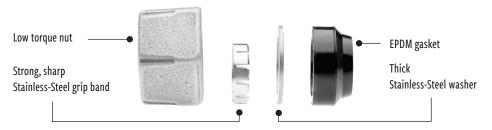


## **MAX NUT**

## Installation Instructions for PVC, PE, Steel, or Copper Tubing

**CAUTION:** Check the marking on the NUT to determine the nominal size tubing material for which the connection is designed: marked "1" for 1" CTS, PVC, or PEP sized Pipe.

See table below for full list of approved piping:



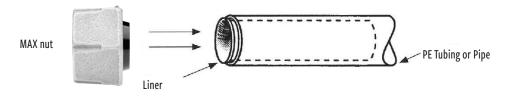
- 1. End of pipe must be round, cut straight, free of burrs, and clean.
- Insert tubing into body of fitting until it contacts the stop inside the fitting. (If there
  is no stop in the fitting, reference to Form #12547, Installation of Compression Style
  Connection without Pipe Stop.)
- 3. For Steel pipe only, pull pipe back 1/8" from touching inside pipe stop.
- 4. Tighten the nut while holding the valve or adapter stationary. Count the number of revolutions or measure the torque with a torque wrench. see torque table below.
- 5. Pressure test for leakage before backfilling in accordance with ASTM D2774, latest edition. Never test with AIR, always test with hydraulic water jacking/pumping.

#### **INSTALLATION HINTS:**

- If installer is unfamiliar with this style of connection, practice on fittings in the shop and pressure test to verify proper technique. Once the installer has the "feel" of tightening this type of connection, dependable leak free connections are easy to make.
- Inspect and test all connections before backfilling so leaks can be detected and repaired without having to re-excavate. It is costly to find and repair leaks after backfilling.
- Use extra care if using PVC pipe over 1" in size, or if higher water pressures are involved.
- For maximum grip performance on steel pipes, hold the nut stationary while rotating the valve or adapter into the nut.
- Do not exceed recommended torque or you could cut the PE pipe, or dent the copper pipe and create a water wear point that may prematurely fail depending on velocity.
- Never reuse a grip ring or gasket if already tightened onto a pipe, it may be dulled or scratched from previous use. See below for replacement kit numbers.
- Never thread a MAX nut onto a valve or adapter not designed for MAX use.

**IMPORTANT:** A rigid, solid tubular stainless steel liner must be used inside the end of polyethylene plastic to prevent it from collapsing as the connection is tightened, and to provide support to allow the gasket in the connection to establish a reliable seal. 3/4" cts 528704, 1" cts 528705, 3/4" ips 505141, 1" ips 505142.

- 1. End of tubing or pipe must be round, cut straight, free of burrs, and clean.
- 2. For PE plastic tubing or pipe, push the appropriate size of liner in until the flare on the liner rests solidly against the end of the tubing or pipe, as shown.



**WARNING:** The safe and reliable performance of this product requires correct installation only on the specific type of tubing or pipe described in the product literature, and which has been manufactured and verified by the installer to comply with the dimensional and physical performance criteria as set forth in the pertinent AWWA/ASTM standard for the tubing/pipe. Improper installation or use of this product on non-standard material could result in failure of the connection with the potential for serious bodily injury and/or property damage.

# Replacement Part Numbers

Full nut assembly: MAX NUT 3/4" gasket/washer/grip kit: PN = 683350

Full nut assembly: MAX NUT 1" gasket/washer/grip kit: PN = 683351

SIZE	REQUIRED TORQUE Hand tight + "x" turns (min, max.)
3/4" MAX Nut .872" - 1.13" 3/4" K copper, HDPE cts/IPS	2.5 - 3 turns (60-70 FtLb)
3/4" hard L copper, PVC, or Steel 1" K copper, or 1" cts HDPE	3-3.5 turns (70-80 FtLb)
1" hard L copper	3.5-4 turns (80-90 FtLb)
1" MAX Nut 1.045" - 1.40" 1" K copper, HDPE cts/IPS, PVC 1" hard L copper or Steel	2.5-3 turns (70-80 FtLb) 3-3.5 turns (80-90 FtLb)
3/4" IPS HDPE, or PVC	2-2.5 turns (60-70 FtLb)

Max nuts manufactured in 2023 and later provide cross-size capabilities.  $\frac{3}{4}$  Mueller Max fittings will work on 1" cts pipes, and 1" Mueller Max fittings will work on  $\frac{3}{4}$ " PVC and IPS pipes. 1" pipes must be pulled back  $\frac{1}{8}$ " from internal stop for best performance.

### Phone: (800) 423-1323

By deviating from the above listed instructions, you will void any product warranty and release Mueller Co. and its affiliated entities from any and all liability associated with the installation or use of this product. For details on the product's warranty, terms, and conditions, please visit www.muellerwp.com. © 2023 Mueller Co., LLC. All rights reserved.