

INSERTS FOR THERMOPLASTICS (European Markets Only)

Metallic inserts provide sturdy, reusable threads in plastic materials and help maintain integrity of tensioned joints. Featured in this catalog are PENCOM's ZERTS suitable for use in a wide variety of thermoplastic materials. Installation styles include press-in, self-tapping and mold-in. Brass is the standard insert material but other materials may be available by request. See PENCOM catalog ZERTS INSERTS FOR PLASTICS for information on plastic material types, installation methods, and application design. ZERTS INSERTS FOR THERMOPLASTICS are only offered in European markets.

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Press-In Inserts



TMZ Barbed Press-In Zerts

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Free-running press-in inserts with an aggressive barb design suitable for a multitude of applications. Available in a wide variety of thread, length, non-headed and headed options.



TMBH Mini-Barbed Press-In Zerts

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Shorter versions of the headed TMZ's but with larger knurl diameters for mainly pull-thru applications in thin material sections.

Self-Tapping Inserts

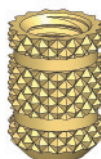


TAZ Grooved Tapping Zerts

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Coarse external threads and cutting flutes contribute to a reliable and robust post-mold installation. Available in double-ended symmetrical and headed styles.

Mold-In Inserts



TMBZ Molded Blind Pull-Tite Zerts

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Blind-threaded inserts designed to be molded in place. Closed end prevents ingress of plastic during molding.



TMTZ Molded Thru-Hole Pull-Tite Zerts

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Inserts with thru-hole threads. They are ideally suited for applications with thin material sections.

Barbed Press-In Zerts

FEATURES

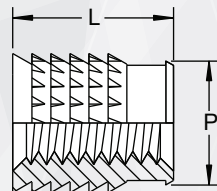
- Simple, press-in installation for thermoplastics.
- Sharp, aggressive barbs provide excellent pull-out resistance.
- Available non-headed and headed in two different head thicknesses and diameters.
- Headed versions reduce the possibility of jack-out where there is a large clearance hole in the mating component, and are also well-suited for pull-thru applications.



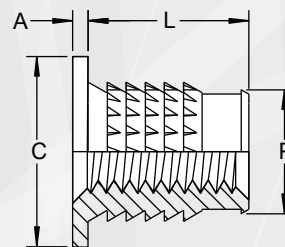
PART DESCRIPTION EXAMPLES

TMZ — M4 — 5.60
 T — T — T
 Series Code Thread Code Length

TMZH — M4 — 5.60 — 1T — LH
 T — T — T — T — T
 Series Code Thread Code Length Head Thickness Code Head Diameter Code



Insert
Series Code TMZ



Headed Insert
Series Code TMZH

TMZ Barbed Press-In Zerts

GENERAL

All dimensions in millimeters

Insert Thread	Insert Thread Code	Series Code	L Length	Head Thickness Code	Head Diameter Code	A Head Thickness	C Head Diameter	P Pilot Diameter
M1.6 x 0.35	M1.6	TMZH	2.14	2T	SH	0.50	3.20	2.06
M2 x 0.4	M2	TMZH	2.14	2T	SH	0.50	4.80	2.74
M2 x 0.4	M2	TMZ	3.10	--	--	--	--	2.74
M2 x 0.4	M2	TMZ	4.20	--	--	--	--	2.74
M2 x 0.4	M2	TMZH	4.20	1T	SH	0.50	4.80	2.74
M2.5 x 0.45	M2.5	TMZ	4.10	--	--	--	--	3.41
M2.5 x 0.45	M2.5	TMZH	4.10	1T	LH	0.75	7.10	3.41
M2.5 x 0.45	M2.5	TMZH	4.10	2T	SH	0.75	5.50	3.41
M2.5 x 0.45	M2.5	TMZ	5.20	--	--	--	--	3.41
M2.5 x 0.45	M2.5	TMZH	5.20	1T	SH	0.75	5.50	3.41
M2.5 x 0.45	M2.5	TMZH	5.20	1T	LH	0.75	7.10	3.41
M3 x 0.5	M3	TMZ	4.10	--	--	--	--	3.41
M3 x 0.5	M3	TMZH	4.10	1T	LH	0.75	7.10	3.41
M3 x 0.5	M3	TMZH	4.10	2T	SH	0.75	5.50	3.41
M3 x 0.5	M3	TMZH	4.10	2T	LH	1.50	7.10	3.41
M3 x 0.5	M3	TMZ	5.20	--	--	--	--	3.41
M3 x 0.5	M3	TMZH	5.20	1T	SH	0.75	5.50	3.41
M3 x 0.5	M3	TMZH	5.20	1T	LH	0.75	7.10	3.41
M3 x 0.5	M3	TMZH	5.20	2T	LH	1.50	7.10	3.41
M3.5 x 0.6	M3.5	TMZ	4.10	--	--	--	--	4.30
M3.5 x 0.6	M3.5	TMZH	4.10	1T	LH	0.75	7.90	4.30
M3.5 x 0.6	M3.5	TMZH	4.10	2T	SH	1.25	6.40	4.30
M3.5 x 0.6	M3.5	TMZH	4.10	2T	LH	1.25	7.90	4.30
M3.5 x 0.6	M3.5	TMZ	7.00	--	--	--	--	4.30
M3.5 x 0.6	M3.5	TMZH	7.00	1T	SH	0.75	6.40	4.30
M3.5 x 0.6	M3.5	TMZH	7.00	1T	LH	0.75	7.90	4.30
M3.5 x 0.6	M3.5	TMZH	7.00	2T	LH	1.25	7.90	4.30
M4 x 0.7	M4	TMZ	5.60	--	--	--	--	5.07
M4 x 0.7	M4	TMZH	5.60	1T	SH	0.75	7.10	5.07
M4 x 0.7	M4	TMZH	5.60	1T	LH	0.75	8.70	5.07
M4 x 0.7	M4	TMZH	5.60	2T	SH	1.50	7.10	5.07
M4 x 0.7	M4	TMZH	5.60	2T	LH	1.50	8.70	5.07

(1) All dimensions are reference unless toleranced.

TMZ Barbed Press-In Zerts

GENERAL (CONTINUED)

All dimensions in millimeters

Insert Thread	Insert Thread Code	Series Code	L Length	Head Thickness Code	Head Diameter Code	A Head Thickness	C Head Diameter	P Pilot Diameter
M4 x 0.7	M4	TMZ	8.50	--	--	--	--	5.07
M4 x 0.7	M4	TMZH	8.50	1T	SH	0.75	7.10	5.07
M4 x 0.7	M4	TMZH	8.50	1T	LH	0.75	8.70	5.07
M4 x 0.7	M4	TMZH	8.50	2T	LH	1.50	8.70	5.07
M5 x 0.8	M5	TMZ	6.60	--	--	--	--	5.65
M5 x 0.8	M5	TMZH	6.60	1T	SH	1.00	7.90	5.65
M5 x 0.8	M5	TMZH	6.60	1T	LH	0.90	11.1	5.65
M5 x 0.8	M5	TMZH	6.60	2T	SH	1.75	7.90	5.65
M5 x 0.8	M5	TMZH	6.60	2T	LH	1.75	11.1	5.65
M5 x 0.8	M5	TMZ	10.1	--	--	--	--	5.65
M5 x 0.8	M5	TMZH	10.1	1T	SH	1.00	7.90	5.65
M5 x 0.8	M5	TMZH	10.1	1T	LH	0.90	11.1	5.65
M5 x 0.8	M5	TMZH	10.1	2T	LH	1.75	11.1	5.65
M6 x 1	M6	TMZ	7.70	--	--	--	--	7.32
M6 x 1	M6	TMZH	7.70	1T	SH	1.30	9.50	7.32
M6 x 1	M6	TMZH	7.70	1T	LH	1.00	12.7	7.32
M6 x 1	M6	TMZH	7.70	2T	SH	2.00	9.50	7.32
M6 x 1	M6	TMZH	7.70	2T	LH	2.00	12.7	7.32
M6 x 1	M6	TMZ	12.3	--	--	--	--	7.32
M6 x 1	M6	TMZH	12.3	1T	SH	1.30	9.50	7.32
M6 x 1	M6	TMZH	12.3	1T	LH	1.00	12.7	7.32
M6 x 1	M6	TMZH	12.3	2T	LH	2.00	12.7	7.32
M8 x 1.25	M8	TMZ	8.30	--	--	--	--	9.83
M8 x 1.25	M8	TMZH	10.1	1T	LH	1.25	14.3	9.83
M8 x 1.25	M8	TMZH	10.1	2T	SH	2.50	12.7	9.83
M8 x 1.25	M8	TMZH	10.1	2T	LH	2.50	14.3	9.83
M8 x 1.25	M8	TMZ	13.8	--	--	--	--	9.75
M8 x 1.25	M8	TMZH	13.8	1T	LH	1.25	14.3	9.75
M8 x 1.25	M8	TMZH	13.8	2T	LH	2.50	14.3	9.75
M10 x 1.5	M10	TMZH	10.1	2T	SH	2.50	14.3	12.12
M10 x 1.5	M10	TMZ	10.5	--	--	--	--	12.12
M10 x 1.5	M10	TMZ	16.1	--	--	--	--	12.01
M12 x 1.75	M12	TMZ	16.1	--	--	--	--	14.51

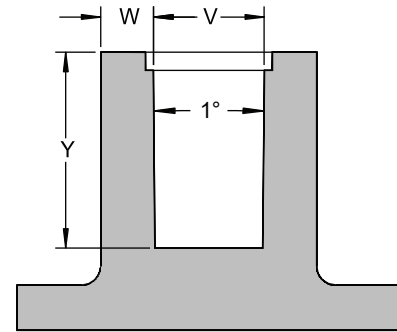
(1) All dimensions are reference unless toleranced.

TMZ Barbed Press-In Zerts

BOSS DIMENSIONS

All dimensions in millimeters

Insert Thread	L Length	Boss		
		V	W	Y
M1.6 x 0.35	2.14	2.30-2.50	1.00	2.20
M2 x 0.4	2.14	3.00-3.30	1.35	2.20
M2 x 0.4	3.10	3.00-3.30	1.35	3.20
M2 x 0.4	4.20	3.00-3.30	1.35	4.30
M2.5 x 0.45	4.10	3.70-4.00	1.70	4.20
M2.5 x 0.45	5.20	3.70-4.00	1.70	5.30
M3 x 0.5	4.10	3.70-4.00	1.70	4.20
M3 x 0.5	5.20	3.70-4.00	1.70	5.30
M3.5 x 0.6	4.10	4.60-5.00	2.25	4.20
M3.5 x 0.6	7.00	4.60-5.00	2.25	7.20
M4 x 0.7	5.60	5.40-5.90	2.50	5.80
M4 x 0.7	8.50	5.40-5.90	2.50	8.70
M5 x 0.8	6.60	6.00-6.50	2.85	6.80
M5 x 0.8	10.1	6.00-6.50	2.85	10.3
M6 x 1	7.70	7.70-8.20	3.20	7.90
M6 x 1	12.3	7.70-8.20	3.20	12.5
M8 x 1.25	8.30	10.2-10.6	4.25	8.50
M8 x 1.25	10.1	10.2-10.6	4.25	10.3
M8 x 1.25	13.8	10.2-10.6	4.25	14.0
M10 x 1.5	10.1	12.5-13.0	5.10	10.3
M10 x 1.5	10.5	12.5-13.0	5.10	10.7
M10 x 1.5	16.1	12.5-13.0	5.10	16.3
M12 x 1.75	16.1	15.0-15.4	5.20	16.3



INSTALLATION

Press the insert into the hole using a squeezing action, not a sharp blow, while maintaining axial alignment to prevent tilting and exerting side loads on the boss. While designed to be cold press-fit, heat or ultrasonic vibration may be used to improve performance by increasing plastic flow around the barbs. Heat installation may be required for use in harder plastics. Drill or mold holes according to the indicated dimensions. Boss dimensions shown are for reference and may vary depending on the type of plastic and application. A counterbore is not required but may reduce plastic mold flash or installation alignment issues.

Mini-Barbed Press-In Zerts

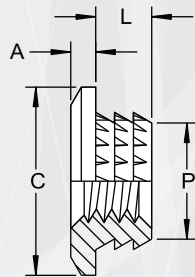
FEATURES

- Simple press-in installation for thermoplastics, and thermoset plastics with tensile strengths less than 100MPa.
- Large head and body diameters provide increased bearing surfaces for thin section materials.
- Well-suited for pull-thru applications.



PART DESCRIPTION EXAMPLE

TMBH — M4 — 3.00
 T — T — T
 Series Code Thread Code Length



Insert
 Series Code TMBH

TMBH Mini-Barbed Press-In Zerts

GENERAL

All dimensions in millimeters

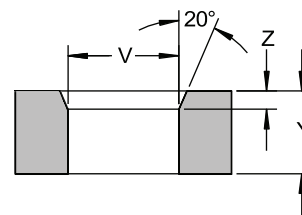
Insert Thread	Insert Thread Code	L Length	A Head Thickness	C Head Diameter	P Pilot Diameter	Rows of Barbs
M2 x 0.4	M2	1.35	0.55	4.90	3.20	2
M2.5 x 0.45	M2.5	1.85	0.85	5.60	4.05	2
M3 x 0.5	M3	1.85	0.85	6.10	4.56	2
M4 x 0.7	M4	3.00	1.00	7.90	6.03	3
M5 x 0.8	M5	3.00	1.40	10.0	7.60	3
M6 x 1	M6	3.00	1.70	12.7	9.45	3
M8 x 1.25	M8	4.55	1.70	14.3	11.45	3
M10 x 1.5	M10	4.55	3.15	16.0	12.95	3

(1) All dimensions are reference unless toleranced.

BOSS DIMENSIONS

All dimensions in millimeters

Insert Thread	Boss		
	V	Y	Z
M2 x 0.4	3.30-3.35	1.45	--
M2.5 x 0.45	4.15-4.20	2.00	--
M3 x 0.5	4.66-4.71	2.00	--
M4 x 0.7	6.13-6.18	3.20	0.25-0.35
M5 x 0.8	7.70-7.75	3.20	0.25-0.35
M6 x 1	9.55-9.60	3.20	0.25-0.35
M8 x 1.25	11.55-11.60	4.75	0.60-0.70
M10 x 1.5	13.05-13.10	4.75	0.60-0.70



INSTALLATION

Press the insert into the hole using a squeezing action, not a sharp blow, while maintaining axial alignment to prevent tilting and exerting side loads on the boss. While designed to be cold press-fit, heat may be used to improve performance by increasing plastic flow around the barbs. Heat installation may be required for use in harder plastics. Ultrasonic vibration is not recommended for headed inserts. Drill or mold holes according to the indicated dimensions. Boss dimensions shown are for reference and may vary depending on the type of plastic and application.

Grooved Tapping Zerts

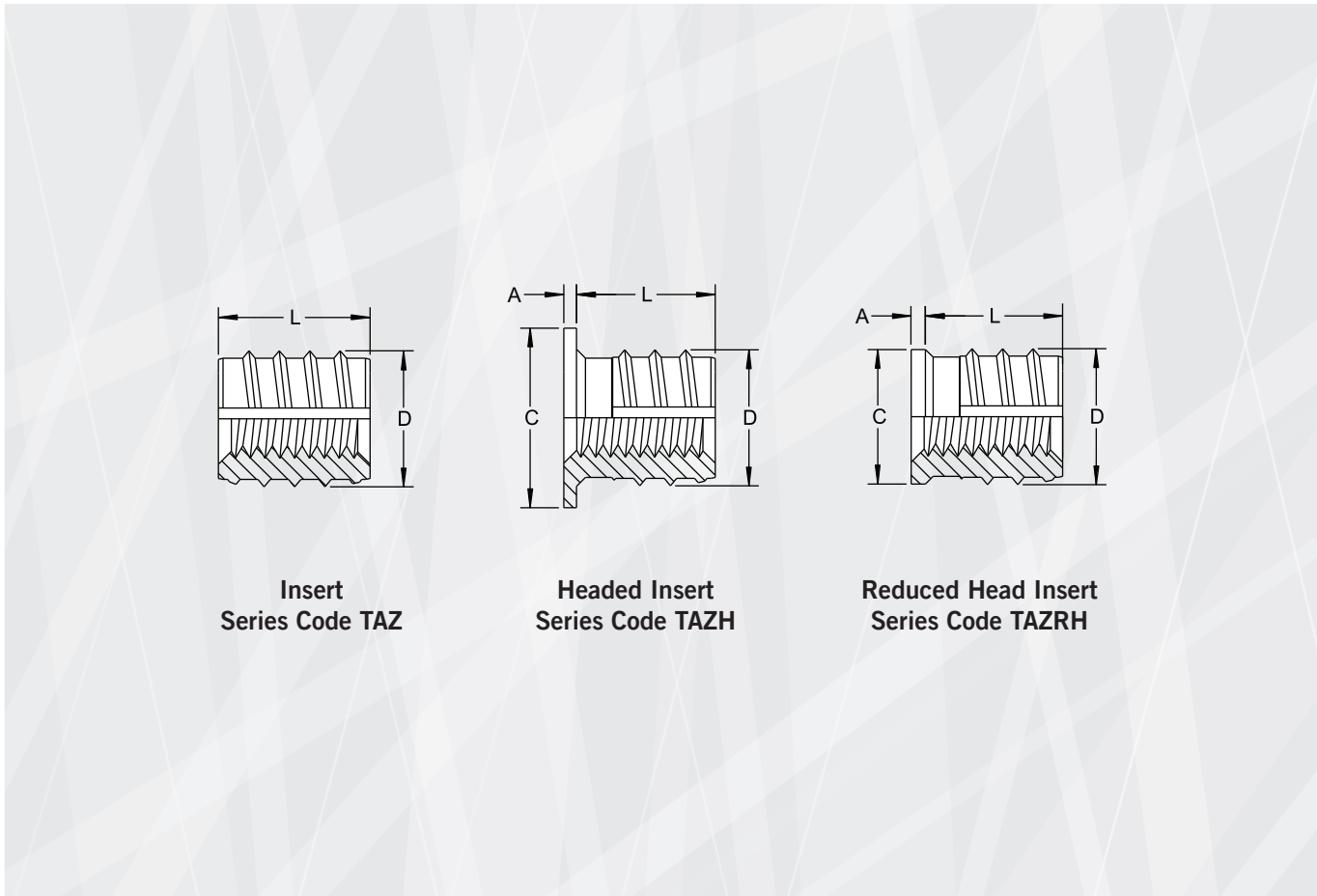
FEATURES

- Coarse external threads and cutting flutes provide a reliable post-mold self-tapping installation in thermoplastics, thermoset plastics and resinous materials.
- Ends of non-headed inserts are symmetrical to assist automatic feeding by eliminating the need for orientation during assembly.
- Headed versions reduce the possibility of jack-out where there is a large clearance hole in the mating component, and are also well-suited for pull-thru applications.



PART DESCRIPTION EXAMPLE

TAZ	—	M4	—	7.10
⏟		⏟		⏟
Series Code		Thread Code		Length



TAZ Grooved Tapping Zerts

GENERAL

All dimensions in millimeters

Insert Thread	Insert Thread Code	Series Code	L Length	A Head Thickness	C Head Diameter	D Insert Diameter
M2 x 0.4	M2	TAZ	4.00	--	--	3.50
M2 x 0.4	M2	TAZ	4.80	--	--	3.50
M2.5 x 0.45	M2.5	TAZ	4.00	--	--	4.33
M2.5 x 0.45	M2.5	TAZH	4.00	0.60	6.35	4.33
M2.5 x 0.45	M2.5	TAZ	5.25	--	--	4.33
M2.5 x 0.45	M2.5	TAZH	5.25	0.60	6.35	4.33
M2.5 x 0.45	M2.5	TAZ	6.25	--	--	4.33
M3 x 0.5	M3	TAZ	4.00	--	--	4.73
M3 x 0.5	M3	TAZH	4.00	0.75	7.10	4.73
M3 x 0.5	M3	TAZ	5.25	--	--	4.73
M3 x 0.5	M3	TAZH	5.25	0.75	7.10	4.73
M3 x 0.5	M3	TAZ	6.25	--	--	4.73
M3 x 0.5	M3	TAZRH	6.25	0.75	4.70	4.73
M3.5 x 0.6	M3.5	TAZ	5.00	--	--	5.52
M3.5 x 0.6	M3.5	TAZH	5.00	0.75	8.30	5.52
M3.5 x 0.6	M3.5	TAZ	6.20	--	--	5.52
M3.5 x 0.6	M3.5	TAZH	6.20	0.75	8.30	5.52
M3.5 x 0.6	M3.5	TAZ	7.30	--	--	5.52
M4 x 0.7	M4	TAZ	5.60	--	--	6.31
M4 x 0.7	M4	TAZH	5.60	0.75	8.70	6.31
M4 x 0.7	M4	TAZ	7.10	--	--	6.31
M4 x 0.7	M4	TAZH	7.10	0.75	8.70	6.31
M4 x 0.7	M4	TAZ	8.40	--	--	6.31
M4 x 0.7	M4	TAZRH	8.40	0.80	6.30	6.31
M5 x 0.8	M5	TAZ	6.40	--	--	7.50
M5 x 0.8	M5	TAZH	6.40	0.90	11.1	7.50
M5 x 0.8	M5	TAZ	8.40	--	--	7.50
M5 x 0.8	M5	TAZH	8.40	0.90	11.1	7.50
M5 x 0.8	M5	TAZ	10.00	--	--	7.50
M5 x 0.8	M5	TAZRH	10.00	0.80	7.50	7.50
M6 x 1	M6	TAZ	7.90	--	--	8.69
M6 x 1	M6	TAZRH	7.90	0.90	8.60	8.69

(1) All dimensions are reference unless toleranced.

TAZ Grooved Tapping Zerts

GENERAL (CONTINUED)

All dimensions in millimeters

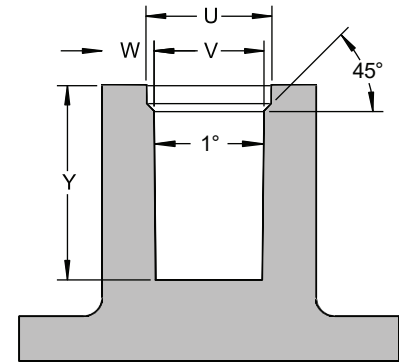
Insert Thread	Insert Thread Code	Series Code	L Length	A Head Thickness	C Head Diameter	D Insert Diameter
M6 x 1	M6	TAZH	7.90	1.00	12.0	8.69
M6 x 1	M6	TAZ	9.80	--	--	8.69
M6 x 1	M6	TAZH	9.80	1.00	12.0	8.69
M6 x 1	M6	TAZ	12.00	--	--	8.69
M6 x 1	M6	TAZRH	12.00	0.90	8.60	8.69
M8 x 1.25	M8	TAZH	7.50	1.25	14.3	11.06
M8 x 1.25	M8	TAZ	9.50	--	--	11.06
M8 x 1.25	M8	TAZ	12.40	--	--	11.06
M8 x 1.25	M8	TAZH	12.40	1.25	14.3	11.06
M8 x 1.25	M8	TAZRH	14.00	1.00	11.1	11.06
M10 x 1.5	M10	TAZ	12.00	--	--	13.95
M10 x 1.5	M10	TAZH	12.00	1.50	18.0	13.95
M10 x 1.5	M10	TAZ	16.00	--	--	13.95
M10 x 1.5	M10	TAZH	16.00	1.50	18.0	13.95

(1) All dimensions are reference unless toleranced.

BOSS DIMENSIONS

All dimensions in millimeters

Insert Thread	L Length	Boss			
		U	V	W	Y
M2 x 0.4	4.00	3.50	3.10-3.30	1.25	4.40
M2 x 0.4	4.80	3.50	3.10-3.30	1.25	5.30
M2.5 x 0.45	4.00	4.33	3.80-4.10	1.55	4.40
M2.5 x 0.45	5.25	4.33	3.80-4.10	1.55	5.80
M2.5 x 0.45	6.25	4.33	3.80-4.10	1.55	6.90
M3 x 0.5	4.00	4.73	4.10-4.40	1.65	4.40
M3 x 0.5	5.25	4.73	4.10-4.40	1.65	5.80
M3 x 0.5	6.25	4.73	4.10-4.40	1.65	6.90
M3.5 x 0.6	5.00	5.52	5.00-5.30	2.00	5.50
M3.5 x 0.6	6.20	5.52	5.00-5.30	2.00	6.90
M3.5 x 0.6	7.30	5.52	5.00-5.30	2.00	8.10
M4 x 0.7	5.60	6.31	5.80-6.10	2.30	6.20
M4 x 0.7	7.10	6.31	5.80-6.10	2.30	7.90
M4 x 0.7	8.40	6.31	5.80-6.10	2.30	9.30
M5 x 0.8	6.40	7.50	6.90-7.20	2.70	7.10
M5 x 0.8	8.40	7.50	6.90-7.20	2.70	9.30
M5 x 0.8	10.00	7.50	6.90-7.20	2.70	11.0
M6 x 1	7.90	8.69	8.00-8.40	3.15	8.70
M6 x 1	9.80	8.69	8.00-8.40	3.15	10.8
M6 x 1	12.00	8.69	8.00-8.40	3.15	13.2
M8 x 1.25	7.50	11.06	10.1-10.6	4.00	8.30
M8 x 1.25	9.50	11.06	10.1-10.6	4.00	10.5
M8 x 1.25	12.40	11.06	10.1-10.6	4.00	13.7
M8 x 1.25	14.00	11.06	10.1-10.6	4.00	15.6
M10 x 1.5	12.00	13.95	13.0-13.5	5.10	13.2
M10 x 1.5	16.00	13.95	13.0-13.5	5.10	17.6



INSTALLATION

Screw inserts into boss holes following standard self-tapping fastener procedures using hand tools or automated screw driving equipment. Boss dimensions shown are for reference and may vary depending on the type of plastic and application. A counterbore is not required but may reduce plastic mold flash, edge chipping or installation alignment issues.

Molded Blind Pull-Tite Zerts

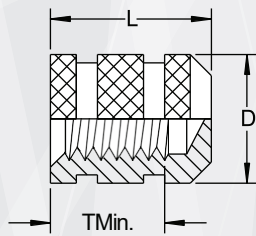
FEATURES

- Generous diamond knurling and engineered grooves provide excellent performance when molded in all types of plastics.
- Blind end prevents ingress of plastic that may lead to contamination of threads during molding.
- Available in both a shorter version designed to fit on a straight mold pin, or a slightly longer style with a counter-bored end that fits snugly on a shouldered mold pin.

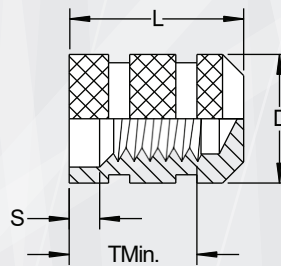


PART DESCRIPTION EXAMPLE

TMBZ — M4 — 8.70
 | | |
 Series Thread Length
 Code Code



Insert
Series Code TMBZ



Insert
Series Code TMBZC

TMBZ Molded Blind Pull-Tite Zerts

GENERAL - TMBZ

All dimensions in millimeters

Insert Thread	Insert Thread Code	L Length ± 0.25	D Insert Diameter ± 0.25	T Thread Depth Min.	Approx. Number of Full Threads
M3 x 0.5	M3	6.40	4.15	3.70	6.8
M3.5 x 0.6	M3.5	7.90	5.00	4.90	7.6
M4 x 0.7	M4	8.70	5.90	5.45	7.0
M5 x 0.8	M5	9.50	6.60	6.45	7.0
M6 x 1	M6	12.5	10.0	8.30	7.5

(1) All dimensions are reference unless toleranced.

GENERAL - TMBZC

All dimensions in millimeters

Insert Thread	Insert Thread Code	L Length $+0.00 -0.25$	D Insert Diameter ± 0.25	S C'bore Depth	T Thread Depth Min.	Approx. Number of Full Threads
M2 x 0.4	M2	5.60	3.40	0.85	3.75	6.3
M2.5 x 0.45	M2.5	6.50	4.15	0.95	4.10	6.0
M3 x 0.5	M3	7.45	4.60	1.10	4.75	6.3
M3.5 x 0.6	M3.5	9.30	5.00	1.35	6.25	7.2
M4 x 0.7	M4	10.30	5.90	1.60	7.05	6.8
M5 x 0.8	M5	11.30	6.60	1.75	8.35	6.7
M6 x 1	M6	14.50	10.0	1.85	10.35	7.0
M8 x 1.25	M8	16.60	11.5	2.05	12.0	7.0
M10 x 1.5	M10	18.00	13.9	2.15	13.0	6.3

(1) All dimensions are reference unless toleranced.

TMBZ Molded Blind Pull-Tite Zerts

PIN DIMENSIONS - TMBZ

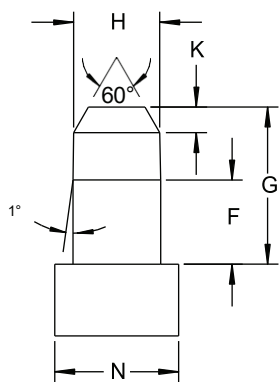
All dimensions in millimeters

Insert Thread	F	G +0.00 -0.25	H ±0.0125	K	N Min.
M3 x 0.5	2.50	4.80	2.50	0.75	4.35
M3.5 x 0.6	2.90	5.40	2.90	0.80	5.20
M4 x 0.7	3.30	5.80	3.30	0.85	6.10
M5 x 0.8	4.20	6.70	4.20	0.90	6.80
M6 x 1	5.00	7.50	5.00	0.95	10.2

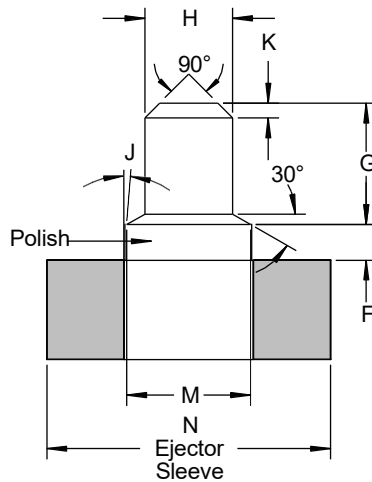
PIN DIMENSIONS - TMBZC

All dimensions in millimeters

Insert Thread	F -0.075 -0.125	G +0.00 -0.25	H	J	K	M ±0.0125	N Min.
M2 x 0.4	0.85	2.50	1.525-1.550	6.0°	0.20	2.300	3.60
M2.5 x 0.45	0.95	3.00	1.975-2.000	5.0°	0.20	2.800	4.35
M3 x 0.5	1.10	3.50	2.425-2.450	4.5°	0.25	3.125	4.80
M3.5 x 0.6	1.35	4.50	2.825-2.850	4.5°	0.30	3.750	5.20
M4 x 0.7	1.60	5.00	3.225-3.250	4.5°	0.35	4.425	6.10
M5 x 0.8	1.75	5.75	4.125-4.150	5.0°	0.40	5.125	6.80
M6 x 1	1.85	6.75	4.875-4.900	4.5°	0.45	6.600	10.2
M8 x 1.25	2.05	9.00	6.675-6.700	4.5°	0.50	8.500	11.7
M10 x 1.5	2.15	10.00	8.375-8.400	4.5°	0.55	10.500	14.1



**TMBZ
Pin Design**



**TMBZC
Pin Design**

INSTALLATION

Place inserts on mold core pins prior to injecting plastic. A good fit between mold core pin and inserts will prevent plastic from flowing into the threads.

TMBZ Molded Blind Pull-Tite Zerts

Molded Thru-Hole Pull-Tite Zerts

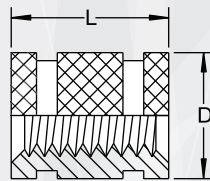
FEATURES

- Generous diamond knurling and engineered grooves provide excellent performance when molded in all types of plastics
- Open-end design for applications where a thru-hole is desirable.
- Shorter length, while not sacrificing the number of threads, make them ideally suited for use in thin sections.



PART DESCRIPTION EXAMPLE

TMTZ — M4 — 7.13
 T T T
 Series Code Thread Code Length



Insert
 Series Code TMTZ

TMTZ Molded Thru-Hole Pull-Tite Zerts

GENERAL

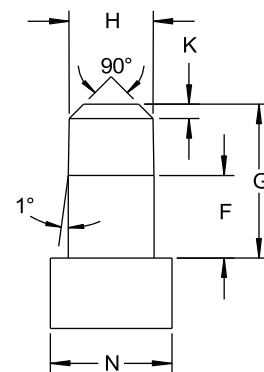
All dimensions in millimeters

Insert Thread	Insert Thread Code	L Length ± 0.05	D Insert Diameter ± 0.25
M2 x 0.4	M2	3.93	3.40
M2.5 x 0.45	M2.5	4.73	4.15
M3 x 0.5	M3	4.73	4.15
M3.5 x 0.6	M3.5	5.88	5.00
M4 x 0.7	M4	7.13	5.90
M5 x 0.8	M5	7.83	6.60
M6 x 1	M6	9.93	9.25
M8 x 1.25	M8	12.48	11.5
M10 x 1.5	M10	13.98	13.9
M12 x 1.75	M12	13.98	16.3

PIN DIMENSIONS

All dimensions in millimeters

Insert Thread	F	G $+0.00$ -0.25	H	K	N Min.
M2 x 0.4	2.00	3.60	1.525-1.550	0.70	3.60
M2.5 x 0.45	2.56	4.40	1.975-2.000	0.70	4.35
M3 x 0.5	3.13	4.40	2.425-2.450	0.75	4.35
M3.5 x 0.6	3.63	5.85	2.825-2.850	0.80	5.20
M4 x 0.7	4.13	6.80	3.225-3.250	0.85	6.10
M5 x 0.8	5.25	7.50	4.125-4.150	0.90	6.80
M6 x 1	6.25	9.60	4.875-4.900	0.95	9.45
M8 x 1.25	8.50	12.15	6.675-6.700	1.00	11.7
M10 x 1.5	10.6	13.65	8.375-8.400	1.00	14.1
M12 x 1.75	12.8	13.65	10.125-10.150	1.00	16.5



TMTZ Pin Design

INSTALLATION

Place inserts on mold core pins prior to injecting plastic. A good fit between mold core pin and inserts will prevent plastic from flowing into the threads.

TMTZ Molded Thru-Hole Pull-Tite Zerts