



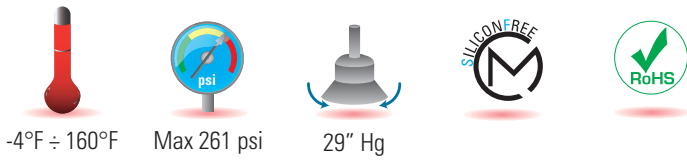
PN LINE

Push-in Fittings, Inch/NPT

The push-in fittings of the PN line are manufactured according to the American standards (Inch tubings and NPT 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 electro-less nickel-plated.

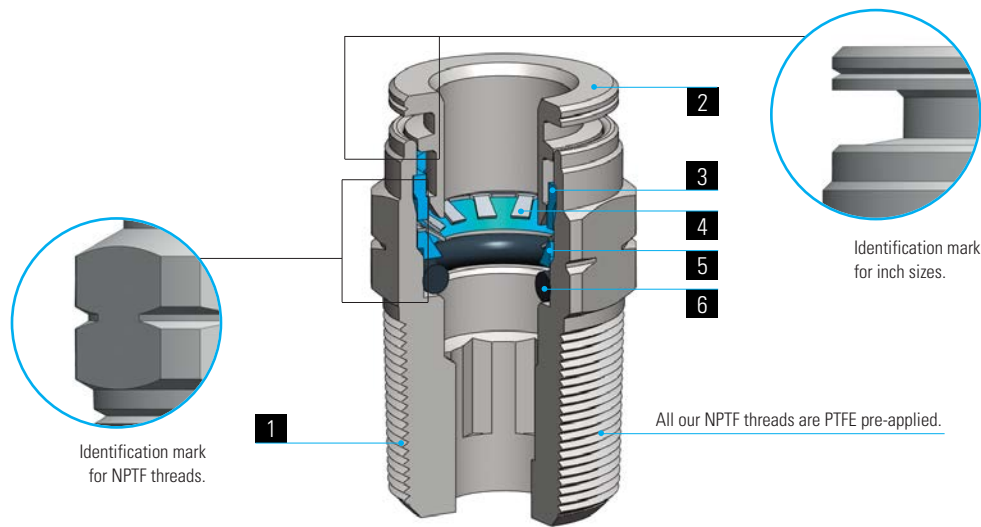


1 - 2	3	4	5	6
Body and Release Ring	Holding Ring	Gripping collet	Protection Ring	Seals
Brass UNI EN 12164 CW614N UNI EN 12165 CW617N Nickel Plated	Acetal Resin (POM)	Stainless Steel AISI 301	Acetal Resin (POM)	NBR



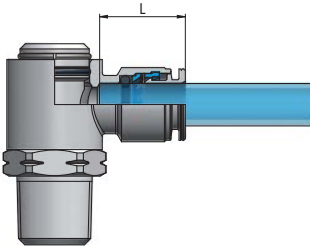
DATA SHEET

Recommended tubings:
PA11, PA12, PA6, Polyethylene PE,
Polyurethane PU (95 durometer or above).
Acceptable Tolerances on the tubings:
+/- .003
Application fields:
Pneumatic circuits.



	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			●	●	●

Tubing insertion depth



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

ASSEMBLY INSTRUCTIONS

1. Cut the tube square (by means of a hose cutter i.e. our PA 34) making sure that no burrs are left and that the tube is not oval.
2. Insert the tube into the fitting until it bottoms.

Tube release

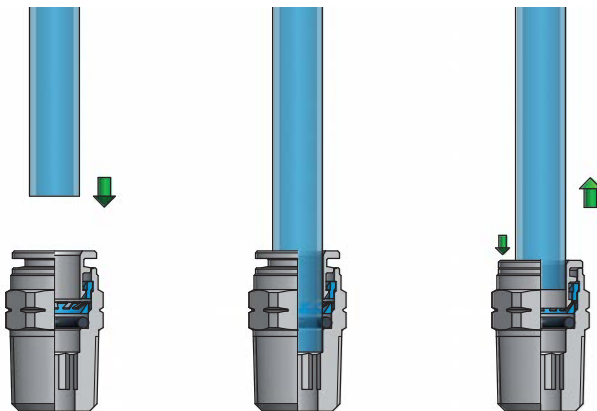
While pressing on the release ring, pull out the tube from the fitting.



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 100).

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.

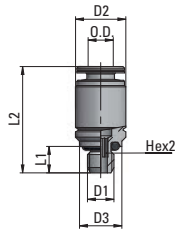
To tighten threads, please check out our tightening torque chart illustrated at page 6.



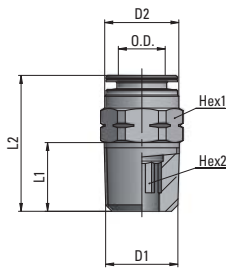
Our tapered male straight connector is provided with an inner hex allowing for easy assembly when no space is available.

PN 11

Taper Straight, male



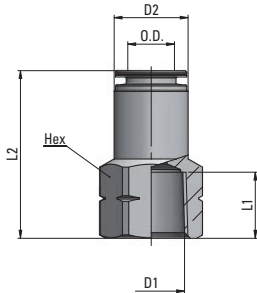
Part Number	Tube OD	D1 UNF	D2	D3	L1	L2	HEX2	oz
11 1/8 10-32	1/8	10-32	.276	.315	.197	.657	3/32	.088
11 5/32 10-32	5/32	10-32	.374	.315	.197	.787	3/32	.159
11 1/4 10-32	1/4	10-32	.472	.315	.197	.925	3/32	.300



Part Number	Tube OD	D1 NPTF	D2	L1	L2	HEX1	HEX2	oz
11 1/8 1/8	1/8	1/8	.276	.335	.728	7/16	3/32	.335
11 5/32 1/8	5/32	1/8	.374	.335	.768	7/16	1/8	.318
11 5/32 1/4	5/32	1/4	.374	.512	.945	9/16	1/8	.706
11 1/4 1/8	1/4	1/8	.472	.335	.866	1/2	5/32	.371
11 1/4 1/4	1/4	1/4	.472	.512	.965	9/16	5/32	.653
11 1/4 3/8	1/4	3/8	.472	.512	1.004	11/16	5/32	1.126
11 5/16 1/8	5/16	1/8	.551	.335	1.043	9/16	3/16	.530
11 5/16 1/4	5/16	1/4	.551	.512	1.004	9/16	1/4	.565
11 5/16 3/8	5/16	3/8	.551	.512	.984	11/16	1/4	.988
11 3/8 1/8	3/8	1/8	.630	.335	1.122	11/16	3/16	.794
11 3/8 1/4	3/8	1/4	.630	.512	1.260	11/16	1/4	.953
11 3/8 3/8	3/8	3/8	.630	.512	1.004	11/16	5/16	.900
11 3/8 1/2	3/8	1/2	.630	.669	1.201	7/8	5/16	1.977
11 1/2 1/4	1/2	1/4	.787	.512	1.358	13/16	5/16	1.253
11 1/2 3/8	1/2	3/8	.787	.512	1.161	13/16	13/32	.971
11 1/2 1/2	1/2	1/2	.787	.669	1.201	7/8	13/32	1.606

PN 13

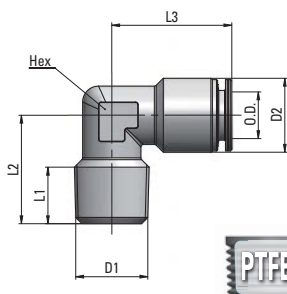
Female Straight



Part Number	Tube OD	D1 NPTF	D2	L1	L2	HEX	oz
13 5/32 1/8	5/32	1/8	.374	.335	.984	1/2	.406
13 1/4 1/8	1/4	1/8	.472	.335	1.063	1/2	.494
13 1/4 1/4	1/4	1/4	.472	.492	1.240	11/16	.935
13 5/16 1/8	5/16	1/8	.551	.335	1.063	9/16	.706
13 5/16 1/4	5/16	1/4	.551	.492	1.240	11/16	1.006
13 3/8 1/4	3/8	1/4	.630	.492	1.339	11/16	1.147
13 3/8 3/8	3/8	3/8	.630	.492	1.339	13/16	1.324

PN 14

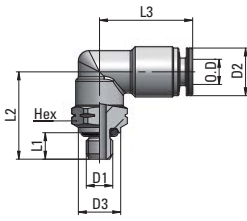
Taper Elbow Fitting, male



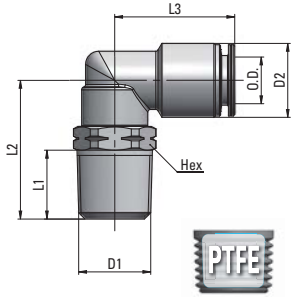
Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX (mm)	oz
14 5/32 1/8	5/32	1/8	.374	.335	.630	.689	10	.318
14 1/4 1/8	1/4	1/8	.472	.335	.630	.807	10	.459
14 1/4 1/4	1/4	1/4	.472	.433	.787	.807	10	.600
14 5/16 1/8	5/16	1/8	.551	.335	.748	.886	12	.724
14 5/16 1/4	5/16	1/4	.551	.433	.807	.886	12	.794
14 3/8 1/4	3/8	1/4	.630	.472	.886	.984	14	1.041
14 3/8 3/8	3/8	3/8	.630	.433	.886	.984	14	1.183

PN 15

Taper Swivelling Elbow Fitting, male



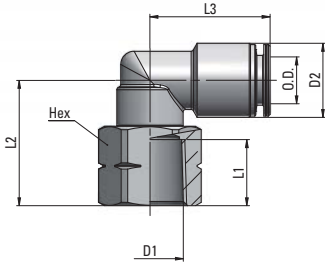
Part Number	Tube OD	D1 UNF	D2	D3	L1	L2	L3	HEX	oz
15 1/8 10-32	1/8	10-32	.276	.315	.197	.650	.539	3/8	.282
15 5/32 10-32	5/32	10-32	.374	.315	.197	.650	.689	3/8	.353



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
15 1/8 1/8	1/8"	1/8	.276	.335	.728	.539	7/16"	.371
15 5/32 1/8	5/32"	1/8	.374	.335	.728	.689	7/16"	.441
15 5/32 1/4	5/32"	1/4	.374	.512	1.024	.748	9/16"	.794
15 1/4 1/8	1/4"	1/8	.472	.335	.827	.866	1/2"	.688
15 1/4 1/4	1/4"	1/4	.472	.512	1.024	.866	9/16"	.865
15 1/4 3/8	1/4"	3/8	.472	.512	1.043	.866	11/16	1.094
15 5/16 1/8	5/16"	1/8	.551	.335	.827	.886	1/2"	.812
15 5/16 1/4	5/16"	1/4	.551	.512	.945	.886	9/16"	.971
15 5/16 3/8	5/16"	3/8	.551	.512	1.122	.906	11/16"	1.412
15 3/8 1/8	3/8"	1/8	.630	.335	.945	1.024	11/16"	1.377
15 3/8 1/4	3/8"	1/4	.630	.512	1.122	1.024	11/16"	1.500
15 3/8 3/8	3/8"	3/8	.630	.512	1.122	1.024	11/16"	1.536
15 3/8 1/2	3/8"	1/2	.630	.669	1.339	1.024	7/8"	2.189
15 1/2 1/4	1/2"	1/4	.787	.512	1.260	1.122	13/16"	2.383
15 1/2 3/8	1/2"	3/8	.787	.512	1.260	1.122	13/16"	2.259
15 1/2 1/2	1/2"	1/2	.787	.669	1.437	1.122	7/8"	2.700

PN 17

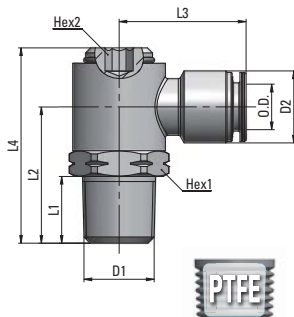
Swivelling Elbow fitting, female



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
17 5/32 1/8	5/32"	1/8	.374	.335	.768	.748	9/16"	.741
17 1/4 1/8	1/4"	1/8	.472	.335	.768	.866	9/16"	.794
17 1/4 1/4	1/4"	1/4	.472	.492	.925	.866	11/16"	1.130
17 5/16 1/8	5/16"	1/8	.551	.335	.768	.886	9/16"	.935
17 5/16 1/4	5/16"	1/4	.551	.492	.925	.886	11/16"	1.288
17 3/8 1/4	3/8"	1/4	.630	.492	1.004	1.024	11/16"	1.571
17 3/8 3/8	3/8"	3/8	.630	.492	1.004	1.024	13/16"	1.712

PN 18

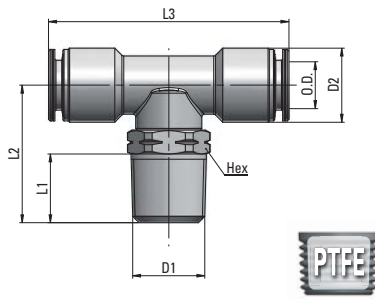
Swivelling fitting with banjo ring



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	L4	HEX1	HEX2	oz
18 5/32 1/8	5/32"	1/8	.374	.335	.807	.807	1.220	9/16"	1/8"	1.006
18 1/4 1/8	1/4"	1/8	.472	.335	.807	.886	1.220	9/16"	1/8"	1.059
18 1/4 1/4	1/4"	1/4	.472	.512	1.043	.945	1.496	11/16"	3/16"	1.712
18 5/16 1/8	5/16"	1/8	.551	.335	.807	.906	1.220	9/16"	1/8"	1.077
18 5/16 1/4	5/16"	1/4	.551	.512	1.043	.965	1.496	11/16"	3/16"	1.747
18 5/16 3/8	5/16"	3/8	.551	.512	1.142	1.043	1.654	13/16"	1/4"	2.269
18 3/8 1/4	3/8"	1/4	.630	.512	1.043	1.043	1.496	11/16"	3/16"	1.836
18 3/8 3/8	3/8"	3/8	.630	.512	1.142	1.142	1.654	13/16"	1/4"	2.965

PN 20

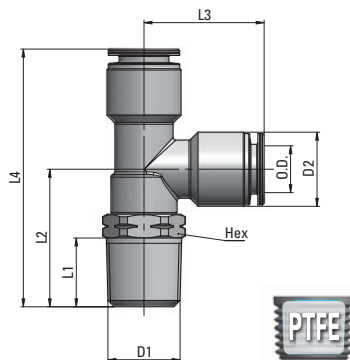
Swivelling Tee fitting, taper



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	HEX	oz
20 1/8 1/8	1/8	1/8	.276	.335	.827	1.260	1/2	.671
20 5/32 1/8	5/32	1/8	.374	.335	.827	1.535	1/2	.777
20 5/32 1/4	5/32	1/4	.374	.512	1.024	1.535	9/16	.953
20 1/4 1/8	1/4	1/8	.472	.335	.827	1.732	1/2	.900
20 1/4 1/4	1/4	1/4	.472	.512	1.024	1.732	9/16	1.077
20 5/16 1/8	5/16	1/8	.551	.335	.827	1.772	1/2	1.112
20 5/16 1/4	5/16	1/4	.551	.512	1.024	1.772	9/16	1.306
20 3/8 1/4	3/8	1/4	.630	.512	1.122	2.047	11/16	1.906
20 3/8 3/8	3/8	3/8	.630	.512	1.122	2.047	11/16	1.942
20 1/2 3/8	1/2	3/8	.787	.512	1.260	2.244	13/16	2.753
20 1/2 1/2	1/2	1/2	.787	.669	1.437	2.244	7/8	3.301

PN 23

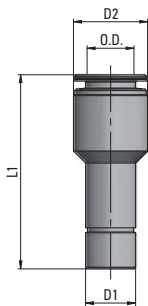
Lateral Swivelling Tee fitting, taper



Part Number	Tube OD	D1 NPTF	D2	L1	L2	L3	L4	HEX	oz
23 1/8 1/8	1/8	1/8	.276	.335	.827	.630	1.457	1/2	.671
23 5/32 1/8	5/32	1/8	.374	.335	.827	.768	1.594	1/2	.812
23 5/32 1/4	5/32	1/4	.374	.512	1.024	.768	1.791	9/16	.953
23 1/4 1/8	1/4	1/8	.472	.335	.827	.866	1.693	1/2	.900
23 1/4 1/4	1/4	1/4	.472	.512	1.024	.866	1.890	9/16	1.077
23 5/16 1/8	5/16	1/8	.551	.335	.827	.886	1.713	1/2	1.112
23 5/16 1/4	5/16	1/4	.551	.512	1.024	.886	1.909	9/16	1.324
23 3/8 1/4	3/8	1/4	.630	.512	1.122	1.024	2.146	11/16	1.915
23 3/8 3/8	3/8	3/8	.630	.512	1.122	1.024	2.146	11/16	1.942
23 1/2 3/8	1/2	3/8	.787	.512	1.260	1.122	2.382	13/16	2.736
23 1/2 1/2	1/2	1/2	.787	.669	1.437	1.122	2.559	7/8	3.177

PN 25

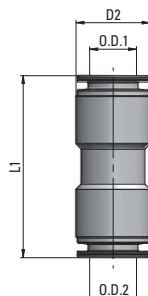
Reducer



Part Number	Tube OD	D1	D2	L1	oz
25 1/8 5/32	1/8	5/32	.276	1.051	.088
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	.883
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

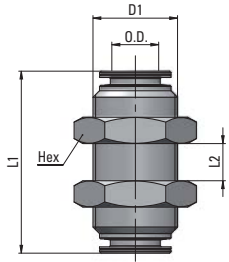
Union



Part Number	Tube OD1	Tube OD2	D2	L1	oz
26 1/8 1/8	1/8	1/8	.276	.827	.106
26 5/32 5/32	5/32	5/32	.374	1.102	.265
26 1/4 1/4	1/4	1/4	.472	1.323	.477
26 5/16 5/16	5/16	5/16	.551	1.339	.635
26 3/8 3/8	3/8	3/8	.630	1.520	.883
26 1/2 1/2	1/2	1/2	.787	1.614	1.444

PN 27

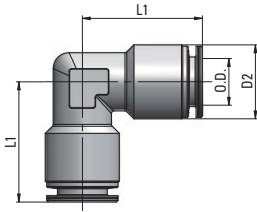
Bulkhead union



Part Number	Tube OD	D1	L1	L2	HEX (mm)	oz Δ
27 1/8 1/8	1/8	M10x1	.827	.177	14	.477
27 5/32 5/32	5/32	M12x1	1.102	.315	16	.818
27 1/4 1/4	1/4	M14x1	1.339	.571	18	1.147
27 5/16 5/16	5/16	M16x1	1.339	.571	20	1.377
27 3/8 3/8	3/8	M18x1	1.535	.689	22	1.889
27 1/2 1/2	1/2	M22x1.5	1.614	.728	26	2.609

PN 28

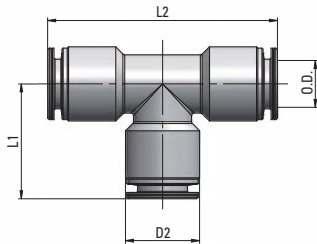
Union Elbow



Part Number	Tube OD	D2	L1	oz Δ
28 1/8 1/8	1/8	.276	.461	.159
28 5/32 5/32	5/32	.374	.689	.335
28 1/4 1/4	1/4	.472	.807	.547
28 5/16 5/16	5/16	.551	.886	.830
28 3/8 3/8	3/8	.630	.984	1.130
28 1/2 1/2	1/2	.787	1.063	1.818

PN 29

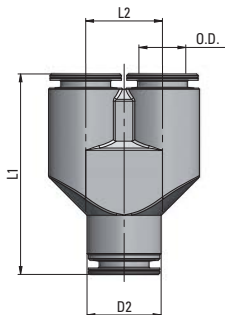
Union Tee



Part Number	Tube OD	D2	L1	L2	oz Δ
29 1/8 1/8	1/8	.276	.461	.921	.194
29 5/32 5/32	5/32	.374	.689	1.378	.441
29 1/4 1/4	1/4	.472	.787	1.575	.706
29 5/16 5/16	5/16	.551	.827	1.654	.988
29 3/8 3/8	3/8	.630	.965	1.929	1.500
29 1/2 1/2	1/2	.787	1.063	2.126	2.436

PN 37

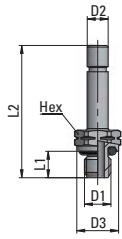
Y Fitting



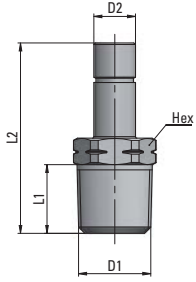
Part Number	Tube OD	D2	L1	L2	oz Δ
37 1/8 1/8	1/8	.354	1.083	.374	.671
37 5/32 5/32	5/32	.354	1.161	.374	.477
37 1/4 1/4	1/4	.472	1.421	.492	1.077
37 5/16 5/16	5/16	.551	1.476	.571	1.483
37 3/8 3/8	3/8	.630	1.752	.650	-

PN 38

Stem adaptor



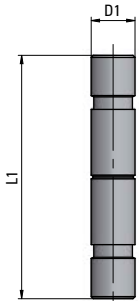
Part Number	D1 UNF	D2	D3	L1	L2	HEX	oz
38 5/32 10-32	10-32	5/32	.311	.197	.984	5/16	.088



Part Number	D1 NPTF	D2	L1	L2	HEX	oz
38 5/32 1/8	1/8	5/32	.335	1.142	7/16	.247
38 5/32 1/4	1/4	5/32	.512	1.339	9/16	.494
38 1/4 1/8	1/8	1/4	.335	1.220	7/16	.300
38 1/4 1/4	1/4	1/4	.512	1.417	9/16	.530
38 5/16 1/8	1/8	5/16	.335	1.220	7/16	.318
38 5/16 1/4	1/4	5/16	.512	1.417	9/16	.547
38 3/8 1/4	1/4	3/8	.512	1.496	9/16	.582
38 3/8 3/8	3/8	3/8	.512	1.516	11/16	.812
38 1/2 3/8	3/8	1/2	.512	1.634	11/16	.900
38 1/2 1/2	1/2	1/2	.669	1.831	7/8	1.518

PN 39

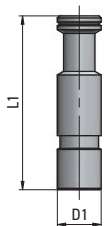
Extention Piece



Part Number	D1	L1	oz
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	.194
39 3/8 3/8	3/8	1.575	.300
39 1/2 1/2	1/2	1.732	.494

PN 40

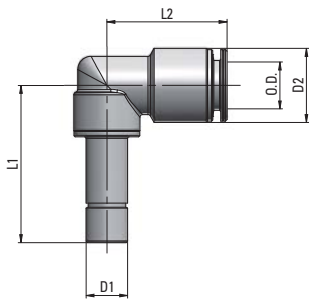
Plug




Part Number	D1	L1	oz
40 1/8 1/8	1/8	.787	.046
40 5/32 5/32	5/32	.984	.088
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	.724
40 1/2 1/2	1/2	1.575	1.483

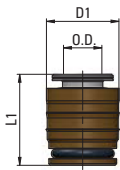
PN 43


Plug-in Elbow



Part Number	Tube OD	D1	D2	L1	L2	oz 
43 5/32 00	5/32	5/32	.374	1.004	.748	.491
43 1/4 00	1/4	1/4	.472	1.161	.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	1.077

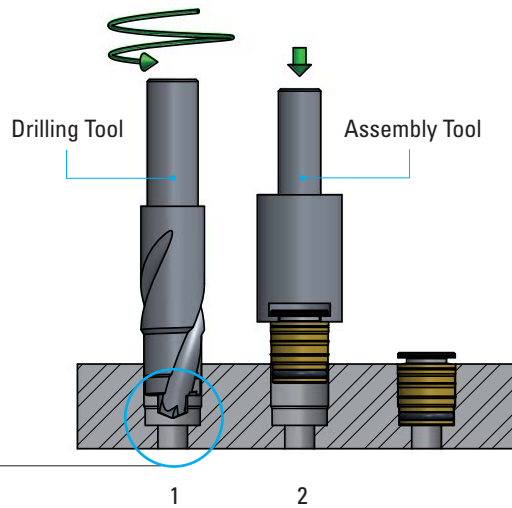
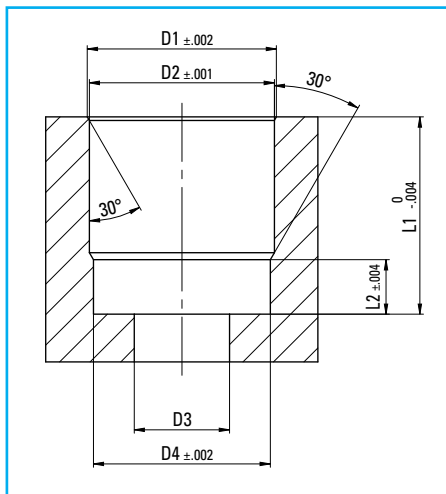
The new construction features of the cartridge PN10 allow for one single cartridge version to be assembled in plastic, aluminium as well as brass bodies.



Part Number	Tube OD	D1	L1	oz 
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

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	.598	.335	.575	.630	.157



- 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 .