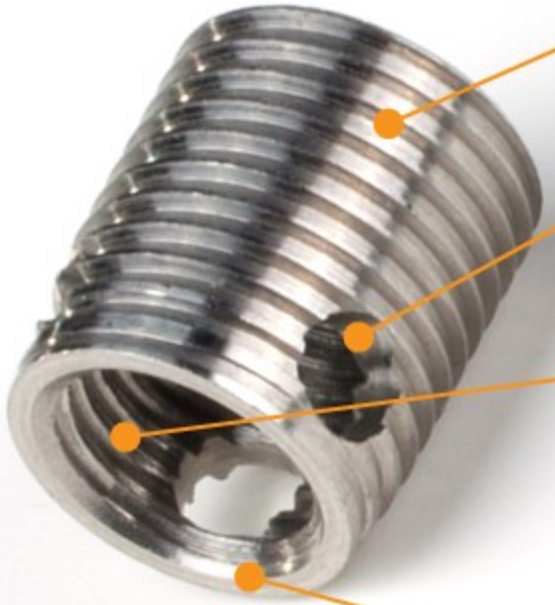
Technical Performance

Tap-Lok® Hole Series

- Highest pull-out resistance.
- Suitable for harder materials.
- Superior vibration resistance.
- One-step installation.
- Available certified to military standards

Hole Series threaded inserts are designed for use in tough-to-tap, high-strength materials as well as softer metals and plastics.



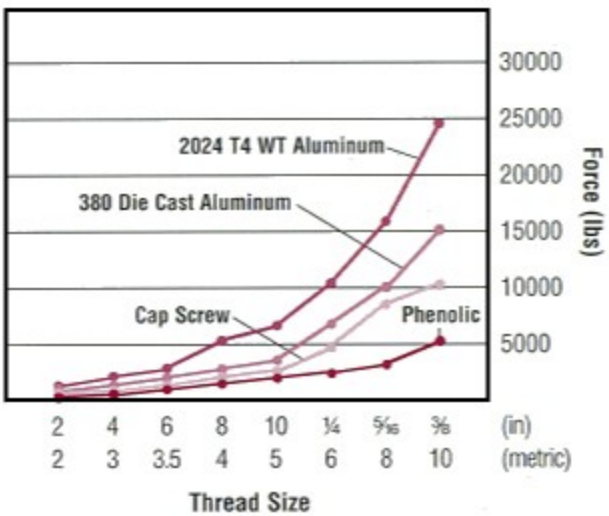
Superior pull-out resistance in softer metals and plastics from the external v-form thread.

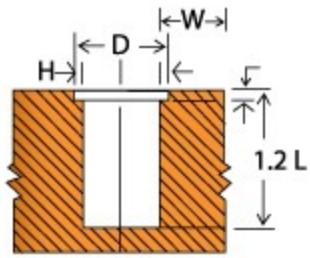
Circular cutting elements self-tap and lock into the base material. They are able to resist extreme vibration with no loss in performance.

High-quality internal threads are wear resistant, Unified and American Standard, class 2B, or ISO Metric standard, class 6H threads. Military version conform to Unified and American Standard, colass 3B.

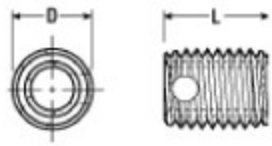
This threaded insert is a solid metal bushing that is **available in stainless steel, steel with zinc plating, or steel with cadmium plating in regular, medium or short length.**

Pull-Out Resistance or Tensile Strength





STRAIGHT HOLE
WITH COUNTERBORE



Performance Data

Internal Thread Size (in)	Internal Thread Size (metric)	Effective Shear Area (in)²	Pull-Out Resistance (lb) Phenolic (9,500 PSI Shear)	Pull-Out Resistance (lb) 380 Die Cast Aluminum (26,000 PSI Shear)	Pull-Out Resistance (lb) 2024 T4 Wrought Aluminum (40,000 PSI Shear)	Tensile Strength (lb) of 160,000 PSI Heat-Treated Cap Screw (in)	Tensile Strength (lb) of 160,000 PSI Heat-Treated Cap Screw (metric)
2	2	.040	380	1040	1600	–	510
4	3	.060	570	1560	2400	910	1250
6	3.5	.090	860	2340	3600	1370	1680
8	4	.130	1290	3380	5200	2120	2180
10	5	.170	1620	4420	6800	2825	3520
¼	6	.270	2570	7020	10800	4800	4980
5⁄16	8	.410	3900	10660	16400	7900	9080
3⁄8	10	.610	5700	15860	24400	11700	14320
7⁄16	–	.780	7410	20280	31200	16050	–
½	12	1.040	9880	27040	41600	21550	20910
9⁄16	14	1.230	11590	31720	48800	27200	28520
5⁄8	16	1.610	15300	41860	64400	34200	38940
¾	18	2.360	22420	61360	94400	50500	–

** Representative performance data for regular length. Preproduction prototype testing recommended for your application.*

Specifications

Inch Sizes		Metric Sizes		D	L Length			H	C
Internal Threads	Basic Part Number	Internal Threads	Basic Part Number	External Diameter	Regular (prefix H)	Medium (prefix HM)	Short (prefix HS)	Recommended Hole Diameter	Counterbore Diameter Depth
2-56	08656	M2 x 0.4	02040	.141	.188	.156	.125	.127	.030
4-40	11240	M3 x 0.5	03050	.172	.234	.187	.156	.159	.030
6-32	13832	M3.5 x 0.6	03560	.219	.281	.218	.187	.204	.030
8-32	16432	M4 x 0.7	04070	.250	.328	.250	.218	.235	.030
10-24 10-32	19024 19032	M5 x 0.8	05080	.297	.375	.296	.250	.278	.040
1/4-20 1/4-28	25020 25028	M6 x 1.0	06010	.375	.484	.375	.312	.352	.050
5/16-18 5/16-24	31218 31224	M8 x 1.25	08012	.469	.562	.469	.375	.443	.055
3/8-16 3/8-24	37516 37524	M10 x 1.5	10015	.563	.687	.562	.437	.533	.060
7/16-14 7/16-20	43714 43720	–	–	.640	.781	.656	.500	.608	.070
1/2-13 1/2-20	50013 50020	M12 x 1.75	12017	.734	.906	.750	.562	.697	.075
9/16-12 9/16-18	56212 56218	M14 x 2.0	14020	.813	1.000	.844	.625	.772	.080
5/8-11 5/8-18	62511 62518	M16 x 2.0	16020	.906	1.125	.937	.687	.862	.090
3/4-10 3/4-16	75010 75016	M18 x 2.0	18020	1.078	1.375	1.125	.812	1.029	.100

PART NUMBER SPECIFICATIONS = Length Prefix + Basic Part Number + Material Suffix

Example: 10-32 Medium-length, steel Hole Series threaded insert with zinc plating
HM-19032-14

M3 x 0.5 Short-length, stainless steel Hole Series threaded insert
HS-03050-50

Military Specifications: Military version conforms to MS35914.
Contact Customer Service for ordering information.

LENGTH PREFIX

H = Regular HM = Medium HS = Short

MATERIAL SUFFIX

12 = Case-hardened, cadmium-plated steel
14 = Case-hardened, zinc-plated steel
50 = Stainless steel