



CAPSCREWS

CAPSCREWS IN SAE-429 - GRADES 2, 5, & 8

- Manufactured to meet the dimensions of ASME / ANSI B18.2.1, proportioned and toleranced to ensure proper loading when assembled in a tapped hole.
- Capscrews can be used with a nut (like a bolt).
- Washer face under the head provides a bearing surface when tightened.
- Capscrews are chamfered to aid in insertion into a tapped hole.

SAE J429 GRADE 2

- Available in 1/4" through 1-1/4" diameters (except 7/16" & 9/16") up to 10" in length.
- **Finishes:** All standard commercial finishes available.
- **Pitch(s):** Coarse thread only.
- Grade 2 orders may be subject to minimum order quantities.

SAE J429 GRADES 5 & 8

- Available in 1/4" through 1-1/4" diameters up to 10" in length.
- **Finishes:** All standard commercial finishes available.
- **Pitch(s):** Coarse & fine threads.

MECHANICAL PROPERTIES OF CAPSCREWS

GRADE	SIZE	PROOF STRESS (PSI)	TENSILE STRESS MIN. (PSI)	SURFACE HARDNESS	CORE HARDNESS ROCKWELL
2	1/4" - 3/4" OVER 3/4"		74,000 60,000		B70 MIN. B100 MAX.
5	1/4" - 1" OVER 1" - 1-1/2"	85,000 74,000	120,000 105,000	54 MAX. 50 MAX.	C25 - C34 C19 - C30
8	1/4" - 1-1/2"	120,000	150,000	58.6 MAX.	C33 - C39

PROOF LOAD & THREAD TENSILE STRENGTH REQUIREMENTS

Coarse Thread Series - UNC

NOMINAL DIE OF PRODUCTS AND THREADS PER INCH	GRADE 2 PROOF LOAD, LB.	TENSILE STRENGTH MIN, LB.	GRADE 5 PROOF LOAD, LB.	TENSILE STRENGTH MIN, LB.	GRADE 8 PROOF LOAD, LB.	TENSILE STRENGTH MIN, LB.
1/4 - 20	1750	2350	2700	3800	3800	4750
5/16 - 18	2900	3900	4450	6300	6300	7850
3/8 - 16	4250	5750	6600	8300	8300	11,600
7/16 - 14	5850	7850	9050	12,800	12,800	15,900
1/2 - 13	7800	10,500	12,100	17,000	17,000	21,300
9/16 - 12	10,000	13,500	15,500	21,800	21,800	27,300
5/8 - 11	12,400	16,700	19,200	27,100	27,100	33,900
3/4 - 10	18,400	24,700	28,400	40,100	40,100	50,100
7/8 - 9	15,200	27,700	39,300	55,400	55,400	69,300
1 - 8	20,000	38,400	51,500	72,700	72,700	80,900

Fine Thread Series - UNC

1/4 - 28	2000	2700	3100	4350	4350	5450
5/16 - 24	3200	4300	4900	6950	6950	8700
3/8 - 24	4800	6500	7450	10,500	10,500	13,200
7/16 - 20	6550	8800	10,100	14,200	14,200	17,800
1/2 - 20	6800	11,800	13,600	19,200	19,200	24,000
9/16 - 18	11,200	15,000	17,300	24,400	24,400	30,400
5/8 - 18	14,100	18,900	21,600	30,700	30,700	38,400
3/4 - 16	20,500	27,600	31,700	44,800	44,800	56,000
7/8 - 14	16,800	30,500	43,300	61,100	61,100	76,400
1 - 12	21,900	39,800	58,400	79,600	79,600	99,400

LARGER DIAMETERS & LONGER LENGTHS AVAILABLE

