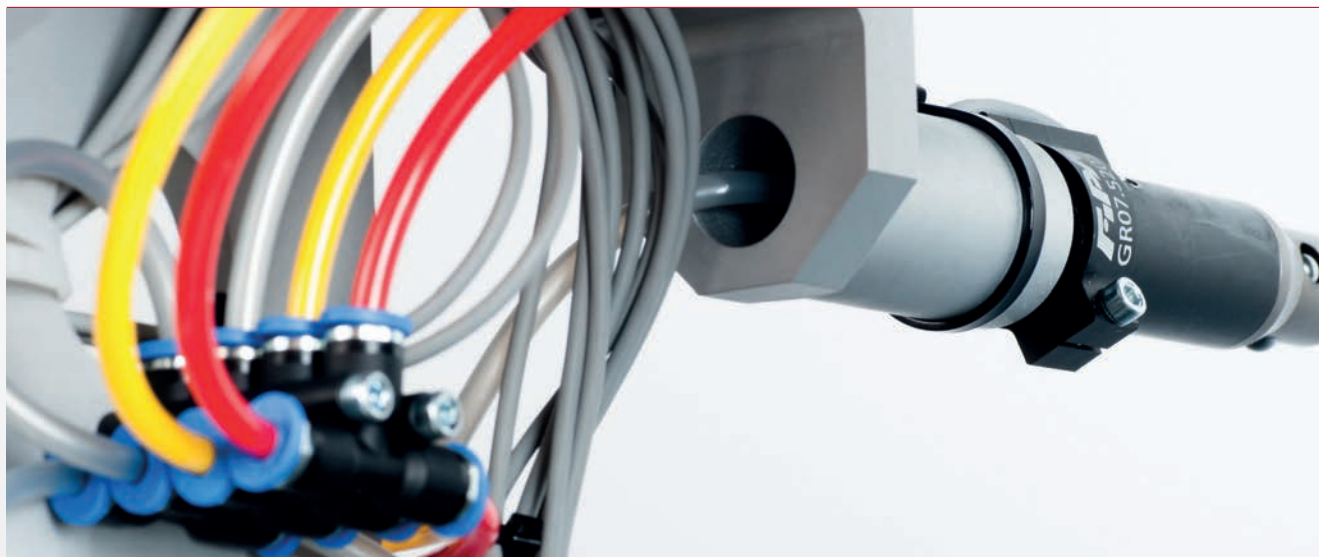




FIPA Push-in fittings



Vacuum manifolds

- > Construction of vacuum systems by means of simple installation of push-in fittings or quick fittings
- > Inlets on one or both sides
- > Up to six inlets or outlets, male and female threads from M5 to G1 1/4
- > Design: aluminum or brass

> See page 435



Push-in fittings and plug-in connectors – standard

- > Suitable for vacuum and pressure applications (-1 - 10 bar)
- > M, G and R male and female threads, straight or 90° version
- > T- and Y-manifolds, 2-way and 3-way angle swivel screw connections
- > Stackable plug-in connector (QC-3-3M - QC 8-8)
- > Lock connection push-in connectors 30.761 - 20.765 (straight); 30.774 - 30.778 (90°): locking of compressed air or vacuum during hose disassembly, release after reconnection
- > Rotation screw connections for mounting in with fast-running machines

> See page 437

Push-in fittings and plug-in connectors – mini

- > Suitable for vacuum and pressure applications (-1 - 10 bar)
- > 40 % smaller than standard version
- > M, R and G male and female threads, straight, 45° or 90° version
- > T-manifold
- > Easy assembly and disassembly thanks to elliptical mini release ring

> See page 449



Accessories

- > Double nipples
- > Thread adapters
- > Threaded sockets
- > Screw plugs
- > Sealing rings

> See page 453



Manifolds for simple assembly of vacuum loads

Outputs on one side, at the front



Product notes

- > Construction of vacuum systems by means of simple installation of push-in fittings or quick fittings
- > Material: aluminum

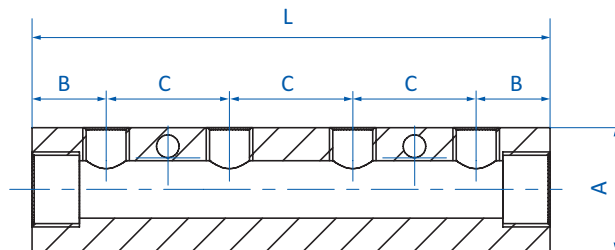
Technical data

Item no.	Input connection	Output connection	Suitable sealing plugs
79.000	2x 1/8	2x M5	77.000 (p.455), 77.009 (p.455)
79.001	2x 1/8	4x M5	77.000 (p.455), 77.009 (p.455)
79.002	2x 1/8	6x M5	77.000 (p.455), 77.009 (p.455)
79.003	2x 1/4	2x 1/8	77.008 (p.455), 77.009 (p.455)
79.004	2x 1/4	4x 1/8	77.008 (p.455), 77.009 (p.455)
79.005	2x 1/4	6x 1/8	77.008 (p.455), 77.009 (p.455)
79.006	2x 3/8	2x 1/4	77.008 (p.455), 77.010 (p.455)
79.007	2x 3/8	4x 1/4	77.008 (p.455), 77.010 (p.455)
79.008	2x 3/8	6x 1/4	77.008 (p.455), 77.010 (p.455)
79.009	2x 3/8	2x 1/4	77.009 (p.455), 77.010 (p.455)
79.010	2x 3/8	4x 1/8	77.009 (p.455), 77.010 (p.455)
79.011	2x 3/8	6x 1/8	77.009 (p.455), 77.010 (p.455)
79.012	2x 1/2	2x 1/4	77.007 (p.455), 77.008 (p.455)
79.013	2x 1/2	4x 1/4	77.007 (p.455), 77.008 (p.455)
79.014	2x 1/2	6x 1/4	77.007 (p.455), 77.008 (p.455)

Dimensions

A [mm]	B [mm]	C [mm]	L [mm]
20	15	15	45
20	15	15	75
20	15	15	105
30	15	30	60
30	15	30	120
30	15	30	180
40	18	36	72
30	18	36	144
30	18	36	216
40	18	30	72
30	18	30	126
30	18	30	186
40	22	36	80
40	22	36	152
40	22	36	224

Dimensions





Tubing technology | Vacuum manifolds

Manifolds for simple assembly of vacuum loads

Manifolds for simple assembly of vacuum loads

Outputs on both sides, at the front and rear



Product notes

- > Construction of vacuum systems by means of simple installation of push-in fittings or quick fittings
- > Material: aluminum

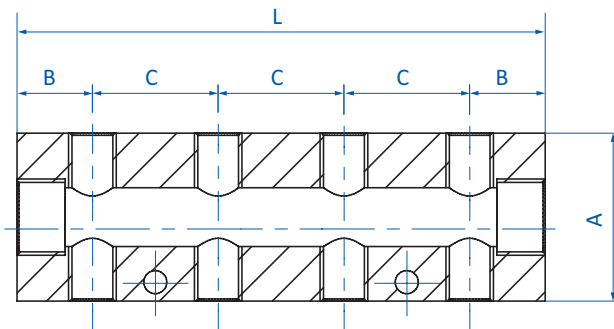
Technical data

Item no.	Input connection	Output connection	Suitable sealing plugs
79.015	2x 1/8	2+2 x M5	77.000 (p.455) 77.009 (p.455)
79.016	2x 1/8	4+4 x M5	77.000 (p.455) 77.009 (p.455)
79.017	2x 1/4	2+2 x 1/8	77.008 (p.455) 77.009 (p.455)
79.018	2x 1/4	4+4 x 1/8	77.008 (p.455) 77.009 (p.455)
79.019	2x 3/8	2+2 x 1/4	77.008 (p.455) 77.010 (p.455)
79.020	2x 3/8	4+4 x 1/4	77.008 (p.455) 77.010 (p.455)
79.023	2x 1/2	2+2 x 1/4	77.007 (p.455) 77.008 (p.455)
79.024	2x 1/2	4+4 x 1/4	77.007 (p.455) 77.008 (p.455)

Dimensions

A [mm]	B [mm]	C [mm]	L [mm]
20	15	15	45
20	15	15	75
30	15	30	60
30	15	30	120
40	18	36	72
40	18	36	144
40	22	36	80
40	22	36	152

Dimensions





Straight male stud connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.000	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.001	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.002	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.003	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.004	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.005	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.006	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.007	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.008	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.009	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.010	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.011	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8
30.002-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	4	G1/8
30.003-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	4	G1/4
30.006-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G1/8
30.007-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G1/4
30.008-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G3/8
30.011-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	8	G3/8

Cartridge male stud connectors, round, hex key



Technical data				Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G	
30.200	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5	
30.201	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6	
30.202	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8	
30.203	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5	
30.204	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6	
30.205	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8	
30.206	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4	
30.207	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8	
30.208	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4	
30.209	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8	

Straight male stud connectors with cut-off valve

Locking of compressed air or vacuum during disassembly, release after reconnection



Technical data				Dimensions	
Item no.	Effective passage area [mm ²]	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.761	1.6	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.762	2	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.763	2.3	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.764	7.3	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.765	7.3	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4



Female stud connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.050	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.051	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.052	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.053	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.054	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.055	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.056	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8

Straight tube connectors – equal



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	
30.223	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	
30.224	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	
30.225	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	

Straight tube reducers



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D1 [mm]	Ø D2 [mm]
30.075	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	4
30.076	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	6

90° elbow male connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.100	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.101	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.102	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.103	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.104	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.105	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.106	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.107	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.108	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.109	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.110	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.111	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8
30.102-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	4	G1/8
30.103-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	4	G1/4
30.106-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G1/8
30.107-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G1/4
30.108-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G3/8
30.109-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	8	G1/8
30.110-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	8	G1/4
30.111-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	8	G3/8



90° elbow female connectors



Technical data

Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]
30.170	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.171	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.172	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.173	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.174	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.175	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.176	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.177	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.178	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.179	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.180	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.181	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.172-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.173-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.176-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.177-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.178-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.179-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.180-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)
30.181-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)

Dimensions

Ø D [mm]	G
4	M5
4	M6
4	R1/8
4	R1/4
6	M5
6	M6
6	R1/8
6	R1/4
6	R3/8
8	R1/8
8	R1/4
8	R3/8
4	G1/8
4	G1/4
6	G1/8
6	G1/4
6	G3/8
8	G1/8
8	G1/4
8	G3/8

90° male elbows with cut-off valve

Locking of compressed air or vacuum during disassembly, release after reconnection



Technical data

Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]
30.774	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.775	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.776	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.777	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.778	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)

Dimensions

Ø D [mm]	G
4	M5
4	G1/8
6	M5
6	G1/8
6	G1/4

90° elbow connectors – equal



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	
30.270	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	
30.271	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	
30.272	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	

Male banjo connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.300	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.301	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.302	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.303	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.304	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.305	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.306	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.307	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.308	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8



Male branch tee connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.332	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.333	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.334	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.335	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.336	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.337	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.338	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.339	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.340	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.341	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.342	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.343	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8

Equal tube tee connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	
30.390	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	
30.391	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	
30.392	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	

Unequal tube tee connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D1 [mm]	Ø D2 [mm]
30.399	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	4
30.400	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	6

Equal Y-connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	
30.431	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	
30.432	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	
30.433	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	

Unequal Y-connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D1 [mm]	Ø D2 [mm]
30.440	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	4
30.441	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	6



Male Y-connectors



Technical data

Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]
30.403	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.404	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.405	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.406	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.407	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.408	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.409	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.410	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.411	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.412	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.413	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)

Dimensions

Ø D [mm]	G
4	M5
4	R1/8
4	R1/4
6	M5
6	M6
6	R1/8
6	R1/4
6	R3/8
8	R1/8
8	R1/4
8	R3/8

Elbow Y male connectors



Technical data

Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]
30.518	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.519	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.520	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.521	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.522	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.523	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.524	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.525	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.527	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.528	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)
30.529	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)

Dimensions

Ø D [mm]	G
4	M5
4	M6
4	R1/8
4	R1/4
6	M5
6	M6
6	R1/8
6	R1/4
8	R1/8
8	R1/4
8	R3/8

Push-in connectors QC

Available as an option: connecting strap for parallel circuit = QB-H, for series circuit = QB-T



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D1 [mm]	Ø D2 [mm]
QC3-3M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	3
QC3-4M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	4
QC3-6M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	6
QC4-3M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	3
QC4-4M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	4
QC4-6M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	6
QC6-3M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	3
QC6-4M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	4
QC6-6M	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	6
QC6-6	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	6
QC6-8	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	8
QC8-6	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	6
QC8-8	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	8

Two stack banjos



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.599	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.600	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.601	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R3/8
30.602	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.603	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.604	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.605	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.606	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.607	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8
30.608	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/2



Two stack, twin banjos



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.649	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.650	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.651	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R3/8
30.652	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.653	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.654	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.655	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.656	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.657	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8
30.658	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/2

3-way male elbow connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.490	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.491	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.492	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.493	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.494	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.495	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.496	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.497	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.498	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.499	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.500	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.501	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8

Three stack, twin banjos



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.674	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.675	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/4
30.676	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R3/8
30.677	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8
30.678	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/4
30.679	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R3/8
30.680	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/8
30.681	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/4
30.682	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R3/8
30.683	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	8	R1/2



Mini male stud connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.900	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M3
30.901	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M5
30.902	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M6
30.903	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.904	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.905	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.906	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.907	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.908	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.906-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	4	G1/8
30.910-G	-0.95 - 15 (-13.8 - 217.6)	-20 - 80 (-4 - 176)	6	G1/8

Mini male stud connectors, round, hex key



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.921	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M5
30.922	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.923	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.924	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.925	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.926	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.927	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.928	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8

Mini tube fittings, cartridge



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.932	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M6
30.933	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.934	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M8
30.935	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M8

Mini female stud connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.914	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M3
30.915	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M5
30.916	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.917	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5

Mini 45° male elbow connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.976	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.977	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.978	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.979	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.980	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.981	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.982	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8



Mini unequal tube tee connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D1 [mm]	Ø D2 [mm]
31.025	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	3
31.026	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	4

Mini extended male elbow connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.963	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M3
30.964	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.965	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.966	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.967	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.968	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.969	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.970	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8

Mini male elbow connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.949	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M3
30.950	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M5
30.951	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M6
30.952	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.953	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.954	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.955	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
30.956	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
30.957	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
30.958	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8

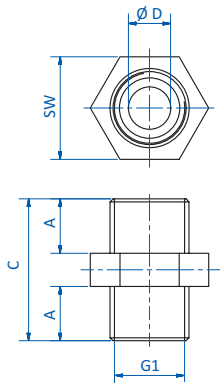
Mini male branch equal tee connectors



Technical data			Dimensions	
Item no.	Pressure range [bar (psi)]	Operating temperature [°C (°F)]	Ø D [mm]	G
30.993	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M3
30.994	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M5
30.995	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	3	M6
30.996	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M3
30.997	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M5
30.998	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	M6
30.999	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	4	R1/8
31.000	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M5
31.001	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	M6
31.002	-0.95 - 15 (-13.8 - 217.6)	0 - 60 (32 - 140)	6	R1/8



Double nipples, equal thread – SZ-GA-MM



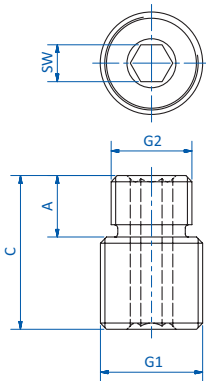
Technical data

Item no.	Material
270.420	Brass
270.059	Brass
270.120	Brass
270.121	Nickel-plated brass

Dimensions

G1 (male)	A [mm]	C [mm]	Ø D [mm]	SW
M5	5	13	2.5	7
G1/8	7	18	5	14
G1/4	9	23.5	7	17
G3/8	9	23	11	19

Reducing bushes with hex socket – SZ GA- MMI



Technical data

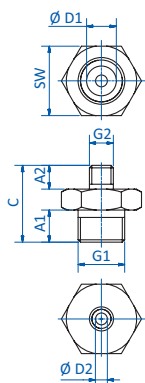
Item no.	Material
270.561	Aluminum
270.562	Aluminum
270.563	Aluminum
270.564	Aluminum
270.565	Aluminum
270.566	Aluminum

Dimensions

G1 (male)	G2 (male)	A [mm]	C [mm]	SW
G3/8	G1/4	10	25	6
G3/8	M10	12	27	5
G3/8	M14	12	27	6
G1/4	G1/4	--	22	5
G1/4	M10	12	24	5
G1/4	M14	11	24	5



Reducing nipples – SZ-GA-RMM



Technical data

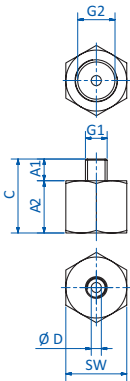
Item no.	Material
270.280	Nickel-plated brass
270.279	Aluminum
270.131	Brass
270.107	Aluminum
270.227	Brass
270.320	Aluminum
270.108	Aluminum
270.181	Nickel-plated brass

Dimensions

G1 (male)	G2 (male)	A1 [mm]	A2 [mm]	C [mm]	D1 [mm]	D2 [mm]	SW
G1/8	M5	6.5	4.8	15.5	6	2.4	14
G1/8	M6	9	7	21	3	3	14
G1/8	M8	7	6	18	4	4	14
G1/8	M12	7.5	8.5	21	5.6	5.6	17
G1/4	M5	9	5	19	7.5	2.5	17
G1/4	M10	10	10	25	5.5	5.5	17
G1/4	M12	8	8	21	5.5	5.5	17
G1/4	G1/8	9	8	22	4	4	17



Reducing bushings male/female – SZ-GA-MF



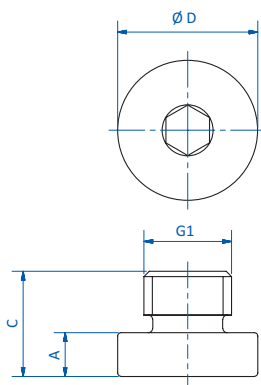
Technical data

Item no.	Material
270.423	Nickel-plated brass
270.079	Brass
270.576	Steel galvanized
270.577	Steel galvanized
270.302	Nickel-plated brass
270.303	Nickel-plated brass
270.334	Nickel-plated brass
270.304	Aluminum
270.090	Brass
270.088	Aluminum
270.245	Brass
270.078	Brass
270.567	Aluminum
270.560	Aluminum

Dimensions

G1 (male)	G2 (female)	A1 [mm]	A2 [mm]	C [mm]	Ø D [mm]	SW
M5	M5	4	7	11	2	8
M5	G1/8	5	12	17	2.3	14
M12	G1/4	10	12	22	6.5	17
M16	G3/8	10	15	25	10	24
G1/8	M5	6	4	10	--	14
G1/8	M6	8	5	13	--	13
G1/8	G1/4	6	10	20	5.3	17
G1/4	M6	10	5	15	--	17
G1/4	M10	5.7	4	11.5	--	19
G1/4	M10	12	16	28	4	17
G1/4	G1/8	9	4	13	--	17
G1/4	G1/4	10	18	28	7.5	17
G1/4	G3/8	11	16	27	4	20
G3/8	G1/4	11	5	16	--	22

Blanking plugs with O-ring seal – SZ-SCV



Technical data

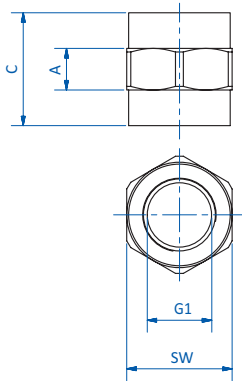
Item no.	Material
77.000	Nickel-plated brass
77.009	Nickel-plated brass
77.008	Nickel-plated brass
77.007	Nickel-plated brass
77.010	Nickel-plated brass

Dimensions

G1 (male)	A [mm]	C [mm]	Ø D [mm]
M5	2	6	8
G1/8	3	11	17
G1/4	3	9.5	14
G1/2	3.5	13.5	25
G3/8	3.5	12.5	20



Threaded bushes – SZ-GA-FF



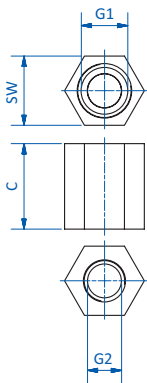
Technical data

Item no.	Material
270.343	Nickel-plated brass
270.182.O	Aluminum
270.579	Aluminum

Dimensions

G1 (female)	A [mm]	C [mm]	SW
G1/8	5.5	15	14
G1/4	20	20	19
G3/8	23	23	22

Reducing bushes – SZ-GA-RFF



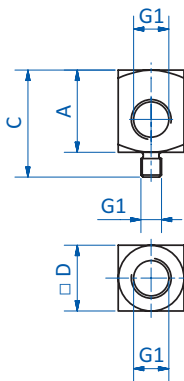
Technical data

Item no.	Material
270.306	Aluminum
270.307	Aluminum
270.308	Aluminum
270.089	Aluminum
270.228	Nickel-plated brass

Dimensions

G1 (female)	G2 (female)	C [mm]	SW
G1/8	M5	14	13
G1/8	M6	14	13
G1/4	M6	17.5	17
G1/4	M10	21	17
G3/8	G1/4	21.5	22

Elbow connectors AG – SZ-WAA



Technical data

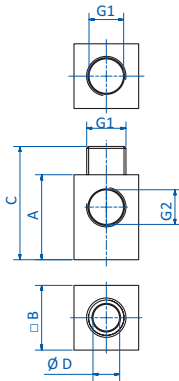
Item no.	Material
GR07.010	Steel nickel-plated
GR07.011	Steel nickel-plated
GR07.012	Steel nickel-plated
GR07.013	Steel nickel-plated

Dimensions

G1 (female)	G2 (male)	A [mm]	C [mm]	□ D [mm]
G1/8	M5	20	26	16
G1/4	M6	33	43	25
G1/4	M8	33	43	25
G1/4	G1/8	25	35	20



Elbow connectors IG – SZ-WAI



Technical data

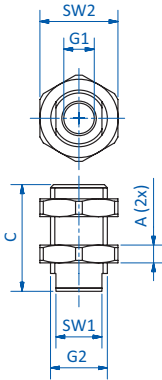
Item no.	Material
270.395	Aluminum
270.396	Aluminum

Dimensions

G1 (female+male)	G2 (female)	A [mm]	B [mm]	C [mm]	Ø D [mm]
G1/8	G1/8	21	16	28	6.6
G1/4	G1/8	26	18	36	8

Bulkhead connectors – SZ-SVS

Allow for height adjustment during vacuum cup installation



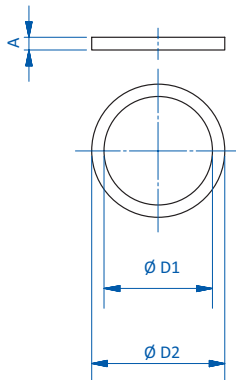
Technical data

Item no.	Material bushing	Material screw nut
270.518	Stainless steel	Steel galvanized
270.519	Stainless steel	Steel galvanized

Dimensions

G1 (female)	G2 (male)	A [mm]	C [mm]	SW1	SW2
G1/8	M16	5	30	13	22
G1/4	M20	5	30	-	24

Sealing rings – SZ-DR



Technical data

Item no.	For outside thread	Material
78.052	M5	Rigid PVC white
78.053	G1/8	Rigid PVC white
78.054	G1/4	Rigid PVC white
78.051	G3/8	Rigid PVC white
78.055	G1/2	Rigid PVC white
78.056	G3/4	Rigid PVC white

Dimensions

A [mm]	Ø D1 [mm]	Ø D2 [mm]
1	5.4	7.9
2	10.3	13.5
2	13.3	18
2	17.5	21.3
2	21.2	27.9
2	26.8	33

Ordering notes

1 packing unit = 100 pieces