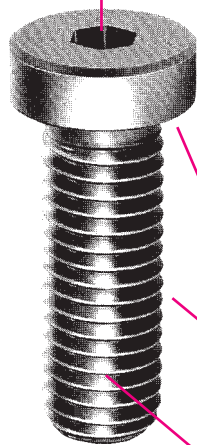


# LOW HEAD CAP SCREWS

## SOCKET HEAD CAP SCREWS ■ Low Head Type



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

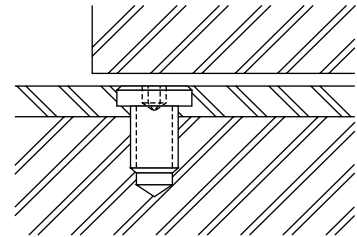
Low head height for thin parts and limited space.

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

Class 3A rolled threads with radiused root to increase fatigue life of threads by reducing stress concentrations and avoiding sharp corners where failures start.

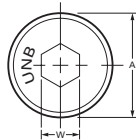
Highest standards of quality, material, manufacture and performance.

High strength, precision fasteners for use in parts too thin for standard height socket cap screw and for applications with limited clearances.



### LENGTH TOLERANCE

Diameter	to 1"	over 1" to 2 1/2"	over 2 1/2"
All	-.03	-.04	-.06



### MECHANICAL PROPERTIES

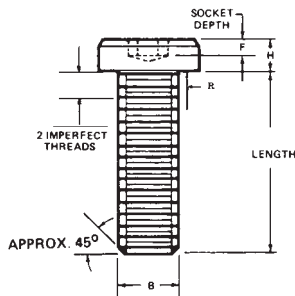
**Material:** ASTM A574 – alloy steel

**Hardness:** Rc 38–43

**Tensile Strength:** 170,000 psi min.

**Yield Strength:** 150,000 psi min.

**NOTE:** Performance data listed are for standard production items only. Non-stock items may vary due to variables in methods of manufacture. It is suggested that the user verify performance on any non-standard parts for critical applications.



nominal size	tensile strength – lbs. min.		single shear strength in threads (calculated lbs.)		recommended* seating torque inch-lbs
	UNRC	UNRF	UNRC	UNRF	
#8	2,380	2,500	1,450	1,570	25
#10	2,980	3,400	1,700	2,140	35
1/4"	5,410	6,180	3,090	3,900	80
5/16"	8,910	9,870	4,930	6,210	157
3/8"	13,200	14,900	7,450	9,400	278
1/2"	24,100	27,200	13,600	17,100	667

### DIMENSIONS

nom. size	basic screw diameter	threads per inch		A		B	F	H		R fillet extension		W
		UNRC	UNRF	max.	min.	basic	min.	max.	min.	max.	min.	nom.
#8	.164	32	36	.270	.265	0.1640	.060	.085	.079	.012	.007	.0781
#10	.190	24	32	.312	.307	0.1900	.072	.098	.092	.014	.009	.0938
1/4"	.250	20	28	.375	.369	0.2500	.094	.127	.121	.014	.009	.1250
5/16"	.312	18	24	.437	.431	0.3125	.110	.158	.152	.017	.012	.1562
3/8"	.375	16	24	.562	.556	0.3750	.115	.192	.182	.020	.015	.1875
1/2"	.500	13	20	.750	.743	0.5000	.151	.254	.244	.026	.020	.2500

**Thread Length:** On all stock lengths the last complete (full form) thread measured with a thread ring gage extends to within two threads of the head.

**Threads:** Threads are Class 3A UNRC and UNRF.

\*Torque calculated to induce approximately 50,000 psi tensile stress in the screw threads (See Note, page 1).