

# FICHA TECNICA

## TORQUE PERNOS HEXAGONALES



### A-490

#### ASTM A490

Bolt Size	TPI	Tension (lbs)		Tightening Torque Range (ft lbs) (Min - Max)	
		Min	Max	Lubricated	Plain
1/2	13	15,000	18,000	63 - 75	125 - 150
5/8	11	24,000	29,000	125 - 151	250 - 302
3/4	10	35,000	42,000	219 - 263	438 - 525
7/8	9	49,000	59,000	357 - 430	715 - 860
1	8	64,000	77,000	533 - 642	1,067 - 1,283
1 1/8	7	80,000	96,000	750 - 900	1,500 - 1,800
1 1/4	7	102,000	122,000	1,063 - 1,271	2,125 - 2,542
1 3/8	6	121,000	145,000	1,386 - 1,661	2,773 - 3,323
1 1/2	6	148,000	178,000	1,850 - 2,225	3,700 - 4,450