

Stainless Steel Push-In Fittings Specifications



A. Installation of Pipe Fittings:

Tighten fitting by hand, then turn it 2-3 turns with a wrench until it reaches the desired torque listed. If the fittings is not pre-coated with sealant, or is used and the sealant is not in good condition, apply Teflon sealant tape to the threads.

Recommendation of Torque for Tightening Fittings		
Fitting Thread Size	Torque, lb-ft	Torque, kgf/cm
10-32, M5 – M6	1.0 – 1.5	14 – 21
NPT1/8, R1/8	5 – 6.5	70 – 90
NPT1/4, R1/4	8.5 – 10	120 – 140
NPT3/8, R3/8	16 – 17.5	220 – 240
NPT1/2, R1/2	20 – 21.5	280 – 300

B. Installation of Tubing into Fitting:

1. Slowly push a clean and perpendicularly cut tube into the fitting until it comes to a dead stop.
2. Gently pull the tubing back until the Grip Ring or Collet of the fitting grips onto the tubing and has a good seal.
3. Use Polyethylene, Polypropylene, Polyurethane, or Nylon tubing designed for instant fittings.
4. Hard metal tubing can be used for all metal Stainless Steel if the tubing is pre-grooved.

C. Removal of Tubing from Fitting:

1. Push in evenly on the Release Button.
2. Pull out the tube while depressing the Release Button.
3. To reuse the tubing, cut off the lodged portion of the previously used tubing in an even and perpendicular fashion.

D. Recommended Tubing Material, Size, and Hardness Requirements:

Tubing Material	Specified Size	Hardness (Durometer)
Polyurethane	+/- 0.006" (+/-0.15 mm)	Shore A 85 or higher
Polyethylene	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Polypropylene	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Nylon	+/- 0.004" (+/-0.1 mm)	Shore D 44—D75
Pre-grooved Metal Tubing	+/- 0.004" (+/-0.1 mm)	

E. Specifications, Materials of Construction, and Schematics of Typical Construction:

	Stainless Steel Fittings
Operating Pressure Range	0 - 250 PSI (0 - 1650 kpa)
Vacuum	0 - 30" Hg (0 - 760 mm Hg)
Operating Temperature	5 - 230°F (-15 to 110°C)
Recommended Tubing Material	Polyurethane, Nylon, Polyethylene, Polypropylene, and Hard metal tubing (tubing must be pre-grooved)
Metal Body	T316 Stainless Steel
Plastic Body	None
Release Button	300 series Stainless Steel
Grip Ring or Collet	300 series Stainless Steel
O-ring	VITON
Thread Sealant	None
Service	Air, Liquid
Sterilization Temperature	Up to 280°F (138°C)

Stainless Steel (SS) Gripper-Style (W) Fitting
Materials of Construction



Stainless Steel (SS) Collet-Style Fitting
Materials of Construction

