

## Socket Low Head Cap Screws

# When it comes to Socket Low Head Cap Screws, insist on "Unilok" Here's why :

"UNILOK" Socket Low Head Cap Screws are high strength precision fasteners for use in parts too thin for standard height Socket Head Cap Screws and for applications with limited clearances.

### Feature for feature the superior Socket Low Head Cap Screw

- Smooth, burr-free sockets uniformly concentric and usable to full depth for correct wrench engagement.
- Low head height for thin parts and limited space.

Elliptical fillet-distributes stress effectively and doubles fatigue of the head-to-shank junction, i Rolled threads with radiused ro runout increases fatigue life of threads by reducing stress con tration and avoiding sharp corn

### Controlled forged Socket

Smooth, burr-free sockets, uniformly concentric and usable to full depth for correct wrench engagement

### Accurate low head

Low head height for thin parts and limited space

### Smooth under head fillet

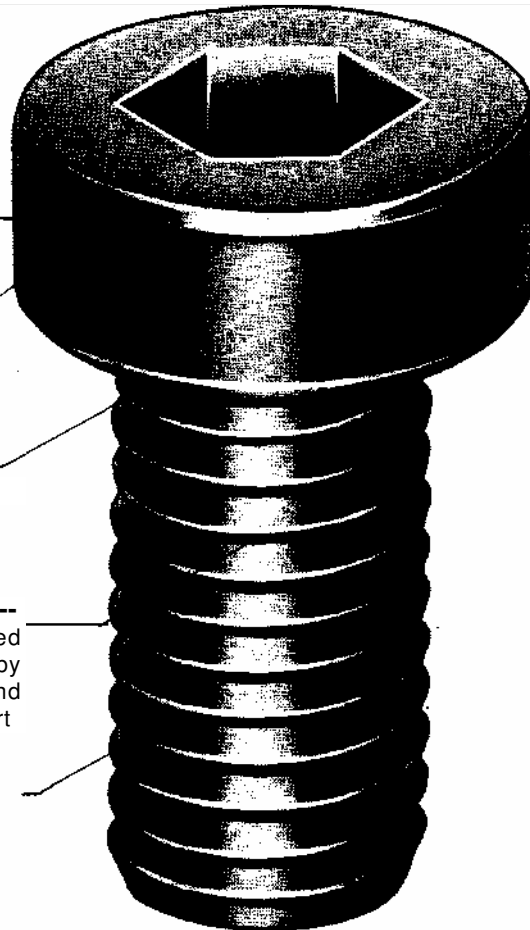
Fillet under head increases fatigue life of head-to-shank junction

### Closely rolled threads -----

Class 4g6g rolled threads with radiused root to increase fatigue life of threads by reducing stress concentrations and avoiding sharp corners where failures start

### High quality -----

Highest standards of quality, material, manufacture and performance



# Socket Low Head Cap Screws

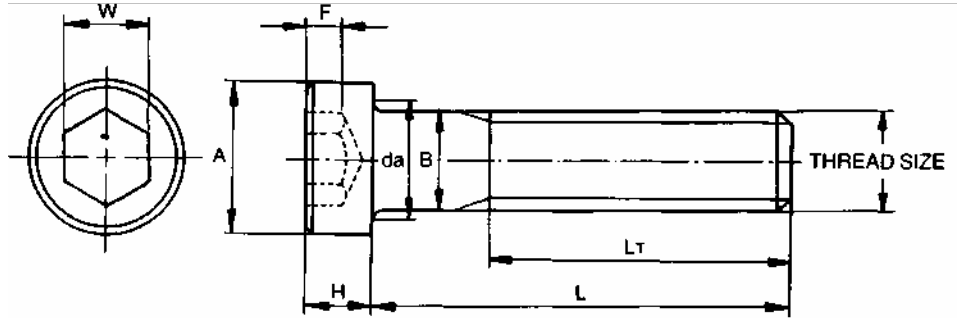


## Metric Series

## Dimensions - Physical Properties - Tightening Torques

### Notes :

1. The screws will generally conform to DIN : 7984 & DIN : 6912.
2. Threads will conform to class 4g6g of IS:4218, ISO-261/965. Coarse Series
3. Screw lengths equal to or shorter than those listed in row 'L' will be threaded to head
4. Material : "UNILOK" High Grade Alloy Steel
5. Heat Treatment : HRc 33-40
6. Property Class : 10.9.
7. All dimensions are in millimeters



Thread Size	M4	M5	M6	M8	M10	M12
Pitch	0.70	0.80	1.00	1.25	1.50	1.75
A Max.	7.0	8.5	10.0	13.0	16.0	18.0
BMax.	4	5	6	8	10	12
FMin.	1.48	1.85	2.09	2.48	3.36	4.26
HMax.	2.8	3.5	4.0	5.0	6.5	8.0
WNom.	3	4	5	6	8	10
da Max.	4.7	5.7	6.8	9.2	11.2	14.2
L	25	25	30	35	40	50,
LT Min.	20	22	24	28	32	36

## Physical Properties

Ultimate tensile strength, Min.	1,040 N/mm <sup>2</sup>	106.0 kgf/mm <sup>2</sup>
Yield strength, 0.2% offset, Min.	940 N/mm <sup>2</sup>	95.8 kgf/mm <sup>2</sup>
Shear strength, Min.	624 N/mm <sup>2</sup>	63.6 kgf/mm <sup>2</sup>
Elongation % on GL = 5.65 VA~ where A = Cross sectional area	9% Min.	

### Note:

The tightening torque calculated to induce 620 N/mm<sup>2</sup> stress in screw threads.

- <sup>^</sup> Torque values listed are for plain screws. For Cadmium plated screws, multiply listed values by 0.75. For Zinc plated screws, multiply listed values by 1.40.

Thread Size	Stress Area mm <sup>2</sup>	Tightening Torque Unplated*		Induced Load	
		Nm	Kgfm	N	Kgf
M4	8.78	4.5	0.46	5,444	555
M5	14.20	8.5	0.87	8,804	897
M6	20.10	14.5	1.48	12,462	1,270
M8	36.60	35.0	3.57	22,692	2,313
M10	58.00	70.0	7.14	35,960	3,665
M12	84.30	120.0	12.23	52,266	5,328