

Screws with Through Hole

Extra Low Head Cap Screws, Low Head Cap Screws, Hex Socket, Hex, Full Thread

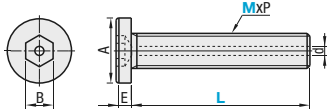
Use in vacuum equipment or vacuum container where air in the tapped hole is required to be removed.

Extra Low Head Cap Screws with Through Hole



RoHS

CBASG



Material: EN 1.4301 Equiv.

Part Number	Type	M	A	E	B	d	Unit Price	Volume Discount Rate
CBASG 3-6	M-L	3	x	0.5	6	1.3	1.5	1.2
8								
10								
12								
16								
CBASG 4-6	M-L	4	x	0.7	8	1.5	2	1.5
8								
10								
12								
16								
CBASG 5-10	M-L	5	x	0.8	9	1.5	3	1.5
12								
16								
20								
CBASG 6-10	M-L	6	x	1.0	10	1.5	3	2
12								
16								
20								
30								

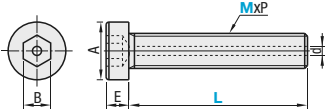
For orders larger than indicated quantity, please check with WOS.

Low Head Cap Screws with Through Hole



RoHS

CBAST



Material: EN 1.4301 Equiv.

Part Number	Type	M	A	E	B	d	Unit Price	Volume Discount Rate
CBAST 3-6	M-L	3	x	0.5	5.5	2	2	1.2
8								
10								
12								
16								
CBAST 4-6	M-L	4	x	0.7	7	2.8	2.5	1.5
8								
10								
12								
16								
20								
CBAST 5-10	M-L	5	x	0.8	8.5	3.5	3	1.5
12								
16								
20								
25								
CBAST 6-10	M-L	6	x	1.0	10	4	4	2
12								
16								
20								
30								

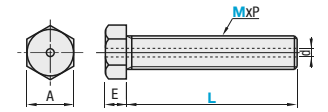
For orders larger than indicated quantity, please check with WOS.

Hex Screws with Through Hole



RoHS

RCBAS



Material: EN 1.4301 Equiv.

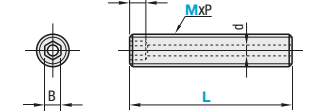
Part Number	Type	M	A	E	B	d	Unit Price	Volume Discount Rate
RCBAS 3-6	M-L	3	x	0.5	5.5	2	1.2	
8								
10								
12								
16								
RCBAS 4-6	M-L	4	x	0.7	7	2.8	1.5	
8								
10								
12								
16								
20								
25								
RCBAS 5-8	M-L	5	x	0.8	8	3.5	2	
10								
12								
16								
20								
25								
RCBAS 6-8	M-L	6	x	1.0	10	4	2	
10								
12								
16								
20								
25								
30								
RCBAS 8-15	M-L	8	x	1.25	13	5.5	2	
20								
25								
30								

Fully Threaded Screws with Through Hole



RoHS

MCBAS



Material: EN 1.4301 Equiv.

Part Number	Type	M	A	E	B	t	d	Unit Price	Volume Discount Rate
MCBAS 3-8	M-L	3	x	0.5	1.5	0.7	1.2		
10									
15									
MCBAS 4-12	M-L	4	x	0.7	2.0	2.2	1.5		
15									
20									
25									
30									
MCBAS 5-15	M-L	5	x	0.8	2.5	2.8	1.5		
20									
25									
30									
MCBAS 6-15	M-L	6	x	1.0	3.0	3.0	2		
20									
25									
30									
MCBAS 8-20	M-L	8	x	1.25	4.0	4.0	2		
25									
30									
35									

Ordering Example
Part Number
CBAS5-10
RCBAS4-6
MCBAS8-30

Hex Socket Head Cap Screws with Through Hole



RoHS

CBAS CBASTN



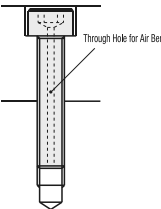
Material: EN 1.4301 Equiv. CBAS
Pure Titanium Class 2 CBASTN

Part Number	Type	M	A	E	B	d	Unit Price	Volume Discount Rate
CBAS 3-6	M-L	3	x	0.5	5.5	3	2.5	1.2
8								
10								
12								
15								
CBAS 4-6	M-L	4	x	0.7	7	4	3	1.5
8								
10								
12								
15								
20								
CBAS 5-8	M-L	5	x	0.8	8.5	5	4	1.5
10								
12								
15								
20								
25								
CBAS 6-8	M-L	6	x	1.0	10	6	5	2
10								
12								
15								
20								
25								
30								
CBAS 8-12	M-L	8	x	1.25	13	8	6	2
15								
20								
25								
30								
CBAS 10-15	M-L	10	x	1.5	16	10	8	2
20								
25								
30								

No specifications available for sizes with no prices shown.
For orders larger than indicated quantity, please check with WOS.



Example



Reference	Tensile Breaking Load (N)
Extra Low Head / Low Head	
M3	1440
M5	4630

* The above data are for reference, not guaranteed.

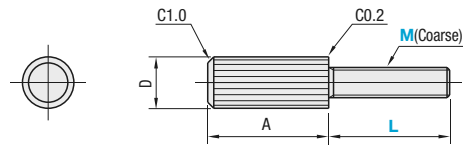
Long Knurled Head Screws / Stepped Knurled Head Screws

Long Knurled Head Screws



RoHS

Type	Material	Surface Treatment
LRLM	EN 1.7220 Equiv.	Electroless Nickel Plating
LRLB	EN 1.4305 Equiv.	-



Part Number	Type	M	A	E	B	d	Unit Price	Volume Discount Rate
LRLM	M (Coarse)	3	6	10		5.5	10	
LRLB	M (Coarse)	4	6	10	16	7	16	
		5	6	10	16	8.5	20	
		6	10	16	20	10	30	
		8			20	13	36	
		10			20	16	40	

Ordering Example
Part Number
LRLB3 - L10

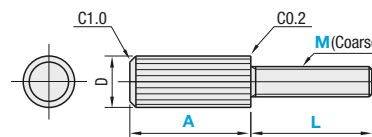
Length Configurable Long Knurled Head Screws



RoHS

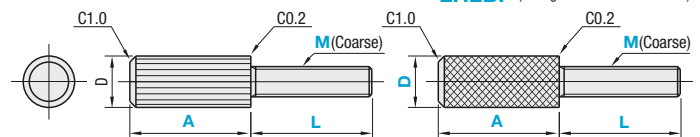
Type	Material	Surface Treatment
LRLMF	EN 1.7220 Equiv.	Electroless Nickel Plating
LRLBS, LRLBF	EN 1.4305 Equiv.	-

LRLBS (Length Configurable)



LRLMF (Configurable)

LRLBF (Configurable - Stainless Steel)



*The head has a checkered pattern.

Configurable Length

Part Number	Type	M	A	E	B	d	Unit Price
LRLBS	M (Coarse)	3	6-40			5.5	
		4	6-40			7	
		5	10-50			8.5	
		6	10-50			10	

Ordering Example
Part Number
LRLBS3 - A15 - L10
LRLBF5 - A10 - L35 - D12

Configurable

Part Number	Type	M	A	E	B	d	Unit Price
LRLMF	M (Coarse)	3	6-40			5-10	
LRLBF	M (Coarse)	4	6-40			5-10	
		5	10-50			10-25	
		6	10-50			10-25	



Alterations
Part Number
LRLMF4 - A10 - L30 - D8 - (RS-MC)

Alteration	Code	Spec.
Undercut	RS	Adds an undercut under the head Applicable only to LRLBS, LRLMF and LRLBF For M3, 6≤L≤21 For M4, 7≤L≤21 Ordering Code RS M e f 3 1.5 2.1-2.3 4 1.5 2.9-3.1 5 1.5 3.6-3.9 6 2 4.4-4.6

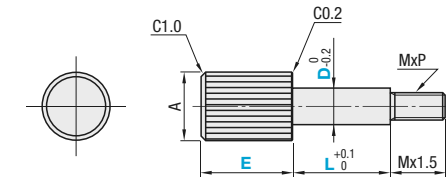
Alteration	Code	Spec.
Tapping	MC	Adds a tapped hole for the screw head. Applicable only to LRLBS, LRLMF and LRLBF 2≤D-MC Ordering Code MC4 M MC (Selection Range) 3 3 4 3, 4 5 3, 4, 5 6 3, 4, 5, 6

Stepped Knurled Head Screws

LRLBD



RoHS



Material: EN 1.4305 Equiv.

Part Number	Type	D	E	L	A	MxP	Unit Price
LRLBD		4	8-30	10-30	5.5	2.5x0.45	
		5			7.0	3x0.5	
		6			8.5	4x0.7	
		8			10.0	6x1.0	

Ordering Example
Part Number
LRLBD4 - E8 - L10

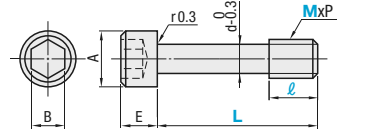
Cover Screws

Available in Box



RoHS

Type	Material	Strength Class
BOX-GUTB	EN 1.4301 Equiv.	A2-70 Equiv.

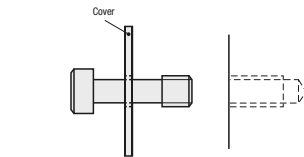


MxP (Coarse)	A	E	B	d
3x0.5	5.5	3	2.5	2.2
4x0.7	7	4	3	3
5x0.8	8.5	5	4	3.9
6x1.0	10	6	5	4.5
8x1.25	13	8	6	6.3

Box package is cost-saving for in-house stock or when large quantities are needed.

Part Number				Unit Price 1 to 10 boxes		Pcs./Box
Type	M	ℓ	L	Price per pkg.	1 Box	
BOX-GUTB (Stainless Steel)	3	4	10			200 pcs./box
			12			
			15			
			20			
	3	8	10			
			12			
			15			
			20			
	4	5	10			
			12			
			15			
			20			
	5	6	12			
			15			
			20			
			25			
8	10	30	25			
			30			
			40			
			40			

The screw will not drop off from the cover when the cover is removed from the frame.
(The cover requires tap machining to prevent screws from falling off.)



Available as a single item. (See below)

*The strength class signifies the screw's tensile strength.
(Ex.) A2-70
—This indicates that the minimum value of tensile strength is 700N/mm².
—The steel class is A2 (Austenitic Stainless Steel)

Please specify in box quantity when ordering.
One box is shipped for an order of 1.



Ordering Example

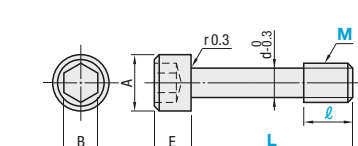
Part Number
BOX-GUTB5-6-20

Available in Single item



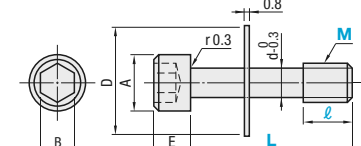
RoHS

GUTB



M	A	E	B	d	D
2	3.8	2	1.5	1.5	-
2.6	4.5	2.5	2	1.8	-
3	5.5	3	2.5	2.2	7
4	7	4	3	3	10
5	8.5	5	4	3.9	12
6	10	6	5	4.5	12
8	13	8	6	6.3	14

GUTBN (With Nylon Washer)



The screw will not drop off from the cover when the cover is removed from the frame.
(The cover requires tap machining to prevent screws from falling off.)

Strength Class: A2-70 Equiv.
Material: EN 1.4301 Equiv.

Part Number		L										GUTB	
Type	M (Coarse)	ℓ											Unit Price
GUTB	2	2.5	4	6	8	10	12	15					Volume Discount Rate
			2.6	3	6	8	10	12	15				
	3	3.5	4	6	8	10	12	15					
			4	8	10	12	15	20					
	4	4	6	8	10	12	15						
			5	10	12	15	20						
	5	5	8	10	12	15	20						
			6	12	15	20	25						
	6	6	8	10	12	15	20						
			8	12	15	20	25	30					
	8	8	12	15	20	25	30						
			10	12	15	20	25	30	40				



Ordering Example

Part Number - ℓ - L
GUTB5 - 6 - 12
GUTBN3 - 4 - 12



Alterations



Part Number - MC
GUTB5 - MC5-LC10

Alteration	Code	Spec.	
	MC	Thread length and L dimension can be specified in 1mm increments. Ordering Code: MC3-LC10	
		M	MC LC
		2	2-6 4-15
		2.6	2-8 6-15
		3	2-9 4-20
		4	3-12 6-20
		5	3-15 8-25
		6	4-18 8-30
		8	5-24 8-40
		LC-MC≥1	

Cover Screws

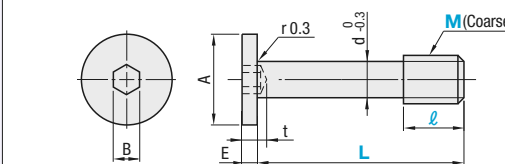
Extra Low Head, Low Head, Button Head Cap

Extra Low Head



RoHS

GUTBG



Reference	Tensile Breaking Load (N)
M3	1160
M5	2520

*The above data are for reference, not guaranteed.

Material: EN 1.4301 Equiv.

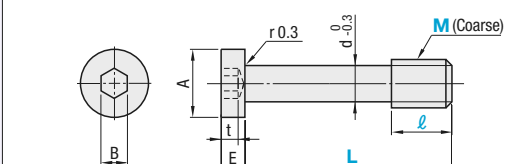
Part Number		L										Unit Price	
Type	M	ℓ											Volume Discount Rate
GUTBG	3	3.5	5	6	8	10							1 ~ 29 pc(s). 30 ~ 300 pcs.
			6	8	10								
			4	6	8	10							
			3	6	8	10	12						
	4	5	10	12									
			8	10	12	16							
			6	8	10	12	16						
			4	8	10	12	16	20					
	5	6	12	16	20	25							
			10	12	16	20	25						
			8	10	12	16	20	25					
			6	8	10	12	16	20	25				
	6	8	12	16	20	25							
			10	12	16	20	25						
			8	10	12	16	20	25					
			5	10	12	16	20	25					
8	10	10	12	16	20	25							
			10	12	16	20	25						
			13	5	5	6.3	3.8						
			13	5	5	6.3	3.8						

Low Head



RoHS

GUTBT



Reference	Tensile Breaking Load (N)
M3	1390
M5	4300

*The above data are for reference, not guaranteed.

Material: EN 1.4301 Equiv.

Part Number		ℓ	L	A	E	B	d	t max.	Unit Price 1 ~ 29 pc(s).	Volume Discount Rate 30 ~ 300 pcs.
Type	M									
GUTBT	3	2	6 8	5.5	2	2	2.2	1.5		
		3.5	6 8 10 12							
		4	8 10 12 16							
		3	6 8 10 12 16							
	4	5	10 12 16 20	7	2.8	2.5	3	2.3		
		6	12 16 20 25							
		4	12 16							
	6	8	12 20 25 30	10	4	4	4.5	3		
		5	10 12 16							
	8	10	20 30 40	13	5	5	6.3	3.8		



Ordering Example

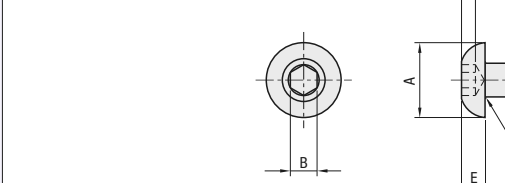
Part Number - ℓ - L
GUTBG5 - 3 - 16
GUTBT8 - 10 - 20

Button Head Cap Screws



RoHS

CBBT



Strength Class: A2-50 Equiv.
Material: EN 1.4301 Equiv.

Part Number		L						ℓ	A	E (Max.)	B	C (Min.)	d	Unit Price	Volume Discount Rate
Type	M													1 ~ 29 pc(s).	30 ~ 50 pcs.
CBBT	3	8	10	12	15	20		4	5.5	1.6	2	1.04	2.2		
			10	12	15	20		5	7.5	2.2	2.5	1.3	3		
	5			12	15	20	25	6	9.5	2.7	3	1.56	3.9		
	6			12	15	20	25	8	10.5	3.3	4	2.08	4.5		
	8			12	15	20	25	10	14	4.4	5	2.6	6.3		

Cover Screws

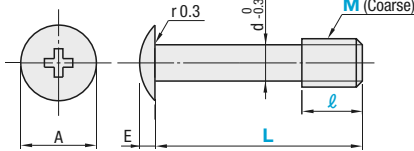
Phillips / Long Knurled Head / Knurled Head

Phillips



RoHS

GUTBJ



Reference

Tensile Breaking Load (N)

M3	1390
M5	4300

* The above data are for reference, not guaranteed.

Material: EN 1.4301 Equiv.

Part Number		ℓ	L	A	E	d	Unit Price	Volume Discount Rate
Type	M							
GUTBJ	3	2	5 8 10	6.9	1.9	2.2		
		3.5	6 8 10					
		4	8 10 12					
	4	3	6 8 10 12 16	9.4	2.5	3		
		5	10 16					
	5	3	8 10 12	11.8	3.1	3.9		
		6	12 16 20					
	6	4	10 12 16 20	14	3.7	4.5		
		8	12 16 20 25 30					
	8	5	16	17.8	4.8	6.3		
		10	40					

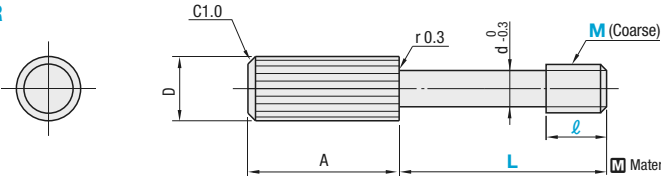
For orders larger than indicated quantity, please check with WOS.

Long Knurled Head



RoHS

GUTBR



Material: EN 1.4305 Equiv.

Part Number		ℓ	L	D	A	d	Unit Price 1 ~ 29 pc(s).	Volume Discount Rate 30 ~ 300 pcs.
Type	M							
GUTBR	3	2	6 8 10 12	5.5	10	2.2		
		3.5	6 8 10 12					
		4	8 10 12					
	4	3	6 8 10 12 16	7	16	3		
		5	10 12 16					
	5	3	8 10 12 16 20	8.5	20	3.9		
		6	12 16 20					
	6	4	8 10 12 16 20	10	30	4.5		
		8	12 16 20 25					
	8	5	10 12 16 20	13	36	6.3		
10		20 25 30						

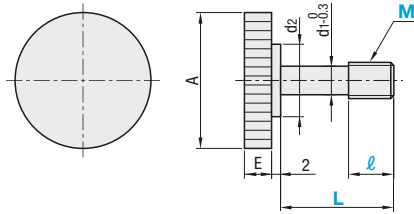
For orders larger than indicated quantity, please check with WOS.

Knurled Head



RoHS

RNCB



Material: EN 1.4305 Equiv.

Part Number		ℓ	L					A	d ₁	d ₂	E	Unit Price 1 ~ 29 pcs(s).	Volume Discount Rate 30 ~ 50 pcs.
Type	M												
RNCB	3	2	4	6	8	10	12	2.2	6	2.5			
		3.5	6	8	10	12							15
		4	8	10	12	15							20
	4	3	6	8	10	12	15	16	3	8	3.5		
		5	10	12	15	20							
	5	3	8	10	12	15	20	3.9	10	4			
		6	12	15	20	25							
	6	8	12	15	24	4.5	12	5					
	8	10	15	20	30	6.3	16	6					

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

Ordering Example

Part Number - ℓ - L

GUTBJ3 - 4 - 8

GUTBR4 - 5 - 16

RNCB4 - 5 - 16

Cover Screws

Configurable Length

Configurable Length Hex Socket Head



RoHS

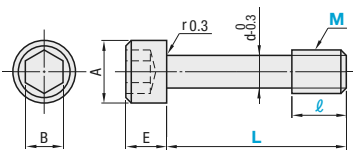
Type

Material

Surface Treatment

Strength Class

FGUTM	EN 1.7220 Equiv.	Electroless Nickel Plating	8.8 Equiv.
FGUTS	EN 1.4301 Equiv.	-	A2-70 Equiv.



Configurable Length Knurled

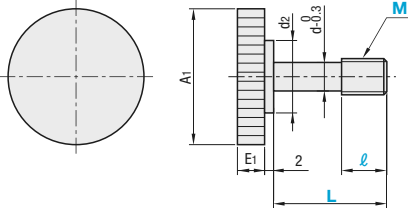


RoHS

Type

Material

FRNCS	EN 1.4305 Equiv.
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Configurable Length Button Head Cap



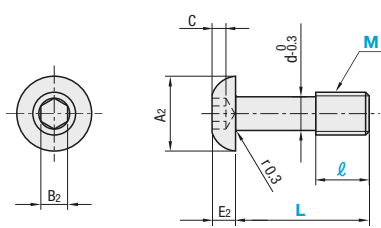
RoHS

Type

Material

Strength Class

FCBBS	EN 1.4301 Equiv.	A2-50 Equiv.
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Part Number		1mm Increment							Unit Price			
Type	M	ℓ			L			ℓ · L Machining Conditions	FGUTM	FGUTS	FRNCS	FCBBS
		FGUTM FGUTS	FRNCS	FCBBS	FGUTM FGUTS	FRNCS	FCBBS					
FGUTM FGUTS FRNCS FCBBS	3	2~18	5~16	5~20	4~20	6~20	6~25	ℓ ≤ L 🔍				
	4	3~18	5~16	5~25	6~20	6~20	6~30					
	5	3~23	5~20	5~25	8~25	8~25	8~30					
	6	4~28	8~20	8~30	8~30	8~25	8~35					
	8	5~38	10~20	10~45	8~40	10~25	10~50					

For ℓ=L, there will be incomplete threads (2 pitches Max.) below the screw head

M	A	A1	A2	E	E1	E2 (Max.)	B	B2	C (Min.)	d	d2
3	5.5	12	5.5	3	2.5	1.6	2.5	2	1.04	2.2	6
4	7	16	7.5	4	3.5	2.2	3	2.5	1.3	3	8
5	8.5	20	9.5	5	4	2.7	4	3	1.56	3.9	10
6	10	24	10.5	6	5	3.3	5	4	2.08	4.5	12
8	13	30	14	8	6	4.4	6	5	2.6	6.3	16

Ordering Example

Part Number - ℓ - L

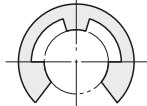
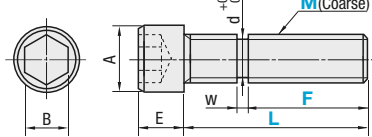
FRNCS6 - 8 - 20

Hex Socket Head Cap Screws with Retaining Ring Groove / Stepped Screws

Low Head Selectable

Retaining Ring Groove Length Configurable
Hex Socket Head Cap Screws

ERSCB



M Material: EN 1.4301 Equiv.
A Accessory:
E Type Retaining Ring EN 1.4301 Equiv.

Part Number		1mm Increment		L-F Machining Conditions	A	E	B	d	W	Applicable E Type Retaining Ring (Nominal Dia.) (For details, see P265)	Unit Price
Type	M (Coarse)	F	L								
ERSCB	3	2~12	10~20	L-F≥8	5.5	3	2.5	2	0.5	2	
	4	3~13	10~20	L-F≥7	7	4	3	3	0.7	3	
	5	3~18	10~25	L-F≥7	8.5	5	4	4	0.7	4	
	6	3~23	10~30	L-F≥7	10	6	5	4	0.7	4	
	8	4~29	10~35	L-F≥6	13	8	6	6	0.9	6	



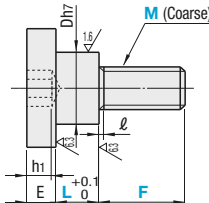
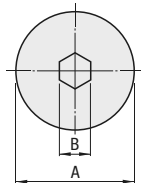
Ordering
Example

Part Number - F - L
ERSCB6 - 5 - 25

Stepped Screws



RoHS



Type	M Material	S Surface Treatment
DBB	EN 1.1191 Equiv.	Black Oxide
DBS	EN 1.4305 Equiv.	-

Part Number		L	F	E	Dh7	A	B	ℓ	h1	DBB				DBS			
Type	M (Coarse)									Unit Price	Volume	Discount	Rate	Unit Price	Volume	Discount	Rate
DBB	3	3	3 4 5 6	2	5	8	2	1	2	1 ~ 4 pcs.	5 ~ 19 pcs.	20 ~ 49 pcs.	50 ~ 100 pcs.	1 ~ 4 pcs.	5 ~ 19 pcs.	20 ~ 49 pcs.	50 ~ 100 pcs.
		4	3 4 5 6														
		5	3 4 5 6														
		6	3 4 5 6														
		7	4 5 6														
	4	3	4 5 6 8	2.8	6	10	2.5	1.2	2.5								
		4	4 5 6 8														
		5	4 5 6 8														
		6	4 5 6 8														
		7	4 5 6 8														
DBS	5	3	5 8 10	3.5	8	12	3	1.4	3								
		4	5 8 10														
		5	5 8 10														
		6	5 8 10														
		7	5 8 10														
	6	3	8 10 12	4	10	16	4	1.5	3.5								
		4	8 10 12														
		5	8 10 12														
		6	8 10 12														
		7	8 10 12														



Ordering
Example

Part Number - L - F
DBS6 - 3 - 10

Stepped Screws

Extra Low Head, Low Head, Button Head Cap, Phillips



RoHS

Extra Low Head	Low Head	Button Head Cap Screws	Phillips	M Material	S Surface Treatment
DBGB	DBTB	DBBB	DBJB	EN 1.1191 Equiv.	Black Oxide
DBGM	DBTM	DBBM	DBJM	EN 1.1191 Equiv.	Electroless Nickel Plating
DBGS	DBTS	DBBS	DBJS	EN 1.4305 Equiv.	-

Reference Tensile Breaking Load (N)

	Extra Low Head	Low Head	Button Head Cap	Phillips
M3			1950	
M5			4630	

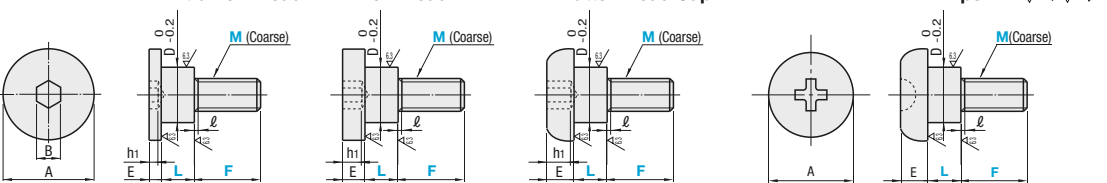
* The above data are for reference, not guaranteed.

Extra Low Head

Low Head

Button Head Cap

Phillips



Extra Low Head

Part Number		1mm Increment		E	D	A	B	ℓ	h1	Unit Price		
Type	M (Coarse)	L	F							DBGB	DBGM	DBGS
DBGB DBGM DBGS	3	5~20	3~6	1.5	5	8	1.5	1	1.5			
	4		4~8		6	10	2	1.2	2			
	5		5~10		8	12	3	1.4	3			
	6		6~12		10	16	3		3			
	8		8~12		12	18	4	1.5	3.5			
	10		10~15		15	20	5		4			

Low Head

Part Number		1mm Increment		E	D	A	B	ℓ	h1	Unit Price		
Type	M (Coarse)	L	F							DBTB	DBTM	DBTS
DBTB DBTM DBTS	3	3~20	3~6	2	5	8	2	1	2			
	4		4~8	2.8	6	10	2.5	1.2	2.5			
	5		5~10	3.5	8	12	3	1.4	3			
	6		6~12	4	10	16	4		3.5			
	8		8~12	5	12	18	5	1.5	4			
	10		10~15	6	15	20	6		4.5			

Button Head Cap Screws

Part Number		1mm Increment		E	D	A	B	ℓ	h1	Unit Price		
Type	M (Coarse)	L	F							DBBB	DBBM	DBBS
DBBB DBBM DBBS	3	5~20	3~6	2.8	5	8	2	1	2			
	4		4~8	3.5	6	10	2.5	1.2	2.5			
	5		5~10	4.7	8	12	3	1.4	3			
	6		6~12	5.6	10	16	4		3.5			
	8		8~12	6.2	12	18	5	1.5	4			
	10		10~15	6.9	15	20	6		4.5			

Phillips

Part Number		1mm Increment		E	D	A	ℓ	Unit Price			
Type	M (Coarse)	L	F					DBJB	DBJM	DBJS	
DBJB DBJM DBJS	3	1~20	3~6	2.8	5	8	1				
	4		4~8	3.5	6	10	1.2				
	5		5~10	4.7	8	12	1.4				
	6		6~12	5.6	10	16					
	8		8~12	6.2	12	18	1.5				
	10		10~15	6.9	15	20					



Ordering
Example

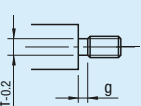
Part Number - L - F
DBTS6 - 3 - 10



Alterations



Part Number - L - F - (LTC · PC)
DBJM6 - 3.4 - 10 - LTC

Alterations	Code	Spec.																												
 LTC ± 0.05	LTC	L Dimension Increment LTC=0.1mm Increment																												
 $f \pm 0.2$ g	PC	Adds a relief on M. <table><tr><th>D</th><th>MxPitch</th><th>g</th><th>f</th></tr><tr><td>5</td><td>M3 x 0.5</td><td>1.2</td><td>2.3</td></tr><tr><td>6</td><td>M4 x 0.7</td><td></td><td>3.2</td></tr><tr><td>8</td><td>M5 x 0.8</td><td>1.4</td><td>4.0</td></tr><tr><td>10</td><td>M6 x 1.0</td><td>1.7</td><td>4.8</td></tr><tr><td>12</td><td>M8 x 1.25</td><td></td><td>6.5</td></tr><tr><td>15</td><td>M10 x 1.5</td><td>2</td><td>8.2</td></tr></table>	D	MxPitch	g	f	5	M3 x 0.5	1.2	2.3	6	M4 x 0.7		3.2	8	M5 x 0.8	1.4	4.0	10	M6 x 1.0	1.7	4.8	12	M8 x 1.25		6.5	15	M10 x 1.5	2	8.2
D	MxPitch	g	f																											
5	M3 x 0.5	1.2	2.3																											
6	M4 x 0.7		3.2																											
8	M5 x 0.8	1.4	4.0																											
10	M6 x 1.0	1.7	4.8																											
12	M8 x 1.25		6.5																											
15	M10 x 1.5	2	8.2																											

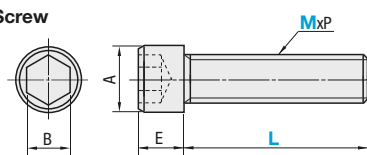
Plastic Hex Socket Head Cap Screws / Plastic Hex Socket Head Set Screws

Material: RENY / PPS / PEEK

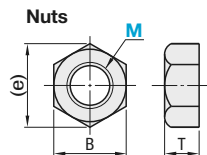


Type				Material
Screw	Nuts	Washers	Set Screws	
RENB	RENN	RENW	-	RENY (Glassfiber Reinforced Polyamide MXD6)
PPSB	PPSN	PPSW	-	PPS (Polyphenylenesulfide)
PEKB	PEKN	PEKW	PEKSF	PEEK (Polyetheretherketone)

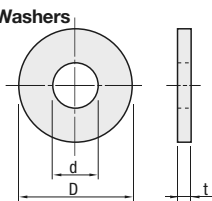
Screw



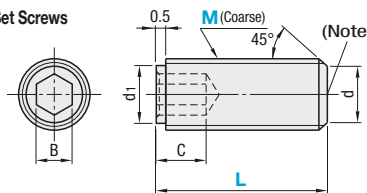
Nuts



Washers



Set Screws



(Note) Gate mark remains.

* Usable as one end threaded posts in combination with Both Ends Tapped Plastic Hex Spacers on P222.

<Cautions>

- The surface colors of plastic screws, nuts and washers may change somewhat depending on production lot and other conditions.
- Sometimes black spots may be seen on the surface, which does not affect its performance.

Plastic Hex Socket Head Cap Screws

Part Number		M x P	A	E	B	Unit Price			Volume Discount Rate			Quantity		
Type	M-L					* Less than			* or More					
REN PPSB PEKB	3- 6 8 10 12 15 20	3 x 0.5	5.5	3	2.5	REN	PPSB	PEKB	REN	PPSB	PEKB	100		
REN PPSB PEKB	4- 6 8 10 12 15 20	4 x 0.7	7	4	3							100		
REN PPSB PEKB	5- 8 10 12 15 20 25 30	5 x 0.8	8.5	5	4							100		
REN PPSB PEKB	6-10 12 15 20 25 30 40	6 x 1.0	10	6	5							100		
REN PPSB PEKB	8-15 20 25 30 40	8 x 1.25	13	8	6							50		
REN	10-15 20 25 30 35 40	10 x 1.5	16	10	8							50		
REN	12-20 25 30 35 40	12 x 1.75	18	12	10							50		

•RENY-Glassfiber Reinforced Polyamide MXD6

RENY is based on polyamide MXD6 and is also a crystalline engineered plastic reinforced with 50% glass fiber. It has the highest strength and elasticity among engineered plastics, and excels in both oil and heat resistance. Thus, it is used as an alternative to metal.

•PPS-Polyphenylenesulfide

PPS is a crystalline super engineered plastic. It has excellent heat resistance, and does not deteriorate in physical properties even when it is used for long durations in high temperature atmosphere. In addition, it excels in chemical resistance, mechanical characteristics, electrical properties and dimensional stability.

Plastic Nuts

Part Number	Type	M	B	(e)	T	Unit Price		Volume Discount Rate	
						1 ~ 99 pc(s).	100 ~ 200 pcs.	1 ~ 99 pc(s).	100 ~ 200 pcs.
RENN	3	5.5	6.4	2.4					
PPSN	4	7	8.1	3.2					
PEKN	5	8	9.2	4					
	6	10	11.5	5					
	8	13	15	6.5					
	10	17	19.6	8		-	-	-	-
	12	19	21.9	10		-	-	-	-

Plastic Washers

Part Number	Type	No.	D	d	t	Unit Price		Volume Discount Rate	
						1 ~ 99 pc(s).	100 ~ 200 pcs.	1 ~ 99 pc(s).	100 ~ 200 pcs.
RENW	3	7	3.2	0.5					
PPSW	4	9	4.3	0.8					
PEKW	5	10	5.3	1					
	6	12.5	6.4	1.6					
	8	17	8.4	1.6					
	10	21	10.5	2.0		-	-	-	-
	12	24	13	2.5		-	-	-	-

Plastic Set Screws

Part Number	Type	M-L	B	d ₁	C (Min.)	d (Max.)	Unit Price	
							1 ~ 99 pc(s).	100 ~ 200 pcs.
PEKSF	3-15	1.5	2.2	2	2			
	4-20	2	2.8	2.5	2.5			
	5-20	2.5	3.6	3	3.5			
	6-25	3	4.4	3.5	4			
	8-30	4	6	5	5.5			



Part Number
PPSB3-10
PPSN3
PPSW3
PEKSF4-20

•PEEK-Polyetheretherketone

PEEK is semicrystalline super engineered plastic with the highest performance. It has the highest chemical resistance among all engineered plastics. The only generally used chemical that can dissolve PEEK is concentrated sulfuric acid. PEEK also excels in heat resistance, abrasion resistance, flame resistance and hydrolysis resistance.

⚠ Characteristic Value of Plastics P221

Plastic Hex Socket Head Cap Screws / Plastic Screws

No Knurling

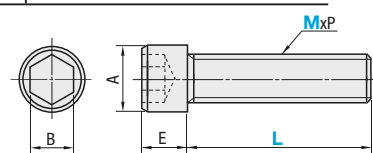
Low Head/Extra Low Head (Available in Pkg.)

No Knurling



RoHS

Type	Material
PPSBL	PPS (Polyphenylenesulfide) Non-Glass Fiber
PEKBL	PEEK (Polyetheretherketone)



⚠ The head is not knurled.
More economical than Knurled Type.

Part Number		MxP	A	E	B	PPSBL			PEKBL		
Type	M-L					Unit Price	Volume Discount Rate		Unit Price	Volume Discount Rate	
						1 ~ 19 pc(s).	20~49	50~100	1 ~ 19 pc(s).	20~49	50~100
PPSBL PEKBL	5-10	5x0.8	8.5	5	4						
	15										
	20										
	25										
	30										
	6-15	6x1.0	10	6	5						
	20										



Ordering Example

Part Number
PPSBL5-20

Low Head (Pkg.)



Extra Low Head (Pkg.)

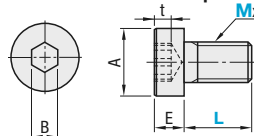


⚠ 20 pcs. per pkg.

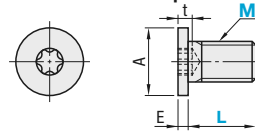
RoHS

Type		Material
Hex Socket Low Head Cap Screws	Extra Low Head Cap Screws	
PACK-RENS	PACK-RENE	RENY (Glassfiber Reinforced Polyamide MXD6)
PACK-PPSS	PACK-PPSE	PPS (Polyphenylenesulfide)
PACK-PEKST	PACK-PEKE	PEEK (Polyetheretherketone)

Hex Socket Low Head Cap Screws



Extra Low Head Cap Screws



⚠ Hexalobular Key Wrenches P196

Part Number	Type	M-L	M x P	A	E	B	t	PACK-RENS		PACK-PPSS		PACK-PEKST		Part Number	Type	M-L	M x P	A	E	Hexalobular Socket Number	t	PACK-RENE		PACK-PPSE		PACK-PEKE	
								Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate									Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
								1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100									1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100	1 ~ 2 3 ~ 100
PACK-RENS PACK-PPSS PACK-PEKST	3-6	8	3 x 0.5	5.5	2	2	1.5							PACK-RENE PACK-PPSE PACK-PEKE	3-6	8	3 x 0.5	6	1.3	8	1.3						
		10														10											
		12														12											
	4-6	8	4 x 0.7	7	2.8	2.5	2.3								4-6	8	4 x 0.7	8	1.5	10	1.5						
		10														10											
		12														12											
	5-8	10	5 x 0.8	8.5	3.5	3	2.7								5-8	10	5 x 0.8	9	1.5	15	1.5						
		12														12											
		16														16											
	6-10	12	6 x 1.0	10	4	4	3								6-10	12	6 x 1.0	10	1.5	20	1.5						
		16														16											



Ordering Example

Part Number
PACK-RENS 3-6
⚠ 20 pcs. per pkg.

Mechanical Properties (Reference)

|--|

Plastic Phillips Pan Head Screws

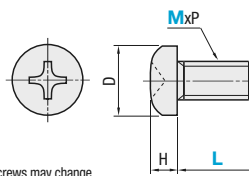
Material: PPS.PEEK (Available in Pkg.)



RoHS

1 pkg. contains 100 pcs.

Type	Material
PACK-PPSA	PPS (Polyphenylenesulfide)
PACK-PEKS	PEEK (Polyetheretherketone)



1 pkg. contains 100 pcs.

The surface colors of plastic Phillips pan head screws may change somewhat depending on production lot and other conditions.

Sometimes black spots on the surface may be seen, which does not affect its performance.

Part Number	M x P	D	H	PACK-PPSA		PACK-PEKS	
				Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	M-L			1-9	10-50	1-9	10-50
PACK-PPSA PACK-PEKS	2.6-6						
	8	2.6 x 0.45	4.5				
	10						
	12						
PACK-PPSA PACK-PEKS	3-6						
	8	3 x 0.5	5.5				
	10						
	12						
PACK-PPSA PACK-PEKS	15						
	20						

Part Number	M x P	D	H	PACK-PPSA		PACK-PEKS	
				Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	M-L			1-9	10-50	1-9	10-50
PACK-PPSA PACK-PEKS	4-6						
	8	4 x 0.7	7				
	10						
	12						
PACK-PPSA PACK-PEKS	15						
	20						
PACK-PPSA PACK-PEKS	5-8						
	10	5 x 0.8	9				
	12						
	15						

Part Number	M x P	D	H	PACK-PPSA		PACK-PEKS	
				Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	M-L			1-9	10-50	1-9	10-50
PACK-PPSA PACK-PEKS	6-10						
	15	6 x 1.0	10.5				
	20						

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

Ordering Example: **Part Number** **PACK-PEKS4-20**

1 pkg. contains 100 pcs.

Thumb Screws (Plastic Head) / Plastic Hex Spacers

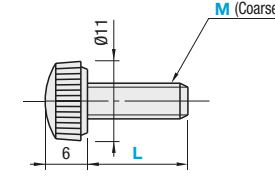
Both Ends Tapped



RoHS

Thumb Screws (Plastic Head)

CRKW (White)
CRKB (Black)
CRKR (Red)



M (Coarse)

Material Knurled Head: PC (Polycarbonate) screw EN 1.4567 Equiv.

Part Number	Type	M-L	Unit Price	Volume Discount Rate
			1 ~ 99 pc(s).	100 ~ 500 pcs.
CRKW (White) CRKB (Black) CRKR (Red)		3-6		
		8		
		10		
		12		
		15		
		20		
		4-6		
		8		
		10		
		12		
		15		
		20		

Usable as screws for cover attachment.

Mechanical Properties (Reference)

	Tensile Breaking Load N		Torsional Breaking Torque N · m	
	PACK-PPSA	PACK-PEKS	PACK-PPSA	PACK-PEKS
M2.6	440	312	0.19	0.16
M3	570	430	0.36	0.3
M4	980	765	0.71	0.64
M5	1570	1230	1.42	1.28
M6	2250	1670	2.11	2.26

- Shown above are reference values and not guaranteed.
- Recommended tightening torque is torsional shear torque x50%. Use a torque driver and torque wrench for tightening.
- Mechanical characteristics change depending on the operating environment. Testing is recommended under the applicable conditions prior to usage.

Guideline for Selection of Plastic Screws by Material①

Item	RENY	PPS	PPS Non-Glass Fiber	PEEK
Lightness	△	△	○	○
Water Absorption Stability	○	○	○	△
Strength, Rigidity	○	○	○	○
Impact Resistance	○	○	○	○
Friction Resistance, Abrasion Resistance	○	○	○	○
Heat Resistance	△	○	○	○
Flame Resistance	△	○	○	○
Electrical Properties	○	○	○	○
Weather Resistance	○	○	○	○

○: Excellent ○: Good △: Questionable

Chemical Resistance Data (Reference)

Chemical Name	Temperature	RENY	PPS / PPS Non-Glass Fiber	PEEK
Hydrochloric Acid 10%	80°C	X	○	○
Hydrochloric Acid 10%	Ambient Temperature	X	○	○
Nitric Acid 10%	80°C	X	△	○
Nitric Acid 10%	Ambient Temperature	X	○	○
Sulfuric Acid 30%	80°C	X	○	○
Sulfuric Acid 10%	80°C	X	○	○
Sulfuric Acid 10%	Ambient Temperature	X	○	○
Sodium Hydroxide 30%	80°C	△	○	○
Sodium Hydroxide 10%	Ambient Temperature	○	○	○
Calcium Chloride (Saturation)	80°C	△	○	○
Acetone	Ambient Temperature	○	○	○
Methanol	60°C	○	○	○
Gasoline	Ambient Temperature	○	○	○
Light Oil	Ambient Temperature	○	○	○
Motor Oil	80°C	○	○	○
Gear Oil	100°C	○	○	○

- Not Affected ○: Hardly Affected △: Somewhat Deteriorated
- Chemical resistances vary depending on the condition of use. Be sure to test the product before use under expected application conditions.

- RENY-Glassfiber Reinforced Polyamide MXD6
RENY is based on polyamide MXD6 and is also a crystalline engineered plastic reinforced with 50% glass fiber. It has the highest strength and elasticity among engineered plastics, and excels in both oil and heat resistance. Thus, it is used as an alternative to metal.
- PPS-Polyphenylenesulfide
PPS is a crystalline super engineered plastic. It has excellent heat resistance, and does not deteriorate in physical properties even when it is used for long durations in high temperature atmosphere. In addition, it excels in chemical resistance, mechanical characteristics, electrical properties and dimensional stability.
- PEEK-Polyetheretherketone
PEEK is semicrystalline super engineered plastic with the highest performance. It has the highest chemical resistance among all engineered plastics. The only generally used chemical that can dissolve PEEK is concentrated sulfuric acid. PEEK also excels in heat resistance, abrasion resistance, flame resistance and hydrolysis resistance.

Guideline for Selection of Plastic Screws by Material②

Strength	RENY > PPS > PEEK > PPS Non-Glass Fiber
Heat Resistance	PPS / PPS Non-Glass Fiber > PEEK > RENY
Chemical Resistance	PEEK > PPS / PPS Non-Glass Fiber > RENY

- RENY and PPS contains glass fiber.
- Continuous Use Temperature RENY: 105°C PPS : PPS Non-Glass Fiber: 200°C PEEK: 180°C Combustibility RENY: UL94HB PPS : PPS Non-Glass Fiber : PEEK:UL94 V-0

Physical Properties Table (Reference)③

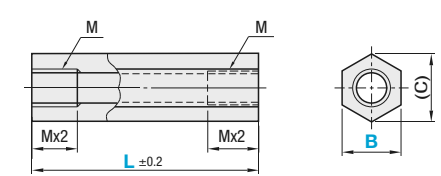
Characteristics	Test Method (ASTM)	Unit	RENY	PPS	PPS Non-Glass Fiber	PEEK
<Mechanical Characteristics>						
Tensile Strength	D638	MPa	285	196	90	91
Elongation	D638	%	2.1	2.2	-	50~120
Bending Strength	D790	MPa	380	255	140	147
Flexural Modulus	D790	GPa	17.4	13.2	3.8	3.9
Izod Impact Strength (Notched)	D256	J/m	110	98	-	88
Rockwell Hardness	D785	R and M Scale	M111	M110	-	R126
<Thermal Characteristics>						
Deflection Temperature under Load (1.82Mpa)	D648	°C	234	270	100	152
Linear Expansion Coefficient	D696	10 ⁻⁵ /K	1.5	1.0	-	5.0
<Electrical Characteristics>						
Dielectric Constant (10 ⁴ Hz)	D150	-	4	4.6	3.6	3.3
Dielectric Tangent (10 ⁴ Hz)	D150	-	0.009	0.002	0.001	0.004
Volume Resistivity	D257	Ω · cm	1.0×10 ⁹	1.0×10 ¹⁶	2.0×10 ¹⁶	4.9×10 ¹⁶
Dielectric Breakdown Strength	D149	MV/mm	17	12	-	17
Arc Resistance	D495	sec	129	120	-	23
<Others>						
Specific Gravity	D792	-	1.65	1.66	1.35	1.3
Water Absorption (At 23°C in water x 24h)	D570	%	0.14	0.015	0.02	0.500
Fiber Glass Content	-	%	50	40	-	-

Plastic Hex Spacers



RoHS

PEKP



<Cautions>

- The surface color may change depending on production lot and other conditions.
- For material data, see P221.
- The pilot hole for tapping goes through.

Material: PEEK (Polyetheretherketone)

Part Number		L (Selection)						M (Coarse)	(C)	Unit Price							
Type	B									L15	L20	L25	L30	L50	L100	L150	L200
PEKP	6	15 20 25 30 50	4	6.9						-	-	-					
	7	20 25 30 50 100 150	3	8.1	-							-					
	8	20 25 30 50 100 150	5	9.2	-							-					
	10	25 30 50 100 150 200	6	11.5	-	-											
	13	50 100 150 200	8	15.0	-	-	-	-									

Ordering Example: **Part Number** **PEKP6** - **L** **20**

Alterations: **Part Number** **PEKP6** - **LC** **LC35**

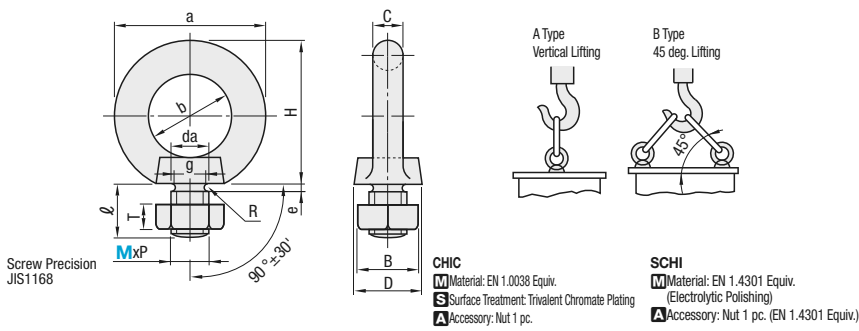
Only applicable to PEKP.

Alteration	Code	Spec.												
L Configurable	LC	Cuts L dimension in 1mm increment. The thread length does not change. <u>Ordering Code</u> LC55												
		LC Specification Range												
		<table><tr><th>B</th><th>LC</th></tr><tr><td>6</td><td>15<LC<50</td></tr><tr><td>7</td><td>20<LC<150</td></tr><tr><td>8</td><td>20<LC<150</td></tr><tr><td>10</td><td>25<LC<200</td></tr><tr><td>13</td><td>35<LC<200</td></tr></table>	B	LC	6	15<LC<50	7	20<LC<150	8	20<LC<150	10	25<LC<200	13	35<LC<200
B	LC													
6	15<LC<50													
7	20<LC<150													
8	20<LC<150													
10	25<LC<200													
13	35<LC<200													

Lifting Eyebolts / Wing Hinge Screws

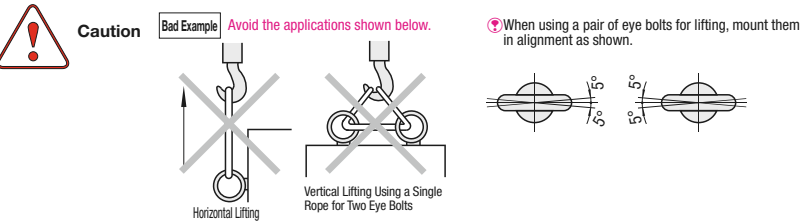
Wing Screws / Wing Nuts / Button Head Cap Screws / Special Tools

Lifting Eyebolts



Part Number		MxP	a	b	C	D	H	l	e	g	R	da	Nuts		A Type N/1P(kgf/1P)	B Type N/2P(kgf/2P)	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Type	M												B	T						
8	8	8x1.25	32.6	20	6.3	16	33.3	15	3	6	1	9.2	13	6.5	785(80)	785(80)				
10	10	10x1.5	41	25	8	20	41.5	18	4	7.7	1.2	11.2	17	8	1471(150)	1471(150)				
12	12	12x1.75	50	30	10	25	51	22	5	9.4	1.4	14.2	19	10	2157(220)	2157(220)				
16	16	16x2.0	60	35	12.5	30	60	27	5	13	1.6	18.2	24	13	4413(450)	4413(450)				
20	20	20x2.5	72	40	16	35	71	30	6	16.4	2	22.4	30	16	6178(630)	6178(630)				

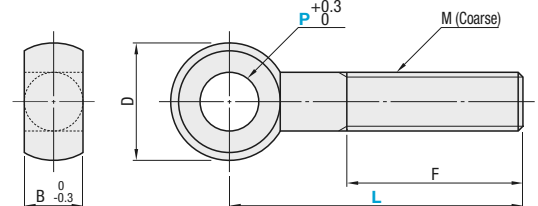
Ordering Example
Part Number



Wing Hinge Screws

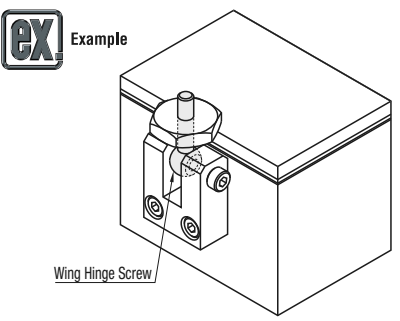


DNDN



M Material: EN 1.4301 Equiv.

Part Number		L	D	B	M	F	Unit Price	Volume Discount Rate
Type	P							
DNDN	6	30	12	6	6	22		
	50					30		
	8	30	16	8	8	20		
	50					30		
	60					30		
	10	50	20	10	10	30		
	70					40		
	100					50		
	50					30		
	12	80	24	12	12	45		
	100					60		
	16	100	32	16	16	50		



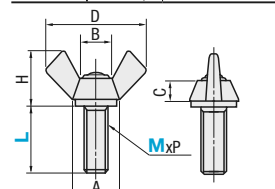
Ordering Example
Part Number - L
DNDN6 - 30

Wing Screws / Wing Nuts



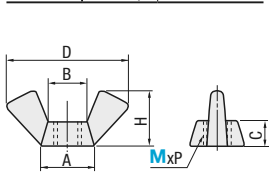
Wing Screws

Type	M	Material	S	Surface Treatment
CHOB		SS Cold Forging		Trivalent Chromate
CHBS		EN 1.4301 Equiv.		-



Wing Nuts

Type	M	Material	S	Surface Treatment
CHON		SS Cold Forging		Trivalent Chromate
CHNS		EN 1.4301 Equiv.		-



Wing Screws Class 2

MxP	A (Min.)	B	C (Min.)	D	H
3x0.5	6.5	4	3	17	9
4x0.7	8	6	4	21	11
5x0.8	10	7	4.5	27	13
6x1.0	13	10	6	31	16
8x1.25	16	12	7.5	36	18

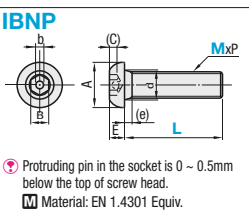
Wing Nuts Class 2

MxP	A (Min.)	B	C (Min.)	D	H
3x0.5	7.5	4	3	17	9
4x0.7	8	6	4	21	11
5x0.8	10	7	4.5	27	13
6x1.0	13	10	6	31	16
8x1.25	16	12	7.5	36	18
10x1.5	20	16	9	48	23

Wing Screws

Part Number		CHOB		CHBS	
Type	M	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
CHOB CHBS (Stainless Steel)	3	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	4	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	5	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	6	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	8	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	10	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	12	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	15	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	20	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	25	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	30	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	35	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
CHOB CHBS (Stainless Steel)	4	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	5	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	6	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	8	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	10	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	12	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	15	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	20	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	25	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	30	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	35	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	40	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
CHOB CHBS (Stainless Steel)	5	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	6	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	8	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	10	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	12	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	15	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	20	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	25	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	30	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	35	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	40	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	45	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
CHOB CHBS (Stainless Steel)	6	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	8	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	10	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	12	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	15	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	20	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	25	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	30	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	35	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	40	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	45	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	50	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
CHOB CHBS (Stainless Steel)	8	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	10	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	12	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	15	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	20	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	25	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	30	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	35	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	40	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	45	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	50	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs
	55	1 ~ 19 pc(s)	20 ~ 49 pcs	1 ~ 49 pc(s)	50 ~ 99 pcs

Tamper Proof Button Head Cap Screws



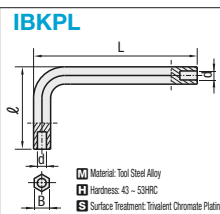
MxP (Coarse)	A	E	B	b	(C) (Min.)	d (Max.)	(e) (Max.)
3x0.5	5.7	1.65	2	1.0	1.04	3.6	1
4x0.7	7.6	2.2	2.5	1.1	1.3	4.7	1.4
5x0.8	9.5	2.75	3	1.3	1.56	5.7	1.6
6x1.0	10.5	3.3	4	1.6	2.08	6.8	2
8x1.25	14	4.4	5	2	2.6	9.2	2.5

Ordering Example
Part Number
IBNP3-6
IBKPL3

Part Number	Unit Price	Volume Discount Rate
3-6	1 ~ 99 pc(s)	100 ~ 200 pcs
12		
16		
20		
25		
30		
4-8		
10		
12		
16		
20		
25		
30		
5-10		
12		
16		
20		
25		
30		
40		

Part Number	Unit Price	Volume Discount Rate
6-10	1 ~ 99 pc(s)	100 ~ 200 pcs
12		
16		
20		
25		
30		
4-8		
10		
12		
16		
20		
25		
30		
5-10		
12		
16		
20		
25		
30		
40		

Dedicated Wrenches



Part Number	No.	Applicable Screw	L	d	B	Unit Price	Volume Discount Rate
3	M3	52	16	1.2	2		
4	M4	58.5	20.5	1.3	2.5		
5	M5	66	23	1.5	3		
6	M6	74	29	1.8	4		
8	M8	85	33	2.3	5		