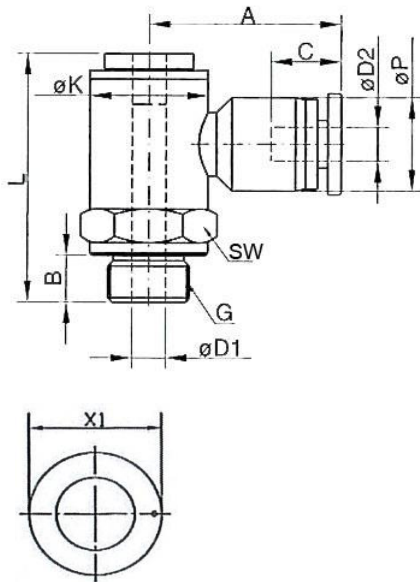


Push-in fittings series manufactured in plastic and nickel-plated brass.
All parts are suitable for use with hoses, tubes or pipes made of plastic and copper.

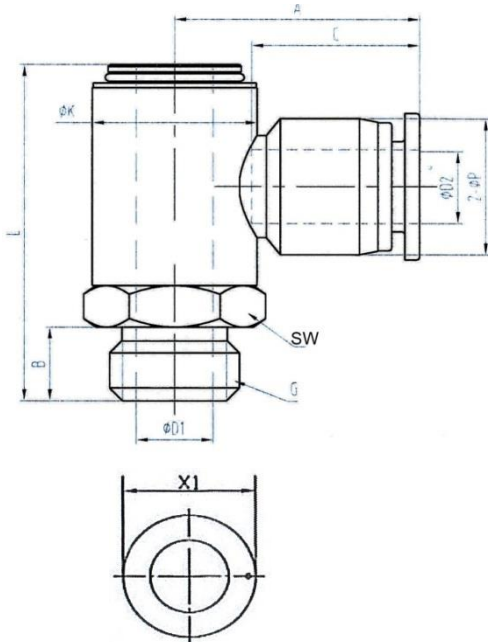
Areas of application:	Air, vacuum
Material:	Plastic and nickel-plated brass
Pressure ring:	Plastic
Working pressure:	Max. 15 bar, coarse vacuum
Temperature range:	-20 °C to 80 °C
Sealing surface:	Parallel version: O-ring in housing Conical version: PTFE thread coating
Medium:	Compressed air and all gases or liquids that are compatible with the materials
Recommended hose:	PU or PA (nylon)



163.014-6

Banjo elbow with inner hex, swivel type, conical male thread, coated

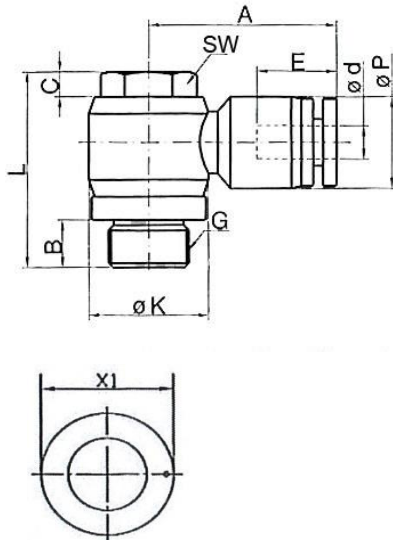
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109379	163.018-4	29.0	22.5	14.9	6.0	4	14	R 1/8	14.0	11.0	7.5	10.0
109380	163.018-6	29.0	21.5	15.7	6.0	6	14	R 1/8	14.0	13.0	7.5	12.0
109381	163.018-8	29.0	24.5	18.2	6.0	8	14	R 1/8	14.0	14.8	7.5	14.0
109382	163.014-4	38.0	24.5	14.9	8.3	4	17	R 1/4	17.8	11.0	9.5	10.0
109383	163.014-6	38.0	23.5	15.7	8.3	6	17	R 1/4	17.8	13.0	9.5	12.0
109384	163.014-8	38.0	26.5	18.2	8.3	8	17	R 1/4	17.8	14.8	9.5	14.0
109385	163.014-10	38.0	29.9	20.7	8.3	10	17	R 1/4	17.8	18.4	9.5	17.0
109386	163.014-12	38.0	30.8	26.6	8.3	12	17	R 1/4	17.8	21.0	9.5	20.0
109387	163.038-8	40.7	28.5	18.2	11.5	8	20	R 3/8	21.9	14.8	10.5	14.0
109388	163.038-10	40.7	31.9	20.7	11.5	10	20	R 3/8	21.9	18.4	10.5	17.0
109389	163.038-12	40.7	32.8	26.6	11.5	12	20	R 3/8	21.9	21.0	10.5	20.0
109390	163.012-10	45.2	34.7	20.7	14.0	10	24	R 1/2	27.1	18.4	13.5	17.0



170.014-6

Banjo elbow with inner hex, swivel type, parallel male thread with O-ring

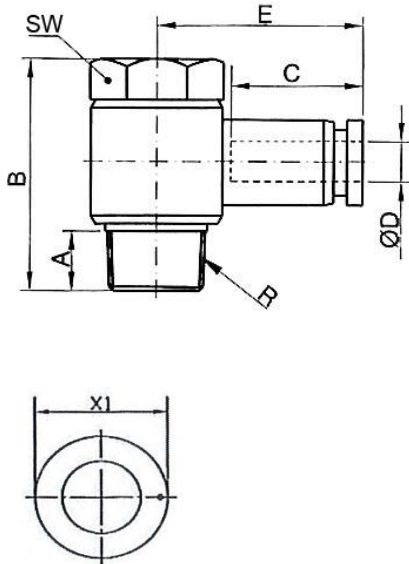
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109391	170.018-4	28.5	22.5	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109392	170.018-6	28.5	21.5	15.4	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109393	170.018-8	28.5	24.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
109394	170.014-6	36.5	23.5	15.4	8,3	6	17	G 1/4	17.8	13.0	6.5	12.0
109395	170.014-8	36.5	26.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109396	170.014-10	36.5	29.9	19.7	8.3	10	17	G 1/4	17.8	18.4	6.5	17.0
109397	170.014-12	36.5	30.8	22.6	8.3	12	17	G 1/4	17.8	21.0	6.5	20.0
109398	170.038-8	39.2	28.5	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109399	170.038-10	39.2	31.9	19.7	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109400	170.038-12	39.2	32.8	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0
109401	170.012-12	64.2	35.4	22.6	14.0	12	24	G 1/2	27.1	21.0	9.5	20.0



145.014-8

Banjo elbow with outer hex, swivel type, parallel male thread with O-ring

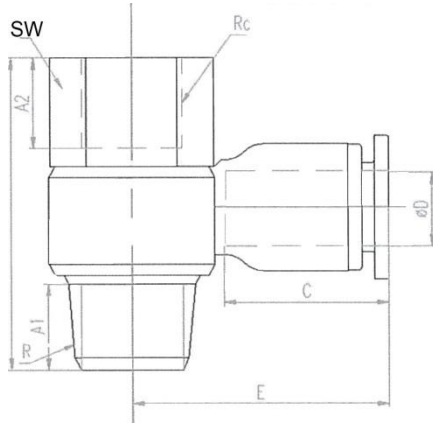
Art. No.	Type No.	L mm	A mm	B mm	C mm	E mm	Ø P mm	Ø K mm	Ø d mm	Thread	a/f mm	X1 mm
109402	145.005-4	17.2	20.0	3.8	-	-	-	-	4	M5	8	10.0
109403	145.005-6	17.2	21.7	3.8	-	-	-	-	6	M5	8	12.0
109404	145.018-4	23.5	22.3	5.7	3.0	15.1	11.0	14.4	4	G 1/8	10	10.0
109405	145.018-6	23.5	22.9	5.7	3.0	16.0	13.0	14.4	6	G 1/8	10	12.0
109406	145.018-8	23.5	25.3	5.7	3.0	18.1	14.8	14.4	8	G 1/8	10	14.0
109407	145.018-10	23.5	30.2	5.7	3.0	20.4	18.4	14.4	10	G 1/8	10	17.0
109408	145.014-4	26.0	24.0	6.3	4.0	15.1	11.0	18.3	4	G 1/4	14	10.0
109409	145.014-6	26.0	24.9	6.3	4.0	16.0	13.0	18.3	6	G 1/4	14	12.0
109410	145.014-8	26.0	28.4	6.3	4.0	18.1	14.8	18.3	8	G 1/4	14	14.0
109411	145.014-10	26.0	32.0	6.3	4.0	20.4	18.4	18.3	10	G 1/4	14	17.0
109412	145.014-12	26.0	32.0	6.3	4.0	23.2	21.0	18.3	12	G 1/4	14	20.0
109413	145.038-6	31.7	26.6	7.5	4.5	16.0	13.0	22.0	6	G 3/8	19	12.0
109414	145.038-8	31.7	29.3	7.5	4.5	18.1	14.8	22.0	8	G 3/8	19	14.0
109415	145.038-10	31.7	32.5	7.5	4.5	20.4	18.4	22.0	10	G 3/8	19	17.0
109416	145.038-12	31.7	35.3	7.5	4.5	23.2	21.0	22.0	12	G 3/8	19	20.0
109417	145.012-6	36.6	29.6	9.5	5.0	16.0	13.0	28.0	6	G 1/2	24	12.0
109418	145.012-8	36.6	32.3	9.5	5.0	18.1	14.8	28.0	8	G 1/2	24	14.0
109419	145.012-10	36.6	35.5	9.5	5.0	20.4	18.4	28.0	10	G 1/2	24	17.0
109420	145.012-12	36.6	36.3	9.5	5.0	23.2	21.0	28.0	12	G 1/2	24	20.0



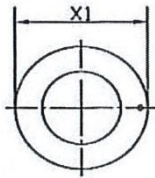
219.014-6

Banjo elbow with inner hex, swivel type, conical male thread, coated

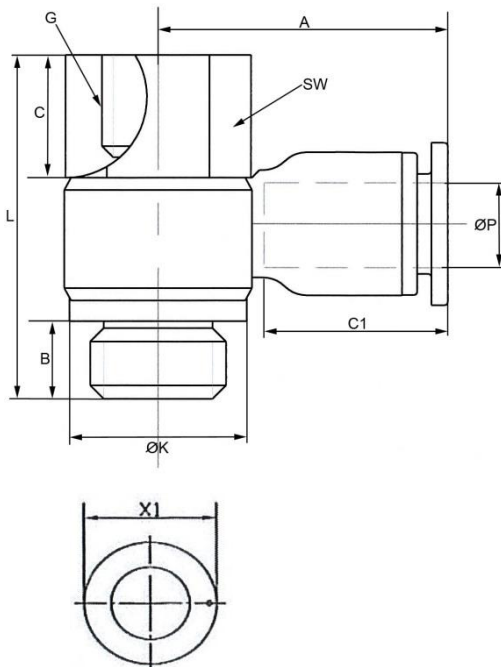
Art. No.	Type No.	Ø D mm	Thread	A mm	B mm	a/f mm	E mm	X1 mm	C mm
109421	219.018-4	4	R 1/8	7.5	23.5	10	22.3	10.0	14.9
109422	219.018-6	6	R 1/8	7.5	23.5	10	22.9	12.0	15.4
109423	219.018-8	8	R 1/8	7.5	23.5	10	25.3	14.0	17.8
109424	219.014-6	6	R 1/4	9.5	26.3	14	24.9	12.0	15.4
109425	219.014-8	8	R 1/4	9.5	26.3	14	28.4	14.0	17.8
109426	219.014-10	10	R 1/4	9.5	26.3	14	32.0	17.0	20.5
109427	219.014-12	12	R 1/4	9.5	26.3	14	33.2	23.0	21.6
109428	219.038-6	6	R 3/8	10.5	31.9	19	26.6	12.0	15.4
109429	219.038-8	8	R 3/8	10.5	31.9	19	29.3	14.0	17.8
109430	219.038-10	10	R 3/8	10.5	31.9	19	32.5	17.0	20.5
109431	219.038-12	12	R 3/8	10.5	31.9	19	35.3	20.0	20.0
109432	219.012-8	8	R 1/2	13.5	38.6	24	32.3	14.0	17.8
109433	219.012-10	10	R 1/2	13.5	38.6	24	35.5	17.0	20.5
109434	219.012-12	12	R 1/2	13.5	38.6	24	36.3	20.0	22.9



220.014-6


Male elbow, swivel type, conical male and female threads, coated

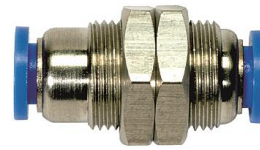
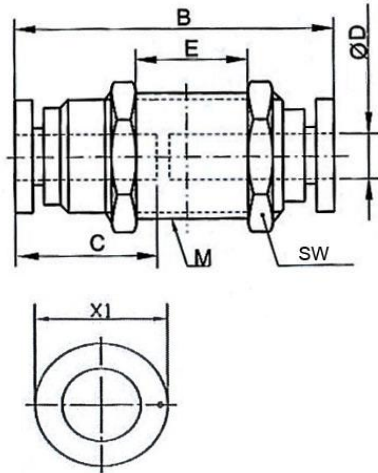
Art. No.	Type No.	Ø D mm	Thread	A1 mm	A2 mm	a/f mm	B mm	E mm	Thread	X1 mm	C mm
109454	220.018-4	4	R 1/8	7.5	8.0	14	29.5	22.3	Rc 1/8	10.0	14.9
109455	220.018-6	6	R 1/8	7.5	8.0	14	29.5	23.1	Rc 1/8	12.0	15.7
109456	220.018-8	8	R 1/8	7.5	8.0	14	29.5	25.6	Rc 1/8	14.0	18.2
109457	220.018-10	10	R 1/8	7.5	8.0	14	29.5	30.1	Rc 1/8	17.0	20.7
109458	220.014-4	4	R 1/4	9.5	11.0	17	34.3	24.1	Rc 1/4	10.0	14.9
109459	220.014-6	6	R 1/4	9.5	11.0	17	34.3	25.1	Rc 1/4	12.0	15.7
109460	220.014-8	8	R 1/4	9.5	11.0	17	34.3	28.6	Rc 1/4	14.0	18.2
109461	220.014-10	10	R 1/4	9.5	11.0	17	34.3	32.3	Rc 1/4	17.0	20.7
109462	220.014-12	12	R 1/4	9.5	11.0	17	34.3	33.5	Rc 1/4	20.0	22.3
109463	220.038-6	6	R 3/8	10.5	12.0	21	40.4	26.8	Rc 3/8	12.0	15.7
109464	220.038-8	8	R 3/8	10.5	12.0	21	40.4	29.6	Rc 3/8	14.0	18.2
109465	220.038-10	10	R 3/8	10.5	12.0	21	40.4	32.9	Rc 3/8	17.0	20.7
109466	220.038-12	12	R 3/8	10.5	12.0	21	40.4	35.6	Rc 3/8	20.0	22.3
109467	220.012-6	6	R 1/2	13.5	14.0	24	47.5	29.8	Rc 1/2	12.0	15.7
109468	220.012-8	8	R 1/2	13.5	14.0	24	47.5	32.6	Rc 1/2	14.0	18.2
109469	220.012-10	10	R 1/2	13.5	14.0	24	47.5	35.9	Rc 1/2	17.0	20.7
109470	220.012-12	12	R 1/2	13.5	14.0	24	47.5	36.6	Rc 1/2	20.0	22.3



221.014-6

Male elbow, swivel type, parallel male and female threads with O-ring

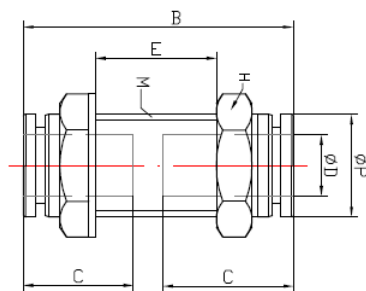
Art. No.	Type No.	L mm	A mm	B mm	C mm	E mm	Ø P mm	Ø K mm	Thread	a/f mm	X1 mm	C1 mm
109435	221.005-4	19.5	20.0	3.8	5.5	-	-	-	M5	10	10.0	14.9
109436	221.005-6	19.5	21.9	3.8	5.5	-	-	-	M5	10	12.0	15.7
109437	221.018-4	29.5	22.3	5.7	9.0	7.0	10.5	14.4	G 1/8	14	10.0	14.9
109438	221.018-6	29.5	22.8	5.7	9.0	7.0	12.5	14.4	G 1/8	14	12.0	15.4
109439	221.018-8	29.5	25.2	5.7	9.0	7.0	14.0	14.4	G 1/8	14	14.0	16.9
109440	221.018-10	29.5	30.2	5.7	9.0	7.0	18.0	14.4	G 1/8	17	17.0	20.5
109441	221.014-4	34.0	24.1	6.3	12.0	10.0	10.5	18.3	G 1/4	17	10.0	14.9
109442	221.014-6	34.0	24.9	6.3	12.0	10.0	12.5	18.3	G 1/4	17	12.0	15.4
109443	221.014-8	34.0	28.3	6.3	12.0	10.0	14.0	18.3	G 1/4	17	14.0	17.9
109444	221.014-10	34.0	32.0	6.3	12.0	10.0	18.0	18.3	G 1/4	17	17.0	20.5
109445	221.014-12	34.0	32.4	6.3	12.0	10.0	20.4	18.3	G 1/4	21	20.0	21.6
109446	221.038-6	40.2	26.5	7.5	13.0	11.0	12.5	22.0	G 3/8	21	12.0	15.4
109447	221.038-8	40.2	29.2	7.5	13.0	11.0	14.0	22.0	G 3/8	21	14.0	17.9
109448	221.038-10	40.2	32.5	7.5	13.0	11.0	18.0	22.0	G 3/8	21	17.0	20.5
109449	221.038-12	40.2	35.3	7.5	13.0	11.0	20.4	22.0	G 3/8	21	20.0	21.8
109450	221.012-6	45.5	29.5	9.5	14.4	13.0	12.5	28.0	G 1/2	24	12.0	15.4
109451	221.012-8	45.5	32.2	9.5	14.4	13.0	14.0	28.0	G 1/2	24	14.0	17.9
109452	221.012-10	45.5	35.5	9.5	14.4	13.0	18.0	28.0	G 1/2	24	17.0	20.5
109453	221.012-12	45.5	36.3	9.5	14.4	13.0	20.4	28.0	G 1/2	24	20.0	22.3



149.006

Female bulkhead connector

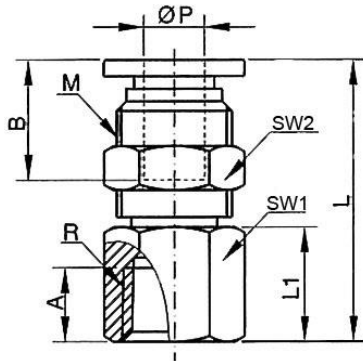
Art. No.	Type No.	Ø D mm	M mm	E mm	B mm	a/f mm	X1 mm	C mm
109808	149.004	4	M12	11.9	31.1	14	10.0	14.8
109809	149.006	6	M14	10.7	33.4	17	12.0	15.4
109810	149.008	8	M16	11.0	37.7	19	14.0	17.8
109811	149.010	10	M20	13.1	41.8	24	17.0	20.5
109812	149.012	12	M22	16.0	46.7	27	20.0	22.9
109813	149.016	16	M27	20.0	51.2	32	23.5	25.0



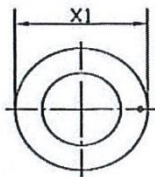
149.010-K

Female bulkhead connector, plastic

Art. No.	Type No.	Ø D mm	M mm	Ø P mm	C mm	B mm	H mm	E mm
135757	149.004-K	4	M12x1.0	10.0	14.5	32.0	14.0	10.0
135758	149.006-K	6	M14x1.25	12.0	15.0	33.0	17.0	10.0
135759	149.008-K	8	M16x1.5	14.0	16.5	37.5	19.0	12.0
135760	149.010-K	10	M20x1.5	17.0	20.0	45.0	24.0	16.0
135761	149.012-K	12	M24x2.0	20.0	21.5	47.0	27.0	18.0

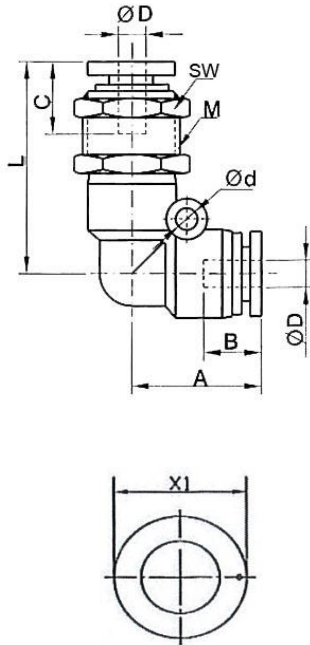


151.014-6



Male bulkhead connector, conical female thread

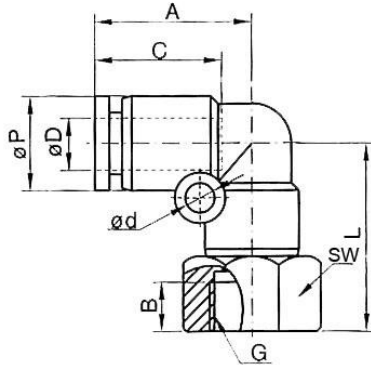
Art. No.	Type No.	L mm	A mm	B mm	L1 mm	a/f1 mm	a/f2 mm	Thread	M mm	Ø P mm	X1 mm
109213	151.018-4	23.8	7.0	14.9	10.0	14	14	Rc 1/8	M12	4	10.0
109214	151.018-6	27.0	7.0	16.2	10.0	17	17	Rc 1/8	M14	6	12.0
109215	151.018-8	32.1	7.0	18.2	10.0	19	19	Rc 1/8	M16	8	14.0
109216	151.014-6	30.0	10.0	16.2	13.0	17	17	Rc 1/4	M14	6	12.0
109217	151.014-8	35.1	10.0	18.2	13.0	19	19	Rc 1/4	M16	8	14.0
109218	151.014-10	36.0	10.0	20.5	13.0	24	24	Rc 1/4	M20	10	17.0
109219	151.014-12	38.1	10.0	22.5	13.0	24	27	Rc 1/4	M22	12	20.0
109220	151.038-10	37.0	11.0	20.3	15.0	24	24	Rc 3/8	M20	10	17.0
109221	151.038-12	39.1	11.0	22.7	15.0	24	27	Rc 3/8	M22	12	20.0
109222	151.012-12	41.1	13.0	22.7	17.0	24	27	Rc 1/2	M22	12	20.0



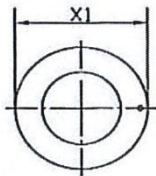
152.006

Bulkhead connector, elbow type

Art. No.	Type No.	L mm	A mm	B mm	C mm	Ø D mm	Ø d mm	M mm	a/f mm	X1 mm
109821	152.004	31.3	17.5	14.9	14.9	4	-	M12	14	10.0
109822	152.006	37.9	18.7	15.4	16.0	6	3.2	M14	17	12.0
109823	152.008	43.6	22.5	17.8	18.2	8	3.2	M16	19	14.0
109824	152.010	51.2	27.2	20.5	20.3	10	4.2	M20	24	17.0
109825	152.012	56.1	29.3	22.9	22.7	12	4.2	M22	27	20.0
109826	152.016	62.6	32.5	24.0	25.0	16	4.3	M27	30	23.5

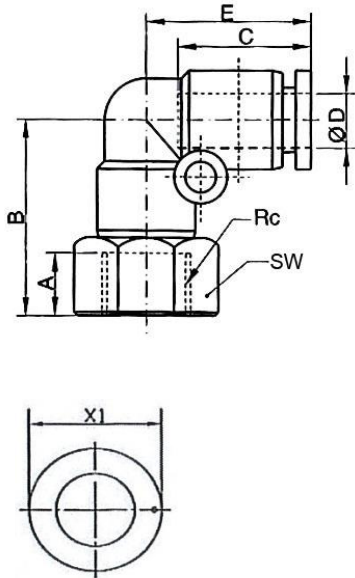


168.014-6



Banjo elbow with parallel female thread, swivel type

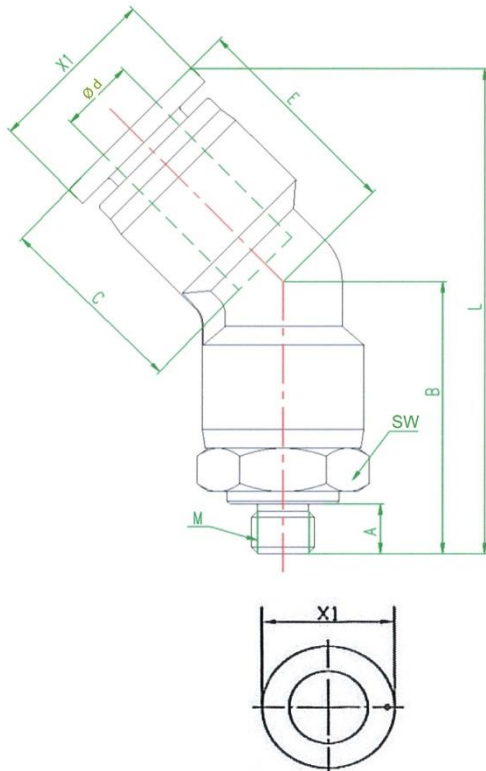
Art. No.	Type No.	L mm	A mm	B mm	C mm	Ø P mm	Ø D mm	a/f mm	Thread	Ø d mm	X1 mm
109340	168.005-4	18.5	17.5	5.0	14.9	-	4	10	M 5	-	10.0
109341	168.005-6	19.7	18.7	5.0	15.4	-	6	12	M 5	-	12.0
109342	168.018-4	23.0	17.5	7.0	14.9	11.0	4	14	G 1/8	3.2	10.0
109343	168.018-6	24.4	18.7	7.0	15.4	13.0	6	14	G 1/8	3.2	12.0
109344	168.018-8	27.3	22.5	7.0	17.8	14.8	8	14	G 1/8	3.2	14.0
109345	168.018-10	27.3	27.2	7.0	20.5	18.4	10	17	G 1/8	4.2	17.0
109346	168.014-4	26.0	17.5	10.0	14.9	11.0	4	17	G 1/4	3.2	10.0
109347	168.014-6	27.4	18.7	10.0	15.4	13.0	6	17	G 1/4	3.2	12.0
109348	168.014-8	30.3	22.5	10.0	17.8	14.8	8	17	G 1/4	3.2	14.0
109349	168.014-10	34.3	27.2	10.0	20.5	18.4	10	17	G 1/4	4.2	17.0
109350	168.014-12	37.0	29.3	10.0	22.9	21.0	12	21	G 1/4	4.2	20.0
109351	168.038-6	28.7	18.7	11.0	15.4	13.0	6	21	G 3/8	3.2	12.0
109352	168.038-8	32.0	22.5	11.0	17.8	14.8	8	21	G 3/8	3.2	14.0
109353	168.038-10	36.3	27.2	11.0	20.5	18.4	10	21	G 3/8	4.2	17.0
109354	168.038-12	38.0	29.3	11.0	22.9	21.0	12	21	G 3/8	4.2	20.0
109355	168.038-16	40.5	32.5	11.0	24.0	26.0	16	24	G 3/8	4.3	-
109356	168.012-6	34.2	18.7	13.0	15.4	13.0	6	24	G 1/2	3.3	12.0
109357	168.012-8	34.3	22.5	13.0	17.8	14.8	8	24	G 1/2	4.2	14.0
109358	168.012-10	38.8	27.2	13.0	20.5	18.4	10	24	G 1/2	4.2	17.0
109359	168.012-12	40.5	29.3	13.0	22.9	21.0	12	24	G 1/2	4.2	20.0
109360	168.012-16	43.0	32.5	13.0	24.0	26.0	16	24	G 1/2	4.3	-



153.014-6

Banjo elbow with conical female thread, swivel type

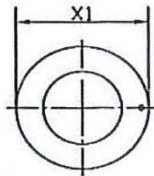
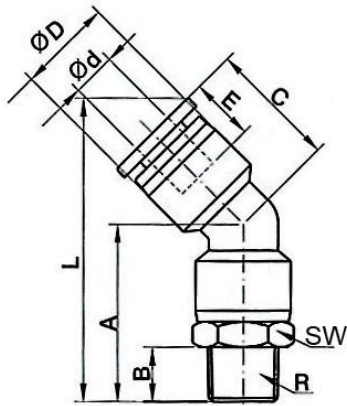
Art. No	Type No.	Ø D mm	Thread	A mm	B mm	E mm	SW mm	X1 mm	C mm
109361	153.018-4	4	Rc 1/8	7.0	23.0	17.5	14	10.0	14.9
109362	153.018-6	6	Rc 1/8	7.0	24.4	19.0	14	12.0	15.7
109363	153.018-8	8	Rc 1/8	7.0	27.3	22.8	14	14.0	17.7
109364	153.018-10	10	Rc 1/8	7.0	27.3	27.2	17	17.0	20.7
109365	153.014-4	4	Rc 1/4	10.0	26.0	17.5	17	10.0	14.9
109366	153.014-6	6	Rc 1/4	10.0	27.4	19.0	17	12.0	15.4
109367	153.014-8	8	Rc 1/4	10.0	30.3	22.8	17	14.0	17.7
109368	153.014-10	10	Rc 1/4	10.0	34.3	27.2	17	17.0	20.7
109369	153.014-12	12	Rc 1/4	10.0	37.0	29.6	21	20.0	22.9
109370	153.038-6	6	Rc 3/8	11.0	28.7	19.0	21	12.0	15.7
109371	153.038-8	8	Rc 3/8	11.0	32.0	22.8	21	14.0	17.7
109372	153.038-10	10	Rc 3/8	11.0	36.3	27.2	21	17.0	20.7
109373	153.038-12	12	Rc 3/8	11.0	38.0	29.6	21	20.0	22.9
109374	153.038-16	16	Rc 3/8	11.0	40.5	32.5	24	23.5	24.0
109375	153.012-8	8	Rc 1/2	13.0	34.3	22.8	24	14.0	17.7
109376	153.012-10	10	Rc 1/2	13.0	38.8	27.2	24	17.0	20.7
109377	153.012-12	12	Rc 1/2	13.0	40.5	29.6	24	20.0	22.9
109378	153.012-16	16	Rc 1/2	13.0	43.0	32.5	24	23.5	24.0



167.014-6

45° union elbow, swivel type, parallel male thread with O-ring

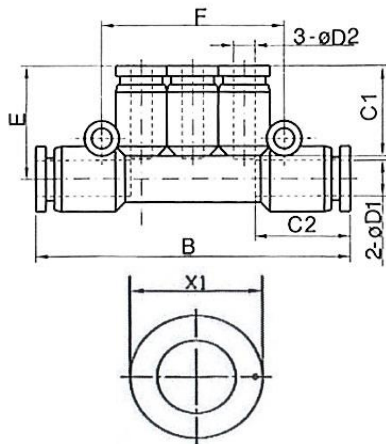
Art. No	Type No.	L mm	A mm	B mm	C mm	E mm	Ø D mm	Ø d mm	a/f mm	Thread	X1 mm
109223	167.005-4	34.7	20.2	4.0	16.2	14.9	11.0	4	10	M5	10.0
109224	167.005-6	36.1	21.9	4.0	17.4	15.4	13.0	6	12	M5	12.0
109225	167.018-4	39.0	23.2	5.5	16.2	14.9	11.0	4	12	G 1/8	10.0
109226	167.018-6	42.0	24.4	5.5	17.4	15.4	13.0	6	14	G 1/8	12.0
109227	167.018-8	47.5	27.1	5.5	20.6	7.8	14.8	8	14	G 1/8	14.0
109228	167.018-10	53.1	29.7	5.5	23.1	20.5	18.4	10	17	G 1/8	17.0
109229	167.014-4	40.5	24.7	6.5	16.2	14.9	12.0	4	12	G 1/4	10.0
109230	167.014-6	43.5	25.9	6.5	17.4	15.4	14.0	6	14	G 1/4	12.0
109231	167.014-8	49.0	28.6	6.5	20.6	17.8	14.8	8	17	G 1/4	14.0
109232	167.014-10	54.1	30.7	6.5	23.1	20.5	18.4	10	17	G 1/4	17.0
109233	167.014-12	60.4	32.8	6.5	26.0	22.9	21.0	12	21	G 1/4	20.0
109234	167.038-6	45.0	26.2	7.5	17.4	15.4	13.0	6	14	G 3/8	12.0
109235	167.038-8	50.5	30.1	7.5	20.6	17.8	14.8	8	20	G 3/8	14.0
109236	167.038-10	55.6	32.2	7.5	23.1	20.5	18.4	10	20	G 3/8	17.0
109237	167.038-12	61.4	33.8	7.5	26.0	22.9	21.0	12	21	G 3/8	20.0
109238	167.012-6	48.5	30.9	9.5	17.4	15.4	13.0	6	14	G 1/2	12.0
109239	167.012-8	54.0	33.6	9.5	20.6	17.8	14.8	8	24	G 1/2	14.0
109240	167.012-10	59.1	35.7	9.5	23.1	20.5	18.4	10	19	G 1/2	17.0
109241	167.012-12	64.9	37.3	9.5	26.0	22.9	21.0	12	24	G 1/2	20.0



154.014-6

45° union elbow, swivel type, conical male thread, coated

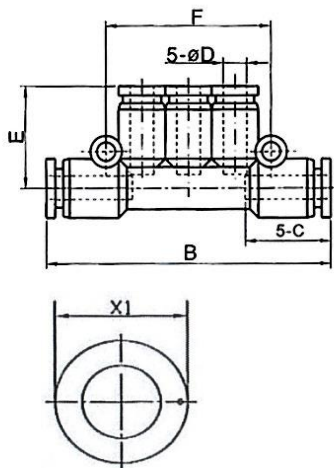
Art. No.	Type No.	L mm	A mm	B mm	C mm	E mm	Ø D mm	Ø d mm	a/f mm	Thread	X1 mm
109242	154.018-4	38.5	22.7	7.5	16.4	14.9	11.0	4	10	R 1/8	10.0
109243	154.018-6	42.0	24.4	7.5	18.0	15.7	13.0	6	12	R 1/8	12.0
109244	154.018-8	48.0	27.6	7.5	20.9	17.7	14.8	8	14	R 1/8	14.0
109245	154.018-10	53.6	30.2	7.5	23.5	20.7	18.4	10	17	R 1/8	17.0
109246	154.014-4	41.5	25.7	9.5	16.4	14.9	11.0	4	14	R 1/4	10.0
109247	154.014-6	44.5	26.9	9.5	18.0	15.7	13.0	6	14	R 1/4	12.0
109248	154.014-8	50.0	29.6	9.5	20.9	17.7	14.8	8	14	R 1/4	14.0
109249	154.014-10	55.6	32.2	9.5	23.5	20.7	18.4	10	17	R 1/4	17.0
109250	154.014-12	61.9	35.2	9.5	26.3	22.9	21.0	12	21	R 1/4	20.0
109251	154.038-6	46.0	28.4	10.5	18.0	15.7	13.0	6	17	R 3/8	12.0
109252	154.038-8	51.5	31.1	10.5	20.9	17.7	14.8	8	17	R 3/8	14.0
109253	154.038-10	56.6	33.2	10.5	23.5	20.7	18.4	10	17	R 3/8	17.0
109254	154.038-12	62.9	36.2	10.5	26.3	22.9	21.0	12	21	R 3/8	20.0
109255	154.012-6	49.5	31.9	13.5	18.0	15.7	13.0	6	21	R 1/2	12.0
109256	154.012-8	55.0	34.6	13.5	20.9	17.7	14.8	8	21	R 1/2	14.0
109257	154.012-10	60.1	36.7	13.5	23.5	20.7	18.4	10	21	R 1/2	17.0
109258	154.012-12	65.9	39.2	13.5	26.3	22.9	21.0	12	21	R 1/2	20.0



146.0806

Tee distributor with plug connection, 3 unequal outlets

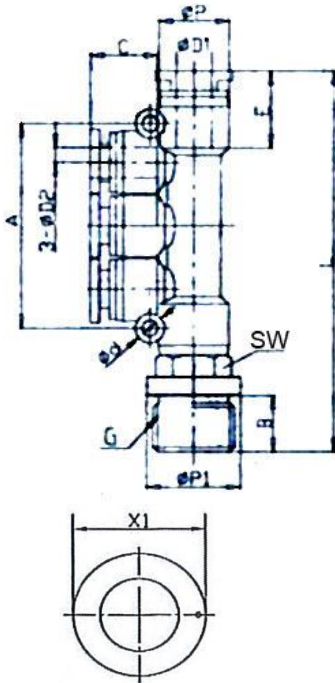
Art. No.	Type No.	Ø D1 mm	Ø D2 mm	E mm	F mm	B mm	X1 mm	C1 mm	C2 mm	X2 mm	X3 mm	Y2 mm
109866	146.0604	6	4	19.0	36.0	57.0	12.0	15.7	14.9	12.0	12.0	12.5
109867	146.0804	8	4	20.0	42.0	62.0	14.0	18.2	14.9	14.0	14.0	13.9
109868	146.0806	8	6	20.0	42.0	62.0	14.0	18.2	15.7	14.0	14.0	13.9
109869	146.1006	10	6	23.0	48.0	81.8	17.0	21.2	15.7	17.0	17.0	17.0
109870	146.1008	10	8	23.5	48.0	81.8	17.0	21.2	18.2	17.0	17.0	17.0



162.006

Tee distributor with plug connection

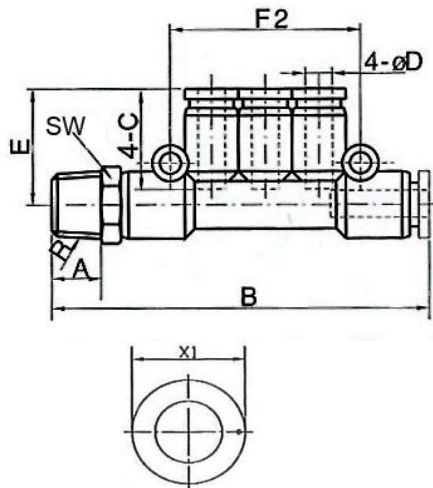
Art. No.	Type No.	Ø D mm	F mm	E mm	B mm	X1 mm	C mm
109871	162.004	4	36.0	19.0	57.0	10.0	14.9
109872	162.006	6	42.0	20.3	61.0	12.0	15.7
109873	162.008	8	48.0	24.0	81.6	14.0	17.8



147.0184

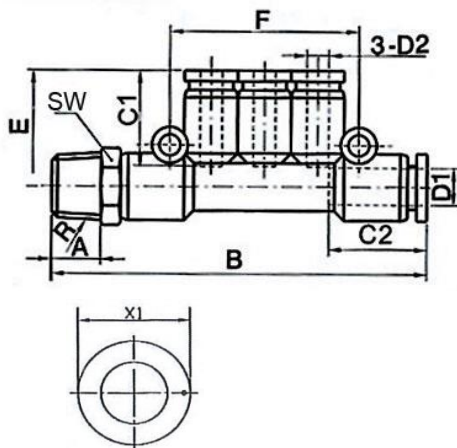
Tee distributor with parallel male thread, with O-ring, swivel type

Art. No.	Type No.	L mm	A mm	B mm	C mm	E mm	Ø D1 mm	Ø D2 mm	Ø d mm	a/f mm	Thread	X1 mm
135702	146.0184	64.2	36.0	5.5	14.9	-	4	4	3.3	12	G 1/8	10.0
135703	146.0186	68.1	42.0	5.5	15.5	-	6	6	3.3	14	G 1/8	12.0
135704	146.0188	87.5	48.0	5.5	18.3	-	8	8	4.3	14	G 1/8	14.0
135705	146.0144	65.5	36.0	6.5	14.9	-	4	4	3.3	12	G 1/4	10.0
135706	146.0146	69.6	42.0	6.5	15.5	-	6	6	3.3	14	G 1/4	12.0
135707	146.0148	89.5	48.0	6.5	18.3	-	8	8	4.3	17	G 1/4	14.0
135708	146.0386	71.1	42.0	7.5	15.5	-	6	6	3.3	14	G 3/8	12.0
135709	146.0388	90.5	48.0	7.5	18.3	-	8	8	4.3	17	G 3/8	14.0
109727	147.0184	64.3	36.0	5.5	15.7	14.9	6	4	3.2	14	G 1/8	12.0
109728	147.01446	65.2	35.5	6.5	-	-	6	4	3.2	14	G 1/4	-
109729	147.0144	69.9	42.0	6.5	17.7	14.9	8	4	3.2	17	G 1/4	14.0
109730	147.0146	71.4	42.0	7.5	17.7	15.7	8	6	3.2	17	G 1/4	14.0
109731	147.0386	70.9	41.5	7.5	-	-	8	6	3.2	17	G 3/8	-
109732	147.0388	91.1	48.0	7.5	21.2	18.2	10	8	3.2	20	G 3/8	17.0



Tee distributor with conical male thread, coated, swivel type

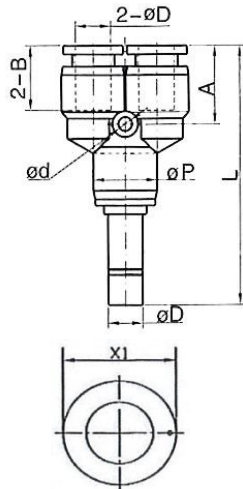
Art. No.	Type No.	∅ D mm	A mm	a/f mm	Thread	E mm	F2 mm	B mm	X1 mm	C mm
109733	174.0184	4	7.5	10	R 1/8	19.0	36.0	63.5	10.0	14.9
109734	174.0186	6	7.5	12	R 1/8	24.0	42.0	68.0	12.0	15.4
109735	174.0188	8	7.5	14	R 1/8	24.0	48.0	88.0	14.0	17.8
135710	174.0144	4	9.5	14	R 1/4	19.0	36.0	66.5	11.9	14.9
109736	174.0146	6	9.5	12	R 1/4	24.0	42.0	70.5	12.0	15.4
109737	174.0148	8	9.5	14	R 1/4	24.0	48.0	90.0	14.0	17.8
135711	174.0386	6	10.5	17.0	R 3/8	20.1	42.0	72.1	13.9	15.5
109738	174.0388	8	10.5	14	R 3/8	24.0	48.0	91.5	14.0	17.8



175.0146

Tee distributor with conical male thread, coated, swivel type

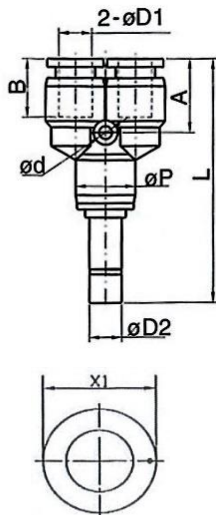
Art. No.	Type No.	∅ D1 mm	∅ D2 mm	a/f mm	Thread	E mm	F mm	B mm	A mm	X1 mm	C1 mm	C2 mm
109739	175.0184	6	4	12	R 1/8	19.0	36.0	64.3	7.5	12.0	15.7	14.9
109740	175.0146	8	6	14	R 1/4	20.3	42.0	70.9	9.5	14.0	17.7	15.7
109741	175.01446	6	4	14	R 1/4	19.6	35.5	66.2	-	-	-	-
109742	175.01448	8	4	14	R 1/4	20.6	41.5	70.4	-	-	-	-
109743	175.0386	8	6	17	R 3/8	20.6	41.5	71.9	-	-	-	-
109744	175.0388	10	8	17	R 3/8	23.9	48.0	92.1	10.5	17.0	21.2	18.2



142.008

Y union with push-in plug

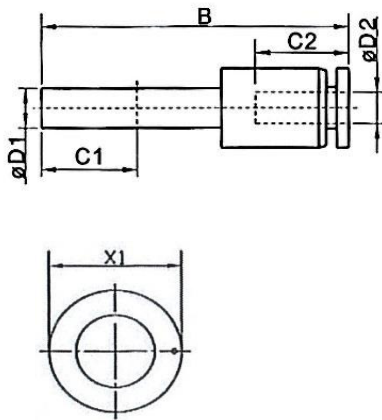
Art. No.	Type No.	L mm	A mm	B mm	Ø D mm	Ø d mm	Ø P mm	X1 mm
109898	142.004	58.0	14.2	15.1	4	3.2	11.0	10.0
109899	142.006	61.0	15.1	16.0	6	3.2	13.0	12.0
109900	142.008	66.3	18.2	18.1	8	3.2	14.8	14.0
109901	142.010	79.1	20.8	20.4	10	4.2	18.4	17.0
109902	142.012	85.4	21.6	23.2	12	4.2	21.0	20.0



158.0806

Y union with push-in plug, unequal

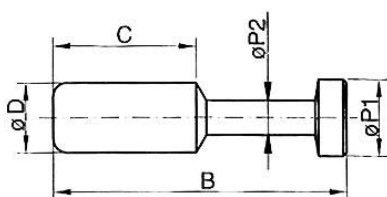
Art. No.	Type No.	L mm	A mm	B mm	Ø D1 mm	Ø D2 mm	Ø d mm	Ø p mm	X1 mm
109903	158.0604	53.7	10.0	15.4	4	6	3.2	13.0	10.0
109904	158.0806	60.4	10.5	15.7	6	8	3.2	14.8	12.0
109905	158.1008	72.3	13.4	17.7	8	10	3.2	18.4	14.0
109906	158.1210	77.0	15.5	21.2	10	12	4.2	21.0	17.0



143.0608

Reducer with push-in plug (143.0612 manufactured entirely in nickel-plated brass)

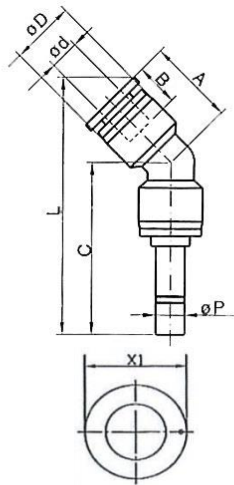
Art. No.	Type No.	Ø D1 mm	Ø D2 mm	B mm	C1 mm	X1 mm	C2 mm
109876	143.0406	6	4	39.5	17.0	12.0	14.9
109877	143.0408	8	4	41.5	18.0	14.0	15.4
109878	143.0608	8	6	41.5	18.0	14.0	17.8
109879	143.0610	10	6	46.5	20.0	17.0	14.9
109880	143.0612	12	6	40.5	23.5	20.0	15.4
109881	143.0810	10	8	46.8	20.0	17.0	18.3
109882	143.0812	12	8	46.8	23.5	20.0	18.3
109883	143.1012	12	10	52.2	23.5	20.0	22.9



144.008

Plug

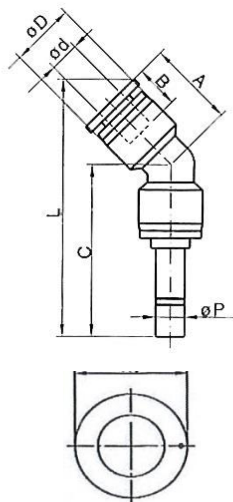
Art. No.	Type No.	Ø D mm	B mm	Ø P1 mm	Ø P2 mm	C mm
109926	144.004	4	28,0	5,0	3,0	15,0
109927	144.006	6	33,0	7,0	3,0	17,0
109928	144.008	8	37,0	9,0	4,0	18,0
109929	144.010	10	42,0	11,0	5,0	20,5
109930	144.012	12	44,0	13,0	6,0	23,0
135835	144.016	16	49,0	17,0	8,0	24,0



156.0606

45° elbow connector with push-in plug

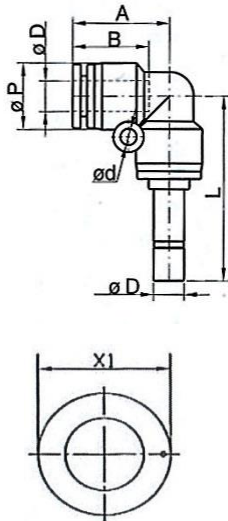
Art. No.	Type No.	L mm	A mm	B mm	C mm	Ø D mm	Ø d mm	Ø P mm	X1 mm
109884	156.0404	46.7	16.2	14.9	31.7	11.0	4	4	10.0
109885	156.0606	51.2	17.4	15.4	34.9	13.0	6	6	12.0
109886	156.0808	60.0	20.5	18.2	40.6	14.8	8	8	14.0
109887	156.1010	68.8	23.1	20.5	46.5	18.4	10	10	17.0
109888	156.1212	76.1	26.0	22.9	50.4	21.0	12	12	20.0



156.0604

45° elbow connector with push-in plug, unequal

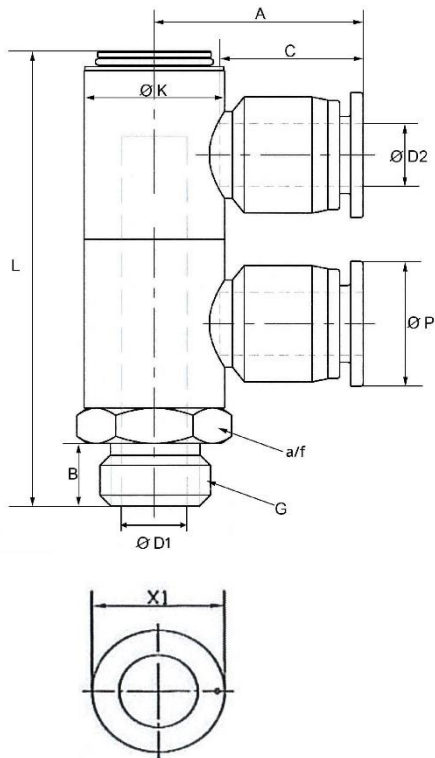
Art. No.	Type No.	L mm	A mm	B mm	C mm	Ø D mm	Ø d mm	Ø P mm	X1 mm
135764	156.0604	52.0	19.0	-	35.0	11.3	4	6	-
135765	156.0806	55.0	19.2	-	37.0	13.3	6	8	-
135766	156.1008	65.0	22.5	-	44.5	14.5	8	10	-
135767	156.1210	78.5	27.8	-	50.0	18.7	10	12	-



157.0606

Union elbow with push-in plug

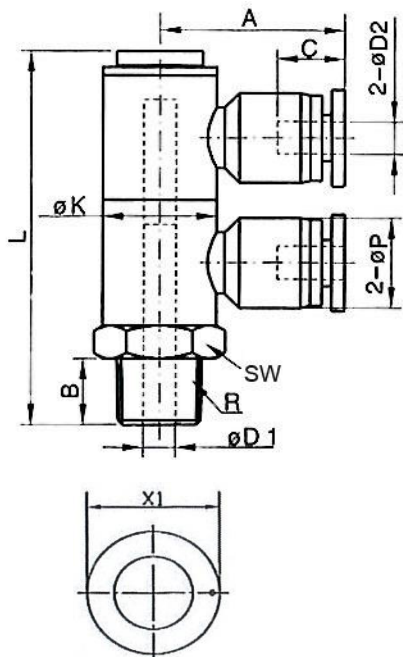
Art. No.	Type No.	L mm	A mm	B mm	Ø P mm	Ø d mm	Ø D mm	X1 mm
109889	157.0404	33.0	17.7	14.9	11.0	-	4	10.0
109890	157.0606	36.2	18.7	15.4	13.0	3.2	6	12.0
Art. No. 109890 = discontinued product. No longer available. New product 125727 (157.0606-K)								
109891	157.0808	42.5	22.5	17.8	14.8	3.2	8	14.0
Art. No. 109891 = discontinued product. No longer available. New product 125729 (157.0808-K)								
109892	157.1010	50.8	27.2	20.4	18.4	4.2	10	17.0
Art. No. 109892 = discontinued product. No longer available. New product 125731 (157.1010-K)								
109893	157.1212	54.5	29.3	22.9	21.0	4.2	12	20.0
125732	157.1616	53.2	31.9	-	25.4	6.0	16	-



171.014-6

Multiple union elbow with inner hex, 2 outlets, swivel type, parallel male thread with O-ring

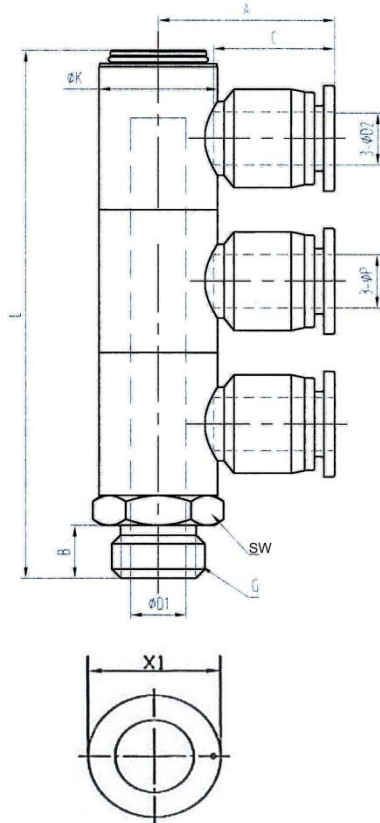
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread mm	Ø K mm	Ø P mm	B mm	X1 mm
109643	171.018-4	43.8	22.5	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109644	171.018-6	43.8	21.5	15.4	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109645	171.018-8	43.8	24.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
109646	171.014-4	58.0	24.7	-	8.3	4	17	G 1/4	17.8	11.0	6.5	10.0
109646	171.014-6	58.0	23.5	15.4	8.3	6	17	G 1/4	17.8	13.0	6.5	12.0
109647	171.014-8	58.0	26.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109648	171.014-10	58.0	29.9	19.7	8.3	10	17	G 1/4	17.8	18.4	6.5	17.0
109649	171.014-12	58.0	30.8	22.6	8.3	12	17	G 1/4	17.8	21.0	6.5	20.0
109651	171.038-4	59.5	24.5	14.9	11.5	4	20	G 3/8	17.8	11.0	7.5	10.0
109652	171.038-6	59.5	23.6	15.5	11.5	6	20	G 3/8	17.8	13.0	7.5	12.0
109650	171.038-8	60.7	28.5	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109651	171.038-10	60.7	31.9	19.7	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109652	171.038-12	60.7	32.8	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0
109656	171.012-8	64.2	28.5	18.3	14.0	8	24	G 1/2	21.9	14.8	9.5	14.0
109657	171.012-10	64.2	34.7	20.7	14.0	10	24	G 1/2	27.1	18.4	9.5	17.0
109658	171.012-12	64.2	35.4	22.6	14.0	12	24	G 1/2	27.1	21.0	9.5	20.0



164.014-6

Multiple union elbow with inner hex, 2 outlets, swivel type, conical male thread, coated

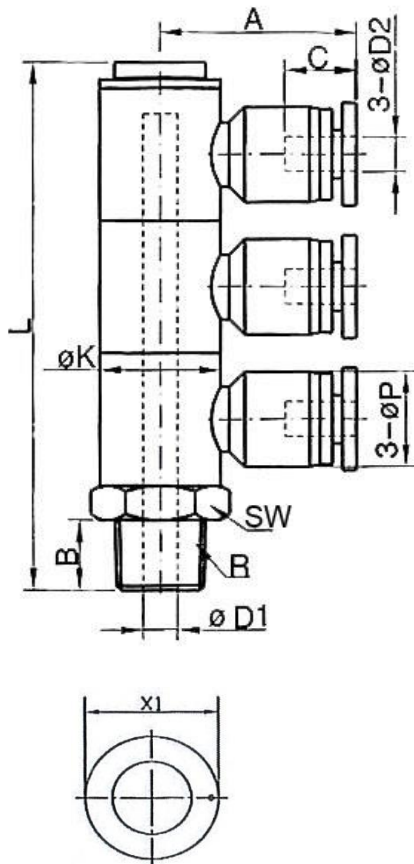
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109659	164.018-4	44.3	22.5	14.9	6.0	4	14	R 1/8	14.0	11.0	7.5	10.0
109660	164.018-6	44.3	21.5	15.7	6.0	6	14	R 1/8	14.0	13.0	7.5	12.0
109661	164.018-8	44.3	24.5	18.2	6.0	8	14	R 1/8	14.0	14.8	7.5	14.0
109662	164.014-4	59.5	24.5	14.9	8.3	4	17	R 1/4	17.8	11.0	9.5	10.0
109663	164.014-6	59.5	23.5	15.7	8.3	6	17	R 1/4	17.8	13.0	9.5	12.0
109664	164.014-8	59.5	26.5	18.2	8.3	8	17	R 1/4	17.8	14.8	9.5	14.0
109665	164.014-10	59.5	29.9	20.7	8.3	10	17	R 1/4	17.8	18.4	9.5	17.0
109666	164.014-12	59.5	30.8	26.6	8.3	12	17	R 1/4	17.8	21.0	9.5	20.0
109667	164.038-4	61.0	24.5	-	11.5	4	17	R 3/8	17.8	11.0	10.5	10.0
109668	164.038-6	61.0	23.6	-	11.5	6	17	R 3/8	17.8	13.0	10.5	12.0
109667	164.038-8	62.2	28.5	18.2	11.5	8	20	R 3/8	21.9	14.8	10.5	14.0
109668	164.038-10	62.2	31.9	20.7	11.5	10	20	R 3/8	21.9	18.4	10.5	17.0
109669	164.038-12	66.2	32.8	26.6	11.5	12	20	R 3/8	21.9	21.0	10.5	20.0
109672	164.012-8	66.7	28.5	-	14.0	8	24	R 1/2	21.9	14.8	13.5	14.0
109673	164.012-10	66.7	34.7	-	14.0	10	24	R 1/2	27.1	18.4	13.5	17.0
109674	164.012-12	66.7	35.4	-	14.0	12	24	R 1/2	27.1	21.0	13.5	20.0



172.014-6

Multiple union elbow with inner hex, 3 outlets, swivel type, parallel male thread with O-ring

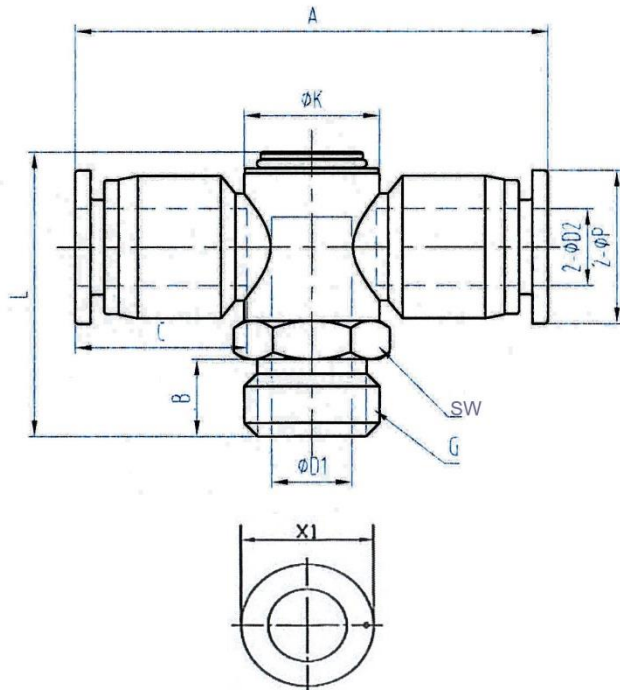
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109675	172.018-4	59.1	22.5	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109676	172.018-6	59.1	21.5	15.4	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109677	172.018-8	59.1	24.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
135690	172.014-4	79.5	24.5	14.9	8.3	4	17	G 1/4	17.8	11.0	6.5	11.9
109678	172.014-6	79.5	23.5	15.4	8.3	6	17	G 1/4	17.8	13.0	6.5	12.0
109679	172.014-8	79.5	26.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109680	172.014-10	79.5	29.9	19.7	8.3	10	17	G 1/4	17.8	18.4	6.5	17.0
109681	172.014-12	79.5	30.8	22.6	8.3	12	17	G 1/4	17.8	21.0	6.5	20.0
135691	172.038-4	81,0	23,5	14,9	8,3	4	20	G 3/8	17,8	11,0	9,0	11,9
135692	172.038-6	81,0	24,5	15,4	8,3	6	20	G 3/8	17,8	13,0	9,0	13,9
109682	172.038-8	82.2	28.5	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109683	172.038-10	82.2	31.9	19.7	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109684	172.038-12	82.2	32.8	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0
135693	172.012-8	85.7	28.5	18.3	11.5	8	24	G 1/2	21.9	14.8	11.0	15.9
135694	172.012-10	85.7	34.5	20.5	14.0	10	24	G 1/2	27.1	18.4	9.5	19.5
135695	172.012-12	85.7	35.4	22.6	14.0	12	24	G 1/2	27.1	21.0	9.5	23.0



165.014-6

Multiple union elbow with inner hex, 3 outlets, swivel type, conical male thread, coated

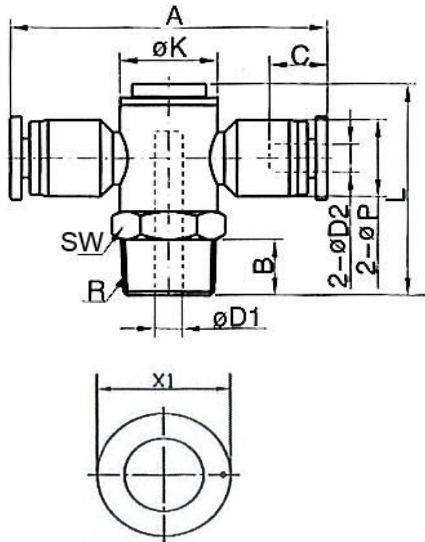
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109685	165.018-4	59.6	22.5	14.9	6.0	4	14	R 1/8	14.0	11.0	7.5	10.0
109686	165.018-6	59.6	21.5	15.7	6.0	6	14	R 1/8	14.0	13.0	7.5	12.0
109687	165.018-8	59.6	24.5	18.2	6.0	8	14	R 1/8	14.0	14.8	7.5	14.0
135969	165.014-4	81.0	24.5	14.9	8.3	4	17	R 1/4	17.8	11.0	9.5	11.9
109688	165.014-6	81.0	23.5	15.7	8.3	6	17	R 1/4	17.8	13.0	9.5	12.0
109689	165.014-8	81.0	26.5	18.2	8.3	8	17	R 1/4	17.8	14.8	9.5	14.0
109690	165.014-10	81.0	29.9	20.7	8.3	10	17	R 1/4	17.8	18.4	9.5	17.0
109691	165.014-12	81.0	30.8	26.6	8.3	12	17	R 1/4	17.8	21.0	9.5	20.0
135697	165.038-4	81.0	23.5	14.9	8.3	4	20	R 3/8	17.8	11.0	10.5	11.9
135698	165.038-6	81.0	24.5	15.4	8.3	6	20	R 3/8	17.8	13.0	10.5	13.9
109692	165.038-8	83.7	28.5	18.2	11.5	8	20	R 3/8	21.9	14.8	10.5	14.0
109693	165.038-10	83.7	31.9	20.7	11.5	10	20	R 3/8	21.9	18.4	10.5	17.0
109694	165.038-12	83.7	32.8	26.6	11.5	12	20	R 3/8	21.9	21.0	10.5	20.0
135699	165.012-8	85.7	28.5	18.3	11.5	8	24	R 1/2	21.9	14.8	13.5	15.9
135700	165.012-10	88.2	34.5	20.5	14.0	10	24	R 1/2	27.1	18.4	13.5	19.5
135701	165.012-12	88.2	35.4	22.6	14	12	24	R 1/2	27.1	21.0	13.5	23.0



173.014-6

Male branch tee with inner hex, swivel type, parallel male thread with O-ring

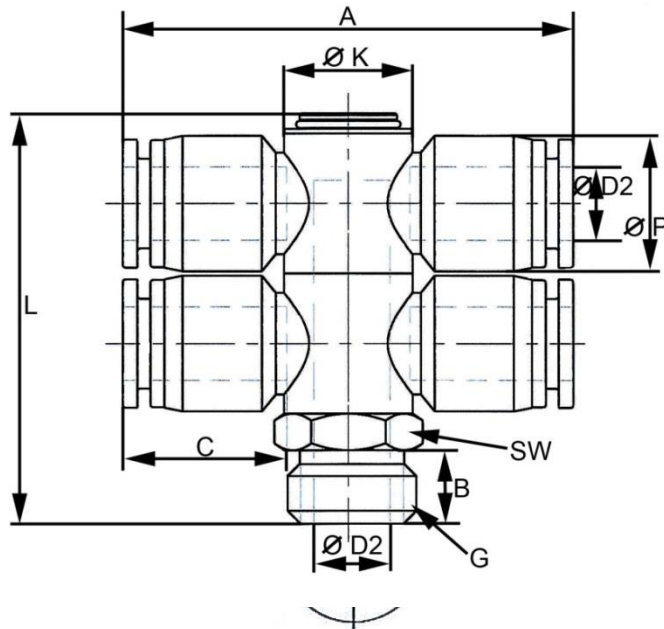
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109563	173.018-4	28.5	45.0	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109564	173.018-6	28.5	42.6	15.7	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109565	173.018-8	28.5	48.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
109566	173.014-6	37.5	46.7	15.7	8.3	6	17	G 1/4	17.8	13.0	6.5	12.0
109567	173.014-8	37.5	52.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109568	173.014-10	37.5	59.6	20.7	8.4	10	17	G 1/4	17.8	18.4	6.5	17.0
109569	173.014-12	37.5	60.7	22.6	8.3	12	17	G 1/4	18.0	21.0	6.5	20.0
109570	173.038-8	39.2	56.3	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109571	173.038-10	39.2	63.5	20.7	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109572	173.038-12	39.2	64.9	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0



166.014-6

Male branch tee with inner hex, swivel type, conical male thread, coated

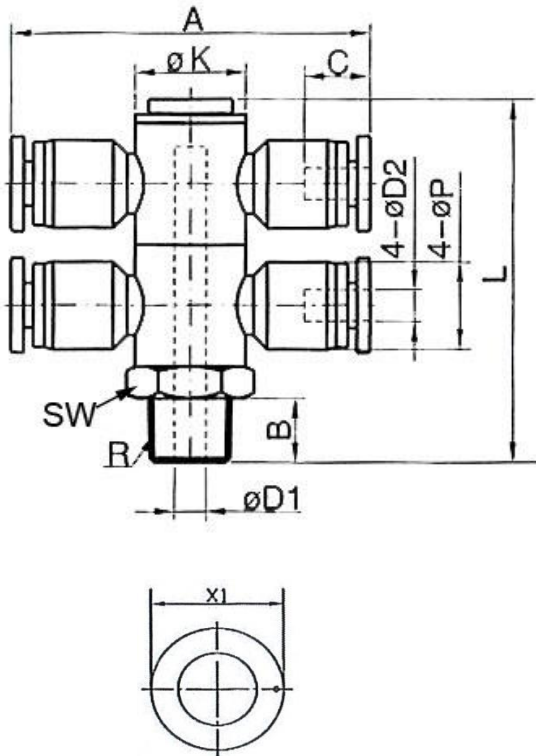
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109573	166.018-4	29.0	45.0	14.9	6.0	4	14	R 1/8	14.0	11.0	7.5	10.0
109574	166.018-6	29.0	42.6	15.7	6.0	6	14	R 1/8	14.0	13.0	7.5	12.0
109575	166.018-8	29.0	48.5	18.2	6.0	8	14	R 1/8	14.0	14.8	7.5	14.0
109576	166.014-6	38.0	46.7	15.7	8.5	6	17	R 1/4	17.8	13.0	9.5	12.0
109577	166.014-8	38.0	52.5	18.2	8.5	8	17	R 1/4	17.8	14.8	9.5	14.0
109578	166.014-10	38.0	59.6	20.7	8.5	10	17	R 1/4	17.8	18.4	9.5	17.0
109579	166.014-12	38.0	61.2	22.6	8.5	12	17	R 1/4	17.8	21.0	9.5	20.0
109580	166.038-8	39.7	56.3	18.2	11.5	8	20	R 3/8	21.9	14.8	10.5	14.0
109581	166.038-10	39.7	63.5	20.7	11.5	10	20	R 3/8	21.9	18.4	10.5	17.0
109582	166.038-12	39.7	64.9	22.6	11.5	12	20	R 3/8	21.9	21.0	10.5	20.0



176.014-6

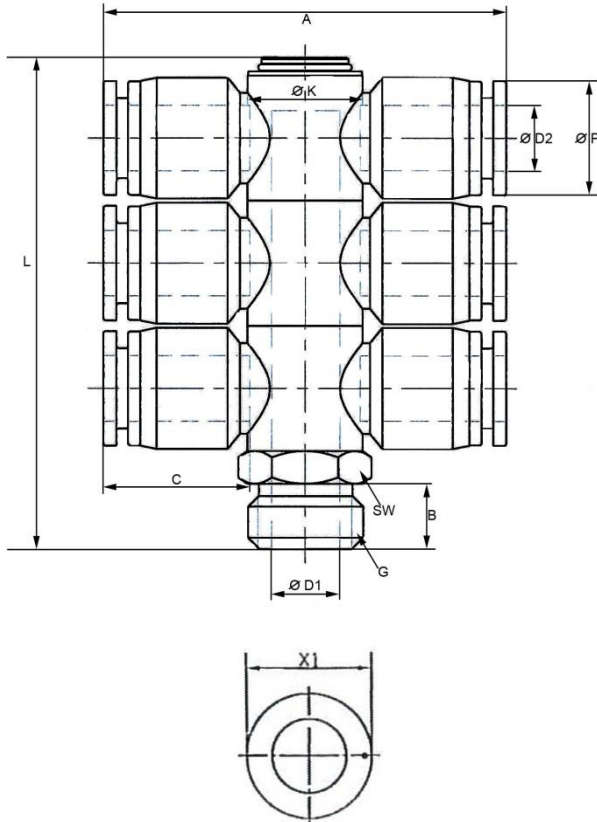
Tee distributor with inner hex, 4 outlets, swivel type, parallel male thread with O-ring

Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109745	176.018-4	43.8	45.0	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109746	176.018-6	43.8	42.6	15.4	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109747	176.018-8	43.8	48.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
135712	176.014-4	58.0	49.0	14.9	8.3	4	17	G 1/4	17.8	11.0	6.5	10.0
109748	176.014-6	58.0	46.7	15.4	8.3	6	17	G 1/4	17.8	13.0	6.5	12.0
109749	176.014-8	59.5	52.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109750	176.014-10	58.0	59.6	20.7	8.3	10	17	G 1/4	17.8	18.4	6.5	17.0
109751	176.014-12	59.1	60.7	22.6	8.3	12	17	G 1/4	17.8	21.0	6.5	20.0
109752	176.038-8	60.7	56.7	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109753	176.038-10	60.7	63.5	22.0	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109754	176.038-12	60.7	64.9	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0
135713	176.012-12	64.2	70.8	22.6	14	12	24	G 1/2	27.1	21.0	9.5	20.0



Tee distributor with inner hex, 4 outlets, swivel type, conical male thread, coated

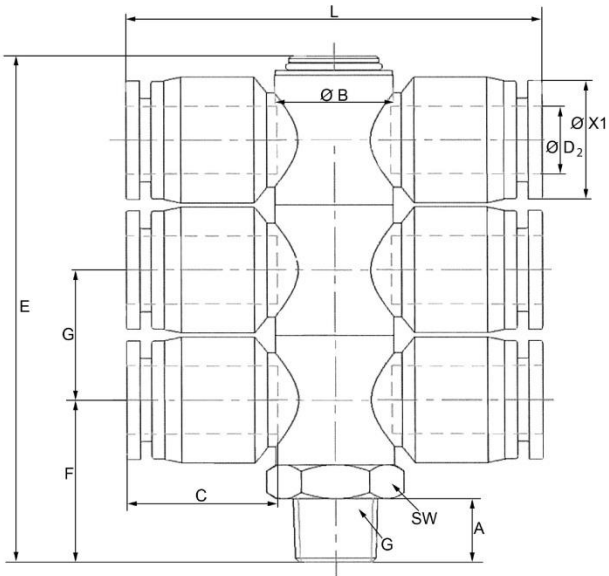
Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109755	174.018-4	44.3	45.0	14.9	6.0	4	14	R 1/8	14.0	11.0	7.5	10.0
109756	174.018-6	44.3	42.6	15.4	6.0	6	14	R 1/8	14.0	13.0	7.5	12.0
109757	174.018-8	44.3	48.5	17.8	6.0	8	14	R 1/8	14.0	14.8	7.5	14.0
135714	174.014-4	59.5	49.0	14.9	8.3	4	17	R 1/4	17.8	11.0	9.5	10.0
109758	174.014-6	59.5	46.7	15.4	8.5	6	17	R 1/4	17.8	13.0	9.5	12.0
109759	174.014-8	59.5	52.5	17.8	8.5	8	17	R 1/4	17.8	14.8	9.5	14.0
109760	174.014-10	59.5	59.6	20.5	8.5	10	17	R 1/4	17.8	18.4	9.5	17.0
109761	174.014-12	59.5	61.2	22.9	8.5	12	17	R 1/4	17.8	21.0	9.5	20.0
109762	174.038-8	61.2	56.7	17.8	11.5	8	20	R 3/8	21.9	14.8	10.5	14.0
109763	174.038-10	61.2	63.5	20.5	11.5	10	20	R 3/8	21.9	18.4	10.5	17.0
109764	174.038-12	61.2	64.9	22.9	11.5	12	20	R 3/8	21.9	21.0	10.5	20.0
135715	174.012-12	66.7	70.8	22.6	14.0	12	24	R 1/2	27.1	21.0	13.5	20.0



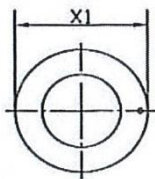
177.014-6

Tee distributor with inner hex, 6 outlets, swivel type, parallel male thread with O-ring

Art. No.	Type No.	L mm	A mm	C mm	Ø D1 mm	Ø D2 mm	a/f mm	Thread	Ø K mm	Ø P mm	B mm	X1 mm
109765	177.018-4	59.1	45.0	14.8	6.0	4	14	G 1/8	14.0	11.0	5.5	10.0
109766	177.018-6	59.1	42.6	15.7	6.0	6	14	G 1/8	14.0	13.0	5.5	12.0
109767	177.018-8	59.1	48.5	18.2	6.0	8	14	G 1/8	14.0	14.8	5.5	14.0
135716	177.014-4	79.5	49.0	14.9	8.3	4	17	G 1/4	17.8	11.0	6.5	10.0
109768	177.014-6	80.5	46.7	15.4	8.3	6	17	G 1/4	17.8	13.0	6.5	12.0
109769	177.014-8	80.5	52.5	18.2	8.3	8	17	G 1/4	17.8	14.8	6.5	14.0
109770	177.014-10	80.5	59.6	20.7	8.1	10	17	G 1/4	17.8	18.4	6.5	17.0
109771	177.014-12	80.5	61.2	22.6	8.3	12	17	G 1/4	17.8	21.0	6.5	20.0
109772	177.038-8	82.2	56.7	18.2	11.5	8	20	G 3/8	21.9	14.8	7.5	14.0
109773	177.038-10	82.0	63.5	20.7	11.5	10	20	G 3/8	21.9	18.4	7.5	17.0
109774	177.038-12	82.2	64.9	22.6	11.5	12	20	G 3/8	21.9	21.0	7.5	20.0
135717	177.012-12	85.7	70.8	22.6	14.0	12	24	G 1/2	27.1	21.0	9.5	20.0

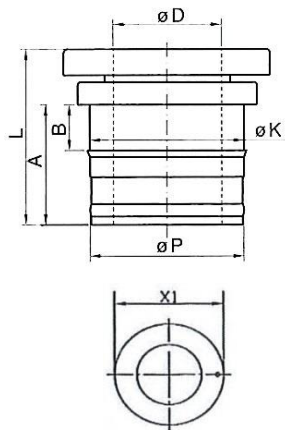


175.014-6



Tee distributor with inner hex, 6 outlets, swivel type, conical male thread, coated

Art. No.	Type No.	E mm	L mm	C mm	Ø D2 mm	a/f mm	Thread	Ø B mm	A mm	X1 mm	F mm	G mm
109775	175.018-4	59.6	45.0	14.9	4	14	R 1/8	14.0	7.5	10.0	19.2	15.3
109776	175.018-6	59.6	43.0	15.4	6	14	R 1/8	14.0	7.5	12.0	19.2	15.3
109777	175.018-8	59.6	49.0	17.8	8	14	R 1/8	14.0	7.5	14.0	19.2	15.3
135718	175.014-4	81.0	49.0	14.9	4	17	R 1/4	17.8	9.5	10.0	-	-
109778	175.014-6	81.0	47.0	15.4	6	17	R 1/4	17.8	9.5	12.0	24.8	21.5
109779	175.014-8	81.0	53.0	17.8	8	17	R 1/4	17.8	9.5	14.0	24.8	21.5
109780	175.014-10	81.0	59.8	20.5	10	17	R 1/4	17.8	9.5	17.0	24.8	21.5
109781	175.014-12	81.0	61.6	22.9	12	17	R 1/4	17.8	9.5	20.0	24.8	21.5
109782	175.038-8	83.7	57.0	17.8	8	20	R 3/8	21.9	10.5	14.0	26.3	21.5
109783	175.038-10	83.7	63.8	20.5	10	20	R 3/8	21.9	10.5	17.0	26.3	21.5
109784	175.038-12	83.7	65.6	22.9	12	20	R 3/8	21.9	10.5	20.0	26.3	21.5
135719	175.012-12	88.2	70.8	22.6	12	24	R 1/2	27.1	13.5	20.0	-	-

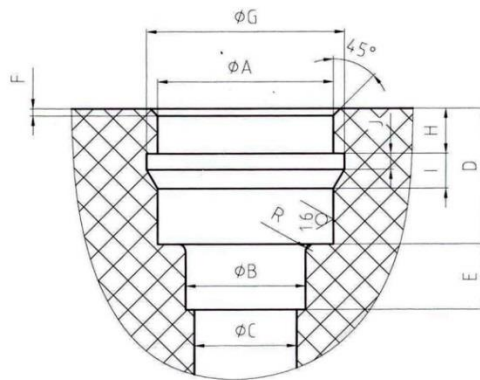


224.06

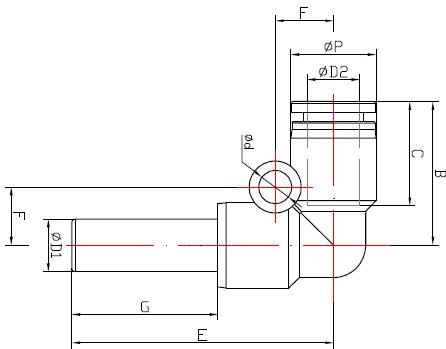
Press-in sleeve, can only be pressed into plastic

Art. No.	Type No.	L mm	A mm	B mm	Ø K mm	Ø D mm	Ø p mm	X1 mm
109942	224.04	11.3	7.3	2.4	8.0	4	7.9	10.0
109943	224.06	11.9	7.8	2.5	10.0	6	9.9	12.0
109944	224.08	13.7	9.2	3.5	12.0	8	11.9	14.0
109945	224.10	15.2	10.5	4.0	15.1	10	14.8	17.0
109946	224.12	17.6	12.3	4.7	17.6	12	17.4	20.0

Drilling dimensions for mounting the press-in sleeves



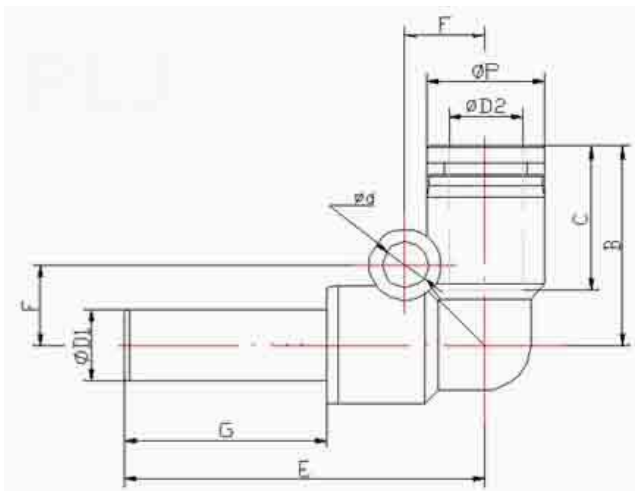
Art. No.	Type No.	A mm	B mm	C mm	D mm	E mm	F mm	R mm	G mm	H mm	I mm	J mm
109942	224.04	8 +0.05 -0.03	4.2 +0.1 0	3.5	7.4 +0.1 0	3.5	0.5	0.5	8.3 ±0.05	2.4 0 -0.05	0.8	0.3
109943	224.06	10 +0.05 -0.03	6.2 +0.1 0	5.0	7.9 +0.1 0	4.0	0.5	0.5	10.3 ±0.05	2.6 0 -0.05	0.8	0.3
109944	224.08	12 +0.05 -0.03	8.2 +0.1 0	7.0	9.3 +0.1 0	4.5	0.5	0.8	12.3 ±0.05	3.5 0 -0.05	0.9	0.3
109945	224.10	15 +0.05 -0.03	10.3 +0.1 0	9.3	11.1 +0.1 0	5.0	0.5	0.8	15.3 +0.1 0	4.0 0 -0.05	1.0	0.3
109946	224.12	17.6 ±0.05	12.3 +0.1 0	10.0	12.3 +0.1 0	5.0	0.5	0.8	17.9 +0.1 0	4.7 0 -0.05	1.0	0.3



157.1010-K

Union elbow with push-in plug

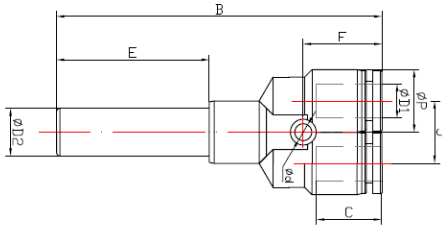
Art. No.	Type No.	ØD1	ØD2	ØP mm	F mm	Ød mm	E mm	G mm	B mm	C mm
125725	157.0404-K	4	4	11	7	3.2	31.0	16.5	18.5	15.3
125727	157.0606-K	6	6	13	8	3.2	34.5	18.5	18.7	15.5
125729	157.0808-K	8	8	14.4	10	3.2	39.7	21.0	22.7	18.0
125731	157.1010-K	10	10	18.4	12	4.2	45.2	22.5	27.7	22.0
135768	157.1212K	12	12	21.0	13.5	4.2	49.0	24.5	29.5	23.0
125733	157.1616-K	16	16	26.0	15.5	5.2	55.0	28.0	32.5	24.0



157.0604-K

Union elbow with push-in plug, unequal

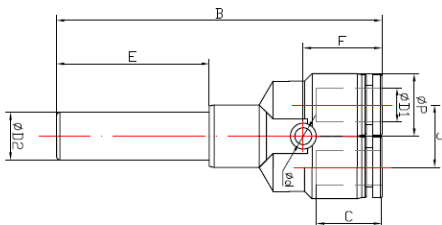
Art. No.	Type No.	ØD1		ØD2	ØP mm	F mm	Ød mm	E mm	G mm	B mm	C mm
125734	158.0604-K	4		6	11.0	14.0	11.0	3.2	49.5	18.5	15.5
125735	158.0806-K	6		8	13.0	14.5	13.0	3.2	54.0	21.0	15.5
135773	158.1006-K	6		10	14.4	18.0	15.0	3.2	57.0	22.5	15.5
125736	158.1008-K	8		10	14.4	18.0	15.0	3.2	57.0	22.5	18.0
135774	158.1208-K	8		12	18.4	21.0	18.0	4.2	68.5	24.5	18.0
125737	158.1210-K	10		12	18.4	21.0	18.0	4.2	68.5	24.5	22.0
135775	158.1610-K	12		16	22.0	22.0	26.0	5.2	82.0	28.0	23.0



142.006-K

45° elbow connector with push-in plug

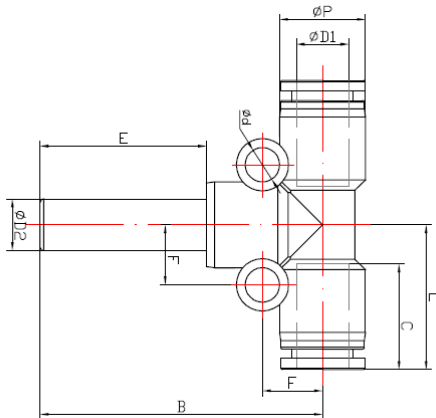
Art. No.	Type No.	ØD1	ØD2	ØP mm	f mm	J mm	Ød mm	B mm	E mm	C mm
125719	142.004-K	4	4	11.0	14.0	11.0	3.2	47.5	16.5	15.5
125720	142.006-K	6	6	13.0	14.5	13.0	3.2	51.5	18.5	15.5
125721	142.008-K	8	8	14.4	18.0	15.0	3.2	55.5	21.0	18.0
125722	142.010-K	10	10	18.4	21.0	18.0	4.2	66.5	22.5	22.0
125723	142.012-K	12	12	21.0	21.5	21.0	4.2	72.0	24.5	23.0
135772	142.016-K	16	16	26.0	22.0	26.0	5.2	82.0	28.0	24.0



142.0604-K

45° elbow connector with push-in plug, unequal

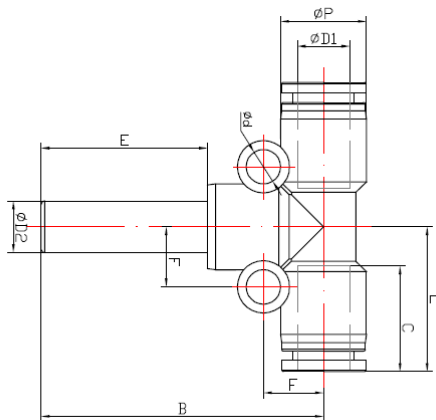
Art. No.	Type No.	ØD1	ØD2	ØP mm	f mm	J mm	Ød mm	B mm	E mm	C mm
125734	158.0604-K	4	6	11.0	14.0	11.0	3.2	49.5	18.5	15.5
125735	158.0806-K	6	8	13.0	14.5	13.0	3.2	54.0	21.0	15.5
135773	158.1006-K	6	10	14.4	18.0	15.0	3.2	57.0	22.5	15.5
125736	158.1008-K	8	10	14.4	18.0	15.0	3.2	57.0	22.5	18.0
135774	158.1208-K	8	12	18.4	21.0	18.0	4.2	68.5	24.5	18.0
125737	158.1210-K	10	12	18.4	21.0	18.0	4.2	68.5	24.5	22.0
135775	158.1610-K	12	16	22.0	22.0	26.0	5.2	82.0	28.0	23.0



293.008-K

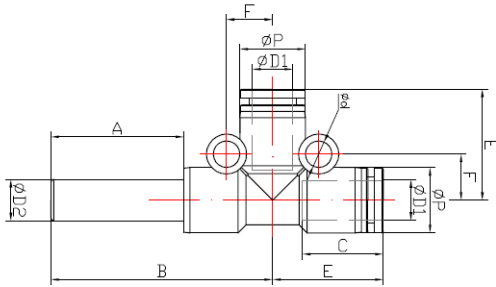
T union with push-in plug

Art. No.	Type No.	ØD1	ØD2	ØP mm	Ød mm	C mm	B mm	E mm	F mm	L mm
135776	293.004-K	4	4	11.0	3.2	15.5	31.5	17.0	7.0	18.5
135777	293.006-K	6	6	13.0	3.2	15.5	35.0	20.0	8.0	19.0
135778	293.008-K	8	8	14.4	3.2	18.0	40.0	22.0	9.0	21.7
135779	293.010-K	10	10	18.4	4.2	22.0	46.5	23.5	12.0	27.4
135780	293.012-K	12	12	21.0	4.2	23.0	50.0	26.0	13.5	28.0
135781	293.016-K	16	16	26.0	5.2	24.0	54.5	28.0	15.5	32.0



T union with push-in plug, unequal

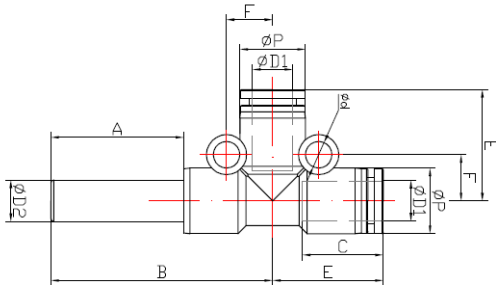
Art. No.	Type No.	ØD1	ØD2		ØP mm	Ød mm	C mm	B mm	E mm	F mm	L mm
135782	293.0604-K	4	6		11.0	3.2	15.5	34.5	20.0	7.0	18.5
135783	293.0806-K	6	8		13.0	3.2	15.5	37.0	22.0	8.0	19.0
135784	293.1006-K	6	10		13.0	3.2	15.5	38.5	23.5	8.0	19.0
135785	293.1008-K	8	10		14.4	3.2	18.0	41.5	23.5	9.0	21.7
135786	293.1208-K	8	12		14.4	3.2	18.0	44.0	26.0	9.0	21.7
135787	293.1210-K	10	12		18.4	4.2	22.0	49.0	26.0	12.0	27.4
135788	293.1612-K	12	16		21.0	4.2	23.0	51.0	28.0	13.5	28.0



294.008-K

T union with push-in plug, angled plug connections

Art. No.	Type No.	ØD1	ØD2	ØP mm	B mm	E mm	Ød mm	F mm	C mm	A mm
135789	294.004-K	4	4	11,0	31,5	18,5	3,2	7,0	15,5	17,0
135790	294.006-K	6	6	13,0	35,0	19,0	3,2	8,0	15,5	20,0
135791	294.008-K	8	8	14,4	39,7	21,7	3,2	9,0	18,0	22,0
135792	294.010-K	10	10	18,4	46,0	27,4	4,2	12,0	22,0	23,5
135793	294.012-K	12	12	21,0	49,0	28,0	4,2	13,5	23,0	26,0
135794	294.016-K	16	16	26,0	54,5	32,0	5,2	15,5	24,0	28,0



294.0806-K

T union with push-in plug, angled plug connections, unequal

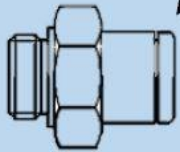
Artikel Nr.	Typen Nr.	ØD1	ØD2	ØP mm	B mm	E mm	Ød mm	F mm	C mm	A mm
135795	294.0604-K	4	6	11,0	34,5	18,5	3,2	7,0	15,5	20,0
135796	294.0806-K	6	8	13,0	37,0	19,0	3,2	8,0	15,5	22,0
135797	294.1006-K	6	10	13,0	38,5	19,0	3,2	8,0	15,5	23,5
135798	294.1008-K	8	10	14,4	41,2	21,7	3,2	9,0	18,0	23,5
135799	294.1208-K	8	12	14,4	43,7	21,7	3,2	9,0	18,0	26,0
135800	294.1210-K	10	12	18,4	48,5	27,4	4,2	12,0	22,0	26,0
135801	294.1612-K	12	16	21,0	51,0	28,0	4,2	13,5	24,0	28,0

Assembling instructions for push-in fittings

- Cut the hose ends plain. To ensure an ideal sealing effect and secure stop of the fitting make sure the hose end is not oval.
- Clean the hose ends and make sure that it is free of burrs.
- Push the hose ends into the fitting till it stops.
- Test stability by pulling the hose shortly.
- Push the release ring to release the hose.
- Pull out the hose with slight rotation.
- For a new assembling cut the hose plain again. Then pushing and releasing the tube should not be affected adversely.

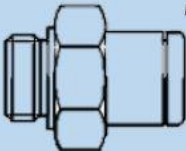
*The suitability test for the individual application is the user's responsibility.

We recommend for improved strength of push-in fittings with **PA** hoses, the following push-in fitting - hose combination:

	For tube O.D.	Recommended hose Ø	Recommended hose
	3	3x1.5 *	259.08 X
	4	4x2 *	259.09 X
	5	5x3	259.10 X
	6	6x4 *	259.11 X
	8	8x6 *	259.12 X
	10	10x7 *	259.61 X
	12	12x9 *	259.14 X
	14	14x11	259.62 X
	16	16x12	259.25 X

* Recommended and based on ISO 14743

We recommend for improved strength of push-in fittings with **PU** hoses, the following push-in fitting - hose combination:

	For tube O.D.	Recommended hose Ø	Recommended hose
	3	3x1.5 *	259.50 X
	4	4x2 *	259.04 X
	5	5x3	259.15 X
	6	6x4 *	259.16 X
	8	8x5 *	259.63 X
	10	10x7 *	259.64 X
	12	12x8 *	259.65 X
	14	14x10	259.51 X
	16	16x12	259.52 X

* Recommended and based on ISO 14743