Hex Socket Extra Low Head Cap Screws

Ultra Low Head Cap Screws / Dedicated Wrenches

Hex Sockets, Hexalobular

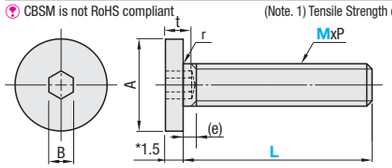
Features
- Developed to reduce the screw head height space.
- They require no countersinking unlike flat head screws.

Part Numbers in ☐ are not RoHS compliant. RoHS10

Type	Material (M)	Hardness (H)	Surface Treatment (S)	Strength Class*	Head Strength Class
CBSS	EN 1.7220 Equiv.	32~39HRC	Black Oxide	10.9	5.8 (M104.8)
CBSM			Bright Chromate Plating		
CBSA			Trivalent Chromate		
CBSR			LTBC Plating		
CBSTS	EN 1.4301 Equiv.	-	-	(Note 1)	-
BOX-CBSTS					

CBSM is not RoHS compliant

(Note. 1) Tensile Strength of CBSTS 400N/mm²



MxP	A	B	t max.	(e) max.	r
2x0.4	4	1.3	1.2	1.2	0.1 or More (0.2 orMore)
2.5x0.45	5	1.3	1.5	1.5	
3x0.5	6	1.5	2	1.6	
4x0.7	8	2	2.5	1.6	0.2 or More
5x0.8	9	3	3	2	
6x1.0	10	3	4	2.5	0.25 or More (0.2 or More)
8x1.25	13	4	5	3	0.4 or More (0.2 orMore)
10x1.5	16 (15)	5	6	3.5	

The dimensions of CBSTS is shown in ( ).
* The dimension for M2 Type of CBSS and CBSA is 1.1, and M2.5 Type is 1.3.
* The dimension for M3 Type of CBSS, CBSM, CBSA and CBSR is 1.3.

Available in Single item

Part Number Type	M-L	CBSS Unit Price 1 ~ 300 pcs.	CBSM Unit Price 1 ~ 99 pc(s).	CBSM Volume Discount Rate 100 ~ 300 pcs.	CBSA Unit Price 1 ~ 19 pc(s).	CBSA Volume Discount Rate 20 ~ 99 pcs.	CBSA Volume Discount Rate 100 ~ 300 pcs.	CBSR Unit Price 1 ~ 99 pc(s).	CBSR Volume Discount Rate 100 ~ 300 pcs.	CBSTS Unit Price 1 ~ 4 pc(s).	CBSTS Volume Discount Rate 5 ~ 99 pcs.	CBSTS Volume Discount Rate 100 ~ 300 pcs.
CBSS CBSM CBSA CBSR CBSTS	2- 3	-			-	-	-					
	4											
	5											
	6		-	-				-	-			
	8											
	10											
	12											
	2.5- 3	-			-	-	-					
	4											
	5											
	6		-	-				-	-			
	8											
	10											
	12									-	-	-
	3- 4	-	-	-				-	-			
	5											
	6											
	8											
	10											
	12											
	14	-	-	-	-	-	-	-	-			
	16											
	4- 5	-	-	-				-	-			
	6											
	8											
	10											
	12											
	14		-	-	-	-	-					
	16											
	18				-	-	-	-	-			
	20											
	5- 6	-										
	8											
	10											
	12											
	14	-	-	-	-	-	-	-	-			
	16											
	18	-	-	-	-	-	-	-	-			
	20											
	25	-	-	-	-	-	-	-	-			
	6- 6	-										
	8											
	10											
	12											
	14	-	-	-	-	-	-	-	-			
	16											
	18	-	-	-	-	-	-	-	-			
	20											
	25											
	30	-	-	-				-	-			
	8- 6	-										
	8											
	10											
	12											
	14	-	-	-	-	-	-	-	-			
	16											
	18	-	-	-	-	-	-	-	-			
	20											
	25											
	30											
	10- 10											
	12											
	14	-			-	-	-					
	16											
	18	-	-	-	-	-	-	-	-			
	20											
	25											
	30											

* marked sizes are more economical in boxes.
For orders larger than indicated quantity, please request a quotation.
No specifications available for sizes with no prices shown.
Hex Wrench for M2 and M2.5 P.196

Available in Box

Part Number Type	M-L	Unit Price per pkg.	Unit Price 1 ~ 10 Box(es)	Pcs./Box
BOX-CBSTS (Stainless Steel)	3- 5			500 pcs./box
	6			
	8			
	10			
	12			
	4- 5			
	6			
	8			
	10			
	12			
	16			
	5- 6			
	8			
	10			
	12			
	16			
	20			
	6- 8			
	10			
	12			
	16			
	20			
	25			
	8-10			200 pcs./box
	12			
	16			
	20			
	25			
	10-16			
	20			
	25			150 pcs./box

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

Ordering Example — Part Number: CBSA6-12

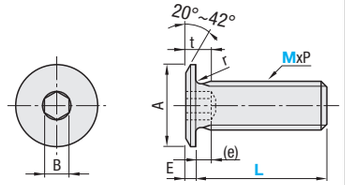
Head is extremely thin. Most suitable for machine and equipment locations without clearance.

Ultra Low Head Cap Screws Hex Sockets

RoHS10

CBSTSR

M	r (Min.)
2	0.1
2.5	
3	
4	0.2
5	0.2
6	0.25



M Material: EN 1.4301 Equiv.

Part Number Type	M-L	M x P	A	B	E	t max.	(e) max.	CBSTSR Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10 ~ 19 pcs.	20 ~ 49 pcs.	50 ~ 300 pcs.
CBSTSR	2- 3	2 x 0.4	4	1.3	0.5	1.2	1.2				
	4										
	5										
	6										
	8										
	10										
	2.5- 3	2.5 x 0.45	5	1.3	0.6	1.5	1.2				
	4										
	5										
	6										
	3- 5	3 x 0.5	6	1.5	0.8	2	1.4				
	6										
	8										
	10										
	12										
	16										
	4- 5	4 x 0.7	8	2	0.9	2.5	1.5				
	6										
	8										
	10										
	12										
	16										
	20										
	25										
	5- 6	5 x 0.8	9	2.5	1	3	1.8				
	8										
	10										
	12										
	16										
	20										
	25										
	6- 8	6 x 1.0	10	3	1.2	4	2.2				
	10										
	12										
	16										
	20										
	25										

Ordering Example — Part Number: CBSKE5-16, CBSTSR3-8

(Reference Value)

Thread	Tightening Torque N·m	Tensile Strength N/mm²
M2	0.16	200
M2.5	0.35	350
M3	0.6	
M4	1.1	
M5	2.2	
M6	5	

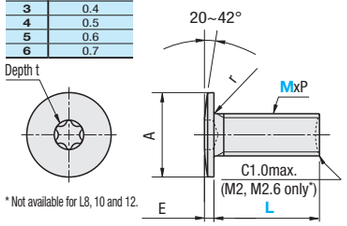
Ultra Low Head Cap Screws Hexalobular

RoHS10

Type	Material (M)	Hardness (H)	Surface Treatment (S)
CBSSE	Cold Forged Carbon Steel Wire JIS-SWCH12-18A	HV400~	Nickel Plating
CBSKE			Black Nickel Plating
CBSTSE	EN 1.4301 Equiv.	-	-

M	r (Max.)
2	0.3
2.6	0.3
3	0.4
4	0.5
5	0.6
6	0.7

Ultra Low Head Cap Screws are fully threaded.



* Not available for L8, 10 and 12.

Part Number Type	M-L	M x P	A	E	Hexalobular Socket Number	t min.	CBSSE Unit Price 1 ~ 19 pc(s).	CBSSE Volume Discount Rate 20 ~ 300 pcs.	CBSKE Unit Price 1 ~ 19 pc(s).	CBSKE Volume Discount Rate 20 ~ 300 pcs.	CBSTSE Unit Price 1 ~ 9 pc(s).	CBSTSE Volume Discount Rate 10 ~ 300 pcs.
CBSTSE	2- 3	2 x 0.4	4.0	0.5	4	0.4	-	-	-	-		
	4											
	5											
	6											
	8											
	10											
	12											
CBSTSE	2.6- 3	2.6 x 0.45	6.0	0.6	5	0.5	-	-	-	-		
	4											
	5											
	6											
	8											
	10											
	12											
CBSSE CBSKE CBSTSE	3- 5	3 x 0.5	7.0	0.8	6	0.75			-	-		
	6											
	8											
	10											
	12											
	16						-	-	-	-		
CBSSE CBSKE CBSTSE	4- 6	4 x 0.7	8.0	0.9	8	0.9						
	8											
	10											
	12								-	-		
	16											
	20						-	-				
	25											
CBSSE CBSKE CBSTSE	5- 8	5 x 0.8	9.0	1.0	10	1.0						
	10											
	12											
	16											
	20						-	-	-	-		
	25											
	30											
CBSTSE	6- 8	6 x 1.0	12	1.2	20	1.2	-	-	-	-		
	10											
	12											
	16											
	20											
	25											
	30											
	35											
	40											

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

CBSSE·CBSKE are carburized.
*1:Carburization is the process where carbon diffused into the steel surface is heat treated to make surface harder.

Select screws from hexalobular socket numbers.

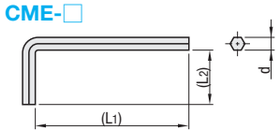
(Reference Value)

Thread	Tightening Torque N·m
M2	0.178
M2.6	0.36
M3	0.63
M4	1.50
M5	3
M6	5.2

Hex Wrench

RoHS10

CME-☐



M Material: Tool Steel
H Hardness: 45~52HRC

Part Number	(L1)	(L2)	d	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10 ~ 50 pcs.
CME-0.9	32	10	0.9		
CME-1.3	41	12	1.3		

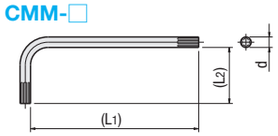
Use CME-1.3 wrench for CBSTSR M2, 2.5.
For orders larger than indicated quantity, please check with WOS.

Ordering Example — Part Number: CMM-5, CME-1.3

Hexalobular Key Wrenches

RoHS10

CMM-☐



M Material: Tool Steel
H Hardness: 45~52HRC

Part Number	Hexalobular Socket Number	(L1)	(L2)	d	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10 ~ 50 pcs.
CMM-4	4	48	16	3		
CMM-5	5	48	16	3		
CMM-6	6	42	16	3		
CMM-8	8	48	16	3		
CMM-10	10	51	16	3		
CMM-15	15	54	18	4		
CMM-20	20	57	19	4		

L_1 and L_2 are reference values.