Technical Performance

Speedserts® Series

- Very high pull-out resistance.
- Suitable for a wide range of softer metals and plastics.
- Symmetric design for automatic feeding.
- One-step installation.
- No metal chips.

Speedserts®, self-threading inserts form strong threads in softer metals and plastics for a very high pull-out resistance. Their locking action makes them very resistant to vibration.

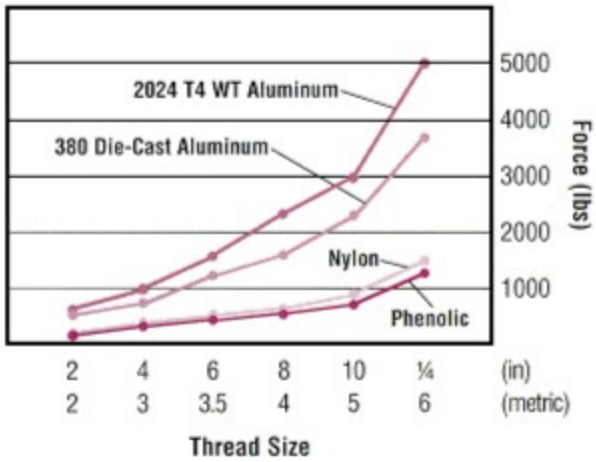
Ideal for automatic feed installations. Symmetrical design allows inserts to be installed using either end.

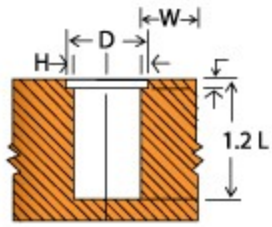
Exterior lobes are designed to roll through the base material and lock the insert in place without leaving chips behind. The wave gently rolls though the base material pushing it back and then allowing it to returnbehind the wave crest to securely lock the insert in place.

High-quality internal threads are wear resistant. Unified and American Standard, class 2B, or ISO Metric standard, class 6H threads.

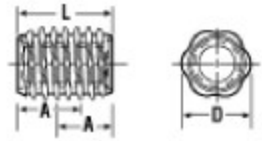
Speedserts® threaded insert are available in **stainless steel in regular, medium, or short lengths.**

Pull-Out Resistance





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)	Nylon (12,000 PSI Shear)	380 Die Cast Aluminum (30,000 PSI Shear)	2024 T4 Wrought Aluminum (40,000 PSI Shear)
2	2	.015	140	180	450	600
4	3	.025	240	300	750	1000
6	3.5	.040	380	480	1200	1600
8	4	.055	520	660	1650	2200
10	5	.075	710	900	2250	3000
¼	6	.125	1190	1500	3750	5000

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

Specifications

Inch Sizes		Metric Sizes		D	L	A	H Recommended Hole Diameter		C
Internal Threads	Basic Part Number	Internal Threads	Basic Part Number	Diameter	Length*	Internal Lock Location*	Plastics	Aluminum	Counterbore Depth
2-56	SP0256	M2 x 0.4	SPM2 x 0.4	.138	.190	.120	.125	.128	.020
	SPA0256		SPAM2 x 0.4	.138	.160	NA	.125	.128	.020
	SPB0256		SPBM2 x 0.4	.138	.120	NA	.125	.128	.020
4-40	SP0440	M3 x 0.5	SPM3 x 0.5	.172	.230	.150	.155	.161	.040
	SPA0440		SPAM3 x 0.5	.172	.190	.130	.155	.161	.040
	SPB0440		SPBM3 x 0.5	.172	.160	NA	.155	.161	.040
6-32	SP0632	M3.5 x 0.6	SPM3.5 x 0.6	.216	.280	.190	.197	.204	.040
	SPA0632		SPAM3.5 x 0.6	.216	.220	.160	.197	.204	.040
	SPB0632		SPBM3.5 x 0.6	.216	.190	NA	.197	.204	.040
8-32	SP0832	M4 x 0.7	SPM4 x 0.7	.253	.330	.210	.234	.237	.040
	SPA0832		SPAM4 x 0.7	.253	.250	.170	.234	.237	.040
	SPB0832		SPBM4 x 0.7	.253	.220	NA	.234	.237	.040
10-24	SP1024	M5 x 0.8	SPM5 x 0.8	.280	.370	.240	.253	.263	.050
	SPA1024		SPAM5 x 0.8	.280	.300	.210	.253	.263	.050
	SPB1024		SPBM5 x 0.8	.280	.250	NA	.253	.263	.050
10-32	SP1032			.280	.370	.230	.253	.263	.050
	SPA1032			.280	.300	.200	.253	.263	.050
	SPB1032			.280	.250	NA	.253	.263	.050
¼-20	SP420	M6 x 1.0	SPM6 x 1.0	.370	.490	.320	.340	.348	.050
	SPA420		SPAM6 x 1.0	.370	.370	.260	.340	.348	.050
	SPB420		SPBM6 x 1.0	.370	.312	NA	.340	.348	.050
¼-28	SP428			.370	.490	.290	.340	.348	.050
	SPA428			.370	.370	.230	.340	.348	.050
	SPB428			.370	.312	NA	.340	.348	.050

PART NUMBER SPECIFICATION = Length prefix + Metric prefix + Lock prefix + Internal threaded size

Example: 10-32 Medium-length, threaded insert
SPA1032

3 x 0.5 Regular-length, metric threaded insert with internal lock
SPML3 x 0.5

NA = Not Available

***LENGTH PREFIX**
SP = Regular SPA = Medium SPB = Short

METRIC PREFIX
(None) = Inch size
M = Metric

+LOCK PREFIX
(None) = Non-locking threaded insert with passivation
L = Locking threaded insert with dry-lubricant finish