6	±0.015 2.8	160	10-20	6	8				Adds a square bore at hub center. SC=1mm Increment Ordering Code: SC12 <table><tr><th>D</th><th>SC</th><th>SC</th><th>Tolerance</th></tr><tr><td>80</td><td>10</td><td>10-14</td><td>+0.1 0</td></tr><tr><td>100</td><td>10</td><td>15-16</td><td>+0.3 0</td></tr><tr><td>125</td><td>10</td><td></td><td></td></tr><tr><td>140</td><td>10-12</td><td></td><td></td></tr><tr><td>160</td><td>10-14</td><td></td><td></td></tr></table>	D	SC	SC	Tolerance	80	10	10-14	+0.1 0	100	10	15-16	+0.3 0	125	10			140	10-12			160	10-14		
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