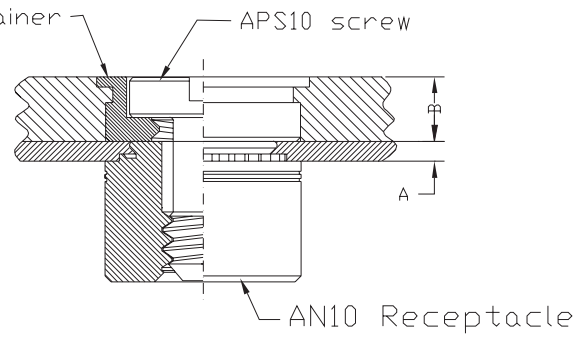
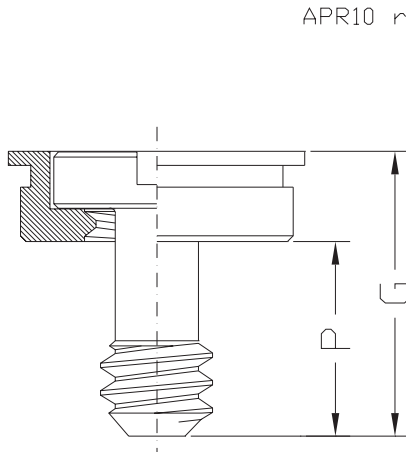
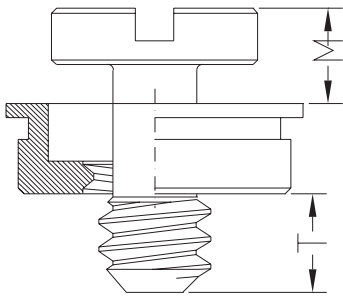


ACCESS HARDWARE

TYPE APF10 FLUSH-MOUNTED PANEL SCREW COMPONENTS



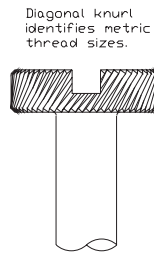
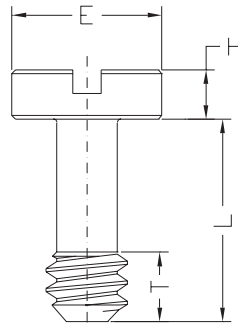
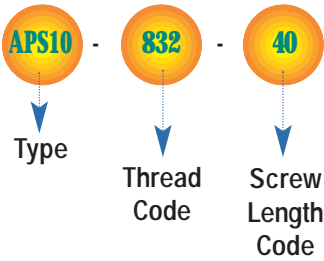
Screw head is flush in sheets as thin as .125" / 3.2 mm.
Screw remains captive in retainer when disengaged.
For use in sheets of AHRB 70 or less.



UNIFIED (inch)	A	B	G	M	P	T
	Max.	Nom.	-.010			Nom.
	.04	.125	.40	.16	.28	.13

METRIC (mm)	A	B	G	M	P	T
	Max.	Nom.	-0.25			Nom.
	1	3.18	10.16	4.06	7.11	3.3

Part Number Designation



APS10 Flush-Mounted Screws

UNIFIED (inch)	Thread Size	Type	Thread Code	Screw Length Code	E	H	L	T
					Nom.	+ .002 - .006	-.010	Nom.
	.112-40 (#4-40)	APS10	440	40	.18	.075	.33	.13
	.138-32 (#6-32)	APS10	632	40	.21	.075	.33	.13
	.164-32 (#8-32)	APS10	832	40	.25	.075	.33	.13
	.190-32 (#10-32)	APS10	032	40	.28	.075	.33	.13

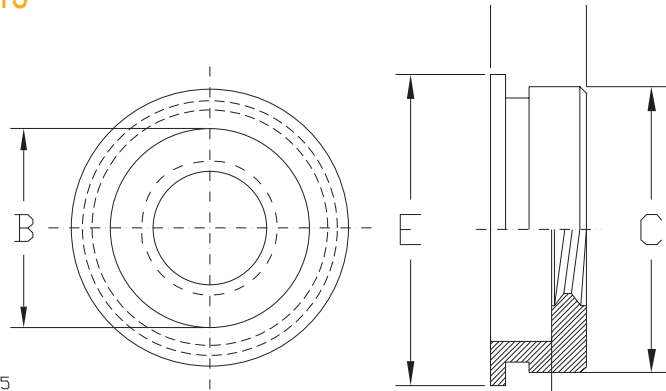
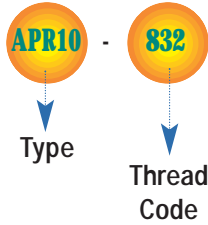
METRIC (mm)	Thread Size x Pitch	Type	Thread Code	Screw Length Code	E	H	L	T
					Nom.	+ 0.05 - 0.15	-0.25	Nom.
	M3 x 0.5	APS10	M3	40	4.7	1.91	8.38	3.3
	M4 x 0.7	APS10	M4	40	6.3	1.91	8.38	3.3
	M5 x 0.8	APS10	M5	40	7.1	1.91	8.38	3.3

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APR10 Self-Clinching Flush-Mounted Retainers

Part Number Designation



Part No: APR10-M5
 Description: Flush Mounted Retainers
 Min. Sheet Thickness For Self-Clinching: 1.4
 Min. Sheet Thickness For Flush Install: 3.2
 Hole Size in Sheet: 9.50 +.003 - .000
 Min. Dist. Hole C/L to Edge: 9.2

UNIFIED (inch)	Thread Size	Type	Thread Code	A Max.	Min. Sheet for Self-Clinching	Min. Sheet for Flush Installation	Hole Size in Sheet + .003 - .000	B Nom.	C Max.	E Nom.	H Nom.	Min. Dist. Hole C/L to Edge
	.112-40 (#4-40)	APR10	440	.125	.050	.125	.281	.195	.280	.31	.075	.31
	.138-32 (#6-32)	APR10	632	.125	.050	.125	.312	.225	.311	.34	.075	.33
	.164-32 (#8-32)	APR10	832	.125	.050	.125	.344	.255	.343	.37	.075	.34
	.190-32 (#10-32)	APR10	032	.125	.050	.125	.375	.290	.374	.41	.075	.36

METRIC (mm)	Thread Size x Pitch	Type	Thread Code	A Max.	Min. Sheet for Self-Clinching	Min. Sheet for Flush Installation	Hole Size in Sheet + 0.08	B Nom.	C Max.	E Nom.	H Nom.	Min. Dist. Hole C/L to Edge
	M3 x 0.5	APR10	M3	3.18	1.27	3.18	7.14	4.75	7.12	7.87	1.91	7.87
	M4 x 0.7	APR10	M4	3.18	1.27	3.18	8.74	6.48	8.72	9.53	1.91	8.64
	M5 x 0.8	APR10	M5	3.18	1.27	3.18	9.53	7.37	9.5	10.41	1.91	9.14

MATERIAL & FINISH SPECIFICATIONS

Type	Threads		Fastener Materials							Standard Finishes			Optional Finish		For Use In Sheet Hardness:				
	Internal, ANSI B1.1, 2B ANSI/ASME B1.13M, 6H	External, ANSI B1.1, 2A ANSI/ASME B1.13M, 6g (1)	300 Series Stainless Steel	Carbon Steel	Heat-Treated Carbon Steel	Aluminum	Acetal (4)	400 Series Stainless Steel	ABS (3)	Passivated and/or Tested Per ASTM A380	Bright Nickel Over Copper Flash per ASTM B689	Zinc Per ASTM B633-85 SC1 (5µm), Type III, Colorless	Natural Finish	Black Anodize	Black Nitride	80 or Less on the Rockwell OBO Scale	70 or Less on the Rockwell OBO Scale	60 or Less on the Rockwell OBO Scale	PC Board
APR10	•		•							•							•		
APS10		•	•							•									

- As with all external plated threads, Class 2A/6g, the maximum major and pitch, after plating, may equal basic sizes and be gauged to Class 3A/6h, per ANSI B1.1, Section 8, Table 3A and ANSI B1.13M, Section 8, Paragraph 8.2.
- The temperature limit is 200° F / 93° C.
- Temperature limit is 200° F / 93° C.
- Temperature range 32° F - 150° F / 0° C - 65° C.

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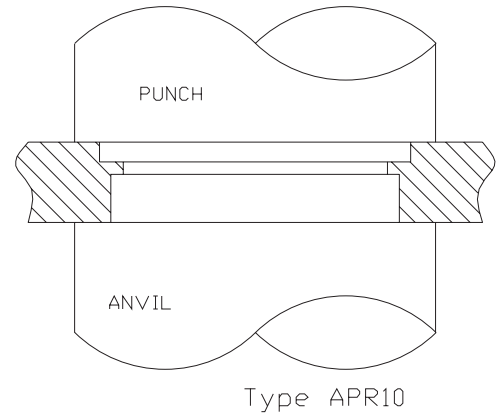


INSTALLATION

Basic installation method shown in drawings below

Procedure:

1. Punch or drill properly sized mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Place shank of fastener into mounting hole, preferably the punch side.
3. With punch and anvil surfaces parallel, apply squeezing force until the shoulder of the retainer or nut comes in contact with the sheet material. For **Type APR10**, squeeze until the retainer is flush in the sheet. For **Type APFP**, apply squeezing force to the top of the screw (not to plastic knob).



PERFORMANCE DATA⁽¹⁾

UNIFIED (inch)	Type	Thread Code	Test Sheet Material			
			5052-H34 Aluminum		Cold-Rolled Steel	
			Installation (lbs.)	Pushout (lbs.)	Installation (lbs.)	Pushout (lbs.)
APR10	440	2100	(2)	3000	(2)	
	632	2100	(2)	3000	(2)	
	832	2100	(2)	3600	(2)	
	032	2400	(2)	4200	(2)	

METRIC (mm)	Type	Thread Code	Test Sheet Material			
			5052-H34 Aluminum		Cold-Rolled Steel	
			Installation (kN)	Pushout (N)	Installation (kN)	Pushout (N)
APR10	M3	9.3	(2)	13.3	(2)	
	M4	9.3	(2)	16	(2)	
	M5	10.7	(2)	18.7	(2)	

(1) The installation and push out values reported are averages when all installations and procedures are followed. Variations in mounting hole size, sheet material and installation force will affect this data. Performance data testing of this product in your application is recommended. We will be happy to provide samples for this purpose. For Type APFS, tests were performed at room temperature and results are temperature dependent.

(2) Not applicable.