

Hexagon Socket Cap Screws

Extra Low Head

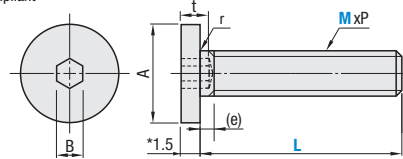
Extra Low Hexagon Socket Head Cap Screws



RoHS10

Type	Material	HhHardness	Surface Treatment	Strength Class	Head Strength Class
CBSS	4137 Alloy Steel	32-39 HRC min.	Black Oxide	10.9	5.8 (M10, 4.8)
CBSM			Bright Chromate Plating		
CBSA			Trivalent Chromate		
CBSR			Low Temperature Black Chrome Plating		
CBSTS	304 Stainless Steel	—	—	(Note 1)	—

Ⓢ CBSM is not RoHS compliant



M x P	A	B	t max.	(e) max.	r
2 x 0.4	4	1.3	1.2	1.2	0.1 or More (0.2 or More)
2.5 x 0.45	5	1.3	1.5	1.5	0.1 or More (0.2 or More)
3 x 0.5	6	1.5	2.0	1.6	0.2 or More
4 x 0.7	8	2.0	2.5	1.6	0.2 or More
5 x 0.8	9	3.0	3.0	2.0	0.25 or More (0.2 or More)
6 x 1.0	10	3.0	4.0	2.5	0.25 or More (0.2 or More)
8 x 1.25	13	4.0	5.0	3.0	0.4 or More (0.2 or More)
10 x 1.5	16 (15)	5.0	5.0	3.5	0.4 or More (0.2 or More)

* The dimension for M2 Type of CBSS, CBSA and CBSTS is 1.1, and M2.5 Type is 1.3.

* The dimension for M3 Type of CBSS, CBSM, CBSA and CBSR is 1.3.

Part Number	Available Types							
	Type	M - L	CBSS	CBSM	CBSA	CBSR	CBSTS	
CBSS CBSM CBSA CBSR CBSTS	2 - 3	2 - 3	•	•	•	•	•	
	4	4	•	•	•	•	•	
	5	5	•	•	•	•	•	
	6	6	•	•	•	•	•	
	8	8	•	•	•	•	•	
	10	10	•	•	•	•	•	
	12	12	•	•	•	•	•	
	14	14	•	•	•	•	•	
	16	16	•	•	•	•	•	
	18	18	•	•	•	•	•	
	20	20	•	•	•	•	•	
	25	25	•	•	•	•	•	
CBSS CBSM CBSA CBSR CBSTS	2.5 - 3	2.5 - 3	•	•	•	•	•	
	4	4	•	•	•	•	•	
	5	5	•	•	•	•	•	
	6	6	•	•	•	•	•	
	8	8	•	•	•	•	•	
	10	10	•	•	•	•	•	
	12	12	•	•	•	•	•	
	14	14	•	•	•	•	•	
	16	16	•	•	•	•	•	
	18	18	•	•	•	•	•	
	20	20	•	•	•	•	•	
	25	25	•	•	•	•	•	
CBSS CBSM CBSA CBSR CBSTS	3 - 4	3 - 4	•	•	•	•	•	
	5	5	•	•	•	•	•	
	6	6	•	•	•	•	•	
	8	8	•	•	•	•	•	
	10	10	•	•	•	•	•	
	12	12	•	•	•	•	•	
	14	14	•	•	•	•	•	
	16	16	•	•	•	•	•	
	18	18	•	•	•	•	•	
	20	20	•	•	•	•	•	
	25	25	•	•	•	•	•	
	CBSS CBSM CBSA CBSR CBSTS	4 - 5	4 - 5	•	•	•	•	•
6		6	•	•	•	•	•	
8		8	•	•	•	•	•	
10		10	•	•	•	•	•	
12		12	•	•	•	•	•	
14		14	•	•	•	•	•	
16		16	•	•	•	•	•	
18		18	•	•	•	•	•	
20		20	•	•	•	•	•	
25		25	•	•	•	•	•	
CBSS CBSM CBSA CBSR CBSTS		5 - 6	5 - 6	•	•	•	•	•
		8	8	•	•	•	•	•
	10	10	•	•	•	•	•	
	12	12	•	•	•	•	•	
	14	14	•	•	•	•	•	
	16	16	•	•	•	•	•	
	18	18	•	•	•	•	•	
	20	20	•	•	•	•	•	
	25	25	•	•	•	•	•	
	CBSS CBSM CBSA CBSR CBSTS	6 - 6	6 - 6	•	•	•	•	•
		8	8	•	•	•	•	•
		10	10	•	•	•	•	•
12		12	•	•	•	•	•	
14		14	•	•	•	•	•	
16		16	•	•	•	•	•	
18		18	•	•	•	•	•	
20		20	•	•	•	•	•	
25		25	•	•	•	•	•	
CBSS CBSM CBSA CBSR CBSTS		8 - 6	8 - 6	•	•	•	•	•
		8	8	•	•	•	•	•
		10	10	•	•	•	•	•
	12	12	•	•	•	•	•	
	14	14	•	•	•	•	•	
	16	16	•	•	•	•	•	
	18	18	•	•	•	•	•	
	20	20	•	•	•	•	•	
	25	25	•	•	•	•	•	
	CBSS CBSM CBSA CBSR CBSTS	10 - 10	10 - 10	•	•	•	•	•
		12	12	•	•	•	•	•
		14	14	•	•	•	•	•
16		16	•	•	•	•	•	
18		18	•	•	•	•	•	
20		20	•	•	•	•	•	
25		25	•	•	•	•	•	
30		30	•	•	•	•	•	

Ⓢ The dimensions of CBSTS is shown in ().
Ⓢ Hex Wrench for M2 and M2.5 P.2395

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

Part Number Example
Part Number: CBSA6-12



Ultra Low Hexagon Socket Head Cap Screws

Hexalobular / Hexagon Sockets

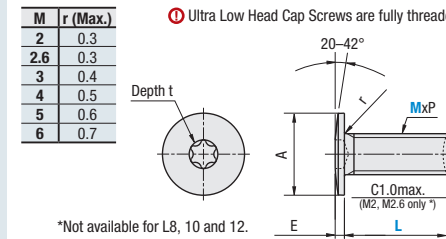
Ultra Low Socket Head Cap Screws - Hexalobular



RoHS10

Type	Material	Hardness	Surface Treatment
CBSSE	Cold Forged Carbon Steel Wire	HV 400 min.	Nickel Plating
CBSKE	SWCH Carbon Steel 12-18 Carbon Wire Steel (JIS)		Black Nickel Plating
CBSTSE	304 Stainless Steel or Equivalent	—	—

Ⓢ Ultra Low Head Cap Screws are fully threaded.

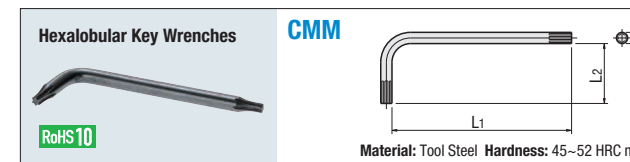


*Not available for L8, 10 and 12.

Part Number	Available Types									
	Type	M - L	M x P	A	E	Hexalobular Socket Number	t min.	CBSSSE	CBSKE	CBSTSE
CBSSE CBSKE CBSTSE	2 - 3	2 - 3	2 x 0.4	4	0.5	4	0.4	•	•	•
	4	4	2.5 x 0.45	5	0.6	5	0.5	•	•	•
	5	5	3 x 0.5	6	0.6	6	0.5	•	•	•
	6	6	4 x 0.7	8	0.9	8	0.9	•	•	•
	8	8	5 x 0.8	9	1	10	1	•	•	•
	10	10	6 x 1.0	12	1.2	20	1.2	•	•	•
	12	12						•	•	•
	14	14						•	•	•
	16	16						•	•	•
	18	18						•	•	•
	20	20						•	•	•
	25	25						•	•	•

Ⓢ CBSSE and CBSKE are carburized. Carburization is the process where carbon diffused into the steel surface is heat treated to make surface harder.
Ⓢ Select screws from hexalobular socket numbers.

Thread	Tightening Torque	
	N - m	
M2	0.16	0.23
M2.6	0.35	0.46
M3	0.6	0.72
M4	1.1	1.7
M5	2.2	3.4
M6	5	6.2



Part Number	Hexalobular Socket	(L ₁)	(L ₂)	d
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	4
CMM-15	15	54	18	4
CMM-20	20	57	19	4

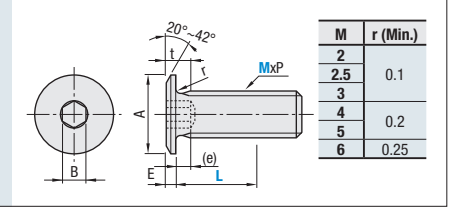
Ⓢ L₁ and L₂ are reference values.

Ultra Low Socket Head Cap Screws - Hexagon



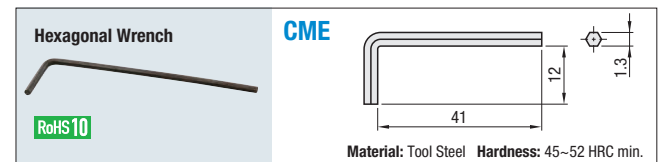
RoHS10

Type	Material	Hardness	Surface Treatment
CBSTSR	304 Stainless Steel	—	—
CBSTBR	4137 Alloy Steel	HV320-380	Nickel Plating (Black)
CBSTNR			Nickel Plating (White)



Part Number	Available Types							
	Type	M - L	M x P	A	B	E	t max.	(e) max.
CBSTSR CBSTNR CBSTBR	2 - 3	2 - 3	2 x 0.4	4	1.27	0.5	1.2	1.2
	4	4	2.5 x 0.45	5	1.27	0.6	1.5	1.2
	5	5	3 x 0.5	6.0	1.5	0.8	2.0	1.4
	6	6	4 x 0.7	8.0	2.0	0.9	2.5	1.5
	8	8	5 x 0.8	9.0	2.5	1.0	3.0	1.8
	10	10	6 x 1.0	10	3.0	1.2	4.0	2.2
	12	12						
	14	14						
	16	16						
	18	18						
	20	20						
	25	25						

Thread Size M	Tightening Torque		Head Side Tensile Strength	
	N - m		N/mm ²	
M2	0.16	0.23	200	300
M2.5	0.35	0.46	350	460
M3	0.6	0.72		
M4	1.1	1.7		
M5	2.2	3.4		
M6	5	6.2		



Part Number	(L ₁)	(L ₂)	d
CME-0.9	32	10	0.9
CME-1.3	41	12	1.3

Ⓢ Can be used for Hexagon Socket Extra Low Head Cap Screws M2 and M2.5. P.2394

Part Number Example
Part Number: CMM-5
CME-1.3