

12096.2

PULL BACK INSERTS

Material

Alloy steel, hardness 62+ HRC.

Technical Notes

Liner bushings are a critical component of

the integrated locator unit system (part no. 12095), achieving precise and accurate machining results.

Order No.	d ₁ mm	d ₂ inch +0.0000 -0.0004	d ₃ inch	d ₄ plate c'bore dia. inch ±0.005	Fixture plate thickness h ₃ inch ±0.005	h ₁ inch	h ₂ inch	h ₄ plate c'bore depth inch +0.010 -0.005
12096.W2131	13	0.7518	0.92	0.94	0.50	0.45	0.22	0.23
12096.W2132	13	0.7518	0.92	0.94	0.75	0.70	0.22	0.23
12096.W2161	16	1.0018	1.23	1.25	0.50	0.45	0.31	0.33
12096.W2162	16	1.0018	1.23	1.25	0.75	0.70	0.31	0.33
12096.W2163	16	1.0018	1.23	1.25	1.00	0.95	0.31	0.33
12096.W2201	20	1.1270	1.36	1.38	0.75	0.70	0.38	0.39
12096.W2202	20	1.1270	1.36	1.38	1.00	0.95	0.38	0.39
12096.W2203	20	1.1270	1.36	1.38	1.50	1.45	0.38	0.39
12096.W2204	20	1.1270	1.36	1.38	2.00	1.95	0.38	0.39
12096.W2251	25	1.3772	1.61	1.63	0.75	0.70	0.38	0.39
12096.W2252	25	1.3772	1.61	1.63	1.00	0.95	0.38	0.39
12096.W2253	25	1.3772	1.61	1.63	1.50	1.45	0.38	0.39
12096.W2254	25	1.3772	1.61	1.63	2.00	1.95	0.38	0.39
12096.W2301	30	1.7523	1.98	2.00	0.75	0.70	0.38	0.39
12096.W2302	30	1.7523	1.98	2.00	1.00	0.95	0.38	0.39
12096.W2303	30	1.7523	1.98	2.00	1.50	1.45	0.38	0.39
12096.W2304	30	1.7523	1.98	2.00	2.00	1.95	0.38	0.39
12096.W2352	35	1.7523	1.98	2.00	1.00	0.95	0.45	0.47
12096.W2353	35	1.7523	1.98	2.00	1.50	1.45	0.45	0.47
12096.W2354	35	1.7523	1.98	2.00	2.00	1.95	0.45	0.47
12096.W2503	50	2.5025	3.00	3.02	1.50	1.45	0.70	0.72
12096.W2504	50	2.5025	3.00	3.02	2.00	1.95	0.70	0.72



Quick and Easy to Use with Every Load

System Overview

The Wixroyd Precision Locating & Mounting System consists of locators, receivers and bushings for a wide range of tooling, fixturing, workholding, production, welding and assembly applications. They offer the ability to make fast, accurate set-up changes which enables significant improvements in machining productivity, throughput rates, quality and reduced operating costs.

Wixroyd has solved the typical problems associated with precision attachment and removal of fixture plates, tooling and accessories. The Wixroyd system eliminates the need to pry, pound and use jack screws to separate the fixture plate from the sub-plate or machine table. The Wixroyd system uses a threaded fastening device to mechanically extract the precision locator from its receiver, allowing easy separation of fixture plates, tooling and accessories. Unlike competitive ball locking products, the Wixroyd system does not require expensive "repair kits" since there are no rubber o-rings to break nor ball bearings to fall out or fracture.

Usage

- Place fixture plate over sub-plate or machine table containing the Wixroyd receivers.
- Insert two Wixroyd precision locators through holes lined with hardened bushings and into the receivers.
- Insert two remaining locators into unlined holes and tighten to draw each locator to the desired torque.
- Total time require to unload existing fixture plates and load a new fixture plate is typically under 2 minutes.

System Features

- Self- extracting – unique design enables easy and quick "self-extract" from tooling, fixturing etc. There is no binding or other issues to delay removal time or compromise accuracy of the locking system.
- Precise locating – repeatability of +/- 0.0004"
- High clamping strength – over 45,000 lbs
- Easy Installation – easily installed in a wide range of applications using standard tooling and machining practices.
- Compact – requires minimal space in tooling and fixture applications. Both standard and compact/flush mounting options.
- Can be retro-fitted with existing competitive ball lock type systems.

Product Range



12095.W0131 to .W0504 -
Locator unit - standard



12095.W2131 to .W2504 -
Locator unit - compact



12097.W0131 to .W0501 -
Face mount receivers
- standard



12097.W2131 to .W2501
- Face mount compact
receivers - compact

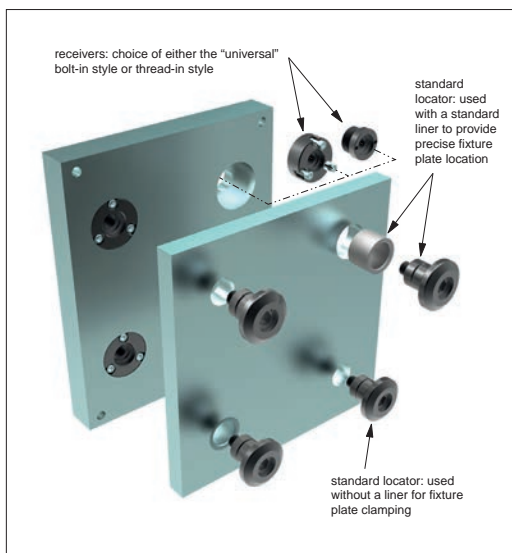


Precision Locating and Mounting System

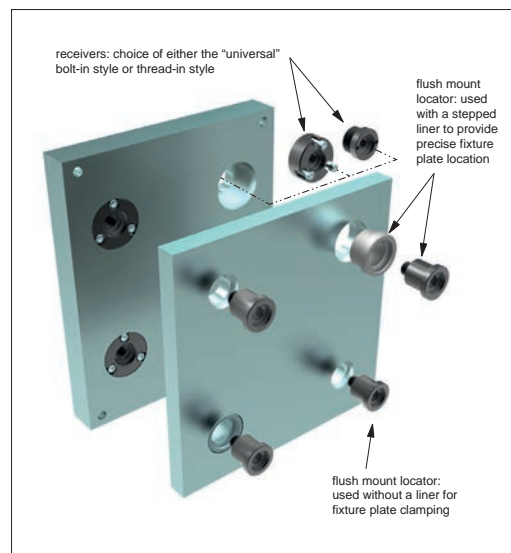
- Q. What is the Wixroyd Precision Locating & Mounting System?**
 A. It is a means of locating and locking two flat surfaces together. These surfaces are most commonly a fixture plate and sub-plates, however, they are also used in many other applications because of their holding strength and accuracy.
- Q. How does it locate the fixture plate?**
 A. The Wixroyd system locates with receivers in the base plate, liner bushings in the sub-plate and locator/fasteners locking the two surfaces together.
- Q. How many locators are needed to locate and fasten the fixture plate?**
 A. Two locators with liner bushings are required to accurately position and two locators without liner bushings to fasten only.
- Q. How does it fasten?**
 A. Locators use standard threads to hold the two surfaces together. By tightening the locators into the receivers very high holding forces can be achieved.
- Q. Can the Wixroyd system be mounted so the work pieces mounting surface is free from any interference?**
 A. Yes, our compact of flush locators allow the head to lie flush with the fixture plate surface.
- Q. Can the system be used in high temperature applications?**
 A. Yes, because all parts are made from heat treated alloy steel, temperatures up to +500F are not a problem. The user should account for thermal expansion of the fixture plates and bases that could affect tolerances.
- Q. Can Fixture plates be mounted in both the horizontal and vertical positions with the Wixroyd system?**
 A. Yes, in vertical mounting applications Wixroyd offer optional docking hardware to “hang” the fixture plate from the tooling column before fastening the surfaces together.
- Q. Can a current ball locking type system be retrofit to work with the Wixroyd system?**
 A. Yes, the universal bolt-in receiver will fit directly into the pocket that holds ball locking type receivers. Also, the Wixroyd system locators will fit the existing holes and liners of a fixture plate set up for ball locking systems.

FAQs

PULL BACK INSERTS



Standard locators



Flush mount locators

Applications

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