

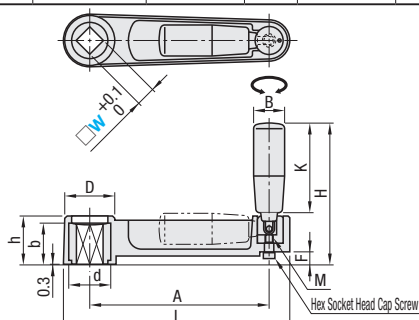
Retractable Revolving Crank Handles with Square Bore / Revolving Crank Handles with Square/Round Bore / Revolving Crank Handles

Spoked Handwheels

Retractable Revolving Crank Handles with Square Bore



Type	Body		Hub		Handle		Handle Thread		Included Screw	
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
SSCH	Reinforced Nylon (Glass Fibers Contained)	SS400	Black Oxide	Phenol Resin	SS400	Trivalent Chromate	Structural Alloy Steel	Trivalent Chromate		

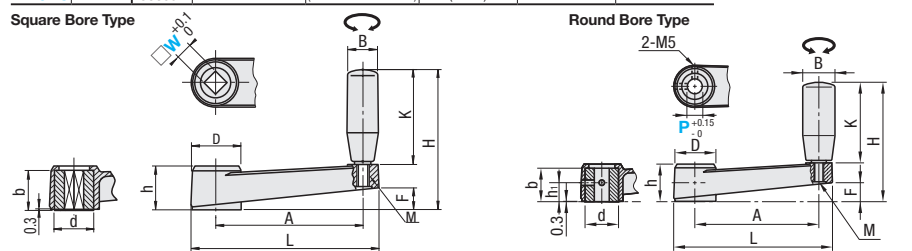


Part Number Type	W	L	A	H	h	D	K	F	M	B	d	b	Reference Mass (g)	Unit Price
10	108	80	68	26	27.5	40	6	5	18	22	22	145		
12	130	100	72	30	31	40	10	5	18	27	27	210		
14	164.5	130.5	102.5	35	36.2	65.3	9	6	23	30	30	310		
17	198.5	161	122.5	40	40.5	80.3	12	8	26	34	34	420		

Revolving Crank Handles with Square / Round Bore



Type	Hub		Main Body, Handle		Screw		Handle Thread	
	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment
MBCH	SS400	Black Oxide	Reinforced Nylon	Black Oxide	Brass	Black Oxide	SS400	Trivalent Chromate
MBCR	SS400	Black Oxide	Reinforced Nylon	Black Oxide	Brass (Insert)	Black Oxide	SS400	Trivalent Chromate
MBCHS	SUS304	-	Reinforced Nylon	Black Oxide	Brass (Insert)	Black Oxide	SS400	Trivalent Chromate

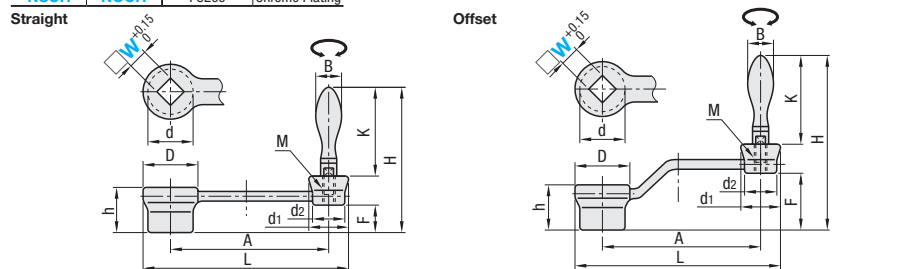


Part Number Type	W	P	L	A	H	h	D	K	F	M	B	d	b	h1	Reference Mass (g)	Unit Price		
																MBCH	MBCRS	MBCR
8	8	85.5	64.5	63	23	24.5	40	10	6	22	18	19	10	76				
10	10	105	80	76	26	27.5	50	13.5			22	22	11.5	102				
12	12	128	100	94.5	30	31	64.5	14.5			27	27	14.5	184				
14	-	161.5	130.5	114.5	35	36.2	79.5	19	8	26	30	30	-	259				
17	-	196	161	128.5	40	40.5	88.5	22	10		34	34	-	369				

Revolving Crank Handles



Type	Type		Material	Surface Treatment
	Straight Type	Offset Type	FC200	Chrome Plating
NSCH	NSCH	NOCH	FC200	Chrome Plating



Part Number Type	W	L	A	H		h	D	d	d1	d2	K	F		M	B	Reference Mass (g)	Unit Price	
				NSCH	NOCH							NSCH	NOCH				NSCH	NOCH
8	86	63.5	75	94	22	27	22	18	14	49	13	32	5	13	105			
10	105	79	85	103	24	30	25	22	17	55	15	33	6	16	150			
12	128	98	105.7	126.7	28	34	28	26	20	70.7	17	38	8	20	230			
14	162	128	123.3	147.3	30	40	33	28	22	87.3	17	41			360			
17	198	159.5	128.3	157.3	34	45	37	32	25		87.3	21	50	10	510			
19															500			
22	212	170	129.3	160.3	36	50	40	34	27			22	53	10	680			

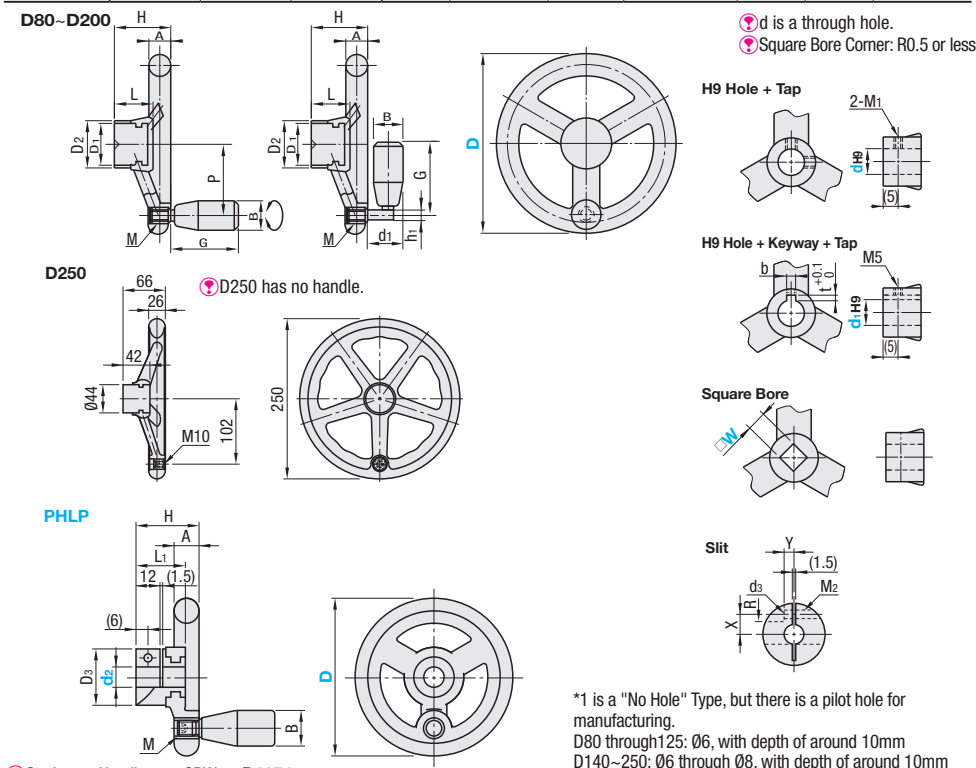
Ordering Example: Part Number SSCH10, MBCH10, NSCH8

Spoked Handwheels



RoHS 10

I.D. Shaft Bore Shape	Type			Hub		Handwheel	Handle Mounting Hole Insert	Handle		Handle Thread	
	Stationary Handles	Folding Handles	Without Handle	Material	Surface Treatment	Material	Material	Material	Material	Surface Treatment	
*1 No Hole	PHLN	PHLFN	-	FC200	Black Oxide	Phenol	Phenol	Brass			
H9 Hole + Tap	PHLM	PHLFM	-	SUS303	-	Phenol	SUM22L	Trivalent Chromate			
H9 Hole + Keyway + Tap	PHLK	PHLFK	-	FC200	Black Oxide	Phenol	Brass		Phenol	SUM21	Trivalent Chromate
Square Bore	PHLW	PHLFW	-	FC200	Black Oxide						
Slit	PHLP	-	-	S45C	Black Chromate	Polypropylene					



*1 is a "No Hole" Type, but there is a pilot hole for manufacturing. D80 through 125: Ø6, with depth of around 10mm. D140~250: Ø6 through Ø8, with depth of around 10mm.

Part Number Type	D	d Selection	M (Coarse)	d1	b	t	W Selection	d2	H	A	D1	D2	D3	L	L1	L2	d1	h1	X	Y	R (Dia.)	d3	m3 (Coarse)	m2 (Coarse)	P (Prep. Eng. Torque)	B				G				Mass (g)	
																										PHL	PHLF	PHLW	PHLFW	PHL	PHLF	PHLW	PHLFW	PHL	PHLF
No Hole	H9 Hole + Keyway + Tap	80	*10, *12, 14	5	10	3	1.4	10	10	32	13	20	28	27.5	25	25	24	9	9	7	8.5	4.5	4	26	3	20	20	40	55	135	177				
	PHLN	100	*10, *12, *15	5	12	4	1.8	12	12	36	13	25	35	28	28	30	30	10	9	10	5.5	8	37	5	20	20	40	55	200	242					
	PHLFN	125	*12, *16, 18	6	14	4	2.3	14	14	40	17	40	34.5	30	30	30	30	10	9	10	5.5	8	50	5	20	20	40	55	330	410					
H9 Hole + Tap	Square Bore	140	*15, 18, *20	6	15	5	2.3	15	15	41	18	30	44	-	31	-	31	11	-	-	-	10	65	-	23	23	67	104	410	565					
	PHLM	160	16, 18, 20	6	16	5	2.3	16	16	48	20	45	-	37	-	31	11	-	-	-	-	10	55	-	23	23	67	104	485	640					
	PHLFM	180	16, 18, 20	6	16	5	2.3	16	16	50	23	50	-	37	-	31	11	-	-	-	-	10	73	-	23	23	67	104	640	795					
	PHLSM	200	16, 18, 20	6	16	5	2.3	16	16	54	23	35	50	-	42	-	31	11	-	-	-	10	80	-	23	23	67	104	780	935					
No Hole, Without Handle	PHLN-R	250	-	-	-	-	-	-	-	66	26	-	44	-	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	980	-				

*Only * marked d dimensions are available for Stainless Steel Type.
*Only D80, 100 and 125 are Slit Type.

Ordering Example: Part Number - d
PHLN80 - 12
PHLM100 - 12
PHLP125 - 12

D	Unit Price				
	No Shaft Bore	H9 Hole + Tap	H9 Hole + Keyway + Tap	Square Bore	Slit
80	-	-	-	-	-
100	-	-	-	-	-
125	-	-	-	-	-
140	-	-	-	-	-
160	-	-	-	-	-
180	-	-	-	-	-
200	-	-	-	-	-
250	-	-	-	-	-

New JIS (B1301) Keyway Dimensions				
dH9	W	bJS9	t ^{±0.1}	
10	+0.036 0	11.4	3	±0.0125
12		13.8	4	
15	+0.043 0	17.3	5	±0.0150
16		18.3	5	

