

Offset Levers / Ball Knobs

Stationary Handles / Stainless Steel Handles - Stationary/Revolving / Ergonomic Handles - Stationary/Revolving / Revolving Handles with Caps

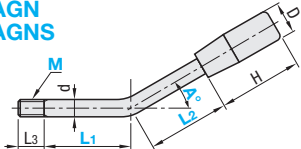
Offset Levers



Type	Handle	Lever
Handle Type	Ball Knobs	
LAGN	LAG	
LAGNS	LAGS	

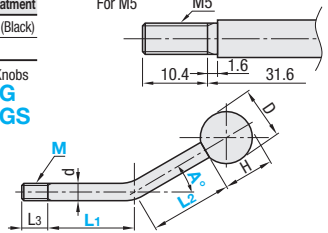
Material	Surface Treatment
Phenol Resin (Black)	EN 1.1191 Equiv. Cathodic Paint (Black)
EN 1.4301 Equiv.	-

Handle Type
LAGN
LAGNS



Ball Knobs
LAG
LAGS

Tighten the nuts after positioning the lever.



Part Number	Type	M (Coarse)	L1	L2	A° Selection (Tolerance±2°)	L3	d	D	H	Unit Price
Handle Type										
LAGN		5	30	60	30	12	6	17	25	
LAGNS		8				15	8			
Ball Knobs										
LAG		10	30-100	60-100	30 45 60 90	20	10	21	30	
LAGS		12	10mm Increment	10mm Increment		25	12	25	35	

Part Number	L1	L2	A°
LAGN5	30	60	30
LAGS10	80	100	90

Ball Knobs

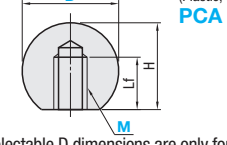


Type	Material	Surface Treatment	Screw
PBA	(Black) Phenol Resin	-	-
PCA	(Red) Melamine Resin	-	Brass (Insert)
BGW	EPDM (Matt Black)	-	Brass (Insert)
BKS	EN 1.4301 Equiv.	Buff Polished	-
BKA	-	Polishing	-
BKAU	Aluminum Alloy	Clear Anodize	-
BKAB	-	Black Anodize	-

(Plastic, No Insert)

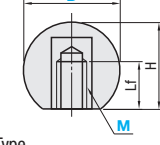
PBA
(Stainless Steel)
BKS
(Aluminum)
BKA
BKAU
BKAB

(Plastic, With Insert)

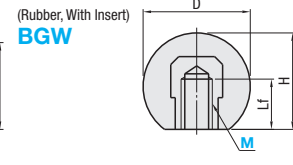


PCA

(Rubber, With Insert)



BGW



Plastic (Black: Phenol / Red: Melamine)

Part Number	Type	M (Coarse)	D	Ball Color	H	PBA	PCA	PBA PCA	Unit Price	Unit Price
									1~100	1~50
		6	20		18	10	10	7		
		8	25		23	10	10	15		
		10	30		28	16	10	20		
		12	40		18	10	10	7		
		14	50		23	12	12	15		
		16	60		28	16	12	30		
		18	70		32	16	12	40		
		20	80		28	18	15	30		
		22	90		32	18	15	40		
		24	100		37	18	15	55		
		26	110		37	18	15	50		

The default color will be black unless specified otherwise.

For orders larger than indicated quantity, please check with WOS.

Rubber

Part Number	Type	M (Coarse)	D	H	Lf	Mass (g)	Unit Price
		6	20	18	10	10	
		8	25	22.5	12.5	15	
		10	32	29	16	25	
		12	40	36	20	40	

Stainless Steel, Aluminum

Part Number	Type	M (Coarse)	D	H	Lf	Mass (g)	Unit Price
		3	15	*13	*8	13	5
		4	20	18	9.1	31	11
		5	20	18	9.1	30	11
		6	25	22.5	11	60	21
		8	32	29	14.5	126	43
		10	40	37	18	215	85

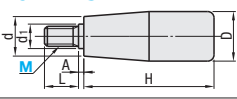
* H dimension and Lf dimension for BKS M3 are 13.5 and 7 respectively.

Stationary Handles

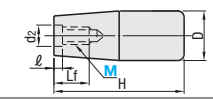


Type	Shape	Handle	Screw
		Material	Material
GRAM	Threaded	Phenol	EN 1.0736 Equiv. Trivalent Chromate
GRAMS	Threaded	Phenol	EN 1.4305 Equiv. -
GRAF	Tapped	-	-
GRAFC	Tapped (Insert)	Nylon 6	EN 1.1191 Equiv. Trivalent Chromate

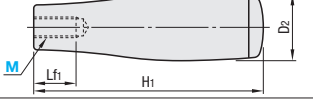
GRAM
GRAMS



GRAF



GRAFC



Part Number	Type	M (Coarse)	D	D2	d	d1	d2	A	ℓ	H	H1	L	Lf	Lf1	Mass (g)	Unit Price
		6	17	19	12	8	6.5	1.5	1.8	40	65	13	20	12	16	10
		8	21	24	17	11	8.5	2	4.5	50	80	16	26	16	32	20
		10	25	28	20	13	10.5	2	5	65	95	20	33	20	61	37
		12	28	32	23	16	12.5	2.5	5	80	110	25	40	24	100	61

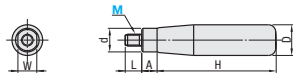
Stainless Steel Handles - Stationary / Revolving



Type	Handle	Material	Surface Treatment
GRMSN	Stationary	EN 1.4301 Equiv.	Electrolytic Polishing
GRMS	Revolving	EN 1.4301 Equiv.	Electrolytic Polishing

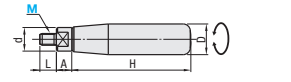
(Stationary Handle)

GRMSN



(Revolving Handle)

GRMS



Part Number	Type	M	D	d	H	L	W	A	Mass (g)	Unit Price
		5	10	8	39	6	6.5	6	25	
		6	13	10	50	7	8	7	55	
		8	16	13	60	8	10	8	100	
		10	20	16	70	10	12	10	180	

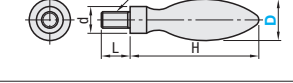
Ergonomic Handles - Stationary / Revolving



Type	Mechanism	Handle	Screw
		Material	Material
GRMHF	Stationary	EN 1.0038 Equiv. Chrome Plating	EN 1.0038 Equiv. Chrome Plating
GRMK	Revolving	EN 1.0038 Equiv. Shot Blasted	EN 1.0038 Equiv. Chrome Plating
GRMAK	Revolving	EN AW-2024 Equiv. Polypropylene	-
GRMKB	Revolving	Polypropylene	-

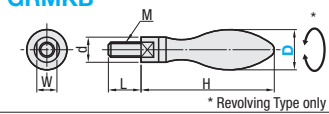
(Stationary Handle)

GRMHF



(Revolving Handle)

GRMK
GRMAK
GRMKB



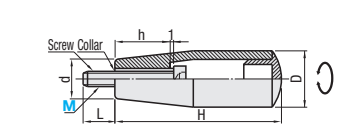
* Revolving Type only

Part Number	Type	M (Coarse)	D	d	H	H1	W	L	Mass (g)	Unit Price
		13	5	10	-	49	8	11	30	
		16	6	13	48.5	55	8	14	48	
		20	8	16	62.5	70.7	10	15.5	97	
		25	10	20	87.3	87.3	12	18	192	

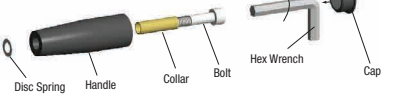
Revolving Handles with Caps



Type	Handle	Screw
	Material	Material
GRM	Nylon6 (Black)	EN 1.7220 Equiv. Trivalent Chromate



How to Mount



Part Number	Type	M (Coarse)	D	d	H	h	L	Mass (g)	Unit Price
		5	18	13	55	18.5	10	25	
		6	20	15	60	20	13	30	
		8	26	20	85	33	15	60	
		10	32	25	100	40	20	100	

Part Number	GRAM12	GRAMS6	GRAMK13	GRAM5
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