



EDZ

Expansion Diamond Zerts

FEATURES

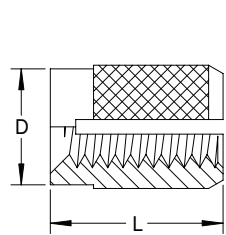
- Simple press-in installation for most thermoplastics.
- Mating screw resistant to loosening after installation.
- Reverse-headed style provides excellent jack-out resistance.



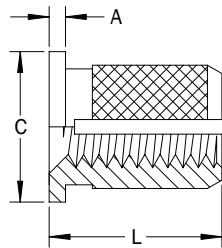
PART DESCRIPTION EXAMPLE

EDZ	—	632	—	249
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Series Code		Insert Thread Code		Insert Length Code

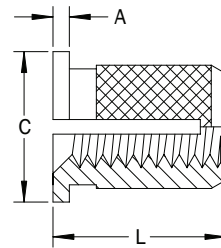
Standard material is brass. Custom materials and finishes available by request.



Insert
Series Code EDZ



Headed Insert
Series Code EDZH



Reverse-Headed Insert
Series Code EDZR

EDZ Expansion Diamond Zerts

GENERAL

	Insert Thread	Insert Thread Code	Boss		A Head Thickness	C Head Diameter	D Insert Diameter
			B Hole Dia. +.004 -.000	W Wall Thickness Min.			
INCH	2-56	256	.126	.094	.017	.187	.124
	4-40	440	.157	.126	.020	.218	.156
	6-32	632	.189	.142	.026	.250	.186
	8-32	832	.220	.157	.032	.281	.217
	10-24	1024	.252	.189	.039	.312	.249
	10-32	1032	.252	.189	.039	.312	.249
	1/4-20	2520	.315	.236	.049	.375	.311
	1/4-28	2528	.315	.236	.049	.375	.311
	5/16-18	3118	.378	.276	.049	.437	.374
	5/16-24	3124	.378	.276	.049	.437	.374

(1) All dimensions are in inches and reference unless toleranced.

	Insert Thread	Insert Thread Code	Boss		A Head Thickness	C Head Diameter	D Insert Diameter
			B Hole Dia. +0.10 -0.00	W Wall Thickness Min.			
METRIC	M2 x 0.4	M2	3.20	2.40	0.43	4.80	3.20
	M2.5 x 0.45	M2.5	4.00	3.20	0.51	5.50	4.00
	M3 x 0.5	M3	4.00	3.20	0.51	5.50	4.00
	M3.5 x 0.6	M3.5	4.80	3.60	0.66	6.40	4.70
	M4 x 0.7	M4	5.60	4.00	0.82	7.10	5.50
	M5 x 0.8	M5	6.40	4.80	0.99	7.90	6.30
	M6 x 1.0	M6	8.00	6.00	1.25	9.50	7.90
	M8 x 1.25	M8	9.60	7.00	1.25	11.10	9.50

(1) All dimensions are in millimeters and reference unless toleranced.

INSERT LENGTH

INCH	Insert Thread	L Insert Length	Insert Length Code
	2-56	.155 ²	155
	4-40	.138	138
		.186 ²	186
	6-32	.138	138
		.249 ²	249
	8-32	.197	197
		.312 ²	312
	10-24 10-32	.236	236
		.371 ²	371
1/4-20 1/4-28	.374	374	
	.497 ²	497	
5/16-18 5/16-24	.374	374	
	.497 ²	497	

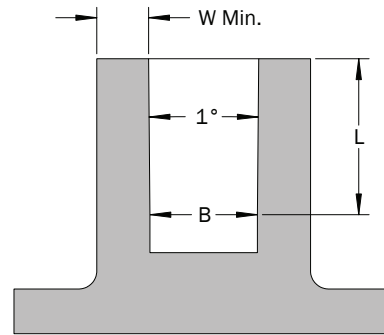
- (1) All dimensions are in inches and reference unless toleranced.
- (2) Preferred length.
- (3) Custom insert lengths available by request.

METRIC	Insert Thread	L Insert Length	Insert Length Code
	M2 x 0.4	3.90 ²	3.90
	M2.5 x 0.45	4.70 ²	4.70
	M3 x 0.5	3.50	3.50
		4.70 ²	4.70
	M3.5 x 0.6	3.50	3.50
		6.30 ²	6.30
	M4 x 0.7	5.00	5.00
		7.90 ²	7.90
	M5 x 0.8	6.00	6.00
		9.40 ²	9.40
	M6 x 1.0	9.50	9.50
		12.60 ²	12.60
	M8 x 1.25	9.50	9.50
		12.60 ²	12.60

- (1) All dimensions are in millimeters and reference unless toleranced.
- (2) Preferred length. Custom insert lengths available by request.
- (3) Custom insert lengths available by request.

BOSS DESIGN RECOMMENDATION

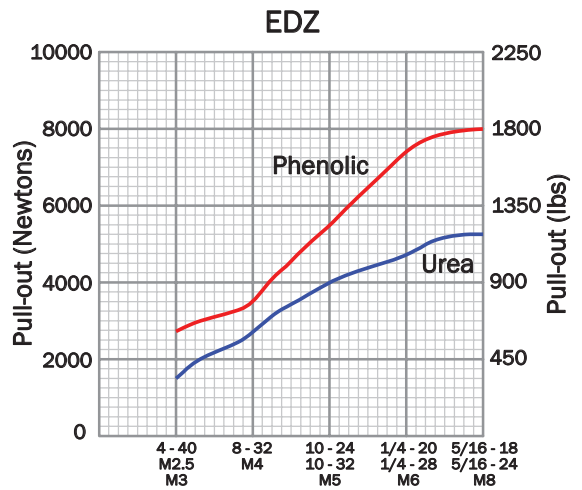
The EDZ Expansion Diamond Zert is designed to be installed into a straight hole with a 1° inclusive taper. The top of the hole should not be countersunk or counterbored as this will decrease the insert's performance. The recommended hole size applies at the point reached by the bottom of the insert. Molded holes should be used wherever possible as drilled holes may result in diminished performance. Minimum boss wall thicknesses shown are for reference and may vary depending on the type of plastic.



INSTALLATION

Press the insert into the boss using a squeezing action – never a hammer blow. Ensure that the insert maintains axial alignment during installation to prevent tilting which will induce side loads on the boss. Oversize boss holes weaken the insert's self-aligning characteristics causing side loads which may lead to possible boss cracking. Install a fixing screw with sufficient length to fully penetrate the insert and achieve maximum expansion prior to applying full clamping load. The EDZR Reverse-headed Insert should be mounted with the head on the back of the molding.

PERFORMANCE



(1) Performance data shown is for preferred insert lengths and reference only. Variations in application, boss material type and size, and installation method will affect the loads. PENCOM strongly encourages testing in the application.