

## Modular XYZ Xpansion® Threaded Pin Instructions

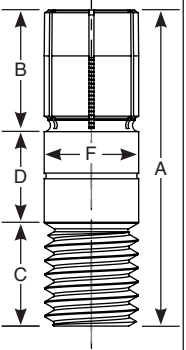
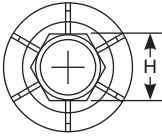
Threaded XYZ Pins incorporate an internal rotary broached hex for simple installation and removal from a tombstone, grid plate or fixture plate. Threaded Pins may be installed in a drilled and reamed hole for precise location or set in a hardened drill bushing for additional strength and wear resistance.

To install a Threaded XYZ Pin in a precision bore, drill/tap accordingly and ream the hole over the nominal diameter minimum of +0.0001 to +0.0005".

Patent No. 10,458,459

Part Number	External Thread	A	B	C	D	F (+/-) .000/.001"	G*	H	Replacement Tapered Screw	Tapered Screw Thread x Length
31850	1/2"-13	1.625"	0.60"	0.53"	0.50"	.500"	0.413"	3/16"	31010	1/4-20 x 1 1/4
31860	5/8"-11	1.875"	0.62"	0.62"	0.62"	.625"	0.472"	1/4"	31020	5/16-18 x 1 1/4

\*G minimum diameter pin can be machined or turned down to \*\*Torque of Pin body needs to exceed torque of Tapered screw  
Tapered screw included with pin.



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## Modular XYZ Xpansion® Threaded Pin Metric Instructions

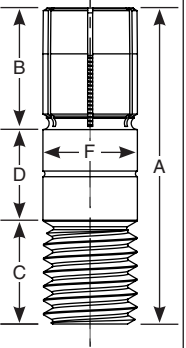
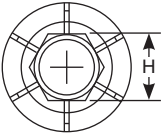
Threaded XYZ Pins incorporate an internal rotary broached hex for simple installation and removal from a tombstone, grid plate or fixture plate. Threaded Pins may be installed in a drilled and reamed hole for precise location or set in a hardened drill bushing for additional strength and wear resistance.

To install a Threaded XYZ Pin in a precision bore, drill/tap accordingly and ream the hole over the nominal diameter minimum of +.003 to +0.013mm.

Patent No. 10,458,459

Part Number	External Thread	A	B	C	D	F (+/-) .000/.025mm	G*	H	Replacement Tapered Screw	Tapered Screw Thread x Length
38850	M12-1.75	40mm	15mm	13mm	12.00mm	12.00mm	10.5mm	5mm	38010	M6-1 x 30mm
38860	M16-2	45mm	16mm	13mm	16.00mm	16.00mm	12mm	6mm	38020	M8-1.25 x 30mm

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Tapered screw included with pin.



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## Modular XYZ Xpansion® Press Fit Pin Instructions

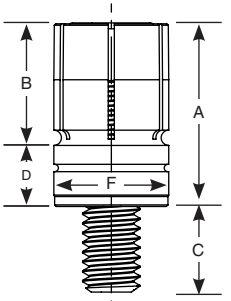
Pins are intended for press fit or close tolerance removable slide fit applications. Install in a precision bore or a bushing with the center threaded for the Tapered screw. If precise location is not necessary, pin can be used on top of fixture plate. An accessory kit is available to make Installation and Removal (I/R) of the XYZ Pins quick and easy. NOTE: If recessing pin into fixture beyond slits be sure to provide clearance for expanding segments.

17-4PH Part Number*	12L14 Part Number	Description	A	B	C	D	F (+/-) .000/.001"	G**	Replacement Tapered Screw	Tapered Screw Thread x Length	Installation/ Removal (I/R) Kit***	ID (Pullout) Thread
31730	31630	Press Fit 1/4"	.500"	.27"	.29"	.23"	.250"	.219"	31731S	5-40 x 5/8	31720	6-32
31740	31640	Press Fit 3/8"	.750"	.50"	.33"	.25"	.375"	.281"	31002S	8-32 x 7/8	31721	10-32
31750	31650	Press Fit 1/2"	.750"	.50"	.45"	.25"	.500"	.413"	31010S	1/4-20 x 7/8	31722	5/16-18
31760	31660	Press Fit 5/8"	.750"	.50"	.52"	.25"	.625"	.472"	31020S	5/16-18 x 7/8	31723	3/8-16
-	31670	Press Fit 3/4"	.875"	.562"	.56"	.31"	.750"	.625"	31032S	3/8-16 x 7/8	31724	-

\*The Stainless Steel Press Fit Pins no longer have internal threads to reduce cost to you. Rarely used, but if you intend on removing please tap accordingly. If you intend to remove one using one of our Installation/Removal (I/R) Kits, tap through the XYZ Pin with the thread size listed in the ID (Pullout) Thread column above before installation into a fixture. The use of the I/R tool for installation does not require an ID thread.

\*\*G minimum diameter pin can be machined or turned down to \*\*\*Kit includes screws (2) SHCS

Tapered screw included with pin.



Patent No. 10,458,459

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## Modular XYZ Xpansion® Press Fit Pin Metric Instructions

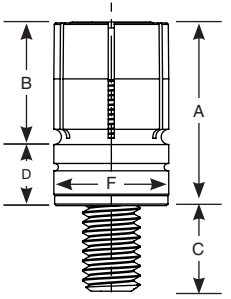
Pins are intended for press fit or close tolerance removable slide fit applications. Install in a precision bore or a bushing with the center threaded for the Tapered screw. If precise location is not necessary, pin can be used on top of fixture plate. An accessory kit is available to make Installation and Removal (I/R) of the XYZ Pins quick and easy. NOTE: If recessing pin into fixture beyond slits be sure to provide clearance for expanding segments.

17-4PH Part Number*	12L14 Part Number	Description	A	B	C	D	F (+/-) .000/.025mm	G**	Repl. Tapered Screw	Tapered Screw Thread x Length	Installation/ Removal (I/R) Kit***	ID (Pullout) Thread
38730	38630	Press Fit 6mm	13mm	7mm	7.3mm	5.8mm	6.00mm	5.5mm	38731S	M3-0.5 x 16mm	38720	M3.5 X .6
38740	38640	Press Fit 10mm	19mm	12.7mm	8.4mm	6.35mm	10.00mm	7.5mm	38002S	M4-0.7 x 22mm	38721	M5 X .8
38750	38650	Press Fit 12mm	19mm	12.7mm	11.1mm	6.35mm	12.00mm	10.5mm	38010S	M6-1 x 22mm	38722	M8 X 1.25
38760	38660	Press Fit 16mm	19mm	12.7mm	13mm	6.35mm	16.00mm	12mm	38020S	M8-1.25 x 22mm	38723	M10 X 1.5
-	38670	Press Fit 20mm	22mm	14mm	13mm	8mm	20.00mm	16mm	38032S	M10-1.5 x 22mm	38724	-

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