

Floating Access Hardware

Floating captive screw assembly



Features and Benefits

- ▶ Installs into any panel hardness.
- ▶ Universal slot/Phillips recess.
- ▶ Compensates for up to .060"/1.52mm mating thread misalignment.
- ▶ Appropriate for close centerline-to-edge applications.
- ▶ Can be installed on painted surfaces.
- ▶ MATHread® anti cross-threading screw technology speeds assembly and eliminates failures.
- ▶ Type PF11MW™ meets "operator access area" requirements similar to UL 508.
- ▶ Type PF12MW™ meets "service access area" requirements similar to UL 1950.
- ▶ Available with DuraBlack™ finish.
- ▶ RoHS compliant.



DuraBlack™ finish.

"Shoulder on retainer" feature can only be found on genuine PEM® brand panel fasteners.



Installation

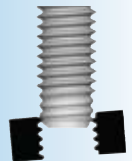
1. Prepare properly sized mounting hole in sheet.
2. Place fastener into recessed anvil and workpiece over shank of fastener. Then place the washer over the shank of fastener.
3. With punch and anvil surfaces parallel, apply swaging force with flaring punch.

Anti Cross-thread Technology – How It Works



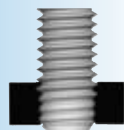
THREADS CAM:

As the threads come into contact, the patented anti cross-thread begins to cam over the female thread.



MISALIGNED AXIS:

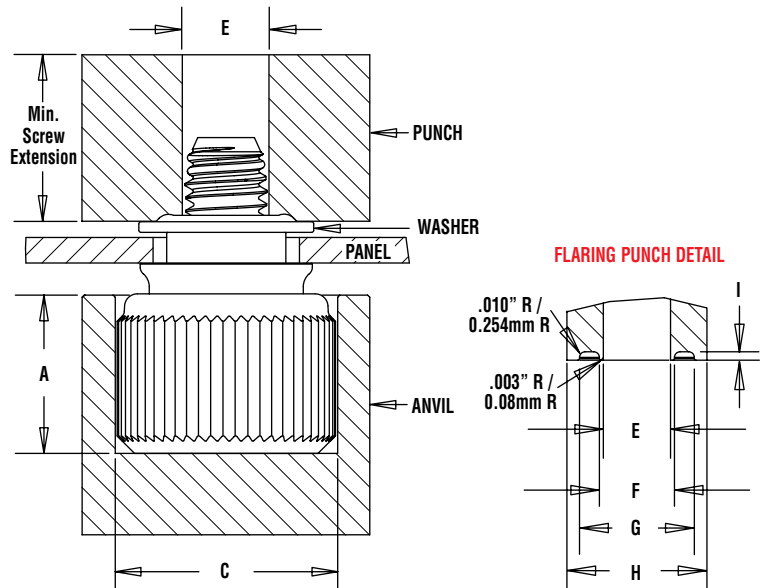
This design offers users the benefits of self-aligning, anti cross-threading threads.



THREADS DRIVE NORMALLY:

The design promotes alignment of the two thread helixes. The fasteners drive easily with reduced effort.

MATHread® is a registered trademark of MATHread Inc.

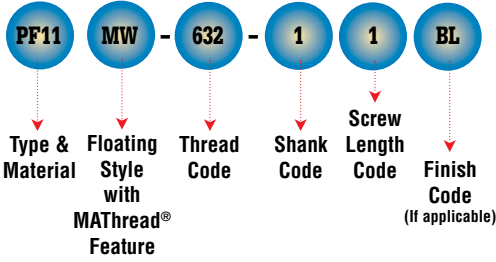


PEM dimple trademark on screw end.

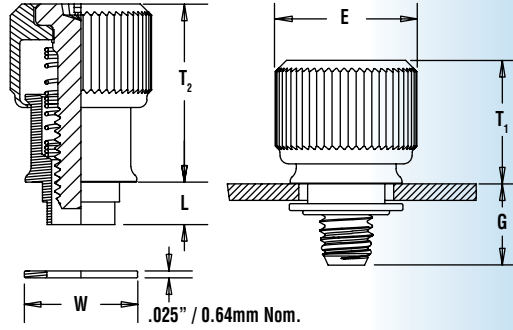
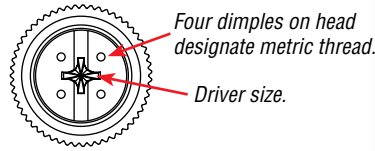


Thread Code	Anvil Dimensions		Punch Dimensions					Anvil Part Number	Punch Part Number
	A ±.002/±0.05 (in.) / (mm)	C ±.001/±0.03 (in.) / (mm)	E (in.) / (mm)	F ±.001/±0.03 (in.) / (mm)	G ±.003/±0.08 (in.) / (mm)	H Min. (in.) / (mm)	I ±.004/±0.1 (in.) / (mm)		
440 / M3	.260 / 6.6	.437 / 11.1	.120 / 3.05	.135 / 3.43	.204 / 5.18	.250 / 6.35	.015 / .381	8003521	8014304
632 / M3.5	.390 / 9.9	.468 / 11.9	.140 / 3.56	.159 / 4.04	.249 / 6.32	.300 / 7.62	.015 / .381	8003522	8014305
832 / M4	.390 / 9.9	.531 / 13.5	.201 / 5.11	.217 / 5.51	.340 / 8.64	.400 / 10.16	.028 / .711	8003523	8014306
032 / M5	.390 / 9.9	.531 / 13.5	.201 / 5.11	.217 / 5.51	.340 / 8.64	.400 / 10.16	.028 / .711	8003523	8014306
0420 / M6	.480 / 12.2	.598 / 15.2	.252 / 6.4	.271 / 6.88	.430 / 10.92	.500 / 12.7	.028 / .711	8004351	8014307

Part Number Designation

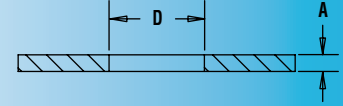


Type PF11MW panel fasteners are shipped with mating washers.



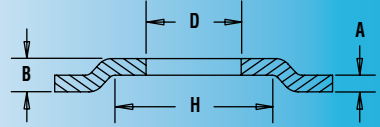
PANEL CONFIGURATION 1

For applications where a space between mating panels is acceptable.



PANEL CONFIGURATION 2

For applications where a space between mating panels is not acceptable.



All dimensions are in inches.

UNIFIED	Thread Size	Type		Thread Code	Shank Code	Screw Length Code	A Max. Sheet Thickness	B Min.	D Hole Size In Sheet +.003 -.001	E ±.010	G Nom.	H Min.	L Nom.	T1 Nom.	T2 Nom.	Driver Size	Min. Float	W Nom.
		Knurled Cap	Smooth Cap															
	.112-40 (#4-40)	PF11MW	PF12MW	440	1	1	.063	.111	.250	.417	.260	.375	.137	.310	.470	#1	.073	.312
	.138-32 (#6-32)	PF11MW	PF12MW	632	1	1	.063	.115	.283	.450	.290	.413	.149	.450	.640	#2	.076	.344
	.164-32 (#8-32)	PF11MW	PF12MW	832	1	1	.063	.121	.346	.514	.290	.469	.157	.450	.640	#2	.076	.407
	.190-32 (#10-32)	PF11MW	PF12MW	032	1	1	.063	.121	.346	.514	.290	.469	.157	.450	.640	#2	.076	.407
	.250-20 (1/4-20)	PF11MW	PF12MW	0420	1	1	.063	.128	.413	.575	.350	.531	.157	.530	.800	#3	.081	.468

All dimensions are in millimeters.

METRIC	Thread Size x Pitch	Type		Thread Code	Shank Code	Screw Length Code	A Max. Sheet Thickness	B Min.	D Hole Size In Sheet +0.08 -0.03	E ±0.25	G Nom.	H Min.	L Nom.	T1 Nom.	T2 Nom.	Driver Size	Min. Float	W Nom.
		Knurled Cap	Smooth Cap															
	M3 x 0.5	PF11MW	PF12MW	M3	1	1	1.6	2.82	6.35	10.59	6.6	9.52	3.48	7.87	11.94	#1	1.85	7.92
	M3.5 x 0.6	PF11MW	PF12MW	M3.5	1	1	1.6	2.92	7.19	11.43	7.37	10.49	3.78	11.43	16.26	#2	1.93	8.74
	M4 x 0.7	PF11MW	PF12MW	M4	1	1	1.6	3.07	8.79	13.06	7.37	11.91	3.99	11.43	16.26	#2	1.93	10.34
	M5 x 0.8	PF11MW	PF12MW	M5	1	1	1.6	3.07	8.79	13.06	7.37	11.91	3.99	11.43	16.26	#2	1.93	10.34
	M6 x 1	PF11MW	PF12MW	M6	1	1	1.6	3.25	10.49	14.61	8.89	13.48	3.99	13.46	20.32	#3	2.06	11.89

Performance Data⁽¹⁾

Type	Thread Code	Test Sheet Material	
		Swaging Force (lbs.) / (N)	Pullout (lbs.) / (N)
PF11MW PF12MW	440 / M3	350 / 1557	112 / 499
	632 / M3.5	400 / 1779	138 / 612
	832 / M4	700 / 3114	202 / 897
	032 / M5	700 / 3114	202 / 897
	0420 / M6	900 / 4003	212 / 945

(1) Performance values reported are averages when all installation specifications and procedures are followed. Variations in mounting hole size, sheet material and installation force will affect this data. Performance testing of this product in your application is recommended. We will be happy to provide samples for this purpose.

Material & Finish Specifications

Material:

Knob: Aluminum
Retainer: Aluminum
Screw: Heat-treated Carbon Steel
Spring: 300 Series Stainless Steel
Washer: 300 Series Stainless Steel

Finish:

Knob: Natural Finish (standard), Black anodize (optional)
Retainer: Natural Finish
Screw: Zinc plated, 5µm, colorless (standard),
BL - Black nitride (optional)

Specifications subject to change without notice.

Check our website for the most current version of this bulletin.

RoHS compliance information can be found on our website.

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