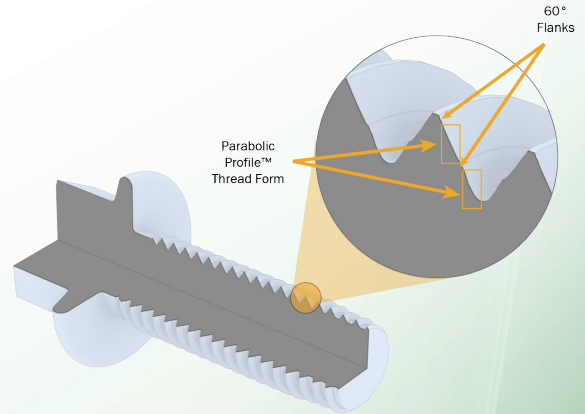




# TAPTITE PRO<sup>®</sup> FASTENERS

FEATURING THE INNOVATIVE RADIUS PROFILE™ THREAD

TAPTITE PRO<sup>®</sup> thread forming screws advance current thread forming technology with the development of the Parabolic Profile™ thread form. The innovative new thread form, when combined with the proven Trilobular™ cross section, provides low thread forming torque, excellent resistance to vibrational loosening along with high axial pullout and reduced overall cost of assembly. In addition to these great benefits, TAPTITE PRO<sup>®</sup> screws maintain torque tension relationships comparable to machine screws of equivalent size. TAPTITE PRO<sup>®</sup> fasteners also provide an improved failure mode; as a result of over-tightening in standard lengths of engagement, the screw will fracture within the screw threads.



## ADVANTAGES

- ▶ Deep thread engagements generates strong mating threads with uninterrupted grain flow
- ▶ No assembly line crossthreading
- ▶ Superior vibration resistance eliminates need for add-on locking devices
- ▶ Eases assembly - low end load to initiate thread forming, less operator fatigue

## MAINTAINS

- ▶ Axial alignment
- ▶ Low end load
- ▶ Low thread-forming torque
- ▶ Efficient torque-tension relationships
- ▶ Resistance to vibrational loosening
- ▶ Resistance to axial pull-out

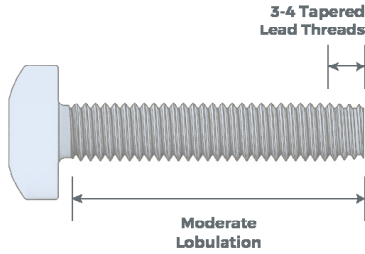
## PREDICTABLE FAILURE MODE

TAPTITE PRO<sup>®</sup> thread-forming fasteners feature a predictable failure mode that eliminates stripping issues. When properly used in standard lengths of engagement, overtightened TAPTITE PRO<sup>®</sup> fasteners will fracture within the screw threads. Rather than replacing or repairing costly nut members or castings, an overtightened joint will now consistently result in a broken fastener that can quickly be removed with a screw extractor. This design improvement was accomplished without sacrificing any tensile or torsional strength requirements.

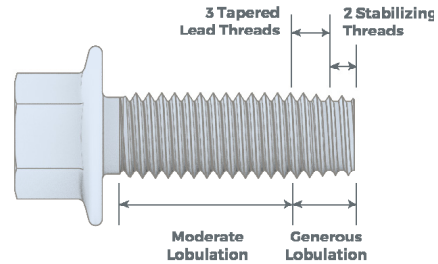




**SCREW BODY DIMENSIONS**



**TAPTITE PRO® (M5 OR #12 AND SMALLER)**



**TAPTITE PRO® (M6 OR 1/4" AND LARGER)**

**METRIC SIZES (MM)**

SCREW SIZE	C(MAX)	C(MIN)	D(MAX)	D(MIN)
M1.0 X 0.25	1.000	0.955	0.975	0.924
M1.2 X 0.25	1.200	1.155	1.175	1.124
M1.4 X 0.30	1.405	1.355	1.375	1.317
M1.6 X 0.35	1.61	1.53	1.58	1.49
M1.8 X 0.35	1.81	1.73	1.78	1.69
M2.0 X 0.40	2.01	1.93	1.97	1.88
M2.2 X 0.45	2.21	2.12	2.17	2.06
M2.5 X 0.45	2.52	2.43	2.48	2.37
M3.0 X 0.50	3.02	2.93	2.97	2.87
M3.5 X 0.60	3.52	3.42	3.46	3.35
M4.0 X 0.70	4.02	3.92	3.95	3.83
M4.5 X 0.75	4.52	4.41	4.45	4.32
M5.0 X 0.80	5.02	4.91	4.94	4.81
M6.0 X 1.00	6.10	5.97	6.00	5.85
M7.0 X 1.00	7.10	6.97	7.00	6.85
M8.0 X 1.25	8.13	7.97	8.00	7.81
M9.0 X 1.25	9.13	8.97	9.00	8.81
M10 X 1.50	10.15	9.97	10.00	9.78
M12 X 1.75	12.18	11.97	12.00	11.75
M14 X 2.00	14.20	13.97	14.00	13.72
M16 X 2.00	16.20	15.97	16.00	15.72
M18 X 2.50	18.25	17.97	18.00	17.66
M20 X 2.50	20.25	19.97	20.00	19.66

**INCH SIZES (IN)**

SCREW SIZE	C(MAX)	C(MIN)	D(MAX)	D(MIN)
0 - 80	0.0626	0.0586	0.0613	0.0570
2 - 56	0.0880	0.0840	0.0862	0.0818
3 - 48	0.1010	0.0970	0.0989	0.0944
4 - 40	0.1138	0.1098	0.1113	0.1067
5 - 40	0.1268	0.1228	0.1243	0.1197
6 - 32	0.1413	0.1353	0.1382	0.1314
8 - 32	0.1674	0.1614	0.1643	0.1575
10 - 24	0.1934	0.1874	0.1892	0.1822
10 - 32	0.1936	0.1876	0.1905	0.1837
12 - 24	0.2194	0.2134	0.2152	0.2082
1/4 - 20	0.2550	0.2490	0.2500	0.2440
5/16 - 18	0.3180	0.3120	0.3125	0.3065
3/8 - 16	0.3810	0.3750	0.3745	0.3685
7/16 - 14	0.4445	0.4385	0.4375	0.4315
7/16 - 20	0.4425	0.4365	0.4375	0.4315
1/2 - 13	0.5075	0.5015	0.5000	0.4940
9/16 - 12	0.5710	0.5630	0.5625	0.5545
5/8 - 11	0.6340	0.6260	0.6250	0.6170