

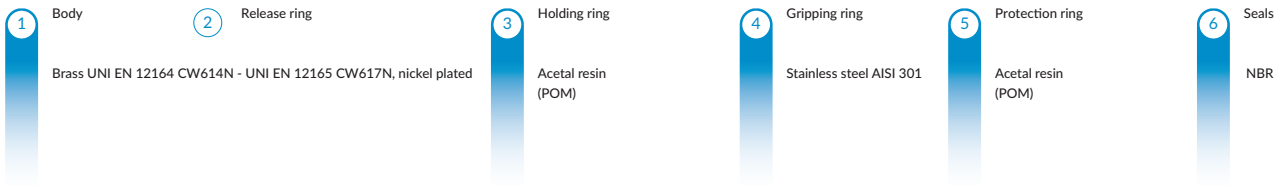
PN LINE



Push-in Fittings, Inch/NPTF

The push-in fittings of the PN line are manufactured according to the American standards (Inch tubings and NPTF Threads). They are suitable for quick connections in different industrial applications; they are robust, compact and guarantee high performances in time. All PN fittings are electrolytic nickel-plated.

PN Line



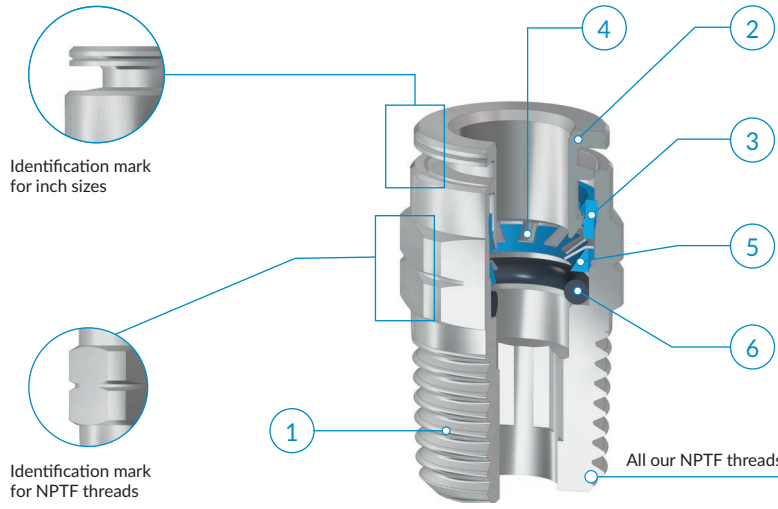
-4° ÷ 176°F



Max 290 PSI



-29° H

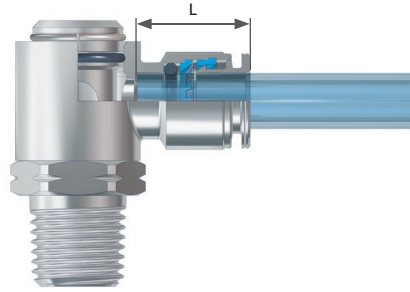


| | 10-32 UNF | 1/8 NPTF | 1/4 NPTF | 3/8 NPTF | 1/2 NPTF |
|------|-----------|----------|----------|----------|----------|
| 1/8 | • | • | | | |
| 5/32 | • | • | • | | |
| 1/4 | • | • | • | • | |
| 5/16 | | • | • | • | |
| 3/8 | | • | • | • | • |
| 1/2 | | | • | • | • |

Recommended tubings:
PA11, PA12, PA6, Polyethylene PE,
Polyurethane PU (98 Shore A)

Acceptable Tolerances on the tubings:
+/- .003 up to Ø 3/8"
+/- .004 Ø 1/2"

Application fields:
Pneumatic circuits



| OD | L |
|------|------|
| 1/8 | .386 |
| 5/32 | .520 |
| 1/4 | .634 |
| 5/16 | .637 |
| 3/8 | .720 |
| 1/2 | .767 |

i ASSEMBLY INSTRUCTIONS

1

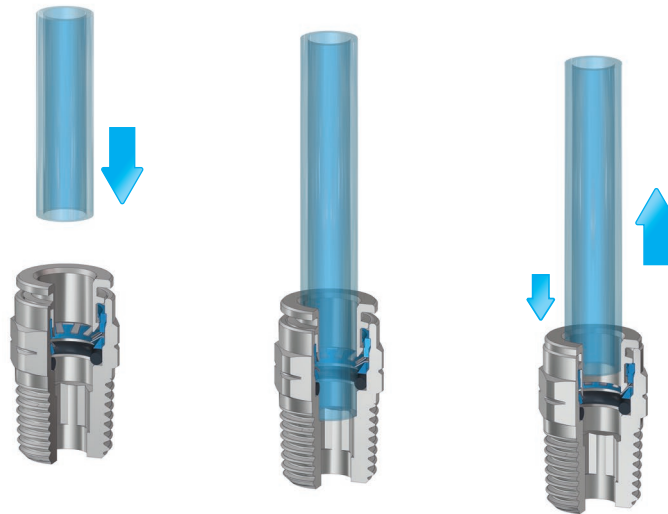
Cut the tube square (by means of a hose cutter i.e. our TCUT) making sure that no burrs are left and that the tube is not oval. In case of use with metal hoses, make a groove all around the tube diameter with a suitable tool (TINC). The groove must be made according to the tube diameter so that the fitting collect can better grip onto it.

2

Insert the tube into the fitting until it bottoms.

Tube release

While pressing on the release ring, pull out the tube from the fitting.



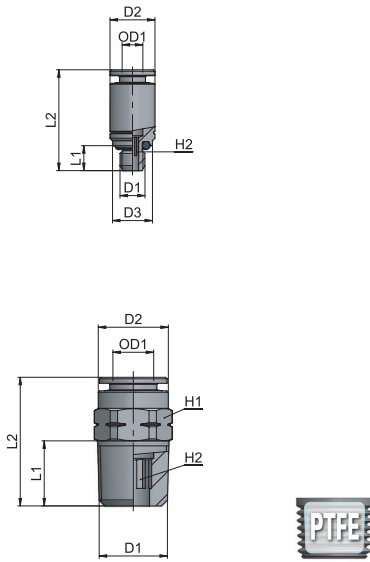
Once the tubing is connected to the fitting, make sure that the tubing is not subject to any tensile strength and that the min. recommended bending radius stated in the tubing section of this catalogue is complied with (see page 136).

To prevent any accidental tube release, no components have to come in touch with the release ring and exercise any unwanted pressure on the same. Indeed however lateral, any load on the release ring may cause the tube disconnection.

To tighten threads, please check out our tightening torque chart illustrated at page 6.

PN 11

Taper straight, male

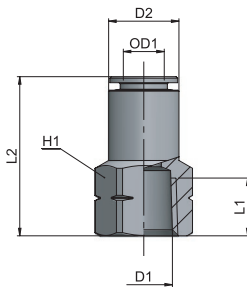


| Type | OD1 | D1 | D2 | D3 | L1 | L2 | H2 | oz Δ |
|---------------|-------|-----------|------|------|------|------|------|-------------|
| 11 1/8 10-32 | 1/8" | 10-32 UNF | .276 | .315 | .197 | .689 | 3/32 | .089 |
| 11 5/32 10-32 | 5/32" | 10-32 UNF | .374 | .315 | .197 | .787 | 3/32 | .159 |
| 11 1/4 10-32 | 1/4" | 10-32 UNF | .472 | .315 | .197 | .925 | 3/32 | .300 |

| Type | OD1 | D1 | D2 | L1 | L2 | H1 | H2 | oz Δ |
|-------------|------|----------|------|------|-------|-------|------|-------------|
| 11 1/8 1/8 | 1/8 | 1/8 NPTF | .276 | .335 | .748 | 7/16 | 3/32 | .336 |
| 11 5/32 1/8 | 5/32 | 1/8 NPTF | .374 | .335 | .768 | 7/16 | 1/8 | .318 |
| 11 5/32 1/4 | 5/32 | 1/4 NPTF | .374 | .512 | .945 | 9/16 | 1/8 | .706 |
| 11 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .866 | 1/2 | 5/32 | .371 |
| 11 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .512 | .965 | 9/16 | 5/32 | .653 |
| 11 1/4 3/8 | 1/4 | 3/8 NPTF | .472 | .512 | 1.004 | 11/16 | 5/32 | 1.126 |
| 11 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | 1.043 | 9/16 | 3/16 | .530 |
| 11 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .512 | 1.004 | 9/16 | 1/4 | .565 |
| 11 5/16 3/8 | 5/16 | 3/8 NPTF | .551 | .512 | .984 | 11/16 | 1/4 | .988 |
| 11 3/8 1/8 | 3/8 | 1/8 NPTF | .630 | .335 | 1.122 | 11/16 | 3/16 | .794 |
| 11 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .512 | 1.260 | 11/16 | 1/4 | .953 |
| 11 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .512 | 1.004 | 11/16 | 5/16 | .900 |
| 11 3/8 1/2 | 3/8 | 1/2 NPTF | .630 | .669 | 1.201 | 7/8 | 5/16 | 1.976 |
| 11 1/2 1/4 | 1/2 | 1/4 NPTF | .787 | .512 | 1.358 | 13/16 | 5/16 | 1.253 |
| 11 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .512 | 1.161 | 13/16 | 3/8 | .971 |
| 11 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .669 | 1.201 | 7/8 | 3/8 | 1.694 |

PN 13

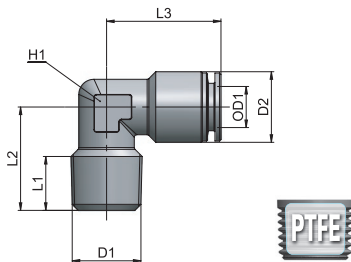
Female straight



| Type | OD1 | D1 | D2 | L1 | L2 | H1 | oz Δ |
|-------------|------|----------|------|------|-------|-------|-------------|
| 13 5/32 1/8 | 5/32 | 1/8 NPTF | .374 | .335 | .984 | 1/2 | .406 |
| 13 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | 1.063 | 1/2 | .494 |
| 13 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .472 | 1.240 | 11/16 | .935 |
| 13 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | 1.063 | 9/16 | .706 |
| 13 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .472 | 1.240 | 11/16 | 1.006 |
| 13 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .472 | 1.339 | 11/16 | 1.147 |
| 13 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .492 | 1.339 | 13/16 | 1.323 |
| 13 3/8 1/2 | 3/8 | 1/2 NPTF | .630 | .531 | 1.476 | 1 | 2.085 |
| 13 1/2 1/4 | 1/2 | 1/4 NPTF | .787 | .453 | 1.339 | 13/16 | 1.823 |
| 13 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .472 | 1.398 | 13/16 | 1.656 |
| 13 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .531 | 1.496 | 1 | 2.263 |

PN 14


Taper elbow fitting, male




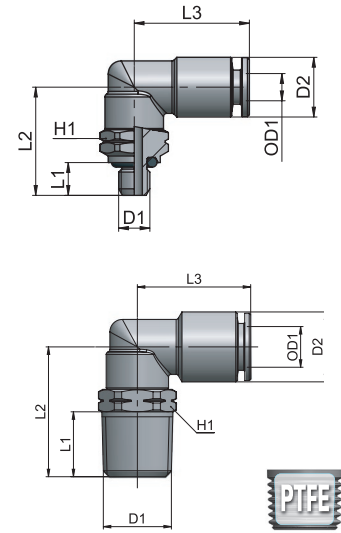
| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz Δ |
|-------------|------|----------|------|------|------|------|----|-------------|
| 14 5/32 1/8 | 5/32 | 1/8 NPTF | .374 | .331 | .630 | .689 | 10 | .318 |
| 14 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .331 | .630 | .807 | 10 | .459 |
| 14 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .429 | .787 | .807 | 10 | .600 |
| 14 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .748 | .886 | 12 | .724 |
| 14 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .421 | .807 | .886 | 12 | .794 |
| 14 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .480 | .886 | .984 | 14 | 1.041 |
| 14 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .425 | .886 | .984 | 14 | 1.182 |

PN 15

Taper swivelling elbow fitting, male


| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz  |
|---------------|------|-----------|------|------|------|------|------|--|
| 15 1/8 10-32 | 1/8 | 10-32 UNF | .276 | .197 | .637 | .551 | 5/16 | .283 |
| 15 5/32 10-32 | 5/32 | 10-32 UNF | .358 | .197 | .650 | .689 | 3/8 | .353 |

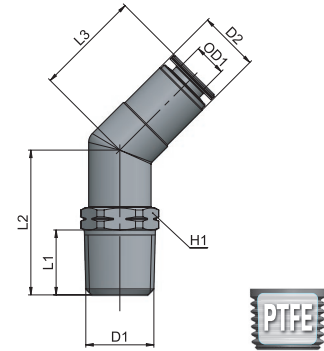
| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz  |
|-------------|------|----------|------|------|-------|-------|-------|--|
| 15 1/8 1/8 | 1/8 | 1/8 NPTF | .276 | .335 | .716 | .551 | 7/16 | .371 |
| 15 5/32 1/8 | 5/32 | 1/8 NPTF | .358 | .335 | .728 | .689 | 7/16 | .441 |
| 15 5/32 1/4 | 5/32 | 1/4 NPTF | .358 | .512 | 1.024 | .748 | 9/16 | .794 |
| 15 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .835 | .866 | 1/2 | .688 |
| 15 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .512 | 1.031 | .866 | 9/16 | .865 |
| 15 1/4 3/8 | 1/4 | 3/8 NPTF | .472 | .512 | 1.051 | .866 | 11/16 | 1.094 |
| 15 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .835 | .886 | 1/2 | .812 |
| 15 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .512 | 1.031 | .886 | 9/16 | .971 |
| 15 5/16 3/8 | 5/16 | 3/8 NPTF | .551 | .512 | 1.122 | .906 | 11/16 | 1.411 |
| 15 3/8 1/8 | 3/8 | 1/8 NPTF | .630 | .335 | .945 | 1.024 | 11/16 | 1.376 |
| 15 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .512 | 1.122 | 1.024 | 11/16 | 1.500 |
| 15 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .512 | 1.122 | 1.024 | 11/16 | 1.535 |
| 15 3/8 1/2 | 3/8 | 1/2 NPTF | .630 | .669 | 1.339 | 1.024 | 7/8 | 2.187 |
| 15 1/2 1/4 | 1/2 | 1/4 NPTF | .787 | .512 | 1.260 | 1.122 | 13/16 | 2.381 |
| 15 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .512 | 1.260 | 1.122 | 13/16 | 2.258 |
| 15 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .669 | 1.437 | 1.122 | 7/8 | 2.699 |



PN 15-45°


Swivelling elbow fitting, male 45°

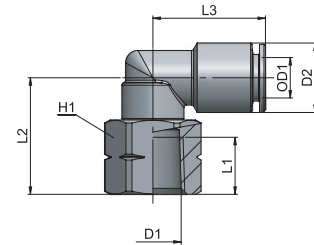
| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz  |
|----------------|-----|----------|------|------|-------|-------|-------|--|
| 15 1/4 1/8 45° | 1/4 | 1/8 NPTF | .472 | .335 | .945 | .827 | 1/2 | .889 |
| 15 1/4 1/4 45° | 1/4 | 1/4 NPTF | .472 | .512 | 1.142 | .827 | 9/16 | 1.074 |
| 15 3/8 1/4 45° | 3/8 | 1/4 NPTF | .630 | .512 | 1.161 | .984 | 11/16 | 1.724 |
| 15 3/8 3/8 45° | 3/8 | 3/8 NPTF | .630 | .512 | 1.161 | .984 | 11/16 | 1.759 |
| 15 3/8 1/2 45° | 3/8 | 1/2 NPTF | .630 | .669 | 1.378 | .984 | 7/8 | 2.438 |
| 15 1/2 3/8 45° | 1/2 | 3/8 NPTF | .787 | .512 | 1.260 | 1.083 | 13/16 | 2.568 |
| 15 1/2 1/2 45° | 1/2 | 1/2 NPTF | .787 | .669 | 1.437 | 1.083 | 7/8 | 3.001 |



PN 17

Swivelling elbow fitting, female

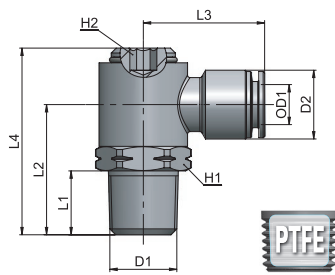
| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz  |
|-------------|------|----------|------|------|-------|-------|-------|--|
| 17 5/32 1/8 | 5/32 | 1/8 NPTF | .358 | .335 | .768 | .748 | 9/16 | .741 |
| 17 5/32 1/4 | 5/32 | 1/4 NPTF | .358 | .453 | .933 | .767 | 11/16 | .741 |
| 17 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .776 | .866 | 9/16 | .794 |
| 17 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .453 | .933 | .866 | 11/16 | 1.129 |
| 17 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .776 | .886 | 9/16 | .935 |
| 17 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .453 | .933 | .886 | 11/16 | 1.288 |
| 17 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .472 | 1.004 | 1.024 | 11/16 | 1.570 |
| 17 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .472 | 1.004 | 1.024 | 13/16 | 1.711 |
| 17 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .472 | 1.102 | 1.122 | 13/16 | 2.255 |
| 17 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .531 | 1.220 | 1.122 | 1 | 2.910 |



| | |
|-----------|-----|
| CO | 67 |
| MA | 31 |
| MM | 115 |
| PA | 49 |
| PE | 45 |
| PM | 111 |
| PN | 19 |
| PT | 121 |
| PU | 55 |
| PU Safety | 59 |
| PUX | 101 |
| PV | 81 |
| PVX | 105 |
| PX | 95 |
| Tool | 129 |
| Tubings | 135 |

PN 18

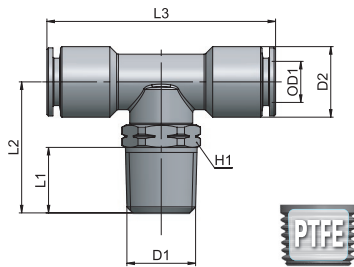
Swivelling fitting with banjo ring



| Type | OD1 | D1 | D2 | L1 | L2 | L3 | L4 | H1 | H2 | oz |
|-------------|------|----------|------|------|-------|-------|-------|-------|------|-------|
| 18 5/32 1/8 | 5/32 | 1/8 NPTF | .358 | .335 | .807 | .807 | 1.220 | 9/16 | 1/8 | 1.006 |
| 18 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .807 | .886 | 1.220 | 9/16 | 1/8 | 1.059 |
| 18 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .512 | 1.043 | .945 | 1.496 | 11/16 | 3/16 | 1.711 |
| 18 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .807 | .906 | 1.220 | 9/16 | 1/8 | 1.076 |
| 18 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .512 | 1.043 | .965 | 1.496 | 11/16 | 3/16 | 1.747 |
| 18 5/16 3/8 | 5/16 | 3/8 NPTF | .551 | .512 | 1.142 | 1.043 | 1.654 | 13/16 | 1/4 | 2.681 |
| 18 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .512 | 1.043 | 1.043 | 1.496 | 11/16 | 3/16 | 1.835 |
| 18 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .512 | 1.142 | 1.142 | 1.654 | 13/16 | 1/4 | 2.964 |

PN 20

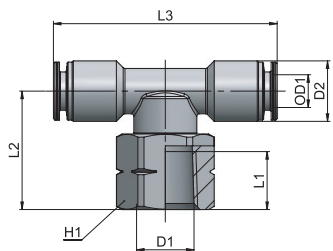
Swivelling T fitting, taper



| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz |
|-------------|------|----------|------|------|-------|-------|-------|-------|
| 20 1/8 1/8 | 1/8 | 1/8 NPTF | .276 | .335 | .716 | 1.102 | 7/16 | .671 |
| 20 5/32 1/8 | 5/32 | 1/8 NPTF | .358 | .335 | .827 | 1.535 | 1/2 | .777 |
| 20 5/32 1/4 | 5/32 | 1/4 NPTF | .358 | .512 | 1.024 | 1.535 | 9/16 | .953 |
| 20 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .827 | 1.732 | 1/2 | .900 |
| 20 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .512 | 1.024 | 1.732 | 9/16 | 1.076 |
| 20 1/4 3/8 | 1/4 | 3/8 NPTF | .472 | .512 | 1.043 | 1.732 | 11/16 | 1.328 |
| 20 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .827 | 1.772 | 1/2 | 1.112 |
| 20 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .512 | 1.024 | 1.772 | 9/16 | 1.306 |
| 20 3/8 1/8 | 3/8 | 1/8 NPTF | .630 | .335 | .945 | 2.047 | 11/16 | 1.769 |
| 20 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .512 | 1.122 | 2.047 | 11/16 | 1.905 |
| 20 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .512 | 1.122 | 2.047 | 11/16 | 1.941 |
| 20 3/8 1/2 | 3/8 | 1/2 NPTF | .630 | .669 | 1.339 | 2.047 | 7/8 | 2.611 |
| 20 1/2 1/4 | 1/2 | 1/4 NPTF | .787 | .512 | 1.260 | 2.244 | 13/16 | 3.029 |
| 20 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .512 | 1.260 | 2.244 | 13/16 | 2.752 |
| 20 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .669 | 1.437 | 2.244 | 7/8 | 3.299 |

PN 20-F

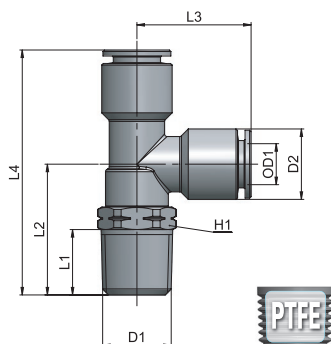
Swivelling T fitting, female



| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | oz |
|--------------|-----|----------|------|------|-------|-------|-------|-------|
| 20 1/4 1/4 F | 1/4 | 1/4 NPTF | .472 | .453 | .925 | 1.732 | 11/16 | 1.371 |
| 20 3/8 1/4 F | 3/8 | 1/4 NPTF | .630 | .453 | 1.004 | 2.047 | 11/16 | 1.996 |
| 20 3/8 3/8 F | 3/8 | 3/8 NPTF | .630 | .472 | 1.004 | 2.047 | 13/16 | - |
| 20 1/2 3/8 F | 1/2 | 3/8 NPTF | .787 | .472 | 1.102 | 2.244 | 13/16 | 2.897 |
| 20 1/2 1/2 F | 1/2 | 1/2 NPTF | .787 | .531 | 1.220 | 2.244 | 1 | 3.551 |

PN 23


Lateral run T fitting, taper

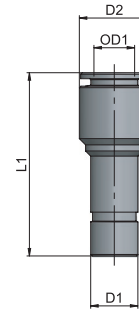


| Type | OD1 | D1 | D2 | L1 | L2 | L3 | L4 | H1 | oz |
|-------------|------|----------|------|------|-------|-------|-------|-------|-------|
| 23 1/8 1/8 | 1/8 | 1/8 NPTF | .276 | .335 | .716 | .551 | 1.267 | 7/16 | .671 |
| 23 5/32 1/8 | 5/32 | 1/8 NPTF | .358 | .335 | .827 | .768 | 1.594 | 1/2 | .812 |
| 23 5/32 1/4 | 5/32 | 1/4 NPTF | .358 | .512 | 1.024 | .768 | 1.791 | 9/16 | .953 |
| 23 1/4 1/8 | 1/4 | 1/8 NPTF | .472 | .335 | .827 | .866 | 1.693 | 1/2 | .900 |
| 23 1/4 1/4 | 1/4 | 1/4 NPTF | .472 | .512 | 1.024 | .866 | 1.890 | 9/16 | 1.076 |
| 23 1/4 3/8 | 1/4 | 3/8 NPTF | .472 | .512 | 1.043 | .866 | 1.909 | 11/16 | 1.322 |
| 23 5/16 1/8 | 5/16 | 1/8 NPTF | .551 | .335 | .827 | .886 | 1.713 | 1/2 | 1.112 |
| 23 5/16 1/4 | 5/16 | 1/4 NPTF | .551 | .512 | 1.024 | .886 | 1.909 | 9/16 | 1.323 |
| 23 3/8 1/4 | 3/8 | 1/4 NPTF | .630 | .512 | 1.122 | 1.024 | 2.146 | 11/16 | 1.914 |
| 23 3/8 3/8 | 3/8 | 3/8 NPTF | .630 | .512 | 1.122 | 1.024 | 2.146 | 11/16 | 1.941 |
| 23 3/8 1/2 | 3/8 | 1/2 NPTF | .630 | .669 | 1.339 | 1.024 | 2.362 | 7/8 | 2.618 |
| 23 1/2 1/4 | 1/2 | 1/4 NPTF | .787 | .512 | 1.260 | 1.122 | 2.382 | 13/16 | 3.052 |
| 23 1/2 3/8 | 1/2 | 3/8 NPTF | .787 | .512 | 1.260 | 1.122 | 2.382 | 13/16 | 2.734 |
| 23 1/2 1/2 | 1/2 | 1/2 NPTF | .787 | .669 | 1.437 | 1.122 | 2.559 | 7/8 | 3.175 |

PN 25


Reducer

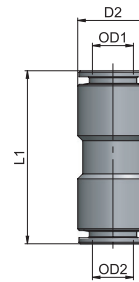
| Type | OD1 | D1 | D2 | L1 | oz  |
|-------------|------|------|------|-------|--|
| 25 1/8 5/32 | 1/8 | 5/32 | .276 | 1.094 | .089 |
| 25 5/32 1/4 | 5/32 | 1/4 | .374 | 1.240 | .265 |
| 25 1/4 5/16 | 1/4 | 5/16 | .472 | 1.358 | .406 |
| 25 1/4 3/8 | 1/4 | 3/8 | .472 | 1.358 | .477 |
| 25 1/4 1/2 | 1/4 | 1/2 | .512 | 1.358 | .882 |
| 25 5/16 3/8 | 5/16 | 3/8 | .551 | 1.437 | .547 |
| 25 3/8 1/2 | 3/8 | 1/2 | .630 | 1.575 | .865 |



PN 26


Union

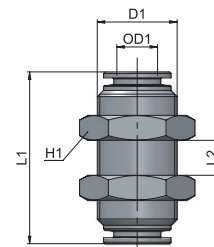
| Type | OD1 | OD2 | D2 | L1 | oz  |
|--------------|------|------|------|-------|--|
| 26 1/8 1/8 | 1/8 | 1/8 | .276 | .889 | .121 |
| 26 5/32 5/32 | 5/32 | 5/32 | .354 | 1.102 | .265 |
| 26 1/4 1/4 | 1/4 | 1/4 | .472 | 1.323 | .454 |
| 26 5/16 5/16 | 5/16 | 5/16 | .551 | 1.339 | .635 |
| 26 3/8 1/4 | 3/8 | 1/4 | .630 | 1.441 | .721 |
| 26 3/8 3/8 | 3/8 | 3/8 | .630 | 1.520 | .882 |
| 26 1/2 3/8 | 1/2 | 3/8 | .787 | 1.586 | 1.211 |
| 26 1/2 1/2 | 1/2 | 1/2 | .787 | 1.614 | 1.443 |



PN 27


Bulkhead union

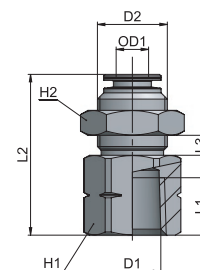
| Type | OD1 | D1 | L1 | L2 | H1 | oz  |
|--------------|------|---------|-------|------|----|--|
| 27 1/8 1/8 | 1/8 | M8x0,75 | .886 | .295 | 12 | .477 |
| 27 5/32 5/32 | 5/32 | M12x1 | 1.102 | .374 | 16 | .812 |
| 27 1/4 1/4 | 1/4 | M14x1 | 1.339 | .571 | 18 | 1.147 |
| 27 5/16 5/16 | 5/16 | M16x1 | 1.339 | .610 | 20 | 1.376 |
| 27 3/8 3/8 | 3/8 | M18x1 | 1.535 | .689 | 22 | 1.888 |
| 27 1/2 1/2 | 1/2 | M22x1,5 | 1.614 | .728 | 26 | 2.607 |



PN 27-F

Bulkhead union female

| Type | OD1 | D1 | D2 | L1 | L2 | L3 | H1 | H2 | oz  |
|---------------|------|----------|---------|------|-------|------|-------|----|--|
| 27 5/32 1/4 F | 5/32 | 1/4 NPTF | M12x1 | .453 | 1.161 | .276 | 11/16 | 16 | .630 |
| 27 1/4 1/8 F | 1/4 | 1/8 NPTF | M14x1 | .315 | 1.063 | .335 | 11/16 | 18 | .709 |
| 27 1/4 1/4 F | 1/4 | 1/4 NPTF | M14x1 | .453 | 1.260 | .335 | 11/16 | 18 | .709 |
| 27 3/8 1/4 F | 3/8 | 1/4 NPTF | M18x1 | .453 | 1.339 | .413 | 7/8 | 22 | .866 |
| 27 3/8 3/8 F | 3/8 | 3/8 NPTF | M18x1 | .472 | 1.378 | .413 | 7/8 | 22 | .866 |
| 27 3/8 1/2 F | 3/8 | 1/2 NPTF | M18x1 | .531 | 1.496 | .413 | 1 | 22 | .866 |
| 27 1/2 3/8 F | 1/2 | 3/8 NPTF | M22x1,5 | .472 | 1.417 | .472 | 1 | 26 | 1.023 |
| 27 1/2 1/2 F | 1/2 | 1/2 NPTF | M22x1,5 | .531 | 1.535 | .472 | 1 | 26 | 1.023 |



PN
LINE

CO 67

MA 31

MM 115

PA 49

PE 45

PM 111

PN 19

PT 121

PU 55

PU Safety 59

PUX 101

PV 81

PVX 105

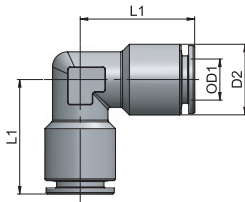
PX 95


Tool 129

Tubings 135

PN 28

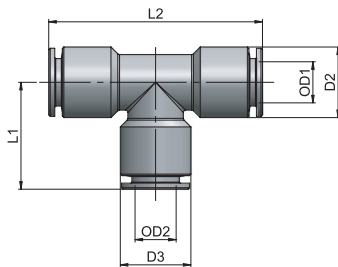
Union elbow




| Type | OD1 | D2 | L1 | oz  |
|--------------|------|------|-------|--|
| 28 1/8 1/8 | 1/8 | .276 | .504 | .159 |
| 28 5/32 5/32 | 5/32 | .354 | .689 | .336 |
| 28 1/4 1/4 | 1/4 | .472 | .807 | .547 |
| 28 5/16 5/16 | 5/16 | .551 | .886 | .829 |
| 28 3/8 3/8 | 3/8 | .630 | .984 | 1.129 |
| 28 1/2 1/2 | 1/2 | .787 | 1.063 | 1.817 |

PN 29

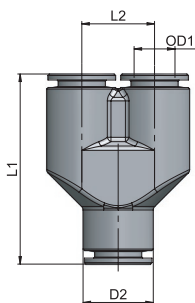
Union T




| Type | OD1 | OD2 | D2 | D3 | L1 | L2 | oz  |
|--------------|------|------|------|------|-------|-------|--|
| 29 1/8 1/8 | 1/8 | 1/8 | .276 | .276 | .504 | 1.008 | .195 |
| 29 5/32 5/32 | 5/32 | 5/32 | .354 | .354 | .689 | 1.378 | .441 |
| 29 1/4 1/4 | 1/4 | 1/4 | .472 | .472 | .787 | 1.575 | .706 |
| 29 5/16 5/16 | 5/16 | 5/16 | .551 | .551 | .827 | 1.654 | .988 |
| 29 3/8 3/8 | 3/8 | 3/8 | .630 | .630 | .965 | 1.929 | 1.500 |
| 29 3/8 1/4 | 3/8 | 1/4 | .630 | .472 | .886 | 1.929 | 1.411 |
| 29 1/2 1/2 | 1/2 | 1/2 | .787 | .787 | 1.063 | 2.126 | 2.420 |
| 29 1/2 1/4 | 1/2 | 1/4 | .787 | .472 | .965 | 2.126 | 2.216 |
| 29 1/2 3/8 | 1/2 | 3/8 | .787 | .630 | 1.063 | 2.126 | 2.383 |

PN 37

Y fitting



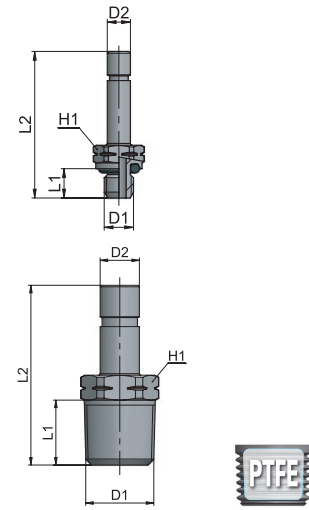
| Type | OD1 | D2 | L1 | L2 | oz  |
|--------------|------|------|-------|------|--|
| 37 1/8 1/8 | 1/8 | .268 | .984 | .295 | .671 |
| 37 5/32 5/32 | 5/32 | .354 | 1.161 | .374 | .477 |
| 37 1/4 1/4 | 1/4 | .472 | 1.437 | .492 | 1.076 |
| 37 5/16 5/16 | 5/16 | .551 | 1.476 | .571 | 1.482 |
| 37 3/8 3/8 | 3/8 | .630 | 1.752 | .650 | 2.419 |

PN 38

Stem adaptor

| Type | D1 | D2 | L1 | L2 | H1 | oz Δ |
|---------------|-----------|------|------|------|------|-------------|
| 38 5/32 10-32 | 10-32 UNF | 5/32 | .197 | .984 | 5/16 | .089 |

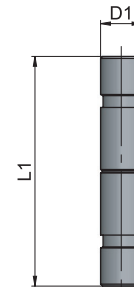
| Type | D1 | D2 | L1 | L2 | H1 | oz Δ |
|-------------|----------|------|------|-------|-------|-------------|
| 38 5/32 1/8 | 1/8 NPTF | 5/32 | .335 | 1.142 | 7/16 | .247 |
| 38 5/32 1/4 | 1/4 NPTF | 5/32 | .512 | 1.339 | 9/16 | .494 |
| 38 1/4 1/8 | 1/8 NPTF | 1/4 | .335 | 1.220 | 7/16 | .300 |
| 38 1/4 1/4 | 1/4 NPTF | 1/4 | .512 | 1.417 | 9/16 | .530 |
| 38 5/16 1/8 | 1/8 NPTF | 5/16 | .335 | 1.220 | 7/16 | .318 |
| 38 5/16 1/4 | 1/4 NPTF | 5/16 | .512 | 1.417 | 9/16 | .547 |
| 38 3/8 1/4 | 1/4 NPTF | 3/8 | .512 | 1.496 | 9/16 | .583 |
| 38 3/8 3/8 | 3/8 NPTF | 3/8 | .512 | 1.516 | 11/16 | .812 |
| 38 1/2 3/8 | 3/8 NPTF | 1/2 | .512 | 1.634 | 11/16 | .900 |
| 38 1/2 1/2 | 1/2 NPTF | 1/2 | .669 | 1.831 | 7/8 | 1.517 |



PN 39

Extention piece

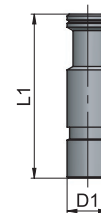
| Type | D1 | L1 | oz Δ |
|--------------|------|-------|-------------|
| 39 5/32 5/32 | 5/32 | 1.181 | .099 |
| 39 1/4 1/4 | 1/4 | 1.378 | .177 |
| 39 5/16 5/16 | 5/16 | 1.378 | .195 |
| 39 3/8 3/8 | 3/8 | 1.575 | .300 |
| 39 1/2 1/2 | 1/2 | 1.732 | .494 |



PN 40

Plug

| Type | D1 | L1 | oz Δ |
|--------------|----------|-------|-------------|
| 40 1/8 1/8 | 1/8 | .787 | .046 |
| 40 5/32 5/32 | 5/32 | .984 | .089 |
| 40 1/4 1/4 | 1/4 | .984 | .159 |
| 40 5/16 5/16 | 5/16 | 1.181 | .441 |
| 40 3/8 3/8 | 3/8 | 1.378 | .397 |
| 40 1/2 1/2 | 1/2 NPTF | 1.575 | 1.482 |

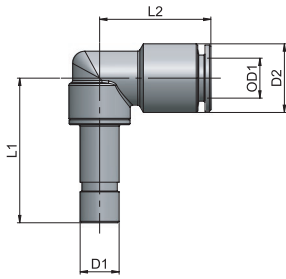



PN LINE

| | |
|-----------|-----|
| CO | 67 |
| MA | 31 |
| MM | 115 |
| PA | 49 |
| PE | 45 |
| PM | 111 |
| PN | 19 |
| PT | 121 |
| PU | 55 |
| PU Safety | 59 |
| PUX | 101 |
| PV | 81 |
| PVX | 105 |
| PX | 95 |
| Tool | 129 |
| Tubings | 135 |

PN 43

Plug-in elbow

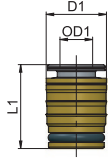


| Type | OD1 | D1 | D2 | L1 | L2 | oz  |
|------------|------|------|------|-------|-------|--|
| 43 5/32 00 | 5/32 | 5/32 | .358 | 1.012 | .768 | .491 |
| 43 1/4 00 | 1/4 | 1/4 | .472 | 1.169 | .866 | .621 |
| 43 5/16 00 | 5/16 | 5/16 | .551 | 1.161 | .886 | .724 |
| 43 3/8 00 | 3/8 | 3/8 | .630 | 1.319 | 1.024 | 1.076 |

PN 10

Press-in cartridge

The new construction features of the cartridge PN10 allow for one single cartridge version to be assembled in plastic, aluminium as well as brass bodies.



| Type | OD1 | D1 | L1 | oz Δ |
|------------|------|------|------|-------------|
| 10 5/32 00 | 5/32 | .366 | .571 | .127 |
| 10 1/4 00 | 1/4 | .472 | .650 | .212 |
| 10 5/16 00 | 5/16 | .539 | .669 | .279 |
| 10 3/8 00 | 3/8 | .602 | .748 | .364 |

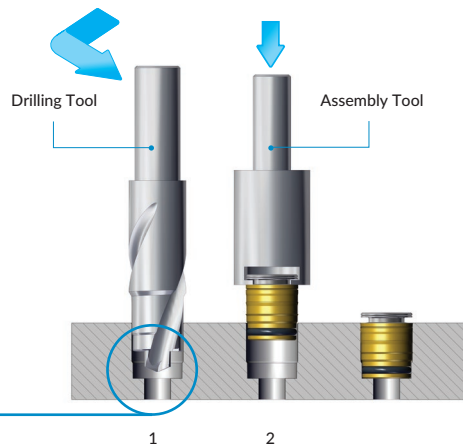
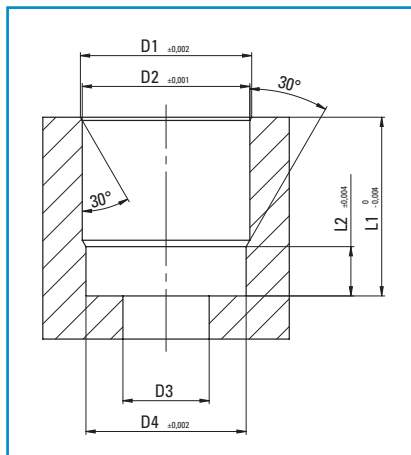
Cartridge seat drilling plan

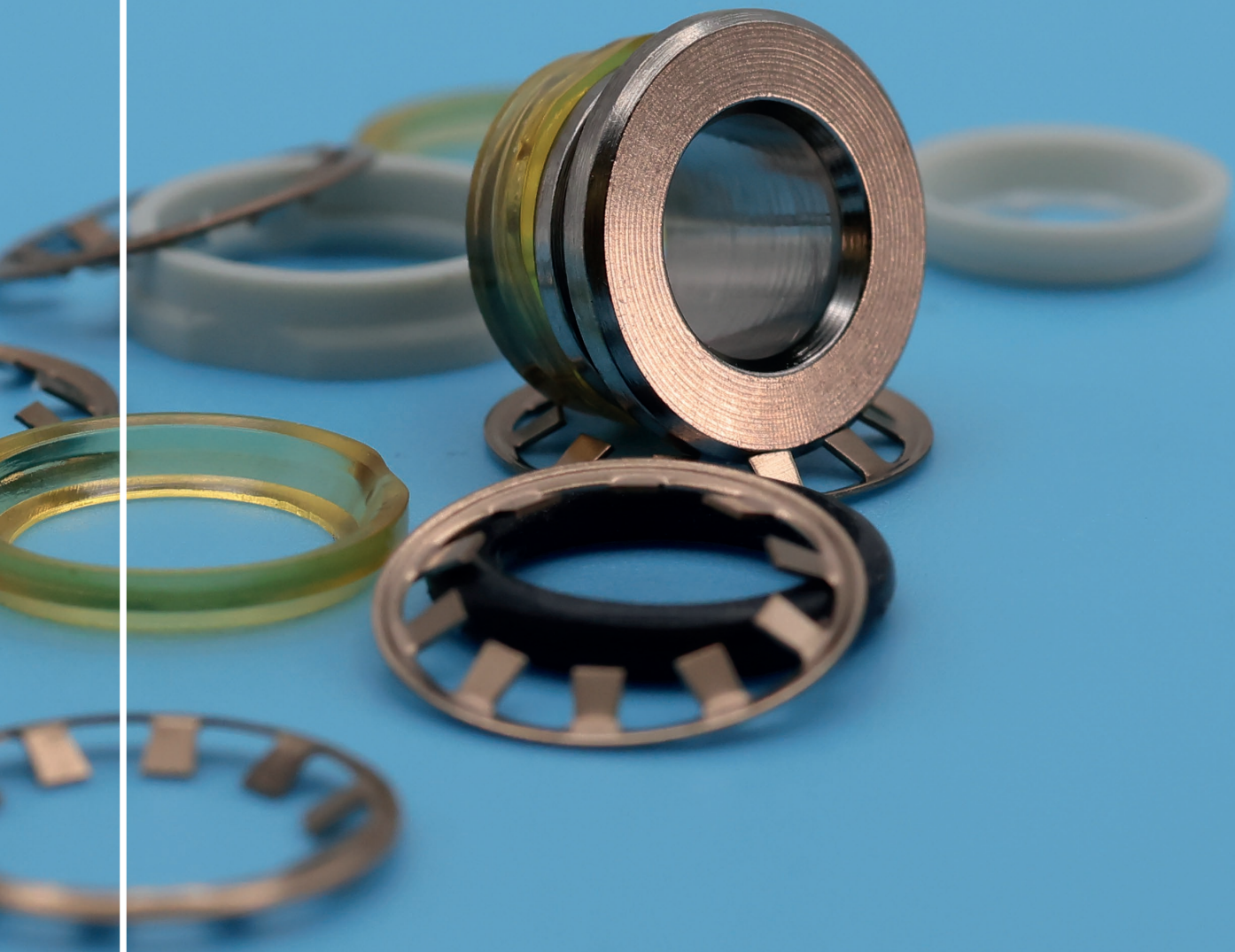
1 Drill the cartridge seat, following the instructions given.

2 Manually press the cartridge into the seat and by means of the Assembly tool push it all the way down until it bottoms; this will guarantee the proper cartridge assembly.

"Drilling and Assembly Tool" available upon request.

| Tube OD | D1 | D2 | D3 | D4 | L1 | L2 |
|---------|------|------|------|------|------|------|
| 5/32 | .374 | .362 | .118 | .339 | .472 | .126 |
| 1/4 | .480 | .469 | .217 | .445 | .551 | .157 |
| 5/16 | .547 | .535 | .276 | .512 | .571 | .157 |
| 3/8 | .610 | .597 | .335 | .575 | .630 | .157 |





cmatic