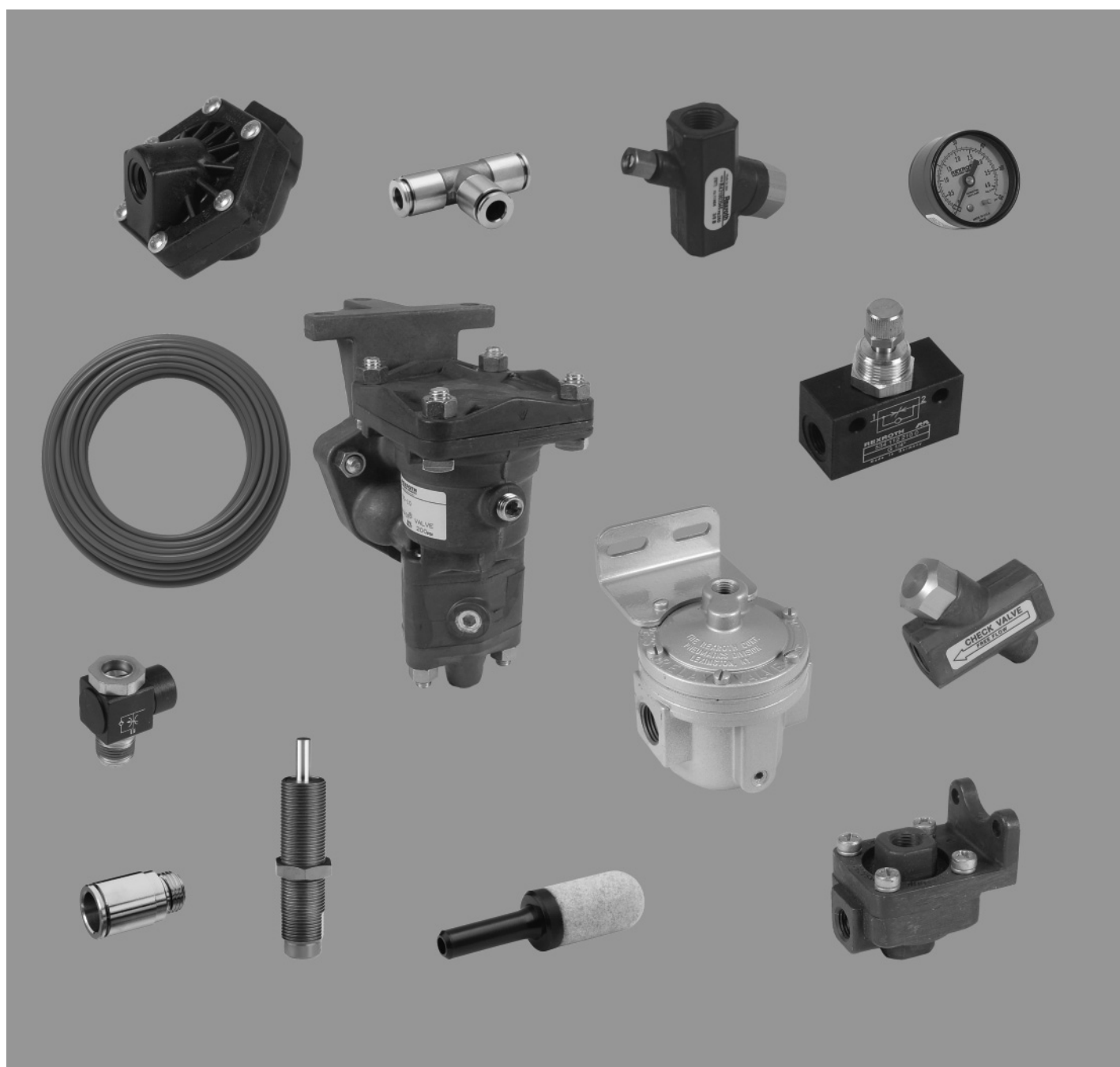


Pneumatic Accessory Valves and Devices



Fittings & Tubing



Push-in metric fittings in brass; inch and metric in stainless steel



Metric/inch adapters, reducing bushings, plugs, nipples, etc.



Metric/inch tubing in polyurethane and polyethylene



Plastic tubing cutters, T-clips, mounting strips, etc.

Pneumatic Accessory Valves



Flow control valves - inline and right angle, inch and metric



Check valves - inline and right angle, inch and metric



Quick exhaust valves - inline and right angle in inch and metric



Shuttle valves - inline inch and metric



Relay valves - inch Type S, C2, H, L and PD



Pressure regulators - right angle in-port inch and metric



Mechanical spool valve - inline sliding actuation, metric

Accessory Devices



Pressure switch - mechanical



Pressure gauges - inch and metric



Silencers - inch and metric



Timing volume



Shock absorbers

Many other pneumatic products are available. Catalogs can be downloaded from www.boschrexroth-us.com/brp or request a catalog on a specific product via email from pneumatics@boschrexroth-us.com

Table of Contents

	Page No.
Fittings & Tubing	
Push-in Fittings, Metric, Series QR2-S	2
Push-in Fittings, Inch, Stainless Steel	20
Push-in Fittings, Metric, Series QR2-C (Stainless Steel)	24
Fittings, Metric (Blanking plugs, Reducing Nipples)	36
Adapter Fittings (ISO G to Inch, M7, Inch to R ISO, Inch Pipe Plugs/Nipples/Reducer Bushings)	38
Plastic Tubing, Metric	39
Plastic Tubing, Inch	44
Plastic Tubing - Accessories	45
Accessory Valves	
Flow Control - Inline, Floreg®, 1/8" to 1" NPTF	49
Flow Control - Inline, Series CH01, Metric G1/8 to G1/4	51
Flow Control - Right Angle, Inch, Threaded and Push-in	53
Flow Control - Right Angle, Series CC04, Metric Push-in	54
Check Valve - Inline, 1/8" to 1" NPTF	58
Check Valve - Inline, Metric G1/8 to G3/4	59
Check Valve - Right Angle, Pilot Operated, 1/8" to 1/2" NPTF	61
Check Valve - Right Angle, Pilot Operated, Metric G1/8 to G1/2	62
Quick Exhaust - Inline, Inch, Aluminum and Polymer Bodies	64
Quick Exhaust - Right Angle, Metric M5 to G1	67
Shuttle - Inline, 1/8" to 1/2" NPTF	69
Shuttle - Inline, Metric M5 to G1	70
Relay - Type S, 1/4" NPTF	73
Relay - Type C2, 1/2" NPT	76
Relay - Type H and L, 1/4" NPT	78
Relay - Type PD, 1/2" NPT	80
Pressure Regulator - In-port Right Angle, 1/8" to 1/2" NPTF	81
Pressure Regulator - In-port Right Angle, Metric G1/8 to G1/4	82
Mechanical Spool - Inline, Sliding Actuation, Metric G1/8 to G1/2	84
Accessory Devices	
Pressure Switch - Mechanical, Series PM1	85
Pressure Gauges	87
Silencers - Inch	94
Silencers - Metric	96
Timing Volume, Pneumatic	101
Shock Absorber - Series 370	102

Push-in Fittings, Metric, Series QR2-S

Straight fitting, external thread, QR2-S-RPN

Rexroth
Bosch Group



00136711

Ambient temperature min./max.
Working pressure min./max.

-20°C / +80°C
-0.95 bar / 16 bar

Materials:

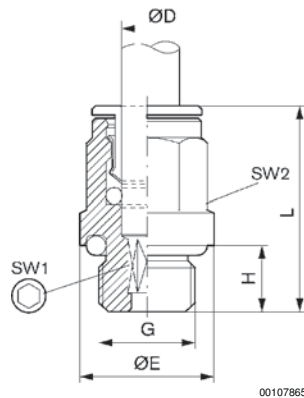
Housing
Seal
Tooth lock washer
Release ring
Thread

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

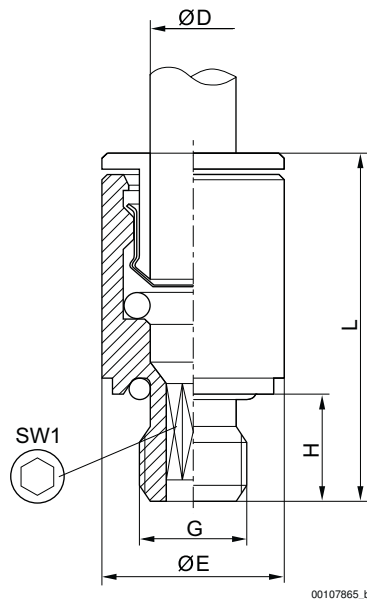
Fig. 1



Push-in Fittings, Metric, Series QR2-S

Straight fitting, external thread, QR2-S-RPN

Fig. 2



Part No.	Port G	Port D	Ø E	H	L	SW 1	SW 2	Delivery quantity [Piece]	Weight [kg]	Fig.
1823373038	M5	Ø 4	9	4	20.5	2.5	–	25	0.006	Fig. 2
1823373039	M5	Ø 5	9.5	4	22	2.5	–	10	0.007	Fig. 2
1823373040	M5	Ø 6	10.5	4	22	2.5	–	25	0.01	Fig. 2
1823373100	M7	Ø 4	10.8	6	22	2.5	9	25	0.007	Fig. 1
1823373088	M7	Ø 6	10.5	6	24	3.5	–	25	0.005	Fig. 2
1823373041	G 1/8	Ø 4	13.5	6	20	2.5	9	25	0.005	Fig. 1
1823373042	G 1/8	Ø 5	13.5	6	22	4	10	10	0.01	Fig. 1
1823373043	G 1/8	Ø 6	13.5	6	24	4	11	25	0.011	Fig. 1
1823373044	G 1/8	Ø 8	13	6	26.5	5	13	25	0.012	Fig. 1
1823373045	G 1/4	Ø 4	17	8	21	2.5	9	25	0.012	Fig. 1
1823373046	G 1/4	Ø 5	17	8	22	4	10	10	0.013	Fig. 1
1823373047	G 1/4	Ø 6	17	8	24	4	11	25	0.015	Fig. 1
1823373048	G 1/4	Ø 8	17	8	25	6	13	10	0.016	Fig. 1
1823373049	G 1/4	Ø 10	16	8	29.5	7	16	10	0.026	Fig. 1
1823391809	G 1/4	Ø 12	16	8	31	7	18	10	0.031	Fig. 1
R412004708	G 1/4	Ø 12	17	8.3	31	7	–	10	0.022	Fig. 2
1823373050	G 3/8	Ø 8	20	9	25	6	13	10	0.021	Fig. 1
1823373051	G 3/8	Ø 10	21	9	29.5	8	16	10	0.028	Fig. 1
1823373052	G 3/8	Ø 12	21	9	31	10	18	5	0.038	Fig. 1
1823373053	G 3/8	Ø 14	21	9	34	10	21	5	0.059	Fig. 1
1823373054	G 1/2	Ø 12	24	11	31	10	18	5	0.048	Fig. 1
1823373055	G 1/2	Ø 14	24	11	34	12	21	5	0.064	Fig. 1
R412007955	G 1/2	Ø 16	24	11	37	12	24	1	0.072	Fig. 1

Push-in Fittings, Metric, Series QR2-S

Straight female stud fitting, internal thread, QRS-2-RAI



00110651

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

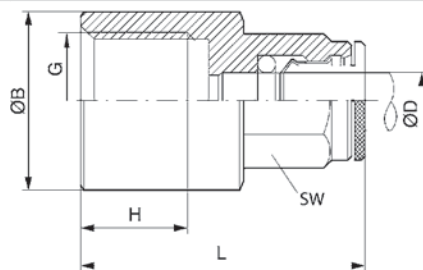
Housing
Seal
Tooth lock washer
Release ring
Thread

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107888

Part No.	Port G	Port D	Ø B	H	L	SW	Delivery quantity [Piece]	Weight [kg]				
1823391643	G 1/8	Ø 4	11	6	26.5	9	10	0.01				
1823391644	G 1/8	Ø 5	12	6	27	10	10	0.01				
1823391645	G 1/8	Ø 6	11	6	27	11	10	0.011				
1823391646	G 1/8	Ø 8	11	6	28	13	10	0.015				
1823391647	G 1/4	Ø 4	16	10	29.5	9	10	0.014				
1823391648	G 1/4	Ø 5	16	10	30	10	10	0.016				
1823391649	G 1/4	Ø 6	16	10	31	11	10	0.018				
1823391650	G 1/4	Ø 8	16	10	32	13	10	0.02				

Push-in Fittings, Metric, Series QR2-S

Bulkhead connector, internal thread, QR2-S-RSI



00127676

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

Release ring

Brass, nickel-plated

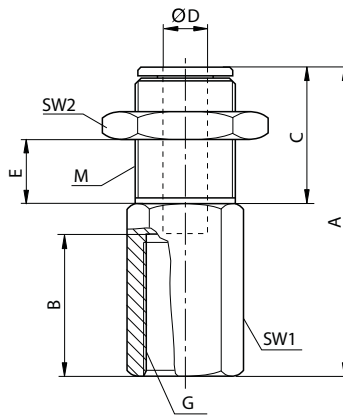
Thread

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00127675

Part No.	Port G	Port D	M	A	B	C	E ±2 1)	SW1	SW2	Delivery quantity [Piece]
1823391757	G 1/8	Ø 4	M10x1	25	8.5	15	9.5	15	13	10
1823391758	G 1/8	Ø 6	M14x1	26	8.5	15	9.5	17	17	10
1823391759	G 1/4	Ø 6	M14x1	30.5	13	15	9.5	17	17	10
1823391760	G 1/8	Ø 8	M16x1	28	8.5	15	9.5	17	19	10
1823391761	G 1/4	Ø 8	M16x1	33	13	15	9.5	17	19	10

1) Max.

Push-in Fittings, Metric, Series QR2-S

Male elbow fitting, rotatable, external thread, QR2-S-RVT

Rexroth
Bosch Group



00119822



00119490

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

Release ring

Brass, nickel-plated

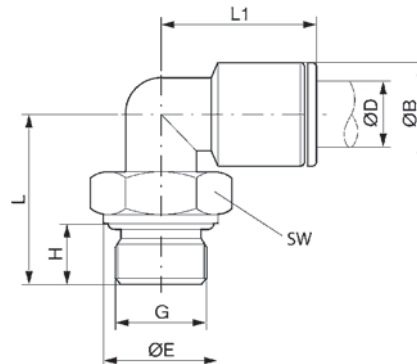
Thread

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107875

Part No.	Port G	Port D	ØB	ØE	H	L	L1	SW	Delivery quantity [Piece]	Weight [kg]
1823391709	M5	Ø 4	9	8	4	14.5	19	9	10	0.015
1823391889	M5	Ø 6	11	8	4	14.5	21	9	10	0.016
1823391885	M7	Ø 4	9	10	6	16.5	18	9	10	0.017
1823391886	M7	Ø 6	11	10	6	16.5	19.5	9	10	0.017
1823391710	G 1/8	Ø 4	9	13	6	20	19	13	10	0.018
1823391711	G 1/8	Ø 6	11	13	6	20	21	13	10	0.02
1823391712	G 1/8	Ø 8	13	13	6	20	24	13	10	0.022
R412007687	G 1/8	Ø 10	15	13	6	24	27	13	5	0.032
1823391713	G 1/4	Ø 4	9	16	8	24	19	13	10	0.024
1823391714	G 1/4	Ø 6	11	16	8	24	21	13	10	0.025
1823391715	G 1/4	Ø 8	13	16	8	24	24	13	10	0.027
1823391718	G 1/4	Ø 10	15	16	8	24	27	16	10	0.031
1823391843	G 1/4	Ø 12	17	16	8	28.5	28	16	5	0.042
1823391716	G 3/8	Ø 8	13	20	9	25.5	24	13	5	0.042
1823391717	G 3/8	Ø 10	15	20	9	28	27	16	5	0.042
1823391838	G 3/8	Ø 12	17	20	9	28.5	28	20	5	0.045
1823391839	G 3/8	Ø 14	20	20	9	28.5	31	20	5	0.062
R412010182	G 3/8	Ø 16	23	20	9	33.5	33	20	1	0.072
R412007589	G 1/2	Ø 10	15	25	11	30	27	16	5	0.046
1823391840	G 1/2	Ø 12	17	25	11	33.5	28	20	5	0.065
1823391841	G 1/2	Ø 14	20	25	11	33.5	31	20	5	0.07
R412007956	G 1/2	Ø 16	23	25	11	38	33	20	1	0.084

Push-in Fittings, Metric, Series QR2-S

Right angle banjo connection, external thread, QR2-S-RW1

Rexroth
Bosch Group



00110644

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

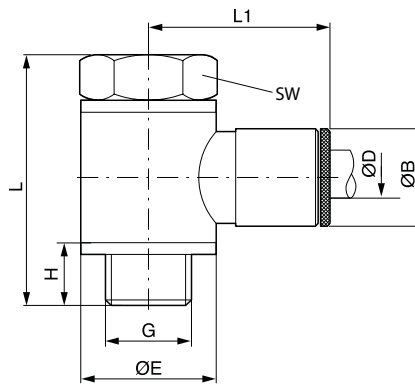
Housing
Seal
Tooth lock washer
Release ring
Thread

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



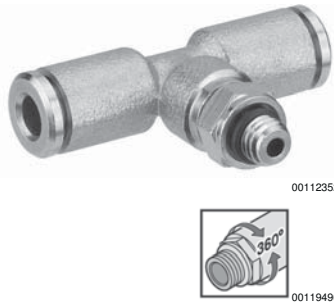
00107877

Part No.	Port G	Port D	L	L1	H	Ø B	Ø E	SW	Delivery quantity [Piece]	Weight [kg]
1823391549	M5	Ø 4	17.5	18.5	4.5	9	7	8	10	0.01
1823391550	M5	Ø 5	17.5	19.5	4.5	10	7	8	10	0.016
1823391905	M5	Ø 6	19	19	4.5	10.5	10	8	10	0.018
1823391551	G 1/8	Ø 4	28	21	7.5	9	14	14	10	0.024
1823391552	G 1/8	Ø 5	28	22.5	7.5	10	14	14	10	0.026
1823391553	G 1/8	Ø 6	28	22.5	7.5	11	14	14	10	0.027
1823391554	G 1/8	Ø 8	28	24.5	7.5	13	14	14	10	0.032
1823391556	G 1/4	Ø 6	33	24	9	11	18	17	10	0.035
1823391557	G 1/4	Ø 8	33	26	9	13	18	17	10	0.048
1823391558	G 1/4	Ø 10	33	27	9	15	18	17	5	0.052
1823391559	G 3/8	Ø 8	36	28	9	13	21	19	5	0.072
1823391560	G 3/8	Ø 10	36	29	9	15	21	19	5	0.077
1823391561	G 3/8	Ø 12	36	30	9	17	21	19	5	0.088

Push-in Fittings, Metric, Series QR2-S

Male branch tee, rotatable, external thread, QR2-S-RTT

Rexroth
Bosch Group



Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

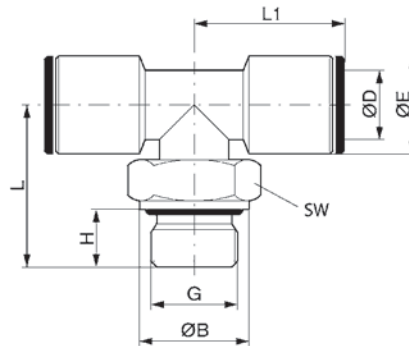
Housing
Seal
Tooth lock washer
Release ring
Thread

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions

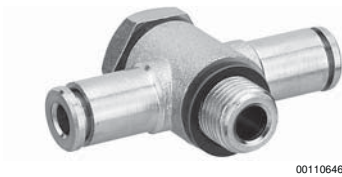


Part No.	Port G	Port D	Ø B	Ø E	H	L	L1	SW	Delivery quantity [Piece]	Weight [kg]		
1823391812	M5	Ø 4	8	9	4	16.5	19	9	25	0.019		
1823391813	G 1/8	Ø 4	12.8	9	6	18.5	17.5	13	25	0.022		
1823391814	G 1/8	Ø 6	13	11	6	20	21	13	25	0.033		
1823391815	G 1/8	Ø 8	13	13	6	20	23	13	25	0.034		
1823391816	G 1/4	Ø 4	12.8	9	8	22.5	19	16	25	0.028		
1823391817	G 1/4	Ø 6	16	11	8	24	21	13	25	0.035		
1823391818	G 1/4	Ø 8	16	13	8	24	23	13	10	0.038		
1823391819	G 1/4	Ø 10	15.8	15	8	24.5	25	16	10	0.043		
1823391823	G 1/4	Ø 12	16	17	8	28.5	28	16	10	0.072		
1823391820	G 3/8	Ø 8	20	13	9	25.5	24	18	10	0.045		
1823391821	G 3/8	Ø 10	20	15	9	28	26	16	10	0.046		
1823391822	G 3/8	Ø 12	20	17	9	26.5	27	18	5	0.057		
1823391824	G 1/2	Ø 14	25	20	11	33.5	31	20	5	0.091		

Push-in Fittings, Metric, Series QR2-S

Swivel branch tee, rotatable, external thread, QR2-S-RTS

Rexroth
Bosch Group



00110646

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

Release ring

Brass, nickel-plated

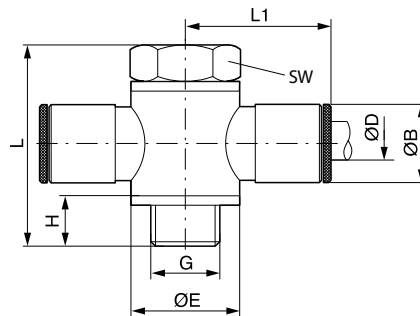
Thread

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107878

Part No.	Port G	Port D	Ø B	Ø E	H	L	L1	SW	Delivery quantity [Piece]	Weight [kg]
1823391562	M5	Ø 4	9	8	4.5	17.5	18.5	8	10	0.02
1823391563	M5	Ø 5	10	7	4.5	17.5	19.5	8	10	0.024
1823391564	G 1/8	Ø 4	9	14	7.5	28	21	14	10	0.034
1823391565	G 1/8	Ø 5	10	14	7.5	28	22.5	14	10	0.036
1823391566	G 1/8	Ø 6	11	14	7.5	28	23	14	10	0.038
1823391567	G 1/8	Ø 8	13	14	7.5	28	24.5	14	10	0.041
1823391568	G 1/4	Ø 6	11	18	9	33	24	17	10	0.054
1823391569	G 1/4	Ø 8	13	18	9	33	26	17	10	0.056
1823391570	G 1/4	Ø 10	15	18	9	33	27	17	5	0.063
1823391571	G 3/8	Ø 8	13	21	9.5	36	28	22	5	0.076
1823391572	G 3/8	Ø 10	15	21	9.5	36	29	22	5	0.096
1823391573	G 3/8	Ø 12	17	21	9.5	36	30	22	5	0.117

Push-in Fittings, Metric, Series QR2-S

Male run tee, rotatable, external thread, QR2-S-RLT

Rexroth
Bosch Group



Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

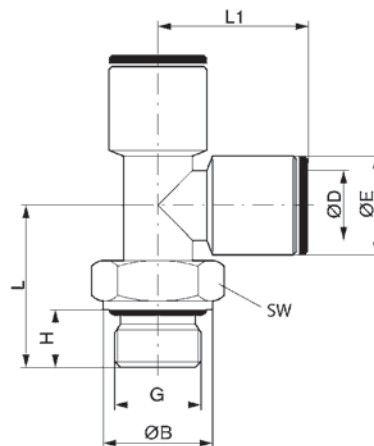
Housing
Seal
Tooth lock washer
Release ring
Thread

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



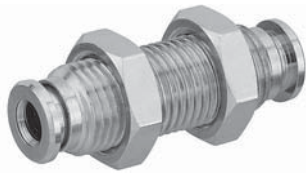
00108784

Part No.	Port G	Port D	Ø B	Ø E	H	L	L1	SW	Delivery quantity [Piece]	Weight [kg]
1823391825	M5	Ø 4	8	9	4	20	19	9	25	0.015
1823391826	G 1/8	Ø 4	12.8	9	5.8	18.5	17.5	13	25	0.023
1823391827	G 1/8	Ø 6	12.8	11	5.8	18.5	21	13	25	0.023
1823391828	G 1/8	Ø 8	12.8	13	5.8	20.5	23	13	25	0.029
1823391829	G 1/4	Ø 4	15.8	9	8	22.5	19	16	25	0.028
1823391830	G 1/4	Ø 6	15.8	11	8	22.5	21	13	25	0.031
1823391831	G 1/4	Ø 8	15.8	13	8	22.5	24	13	10	0.037
1823391832	G 1/4	Ø 10	15.8	15	8	24.5	27	16	10	0.044
1823391836	G 1/4	Ø 12	15.8	17	8	24.5	27	16	10	0.054
1823391833	G 3/8	Ø 8	20	13	9	25.5	24	13	10	0.045
1823391834	G 3/8	Ø 10	20	15	9	24.5	25.5	16	10	0.047
1823391835	G 3/8	Ø 12	20	17	9	26.5	27	18	5	0.058
1823391837	G 1/2	Ø 14	25	20	11	30.5	31	21	5	0.092

Push-in Fittings, Metric, Series QR2-S

Bulkhead union, QR2-S-RSM

Rexroth
Bosch Group



00110650

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

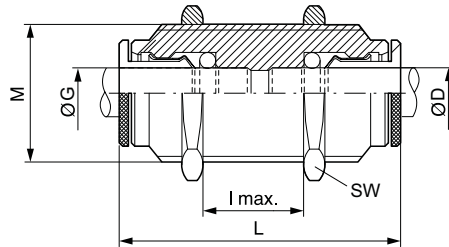
Release ring

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107887

Part No.	Port G	Port D	M	I 1)	L	SW	Delivery quantity [Piece]	Weight [kg]				
1823391636	Ø 4	Ø 4	M10x1	8	32	13	10	0.017				
1823391637	Ø 5	Ø 5	M11x1	8	33	14	10	0.02				
1823391638	Ø 6	Ø 6	M14x1	8	33.5	17	10	0.022				
1823391639	Ø 8	Ø 8	M16x1	10	37	18	10	0.029				
1823391640	Ø 10	Ø 10	M17x1	12	39.5	20	10	0.058				
1823391641	Ø 12	Ø 12	M20x1	17	42	24	5	0.063				
1823391642	Ø 14	Ø 14	M22x1	18	45	25	5	0.092				
R412010241	Ø16	Ø16		21	50	36	2	0.174				

1) Max.

Push-in Fittings, Metric, Series QR2-S

Straight union, QR2-S-RSK

Rexroth
Bosch Group



00119557

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

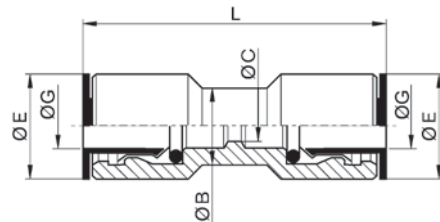
Release ring

Brass, nickel-plated

Technical Remarks

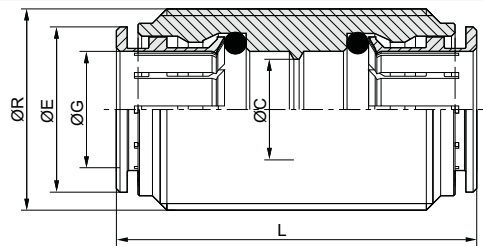
- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00133717

Dimensions for fitting with external thread



00133717_a

Part No.	Port G	Port R	ØB	ØC	ØE	L	Delivery quantity [Piece]	Weight [kg]				
1823386077	Ø 4	-	7	3	9	30	10	0.012				
1823386078	Ø 5	-	8	4	9.5	32	10	0.014				
1823386079	Ø 6	-	10	5	11	31.5	10	0.016				
1823386080	Ø 8	-	12	7	13	36	10	0.023				
1823386081	Ø 10	-	13	9	15	37	10	0.043				
1823386082	Ø 12	-	16	11	17	40.5	5	0.052				
1823386083	Ø 14	-	18	12	20	45	5	0.075				
R412010539	Ø16	M28x1,5	-	14	23	50	1	0.114				

Push-in Fittings, Metric, Series QR2-S

Union elbow, QR2-S-RVK

Rexroth
Bosch Group



Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

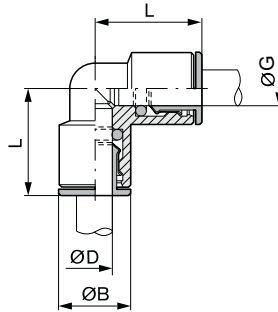
Housing
Seal
Tooth lock washer
Release ring

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107868

Part No.	Port G	Port D	ØB	L	Delivery quantity [Piece]	Weight [kg]						
1823380012	Ø 4	Ø 4	9	17.5	10	0.01						
1823380013	Ø 5	Ø 5	9.5	19	10	0.011						
1823380014	Ø 6	Ø 6	11	19.5	10	0.014						
1823380015	Ø 8	Ø 8	13	23	10	0.019						
1823380016	Ø 10	Ø 10	15	25	10	0.026						
1823380017	Ø 12	Ø 12	17	27	5	0.037						
1823380018	Ø 14	Ø 14	19	30	5	0.056						
R412010540	Ø16	Ø16	23	33	1	0.064						

Push-in Fittings, Metric, Series QR2-S

Union tee, QR2-S-RTK

Rexroth
Bosch Group



00110604

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

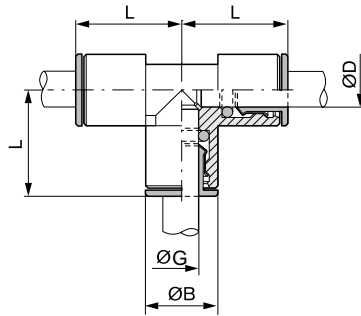
Housing
Seal
Tooth lock washer
Release ring

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107869

Part No.	Port G	Port D	ØB	L	Delivery quantity [Piece]	Weight [kg]						
1823381043	Ø 4	Ø 4	9	17.5	10	0.015						
1823381044	Ø 5	Ø 5	10	19	10	0.016						
1823381045	Ø 6	Ø 6	11	19.5	10	0.019						
1823381046	Ø 8	Ø 8	13	23	10	0.027						
1823381047	Ø 10	Ø 10	15	25	10	0.038						
1823381048	Ø 12	Ø 12	17	27	5	0.051						
1823381049	Ø 14	Ø 14	20	30	5	0.076						
R412010541	Ø16	Ø16	23	36	1	0.115						

Push-in Fittings, Metric, Series QR2-S

Straight fitting, increasing, QR2-S-REE



Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

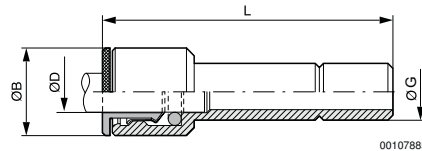
Housing
Seal
Tooth lock washer
Release ring

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



Part No.	Port G	Port D	Ø B	L	Delivery quantity [Piece]	Weight [kg]						
1823391628	Ø 4	Ø 6	10.5	33.5	10	0.008						
1823391890	Ø 6	Ø 8	13	39	10	0.01						

Push-in Fittings, Metric, Series QR2-S

Straight fitting, reducing, QR2-S-RED

Rexroth
Bosch Group



00110648

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
-0.95 bar / 16 bar

Materials:

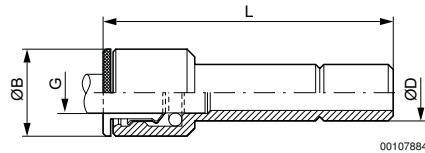
Housing
Seal
Tooth lock washer
Release ring

Brass, nickel-plated
Acrylonitrile Butadiene Rubber
Stainless steel
Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107884

Part No.	Port G	Port D	Ø B	L	Delivery quantity [Piece]	Weight [kg]						
1823391614	Ø 4	Ø 5	9	32.5	10	0.007						
1823391615	Ø 4	Ø 6	9	28.5	10	0.008						
1823391616	Ø 5	Ø 6	9.5	35.5	10	0.009						
1823391617	Ø 4	Ø 8	9	31	10	0.011						
1823391618	Ø 5	Ø 8	9.5	32.5	10	0.011						
1823391619	Ø 6	Ø 8	10.5	33.5	10	0.012						
1823391620	Ø 6	Ø 10	10.5	36.5	10	0.016						
1823391621	Ø 8	Ø 10	13	38	10	0.018						
1823391622	Ø 4	Ø 12	13	39.5	10	0.024						
1823391623	Ø 6	Ø 12	13	39.5	10	0.022						
1823391624	Ø 8	Ø 12	13	38.5	10	0.02						
1823391903	Ø 10	Ø 12	15	41	5	0.019						
1823391625	Ø 4	Ø 14	15	43	5	0.024						
1823391626	Ø 6	Ø 14	15	43	5	0.023						
1823391627	Ø 8	Ø 14	15	43	5	0.026						
1823391842	Ø 10	Ø 14	15	43	10	0.03						
1823391811	Ø 12	Ø 14	17	43	10	0.041						
R412010190	Ø 14	Ø 16	20	47	5	0.039						

Push-in Fittings, Metric, Series QR2-S

Plug-in elbow, QR2-S-RVA



00124066

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

Housing

Brass, nickel-plated

Seal

Acrylonitrile Butadiene Rubber

Tooth lock washer

Stainless steel

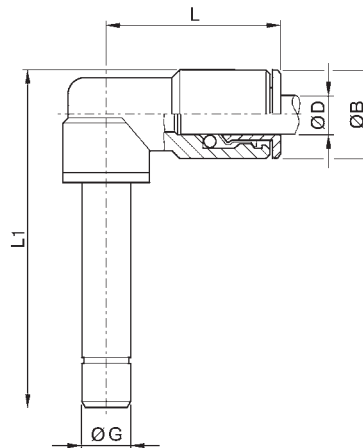
Release ring

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions, Series, QR2-S-RVK



00119509

Part No.	Port G	Port D	Ø D	Ø B	L	L1	Delivery quantity [Piece]	Weight [kg]				
R412004851	Ø 4	Ø 4	4	9	18	24	10	0.007				
R412004852	Ø 6	Ø 6	6	11	20	32	10	0.012				
1823391942	Ø 8	Ø 8	8	13	23	37.5	10	0.018				
1823391943	Ø 10	Ø 10	10	15	26	43.1	10	0.025				
1823391944	Ø 12	Ø 12	12	17	28	49.5	10	0.033				

Push-in Fittings, Metric, Series QR2-S

Blanking plug, QR2-S-RBS



00110647

Ambient temperature min./max.

-20 °C / +80 °C

Working pressure min./max.

-0.95 bar / 16 bar

Materials:

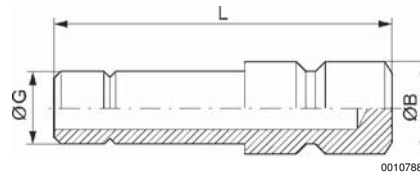
Housing

Brass, nickel-plated

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions



00107883

Part No.	Port G	Ø B	L	Delivery quantity [Piece]	Weight [kg]						
1823391607	Ø 4	5	25.5	25	0.002						
1823391608	Ø 5	6	26.5	25	0.006						
1823391609	Ø 6	7	27.5	25	0.008						
1823391610	Ø 8	9	30.5	25	0.015						
1823391611	Ø 10	11	35	25	0.018						
1823391612	Ø 12	13	37	25	0.023						
1823391613	Ø 14	15	40	25	0.037						

Push-in Fittings, Metric, Series QR2-S

Plug-in union, QR2-S-RDS

Rexroth
Bosch Group



Ambient temperature min./max.
Working pressure min./max.

-20°C / +80°C
-0.95 bar / 16 bar

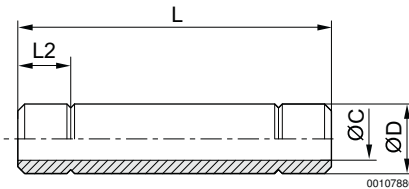
Materials:
Housing

Brass, nickel-plated

Technical Remarks

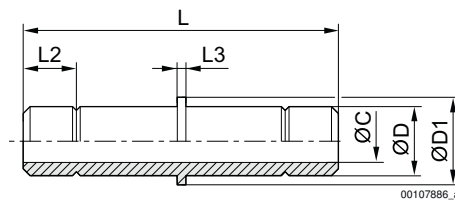
- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of compatible tubing, see the online section "Technical information".

Dimensions (no collar version)



Part No.	Port D	Ø C	L	L2	Delivery quantity [Piece]	Weight [kg]							
1823391630	Ø 5	3	33	4.6	25	0.003							
1823391633	Ø 10	8	45.5	6.5	25	0.01							
1823391634	Ø 12	10	48	6.6	10	0.014							
1823391635	Ø 14	12	53	7.7	10	0.018							

Dimensions (with collar version)



Part No.	Port D	Ø C	L	L2	L3	ØD1	Delivery quantity [Piece]	Weight [kg]					
1823391629	Ø 4	2	35	5.4	0.6	17	25	0.003					
1823391631	Ø 6	4	36.6	5.8	0.6	9	25	0.005					
1823391632	Ø 8	6	40	6.9	1	7	25	0.007					
R412010191	Ø16	14	58	8.7	2	5	10	0.024					

Push-in Fittings, Inch, Stainless Steel

Male connector, tube to NPT



Technical Data - Stainless Steel Push-in Fittings

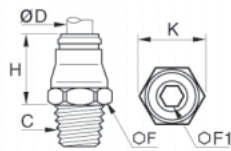
Sizes		5/32" to 1/2" NPT
Max. pressure	psi	290
	bar	20
Temp. range	F	-4 to 248°
	C	-20 to 120°
Materials	body	stainless steel 316L
	O-rings	Fluoroelastomer FKM (FPM)
	collar	stainless steel

Applications

Made from stainless steel, useful in handling aggressive fluids such as acids, alcohols, and hydrocarbons, and in exposed environments.

Note: All dimensions are given in inches unless otherwise indicated.

Male Connector-Tube to NPT



Dimensions						
ØD	C	F	F1	H	K	Wgt. (oz.)
5/32	NPT1/8	0.43	0.12	0.57	0.47	0.28
5/16	NPT1/8	0.59	0.20	0.75	0.65	0.60
5/16	NPT1/4	0.59	0.24	0.71	0.65	0.63
3/16	NPT1/8	0.39	0.12	0.61	0.43	0.35
3/16	NPT1/4	0.55	0.12	0.61	0.59	0.56
1/4	NPT1/8	0.51	0.16	0.75	0.55	0.42
1/4	NPT1/4	0.55	0.16	0.69	0.59	0.60
3/8	NPT1/4	0.75	0.24	0.98	0.83	1.06
3/8	NPT3/8	0.75	0.28	0.94	0.83	1.13
1/2	NPT1/4	0.87	0.28	1.02	0.94	1.27
1/2	NPT3/8	0.87	0.31	0.98	0.94	1.34
1/2	NPT1/2	0.87	0.39	0.98	0.94	1.66

Part numbers			
Tube size	Thread	Pack size	Part number
5/32	NPT1/8	2	1823392800
5/16	NPT1/8	2	1823392801
5/16	NPT1/4	2	1823392802
3/16	NPT1/8	2	1823392803
3/16	NPT1/4	2	1823392804
1/4	NPT1/8	2	1823392805
1/4	NPT1/4	2	1823392806
3/8	NPT1/4	2	1823392807
3/8	NPT3/8	2	1823392808
1/2	NPT1/4	2	1823392809
1/2	NPT3/8	2	1823392810
1/2	NPT1/2	2	1823392811

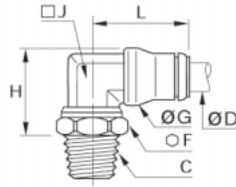
Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Push-in Fittings, Inch, Stainless Steel

Compact male elbow, tube to NPT

Rexroth
Bosch Group

▲ Compact Male Elbow-Tube to NPT



Dimensions							
ØD	C	F	ØG	H	J	L	Wgt. (oz.)
5/32	NPT1/8	0.51	0.39	0.69	0.28	0.75	0.53
5/16	NPT1/4	0.55	0.59	0.94	0.43	0.94	0.13
3/16	NPT1/8	0.39	0.39	0.81	0.28	0.77	0.56
3/16	NPT1/4	0.55	0.39	0.81	0.28	0.77	0.78
1/4	NPT1/8	0.51	0.47	0.85	0.35	0.91	0.71
1/4	NPT1/4	0.55	0.47	0.85	0.35	0.91	0.92
3/8	NPT1/4	0.67	0.69	1.12	0.51	1.20	1.83
3/8	NPT3/8	0.75	0.69	1.12	0.51	1.20	1.94
1/2	NPT1/4	0.87	0.79	1.34	0.59	1.30	2.57
1/2	NPT3/8	0.87	0.79	1.34	0.59	1.30	2.47
1/2	NPT1/2	0.87	0.79	1.34	0.59	1.30	2.68

Part numbers			
Tube	Thread	Pack	Part number
5/32	NPT1/8	2	1823392820
5/16	NPT1/4	2	1823392821
3/16	NPT1/8	2	1823392822
3/16	NPT1/4	2	1823392823
1/4	NPT1/8	2	1823392824
1/4	NPT1/4	2	1823392825
3/8	NPT1/4	2	1823392826
3/8	NPT3/8	2	1823392827
1/2	NPT1/4	2	1823392828
1/2	NPT3/8	2	1823392829
1/2	NPT1/2	2	1823392830

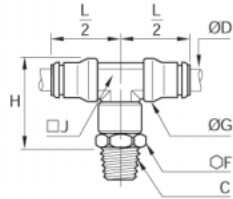
Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Push-in Fittings, Inch, Stainless Steel

Male branch tee, tube to NPT/Male elbow, tube to 10-32



Male Branch Tee-Tube to NPT

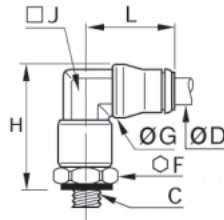


Dimensions							
ØD	C	F	ØG	H	J	L	Wgt. (oz)
5/32	NPT1/8	0.43	0.39	0.87	0.28	1.54	0.74
5/16	NPT1/8	0.55	0.59	1.34	0.43	1.89	1.48
5/16	NPT1/4	0.55	0.59	1.34	0.43	1.89	1.66

Part numbers			
Tube	Thread	Pack	Part number
5/32	NPT1/8	2	1823392840
5/16	NPT1/8	2	1823392841
5/16	NPT1/4	2	1823392842

Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Male Elbow-Tube to 10-32



Dimensions							
ØD	C	F	ØG	H	J	L	Wgt. (oz)
5/32	10-32	0.39	0.39	0.98	0.28	0.77	0.71

Part numbers			
Tube	Thread	Pack	Part number
5/32	10-32	2	1823392860

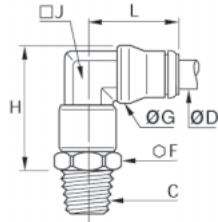
Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Push-in Fittings, Inch, Stainless Steel

Male elbow, tube to NPT/Male run tee, tube to NPT



Male Elbow-Tube to NPT

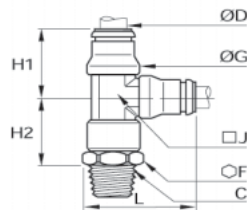


Dimensions							
ØD	C	F	ØG	H	J	L	Wgt. (oz)
5/32	NPT1/8	0.43	0.39	1.00	0.28	0.73	0.56
5/16	NPT1/8	0.55	0.59	1.34	0.43	0.94	1.16
5/16	NPT1/4	0.55	0.59	1.34	0.43	0.94	1.38

Part numbers			
Tube	Thread	Pack	Part number
5/32	NPT1/8	2	1823392880
5/16	NPT1/8	2	1823392881
5/16	NPT1/4	2	1823392882

Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Male Run Tee-Tube to NPT



Dimensions								
ØD	C	F	ØG	H1	H2	J	L	Wgt. (oz)
5/32	NPT1/8	0.43	0.39	0.75	0.83	0.28	0.98	0.71
5/16	NPT1/8	0.55	0.59	0.94	1.04	0.43	1.20	1.76
5/16	NPT1/4	0.55	0.59	0.94	1.04	0.43	1.20	1.90

Part numbers			
Tube	Thread	Pack	Part number
5/32	NPT1/8	2	1823392900
5/16	NPT1/8	2	1823392901
5/16	NPT1/4	2	1823392902

Note: Order in multiples of two per part number, due to package size. Dimensions in inches unless otherwise noted.

Push-in Fittings, Metric, Series QR2-C

Straight fitting, QR2-C-RPN
Stainless steel

Rexroth
Bosch Group



00119552

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +150 °C
-0.95 bar / 16 bar

Materials:

Housing

Stainless steel

Seal

Fluorocaoutchouc

Tooth lock washer

Stainless steel

Release ring

Stainless steel

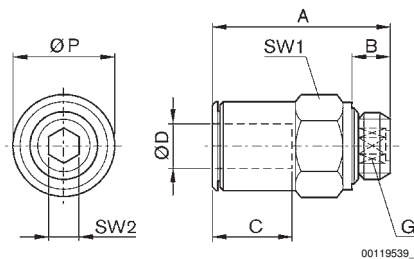
Thread

Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



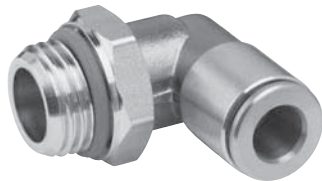
00119539_a

Part No.	Port G	Port D	A	B	C	SW1	SW2	ØP	Delivery quantity [Piece]	Weight [kg]
2544004050	M5	Ø 4	19.5	5	15	9	-	8	2	0.005
R412010036	M7	Ø 4	22.5	5.5	15	11	2.5	9	2	0.01
R412010037	M7	Ø 6	24	5.5	16	11	3.5	11	2	0.01
R412004890	G 1/8	Ø 4	16.5	6	15	13	3	13	2	0.008
R412004891	G 1/8	Ø 6	21.5	6	16	13	4	13	2	0.01
R412004892	G 1/8	Ø 8	24	6	18	13	5	13	2	0.013
R412004893	G 1/4	Ø 6	19	8	16	16	4	16	2	0.015
R412004894	G 1/4	Ø 8	22.5	8	18	16	6	16	2	0.019
R412004895	G 1/4	Ø 10	29.5	8	19	16	7	15	2	0.022
R412004896	G 3/8	Ø 10	30.5	9	19	21	8	15	2	0.039
R412004897	G 3/8	Ø 12	31.5	9	20	21	10	17	2	0.041
R412010043	G 1/2	Ø 10	29	9	14	23	8	25.5	2	0.057

Push-in Fittings, Metric, Series QR2-C

Elbow fitting, external thread, QR2-C-RVT
Stainless steel

Rexroth
Bosch Group



00119553

Ambient temperature min./max. -20 °C / +150 °C
Working pressure min./max. -0.95 bar / 16 bar

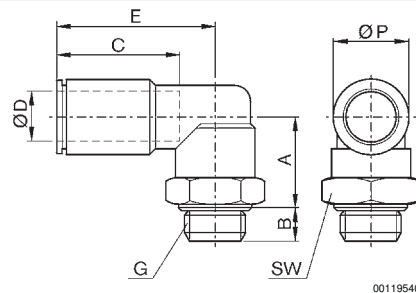
Materials:

Housing	Stainless steel
Seal	Fluorocautchouc
Tooth lock washer	Stainless steel
Release ring	Stainless steel
Thread	Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



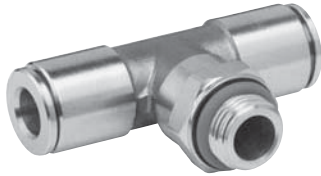
00119540

Part No.	Port G	Port D	A	B	C	E	SW	Ø P	Delivery quantity [Piece]	Weight [kg]
R412005617	M5	Ø 4	15	4	15	14.5	9	9	2	0.008
R412004898	G 1/8	Ø 4	14.5	5.5	15	19.5	13	9	2	0.012
R412004899	G 1/8	Ø 6	16.5	5.5	16	19.5	13	11	2	0.02
R412004900	G 1/8	Ø 8	18.5	5.5	18	19.5	13	13	2	0.022
R412004901	G 1/4	Ø 6	15.5	6.5	16	20.5	16	11	2	0.024
R412005616	G 1/4	Ø 8	17.5	6.5	18	20.5	16	13	2	0.025
R412004902	G 3/8	Ø 10	18.5	7	19	24	21	16	1	0.043
R412004903	G 3/8	Ø 12	21	7	19	26.5	21	19	1	0.06

Push-in Fittings, Metric, Series QR2-C

T-union, external thread, QR2-C-RTT
Stainless steel

Rexroth
Bosch Group



00119556

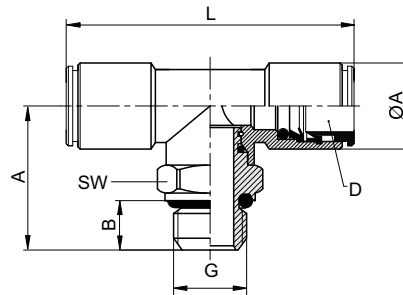
Ambient temperature min./max. -20 °C / +150 °C
Working pressure min./max. -0.95 bar / 16 bar

Materials:
Housing Stainless steel
Seal Fluorocautchouc
Tooth lock washer Stainless steel
Release ring Stainless steel
Thread Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- Thread seal with captive O-ring
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



00119543

Part No.	Port G	Port D	A	Ø A	B	C	E	SW	Delivery quantity [Piece]	Weight [kg]
R412004889	M5	Ø 4	18	9	4	15	34	9	2	0.013
R412004904	G 1/8	Ø 4	20	9	5	15	34	13	2	0.017
R412004905	G 1/8	Ø 6	22.5	12	5	16	42	13	2	0.029
R412004906	G 1/8	Ø 8	22.5	14	5	18	43	13	2	0.03
R412004907	G 1/4	Ø 6	24.5	12	6.5	16	42	16	2	0.033
R412004908	G 1/4	Ø 8	24.5	14	6.5	18	43	16	2	0.035

Push-in Fittings, Metric, Series QR2-C

Straight plug connector, QR2-C-RSK
Stainless steel



00119557

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +150 °C
-0.95 bar / 16 bar

Materials:

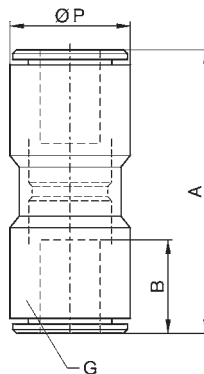
Housing
Seal
Tooth lock washer
Release ring

Stainless steel
Fluorocautchouc
Stainless steel
Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



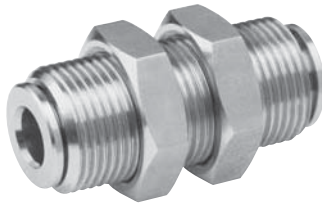
00119544

Part No.	Port G	A	B	Ø P	Delivery quantity [Piece]	Weight [kg]					
R412004982	Ø 4	30	15	9	2	0.011					
R412004983	Ø 6	33	16	11	2	0.016					
R412004984	Ø 8	37	18	13	2	0.018					
R412004985	Ø 10	37	19	15	2	0.025					
R412004986	Ø 12	39	20	17	2	0.03					

Push-in Fittings, Metric, Series QR2-C

Bulkhead plug connector, QR2-C-RSM
Stainless steel

Rexroth
Bosch Group



00119558

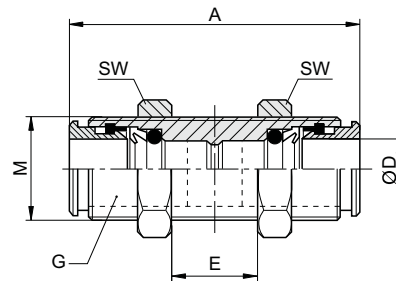
Ambient temperature min./max. -20°C / +150°C
Working pressure min./max. -0.95 bar / 16 bar

Materials:
Housing Stainless steel
Seal Fluorocautchouc
Tooth lock washer Stainless steel
Release ring Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



00119545

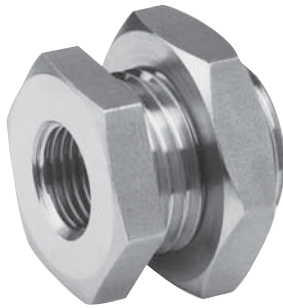
Part No.	Port G	Port D	M	A	C	E 1)	SW	Delivery quantity [Piece]	Weight [kg]			
2544404000	Ø 4	Ø 4	M12x1	27	13.5	11	15	2	0.024			
2544406000	Ø 6	Ø 6	M14x1	32.5	16.2	16	17	2	0.031			
2544408000	Ø 8	Ø 8	M16x1	33	16.5	17	19	2	0.038			
2544410000	Ø 10	Ø 10	M18x1	37.5	18.7	19	21	2	0.051			
2544412000	Ø 12	Ø 12	M20x1	39.5	19.7	20	24	2	0.06			

1) max.

Push-in Fittings, Metric, Series QR2-C

Bulkhead connector, external thread, QR2-C-RSG
Stainless steel

Rexroth
Bosch Group



00124885

Ambient temperature min./max.
Working pressure min./max.

-20 °C / +150 °C
-0.95 bar / 16 bar

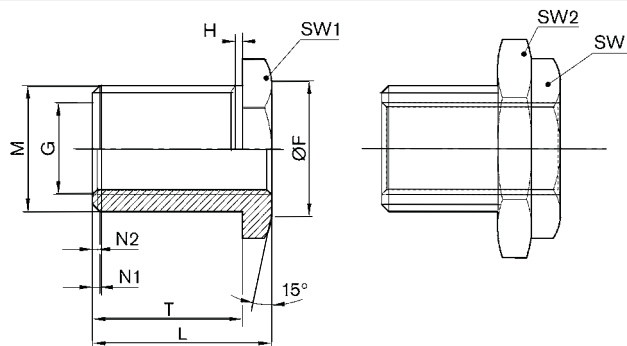
Materials:
Housing
Thread

Stainless steel
Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions

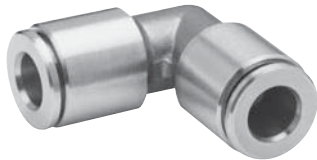


00128544

Part No.	Port G	M	L	T	N1	N2	H	Ø F	SW1	SW2	Delivery quantity [Piece]
R415009442	G 1/2	M28x1,5	33	27	1x45	1x45	2	31	32	36	1
R412004961	G 1/8	M16x1,5	18	14	1x45	0,5x45	1	18	19	22	2
R412004962	G 1/4	M20x1,5	25	21	1x45	1x45	2	23	24	27	2
R412004963	G 3/8	M26x1,5	26	21	1x45	1x45	2	29	30	32	2
Part No.	Weight [kg]										
R415009442	0.11										
R412004961	0.028										
R412004962	0.054										
R412004963	0.09										

Push-in Fittings, Metric, Series QR2-C

Angled plug connector, QR2-C-RVK
Stainless steel



00119559

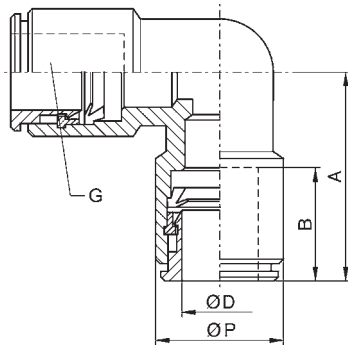
Ambient temperature min./max. -20 °C / +150 °C
Working pressure min./max. -0.95 bar / 16 bar

Materials:
Housing Stainless steel
Seal Fluorocautchouc
Tooth lock washer Stainless steel
Release ring Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



00119546

Part No.	Port G	Port D	A	B	Ø P	Delivery quantity [Piece]	Weight [kg]					
2544204000	Ø 4	Ø 4	17	15	9	2	0.011					
2544206000	Ø 6	Ø 6	20	16	12	2	0.018					
2544208000	Ø 8	Ø 8	21	18	14	2	0.023					
2544210000	Ø 10	Ø 10	25	19	16	2	0.041					
2544212000	Ø 12	Ø 12	27	20	18	2	0.044					

Push-in Fittings, Metric, Series QR2-C

T-plug connector, SR2-C-RTK
Stainless steel



00119560

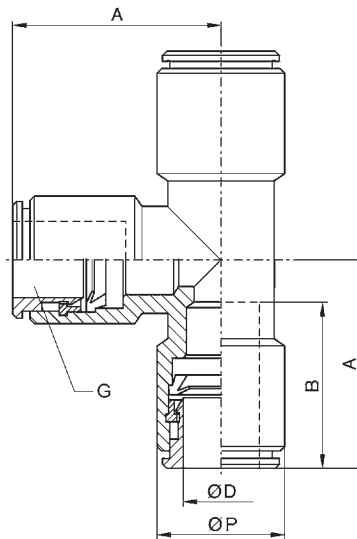
Ambient temperature min./max. -20 °C / +150 °C
Working pressure min./max. -0.95 bar / 16 bar

Materials:
Housing Stainless steel
Seal Fluorocautchouc
Tooth lock washer Stainless steel
Release ring Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions

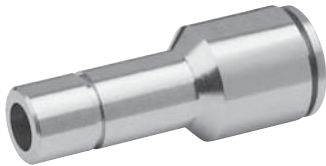


00119547

Part No.	Port G	Port D	A	B	Ø P	Delivery quantity [Piece]	Weight [kg]					
2544304000	Ø 4	Ø 4	17	15	9	2	0.014					
2544306000	Ø 6	Ø 6	20	16	12	2	0.029					
2544308000	Ø 8	Ø 8	21	18	14	2	0.031					
2544310000	Ø 10	Ø 10	25	19	16	2	0.055					
2544312000	Ø 12	Ø 12	27	20	18	2	0.059					

Push-in Fittings, Metric, Series QR2-C

Straight fitting, reducing, QR2-C-RED
Stainless steel



00119561

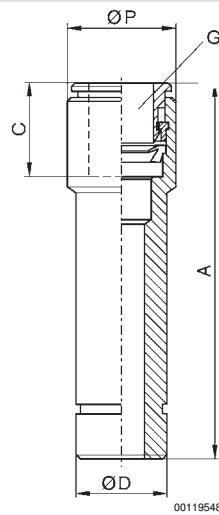
Ambient temperature min./max. -20°C / +150°C
Working pressure min./max. -0.95 bar / 16 bar

Materials:
Housing Stainless steel
Seal Fluorocautchouc
Tooth lock washer Stainless steel
Release ring Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



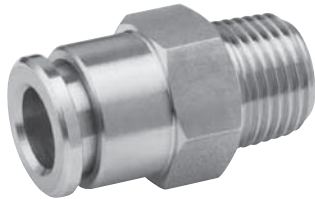
00119548

Part No.	Port G	Port D	A	C	Ø P	Delivery quantity [Piece]	Weight [kg]					
2544506040	Ø 4	Ø 6	27	15	9	2	0.006					
2544508060	Ø 6	Ø 8	32.5	16	12	2	0.01					
2544510080	Ø 8	Ø 10	33	18	14	2	0.015					

Push-in Fittings, Metric, Series QR2-C

Straight fitting, R threads, QR2-C-RPN
Stainless steel

Rexroth
Bosch Group



00119562

Ambient temperature min./max.
Working pressure min./max.

-20°C / +150°C
-0.95 bar / 16 bar

Materials:

Housing

Stainless steel

Seal

Fluorocautchouc

Tooth lock washer

Stainless steel

Release ring

Stainless steel

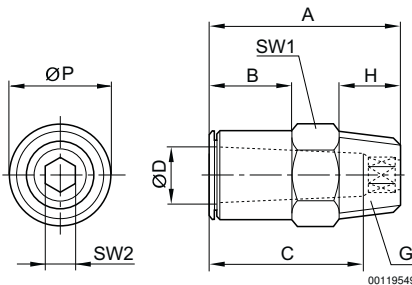
Thread

Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



00119549

Part No.	Port G	Port D	A	B	C	H	SW1	SW2	Ø P	Delivery quantity [Piece]	Weight [kg]
2544004180	R 1/8	Ø 4	18	5	15	6.5	10	3	9	2	0.006
2544006180	R 1/8	Ø 6	20.5	6	18	7.5	12	5	11	2	0.009
2544008180	R 1/8	Ø 8	24	11.5	16	7.5	14	6	13	2	0.014
2544004140	R 1/4	Ø 4	21.5	1.5	16	10.5	14	3	9	2	0.016
2544006140	R 1/4	Ø 6	20.5	2.5	15	11	14	5	11	2	0.014
2544008140	R 1/4	Ø 8	22.5	4.5	19	11	14	6	13	2	0.014
2544010140	R 1/4	Ø 10	29.5	11	19	11	16	9	16	2	0.021
2544010380	R 3/8	Ø 10	25.5	6	19	11.5	17	5	16	1	0.021
2544012380	R 3/8	Ø 12	31.5	11	20	11.5	19	10	18	1	0.026
2544012120	R 1/2	Ø 12	31.5	8.5	20	14	22	10	18	1	0.041

Push-in Fittings, Metric, Series QR2-C

Elbow fitting, R threads, QR2-C-RVT
Stainless Steel

Rexroth
Bosch Group



00119563

Ambient temperature min./max. -20°C / +150°C
Working pressure min./max. -0.95 bar / 16 bar

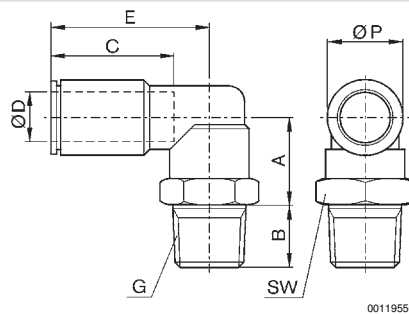
Materials:

Housing	Stainless steel
Seal	Fluorocautchouc
Tooth lock washer	Stainless steel
Release ring	Stainless steel
Thread	Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the online section "Technical information".

Dimensions



00119550

Part No.	Port G	Port D	A	B	C	E	SW	Ø P	Delivery quantity [Piece]	Weight [kg]
2544104180	R 1/8	Ø 4	13	7	15	20	13	9	2	0.011
2544106180	R 1/8	Ø 6	13	7	16	21	13	11	2	0.021
2544108180	R 1/8	Ø 8	13	7	18	24	13	13	2	0.022
2544104140	R 1/4	Ø 4	14	11	15	20	14	9	2	0.025
2544106140	R 1/4	Ø 6	14	11	16	21	14	11	2	0.027
2544108140	R 1/4	Ø 8	14	11	18	24	14	13	2	0.028
2544110140	R 1/4	Ø 10	14.5	11	17	26.5	16	16	2	0.037
2544110380	R 3/8	Ø 10	15.5	11.5	17	25.5	17	16	1	0.034
2544112380	R 3/8	Ø 12	19	11.5	18.5	28	20	18	1	0.066
2544112120	R 1/2	Ø 12	19.5	14	18.5	28	22	18	1	0.067

Push-in Fittings, Metric, Series QR2-C

T-union, R threads, QR2-C-RTT
Stainless steel

Rexroth
Bosch Group



00119564

Ambient temperature min./max. -20 °C / +150 °C
Working pressure min./max. -0.95 bar / 16 bar

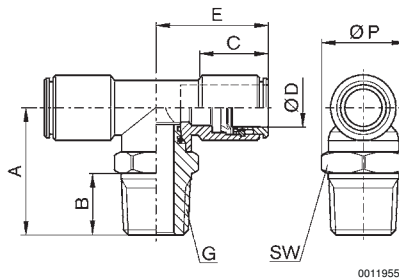
Materials:

Housing	Stainless steel
Seal	Fluorocautchouc
Tooth lock washer	Stainless steel
Release ring	Stainless steel
Thread	Stainless steel

Technical Remarks

- The series QR1 (plastic) and QR2 (metal) can not be combined
- For further information about assembling and tolerances of adaptable tubing, see the section "Technical information".

Dimensions



00119551

Part No.	Port G	Port D	A	B	C	E	SW	Ø P	Delivery quantity [Piece]	Weight [kg]		
R412004968	R 1/8	Ø 4	21.5	7.5	15	17	10	9	2	0.015		
R412004969	R 1/8	Ø 6	24.5	7.5	16	21	13	12	2	0.03		
R412004970	R 1/8	Ø 8	24.5	7.5	18	21.5	13	14	2	0.031		
R412004971	R 1/4	Ø 6	28.5	11	16	21	14	12	2	0.034		
R412004972	R 1/4	Ø 8	28.5	11	18	21.5	14	14	2	0.035		
R412004909	R 1/4	Ø 10	32	11	19	25	16	16	2	0.058		
R412004910	R 3/8	Ø 10	32.5	11.5	19	25	18	16	1	0.061		

Fittings, Metric

Blanking plug, with gasket/Flush plug

Rexroth
Bosch Group

Blanking plug



00110668

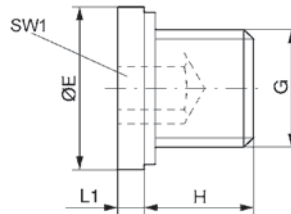
Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
0 bar / 16 bar

Materials:
Screw
Housing
Seal
Thread

Steel, galvanized
Steel, galvanized
Polyvinyl chloride, hard
Steel, galvanized

Dimensions



Part No.	Port G	Ø E	H	L1	SW1	Delivery quantity [Piece]						
1823462016	M5	SW8	4.5	3	-	25						
1823462028	G 1/8	14	8	3	5	25						
1823462029	G 1/4	18	12	3	6	25						
1823462030	G 3/8	22	12	3	8	25						
1823462031	G 1/2	26	14	4	10	25						
1823462032	G 3/4	32	16	4	12	10						
1823462033	G 1	39	16	5	17	5						

Flush plug



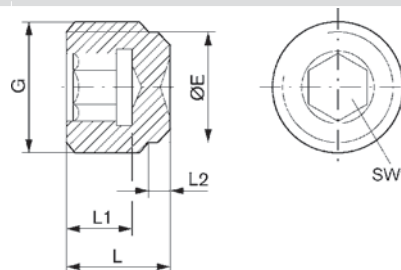
Ambient temperature min./max.
Working pressure min./max.

-20 °C / +80 °C
0 bar / 16 bar

Materials:
Screw
Housing
Thread

Brass
Brass
Brass

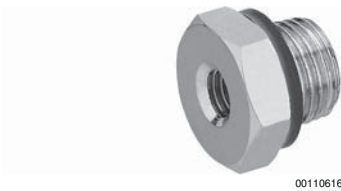
Dimensions



Part No.	Port G	ØE	L	L1	L2	SW1	Delivery quantity [Piece]					
1823462004	G 1/8	8	8	5	2	5	10					
1823462003	G 1/4	11	11	7	3.5	6	10					

Fittings, Metric

Reducing nipple, with gasket



00110616

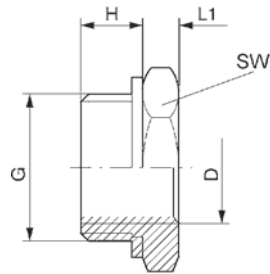
Ambient temperature min./max.
Working pressure min./max.

-20°C / +80°C
0 bar / 16 bar

Materials:
Screw
Housing
Seal
Thread

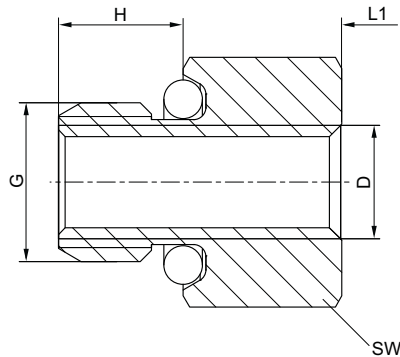
Brass, nickel-plated
Brass, nickel-plated
Polyvinyl chloride, hard
Brass, nickel-plated

Dimensions



00107921

Dimensions 2122807050



Part No.	Port G	Port D	H	L1	SW	Delivery quantity [Piece]						
1823391080	G 1/8	M5	7	4	13	10						
2122807050	M7	M5	5.5	7	10	10						
1823391012	G 1/4	G 1/8	9	4	17	10						
1823391298	G 3/8	G 1/8	9	5	19	10						
1823391013	G 3/8	G 1/4	10	5	19	10						
1823391299	G 1/2	G 1/8	15.5	5.5	24	5						
1823391300	G 1/2	G 1/4	15.5	5.5	24	5						
1823391014	G 1/2	G 3/8	15.5	5.5	24	5						
1823391301	G 3/4	G 1/4	12	7	32	5						
1823391302	G 3/4	G 3/8	12	7	32	5						
1823391028	G 3/4	G 1/2	12	7	32	5						
1823391303	G 1	G 3/8	15	8	41	2						
1823391304	G 1	G 1/2	15	8	41	2						
1823391285	G 1	G 3/4	15	8	41	2						

Adapter Fittings

Adapters - metric to inch/common inch pipe fittings

Male/Female Adapter ISO G (BSPP) to Inch

A male	B female	Per Pack*	Part No.
ISO G1/8	1/8" NPT	10	R432011744
ISO G1/4	1/4" NPT	10	R432011874
ISO G3/8	3/8" NPT	10	R432011847
ISO G1/2	1/2" NPT	10	R432011745
1/8" NPT	ISO G1/8	10	R432012022
1/4" NPT	ISO G1/4	10	R432012023
3/8" NPT	ISO G3/8	10	R432012024
1/2" NPT	ISO G1/2	10	R432012025



M7 Adapter fittings

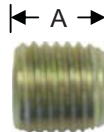
Type	Part No.	Thread	Tube O.D.	Pack Qty.*
straight	1823373100	M7	4mm	25
straight	1823373088	M7	6mm	25
elbow	R412005377	M7	4mm	25
elbow	R412005378	M7	6mm	25
straight	R412004925	M7	1/8"	25
straight	R412004926	M7	1/4"	25



Hex Socket Pipe Plug

Size	A min/max (in.)	Part No.	Pack Qty.*
1/8" NPT	0.290/0.370	R432027753	1
1/4" NPT	0.417/0.475	R432027754	1
3/8" NPT	0.475/0.520	R432012266	1
1/2" NPT	0.524/0.630	R432027755	1

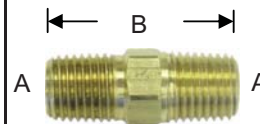
Material: Zinc plated steel



Hex Pipe Double Nipple

Material: Brass

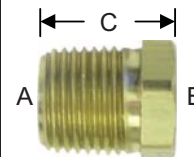
A	B (in.)	Hex Width (in.)	Part No.	Pack Qty.*
10-32 UNF	0.50	0.25	R432012043	1
1/8" NPT	0.97	0.44	R432012044	1
1/4" NPT	1.38	0.56	R432012041	1
3/8" NPT	1.41	0.69	R432030233	1
1/2" NPT	1.81	0.88	R432012042	1



Reducer Bushing

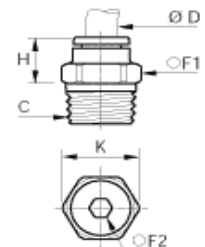
Material: Brass, except R432012160 is zinc plated steel.

A male	B female	C (in.)	Hex Width (in.)	New Part No.*	Pack Qty.*
1/8" NPT	10-32 UNF	0.53	0.44	R432030232	1
1/4" NPT	1/8" NPT	0.75	0.64	R432027750	1
3/8" NPT	1/8" NPT	0.75	0.68	R432012159	1
3/8" NPT	1/4" NPT	0.75	0.68	R432027749	1
1/2" NPT	1/4" NPT	1.00	0.88	R432027751	1
1/2" NPT	3/8" NPT	1.00	0.88	R432030225	1
3/4" NPT	1/4" NPT	1.00	1.12	R432030202	1
3/4" NPT	3/8" NPT	1.00	1.13	R432030201	1
3/4" NPT	1/2" NPT	1.06	1.13	R432012160	1



Hybrid Fittings - Inch tube to Male BSPT (R ISO)

Part Number	ØD (in.)	C	F1 (in.)	F2 (in.)	H (in.)	K (in.)	wt. (oz.)
R432016913	5/32	R1/8	0.39	0.12	0.37	0.43	0.282
R432016914	1/8	R1/8	0.43	0.12	0.34	0.47	0.176
R432016917	1/4	R1/8	0.43	0.16	0.47	0.47	0.212
R432016918	1/4	R1/4	0.55	0.16	0.37	0.59	0.741
R432016919	3/8	R1/4	0.71	0.20	0.30	0.77	0.600
R432016922	1/2	R1/4	0.87	0.24	1.06	0.94	1.552
R432016920	3/8	R3/8	0.51	0.20	0.79	0.55	0.670
R432016923	1/2	R3/8	0.87	0.28	1.02	0.94	1.693
R432016921	3/8	R1/2	0.55	0.24	0.66	0.59	2.152
R432016924	1/2	R1/2	0.94	0.28	0.81	0.94	1.728



Note: BSP-T (R ISO tapered) threads can be used in an ISO G (BSPP) female port, with sealing ensured by thread sealant.

*Pack Quantity is order quantity multiple due to package size.

Plastic Tubing, Metric

Plastic tubing, polyurethane (PUR)
3mm to 16mm O.D.

Rexroth
Bosch Group



00127683

Working pressure min./max. -0.95bar / +10bar
Ambient temperature min./max. -30 °C / +80 °C

Materials:
Compressed air tubing Polyester polyurethane

Technical Remarks

- External calibrated
- Suitable for dynamic laying
- Halogen-free

Tubing diameter external	Wall thickness	Bending radius min. at 20 °C	Weight	Color	Length	Part No.
[mm]	[mm]	[mm]	[kg/m]		[m]	
3	0.6	8	0.005	Natural	50	1820712069
				Black		1820712068
				Red		1820712066
				Blue		1820712067
4	0.75	12	0.009	Natural	25	1820712000
				Black	25	1820712010
				Red	25	1820712020
				Blue	25	1820712030
				Green	25	1820712078
				Black	50	R412009984
				Blue	50	R412009985
				Natural	100	1820712007
				Black	100	1820712018
				Red	100	1820712026
				Blue	100	1820712036
				Yellow	100	R412004860
5	0.95	13	0.015	Natural	25	1820712001
				Black	25	1820712011
				Red	25	1820712021
				Blue	25	1820712031
				Blue	50	R412009986

Plastic Tubing, Metric

Plastic tubing, polyurethane (PUR)
3mm to 16mm O.D.

Tubing diameter external	Wall thickness	Bending radius min. at 20°C	Weight	Color	Length	Part No.				
[mm]	[mm]	[mm]	[kg/m]		[m]					
6	1.05	18	0.02	Natural	25	1820712002				
				Black	25	1820712012				
				Red	25	1820712022				
				Blue	25	1820712032				
				Green	25	1820712079				
				Black	50	R412009987				
				Blue	50	R412009988				
				Natural	100	1820712006				
				Black	100	1820712019				
				Red	100	1820712027				
				Blue	100	1820712037				
				Yellow	100	R412004861				
				Green	100	R412007650				
8	1.15	30	0.03	Natural	25	1820712003				
				Black	25	1820712013				
				Red	25	1820712023				
				Blue	25	1820712033				
				Green	25	1820712080				
				Black	50	R412009989				
				Blue	50	R412009990				
				Natural	100	1820712008				
				Black	100	1820712016				
				Red	100	1820712028				
				Blue	100	1820712038				
				Yellow	100	R412004862				
				Green	100	R412007621				
10	1.25	45	0.042	Natural	25	1820712005				
				Black	25	1820712015				
				Red	25	1820712025				
				Blue	25	1820712035				
				Blue	50	R412009991				
				Natural	100	1820712009				
				Black	100	1820712081				
				Red	100	1820712029				
				Blue	100	1820712039				
				Yellow	100	R412004863				
				Green	100	R412004915				
				12	1.5	55	0.06	Natural	25	1820712004
								Black	25	1820712014
Red	25	1820712024								
Blue	25	1820712034								
Blue	50	R412009992								
Natural	100	1820712082								
Black	100	1820712017								
Red	100	1820712083								
Blue	100	1820712040								

Plastic Tubing, Metric

Plastic tubing, polyurethane (PUR)
3mm to 16mm O.D.

Tubing diameter external	Wall thickness	Bending radius min. at 20 °C	Weight	Color	Length	Part No.
[mm]	[mm]	[mm]	[kg/m]		[m]	
14	2	55	0.092	Natural	25	R412004790
				Black	25	R412004778
				Red	25	R412004786
				Blue	25	R412004782
				Natural	100	R412004791
				Black	100	R412004779
				Red	100	R412004787
				Blue	100	R412004783
16	2.5	65	0.129	Natural	25	R412004792
				Black	25	R412004780
				Red	25	R412004788
				Blue	25	R412004784
				Natural	100	R412004793
				Black	100	R412004781
				Red	100	R412004789
				Blue	100	R412004785

Plastic Tubing, Metric

Plastic tubing, polyamide (PAM)
4mm to 16mm O.D.

Rexroth
Bosch Group



00127734

working pressure max. at 20 °C
Ambient temperature min./max.

See table below
-40 °C / +80 °C

Materials:
Compressed air tubing

Polyamide

Technical Remarks	
■ External calibrated	

Tubing diameter external [mm]	Wall thickness [mm]	working pressure max. at 20 °C [bar]	Bending radius min. at 20 °C [mm]	Weight [kg/m]	Color	Length [m]	Part No.
4	1	26	20	0.006	Natural	25	1820712100
	1	26			Black	25	1820712110
	0.5	15			Silver gray	25	R412009980
	0.5	15			Blue	25	R412009913
	0.5	15			Black	50	R412009931
	0.5	15			Natural	50	R412009937
	0.5	15			Blue	100	R412009914
	0.5	15			Silver gray	100	R412009943
6	1	24	30	0.011	Natural	25	1820712101
	1	24			Black	25	1820712111
	1	24			Red	25	R412007515
	1	24			Green	25	R412007516
	0.65	13			Blue	25	R412009915
	0.65	13			Silver gray	25	R412009998
	0.65	13			Blue	50	R412009916
	0.65	13			Black	50	R412009932
	0.65	13			Natural	50	R412009938
	0.65	13			Blue	100	R412009917
	0.65	13			Silver gray	100	R412009944
	1	24			Green	100	R412007636
	1	24			Natural	100	R412009905
	1	24			Black	100	R412009906

Plastic Tubing, Metric

Plastic tubing, polyamide (PAM)
4mm to 16mm O.D.

Tubing diameter external	Wall thickness	working pressure max. at 20 °C	Bending radius min. at 20 °C	Weight	Color	Length	Part No.
[mm]	[mm]	[bar]	[mm]	[kg/m]		[m]	
8	0.8	12	40	0.019	Blue	25	R412009918
	1	22			Natural	25	1820712102
	1	22			Black	25	1820712112
	1	22			Blue	25	R412007590
	0.8	12			Silver gray	25	R412009981
	0.8	12			Blue	50	R412009919
	0.8	12			Black	50	R412009933
	0.8	12			Natural	50	R412009939
	0.8	12			Blue	100	R412009920
	0.8	12			Silver gray	100	R412009945
10	1	13.5	50	0.028	Blue	25	R412009921
					Silver gray	25	R412009982
					Natural	25	1820712105
					Black	25	1820712115
					Black	50	R412009934
					Natural	50	R412009940
					Blue	50	R412009922
					Blue	100	R412009923
					Silver gray	100	R412009946
					Green	100	R412007632
Black	100	R412007633					
12	1.1	11	60	0.039	Blue	25	R412009924
	1.1	11			Silver gray	25	R412009983
	1.5	18			Natural	25	1820712103
	1.5	18			Black	25	1820712113
	1.1	11			Black	50	R412009935
	1.1	11			Natural	50	R412009941
	1.1	11			Blue	50	R412009925
	1.1	11			Blue	100	R412009926
	1.1	11			Silver gray	100	R412009947
14	1.25	11	90	0.052	Blue	25	R412009927
	1.5	15			Natural	25	1820712104
	1.5	15			Black	25	1820712114
	1.25	11			Silver gray	25	R412009999
	1.25	11			Black	50	R412009936
	1.25	11			Blue	50	R412009928
	1.25	11			Natural	50	R412009942
16	1.35	10	90	0.065	Blue	25	R412009929
					Silver gray	25	R412014468
					Blue	50	R412009930

Plastic Tubing, Inch

Plastic tubing, polyurethane

Material Polyurethane

Pressure medium	Air
Temperature range	-40° to 165°F (-40° to 74°C)
Vacuum rating	to 28" Hg
Diameter tolerance	± .005"
Working pressure	3 to 1 safety factor (see table)
UV stabilized	Yes



► Other tube sizes, colors and materials are available on request. Please contact Bosch Rexroth Pneumatics for details.

Part Numbers: Tubing Size (Inch)	Blue Polyurethane Part Number	Clear Polyurethane Part Number	Bend Radius	Max. Pressure (psi)		Package Qty. (feet)	Weight (lbs.)
				75°F	150°F		
1/8" OD x .066 ID	R432026247	R432026251	1/4	255	100	50	0.25
1/4" OD x .160 ID	R432026248	R432026252	1/2	175	70	100	1.50
3/8" OD x .245 ID	R432026249	R432026253	7/8	170	70	100	3.40
1/2" OD x .320 ID	R432026250	R432030140	1 1/8	175	70	50	2.55

Material Polyethylene

Pressure medium	Air
Temperature range	-40° to 150°F (-40° to 66°C)
Vacuum rating	to 28" Hg
Diameter tolerance	± .004"
Working pressure	3 to 1 safety factor (see table)
UV stabilized	Yes



Part Numbers: Tubing Size (Inch)	Blue Polyethylene Part Number	Clear Polyethylene Part Number	Bend Radius	Max. Pressure (psi)		Package Qty. (feet)	Weight (lbs.)
				75°F	150°F		
1/8" OD x .062 ID	R432026239	R432026243	1	305	120	100	0.4
1/4" OD x .170 ID	R432026240	R432026244	1 1/4	200	80	100	1.2
3/8" OD x .250 ID	R432026241	R432026245	2	190	75	100	2.3
1/2" OD x .375 ID	R432026242	R432026246	2 1/2	135	55	100	3.4

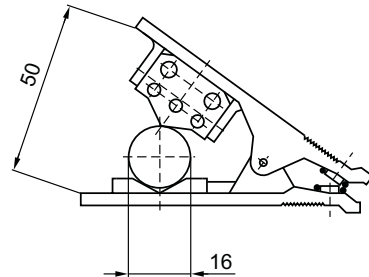
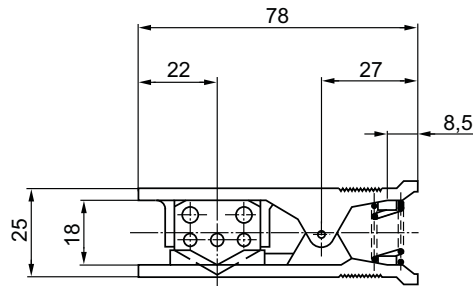
Plastic Tubing - Accessories

Tubing cutter, plastic/Tubing cutter, metal

Tubing cutter, plastic



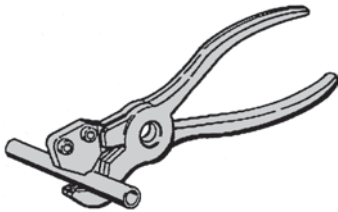
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Part No.	Ø												
1823391390	4-16												

Tubing cutter, metal



P100_163

Part No.	Ø												
8997002402	4-22												
For plastic compressed air tubing													

Plastic Tubing - Accessories

Multi-coupling, Series CP1
For 4 to 7 tubes

Rexroth
Bosch Group



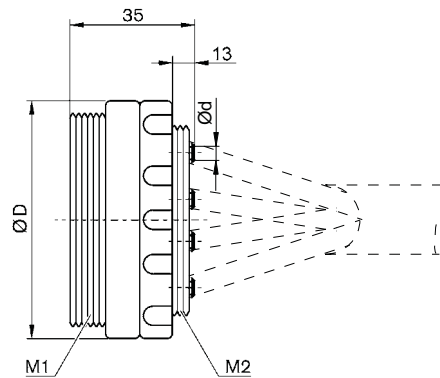
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Working pressure min./max.	0 bar / 16 bar
Ambient temperature min./max.	-20°C / +80°C
Medium temperature min./max.	-20°C / +80°C
Medium	Compressed air

Technical Remarks

- Connect and release 4 to 7 compressed air hoses.
- Clear hose assembly with guide pins.

Coupling plug



00125710

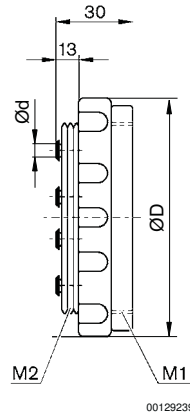
Part No.	M1	M2	Ød 1)	ØD	Number of ports	Housing	Delivery quantity [pcs.]		
R412007569	M46x1,5	M40x1,5	4	50	4	Polyamide	1		
R412007571	M46x1,5	M40x1,5	4	50	7	Polyamide	1		
R412007573	M46x1,5	M40x1,5	6	50	4	Polyamide	1		
R412007575	M46x1,5	M40x1,5	6	50	7	Polyamide	1		

1) Tubing-Ø (external)

Plastic Tubing - Accessories

Multi-coupling, Series CP1
For 4 to 7 tubes

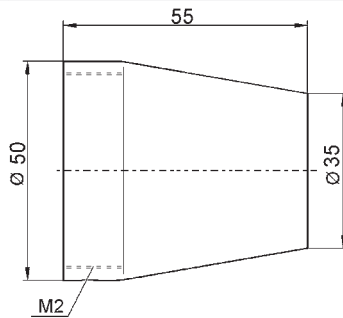
Intermediate connector



Part No.	M1	M2	Ød 1)	ØD	Number of ports	Housing	Delivery quantity [pcs.]		
R412007570	M46x1,5	M40x1,5	4	55	4	Polyamide	1		
R412007572	M46x1,5	M40x1,5	4	55	7	Polyamide	1		
R412007574	M46x1,5	M40x1,5	6	55	4	Polyamide	1		
R412007576	M46x1,5	M40x1,5	6	55	7	Polyamide	1		

1) Tubing-Ø (external)

Protective cap



The protective cap can be assembled on both sides of the coupling.

Part No.	M2	Number of ports	Housing	Delivery quantity [pcs.]						
R412007577	M40x1,5	4, 7	Polyamide	1						

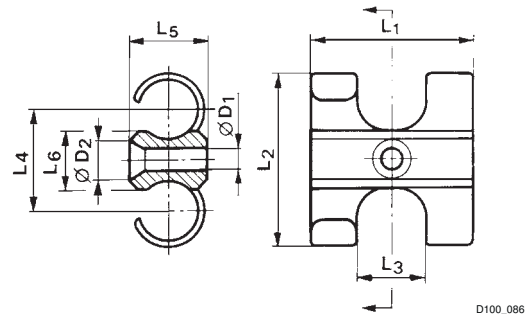
Plastic Tubing - Accessories

T-clips/Terminal strips

T-clips



1100-861



D100_086

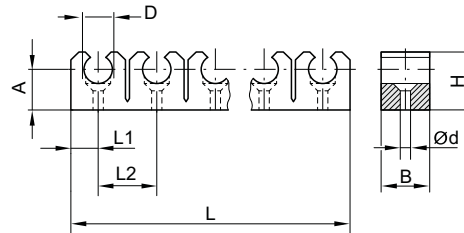
Part No.	*)	Ø D1	Ø D2	L1	L2	L3	L4	L5	L6	Material
8186040000	4-5 x ...	3	6	18	15	6	10	9	7	Polyoxymethylene
8186060000	6-7 x ...	3	6	20	20	8	12	9	8	Polyoxymethylene
8186080000	8-9 x ...	4	8	24	25	10	15	12	10	Polyoxymethylene
8186100000	10-11 x ...	4	8	28	31	12	18	15	11	Polyoxymethylene
8186120000	12-14 x ...	4	9	35	34	14	21	17	12	Polyoxymethylene
8186160000	15-17 x ...	5	10	42	43	17	25	20	14	Polyoxymethylene
8186180000	18-21 x ...	5	12	49	51	20	31	23	16	Polyoxymethylene

Delivery unit is 50 pieces.

Terminal strips



00127690



D = 4, 5, 6, 8 mm



D = 10, 12 mm

00108773

Part No.	A	B	D*)	Ø d	H	L	L1	L2	**)	Material	Delivery quantity [Piece]
1824431005	6	14	4-5	2.4	9	100	5	10	10	Polyethylene	10
1824431006	5.5	14	6	3	9	110	5.5	11	10	Polyethylene	10
1824431007	7.5	15	8	2.8	12.5	141	6.4	14.2	10	Polyethylene	10
1824431008	9	18	10	2.8	14.7	121	9.8	20	6	Polyethylene	10
1824431009	10	18	11.5	2.8	16	121	10	20	6	Polyethylene	10

*) For plastic tubing with diameter D

***) Terminals per strip

Accessory Valves - Flow Control

Flow control valve, inline, Floreg®
1/8" to 1" NPTF



Floreg® Type A

Type	Standard Flow Regulation
Working Pressures	Pneumatic-Vacuum to 250 PSIG Max. Hydraulic-500 PSIG Max. Non-shock applications.
Temperature Range	-40° to +160° F (+200° F Intermittent)
Media	Air or hydraulic fluid
Port Size	1/8" to 1" NPTF



Floreg® Type B

Type	"Micrometer" or Fine Flow Regulation
Working Pressure	Vacuum to 250 PSIG Max.
Temperature Range	-40° to +160° F (+200° F Intermittent)
Media	Air
Port Size	1/8" to 1" NPTF

Operating Characteristics

The FLOREG® Valve is an adjustable device that works with other components of a fluid circuit to time, to sequence or to coordinate operations. It controls the rate at which a gas or liquid can flow in one direction through a circuit, yet allows free flow in the opposite direction.

CONTROLLED FLOW-Fluid flow is limited by orifice created by diameter differences of valve and valve seat.

FREE FLOW-Fluid forces valve upward to compress spring and increase orifice to maximum size.

Spring holds valve on its seat in body. Adjusting screw raises valve from seat for flow.

Type A - Standard Flow Regulation

Size NPTF	C _v	Part Number - Valve current (old)	Approx. Valve Weight (oz.)	Part Number - Repair Kit* current (old)
1/8"	1.50	R431006861 (P -066693-00000)	2.5	R431007472 (P -069547-00000)
1/4"	1.81	R431003089 (P -053025-00002)	2.5	R431007472 (P -069547-00000)
3/8"	3.37	R431003085 (P -053020-00002)	3.5	R431007473 (P -069548-00000)
1/2"	4.95	R431003081 (P -053010-00002)	6.0	R431007474 (P -069549-00000)
3/4"	9.50	R431003539 (P -055010-00000)	21.0	R431007475 (P -069550-00000)
1"	13.78	R431003496 (P -054986-00000)	22.0	R431007475 (P -069550-00000)

*Repair kits include plunger assembly, screw, spring and 'o' rings.

Type B - Micrometer or Fine Flow Regulation

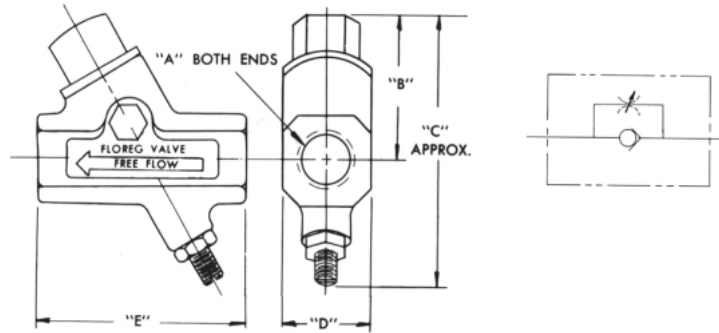
Size NPTF	C _v	Part Number - Valve current (old)	Approx. Valve Weight (oz.)	Part Number - Repair Kit* current (old)
1/8"	1.16	R431003544 (P -055017-00000)	3.25	R431007476 (P -069551-00000)
1/4"	1.28	R431003545 (P -055018-00000)	3.25	R431007476 (P -069551-00000)
3/8"	2.98	R431003546 (P -055019-00000)	4.5	R431007477 (P -069552-00000)
1/2"	3.35	R431003547 (P -055020-00000)	8.5	R431007478 (P -069553-00000)
3/4"	9.50	R431003551 (P -055021-00000)	27.0	R431007479 (P -069554-00000)
1"	13.28	R431003552 (P -055022-00000)	25.0	R431007479 (P -069554-00000)

*Repair kits include plunger assembly, screw, spring and 'o' rings.

Accessory Valves - Flow Control

Flow control valve, inline, Floreg®
1/8" to 1" NPTF

Rexroth
Bosch Group



DIMENSIONS

Size	A	B	C	D	E
1/8"	1/8"-27 Dryseal NPTF	1 1/4"	2 7/16"	7/8"	2"
1/4"	1/4"-18 Dryseal NPTF	1 1/4"	2 7/16"	7/8"	2"
3/8"	3/8"-18 Dryseal NPTF	1 1/2"	3"	1"	2 3/8"
1/2"	1/2"-14 Dryseal NPTF	1 5/8"	3 3/16"	1 1/4"	2 3/4"
3/4"	3/4"-14 Dryseal NPTF	2 1/2"	4 3/4"	2"	4"
1"	1"-11 1/2 Dryseal NPTF	2 1/2"	4 3/4"	2"	4"

Accessory Valves - Flow Control

Flow control valve, inline, Series CH01
G1/8 to G1/4



B0000271_1

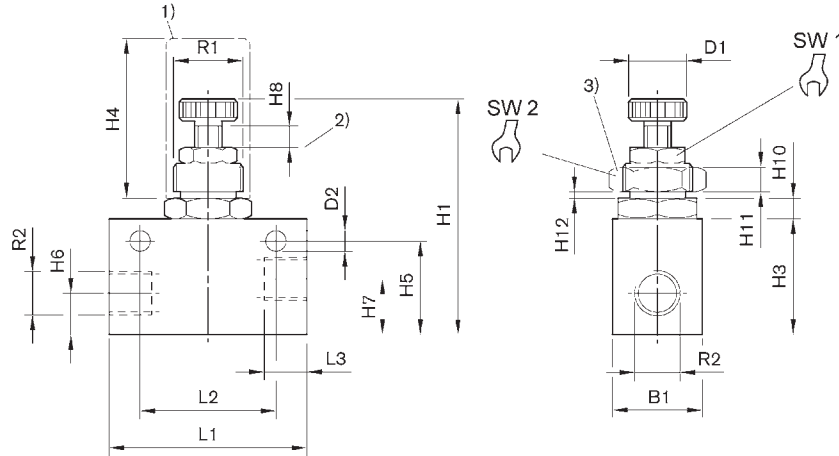
Working pressure min./max. 0 bar / 10 bar
Ambient temperature min./max. +0°C / +80°C
Medium temperature min./max. +0°C / +80°C
Medium Compressed air

Materials:
Housing Aluminum, anodized
Seals Acrylonitrile Butadiene Rubber
Flow control screw Steel, galvanized

	Port 1	Port 2	Throttle bore	Qn	Weight	Fig.	Part No.
			[mm]	[l/min]	[kg]		
	G 1/8	G 1/8	1	38	0.035	Fig. 1	0821201010
	G 1/8	G 1/8	2	140	0.035	Fig. 1	0821201004
	G 1/4	G 1/4	4	700	0.045	Fig. 1	0821201011
	G 1/2	G 1/2	8.5	2800	0.17	Fig. 2	0821201006

Nominal flow Qn at 6 bar and Δp = 1 bar

Fig. 1



00109092

1) protective cap 2) throttle setting range 3) nut for control panel installation

Part No.	R1	R2	B1	D1	D2	H1	H3	H4	H5	H6	H7	H8
0821201010	M12x1	G 1/8	16	9,8	4,5	56	20	35	16,5	8	8	4
0821201004	M12x1	G 1/8	16	9,8	4,5	56	20	35	16,5	8	8	4
0821201011	M20x1,5	G 1/4	25	15	5,5	70	32	40	26	11	15	5

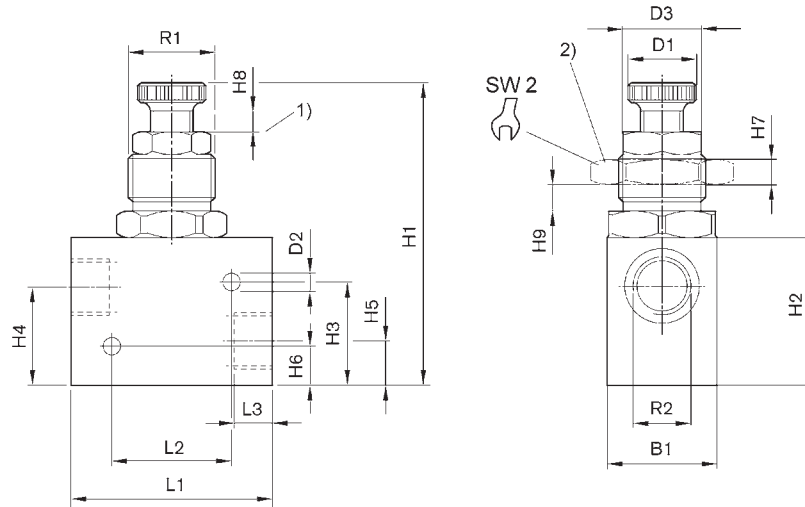
Part No.	H10	H11	H12	L1	L2	L3	SW1	SW2				
0821201010	4,2	4	0	35	25	8	10	17				
0821201004	4,2	4	0	35	25	8	10	17				
0821201011	5,5	6	0	55	38	12	13	24				

Accessory Valves - Flow Control

Flow control valve, inline, Series CH01
G1/8 to G1/4



Fig. 2



00109093

1) throttle setting range 2) nut for control panel installation

Part No.	R1	R2	B1	D1	D2	D3	H1	H2	H3	H4	H5	H6
0821201006	M32x1,5	G 1/2	40	25	10	27.5	120	50	38.5	38	17	13.5
Part No.	H7	H8	H9	L1	L2	L3	SW2					
0821201006	9	9	8	70	45	14	46					

Accessory Valves - Flow Control

Flow control valve, right angle, inch, meter-out
Threaded and push-in versions



Right Angle- Inch

Type	Right Angle - for Push-In Fittings or Threaded Inlet
Supply Pressure	150 PSIG (10 bar)
Cracking Pressure	Check Valve: 7.5 PSIG (0.5 Bar)
Temperatures	15° to 160°F (-9° to 71°C)
Media	Air or inert gas
Materials:	
Body	Nickel Plated Brass
Swivel Housing	Anodized Aluminum
Seals	Buna-N
Spring	Stainless Steel
Needle	10-32, 1/8", 1/4" Stainless Steel 3/8", 1/2" Nickel Plated Brass



Right Angle - Inch Series

Operating Characteristics

Valves Mount Directly on Cylinder
Nickel Plated Brass For Corrosion
Spring Loaded Check Valve
Thread Sealant on Male Threads
360° Swivel Body
Compact Design

Threaded Style

Size	Part Number Slot Adjust	Part Number Knob Adjust
10-32 UNF	R432027180	--
1/8" NPTF	R432027181	R432027185
1/4" NPTF	R432027182	R432027186
3/8" NPTF	R432027183	R432027187
1/4" NPTF	R432027184	R432027188

Push-in Fitting Style

Size	Part Number Slot Adjust	Part Number Knob Adjust
10-32 UNF x 5/32" tube	R432027189	--
1/8" NPTF x 1/4" tube	R432027190	R432027193
1/4" NPTF x 1/4" tube	R432027191	R432027194
3/8" NPTF x 3/8" tube	R432027192	R432027195

*Push-in fitting not available in 1/2" NPTF size.

Tubing tolerances for push-in fittings are:

+/-0.2mm (0.008") except for 1/4" OD tubing, +0.15/-0.35mm (+0.0059"/0.0137")

Push-in fittings suitable for use with nylon, polyethylene, and soft copper tubing; not for use with polyurethane or PVC tubing.

Flow Characteristics

Thread Size		10-32	1/8"	1/4"	3/8"	1/2"
Free Flow	SCFM [Cv]	3.4 [.06]	12.8 [.34]	19.1 [.67]	28.9 [1.87]	53.2 [2.84]
Throttle Closed)	L/Min	98	364	542	819	1508
Orifice Diameter	INCH	0.06	0.118	0.177	0.276	0.394
Orifice Diameter	mm	1.5	1.5	4.5	7.0	10.0
Weight	lbs	0.022	0.055	0.121	0.209	0.407
Weight	kgs	0.01	0.025	0.055	0.095	0.185

Accessory Valves - Flow Control

Flow control valve, right angle, Series CC04
Metric push-in, meter-out

Rexroth
Bosch Group



Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium

0.5 bar / 10 bar
+0°C / +60°C
+0°C / +60°C
Compressed air

Materials:
Housing
Seal
Port

Polyamide
Acrylonitrile Butadiene Rubber
Brass, nickel-plated

	Port 1	Port 2	Throttle bore Ø	Qn 2 → 1	Weight	Fig.	Part No.
			[mm]	[l/min]	[kg]		
	Ø 4	M5	2	70	0.005	Fig. 1	R412010564
	Ø 6	M5	2	110	0.005	Fig. 1	R412010565
	Ø 4	G 1/8	3.5	150	0.017	Fig. 2	R412010568
	Ø 6	G 1/8	3.5	390	0.018	Fig. 2	R412010569
	Ø 8	G 1/8	3.5	470	0.019	Fig. 2	R412010570
	Ø 6	G 1/4	4.5	390	0.035	Fig. 3	R412010571
	Ø 8	G 1/4	4.5	490	0.036	Fig. 3	R412010572
	Ø 10	G 1/4	4.5	520	0.039	Fig. 3	R412010573
	Ø 8	G 3/8	6.6	860	0.035	Fig. 4	R412010574
	Ø 10	G 3/8	6.6	900	0.036	Fig. 4	R412010575
	Ø 12	G 3/8	6.6	960	0.039	Fig. 4	R412010576
	Ø 10	G 1/2	6.6	1530	0.045	Fig. 5	R412010577
	Ø 12	G 1/2	6.6	1850	0.049	Fig. 5	R412010578

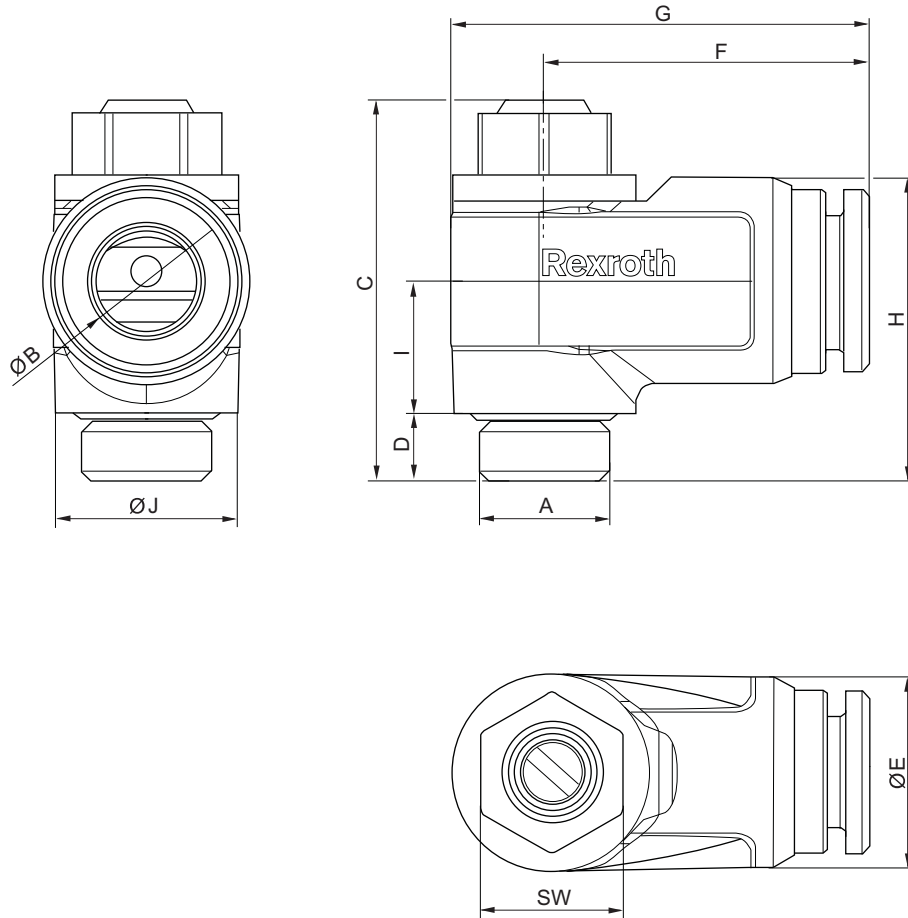
Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Accessory Valves - Flow Control

Flow control valve, right angle, Series CC04
Metric push-in, meter-out

Rexroth
Bosch Group

Dimensions



16383

Part No.	A	$\varnothing B$	C	D	$\varnothing E$	F	G	H	I	$\varnothing J$	SW
R412010564	M5	4	21.8	4	9	15.9	20.4	12	7.5	8.7	7
R412010565	M5	6	21.8	4	11.1	17.2	21.8	13	7.5	8.7	7
R412010568	G1/8	4	28.5	5.5	11.5	21.9	28.8	21	9.8	13.6	10
R412010569	G1/8	6	28.5	5.5	13.5	22.4	29.3	21.7	9.8	13.6	10
R412010570	G1/8	8	28.5	5.5	15.5	24.2	31.1	22.7	9.8	13.6	10
R412010571	G1/4	6	33.6	6.5	13	24.3	33.5	25.3	12.8	17.6	13
R412010572	G1/4	8	33.6	6.5	15.5	26.6	35.5	25.3	11.5	17.6	13
R412010573	G1/4	10	33.6	6.5	18.1	29.2	38.1	26.7	11.5	17.6	13
R412010574	G3/8	8	40.8	7	15.6	28.2	40.6	23.6	15.8	22.2	16
R412010575	G3/8	10	40.8	7	19	32	43.3	33.5	16.4	22.2	16
R412010576	G3/8	12	40.8	7	22.1	34.2	45.4	35.6	17.8	22.2	16
R412010577	G1/2	10	47.8	8.3	19.2	34	47.7	41.1	20.3	26.6	18
R412010578	G1/2	12	47.8	8.3	22	36.1	49.8	43.9	21.5	26.6	18

Accessory Valves - Flow Control

Flow control valve, right angle, Series CC04
Metric push-in/external threads, meter-in

Rexroth
Bosch Group



Working pressure min./max. 0.5 bar / 10 bar
Ambient temperature min./max. +0°C / +60°C
Medium temperature min./max. +0°C / +60°C
Medium Compressed air

Materials:
Housing Polyamide
Seal Acrylonitrile Butadiene Rubber
Port Brass, nickel-plated

	Port 1	Port 2	Throttle bore Ø	Qn 1 → 2	Weight	Fig.	Part No.
			[mm]	[l/min]	[kg]		
	Ø 4	M5	2	70	0.005	Fig. 1	R412010581
	Ø 6	M5	2	110	0.005	Fig. 1	R412010582
	Ø 4	G 1/8	3.5	150	0.017	Fig. 2	R412010585
	Ø 6	G 1/8	3.5	390	0.018	Fig. 2	R412010586
	Ø 8	G 1/8	3.5	470	0.019	Fig. 2	R412010587
	Ø 6	G 1/4	4.5	390	0.035	Fig. 3	R412010588
	Ø 8	G 1/4	4.5	490	0.036	Fig. 3	R412010589
	Ø 10	G 1/4	4.5	520	0.039	Fig. 3	R412010590
	Ø 8	G 3/8	6.6	870	0.035	Fig. 4	R412010591
	Ø 10	G 3/8	6.6	1130	0.036	Fig. 4	R412010592
	Ø 12	G 3/8	6.6	1210	0.039	Fig. 4	R412010593
	Ø 10	G 1/2	6.6	1670	0.045	Fig. 5	R412010594
	Ø 12	G 1/2	6.6	1950	0.049	Fig. 5	R412010595

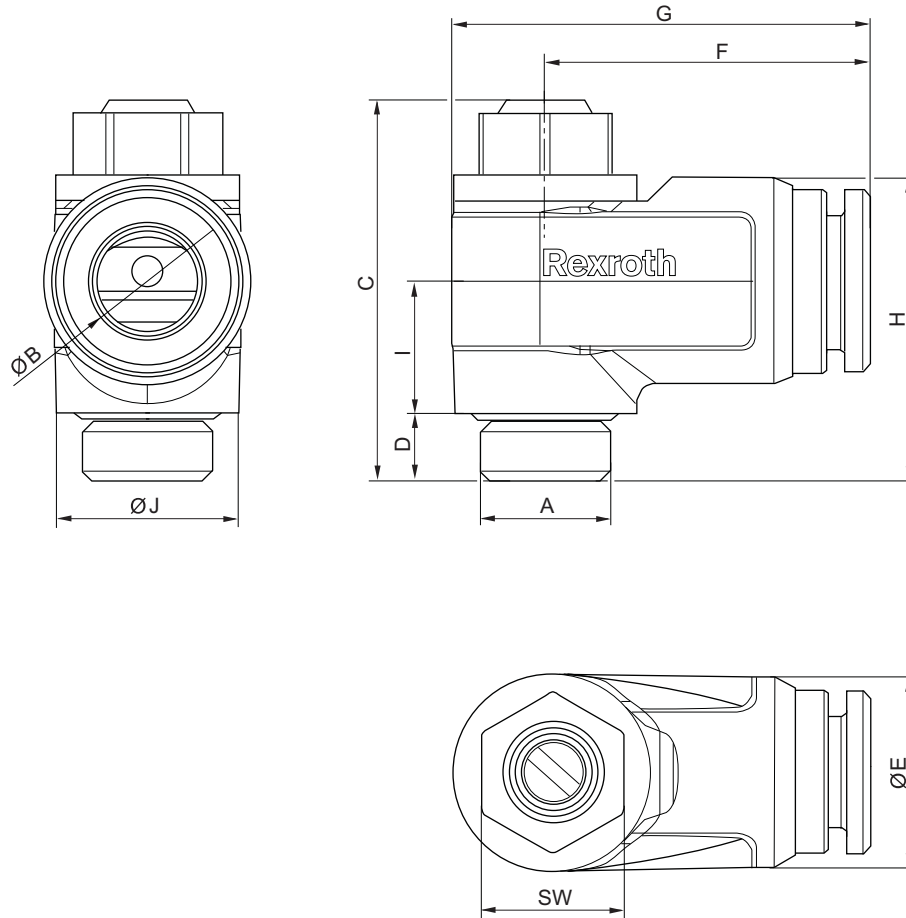
Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Accessory Valves - Flow Control

Flow control valve, right angle, Series CC04
Metric push-in/external threads, meter-in

Rexroth
Bosch Group

Dimensions



16383

Part No.	A	Ø B	C	D	Ø E	F	G	H	I	Ø J	SW
R412010581	M5	4	21.8	4	9	15.9	20.4	12	7.5	8.7	7
R412010582	M5	6	21.8	4	11.1	17.2	21.8	13	7.5	8.7	7
R412010585	G1/8	4	28.5	5.5	11.5	21.9	28.8	21	9.8	13.6	10
R412010586	G1/8	6	28.5	5.5	13.5	22.4	29.3	21.7	9.8	13.6	10
R412010587	G1/8	8	28.5	5.5	15.5	24.2	31.1	22.7	9.8	13.6	10
R412010588	G1/4	6	33.6	6.5	13	24.3	33.5	25.3	12.8	17.6	13
R412010589	G1/4	8	33.6	6.5	15.5	26.6	35.5	25.3	11.5	17.6	13
R412010590	G1/4	10	33.6	6.5	18.1	29.2	38.1	26.7	11.5	17.6	13
R412010591	G3/8	8	40.8	7	15.6	28.2	40.6	23.6	15.8	22.2	16
R412010592	G3/8	10	40.8	7	19	32	43.3	33.5	16.4	22.2	16
R412010593	G3/8	12	40.8	7	22.1	34.2	45.4	35.6	17.8	22.2	16
R412010594	G1/2	10	47.8	8.3	19.2	34	47.7	41.4	20.3	26.6	18
R412010595	G1/2	12	47.8	8.3	22	36.1	49.8	43.9	21.5	26.6	18

Accessory Valves - Check

Check valve, inline
1/8" to 1" NPTF



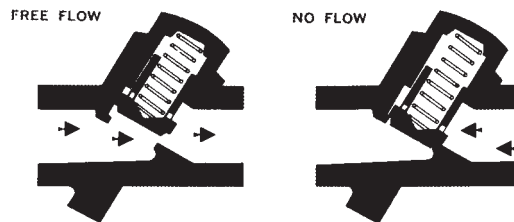
Dryseal NPTF

Type	High Capacity
Working Pressure	250 psi maximum (17.2 bar)
Operating Temperature	-40°F to +160°F, +200°F intermittent service (-40°C to 71°C, 93°C intermittent)
Media	Air
Port Size	1/8" to 1" NPTF



Application

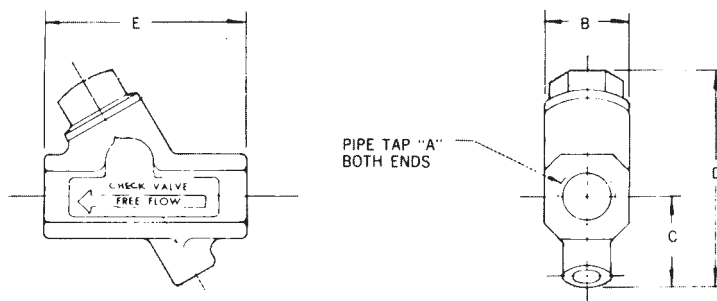
Check valves are installed in a pipeline to permit flow of air in one direction only. Less than 1/2 psi pressure is required to open the valve. The valve is spring loaded to close when no pressure differential exists. Therefore, it may be mounted in any position. The body and cap are made of anodized die cast aluminum. A stainless steel valve, plated spring and Buna N Seal also contribute to trouble free service.



Symbol	Port Size NPTF	New Part No.	Old Part No.	Approx. Valve Weight (oz.)	C _v	"A" Pipe Taps (Dryseal NPTF)
	1/8"	R431003553	P -055023-00000	2.8	1.19	1/8"-27
	1/4"	R431003554	P -055024-00000	2.5	1.34	1/4"-18
	3/8"	R431003556	P -055025-00000	3.8	3.03	3/8"-18
	1/2"	R431003557	P -055026-00000	6.5	3.50	1/2"-14
	3/4"	R431003558	P -055027-00000	26.0	10.00	3/4"-14
	1"	R431003559	P -055028-00000	24.0	13.80	1"-11 1/2

Repair Kits:

1/8" - 1/4" R431007468, 3/8" R431007469, 1/2" R413007470, 3/4" - 1" R431007471



Dimensions

"A" PIPE TAPS	B	C	D	E
1/8"-27 Dryseal NPTF	7/8"	15/16"	2 3/16"	2"
1/4"-18 Dryseal NPTF	7/8"	15/16"	2 3/16"	2"
3/8"-14 Dryseal NPTF	1"	1 1/16"	2 9/16"	2 3/8"
1/2"-14 Dryseal NPTF	1 1/4"	1 3/16"	2 13/16"	2 3/4"
3/4"-14 Dryseal NPTF	2"	1 3/4"	4 1/4"	4"
1"-11 1/2" Dryseal NPTF	2"	1 3/4"	4 1/4"	4"

Accessory Valves - Check

Check valve, metric inline
Threaded connection, G1/8 to G3/4

Rexroth
Bosch Group



00136662

Version
Medium

Poppet valve
Compressed air

Materials:
Housing
Seals

Brass
Acrylonitrile Butadiene Rubber

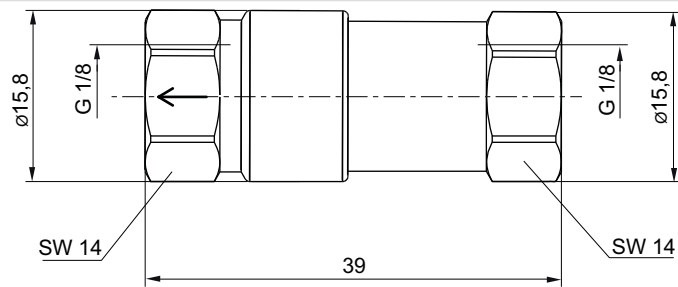
The delivered product varies from that in the illustration. See the drawing for an exact description.

	Port 1	Port 2	Qn 1 → 2	Working pressure min./max.	Ambient tempera- ture min./max.	Medium tempera- ture min./max.	Weight	Part No.
			[l/min]	[bar]	[°C]	[°C]	[kg]	
	G 1/8	G 1/8	230	0.5 / 15	-10°C / +60°C	-10°C / +60°C	0.072	5340981000
	G 1/4	G 1/4	1050				0.168	5340981100
	G 3/8	G 3/8	1650				0.263	5340981200
	G 1/2	G 1/2	2200				0.283	5340981300
	G 3/4	G 3/4	6200				0.38	5340981400

Part No.	Fig.
5340981000	Fig. 1
5340981100	Fig. 2
5340981200	Fig. 2
5340981300	Fig. 3
5340981400	Fig. 2

Nominal flow Qn at 6 bar and Δp = 1 bar

Fig. 1

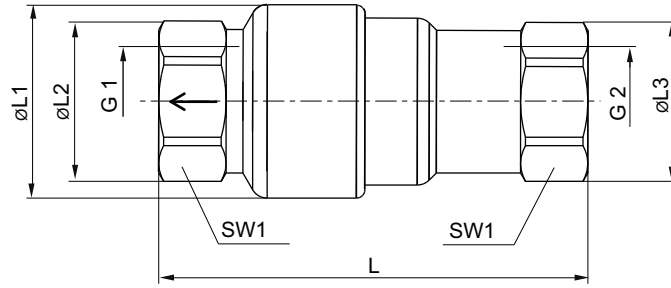


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Accessory Valves - Check

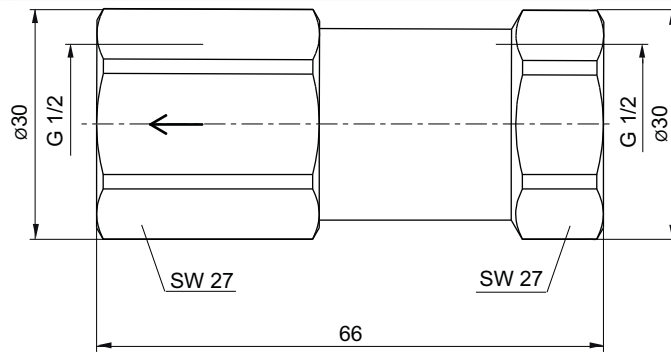
Check valve, metric inline
Threaded connection, G1/8 to G3/4

Fig. 2



	G1	G2	L	L1	L2	L3	SW1				
5340981100	G 1/4	G 1/4	51	23	19	19	17				
5340981200	G 3/8	G 3/8	59.5	29	24.5	24.5	22				
5340981400	G 3/4	G 3/4	77.5	39	35.8	35.8	32				

Fig. 3



Accessory Valves - Check

Check valve, pilot operated, right angle
1/8" to 1/2" NPTF



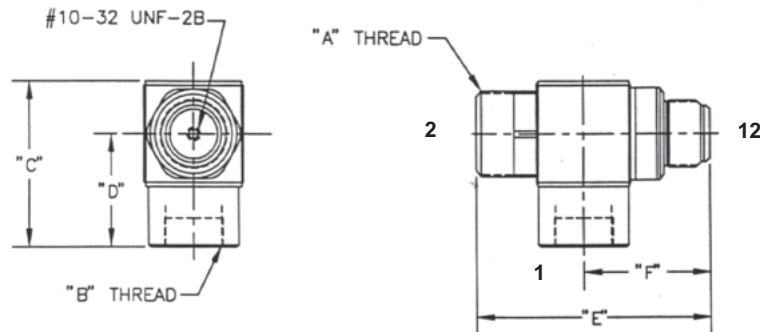
Check Valve, Right Angle, Inch series, Pilot Operated

Type	Pilot Operated, Right Angle - for Inch Threaded Inlet	
Supply Pressure	150 PSIG (10 bar)	
Minimum Pressure	14.5 PSIG (1 bar)	
Temperatures	15° to 160°F (-9° to 71°C)	
Media	Air or inert gas	
Materials:		
Body	Nickel Plated Brass	
Swivel Housing	Anodized Aluminum	
Seals	Buna-N	
Pilot port thread	10-32 UNF	for sizes 1/8 - 1/2 NPTF



Symbol	Thread Size NPTF	New Part No.	Old Part No.	Flow (2-1)* SCFM (NI/min)
	1/8"	R432009209	P -0029977-00000	10.2 (289)
	1/4"	R432009210	P -0029978-00000	23.8 (676)
	3/8"	R432009211	P -0029979-00000	40.8 (1156)
	1/2"	R432009212	P -0029980-00000	67.5 (1910)

*Flow measured at 87 psi, with 15 psi pressure drop.



Dimensions						
Size	A	B	C	D	E	F
1/8	1/8" NPTF	1/8" NPTF	26.7	18.5	41.0	19.8
1/4	1/4" NPTF	1/4" NPTF	32.9	22.5	48.0	25.8
3/8	3/8" NPTF	3/8" NPTF	41.0	28.5	55.0	29.0
1/2	1/2" NPTF	1/2" NPTF	46.3	31.0	65.5	36.0

Dimensions in mm except as noted.

Accessory Valves - Check

Check valve, pilot operated, Series NR02
G1/8 to G1/2 threads

Rexroth
Bosch Group



00120737

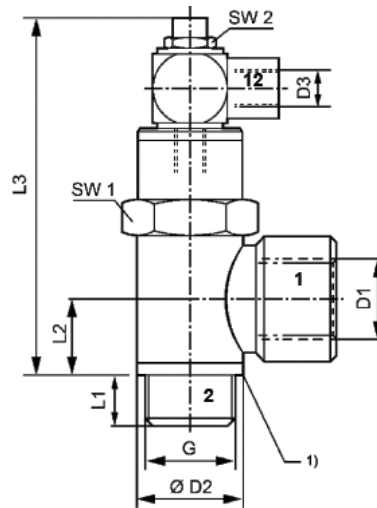
Version
Working pressure min./max. 2 bar / 10 bar
Ambient temperature min./max. -5°C / +70°C
Medium temperature min./max. -5°C / +70°C
Medium Compressed air

Materials:
Housing Brass, nickel-plated
Seals Acrylonitrile Butadiene Rubber

	Port 1	Port 2	Port 12	Qn 1 → 2 [l/min]	Weight [kg]	Fig.	Part No.
	G 1/8	G 1/8	M5	400	0.04	Fig. 1	0821003045
	G 1/4	G 1/4	M5	850	0.07	Fig. 1	0821003046
	G 3/8	G 3/8	G 1/8	1250	0.12	Fig. 2	0821003047
	G 1/2	G 1/2	G 1/8	1800	0.21	Fig. 2	0821003048

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Fig. 1



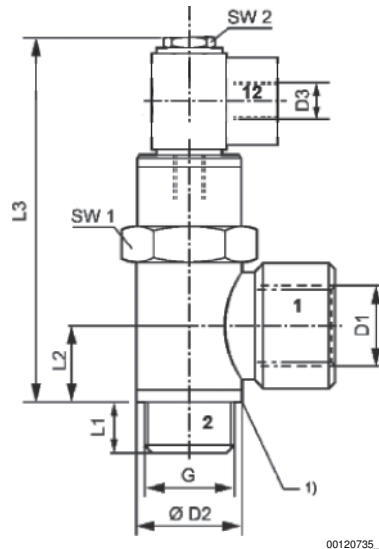
00120735

1) Seal, captive

Accessory Valves - Check

Check valve, pilot operated, Series NR02
G1/8 to G1/2 threads

Fig. 2



00120735_a

1) Seal, captive

Part No.	G	D2	D1	D3	L1	L2	L3	SW1	SW2			
0821003045	G 1/8	14	G 1/8	M5	6	9.5	56	13	8			
0821003046	G 1/4	18	G 1/4	M5	8.2	10.3	58.5	17	8			
0821003047	G 3/8	21.8	G 3/8	G 1/8	9	12	67.5	20	14			
0821003048	G 1/2	25.7	G 1/2	G 1/8	10	14	74	25	14			

Accessory Valves - Quick Exhaust

Quick exhaust valve, inline Quick Release
Inch porting, aluminum or polymer body



Quick Release Valves

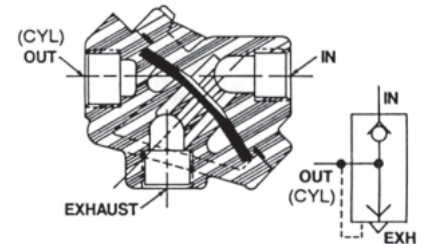
The Quick Release Valve speeds the exhausting of air cylinders, clutches or other pneumatic devices.

It vents air pressure close to the operated device instead of back through the control valve. Equipment cycling or release times are reduced for increased output.

Features:

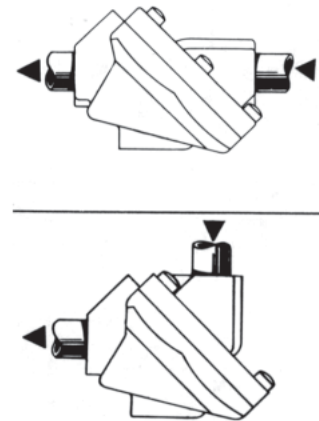
- Sensitivity: A few psi pressure differential across the diaphragm opens the exhaust.
- Large capacity: Large internal air passages exhaust air quickly for top speed of your operation.
- Quiet operation: Special diaphragm design eliminates chattering associated with exhaust valves.
- Long operating life: Corrosion resistant body has only one wearing part - a rugged, oil-resistant diaphragm.
- Reduced weight: Built of aluminum or polymer, they are light enough to be supported by piping alone (mounting brackets are optional on smaller sizes).

- For instant response in Air Circuits



Mounting Flexibility - For in-line or right-angle piping

A desirable feature is that the inlet port may be assembled on the valve in one of two positions. This allows both ports to be mounted on the same center line, or at right angles to each other. The added flexibility simplifies many mounting problems. Field changeout is made by rotating the cover 180°.

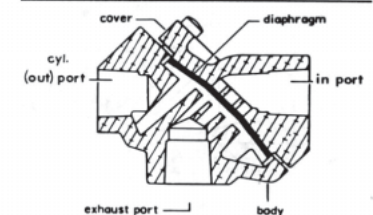
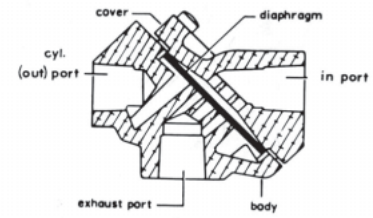


Operating Characteristics

Air pressure entering the inlet port forces the diaphragm against the exhaust port, closing it. Air pressure also deflects against the rim of the diaphragm to open a direct passage around the diaphragm to the outlet port.

When air pressure at the inlet port is reduced, a differential in the pressure acting on the diaphragm is created. This differential in pressure lifts the diaphragm from the exhaust port and seats it on the inlet port. This opens the exhaust port, allows air to flow freely from the outlet port to atmosphere, and closes the inlet port.

Should outlet air pressure drop below inlet pressure, the differential in pressure seats the diaphragm on the exhaust port, stopping further exhaust.



MOUNTING

The 1/4" and 3/8" models are normally mounted directly in the piping. A mounting bracket is available as an accessory, if required.

The 1/2", 3/4" and 1" models have an integral mounting bracket.

Accessory Valves - Quick Exhaust

Quick exhaust valve, inline Quick Release
Aluminum body, 1/4" to 1" NPTF



Technical Data

Type	Aluminum Body, for inline or right-angle piping
Working Pressure	200 psi (13.8 bar) max. on 1/4" and 3/8"
	150 psi (10.3 bar) max. on 1/2" thru 1" sizes
Temperature Range	-40°F to 160°F, 200°F intermittent (-40° to 71°C, 93°C intermittent)
Media	Air or inert gas
Port Size	1/4" to 1" NPTF



Port (NPT)	Piping	Valve Part No.	Old Part No.	Weight lbs. (kg)	C _v in to out	C _v out to exh.	Repair Kit	Old Repair Kit
1/4"	Inline	R431003038	P -052935-00002	0.64 (0.29)	1.77	2.50	R431005410	P -060213-00002
1/4"	Right angle	R431003043	P -052935-00021	0.64 (0.29)	1.77	2.50	R431005410	P -060213-00002
3/8"	Inline	R431003039	P -052935-00003	0.64 (0.29)	2.73	3.08	R431005410	P -060213-00002
3/8"	Right angle	R431003044	P -052935-00031	0.64 (0.29)	2.73	3.08	R431005410	P -060213-00002
1/2"	Inline	R431003040	P -052935-00004	1.44 (0.46)	5.00	5.50	R431005412	P -060214-00002
3/4"	Inline	R431003041	P -052935-00006	2.88 (1.31)	9.70	10.55	R431005414	P -060215-00001
1"	Inline	R431003042	P -052935-00008	3.32 (1.51)	11.95	13.45	R431005414	P -060215-00001

Mounting bracket for 1/4" and 3/8" models: Part no. R431003093 (old part no. P -053067-00000).

Sizes 1/2" through 1" have integral mounting brackets.

Repair kits include diaphragm and gasket.

Inch dimensions: QRV-Aluminum (in-line configuration shown)

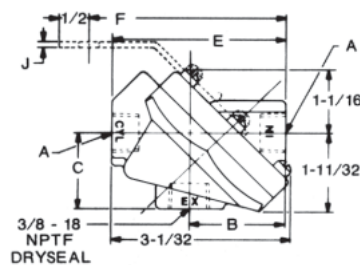
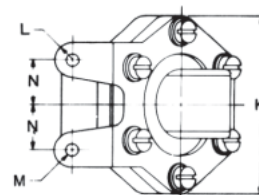
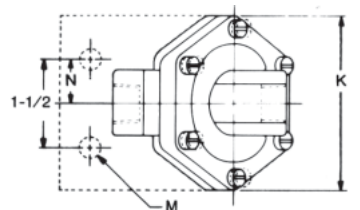


FIGURE 1

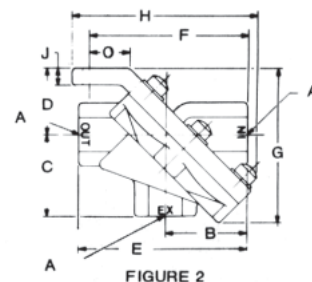


FIGURE 2

Inch dimensions: QRV-Aluminum

Fig. No.	A NPTF Dryseal	B	C	D	E	F	G	H	J	K	L	M (2 Holes)	N	O
Fig. 1	1/4-18	1 3/4	1 11/32	—	3	3 3/8	—	—	1/16	3	—	11/32 Ø	3/4	—
Fig. 1	3/8-14	1 3/4	1 11/32	—	3	3 3/8	—	—	1/16	3	—	11/32 Ø	3/4	—
Fig. 2	1/2-14	1 3/4	1 11/32	1 1/2	3 11/16	3 7/16	3 15/32	4 1/8	3/8	3 15/16	3/8 R.	9/32 Ø	1	7/8
Fig. 2	3/4-14	2 11/16	2 21/32	2 1/16	5 1/4	5	4 13/16	5 1/2	7/16	6 1/2	1/2 R.	13/32 Ø	1 1/2	1 1/8
Fig. 2	1"-11 1/2	2 11/16	2 21/32	2 1/16	5 1/4	5	4 13/16	5 1/2	7/16	6 1/2	1/2 R.	13/32 Ø	1 1/2	1 1/8

Accessory Valves - Quick Exhaust

Quick exhaust valve, inline Quick Release
 Polymer body, 1/4" to 3/8" NPT



Technical Data

Type	Polymer Body, for inline or right angle piping
Working Pressure	150 psi (10.3 bar) maximum
Temperature Range	-20°F to 160°F, 200°F intermittent (-29°C to 71°C, 93°C inter.)
Media	Air
Port Size	1/4" and 3/8" NPT
Material-Body	Glass filled, acetal co-polymer



Note - Torque Values:

Maximum Pipe Thread Torque: 120 in.-lbs.
 Maximum Body Screw Torque: 18 in.-lbs.

Features:

- High exhaust flow capacity
- Light weight for mounting in piping system
- Polymer body for corrosion resistance
- Ideal for industrial and mobile/oilfield applications
- Special corrosion resistant version with stainless steel hardware available

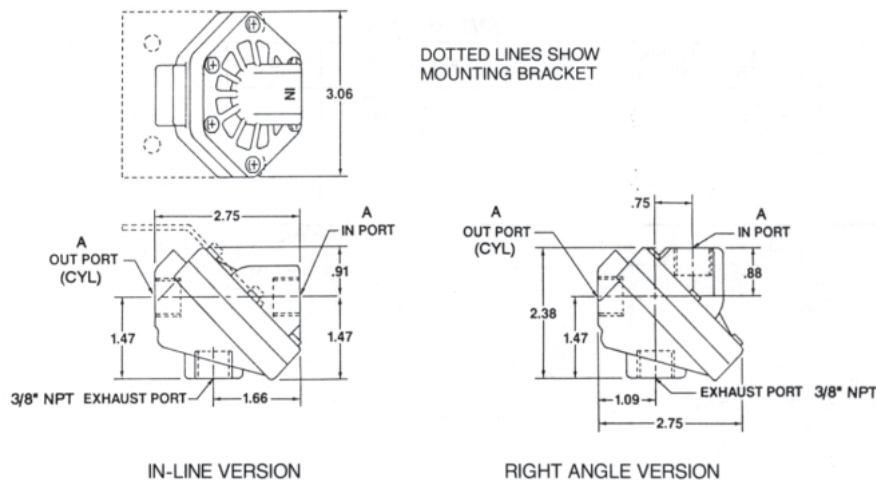
Port (NPT)	Piping	Valve Part No.	Old Part No.	Weight oz. (kg)	C _v in to out	C _v out to exh.	Repair Kit	Mounting Bracket ¹
1/4"	Inline	R431007444	P -069324-00002	7 (0.20)	1.54	1.84	R431005410	R431003093
1/4"	Right angle	R431007446	P -069324-00021	7 (0.20)	1.54	1.84	R431005410	R431003093
1/4"	Inline ²	R434001677	P -031961-00002	7 (0.20)	2.30	2.76	R431005410	R431003093
3/8"	Inline	R431007445	P -069324-00003	7 (0.20)	2.30	2.76	R431005410	R431003093
3/8"	Right angle	R431007447	P -069324-00031	7 (0.20)	2.30	2.76	R431005410	R431003093

1) The polymer Quick Exhaust Valve is normally mounted directly in the piping. A mounting bracket (part no. R431003093) is as an accessory if required.

2) R434001677 is an extra corrosion resistant version due to stainless steel hardware.

Repair kit includes diaphragm and gasket.

Inch dimensions: QRV-Polymer



If needed, a mounting bracket may be ordered separately.

Accessory Valves - Quick Exhaust

Quick exhaust valve, metric Series 573
M5 to G1 threads



5735-041

Version
Working pressure min./max.
Ambient temperature min./max.
Medium temperature
Medium

Poppet valve
0.3 bar / 10 bar
-18°C / +70°C
-18°C / +70°C
Compressed air

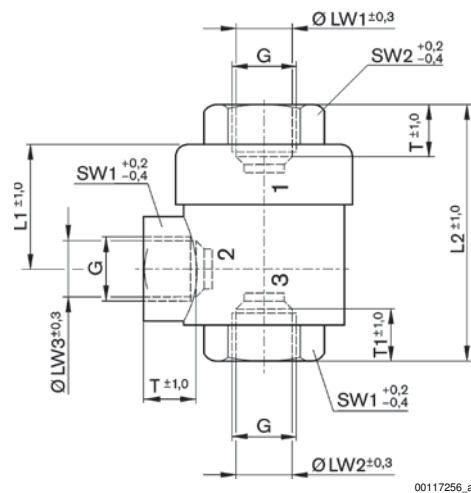
Materials:
Housing

Brass, nickel-plated

	Port 1	Port 2	Port 3 (Exhaust)	Qn 1→2	Qn 2→3	Weight	Fig.	Note	Part No.
				[l/min]	[l/min]	[kg]			
	M5	M5	M5	220	300	0.03	Fig. 2	1)	5735040900
	G 1/8	G 1/8	G 1/8	680	1100	0.08	Fig. 1	2)	5735040000
	G 1/4	G 1/4	G 1/4	1200	2100	0.15	Fig. 1	2)	5735040100
	G 3/8	G 3/8	G 3/8	2300	4900	0.21	Fig. 1	1)	5735040200
	G 1/2	G 1/2	G 1/2	3400	6100	0.32	Fig. 1	2)	5735040300
	G 3/4	G 3/4	G 3/4	4000	13900	0.45	Fig. 1	1)	5735040400
	G 1	G 1	G 1	6800	15600	1.65	Fig. 1	1)	5735030010

1) Seal: Acrylonitrile Butadiene Rubber
2) Seal: Polyurethane
Port 2: internal thread
Port 3 (Exhaust): internal thread
Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Fig. 1



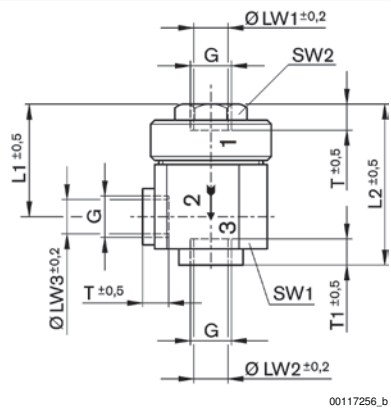
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Part No.	G	T	T1	LW1	LW2	LW3	L1	L2	SW1	SW2		
5735040000	G 1/8	8	8	6	6	6	28	43	14	14		
5735040100	G 1/4	11	11	8.5	8.5	8.5	35	53	19	19		
5735040200	G 3/8	12.5	12.5	11.2	8.5	11.2	35	54.5	21	20		
5735040300	G 1/2	14	15	14	14	14	44	72	26	26		
5735040400	G 3/4	18.5	18.5	18.5	18.5	24.5	37	88	32	32		
5735030010	G 1	19	19	20	24	24	70	118	46	46		

Accessory Valves - Quick Exhaust

Quick exhaust valve, metric Series 573
M5 to G1 threads

Fig. 2



Part No.	G	T	T1	LW1	LW2	LW3	L1	L2	SW1	SW2		
5735040900	M5	3	4	4.2	4.2	4.2	16	25	17	10		

Accessory Valves - Shuttle

Shuttle valve, inline, aluminum body, inch 1/8" to 1/2" NPTF



NPTF Ports

Type	
Supply Pressure	200 psi max. (13.8 bar)
Temperature range	-40°F to 160°F; intermittent 200°F is permissible. (-40°C to 71°C, 93°C intermittent)
Media	Air or inert gas

Application data

The Shuttle Valve automatically selects and directs the flow of air from one or the other of two controlling devices to a common outlet. It serves to connect two independent lines to a common line without destroying the segregation.



	Port (NPTF)	Valve Part No.	Old Part No.	Weight lbs. (kg)	Flow C _v	Repair Kit
	1/8"	R431003347	P -054350-00001	0.44 (0.20)	1.25	R431005614
	1/4"	R431003348	P -054350-00002	0.44 (0.20)	1.58	R431005614
	3/8"	R431003349	P -054350-00003	1.19 (0.54)	3.61	R431005615
	1/2"	R431003350	P -054350-00004	1.19 (0.54)	5.12	R431005615

Repair kits include diaphragm and gasket.

Operating Characteristics

FEATURES-

SIMPLE-Contains only one moving part-an easily replaceable fabric reinforced synthetic rubber diaphragm.

Two body segments, a gasket and four screws complete the assembly.

It has no spring; nothing can bind or stick. Its compact size presents no installation problems.

LIGHTWEIGHT-The Shuttle Valve can easily be supported by piping alone.

Mounting feet are included, however, for installations with vibration or long pipe runs.

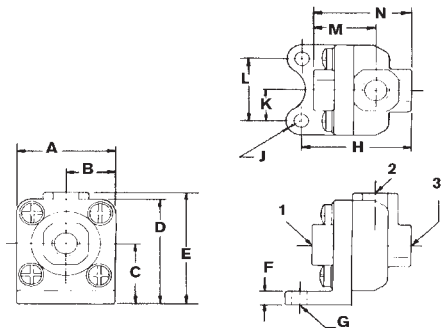
SENSITIVE-Will seal off the opposite inlet line with less than one psi pressure differential.

LONG LIFE-Tests have shown no diaphragm wear after hundreds of thousands of cycles.

To order, refer to port size and part number.

When a pressure differential of one psi or more exists at either inlet port, the higher pressure forces the diaphragm to seal against the opposite

The low (or zero) pressure inlet port is sealed from both the outlet and the opposite inlet port.



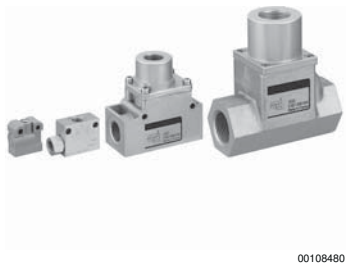
DIMENSIONS

DRYSEAL NPTF Ports	1/8"-27 and 1/4"-18	3/8"-18 and 1/2"-14
ALL PORTS		
A	1 7/8"	2 1/2"
B	15/16"	1 1/4"
C	1 1/2"	1 7/8"
D	2 7/16"	3 1/8"
E	2 5/8"	3 3/4"
F	9/32"	5/16"
G dia.	9/32"	9/32"
H	2 1/8"	3 1/4"
J radius	9/32"	21/64"
K	21/32"	29/32"
L	1 5/16"	1 13/16"
M	1 7/32"	2 1/8"
N	1 29/32"	3 3/8"

Accessory Valves - Shuttle

AS-Shuttle valve, inline metric
M5 to G1 threads

Rexroth
Bosch Group



00108480

Version	Poppet valve
Logic function	Shuttle valve (OR)
Sealing principle	soft sealing
Working pressure min./max.	1 bar / 10 bar
Ambient temperature min./max.	+0 °C / +80 °C
Medium temperature min./max.	+0 °C / +80 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³

Materials:

Housing	See table below
Seals	Acrylonitrile Butadiene Rubber
Threaded bushing	See table below

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

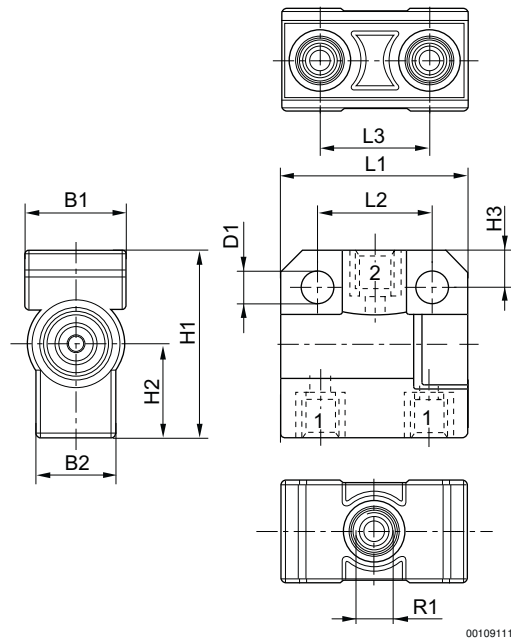
	Compressed air connection		Qn	Weight	Fig.	Note	Part No.
	Input	Output					
			[l/min]	[kg]			
	M5	M5	80	0.011	Fig. 1	1); 3)	0821000004
	G 1/8	G 1/8	640	0.038	Fig. 2	2); 4)	0821000002
	G 1/4	G 1/4	1550	0.1	Fig. 2	2); 4)	0821000003
	G 3/8	G 3/8	2150	0.2	Fig. 3	2); 5)	0821000010
	G 1/2	G 1/2	2300	0.2	Fig. 3	2); 5)	0821000011
	G 3/4	G 3/4	4800	0.5	Fig. 4	2); 5)	0821000014
	G 1	G 1	6100	0.5	Fig. 4	2); 5)	0821000015

1) Housing material: Polyamide
 2) Housing material: Aluminum
 3) Material Threaded bushing: Brass
 4) Material Threaded bushing: Aluminum; Steel
 5) Material Threaded bushing: Aluminum
 Nominal flow Qn at 6 bar and Δp = 1 bar

Accessory Valves - Shuttle

Shuttle valve, inline metric
M5 to G1 threads

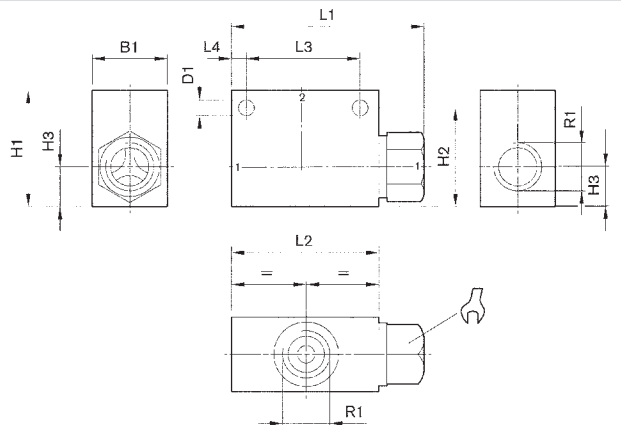
Fig. 1



Part No.	R1	D1	L1	L2	L3	L4	H1	H2	H3	B1	SW	*
0821000004	M5	4.3	26	16	15	-	26	13	5	14	-	5

* = depth of thread

Fig. 2



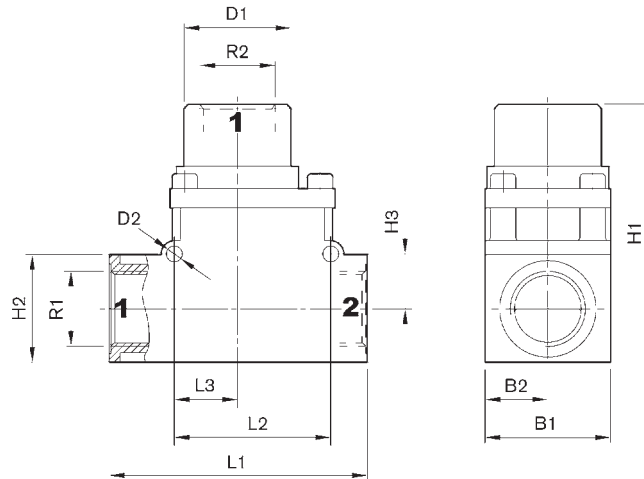
Part No.	R1	D1	L1	L2	L3	L4	H1	H2	H3	B1	SW	*
0821000002	G 1/8	4.3	42	32	25	3.5	25	21	8.5	16	14	8
0821000003	G 1/4	5.5	67.5	55	38	8.5	36.2	30.2	13.2	25	22	12

* = depth of thread

Accessory Valves - Shuttle

Shuttle valve, inline metric
M5 to G1 threads

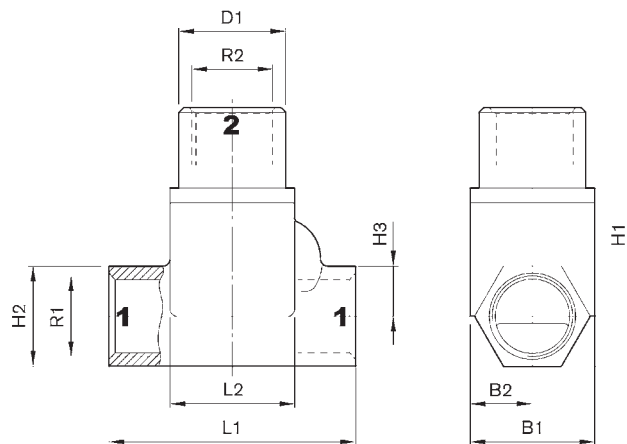
Fig. 3



00109113

Part No.	R1	R2	D1	D2	L1	L2	L3	H1	H2	H3	B1	B2
0821000010	G 3/8	G 3/8	34	4.5	72	44	18	72	30	15	35	17.5
0821000011	G 1/2	G 1/2	34	4.5	72	44	18	72	30	15	35	17.5

Fig. 4



00109116

Part No.	R1	R2	D1	D2	L1	L2	L3	H1	H2	H3	B1	B3
0821000014	G 3/4	G 3/4	44	-	100	51	-	107	41	20.5	50	25
0821000015	G 1	G 1	44	-	100	51	-	107	41	20.5	50	25

Accessory Valves - Relay

Relay Valve, Type S
Zinc or aluminum body, 1/4" NPTF pilot port



Type "S" Relay

Type	3 way pilot operated pressure control	
Supply Pressure	250 psi max. (17.2 bar)	
Pilot Pressure	250 psi max. (17.2 bar)	
Ratio- pilot to delivery	1:1 standard; others noted below.	
Temperature Range	-20°F to 160°F (-29° to 71°C)	
Media	Air or inert gas	
Pilot Port Size	1/4" NPTF	
Body Port size	1/4" and 1" as noted below	
Hysteresis	Less than 5 psi. (0.34 bar)	
Materials	Body	3/8" & 1/2" die cast zinc 3/4" and 1" die cast aluminum
	Diaphragm	Nylon reinforced HYCAR
	Other	Anodized aluminum or plated



Features

Reliability

Automatically sustains pressure directed by the pilot line on a 1 to 1 ratio (optional ratios shown below). The balanced internal valve functions to relieve excess pressure, or to maintain pressure against demand. Rubber seated valves provide zero leakage.

Installation Versatility

Operates in any position. May be supported by piping alone or by a mounting bracket. The IN and OUT ports are plainly marked on the body.

Ease of Maintenance

The valve may be serviced without disturbing line connections. All parts are accessible by removing top cover. No special tools are required.

Large Capacity

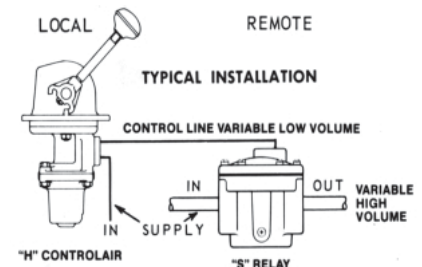
Designed with minimum valving to provide maximum flow (see graph).

Modern Construction

All materials are corrosion resistant. The sturdy die cast body contains wrench flats for ease of installation. Ports have dry seal pipe threads (suitable with standard pipe thread).

Positive Seals

Packing rings are located at all critical points in the assembly to eliminate internal and external leakage.



Application

The "S" Relay Valve is a pilot-operated, 3-way, pneumatic pressure control valve with open exhaust. The large capacity of this valve makes it an ideal volume booster. It receives pressure signals from a remote control valve and repeats this pressure with a greater rate of flow to the component being controlled. The valve serves to speed response time between sending and receiving stations in a pneumatic circuit which involves long piping runs or branch circuits. Where the controlled component is not in a readily accessible location, remote piloting provides a solution.

Model	Port Size NPTF	Version	Valve Part No.	Valve Old Part No.	Weight lbs. (kg)	Repair Kit Part No.
3-S	3/8"-18	Standard	R431003663	P -055160-00000	2.38 (1.08)	R431004153
4-S	1/2"-14	Standard	R431003664	P -055161-00000	2.25 (1.02)	R431004153
6-S	3/4"-14	Standard	R431003665	P -055162-00000	2.63 (1.19)	R431004155
8-S	1"-11	Standard	R431003666	P -055163-00000	2.44 (1.11)	R431004155
4-S	1/2"-14	Multi-function (2:1 ratio), air pilot*	R431006660	P -065671-00001	2.63 (1.19)	**
4-S	1/2"-14	Multi-function, hydraulic pilot 300 psi max., air inlet 150 psi max.*	R431009099	P -064955-00002	2.63 (1.19)	R431006572
2-S	1/4"-18	Adjustable	R431000775	P -027257-00000		**
		Optional tapped exhaust kit for 3-S & 4-S	R431006791	P -066236-00000		**

Mounting bracket included with valves.

*Contact factory for outline drawings.

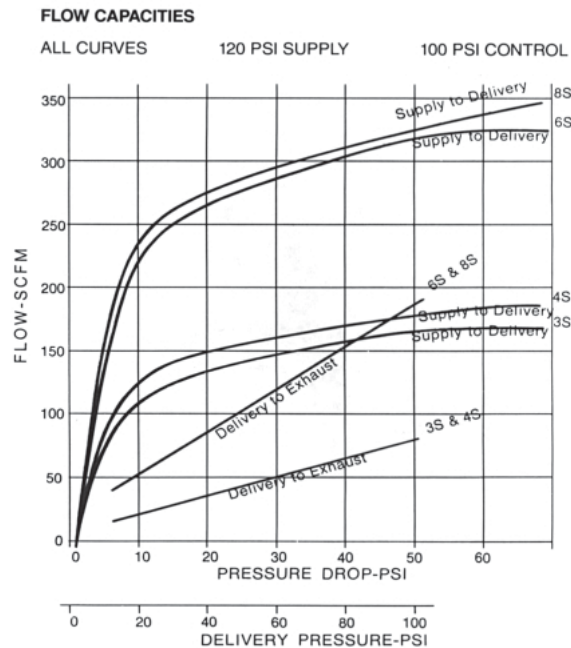
**Contact factory for repair parts.

Accessory Valves - Relay

Relay Valve, Type S
Zinc or aluminum body, 1/4" NPTF pilot port



Operating characteristics

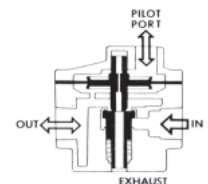


NOTE: Flow capacity of a relay valve is a function of supply pressure; i.e., doubling the supply pressure results in approximately double the flow capacity. EXHAUST CAPACITY is low. Where increased exhaust is necessary, use of our Quick Release Valve is recommended.

Operating characteristics

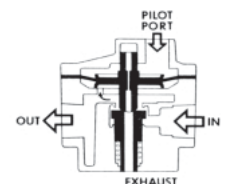
CLOSED CENTER POSITION

When the outlet pressure (pressure below the diaphragm) is equal to the pilot pressure (pressure above the diaphragm), the balance of pressure allows the inlet valve spring to move the valve assembly up. This seats the inlet valve and exhaust valve, sealing the IN and OUT ports.



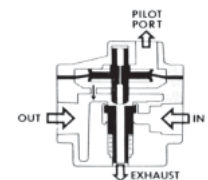
INCREASING PRESSURE

Applying pressure to the pilot port moves the diaphragm assembly down to seat the exhaust valve, unseat the inlet valve plunger, and compress the inlet valve spring. Air pressure from a local source at the IN port flows to the OUT port. A controlled flow of air is also directed to the underside of the diaphragm. Air flow continues until the pressure at the OUT port equals the pressure at the pilot port.



DECREASING PRESSURE

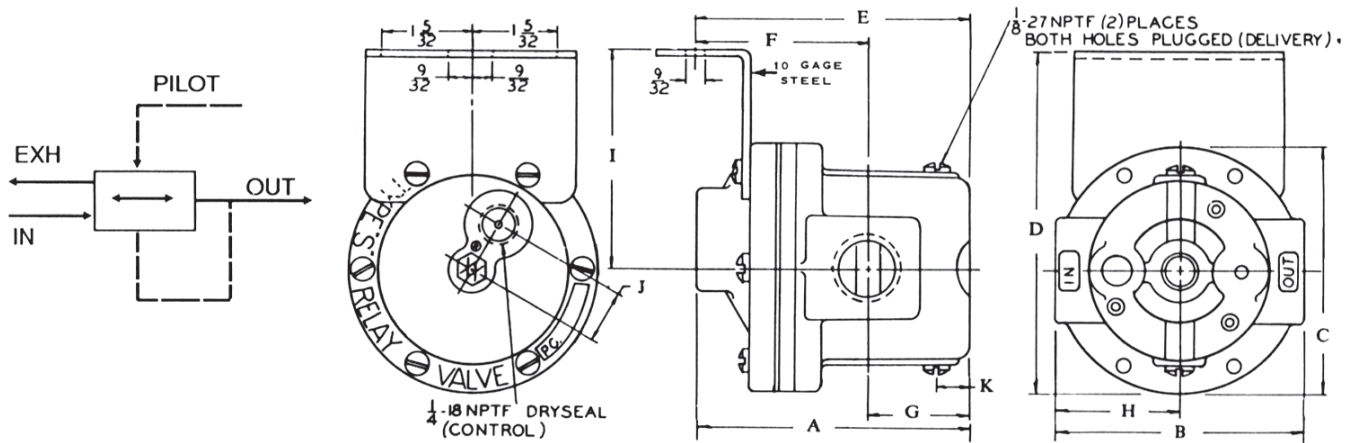
Reducing pressure in the pilot port unbalances the pressure across the diaphragm. The diaphragm assembly and exhaust valve move away from the seated inlet valve, opening the OUT port to exhaust through the hollow inlet valve plunger. Air continues to exhaust until the air pressure at the OUT port under the diaphragm balances the air pressure to the pilot port on the top of the diaphragm.



Accessory Valves - Relay

Relay Valve, Type S

Zinc or aluminum body, 1/4" NPTF pilot port



Dimensions											
Model	A	B	C	D	E	F	G	H	I	J	K
3-S	3 ⁹ / ₁₆	3 ¹ / ₄	3 ¹ / ₄	4 ¹ / ₂	4 ¹ / ₁₆	2 ¹ / ₄	1 ¹¹ / ₃₂	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₁₆	1 ⁵ / ₃₂
4-S	3 ⁹ / ₁₆	3 ¹ / ₄	3 ¹ / ₄	4 ¹ / ₂	4 ¹ / ₁₆	2 ¹ / ₄	1 ¹¹ / ₃₂	1 ⁵ / ₈	2 ⁷ / ₈	1 ¹ / ₁₆	1 ⁵ / ₃₂
6-S	4 ¹¹ / ₃₂	4 ¹ / ₈	4 ¹ / ₈	5 ¹ / ₄	4 ⁷ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ¹ / ₁₆	3 ³ / ₁₆	3 ³ / ₄	1 ³ / ₁₆
8-S	4 ¹¹ / ₃₂	4 ¹ / ₈	4 ¹ / ₈	5 ¹ / ₄	4 ⁷ / ₈	2 ⁷ / ₈	1 ¹ / ₂	2 ¹ / ₁₆	3 ³ / ₁₆	3 ³ / ₄	1 ³ / ₁₆

Accessory Valves - Relay

Relay Valve, Type C2
Aluminum body, 1/2" NPT supply



Technical Data

Type	spring loaded diaphragm	
Supply Pressure	250 psi max. (17.2 bar)	
Control Pressure	150 psi max. (10.3 bar)	
Temperature range	-20°F to 160°F (-29° to 71°C)	
Media	Air or inert gas	
Port Size	1- Supply	1/2"-14 NPT
	2- Control	1/4"-18 NPT
	3- Delivery	1/2"-14 NPT
	EX- Exhaust	3/4"-14 NPT



Application Notes

The C-2 Relay Valve functions to reproduce in substantial volume whatever pressure is applied to the small volume control portion of the valve itself. Its essential purpose is to increase the speed of operation for devices such as brakes, clutches, positioning devices and to reduce transmission time in control lines. This valve is usually directed by a relatively small pressure control valve, such as a CONTROLAIR™ Valve, which is located at some distance from the controlled volume and is connected by small diameter pipe or tubing.

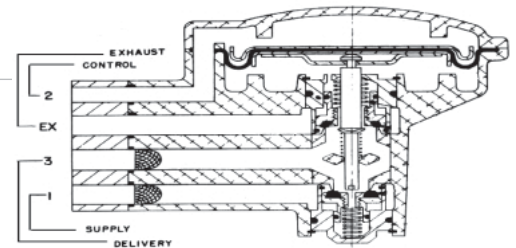
Description	Part Number	Old Part Number
C-2 Relay Valve (complete)	R431000091	-538975-00001
Replacement (valve portion only)	R431000111	-850012-K0000
Repair Kit	R431004938	P -059191-00000

Operating Characteristics

Supply air	Port 1
Control air signal	Port 2
Delivery	Port 3
Exhaust	EX

Application

Reproduces pressure from control line independent of leakage or temperature effects.



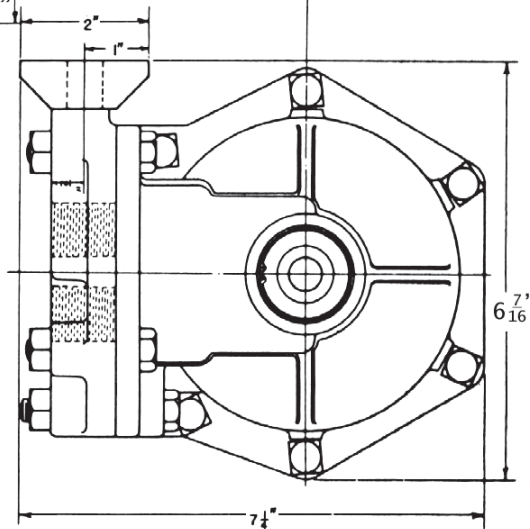
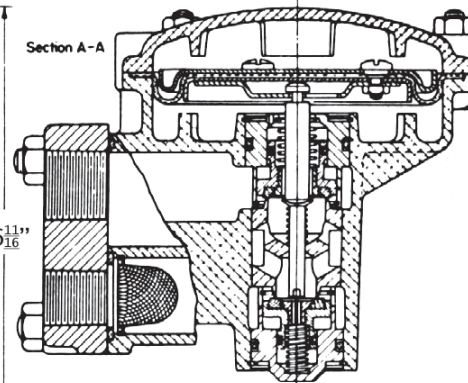
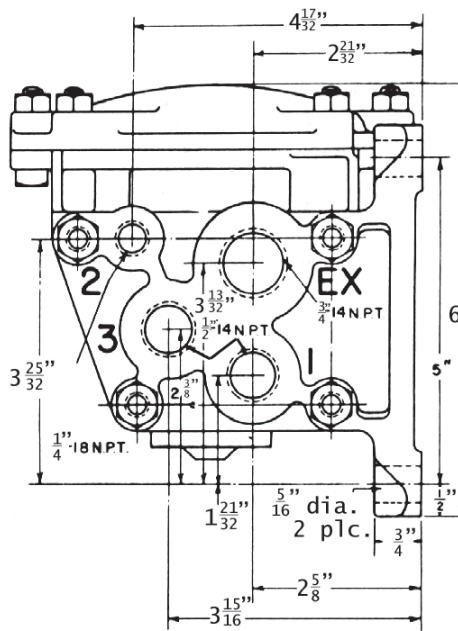
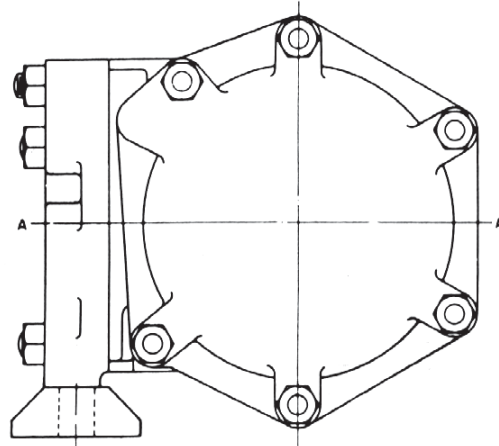
Accessory Valves - Relay

Relay Valve, Type C2
 Aluminum body, 1/2" NPT supply



Dimensions

- 1 =Supply
- 2 =Control
- 3 =Delivery
- EX=Exhaust



Accessory Valves - Relay

Relayair® Valves - Type H and L

Pilot operated sequence valves, aluminum body



"H" and "L" Relayair® Valves

Type	Pilot operated sequence valve	
Supply Pressure	200 PSI Max. (13.8 bar)	
Control Pressure	140 psi max. (9.7 bar)	
Temperature range	-40°F to 160°F (-40°C to 71°C)	
Media	Air or inert gas	
Port Size:		
Control port (port 10), breather port (port 1):	1/4" NPT	
	All other ports:	3/8" NPTF



Operating Characteristics

The Relayair® Valve has three basic uses:

1. As a nongraduated relay to provide a large flow of air from a separate source when piloted by small amount of control media and to stop this flow and exhaust the air to atmosphere when the control pressure is vented.
2. As an interlock to govern the flow in one circuit by placing its control in another independent circuit.
3. As a pressure-sensitive sequence valve for such circuit functions as timing, cycling, etc.

Application Notes

RELAYAIR Valves operated by pilot pressures less than 35 psi utilize one control spring while valves operated by pilot pressures greater than 35 psi use two springs. To obtain pilot pressures less than 10 psi, two diaphragms are used in series.

Model	Pilot Pressure	New Part No.	Old Part No.	Repair Kit Metal Parts	Repair Kit Rubber Parts
H-5-D	3	R431005195	P -059567-00003	R431005482	R431005479
H-5-D	12	R431005196	P -059567-00012	R431005482	R431005479
H-5	10	R431004910	P -059155-00010	R431005482	R431005478
H-5*	10	R431004924	P -059156-00010	R431005482	R431005478
H-5	15	R431004911	P -059155-00015	R431005482	R431005478
H-5	20	R431004912	P -059155-00020	R431005482	R431005478
H-5	25	R431004913	P -059155-00025	R431005482	R431005478
H-5	30	R431004914	P -059155-00030	R431005482	R431005478
H-5	35	R431004915	P -059155-00035	R431005482	R431005478
H-5	45	R431004916	P -059155-00045	R431005482	R431005478
H-5	50	R431004917	P -059155-00050	R431005482	R431005478
H-5	60	R431004918	P -059155-00060	R431005482	R431005478
H-5	70	R431004919	P -059155-00070	R431005482	R431005478
H-5	80	R431004920	P -059155-00080	R431005482	R431005478
H-5	90	R431004921	P -059155-00090	R431005482	R431005478
H-5	100	R431004922	P -059155-00100	R431005482	R431005478
H-5	110	R431004923	P -059155-00110	R431005482	R431005478
L-2-A	40	R431006062	P -062482-00040	R431005482	R431006157
L-2-A	70	R431006063	P -062482-00070	R431005482	R431006157
L-2-A	85	R431006064	P -062482-00085	R431005482	R431006157
L-2-A	110	R431006065	P -062482-00110	R431005482	R431006157
L-2-A	135	R431006067	P -062482-00135	R431005482	R431006157
L-2-A	150	R431006068	P -062482-00150	R431005482	R431006157
L-2-A	220	R431006573	P -065215-00000	R431005482	--

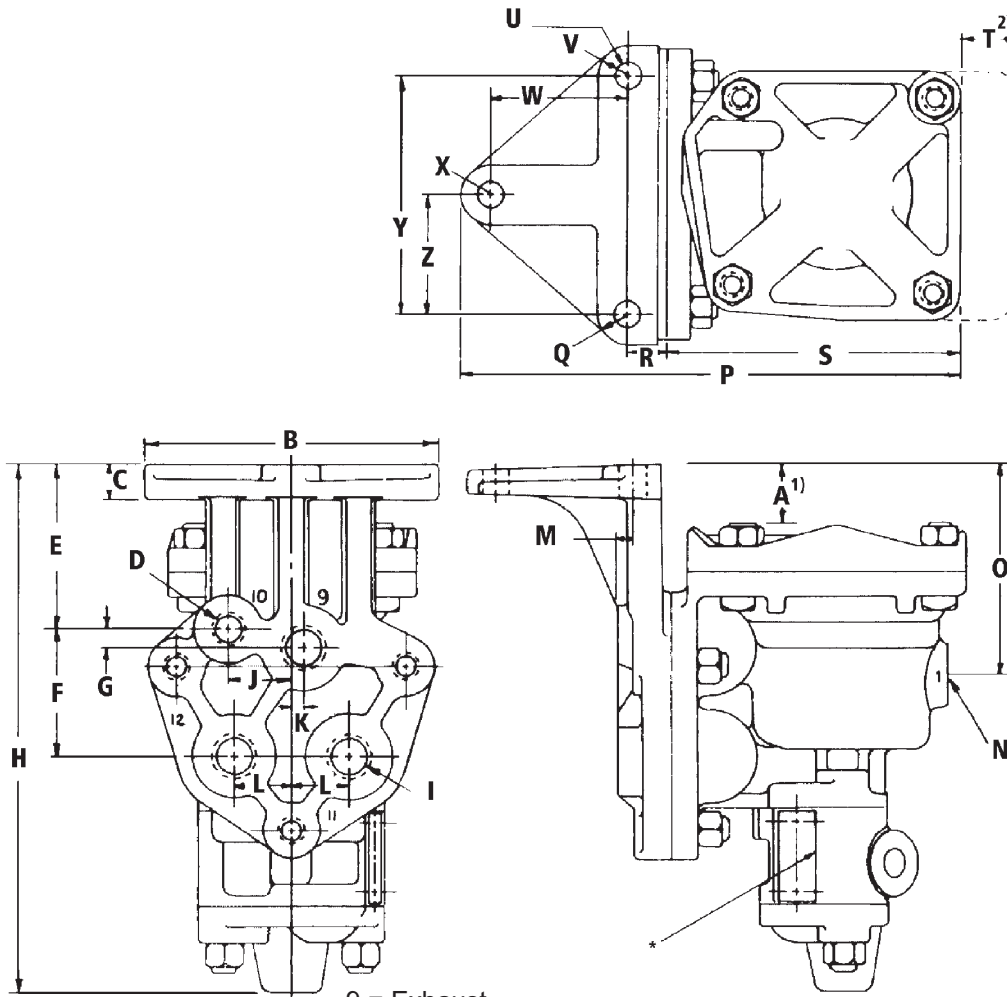
*Non-magnetic version

Accessory Valves - Relay

Relayair® Valves - Type H and L
Pilot operated sequence valves, aluminum body



H-5 Relayair Valve Dimensions



- 9 = Exhaust
- 10 = Pilot
- 11 = Delivery
- 12 = Supply

* Nameplate location.

H-5 Relay Dimensions

A ¹⁾	B	C	D - NPTF	E	F	G	H	I - NPTF	J	K	L	M
13/16	4-3/8	1/2	1/4-18	2-7/16	1-7/8	9/32	7-3/4	3/8-18	15/16	3/16	27/32	1/4
N - NPT	O	P	Q	R	S	T ²⁾	U (3 places)	V	W	X	Y	Z
1/4-18	3-1/8	7-3/8	∅7/16	9/16	4-3/8	13/16	13/32	∅7/16	2	∅7/16	3-1/2	1-3/4

1) H-5 shown. "A" for H-5-D = 1/8"; for L-2-A = 5/16".

2) Clearance required for removal.

* Nameplate location.

Accessory Valves - Relay

Series PD Relay Valve
Aluminum body, 1/2" NPT



Type	Relay
Supply Pressure	250 psi (17.2 bar) maximum
Control Pressure	5 to 250 psi (0.34 to 17.2 bar)
Max. Operating Temperature	-20°F to 200 F (-29°C to 93°C)
Media	Air
Port Size	1/2"-14 NPT
Materials: Body	Anodized aluminum
Piston	Stainless steel
Spool	Cast aluminum



Function:

The PD Relay valve relays or repeats control pressure signals with large quantities of air at corresponding pressures. Used in systems where long lines are required from the control device to the receiving device, the PD2 Relay valve permits fast system response by reducing control pressure transmission times. A direct local connection is made possible, through the Relay valve, between a supply source and the receiving device. This reduces the required capacity and size of the controlling device and the size of the control line. When control pressure is reduced or released, a local exhaust of pressure from the receiving device, through the Relay valve, eliminates the delay normally caused by exhausting the air back through the long control line.

Sensitivity:

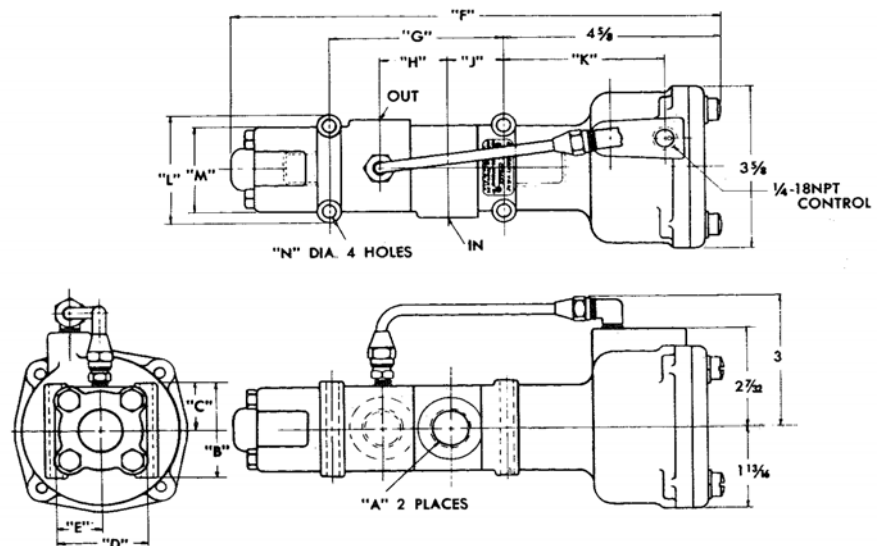
The outlet pressure follows very closely the control pressure through-out the control range. The chart below indicates the changes in outlet pressure required to operate the valve and restore the specified outlet pressure.

Static Outlet Pressure	Outlet Pressure Changes Required	
	To Open Inlet Valve	To Open Exhaust Valve
10 psi (0.69 bar)	- 1 psi (0.07 bar)	+ 1 psi (0.07 bar)
60 psi (4.14 bar)	- 1.5 psi (0.10 bar)	+ 1.5 psi (0.10 bar)
120 psi (8.28 bar)	- 2 psi (0.14 bar)	+ 2 psi (0.14 bar)

Part number: R434005641 (old part no. P -054452-00000)

Dimensions:

	inches	mm
A	1/2"-14 NPT	1/2"-14 NPT
B	2 1/8	54.0
C	1 1/16	27.0
D	1 15/16	49.2
E	31/32	24.6
F	10 3/8	263.5
G	3 11/16	93.7
H	1 7/16	36.5
J	1 3/16	30.2
K	3 1/2	88.9
L	2 7/16	61.9
M	1 15/16	49.2
N	9/32	7.1



Accessory Valves - Pressure Regulators

In-port pressure regulator, inch version
1/8" to 1/2" NPTF threads

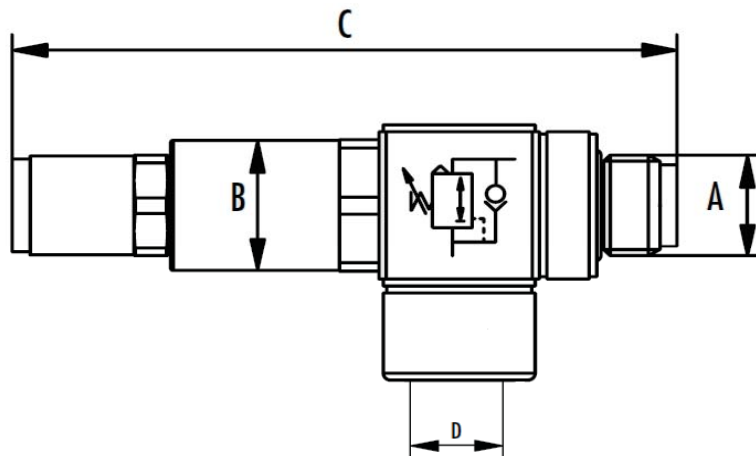


Working pressure min./max. 15 psi / 232 psi (1 bar / 16 bar)
 Ambient temperature min./max. 14 °F/ 158 °F (-10°C / +70°C)
 Medium temperature min./max. 14 °F/ 158 °F (-10°C / +70°C)
 Medium
 Compressed air

Materials:
 Housing Brass, galvanized; Polyamide;
 Aluminum, black anodized
 Seals Acrylonitrile Butadiene Rubber



Input Connection (male)	Output connection (female)	Pressure output range psi [bar]	Flow rate SCFM [l/min]	Part number
1/8 NPTF	1/8 NPTF	15 - 116 [1 - 8]	10.6 [300]	R432031096
1/4 NPTF	1/4 NPTF	15 - 116 [1 - 8]	21.2 [600]	R432031097
3/8 NPTF	3/8 NPTF	15 - 116 [1 - 8]	26.5 [750]	R432031098
1/2 NPTF	1/2 NPTF	15 - 116 [1 - 8]	26.5 [750]	R432031099



Part number	A (male)	B mm	C inch [mm]	D (female)
R432031096	1/8 NPTF	17mm	2.9 [73]	1/8 NPTF
R432031097	1/4 NPTF	17mm	3.2 [81]	1/4 NPTF
R432031098	3/8 NPTF	22mm	3.5 [88]	3/8 NPTF
R432031099	1/2 NPTF	27mm	3.6 [90]	1/2 NPTF

Accessory Valves - Pressure Regulators

In-port pressure regulator, metric push-in version

Rexroth
Bosch Group



00111948_c

Working pressure min./max. 1 bar / 10 bar
 Ambient temperature min./max. -10 °C / +70 °C
 Medium temperature min./max. -10 °C / +70 °C
 Medium Compressed air

Materials:
 Housing Brass, galvanized; Polyamide
 Seals Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

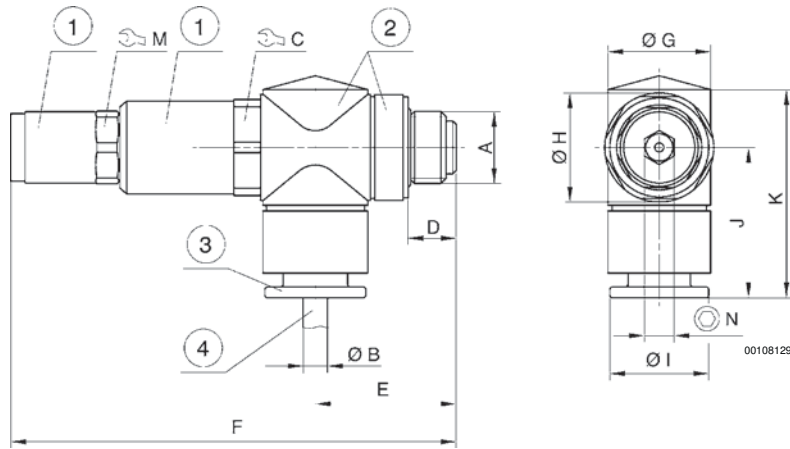
	Compressed air connection		Adjustment range min./max.	Nominal flow	Weight	Fig.	Part No.
	Input	Output					
			[bar]	[l/min]	[kg]		
	G 1/8	Ø 4	1 / 8	400	0.075	Fig. 1	0821302083
	G 1/8	Ø 6		400	0.075	Fig. 1	0821302084
	G 1/8	Ø 6		600	0.105	Fig. 2	0821302086
	G 1/8	Ø 8		400	0.075	Fig. 1	0821302085
	G 1/8	Ø 8		600	0.105	Fig. 2	0821302087
	G 1/4	Ø 6		600	0.08	Fig. 1	0821302088
	G 1/4	Ø 8		600	0.08	Fig. 1	0821302089
	G 1/4	Ø 10		600	0.08	Fig. 1	0821302090

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Accessory Valves - Pressure Regulators

In-port pressure regulator, metric push-in version

Fig. 1

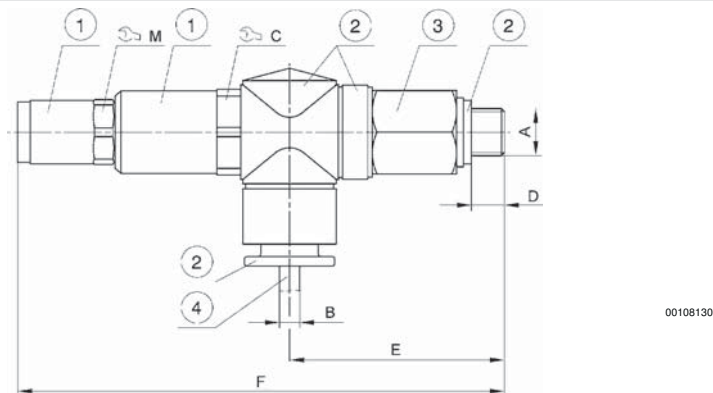


- 1) galvanized brass
- 2) polyamide
- 3) polyamide
- 4) tubing

Part No.	A	B	C	D	E	F	G	H	I	J	K	M
0821302083	G 1/8	4	17	6.3	19.8	70.8	11	15	11	21.7	31.4	13
0821302084	G 1/8	6	17	6.3	19.8	70.8	13	15	13	25	33.9	13
0821302085	G 1/8	8	17	6.3	19.8	70.8	14	15	18	25.2	35.3	13
0821302088	G 1/4	6	17	9.5	25.8	78.8	13	19	13	26	38.1	13
0821302089	G 1/4	8	17	9.5	25.8	78.8	18	19	18	27	39.8	13
0821302090	G 1/4	10	17	9.5	25.8	78.8	18	19	18	27	39.8	13

Part No.	N											
0821302083	5											
0821302084	5											
0821302085	5											
0821302088	5											
0821302089	5											
0821302090	5											

Fig. 2



- 1) galvanized brass
- 2) polyamide
- 3) galvanized brass
- 4) tubing

Part No.	A	B	C	D	E	F	M					
0821302086	G 1/8	6	17	6.5	42.3	95.3	13					
0821302087	G 1/8	8	17	6.2	42.3	95.3	13					

Accessory Valves - Mechanical Slide

Mechanical spool valve, inline metric, sliding actuation
G1/8 to G1/2 threads



00108556

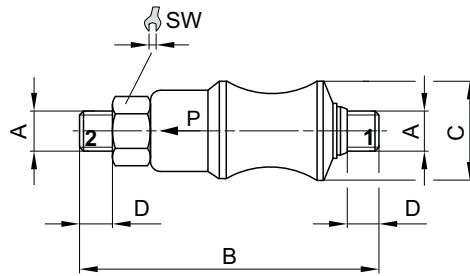
Version
Working pressure min./max. 0 bar / 10 bar
Ambient temperature min./max. +0°C / +80°C
Medium temperature min./max. +0°C / +80°C
Medium Compressed air

Materials:
Housing Brass
Seals Acrylonitrile Butadiene Rubber

	Port 1	Port 2	Qn [l/min]	Weight [kg]	Part No.
	G 1/8	G 1/8	750	0.09	0820402007
	G 1/4	G 1/4	1300	0.16	0820405001
	G 3/8	G 3/8	1900	0.22	0820406001
	G 1/2	G 1/2	3200	0.35	0820407001

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Dimensions



00108557

Part No.	A	B	Ø C	D	SW							
0820402007	G 1/8	72	26	8	14							
0820405001	G 1/4	81	32	10	19							
0820406001	G 3/8	85	37	10	22							
0820407001	G 1/2	98	44	12	27							

Accessory Devices - Pressure Switch

Pressure switch, mechanical, Series PM1



Measurement	Relative pressure
Switching element	microswitch (input/output)
Switching frequency	1,5 Hz
Protection against overpressure	80 bar
Ambient temperature min./max.	-10°C / +80°C
Medium temperature min./max.	-10°C / +80°C
Medium	Compressed air hydraulic oil
Shock resistance max. (XYZ direction)	15 g
Vibration resistance (XYZ direction)	10 g (60 - 500 Hz)
Switching point	adjustable
Hysteresis	max. switching pressure difference
DC operating voltage min./max.	12 V - 125 V
Operational voltage AC min./max.	12 V - 250 V
Mounting orientation	Any
Mounting types	via through holes
Function	change-over contact (mechanical)
Protection class	IP 65
Weight	0.2 kg
Materials:	
Housing	Aluminum
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- Switching function increasing pressure: contact switches from 1-2 to 1-3. Switching function decreasing pressure: contact switches from 1-3 to 1-2.
- Warning: Excessive currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!

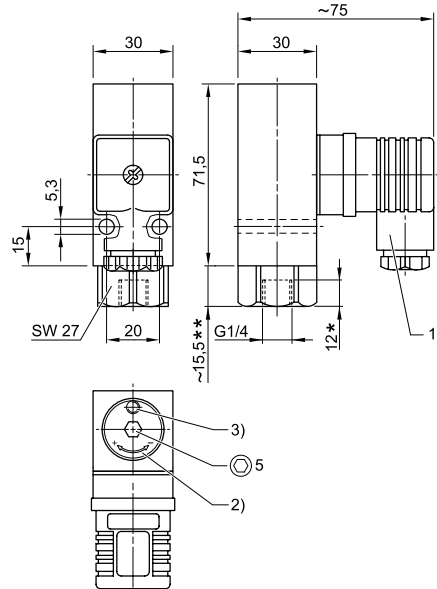
	Type	Operating pressure range min./max. [bar]	Compressed air connection	Repeatability (% of full scale value)	Certificates	Fig.	Note	Part No.
	PM1-M3-G014	-0.9 / 0	internal thread, G 1/4	± 4 %	CCC	Fig. 1	1); 3)	0821100010
	PM1-M3-G014	0.2 / 2 0.2 / 3 0.5 / 8 0.5 / 10 0.5 / 16	internal thread, G 1/4	± 3 %	- CCC - CCC	Fig. 1	2); 4) 1); 3) 1); 4) 2); 4) 1); 4)	3410582100 0821100011 0821100012 3410582000 0821100013
	PM1-M3-F001	-0.9 / 0	Flange with O-ring, Ø 5x1,5	± 4 %	CCC	Fig. 2	1); 3)	0821100020
	PM1-M3-F001 PM1-M3-F001 PM1-F001-M3	0.2 / 3 0.5 / 8 0.5 / 16	Flange with O-ring, Ø 5x1,5	± 3 %	CCC	Fig. 2	1); 3) 2); 4) 1); 4)	0821100021 0821100024 0821100023

- 1) Scope of delivery: with electrical connector
- 2) Scope of delivery: without electrical connector
- 3) Diaphragm: Fluorocautchouc
- 4) Diaphragm: Acrylonitrile Butadiene Rubber

Accessory Devices - Pressure Switch

Pressure switch, mechanical, Series PM1

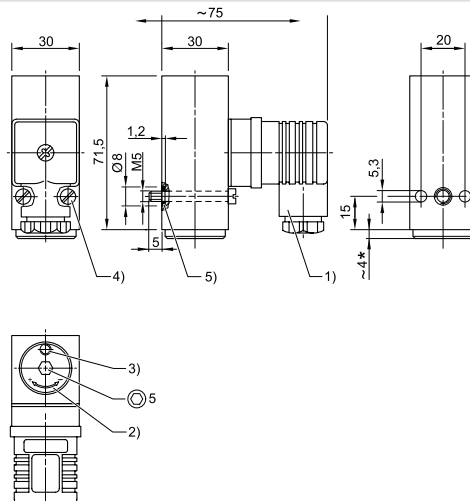
Fig. 1



- 1) electrical connector
- 2) adjustment screw
- 3) adjustment protection
- * minimum screw-in depth

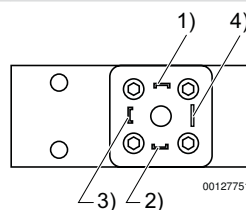
** approx. 9,5 mm for 3410582000; 0821100012; 0821100013

Fig. 2



- 1) Electrical connector
- 2) adjustment screw
- 3) adjustment protection
- 4) cylinder screw M5x35 (included in scope of delivery)
- 5) O-ring Ø5x1.5 (included in scope of delivery)
- * 0 mm for 0821100023 and 0821100024

PIN assignment for electrical connector



- 1) +UB
- 2) break contact
- 3) make contact
- 4) GND

Accessory Devices - Pressure Gauges

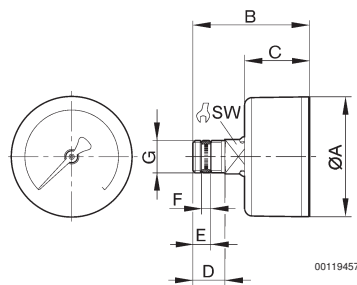
Pressure gauges, Series PG1
1/4 NPT connection



Ambient temperature min./max. 32 F / 122 F (+0°C / +50°C)
 Medium compressed air acc. to ISO 8573-1: 2001
 Compressed air class class 6-4-3
 Version Bourdon tube pressure gauge
 Outer Scale in PSI
 Inner Scale in Bar
 Housing color black housing
 black face
 white outer scale
 white part number
 grey inner scale
 Class 2.5 (Accurate to 2.5% of full scale pressure)
 materials:
 Housing polyamide
 Seal PTFE (polytetrafluoroethylene)
 Thread brass

	Version	Port	Display range [psi]	Application [psi]	Housing diameter [in]	Weight [lb]	Scale value [psi]	Part No.
	ROB-SAS	1/8 NPT	0 - 40	0 - 30	1.58	0.2	1	R412010060
		1/8 NPT	0 - 60	0 - 45	1.58	0.2	2	R412010061
		1/8 NPT	0 - 100	0 - 75	1.58	0.2	2	R412010062
		1/8 NPT	0 - 160	0 - 120	1.58	0.2	5	R412010063
		1/8 NPT	0 - 200	0 - 150	1.58	0.2	5	R412010064
		1/8 NPT	0 - 300	0 - 225	1.58	0.2	10	R412010065
		1/4 NPT	0 - 40	0 - 30	1.97	0.2	1	R412010066
		1/4 NPT	0 - 60	0 - 45	1.97	0.2	2	R412010067
		1/4 NPT	0 - 100	0 - 75	1.97	0.2	2	R412010068
		1/4 NPT	0 - 160	0 - 120	1.97	0.2	5	R412010069
		1/4 NPT	0 - 200	0 - 150	1.97	0.2	5	R412010070
		1/4 NPT	0 - 300	0 - 225	1.97	0.2	10	R412010071
		1/4 NPT	0 - 40	0 - 30	2.48	0.22	1	R412010072
		1/4 NPT	0 - 60	0 - 45	2.48	0.22	2	R412010073
		1/4 NPT	0 - 100	0 - 75	2.48	0.22	2	R412010074
		1/4 NPT	0 - 160	0 - 120	2.48	0.22	5	R412010075
		1/4 NPT	0 - 200	0 - 150	2.48	0.22	5	R412010076
1/4 NPT	0 - 300	0 - 225	2.48	0.22	10	R412010077		

dimensions (in inches, unless otherwise noted)



Ø	G	ØA	B	C	D	SW							
40mm	1/8 NPT	1.58	1.75	0.93	0.39	14mm							
50mm	1/4 NPT	1.93	1.87	1.05	0.51	14mm							
63mm	1/4 NPT	2.48	1.90	1.15	0.51	14mm							

Accessory Devices - Pressure Gauges

Pressure gauges, Series PG1
G1/4 connection



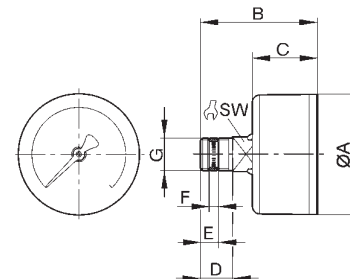
00123444

Ambient temperature min./max.	+0°C / +50° C (+32°F /+122°F)
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
Version	Bourdon tube pressure gauge
Class	2,5
Materials:	
Housing	Polyamide
Seal	Polytetrafluorethylene (PTFE)
Thread	brass

Symbol	Port	Display range		Application	Housing dia.		Weight		Part No.
		psi [bar]	psi [bar]		inch [mm]	lbs.[kg]			
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	1.58" (40)	0.176 (0.08)	R412004407			
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	1.58" (40)	0.176 (0.08)	R412004408			
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	1.58" (40)	0.176 (0.08)	R412004409			
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	1.58" (40)	0.176 (0.08)	R412004410			
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	1.58" (40)	0.176 (0.08)	R412004411			
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	1.58" (40)	0.176 (0.08)	R412004412			
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	1.97" (50)	0.198 (0.09)	R412004413			
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	1.97" (50)	0.198 (0.09)	R412004414			
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	1.97" (50)	0.198 (0.09)	R412004415			
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	1.97" (50)	0.198 (0.09)	R412004416			
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	1.97" (50)	0.198 (0.09)	R412004417			
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	1.97" (50)	0.198 (0.09)	R412004418			
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	2.48" (63)	0.22 (0.1)	R412004419			
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	2.48" (63)	0.22 (0.1)	R412004420			
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	2.48" (63)	0.22 (0.1)	R412004421			
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	2.48" (63)	0.22 (0.1)	R412004422			
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	2.48" (63)	0.22 (0.1)	R412004423			
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	2.48" (63)	0.22 (0.1)	R412004424			

Housing and Dial: black

Dual Scales: bar = white (outside); psi = gray (inside)



Ø (mm/Inch)	ØA	B	C	D	E	F	G	SW (A/F) (mm)
40 / 1.58"	1.537	1.752	0.926	0.394	0.221	0.083	G 1/4	14 mm
50 / 1.97"	1.931	1.872	1.044	0.512	0.284	0.146	G 1/4	14 mm
63 / 2.48"	2.443	1.872	1.143	0.512	0.284	0.146	G 1/4	14 mm

Dimensions in inches.

Accessory Devices - Pressure Gauges

Pressure gauges, Series PG1
G1/8 connection



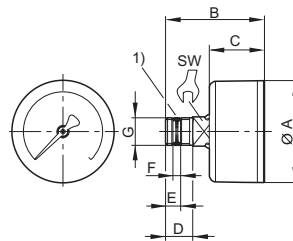
00123444

ATEX	II 2G2D T4 X
Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Main scale unit (outside)	bar
Secondary scale unit (inside)	psi
Ambient temperature min./max.	-40°C / +60°C
Medium	Compressed air
Pointer color	White
Main scale color (outside)	White
Secondary scale color (inside)	Grey
Class	2,5

Materials:	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Polystyrene
Seal	Polytetrafluorethylene

	Compressed air connection	Nominal diameter	Application	Display range	Operating pressure	Scale value	Weight	Part No.
		[mm]	[bar]	[bar]	[bar]		[kg]	
	G 1/8	40	0 - 1.2	0 - 1.6	0 / 1.6	0.05	0.08	R412003853
			0 - 2	0 - 2.5	0 / 2.5	0.1		R412003854
			0 - 3.2	0 - 4	0 / 4	0.1		R412003855
			0 - 4	0 - 6	0 / 6	0.2		R412003856
			0 - 8	0 - 10	0 / 10	0.2		R412003857
			0 - 12	0 - 16	0 / 16	0.5		R412003858

Dimensions



00119457

Compressed air connection G	Nominal diameter	Ø A	B	C	D	E	F 1)	SW				
G 1/8	40	39	44.5	26.5	10	5.6	2.1	14				

1) Gasket thread

Accessory Devices - Pressure Gauges

Pressure gauges, Series PG1-SFB
1/8" NPT connection, 304 stainless steel



17229

Version
Main scale unit (outside)
Medium
Pointer color
Main scale color (outside)
Class

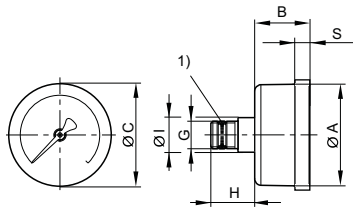
Bourdon tube pressure gauge
psi
Compressed air
Black
Black
2

Materials:
Housing
Thread
Viewing window
pointer

Stainless steel
Stainless steel
safety glass
Stainless steel

	Compressed air connection	Nominal diameter	Application	Display range	Operating pressure	Scale value	Ambient temperature min./max.	Weight	Part No.
		[mm]	[psi]	[psi]	[psi]		[°C]	[kg]	
	1/8 NPT	40	0 - 130	0 - 200	0 / 200	5	-40 / 120	0.08	R432035768

Dimensions in mm



0017229

1) Gasket thread

Compressed air connection G	Nominal diameter	Ø A	B	C	H	I	S					
1/8 NPT	40	40.8	27.5	42.2	18	14	7.8					

The values are in shown in mm. (Conversion factor 1 inch = 25.4 mm)

Accessory Devices - Pressure Gauges

Pressure gauges, Series PG1-SFB
R 1/8 connection, stainless steel



17147

Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Main scale unit (outside)	bar
Secondary scale unit (inside)	psi
Ambient temperature min./max.	-25 °C / +60 °C
Medium	Compressed air
Pointer color	Black
Main scale color (outside)	Black
Secondary scale color (inside)	Grey
Class	2,5

Materials:	
Housing	Stainless steel
Thread	Stainless steel
pointer	Stainless steel


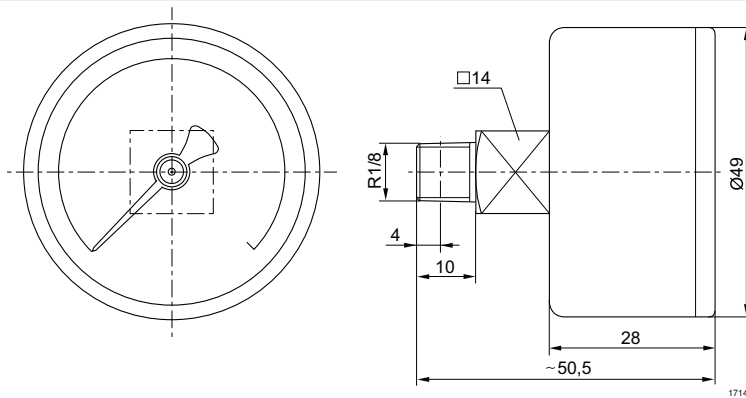
	Compressed air connection	Nominal diameter	Application	Display range	Operating pressure	Scale value	Weight	Note	Part No.
		[mm]	[bar]	[bar]	[bar]		[kg]		
	R 1/8	50	0 - 10	0 - 12	0 / 12	0.2	0.091	Fig. 1	R412010678
								Fig. 2	R412010679

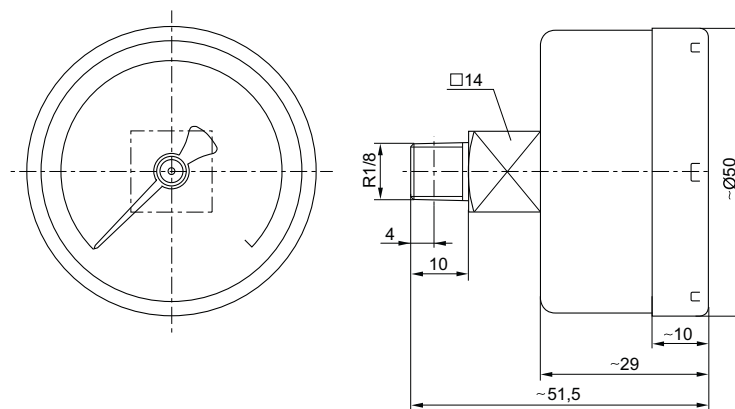
Fig. 1 Polycarbonate viewing window
Fig. 2 Safety glass viewing window

Dimensions, Fig. 1



17148

Dimensions, Fig. 2



17149

Accessory Devices - Pressure Gauges

Pressure gauges, pipe mount
NPT connection



Material: Steel case, black

Background: White

Graduations: psi/bar

PSI - Pounds per square inch

For use with compressed air or other inert gases.

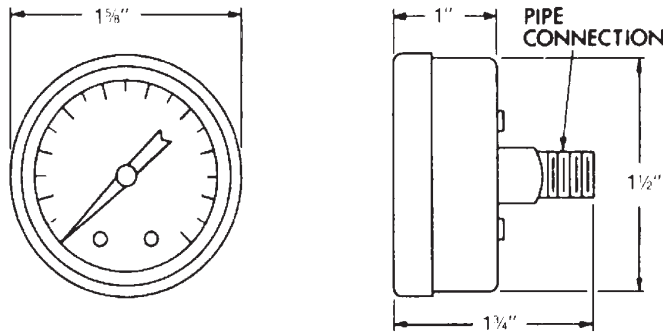
Air gauges are generally most accurate at about half their maximum dial marking and should be ordered with dials approximately double the working pressure desired.



Dial size	Pressure range	Drawing Ref.	Dial graduations	Pipe connection	Part number	Old part no.
1 1/2"	0-60 psig	No. 1	2 psi	1/8"-27 NPT	R432012182	P -049788-00006
1 1/2"	0-200 psig	No. 1	5 psi	1/8"-27 NPT	R432012183	P -049788-00007
2"	0-60 psig	No. 2	2 psi	1/8"-27 NPT	R432012179	P -049788-00003
2"	0-60 psig	No. 2	2 psi	1/4"-18 NPT	R432012181	P -049788-00005
2"	0-160 psig	No. 2	2 psi	1/8"-27 NPT	R432012176	P -049788-00000
2"	0-160 psig	No. 2	2 psi	1/4"-18 NPT	R432012178	P -049788-00002
2"	0-300 psig	No. 2	5 psi	1/8"-27 NPT	R432012177	P -049788-00001
2"	0-300 psig	No. 2	5 psi	1/4"-18 NPT	R432012180	P -049788-00004

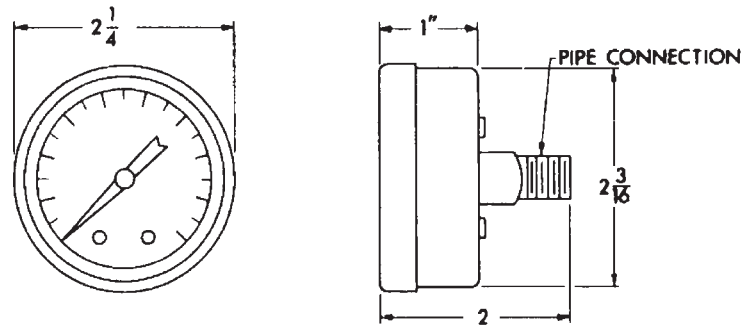
Dimensions No. 1

1 1/2" WHITE DIAL - BLACK STEEL CASE PIPE MOUNTED



Dimensions No. 2

2" WHITE DIAL - BLACK STEEL CASE PIPE MOUNTED



Accessory Devices - Pressure Gauges

Pressure gauges, panel mount, fluid filled
NPT connection



Material: Steel case, chrome plated mount flange and face cover, brass socket

Fluid filled, safety glass lens

Background: White

Graduations: psi

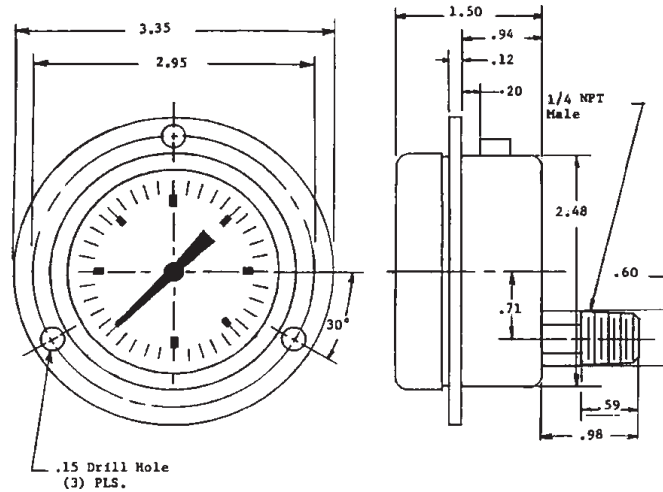
PSI - Pounds per square inch

For use with compressed air or other inert gases.

Air gauges are generally most accurate at about half their maximum dial marking and should be ordered with dials approximately double the working pressure desired.



Dial size	Pressure range	Dial graduations	Pipe connection	Part number	Old part no.
2 1/4"	0-160 psig	5 psi	1/4"-18 NPT	R432011829	P-048134-0000

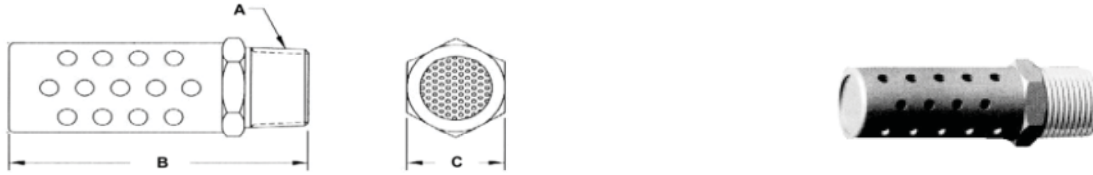


Accessory Devices - Silencers

Silencers, NPT threads
Metal construction



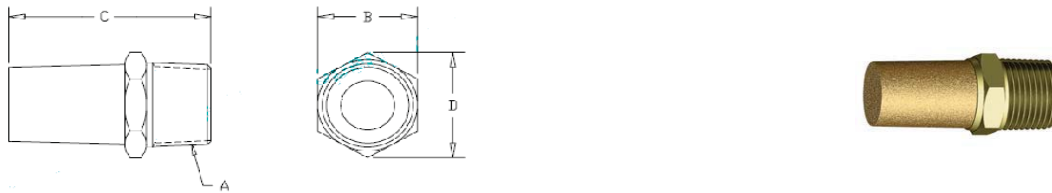
Canister-Style Silencer - NPT Threads



Recommended for pressures up to 125 PSI. Construction of brass and zinc-plated steel.

Part Number	A	B (in.)	C (in.)	Flow (SCFM) at 90 psi	Weight (oz.)
R432012062	1/8-27 NPT	1.38	0.43	44	0.02
R432012060	1/4-18 NPT	1.75	0.56	96	0.05
R432012058	3/8-18 NPT	2.10	0.68	200	0.08
R432011952	1/2-14 NPT	2.75	0.87	450	0.50
R432012059	3/4-14 NPT	3.15	1.06	560	0.30
R432012057	1-11 1/2 NPT	3.87	1.31	800	0.50
R432012061	1 1/4-11 1/2 NPT	4.50	1.68	1120	0.85

Sintered Bronze Cone Silencer - NPT Threads



Recommended for pressures up to 125 PSI. Construction brass and bronze. Porosity: 40 micron

Part Number	A	B (in.)	C (in.)	D (in.)
R432000825	1/8-27 NPT	7/16	0.89	0.50
R432000826	1/4-18 NPT	9/16	1.28	0.65
R432000827	3/8-18 NPT	11/16	1.52	0.81
R432000828	1/2-14 NPT	7/8	1.98	1.03
R432000829	3/4-14 NPT	1 1/16	2.28	1.25

Sintered Bronze Breather/Vent - NPT Threads



Recommended for pressures up to 125 PSI. Construction brass and bronze. Porosity: 90 micron

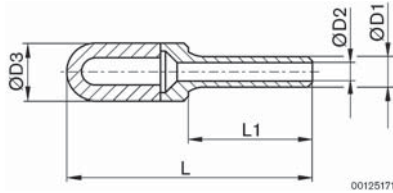
Part Number	A	B (in.)	C (in.)	D (in.)
R432000830	1/8-27 NPT	0.40	7/16	0.50
R432000831	1/4-18 NPT	0.68	9/16	0.65
R432000832	3/8-18 NPT	0.79	11/16	0.81
R432000833	1/2-14 NPT	0.97	7/8	1.03
R432000834	3/4-14 NPT	1.06	1 1/16	1.25

Accessory Devices - Silencers

Silencers, inch, push-in type
Polyethylene construction



◆ Silencers, Inch push-in type, polyethylene



Part No.	Ø D1	Ø D2	Ø D3	L1	L	Flow SCFM
R412005727	1/4"	0.14	0.49	0.81	1.77	1.1*
R412005728	3/8"	0.26	0.61	1.04	2.26	2.3*
R412007714	1/2"	0.36	0.73	1.14	3.23	2.1**

All dimensions in inches.

*Minimum based on 0.73 psi backpressure.

**Minimum based on 0.36 psi backpressure.

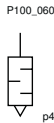
Accessory Devices - Silencers

Silencers, metric, Series SI1
Conical, sintered bronze

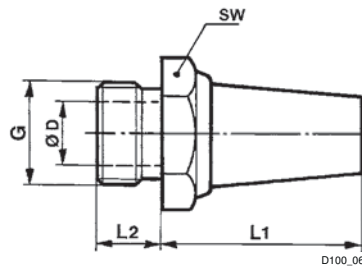


Working pressure min./max. 0 bar / 10 bar
Ambient temperature min./max. -25°C / +80°C
Medium Compressed air

Materials:
Silencers Sintered bronze
Thread Brass



Dimensions



Part No.	Port G	Sound pressure level [db(A)]	Qn [l/min]	SW	Ø D	L1	L2	Weight [kg]	Delivery quantity [Piece]
1827000006	M5	72	460	7	2.5	15	5	0.004	10
8140000700	M7	-	-	10	4	15	5	0.006	10
1827000000	G 1/8	75	1500	13	6	18	6	0.01	10
R412004817	G 1/4	-	-	16	8.5	18.7	7.6	0.013	10
1827000001	G 1/4	79	2900	17	8.5	25	8	0.02	10
1827000002	G 3/8	84	5900	22	12	34	10	0.05	5
1827000003	G 1/2	90	7100	27	14.5	44	12	0.08	2
1827000004	G 3/4	92	8800	32	19	66	14	0.13	1
1827000005	G 1	102	11100	41	25	66	16	0.18	1

Sound pressure level measured at 6 bar at 1 m distance

Accessory Devices - Silencers

Silencers, metric, Series SI1
Low profile, sintered bronze

Rexroth
Bosch Group



P100_037



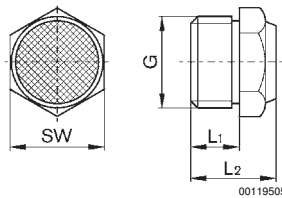
Working pressure min./max.
Ambient temperature min./max.
Medium

0 bar / 10 bar
-25°C / +80°C
Compressed air

Materials:
Silencers
Thread

Sintered bronze
Brass

Dimensions



00119505

Part No.	Port G	Sound pressure level [db(A)]	Qn [l/min]	L1	L2	SW	Weight [kg]	Delivery quantity [Piece]		
1827000032	M5	79	280	5	10.3	7	0.005	10		
1827000031	G 1/8	85	640	6	11.5	13	0.001	10		
1827000033	G 1/4	88	900	8	13.5	17	0.01	10		
1827000034	G 3/8	90	1750	10	17.5	22	0.016	5		
1827000035	G 1/2	85	2000	12	19.5	27	0.035	2		
8145003400	G 3/4	82	3400	14	22.5	32	0.095	1		
8145001000	G 1	82	5100	16	22.5	41	0.057	1		

Sound pressure level measured at 6 bar at 1 m distance

Accessory Devices - Silencers

Silencers, metric, Series SI1
Canister type, aluminum

Rexroth
Bosch Group



00134016



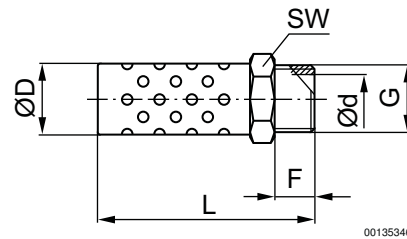
Working pressure min./max.
Ambient temperature min./max.
Medium

0 bar / 15 bar
-10°C / +150°C
Compressed air

Materials:
Silencers
Thread

Metal braiding
Aluminum

Dimensions



00135346

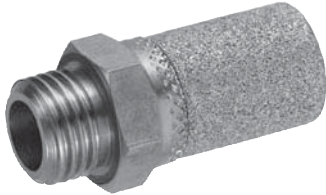
Part No.	Port G	Sound pressure level [db(A)]	Qn [l/min]	L	F	D	d	SW	Delivery quantity [Piece]
R412010283	G 1/8	94	520	33.5	6	10.4	6	11	10
R412010245	G 1/4	96	810	42.5	8.5	13.4	8.5	14	10
R412010246	G 3/8	98	1800	49.2	9	16.5	12	17	5
R412010247	G 1/2	100	3000	65.2	11	21.5	15	22	5
R412010248	G 3/4	102	5800	74.5	12	16.5	20	27	2
R412010249	G 1	104	8500	91	15.5	32.3	26	33	2

Sound pressure level measured at 6 bar at 1 m distance

Accessory Devices - Silencers

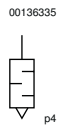
Silencers, metric, Series SI1
Stainless steel

Rexroth
Bosch Group

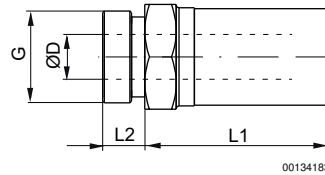


Working pressure min./max. 0 bar / 12 bar
Ambient temperature min./max. -20°C / +150°C
Medium Compressed air

Materials:
Silencers Stainless steel
Thread Stainless steel



Dimensions



Part No.	Port G	Sound pressure level [db(A)]	Qn [l/min]	SW	Ø D	L1	L2	Weight [kg]	Delivery quantity [Piece]
R412010090	M5	85	125	8	3.1	10.5	3.5	0.003	1
R412010081	G 1/8	90	465	13	6.6	20	6	0.011	1
R412010082	G 1/4	93	850	16	8.6	29.5	7.5	0.021	1
R412010083	G 3/8	101	1300	19	12.1	33.5	7.5	0.028	1
R412010084	G 1/2	95	1915	24	15.3	39.5	9.5	0.048	1
R412010085	G 3/4	110	2415	30	19.3	45	10	0.076	1
R412010086	G 1	100	6000	36	25.5	49.5	11.5	0.099	1

Sound pressure level measured at 6 bar at 1 m distance

Accessory Devices - Silencers

Silencers, metric, Series SI1
Polyethylene threaded and push-in

Rexroth
Bosch Group



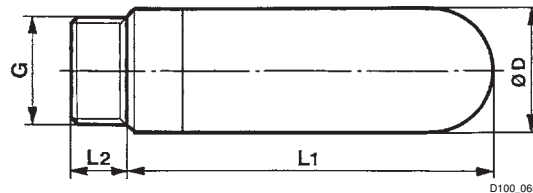
P100_064



Working pressure min./max. 0 bar / 10 bar
Ambient temperature min./max. -25°C / +80°C
Medium Compressed air

Materials:
Silencers Polyethylene
Thread Polyethylene

Dimensions



D100_065

Part No.	Port G	Sound pressure level [db(A)]	Qn [l/min]	Ø D	L1	L2	Weight [kg]	Delivery quantity [Piece]
1827000018	M5	-	-	6.5	17.5	4	0.001	5
1827000019	G 1/8	78	1500	12.5	28.5	5.5	0.002	5
1827000020	G 1/4	80	3100	15.5	34.5	8	0.003	5
1827000021	G 3/8	85	5300	18.5	56	11.5	0.008	2
1827000022	G 1/2	88	7000	23.3	66.5	11	0.013	1
1827000023	G 3/4	-	-	38.5	115.5	16	0.04	1
1827000024	G 1	-	-	49	140	21	0.055	1

Sound pressure level measured at 6 bar at 1 m distance



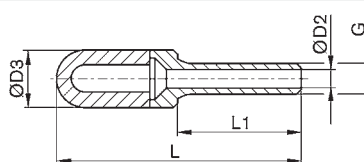
00124883



Working pressure min./max. 0 bar / 10 bar
Ambient temperature min./max. -25°C / +80°C
Medium Compressed air

Materials:
Silencers Polyethylene
Thread Polyethylene

Dimensions



00125171

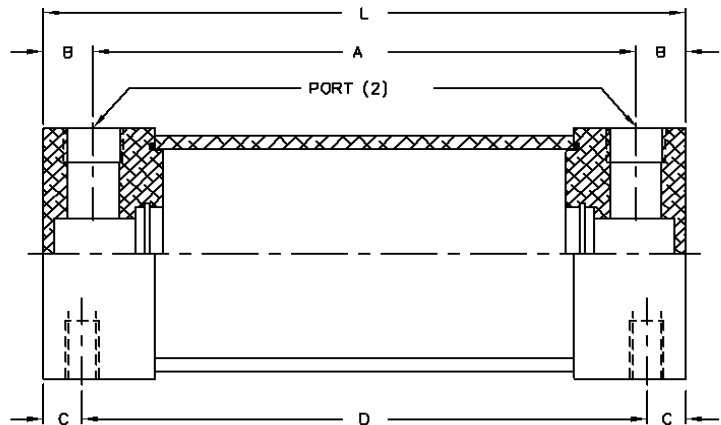
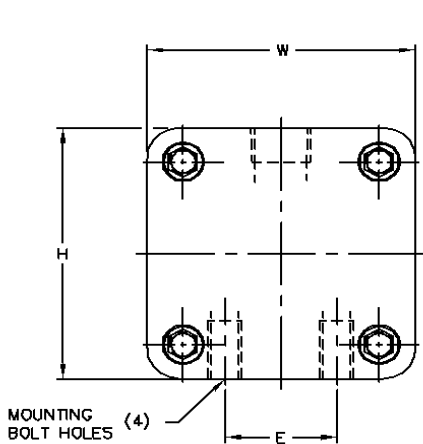
Part No.	Port G	Qn [l/min]	Ø D2	Ø D3	L1	L	Weight [kg]	Delivery quantity [Piece]
R412007519	Ø 4	15	2.5	7	16	32	0.002	5
R412007899	Ø 6	30	3.5	10	20.5	45	0.002	5
R412000591	Ø 6	30	3.5	12.5	20.5	45	-	5
R412007520	Ø 8	45	4.8	13.5	21.5	43.5	0.002	5
R412000593	Ø 10	70	6.9	15.5	26.5	57.5	0.004	5
R412007715	Ø 12	-	8.4	18.5	29	82	0.007	5

Accessory Devices - Timing Volume

Pneumatic timing volume



REXROTH offers a wide range of timing volumes for a variety of pneumatic system uses. These volumes are rated at 200 psi (13.8 bar) maximum working pressure with a 5 to 1 safety factor. They are constructed of lightweight, corrosion resistant anodized aluminum ends and tubing. Each end has two threaded mounting holes.



Volume Capacity Cu. Inch*	Overall Size			Dimensions (Ports)			Mounting Holes				Part Number	Weight (lbs.)
	H	W	L	Thread*	A	B	Thread	C	D	E		
5	2	2	5-5/16	1/4-18	4-3/16	9/16	1/4-20	7/16	4-7/16	5/8	R432013441	1.0
8	2	2	7-1/16	1/4-18	5-15/16	9/16	1/4-20	7/16	6-3/16	5/8	R432013442	1.3
8	3	3	4-5/16	1/4-18	3-3/16	9/16	3/8-16	7/16	3-7/16	1-1/4	R434002910	1.8
12	2	2	9-5/16	1/4-18	8-3/16	9/16	1/4-20	7/16	8-7/16	5/8	R432013443	1.5
12	3	3	5-3/16	1/4-18	4-1/16	9/16	3/8-16	7/16	4-5/16	1-1/4	R434002897	2.0
20	2	2	13-13/16	1/4-18	12-11/16	9/16	1/4-20	7/16	12-15/16	5/8	R432013444	2.0
20	3	3	6-13/16	1/4-18	5-11/16	9/16	3/8-16	7/16	5-15/16	1-1/4	R434002896	2.3
20	4-1/2	4-1/2	4-1/8	3/8-18	3-1/8	1/2	1/2-13	9/16	3	2-1/16	R434002906	3.8
30	3	3	8-13/16	1/4-18	7-11/16	9/16	3/8-16	7/16	7-15/16	1-1/4	R434002895	2.6
30	4-1/2	4-1/2	4-7/8	3/8-18	3-7/8	1/2	1/2-13	9/16	3-3/4	2-1/16	R434002905	4.1
45	3	3	11-15/16	1/4-18	10-13/16	9/16	3/8-16	7/16	11-1/16	1-1/4	R434002894	3.2
45	4-1/2	4-1/2	6-1/8	3/8-18	5-1/8	9/16	1/2-13	9/16	5	2-1/16	R434002904	4.7
60	4-1/2	4-1/2	7-3/8	3/8-18	6-3/8	1/2	1/2-13	9/16	6-1/4	2-1/16	R434004028	5.2
80	4-1/2	4-1/2	8-7/8	3/8-18	7-7/8	1/2	1/2-13	9/16	8-1/8	2-1/16	R434002903	5.8
100	4-1/2	4-1/2	10-1/2	3/8-18	9-1/2	1/2	1/2-13	9/16	9-3/8	2-1/16	R434002902	6.6
225	4-1/2	4-1/2	20-1/2	3/8-18	19-1/2	1/2	1/2-13	9/16	19-1/4	2-1/16	R434002899	10.9

*NPTF ports

Dimensions in inches.

Other sizes available, contact factory.

Accessory Devices - Shock Absorbers

Shock absorbers, Series 370



2711-081

Ambient temperature min./max. -10°C / +70°C
 Medium temperature min./max. -10°C / +70°C
 Medium Oil

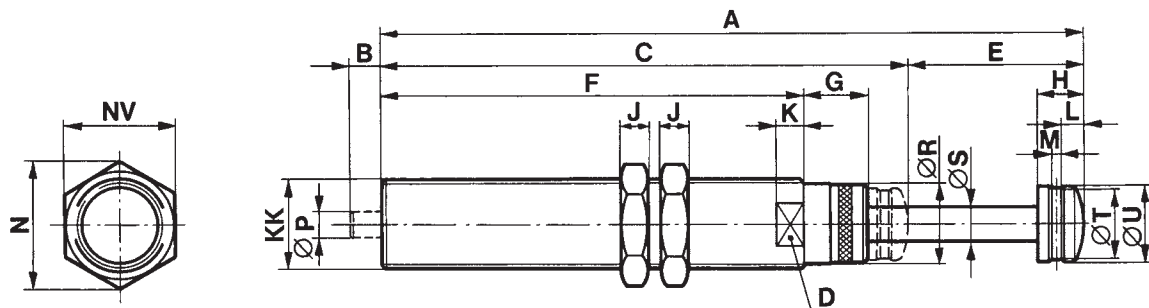
Materials:
 Cylinder tube Steel, bronzed
 Piston rod Steel, hard chromated
 Lock nut Steel, bronzed
 Stop Steel, hardened

Type	Stroke	Effective mass me min./max.	Return spring force min./max.	Absorption energy/stroke max.	Absorption energy/hour max.	Part No.
	[mm]	[kg]	[N]	[Nm]	[Nm/h]	
370-MA	25	10 / 500	25 / 40	60	54000	3701202000
	40	15 / 500	25 / 40	100	54000	3701204000
	50	50 / 5000	50 / 90	375	126000	3702005000
	80	50 / 5000	50 / 90	600	126000	3702008000

Part No.	Mounting thread	Weight [kg]
3701202000	M27x2	0.5
3701204000	M27x2	0.5
3702005000	M42x3	1.85
3702008000	M42x3	1.85

Adjustable stop weight and speed comes with 2 counter nuts

Note: Maximum side load mis-alignment is 5 degrees.



D370_003

Part number	KK	A	B	C	D	E	F	G	H	J	K	L
3701202000	M27x2	183	6.5	158	24	25	115	27	16	8	10	7.5
3701204000	M27x2	198.5	9.5	158	24	40	115	27	16	8	10	7.5
3702005000	M42x3	297	5.5	247	39	50	197	30	20	12	13	9
3702008000	M42x3	326	5.5	247	39	80	197	30	20	12	13	9

Part number	M	N	P	R	S	T	U	NV
3701202000	5	37	6	23.5	12	22	23	32
3701204000	5	37	6	23.5	12	22	23	32
3702005000	6	58	8	37.5	16	34	35	50
3702008000	6	58	8	37.5	16	34	35	50

Note: Additional shock absorbers, Series SA1 and SA2 available in the online catalog.

NOTICES TO PRODUCT USERS

1. WARNING: FLUID MEDIA

Bosch Rexroth pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, Bosch Rexroth must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fire-resistant or other special types of fluids may require special packing and seals. Consult the factory.

2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids Bosch Rexroth's warranty and can result in product failure or other malfunction. See lubrication recommendations below.

AIR LINE LUBRICANTS! In service higher than 18 cycles per minute or with continuous flow of air through the device, an air line lubricator is recommended. * (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. Bosch Rexroth recommends the use of only petroleum-based oils without synthetic additives, and with an aniline point between 180° and 210° F.

COMPRESSOR LUBRICANTS! All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants. It is recommended that users review the National Fluid Power Association "Recommended Guide Lines For Use Of Synthetic Lubricants In Pneumatic Fluid Power Systems" (NFPA T1-1978).

3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

INSTALLATION! Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision. Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when system is under pressure. Always exhaust or drain the pressure from system before performing any service work. Failure to do so can result in serious personal injury.

MOUNTING! Devices should be mounted and positioned in such manner that they cannot be accidentally operated.

4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of malfunction.

5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

MAINTENANCE AND REPAIR! Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All Bosch Rexroth products should provide minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require major repair as result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

*Many Bosch Rexroth pneumatic components can operate with or without air line lubrication; see individual sales catalogs for details.

--Refer to the appropriate service catalog for parts and service information.

LIMITATIONS OF WARRANTIES & REMEDIES

Bosch Rexroth warrants its products sold by it to be free from defects in material and workmanship to the following:

For twelve months after shipment Bosch Rexroth will repair or replace (F.O.B. our works), at its option, any equipment which under normal conditions of use and service proves to be defective in material or workmanship at no charge to the purchaser. No charge will be made for labor with respect to defects covered by this Warranty, provided that the work is done by Bosch Rexroth or any of its authorized service facilities. However, this Warranty does not cover expenses incurred in the removal and reinstallation of any product, nor any downtime incurred, whether or not proved defective.

All repairs and replacement parts provided under this Warranty policy will assume the identity, for warranty purposes, of the part replaced, and the warranty on such replacement parts will expire when the warranty on the original part would have expired. Claims must be submitted within thirty days of the failure or be subject to rejection.

This Warranty is not transferable beyond the first using purchaser. Specifically, excluded from this Warranty are failures caused by misuse, neglect, abuse, improper operation or filtration, extreme temperatures, or unauthorized service or parts. This Warranty also excludes the use of lubricants, fluids or air line additives that are not compatible with seals or diaphragms used in the products. This Warranty sets out the purchaser's exclusive remedies with respect to products covered by it, whether for negligence or otherwise. Neither, Bosch Rexroth nor any of its affiliates will be liable for consequential or incidental damages or other losses or expenses incurred by reason of the use or sale of such products. Our liability (except as to title) arising out of the sale, use or operation of any product or parts, whether on warranty, contract or negligence (including claims for consequential or incidental damage) shall not in any event exceed the cost of replacing the defective products and, upon expiration of the warranted period as herein provided, all such liability is terminated. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. No attempt to alter, amend or extend this Warranty shall be effective unless authorized in writing by an officer of Bosch Rexroth Corporation.

Bosch Rexroth reserves the right to discontinue manufacture of any product, or change product materials, design or specifications without notice.

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Further contacts

www.boschrexroth.com/addresses

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.