FUNCTION FITTINGS

	Materials	Fluids	Maximum Pressure (bar)	Temperature		Performance in Aggressive Environments		Page
				Min.	Max.	Mechanical	Chemical	
Function Fittings								
Polymer Flow Control Regulators 	Technical polymer/nickel-plated brass/NBR	Compressed air	10	0°C	+70°C	Good	Moderate	**92**
Metal Flow Control Regulators, Brass 	Treated brass/ nickel-plated brass/ NBR	Compressed air	10	-25°C	+70°C	Excellent	Moderate	**96**
Metal Flow Control Regulators, Stainless Steel 	Stainless steel 316L/ FKM	Compressed air	40	-15°C	+120°C	Excellent	Excellent	**99**
Blocking Fittings 	Nickel-plated brass/ NBR	Compressed air	10	-20°C	+70°C	Excellent	Good	**111**
Piloted Non-Return Valves 	Technical polymer/nickel-plated brass/NBR	Compressed air	10	-5°C	+60°C	Good	Moderate	**113**
Metal Quick Exhaust Valves 	Nickel-plated brass, aluminium, stainless steel/PU-FKM	Compressed air	10	-20°C	+70°C	Excellent	Excellent	**115**
Polymer Non-Return Valves 	Technical polymer/nickel-plated brass/NBR	Compressed air	10	0°C	+70°C	Good	Moderate	**117**
Adjustable Non-Return Valves 	FDA chemical plated brass/NBR-FKM	Compressed air	12	-20°C	+80°C	Excellent	Excellent	**119**
LIQUIfit® **Non-Return Valves** 	POM/EPDM	Compressed air, drinkable water, treated water, beverages	10	0°C	+65°C	Good	Moderate	**121**
Stainless Steel Non-Return Valves 	Stainless steel/FKM	Many fluids	40	-20°C	+180°C	Excellent	Excellent	**122**
Soft Start Fittings 	Polymer nickel-plated brass/NBR	Compressed air	10	-15°C	+60°C	Good	Good	**123**
Pressure Regulators 	Polymer nickel-plated brass/NBR	Compressed air	10	-5°C	+60°C	Good	Good	**125**

	Materials	Fluids	Maximum Pressure (bar)	Temperature		Performance in Aggressive Environments		Page
				Min.	Max.	Mechanical	Chemical	
Pneumatic Sensor Fittings 	Polymer, treated brass, NBR	Compressed air	8	-15°C	+60°C	Good	Good	**127**
Snap Fittings 	Polymer, nickel-plated brass, NBR	Compressed air	10	-20°C	+80°C	Excellent	Good	**129**
Manually-Operated Valves Manual Switch-Operated Valves 	Polymer, nickel-plated brass, NBR	Compressed air	10	-10°C	+80°C	Excellent	Good	**131**
Manually-Operated Valves Sleeve Valves 	Nickel-plated brass, aluminium, NBR	Compressed air	16	-5°C	+70°C	Excellent	Good	**131**
Silencers 	Polymer, sintered bronze, nickel-plated brass, stainless steel 316L	Compressed air	12	-20°C	+180°C	Good	Moderate	**133**

Selecting your Function Fitting

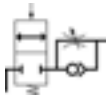
Protect Your System	**Blocking Fittings**	Maintain the load following an emergency stop of a pneumatic system.	Models **7880 - 7881 - 7883 - 7885 7886**
	Soft Start Fittings	Increase the pressure gradually in order to protect it from potentially damaging shock when a pneumatic system is restarted.	Models **7860 - 7861 - 7870 - 7871**
	Non-Return Valves	Allow compressed air or fluids to flow in one direction, and prevent it from flowing in the other. If the supply is accidentally shut off, the air can only escape in one direction.	Models **4890 - 4891 - 4892 - 4895 7930 - 7931 - 7932 - 7984 7985 - 7992 - 7994 -7995 7996**
	Piloted Non-Return Valves	Incorporate 3 functions into one product to protect your system: piloted non-return valve, flow control regulator and manual vent.	Models **7892 - 7894**
Detect End of Cylinder Rod Stroke	**Pneumatic Sensor Fittings**	Detect the back pressure drop at the end of stroke to produce a signal (pneumatic or electronic) to allow reciprocation.	Models **7818 - 7828**
Control and Improve the Performance of Your System	**Pressure Regulators**	Regulate and stabilise the pressure at a maximum determined value whatever the upstream pressure.	Models **7300**
	Quick Exhaust Valves	Increase the return speed of the cylinder by discharging the exhaust directly to atmosphere.	Models **7899 - 7970 - 7971**
	Silencers	Reduce the noise levels whilst air is vented from a compressed air system.	Models **0670 - 0671 - 0672 - 0673 0674 - 0675 - 0676 - 0677**
Working on Your System	**Snap Fittings**	Allow a circuit to be isolated without fully venting the system.	Models **7921 - 7926 - 7960 - 7961**
	Manually-Operated Valves	Allow for repeated venting by simply moving the valve sleeve or the manually-operated valve lever.	Models **0669 - 7800 - 7801 - 7802**

Symbols for Function Fittings

Regulating
air flow

Blocking
air circulation

Blocking
and **regulating** air flow



Controlling
allows the passage of fluid in one direction and prevents it in the other

Exhausting system
and **controlling** pneumatic circuit supply

Detecting
pressure drop

Regulating
pressure by stabilising at a required value

Reducing
pressure supply

Progressive
pressurising of circuits

Isolating a circuit
without venting the entire system

Regulating, blocking and **venting**
to protect the system and individuals

The comprehensive range of Parker Legris Flow Control Regulators provides a solution for all flow regulation functions in a pneumatic system.
Select the model suited to your application according to:

5 Key Requirements

1. Condition of Use

- **Standard** applications → **Technical polymer** models
- **Severe** applications → **Metal** models

2. Connection Options

- On **cylinder** or **threaded control valve** → Models with BSPP, BSPT and metric **threads**; Models with NPT **threads** on request
- On **cylinder** or **control valve with push-in connection** → **Plug-in** models

3. Dimensions

- **Standard applications** require full flow rate performance and compact overall dimensions → **Compact** models
- **Small diameter cylinders** require precise and accurate adjustment and minimum size → **Miniature** models

4. Type of Adjustment

- **Precise** adjustment with locking nut ensuring the setting remains **fixed** → Models with **external adjustment**
- **Precise** adjustment with **screwdriver** and **protection** against unwanted adjustment → Models with **recessed adjustment**

5. Installation Configuration

- Standard **applications** → **Banjo** models
- **Tube output** that can be positioned through 180° and swivels with the tube movement → Models with **swivel outlet**
- **Cylinder where access is difficult** or where another function fitting is installed in the cylinder port → **In-line** models

Flow Control Regulators

Available with technical polymer, nickel-plated brass or aluminium bodies, with external or recessed adjustment screws, Flow Control Regulators offer precise adjustment, accuracy and compactness.

Ø metric:
3 to 14 mm

Technical Characteristics

- **Compatible Fluids:** Compressed air
  Other fluids: contact us
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** 0°C to +70°C
  -25°C to +70°C (metal version)

Max. Tightening Torques (external adjustment screw)	Threads	M3 x0.5	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	0.06	0.16	0.8	1.2	3	3.5
Max. Tightening Torques (recessed adjustment screw)	Threads	-	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	-	0.1	0.4	0.5	0.6	0.7

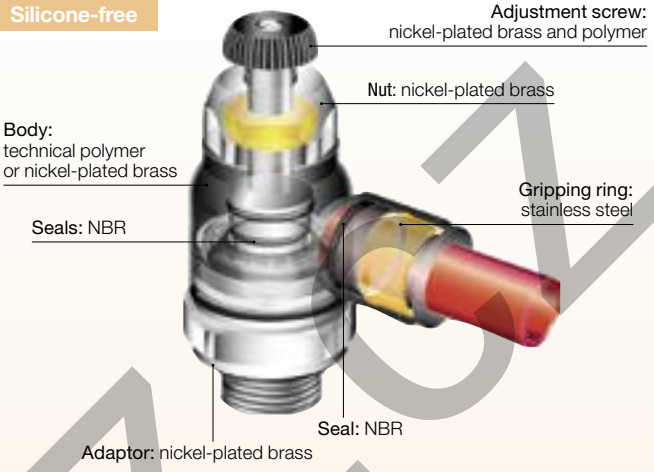
Reliable performance is dependent upon the type of fluid conveyed and component materials being used.

Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

You will find all the flow rate characteristic curves (to 6 bar) for Flow Control Regulators at the end of the chapter.

Component Materials

Silicone-free



Regulations

- **RoHS**
- **REACH**
- **PED**

Advantages

Productivity:
- Higher maximum flow than standard regulators
- Optimal control of the cylinder rod speed

Accuracy:
- Precise adjustment for accurate flow regulation
- Long-term stability of flow

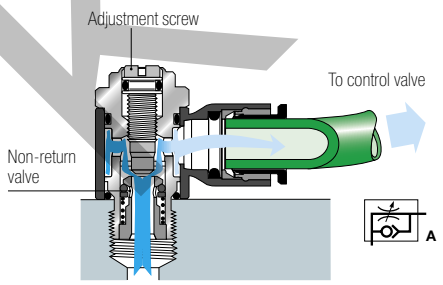
Ergonomics:
- External adjustment screw: easy to adjust ; Recessed adjustment screw: protects the adjustment mechanism
- Can be rotated 360° during assembly

Operation

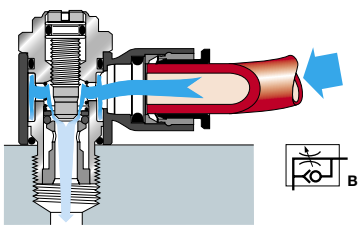
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.
The bi-directional models control the flow of air in both directions.
A more precise and constant flow regulation is obtained when the regulator is fitted directly onto the cylinder.

Models with Recessed Adjustment

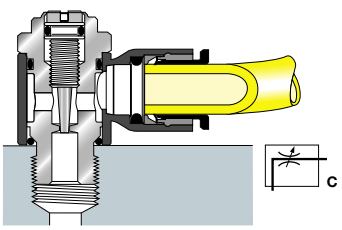
Uni-Directional (Exhaust Version)



Uni-Directional (Supply Version)

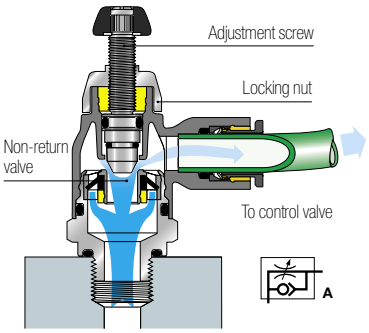


Bi-Directional Version

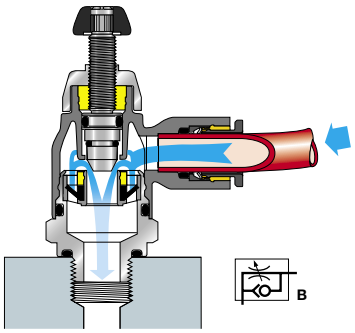


Models with External Adjustment

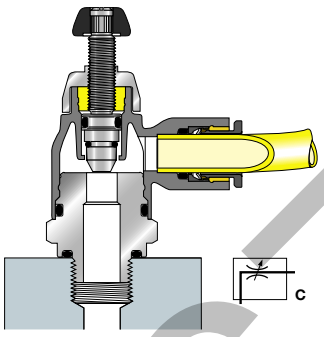
Uni-Directional (Exhaust Version)



Uni-Directional (Supply Version)

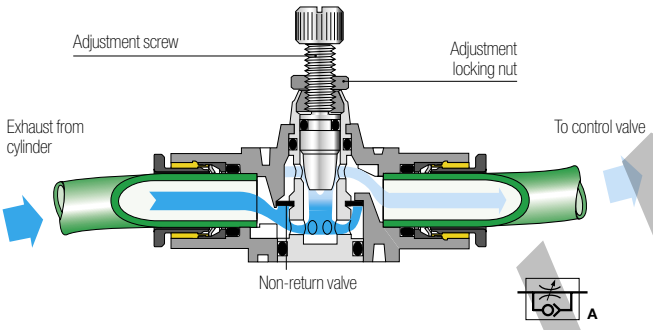


Bi-Directional Version

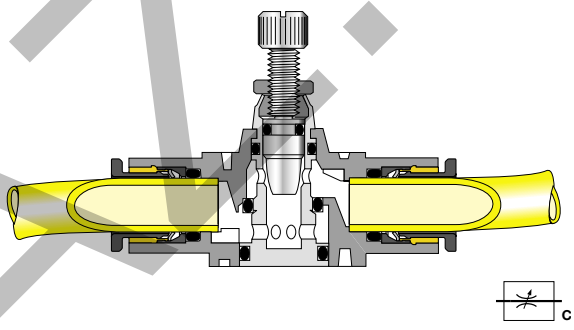


In-Line Models

Uni-Directional Version



Bi-Directional Version

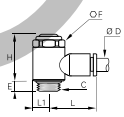


For instant visual identification, each Parker Legris flow control regulator version is identified by the related pneumatic symbol and by a letter:

- uni-directional regulation on exhaust: letter A
- uni-directional regulation on supply: letter B
- bi-directional regulation: letter C

7010 Flow Regulator Male BSPP and Metric Thread

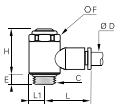
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	H	L	L1	Kg
4	M5x0.8	7010 04 19	4	8	17.5	17	5	0.006
	G1/8	7010 04 10	5	13	25	19	7	0.017
6	M5x0.8	7010 06 19	4	8	17.5	19	5	0.006
	G1/8	7010 06 10	5	13	25	21	7	0.018
	G1/4	7010 06 13	8	17	26.5	22	9.5	0.034
8	G1/8	7010 08 10	5	13	25	26	7	0.019
	G1/4	7010 08 13	8	17	26.5	27	9.5	0.035
	G3/8	7010 08 17	7.5	20	37.5	29	11	0.068
10	G1/4	7010 10 13	8	17	26.5	29	9.5	0.035
	G3/8	7010 10 17	7.5	20	37.5	31	11	0.067
	G1/2	7010 10 21	8	23	43	37	13.5	0.117
12	G3/8	7010 12 17	7.5	20	37.5	34.5	11	0.069
	G1/2	7010 12 21	8	23	43	37	13.5	0.108

7011 Flow Regulator Male BSPP and Metric Thread

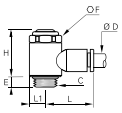
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	H	L	L1	Kg
4	M5x0.8	7011 04 19	4	8	17.5	17	5	0.006
	G1/8	7011 04 10	5	13	25	19	7	0.017
6	M5x0.8	7011 06 19	4	8	17.5	19	5	0.006
	G1/8	7011 06 10	5	13	25	21	7	0.018
	G1/4	7011 06 13	8	17	26.5	22	9.5	0.034
8	G1/8	7011 08 10	5	13	25	26	7	0.019
	G1/4	7011 08 13	8	17	26.5	27	9.5	0.034
	G3/8	7011 08 17	7.5	20	37.5	29	11	0.067
10	G1/4	7011 10 13	8	17	26.5	29	9.5	0.036
	G3/8	7011 10 17	7.5	20	37.5	31	11	0.068

7012 Bi-Directional Flow Regulator Male BSPP and Metric Thread

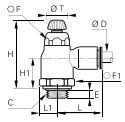
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	H	L	L1	Kg
4	M5x0.8	7012 04 19	4	8	17.5	17	5	0.006
	G1/8	7012 04 10	5	13	25	19	7	0.018
6	M5x0.8	7012 06 19	4	8	17.5	19	5	0.006
	G1/8	7012 06 10	5	13	25	21	7	0.019
	G1/4	7012 06 13	8	17	26.5	22	9.5	0.035
8	G1/8	7012 08 10	5	13	25	26	7	0.019
	G1/4	7012 08 13	8	17	26.5	27	9.5	0.036
	G3/8	7012 08 17	7.5	20	37.5	29	11	0.071

7060 Compact Flow Regulator Exhaust, Male BSPP Thread

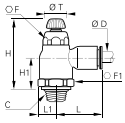
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	F1	H	H max	H1	L	L1	ØT	Kg
4	G1/8	7060 04 10	5	10	16	38	44	16	22	9	10	0.020
6	G1/8	7060 06 10	5	10	16	38	44	16	22	9	10	0.020
	G1/4	7060 06 13	5.5	10	16	36.5	42.5	15	22	9	10	0.020
8	G1/8	7060 08 10	4.5	14	19	41.5	48	18	28	10.5	14	0.032
	G1/4	7060 08 13	5.5	14	19	41.5	48	18.5	28	10.5	14	0.034
	G3/8	7060 08 17	5.5	14	19	41.5	48	17	28	11	14	0.034
10	G1/4	7060 10 13	5.5	17	23	45.5	53.5	20	31.5	12.5	17	0.053
	G3/8	7060 10 17	5.5	17	23	45.5	54	20	31.5	12.5	17	0.054
12	G3/8	7060 12 17	5.5	17	23	45.5	54	20	35	12.5	17	0.056
	G1/2	7060 12 21	7.5	17	24	45.5	54	20	35	13	17	0.058

7065 Compact Flow Regulator Exhaust, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR

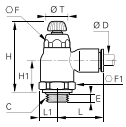


ØD	C		F	F1	H max	H min	H1	L	L1	ØT	Kg
6	R1/8	7065 06 10	10	16	42.5	36.5	15	22	8	10	0.021
8	R1/8	7065 08 10	14	19	45	40	16.5	28	10.5	14	0.034
	R1/4	7065 08 13	14	19	45	40	16.5	28	10.5	14	0.036
10	R1/4	7065 10 13	17	23	51.5	43.5	18	31.5	12.5	17	0.053
	R3/8	7065 10 17	17	23	51.5	43.5	18	31.5	12.5	17	0.055
	R1/2	7065 10 21	17	23	51.5	43.5	18	31.5	12.5	17	0.059
12	R1/4	7065 12 13	17	23	51.5	43.5	18	35	12.5	17	0.056
	R3/8	7065 12 17	17	23	51.5	43.5	18	35	12.5	17	0.059
	R1/2	7065 12 21	17	23	51.5	43.5	18	35	12.5	17	0.064

Pre-coated thread

7061 Compact Flow Regulator Supply, Male BSPP Thread

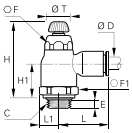
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	F1	H	H max	H1	L	L1	ØT	Kg
4	G1/8	7061 04 10	5	10	16	38	44	16	22	9	10	0.020
6	G1/8	7061 06 10	5	10	16	38	44	16	22	9	10	0.020
	G1/4	7061 06 13	5.5	10	16	36.5	42.5	15	22	9	10	0.021
8	G1/8	7061 08 10	4.5	14	19	41.5	48	18	28	10.5	14	0.033
	G1/4	7061 08 13	5.5	14	19	41.5	48	18.5	28	10.5	14	0.034
	G3/8	7061 08 17	5.5	14	23	41.5	48	17	28	11	14	0.033
10	G1/4	7061 10 13	5.5	17	23	45.5	53.5	20	31.5	12.5	17	0.053
	G3/8	7061 10 17	5.5	17	23	45.5	54	20	31.5	12.5	17	0.054
12	G1/2	7061 12 21	7.5	17	24	45.5	54	20	35	13	17	0.060

7062 Bi-Directional Compact Flow Regulator, Male BSPP Thread

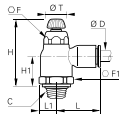
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	F1	H	H max	H1	L	L1	ØT	Kg
4	G1/8	7062 04 10	5	10	16	38	44	16	22	9	10	0.025
6	G1/8	7062 06 10	5	10	16	38	44	16	22	9	10	0.025
	G1/4	7062 06 13	5.5	10	16	36.5	42.5	15	22	9	10	0.025
8	G1/8	7062 08 10	4.5	14	19	41.5	48	18	28	10.5	14	0.043
	G1/4	7062 08 13	5.5	14	19	41.5	48	18.5	28	10.5	14	0.046
	G3/8	7062 08 17	5.5	14	19	41.5	48	17	28	11	14	0.042

7067 Bi-Directional Compact Flow Regulator, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR

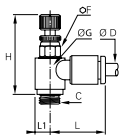


ØD	C		F	F1	H max	H min	H1	L	L1	ØT	Kg
4	R1/8	7067 04 10	10	16	42.5	36.5	14.7	22	9	10	0.025
6	R1/8	7067 06 10	10	16	42.5	36.5	14.7	22	9	10	0.010
	R1/4	7067 06 13	10	16	42.5	36.5	14.7	22	9	10	0.014
8	R1/8	7067 08 10	14	19	45	40	16.5	28	10.5	14	0.034
	R1/4	7067 08 13	14	19	45	40	16.5	28	10.5	14	0.036
	R3/8	7067 08 17	14	19	45	40	16.5	28	11	14	0.042

Pre-coated thread

7660 Miniature Flow Regulator Exhaust, Male BSPP and Metric Thread

Technical polymer, Nickel-plated brass, NBR

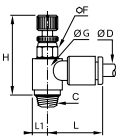


A

ØD	C		F	G	H max	H min	L	L1	Kg
3	M3x0.5	7660 03 09	6	9	26	23.5	17	4.5	0.007
	M5x0.8	7660 03 19	6	9	26	23.5	17	4.5	0.006
4	M3x0.5	7660 04 09	6	9	26	23.5	16.5	4.5	0.007
	M5x0.8	7660 04 19	6	9	26	23.5	17	4.5	0.006
	G1/8	7660 04 10	7	11.5	29.5	27	18	6	0.012
6	M5x0.8	7660 06 19	6	9	26	23.5	18	4.5	0.006
	G1/8	7660 06 10	7	11.5	29.5	27	18.5	6	0.012
	G1/4	7660 06 13	8	12	32.5	30	19	6	0.019
8	G1/8	7660 08 10	13	14	31	26.5	26	7	0.021
	G1/4	7660 08 13	16	19	34	29	27.5	9.5	0.033
	G3/8	7660 08 17	20	23	42	36	29	11.5	0.061

7665 Miniature Flow Regulator Exhaust, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR



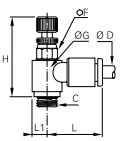
A

ØD	C		F	G	H max	H min	L	L1	Kg
4	R1/8	7665 04 10	7	11.5	27.5	25	18	6	0.012
6	R1/8	7665 06 10	7	11.5	27.5	25	18.5	6	0.012
	R1/4	7665 06 13	8	13.5	30	27.5	19	7	0.019
	R3/8	7665 06 17	17	13.5	34	31.5	19	7	0.025
8	R1/8	7665 08 10	13	14	28.5	24	26	7	0.021
	R1/4	7665 08 13	16	19	29	25	27.5	9.5	0.033
	R3/8	7665 08 17	20	23	36	30	29	11.5	0.061

Pre-coated thread

7669 Miniature Flow Regulator Supply, Male BSPP and Metric Thread

Technical polymer, Nickel-plated brass, NBR

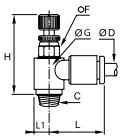


B

ØD	C		F	G	H max	H min	L	L1	Kg
3	M3x0.5	7669 03 09	6	9	26.5	24	17	4.5	0.008
	M5x0.8	7669 03 19	6	9	27.5	25	17	4.5	0.007
4	M5x0.8	7669 04 19	6	9	27.5	25	17	4.5	0.006
	G1/8	7669 04 10	7	11.5	31	28	18	6	0.012
6	M5x0.8	7669 06 19	6	9	27	23.5	18	4.5	0.007
	G1/8	7669 06 10	7	11.5	31	28	18.5	6	0.012
	G1/4	7669 06 13	8	12	34	30.5	19	6	0.019
8	G1/8	7669 08 10	13	14	32	29	26	7	0.021
	G1/4	7669 08 13	16	19	33.5	29.5	27.5	9.5	0.032
	G3/8	7669 08 17	20	23	41	37	29	11.5	0.063

7668 Miniature Flow Regulator Supply, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR



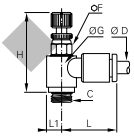
B

ØD	C		F	G	H max	H min	L	L1	Kg
4	R1/8	7668 04 10	7	11.5	28.5	25.5	18	6	0.011
6	R1/8	7668 06 10	7	11.5	29	24	18.5	6	0.012
	R1/4	7668 06 13	8	13.5	31	27	19	7	0.019
8	R1/8	7668 08 10	13	14	28.5	25	26	7	0.020
	R1/4	7668 08 13	16	19	30	26	27.5	9.5	0.032

Pre-coated thread

7662 Bi-Directional Miniature Flow Regulator, Male BSPP and Metric Thread

Technical polymer, Nickel-plated brass, NBR

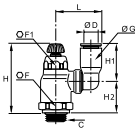


C

ØD	C		F	G	H max	H min	L	L1	Kg
4	M5x0.8	7662 04 19	6	9	26	23.5	17	4.5	0.007
	G1/8	7662 04 10	7	11.5	29.5	27	18	6	0.013
6	M5x0.8	7662 06 19	6	9	26	23.5	18	4.5	0.010
	G1/8	7662 06 10	7	11.5	29.5	27	18.5	6	0.013
	G1/4	7662 06 13	8	12	32.5	30	19	6	0.019

7040 Compact Flow Regulator Swivel Outlet Exhaust, Male BSPP Thread

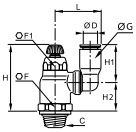
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	F1	G	H max	H min	H1	H2	L	Kg
6	G1/8	7040 06 10	16	10	10.5	44	38	16	18	23.5	0.024
	G1/4	7040 06 13	16	10	10.5	42.5	36.5	16	16.5	23.5	0.023
8	G1/8	7040 08 10	19	14	13.5	48	41.5	23	19	28	0.037
	G1/4	7040 08 13	19	14	13.5	48	41.5	23	19.5	28	0.039
	G3/8	7040 08 17	19	14	13.5	48	41.5	23	17.5	28	0.020
10	G1/4	7040 10 13	23	17	16	53.5	45.5	26.5	21	35	0.051
	G3/8	7040 10 17	23	17	16	54	45.5	26.5	21.5	35	0.063
12	G3/8	7040 12 17	23	17	19	54	45.5	30.5	21.5	38	0.066
	G1/2	7040 12 21	24	17	19	54	45.5	30.5	21	38	0.071

7045 Compact Flow Regulator Swivel Outlet Exhaust, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR

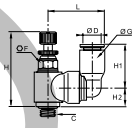


ØD	C		F	F1	G	H max	H min	H1	H2	L	Kg
10	R3/8	7045 10 17	23	17	16	51.5	43.5	26.5	19	35	0.065
12	R3/8	7045 12 17	23	17	19	51.5	43.5	31	19	38	0.065

Pre-coated thread

7640 Miniature Swivel Outlet Flow Regulator Exhaust, Male BSPP and Metric Thread

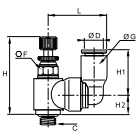
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	G	H max	H min	H1	H2	L	Kg
4	M5x0.8	7640 04 19	6	8.5	26	23.5	14	6.5	19.5	0.011
	G1/8	7640 04 10	7	8.5	29.5	27	14	8	19.5	0.015
6	M5x0.8	7640 06 19	6	10.5	26	23.5	16	6.5	21	0.001
	G1/8	7640 06 10	7	10.5	29.5	27	16	8	20.5	0.015

7649 Miniature Swivel Outlet Flow Regulator Supply, Male BSPP and Metric Thread

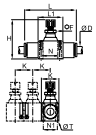
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	G	H max	H min	H1	H2	L	Kg
4	M5x0.8	7649 04 19	6	8.5	27	24	14	6.5	19	0.015
6	M5x0.8	7649 06 19	6	10.5	27	24	16	6.5	21	0.008
	G1/8	7649 06 10	7	10.5	30.5	28	16	8.5	21.5	0.015

7770 In-Line One-Way Flow Regulator

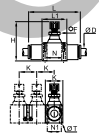
Technical polymer, Nickel-plated brass, NBR



ØD		F	H max	H min	K	L	L1	N	N1	ØT	Kg
4	7770 04 00	5	33.5	29.5	12	36	15	11	8	2.2	0.009
6	7770 06 00	8	44.5	40.5	17	51	23	17	11	3.2	0.024
8	7770 08 00	11	52.5	46.5	18.5	58	26	20	12.5	3.2	0.048
10	7770 10 00	14	61	53	24	73	33	26	16	4.2	0.097
12	7770 12 00	14	67.5	59	28	85	35	27.5	20	4.2	0.132

7772 Bi-Directional In-Line Flow Regulator

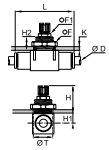
Technical polymer, Nickel-plated brass, NBR



ØD		F	H max	H min	K	L	L1	N	N1	ØT	Kg
4	7772 04 00	5	33.5	29.5	12	36	15	11	8	2.2	0.009
6	7772 06 00	8	44.5	40	17	51	23	17	11	3.2	0.024
8	7772 08 00	11	52.5	46.5	18.5	58	26	20	12.5	3.2	0.054

7776 Panel-Mountable In-Line One-Way Flow Regulator

Technical polymer, Nickel-plated brass, NBR

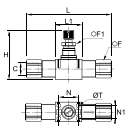


ØD		F	F1	H	H max	H1	H2	K	L	ØT	Kg
4	7776 04 00*	14		39.5	43	6.5	11	6	36	10.5	0.015
6	7776 06 00*	22		45.5	49	7.5	13.5	7	51	16.5	0.038
8	7776 08 00	22	11	45.5	54	9	13.5	7	58	18.5	0.069
10	7776 10 00	30	14	54	62	11.5	13.5	7	73	24.5	0.136
12	7776 12 00	32	14	61	71	12.5	15.5	8	85	27.5	0.185

*Ultrafine adjustment

7771 In-Line One-Way Flow Regulator, Female BSPP Thread

Technical polymer, Nickel-plated brass, NBR



C		F	F1	H max	H min	L	L1	N	N1	ØT	Kg
G1/8	7771 10 10	13	8	44.5	39.5	68.5	23	17	11	3.2	0.043
G1/4	7771 13 13	16	11	50	44	83	26	20	12.5	3.2	0.103
G3/8	7771 17 17	19	14	61	52	97	33	26	16	4.2	0.160
G1/2	7771 21 21	24	14	67.5	57.5	121	35	27.5	20	4.2	0.260

7000 Joining Clips

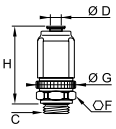
Technical polymer

ØD		Kg
4	7000 00 04	0.001
6-8	7000 00 05	0.005
10-12	7000 00 06	0.001

To be used with 7770,7771,7772 and 7776 series.

7020 Straight Flow Regulator Exhaust, Male BSPP Thread

Technical polymer, Nickel-plated brass, NBR

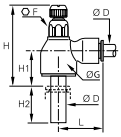


A

ØD	C		F	G	H max	H min	Kg
8	G1/8	7020 08 10	24	27	52.5	46.5	0.110

7030 Compact Plug-In Flow Regulator,Exhaust

Technical polymer, Nickel-plated brass, NBR

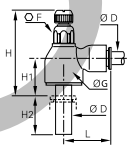


A

ØD		F	G	H max	H min	H1	H2	L	Kg
6	7030 06 00	10	16	41	35	14	17	22	0.013
8	7030 08 00	14	19	46.5	39.5	16	21.5	28	0.022
12	7030 12 00	17	23	51	43	17	27	35	0.044

7031 Compact Plug-In Flow Regulator, Supply

Technical polymer, Nickel-plated brass, NBR

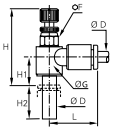


B

ØD		F	G	H max	H min	H1	H2	L	Kg
6	7031 06 00	10	16	41	35	14	17	22	0.013
8	7031 08 00	14	19	46.5	39.5	16	21.5	28	0.035

7630 Miniature Plug-In Flow Regulator, Exhaust

Technical polymer, Nickel-plated brass, NBR

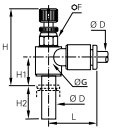


A

ØD		F	G	H max	H min	H1	H2	L	Kg
4	7630 04 00	6	9	28	25.5	9.5	15.5	17	0.007
6	7630 06 00	7	11.5	29	27.5	10.5	17	18.5	0.012

7631 Miniature Plug-In Flow Regulator, Supply

Technical polymer, Nickel-plated brass, NBR

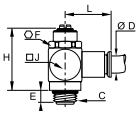


B

ØD		F	G	H max	H min	H1	H2	L	Kg
4	7631 04 00	6	9	28	25.5	9.5	15.5	17	0.007
6	7631 06 00	7	11.5	29	27.5	10.5	17	18.5	0.011

7130 Flow Regulator, Exhaust, Male BSPP and Metric Thread

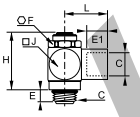
Nickel-plated brass, NBR



ØD	C		E	F	H	J	L	Kg
4	M5x0.8	**7130 04 19**	4	8	17	9	19	0.010
	G1/8	**7130 04 10**	5	13	29	15	20	0.037
6	M5x0.8	**7130 06 19**	4	8	17	9	24	0.013
	G1/8	**7130 06 10**	5	13	29	15	22	0.038
	G1/4	**7130 06 13**	8	17	31	18	24	0.062
8	G1/8	**7130 08 10**	5	13	29	15	25	0.042
	G1/4	**7130 08 13**	8	17	31	18	28	0.066
	G3/8	**7130 08 17**	7	20	40	21.5	29	0.109
10	G1/4	**7130 10 13**	8	17	31	18	30	0.075
	G3/8	**7130 10 17**	7	20	40	21.5	32	0.119
	G1/2	**7130 10 21**	8	23	53	28	34	0.227
12	G3/8	**7130 12 17**	7	20	40	22	36	0.064
	G1/2	**7130 12 21**	8	23	53	28	38	0.306

7140 Flow Regulator Exhaust, Male/Female BSPP and Metric Thread

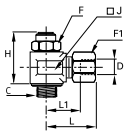
Nickel-plated brass, NBR



C		E	E1	F	H	J	L	Kg
M5x0.8	**7140 19 19**	4	4	8	21	9	11	0.009
G1/8	**7140 10 10**	5	8	13	32	15	17	0.039
G1/4	**7140 13 13**	8	12	17	39	18	24	0.073
G3/8	**7140 17 17**	7	12	20	47	21.5	27	0.124
G1/2	**7140 21 21**	8	15	23	61	28	31	0.238

7160 Flow Regulator with Brass Compression Fitting, Exhaust, Male BSPP Thread

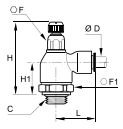
Nickel-plated brass, NBR



ØD	C		F	F1	H	J	L	L1	Kg
4	G1/8	**7160 04 10**	13	10	26	17	25.5	14.5	0.051
6	G1/8	**7160 06 10**	13	13	26	17	25.5	14.5	0.054
	G1/4	**7160 06 13**	17	13	31.5	22	28.5	17.5	0.101
8	G1/8	**7160 08 10**	13	14	26	17	29.5	15.5	0.055
	G1/4	**7160 08 13**	17	14	31.5	22	31	17	0.101
10	G1/4	**7160 10 13**	17	19	31.5	22	35	19	0.117
	G3/8	**7160 10 17**	20	19	44.5	22	37.5	19	0.190
	G1/2	**7160 10 21**	23	19	50	27	37.5	19	0.204
12	G1/2	**7160 12 21**	23	22	50	27	38	21.5	0.212

7100 Compact Flow Regulator, Exhaust, Male BSPP Thread

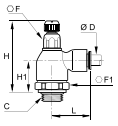
Nickel-plated brass, NBR



ØD	C		F	F1	H max	H min	H1	L	Kg
4	G1/8	7100 04 10	10	19	53	47	23	21	0.080
6	G1/8	7100 06 10	10	19	53	47	23	24.5	0.082
	G1/4	7100 06 13	10	19	53	47.5	23.5	24.5	0.085
8	G1/8	7100 08 10	14	19	55	50	24.5	29	0.097
	G1/4	7100 08 13	14	19	56	50	25	29	0.101
	G3/8	7100 08 17	17	25	62	56	27	30.5	0.154
10	G1/4	7100 10 13	14	19	56	50	25	35	0.106
	G3/8	7100 10 17	17	25	62	56	27	35	0.157
12	G3/8	7100 12 17	17	25	62	56	27	38	0.198
	G1/2	7100 12 21	17	25	62	55	27	38	0.207
14	G1/2	7100 14 21	17	25	62	55	27	41	0.205

7101 Compact Flow Regulator, Supply, Male BSPP Thread

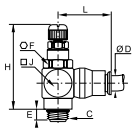
Nickel-plated brass, NBR



ØD	C		F	F1	H max	H min	H1	L	Kg
4	G1/8	7101 04 10	10	19	53	47	23	21	0.096
6	G1/8	7101 06 10	10	19	53	47	23	24.5	0.081
	G1/4	7101 06 13	10	19	53	47.5	23.5	24.5	0.084
8	G1/8	7101 08 10	14	19	55	50	24.5	29	0.097
	G1/4	7101 08 13	14	19	56	50	25	29	0.101
	G3/8	7101 08 17	17	25	62	56	27	30.5	0.155

7680 Compact Flow Regulator, Exhaust, Male BSPP Thread

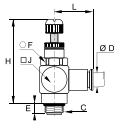
Nickel-plated brass, NBR



ØD	C		E	F	H max	H min	J	L	Kg
6	G1/8	7680 06 10	5	13	44	39	7.5	24.5	0.045
8	G1/8	7680 08 10	5	13	44	39	7.5	24.5	0.047
	G1/4	7680 08 13	8	17	47	41	9	27	0.076
10	G3/8	7680 10 17	7	20	60	50	11	34	0.133
12	G1/2	7680 12 21	8	23	77	65	14	36.5	0.165

7180 Miniature Flow Regulator Exhaust, Male BSPP and Metric Thread

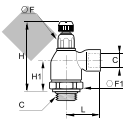
Nickel-plated brass, NBR



ØD	C		E	F	H max	H min	J	L	Kg
4	M5x0.8	7180 04 19	4	8	29	24	10	19	0.012
	G1/8	7180 04 10	5	13	44	39	15	20	0.041
6	M5x0.8	7180 06 19	4	8	29	24	10	24	0.015
	G1/8	7180 06 10	5	13	44	39	15	22	0.043
8	G1/8	7180 08 10	5	13	44	39	15	26	0.049

7110 Compact Flow Regulator Exhaust, Male/ Female BSPP Thread

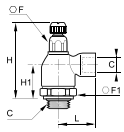
Nickel-plated brass, NBR



C		F	F1	H max	H min	H1	L	Kg
G1/8	7110 10 10	10	19	52.5	47	23	22.5	0.080
G1/4	7110 13 13	14	19	55.5	50.5	25	32	0.107
G3/8	7110 17 17	17	25	62	56	27	34.5	0.212
G1/2	7110 21 21	17	25	62	55	27	37.5	0.191

7111 Compact Flow Regulator Supply, Male/ Female BSPP Thread

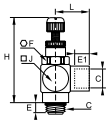
Nickel-plated brass, NBR



C		F	F1	H max	H min	H1	L	Kg
G1/8	7111 10 10	10	19	52.5	47	23	22.5	0.079
G1/4	7111 13 13	14	19	55.5	50.5	25	32	0.108

7190 Miniature Flow Regulator Exhaust, Male/ Female BSPP and Metric Thread

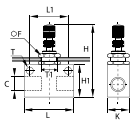
Nickel-plated brass, NBR



C		E	E1	F	H max	H min	J	L	Kg
M5x0.8	7190 19 19	4	4	8	29	24	10	11	0.012
G1/8	7190 10 10	5	8	13	44	39	15	17	0.044

7170 Panel-Mountable In-Line Flow Regulator, Female BSPP and Metric Thread

Treated aluminium, NBR, brass



C		F	H max	H min	H1	K	L	L1	ØT	Kg
M5x0.8	**7170 19 19**	12	42	38	15	12	25	18	4.5	0.021
G1/8	**7170 10 10**	15	56	49	22	18	35	24.7	4.5	0.056
G1/4	**7170 13 13**	15	64	57	30	20	46	35	6.5	0.088
G3/8	**7170 17 17**	22	73	62	30	25	50	35	6.5	0.154
G1/2	**7170 21 21**	22	83	72	40	25	60	44	6.5	0.195

Metal Flow Control Regulators / Stainless Steel

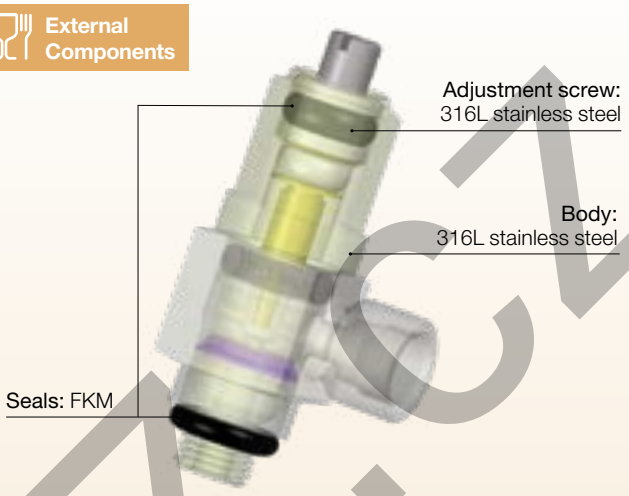
With its 316L stainless steel body and adjustment screw, this range combines precise adjustment, accuracy and compactness for applications in environments with high mechanical or chemical constraints.

Technical Characteristics

Compatible Fluids	Compressed air **7822:** all compatible fluids depending on whether FKM or PTFE seals are used
Working Pressure	**7810-7812:** 1 to 10 bar **7820:** 1 to 16 bar **7822:** 1 to 40 bar
Working Temperature	**7810 – 7812:** 0°C to +70°C **7820 – 7822:** -15° to +120°C

Component Materials

External Components



Advantages

- Compatibility with aggressive, mechanical and chemical environments

For food process applications:

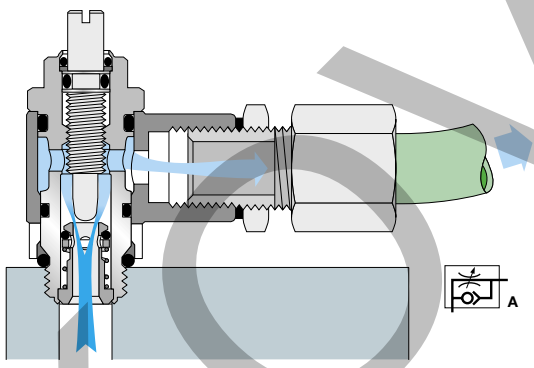
- Guarantees the integrity of the fluids conveyed
- Easy-to-clean

Regulations

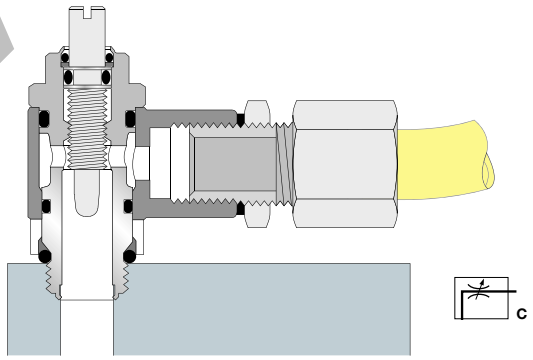
- **RoHS**
- **REACH**
- **PED**
- **FDA: 21 CFR**
- **1935/2004**

Operation

Exhaust Model with External Adjustment

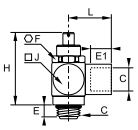


Bi-Directional Model with External Adjustment



7810 Flow Regulator Exhaust, Male/Female BSPP and Metric Thread

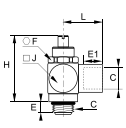
Stainless steel 316L, FKM



C		E	E1	F	H max	H min	J	L	Kg
M5x0.8	**7810 19 19**	4	4	8	26	22	9	11	0.011
G1/8	**7810 10 10**	6	8	13	38	32	15	17	0.039
G1/4	**7810 13 13**	9	12	17	40	35	18	24	0.072
G3/8	**7810 17 17**	8	12	20	53	43	22	27	0.126
G1/2	**7810 21 21**	9	15	23	71	60	28	31	0.261

7812 Bi-Directional Flow Regulator, Male/Female BSPP and Metric Thread

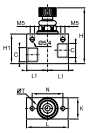
Stainless steel 316L, FKM



C		E	E1	F	H max	H min	J	L	Kg
M5x0.8	**7812 19 19**	4	4	8	26	22	9	11	0.011
G1/8	**7812 10 10**	6	8	13	38	32	15	17	0.040
G1/4	**7812 13 13**	9	12	17	40	35	18	24	0.074
G3/8	**7812 17 17**	8	12	20	53	43	22	24	0.125
G1/2	**7812 21 21**	9	15	23	71	60	28	31	0.261

7820 In-Line One-Way Flow Regulator, Female BSPP Thread

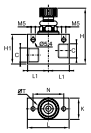
Stainless steel 316L, FKM



DN	C		H max	H min	H1	K	L	L1	N	ØT	Kg
7	G1/8	**7820 00 10**	52.5	47	30	20	40	20	30	20	0.174
7	G1/4	**7820 00 13**	52.5	47	30	20	40	20	30	20	0.164
9	G3/8	**7820 00 17**	65	56	35	25	50	25	36	20	0.285
12	G1/2	**7820 00 21**	65	58	35	25	50	25	36	20	0.305

7822 Bi-Directional In-Line Flow Regulator, Female BSPP Thread

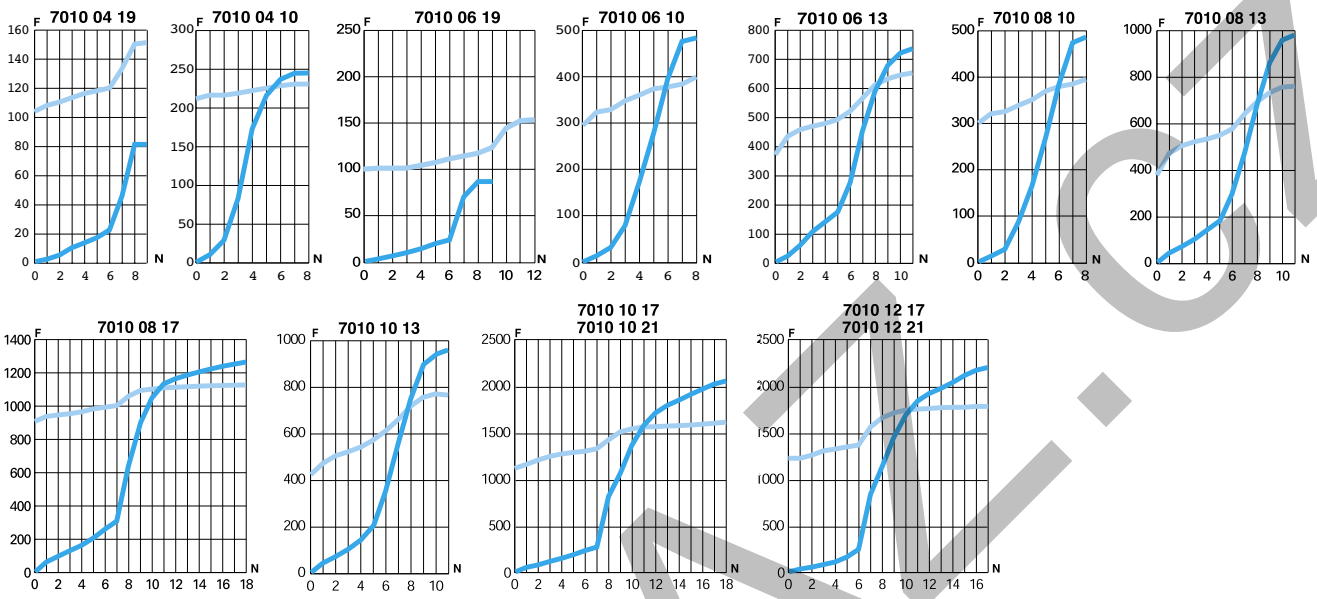
Stainless steel 316L, FKM



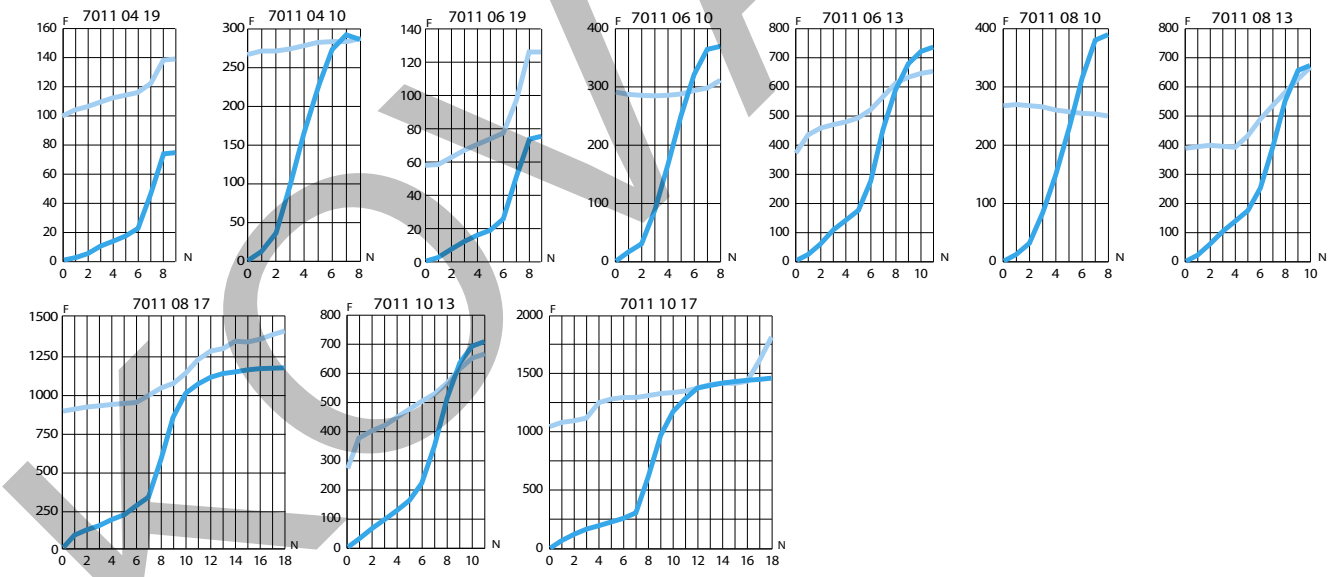
DN	C		H max	H min	H1	K	L	L1	N	ØT	Kg
7	G1/8	**7822 00 10**	52.5	48	30	20	40	20	30	20	0.176
7	G1/4	**7822 00 13**	52.5	48	30	20	40	20	30	20	0.164
9	G3/8	**7822 00 17**	65	58	35	25	50	25	36	20	0.289
12	G1/2	**7822 00 21**	87	76	40	30	60	30	42	30	0.265

7010
7011
7012

7010



7011



7012

Flow characteristics for model 7012:
- exhaust version (see model 7010, direction of adjustment)
- supply version (see model 7011, direction of adjustment)

6 bar

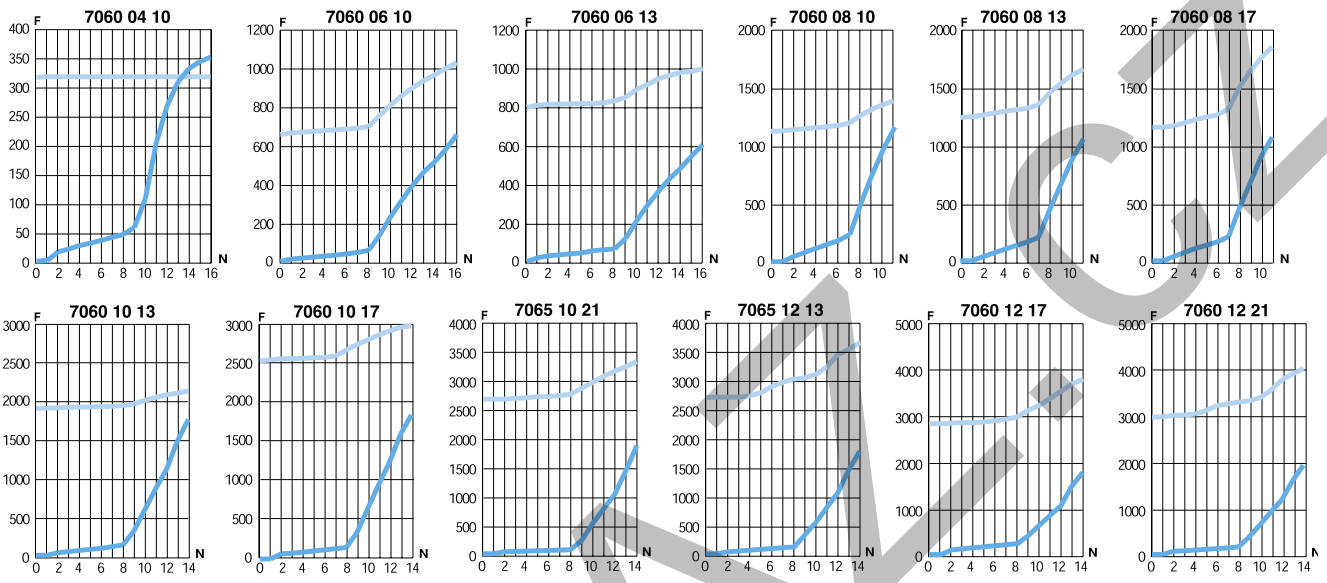
Direction of adjustment
Return

F: Flow in Nl/min
N: Number of turns

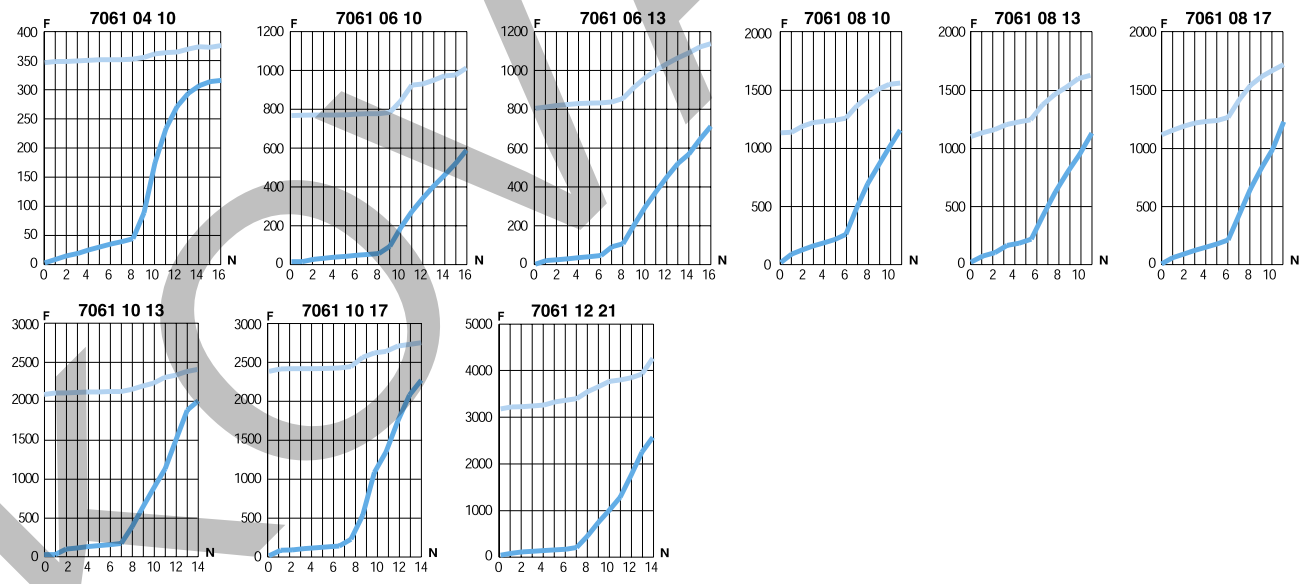
Flow Characteristics (at 6 bar) for Flow Control Regulators

7060
7061
7062

7060



7061

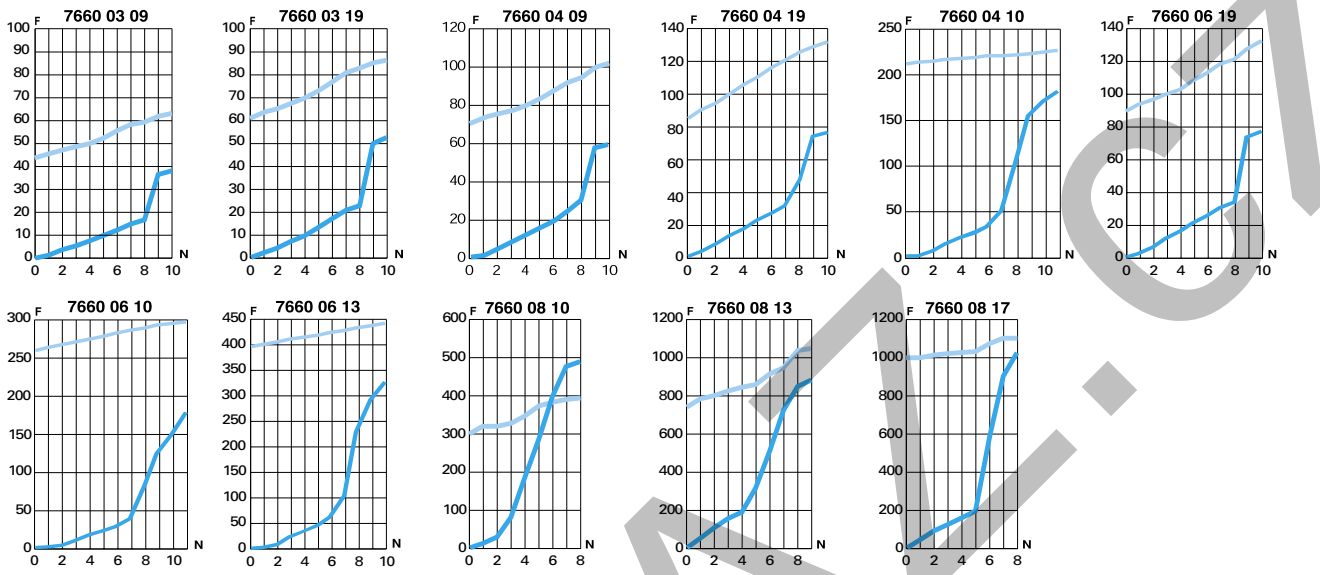


7062

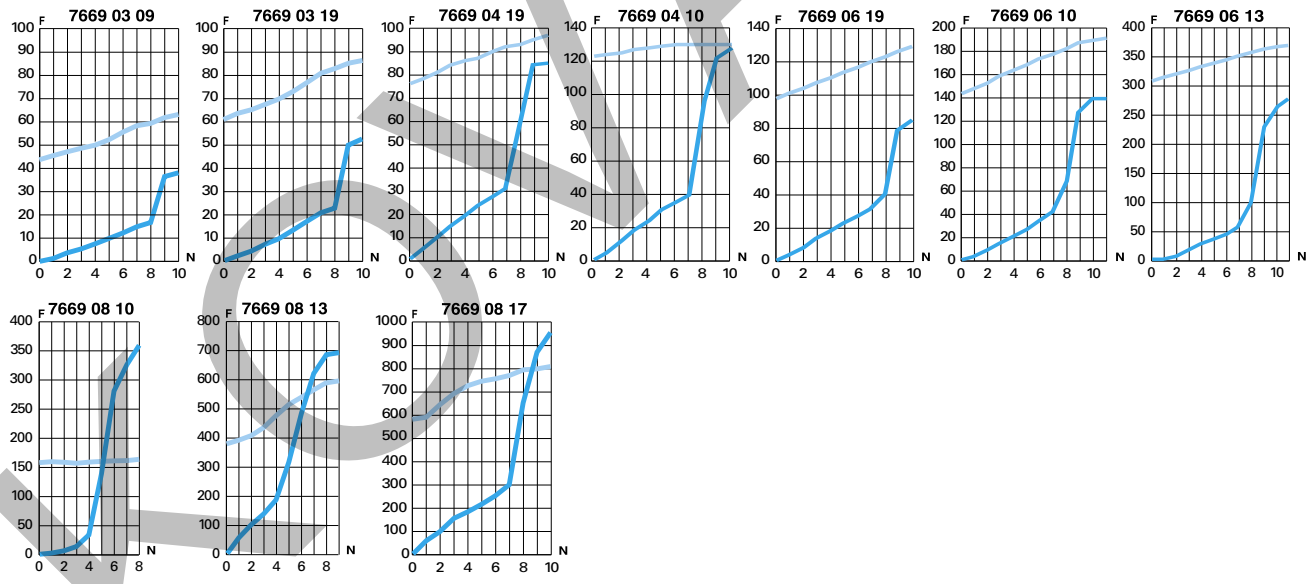
Flow characteristics for model 7062:
- exhaust version (see model 7060, direction of adjustment)
- supply version (see model 7061, direction of adjustment)

7660
7669
7662

7660



7669



7662

Flow characteristics for model 7662:
- exhaust version: see model 7660, direction of adjustment
- supply version: see model 7669, direction of adjustment

6 bar

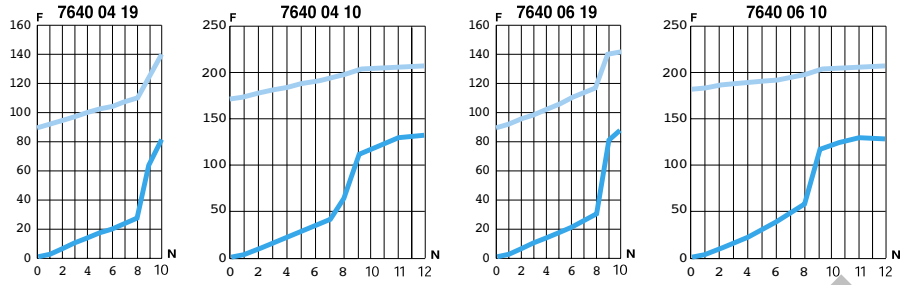
Direction of adjustment
Return

F: Flow in Nl/min
N: Number of turns

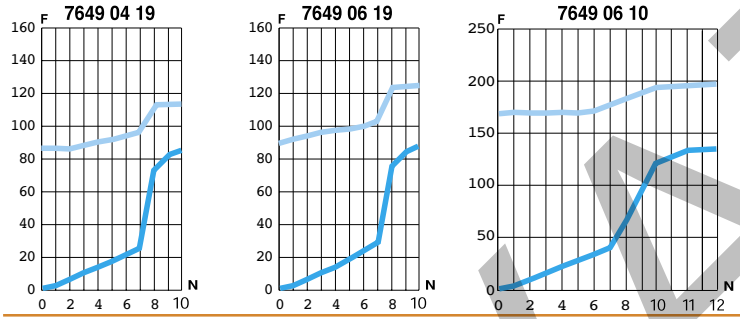
Flow Characteristics (at 6 bar) for Flow Control Regulators

7640
7649

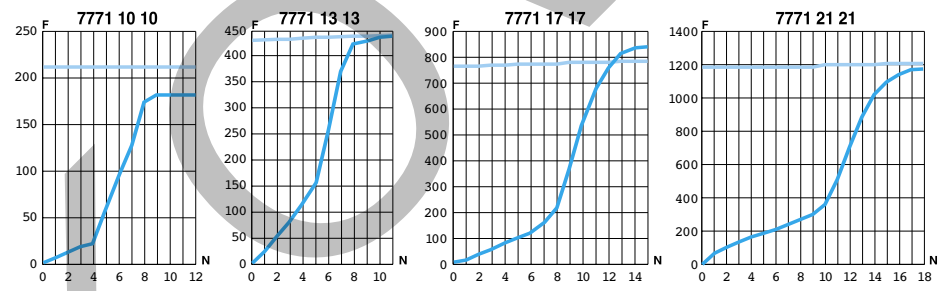
7640



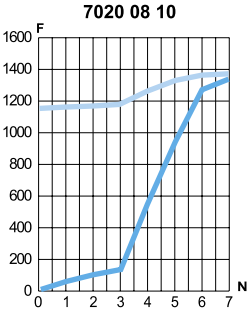
7649



7771

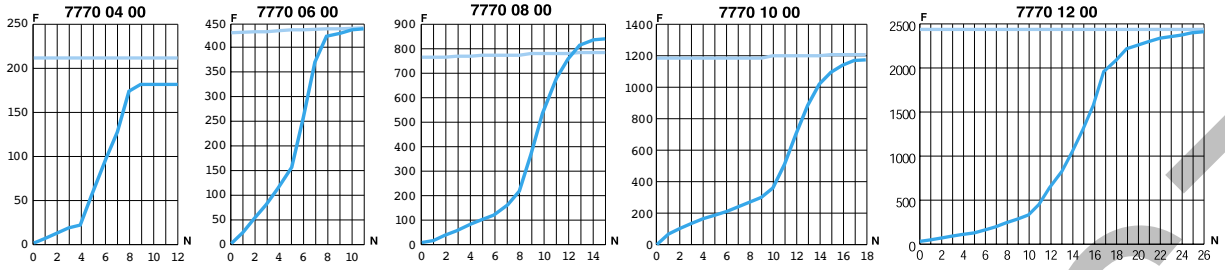


7020

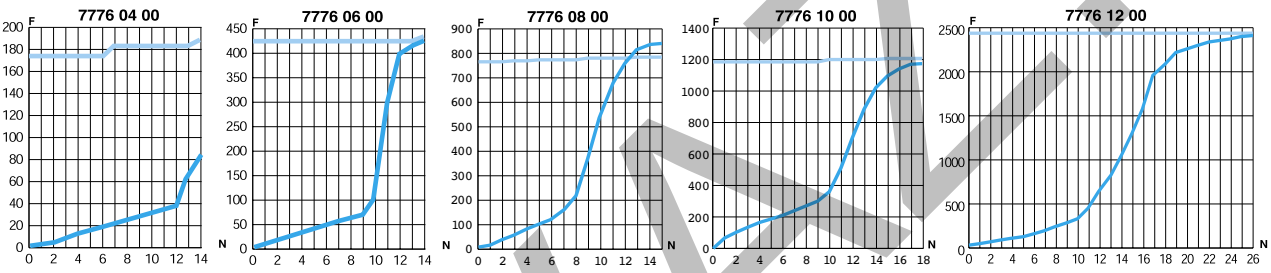


Flow Characteristics (at 6 bar) for Flow Control Regulators

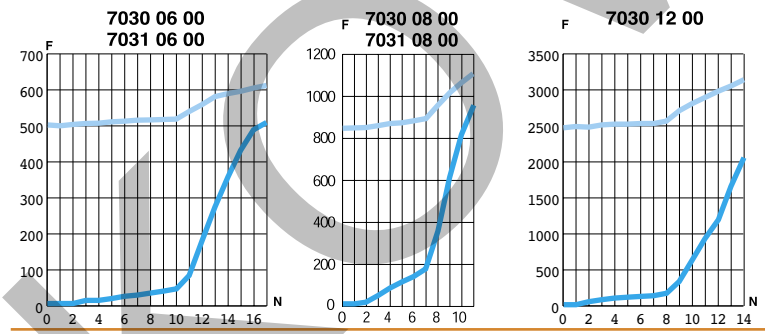
7770



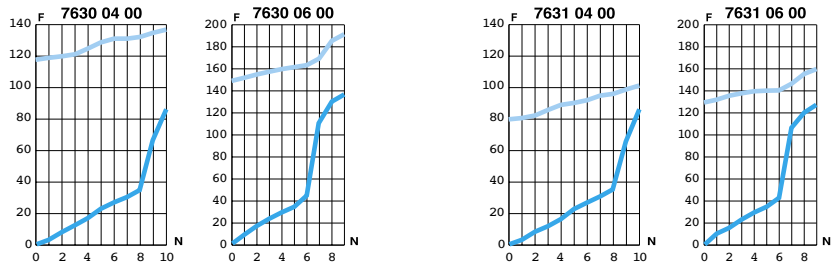
7776



7030
7031



7630
7631



6 bar

Direction of adjustment

Return

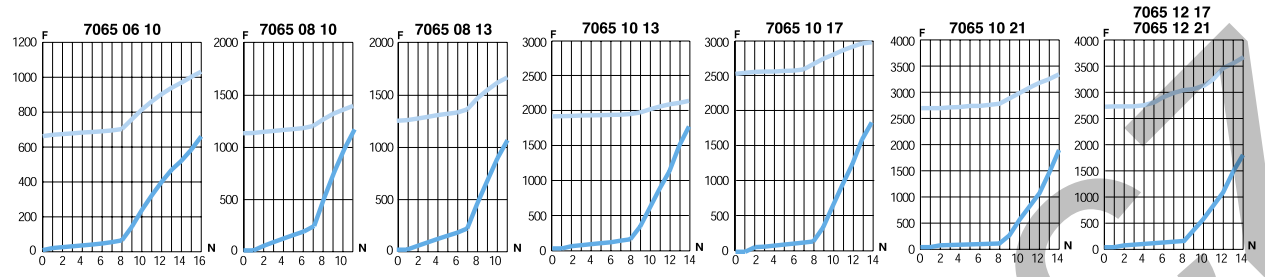
F: Flow in Nl/min

N: Number of turns

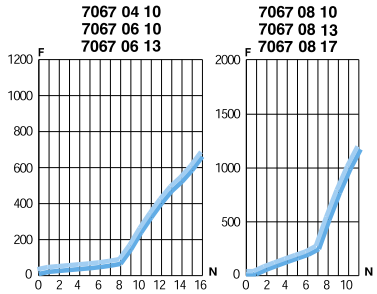
Flow Characteristics (at 6 bar) for Flow Control Regulators

7065
7067

7065

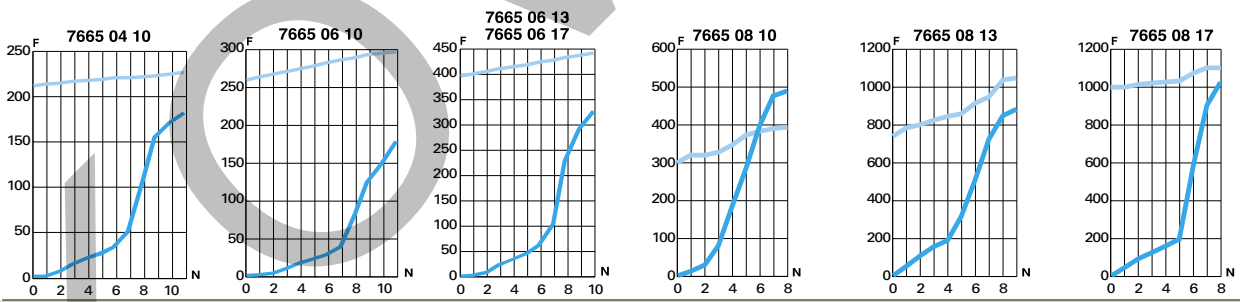


7067

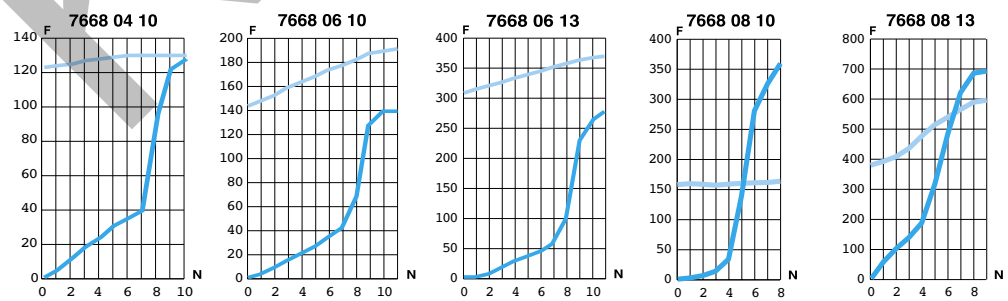


7665
7668

7665

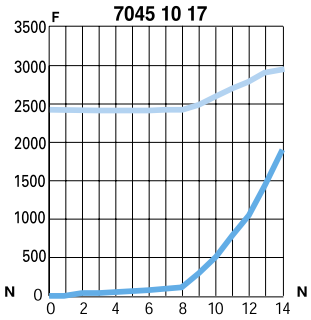


7668

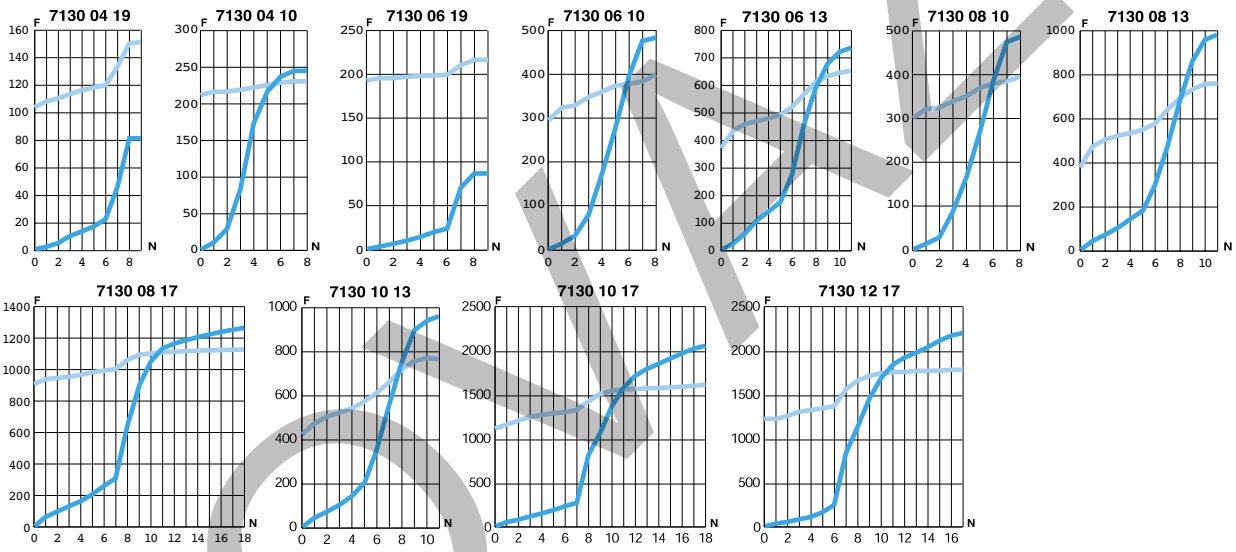


Flow Characteristics (at 6 bar) for Flow Control Regulators

7045



7130



6 bar

Direction of adjustment

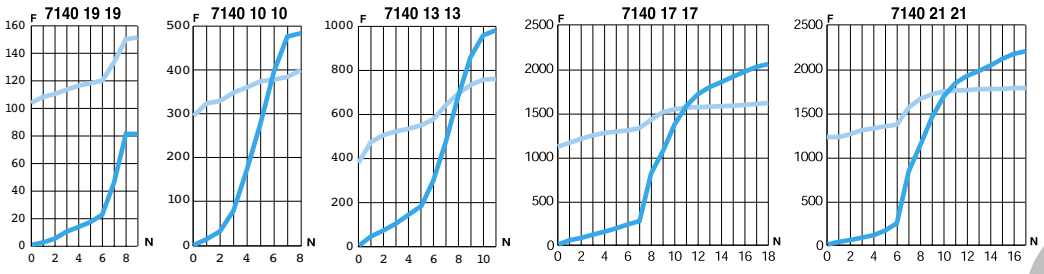
Return

F: Flow in Nl/min

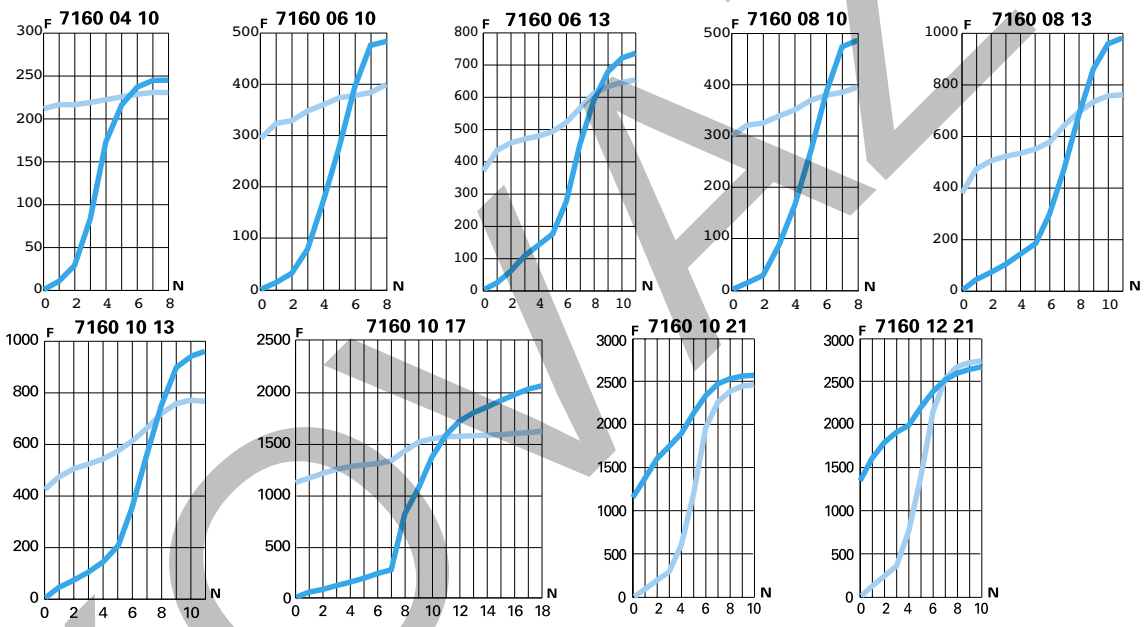
N: Number of turns

Flow Characteristics (at 6 bar) for Flow Control Regulators

7140

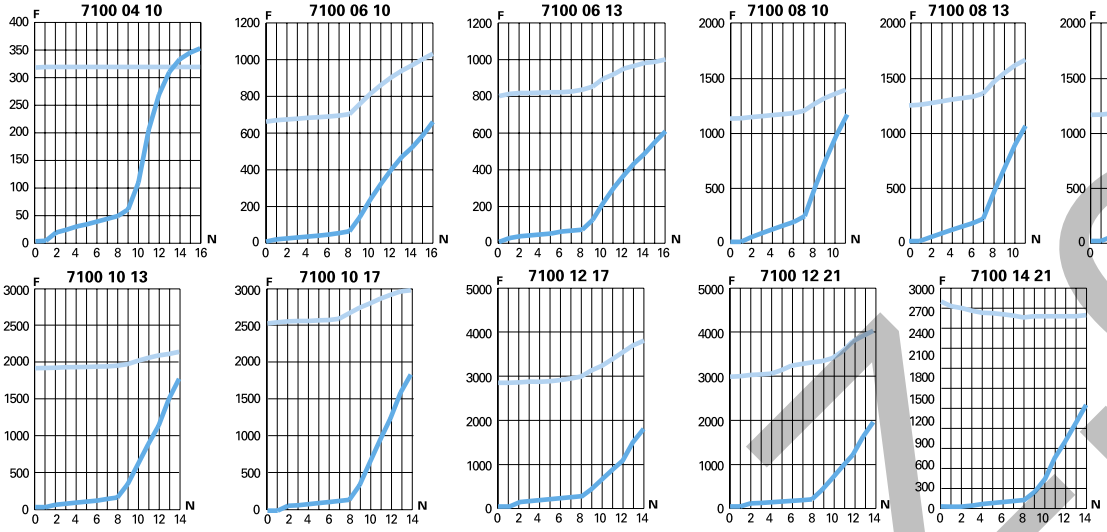


7160

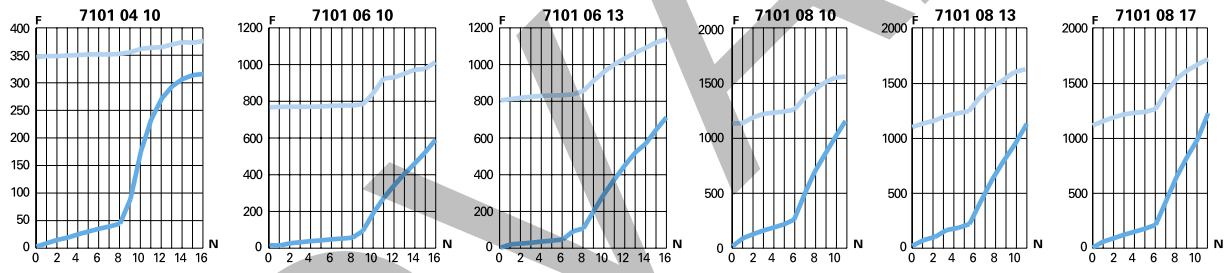


7100
7101

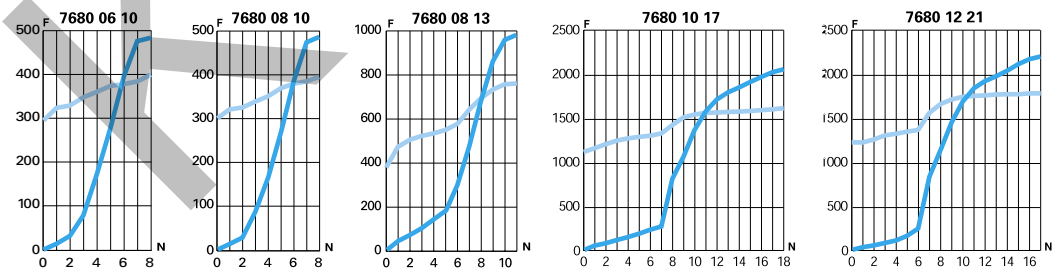
7100



7101



7680



6 bar

Direction of adjustment

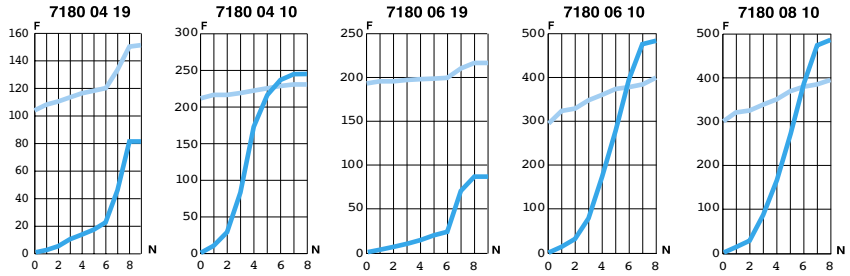
Return

F: Flow in Nl/min

N: Number of turns

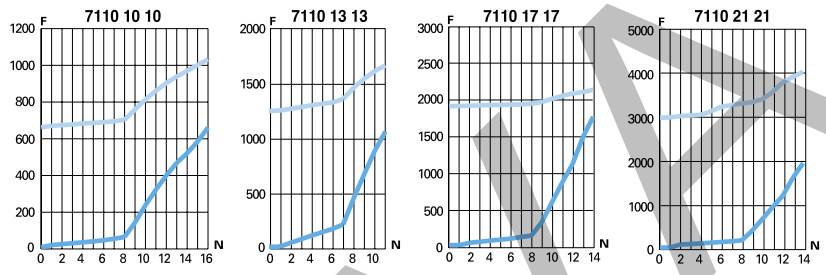
Flow Characteristics (at 6 bar) for Flow Control Regulators

7180

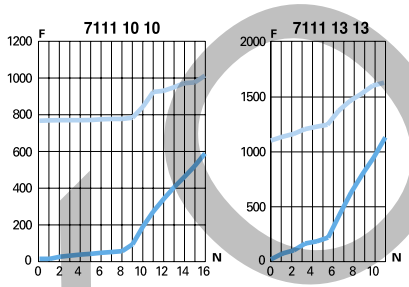


7110
7111

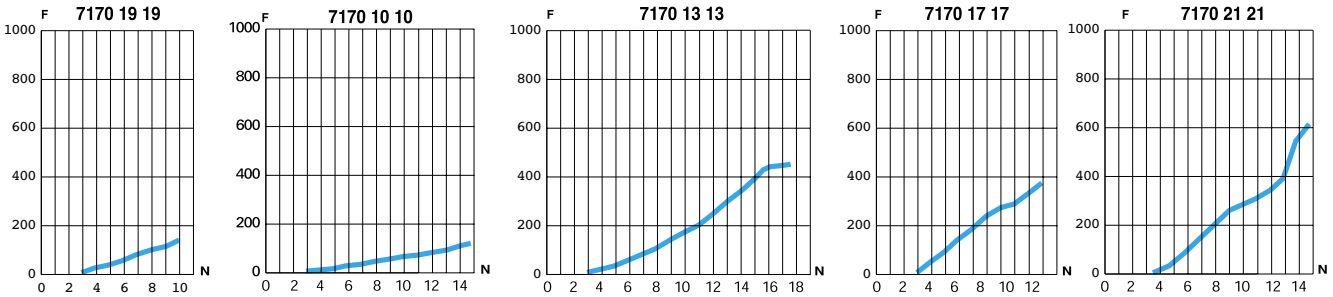
7110



7111



7170



Blocking Fittings

When the pilot signal is removed, these fittings ensure the safety of operators and protect the installation by cutting off the supply of compressed air in the circuit.

Ø metric:
4 to 12 mm

Technical Characteristics

- **Compatible Fluids:** compressed air
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** -20°C to +70°C
  -25°C to +70°C (metal version)

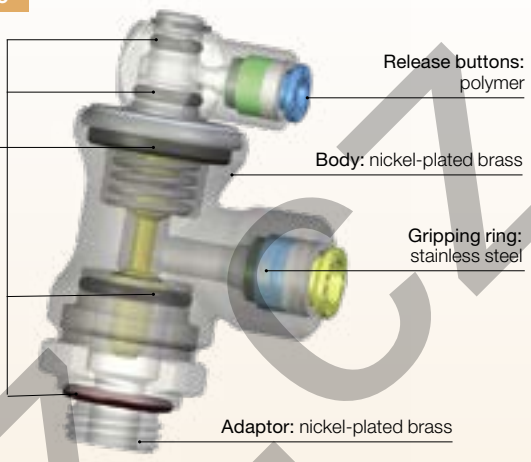
Connection	Supply Flow 6 bar	Pilot and depilot threshold depending on supply pressure					
			2 bar	4 bar	6 bar	8 bar	10 bar
ØD 6 and 8 mm, threads G1/8, G1/4, R1/8, R1/4	650Nl /min	Pilot Pressure	2.40	2.90	3.30	3.60	4.00
	650Nl /min	Depilot Pressure	1.50	1.80	2.15	2.40	2.80
ØD 10 and 12 mm, threads G3/8, G1/2, R3/8, R1/2	1600Nl /min	Pilot Pressure	2.70	3.20	3.50	3.80	4.10
	1600Nl /min	Depilot Pressure	1.40	1.80	2.10	2.40	2.70

Reliable performance is dependent upon the type of fluid conveyed and component materials being used.

Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

Component Materials

Silicone-free



Advantages

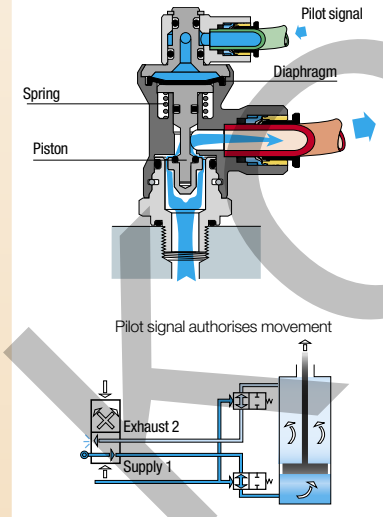
- Mounted in pairs on a cylinder
- Compact size to fit into any configuration
- Proven endurance according to the requirements of DI 2006/42/EC (B10d = 10 000 000 cycles at a frequency of 1Hz, according to ISO 19973)
- Can be rotated 360° during assembly
- Spark resistance, for welding applications

Regulations

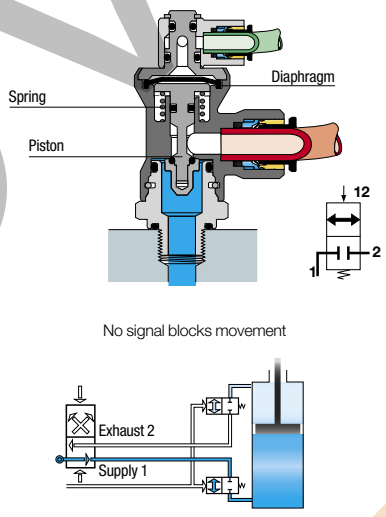
- **RoHS**
- **PED**
- **REACH**
- **B10d >110 millions of cycles**

Operation

Cylinder in Operation (pilot signal active)

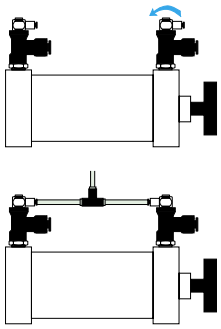


Cylinder Blocked (pilot signal removed)



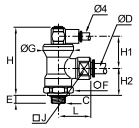
Installation

Mounted in pairs, blocking fittings are installed directly on the cylinder. Being fully orientable, they offer excellent flexibility in the design and installation of pneumatic circuits.



7880 Blocking Fitting, Male BSPP Thread

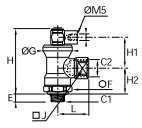
Nickel-plated brass, NBR



ØD	C		E	F	G	H	H1	H2	J	L	Kg
6	G1/8	**7880 06 10**	5.5	21	24	53	24.5	21	17	28	0.127
	G1/4	**7880 06 13**	6.5	21	24	53	24.5	21	17	28	0.130
8	G1/4	**7880 08 13**	6.5	21	24	53	24.5	21	17	28	0.124
	G3/8	**7880 08 17**	7.5	21	24	53	24.5	21	17	28	0.127
10	G3/8	**7880 10 17**	7.5	24	28	58	25	25	27	35	0.210
12	G1/2	**7880 12 21**	9	24	28	58	25	25	27	37.5	0.220

7881 Blocking Fitting, Male/Female BSPP Thread

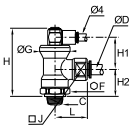
Nickel-plated brass, NBR



C1	C2		E	F	G	H	H1	H2	J	L	Kg
G1/8	G1/4	**7881 13 10**	5.5	21	24	53	24.5	21	17	25.5	0.119
G1/4	G1/4	**7881 13 13**	6.5	21	24	53	24.5	21	17	25.5	0.120
G3/8	G3/8	**7881 17 17**	7.5	24	28	58	25	25	27	34	0.208
G1/2	G1/2	**7881 21 21**	9	24	28	58	25	25	27	40	0.221

7885 Blocking Fitting, Male BSPT Thread

Nickel-plated brass, NBR

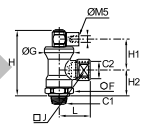


ØD	C		F	G	H	H1	H2	J	L	Kg
6	R1/8	**7885 06 10**	21	24	51.5	25	20	17	28	0.127
	R1/4	**7885 06 13**	21	24	51.5	25	20	17	28	0.131
8	R1/4	**7885 08 13**	21	24	51.5	25	20	17	28	0.126
	R3/8	**7885 08 17**	21	24	51.5	25	20	17	28	0.131
10	R3/8	**7885 10 17**	24	28	57	25	24	27	35	0.217
12	R1/2	**7885 12 21**	24	28	57	25	24	27	37.5	0.229

Pre-coated thread

7886 Blocking Fitting, Male/Female BSPT Thread

Nickel-plated brass, NBR

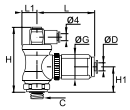


C1	C2		F	G	H	H1	H2	J	L	Kg
R1/8	R1/4	**7886 13 10**	21	24	51.5	25	20	17	26.5	0.121
R1/4	R1/4	**7886 13 13**	21	24	51.5	25	20	17	26.5	0.126
R3/8	R3/8	**7886 17 17**	24	28	57	25	24	27	34	0.225
R1/2	R1/2	**7886 21 21**	24	28	57	25	24	27	40	0.235

Pre-coated thread

7883 Blocker/Flow Regulator, Exhaust, Male BSPP Thread

Nickel-plated brass, technical polymer, NBR



ØD	C		G	H	H1	L	L max	L1	Kg
4	G1/8	**7883 04 10**	21.5	53	21	46.5	52	12	0.166
6	G1/8	**7883 06 10**	21.5	53	21	46.5	52	12	0.163
	G1/4	**7883 06 13**	21.5	53	21	46.5	52	12	0.166
8	G1/4	**7883 08 13**	27	57.5	24.5	54	60	14	0.252
	G3/8	**7883 08 17**	27	57.5	24.5	54	60	14	0.254

Combination of blocking and flow regulation functions
Working temperature: 0 to 70°C

Piloted Non-Return Valves

Piloted non-return valves are designed to protect installations: if the compressed air supply is removed, they lock the air supply to the cylinder, thus maintaining it in position.

Ø metric:
6 to 12 mm

Technical Characteristics

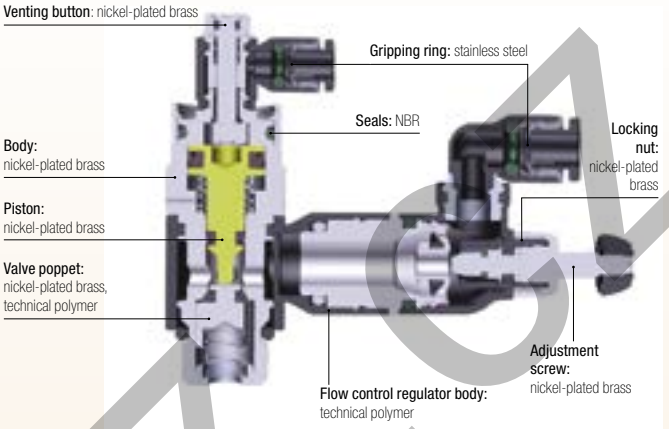
- **Compatible Fluids:** compressed air
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** -5°C to +60°C
- **Cracking Pressure:** 0.3 bar

Advantages

- Mounted in pairs on a cylinder
- 3 functions in 1 compact product:
  - piloted non-return valve
  - flow control regulator
  - manual exhaust
- Vent saves time on restart after maintenance operations

Component Materials

Silicone-free

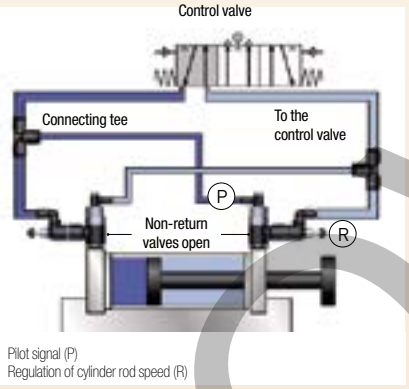


Regulations

- **RoHS**
- **REACH**
- **PED**

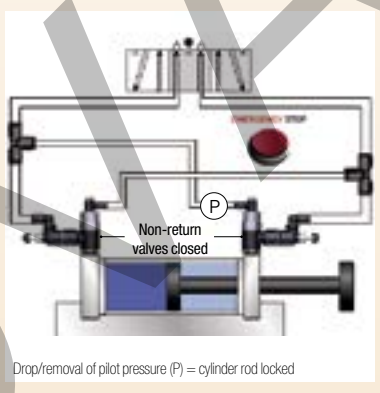
Operation

Normal Operation



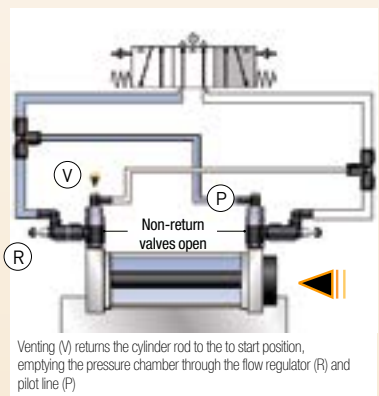
Pilot signal (P)
Regulation of cylinder rod speed (R)

Emergency Stop or Pressure Drop



Drop/removal of pilot pressure (P) = cylinder rod locked

Venting Operation



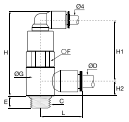
Venting (V) returns the cylinder rod to the to start position, emptying the pressure chamber through the flow regulator (R) and pilot line (P)

Model	Pilot and depilot threshold					
		2 bar	4 bar	6 bar	8 bar	10 bar
G1/8	Pilot Pressure	1.2	1.72	2.44	2.96	3.56
	Depilot Pressure	0.56	0.96	1.12	1.76	2.12
G1/4	Pilot Pressure	0.92	1.52	2.12	2.68	3.28
	Depilot Pressure	0.64	1.16	1.68	2.16	2.64
G3/8	Pilot Pressure	1.12	1.84	2.56	3.32	4.08
	Depilot Pressure	0.64	1.04	1.44	1.84	2.36
G1/2	Pilot Pressure	1.04	1.60	2.12	2.76	3.88
	Depilot Pressure	0.76	1.28	1.76	2.20	2.72

Maximum Flow at 6 bar (Nl/min)	7894 06 10	7894 06 13	7894 08 10	7894 08 13	7894 08 17	7894 10 17	7894 10 21	7894 12 21
Direction of Adjustment	250	475	240	585	875	940	1535	1560
Return	365	620	355	815	1085	1205	1860	1940

7892 Piloted Non-Return Valve, Male BSPP Thread

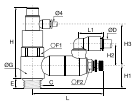
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	G	H	H1	H2	L	Kg
6	G1/8	**7892 06 10**	6	13	14	42	30	7	21	0.020
	G1/4	**7892 06 13**	9	17	18.5	45	32	9	23	0.042
8	G1/8	**7892 08 10**	6	13	14	42	29	9	25	0.020
	G1/4	**7892 08 13**	9	17	18.5	45	32	9	27	0.042
	G3/8	**7892 08 17**	6	20	22.5	57	41	11	28	0.093
10	G3/8	**7892 10 17**	6	20	22.5	57	41	11	31	0.144
	G1/2	**7892 10 21**	10	24	28	63	47	16	36	0.109
12	G1/2	**7892 12 21**	10	24	28	63	47	16	36	0.150

7894 Piloted Non-Return Valve with Flow Regulator Exhaust, Male BSPP Thread

Technical polymer, Nickel-plated brass



ØD	C		E	F1	F2	G	H	H1	H2	H3	L	L max	L1	Kg
6	G1/8	**7894 06 10**	6	13	8	14	46	7	24	31	48.5	51	16	0.041
	G1/4	**7894 06 13**	9	17	10	18.5	49	11	18	31	59.5	65	17	0.067
8	G1/8	**7894 08 10**	6	13	8	14	46	7	27	31	48.5	51	22	0.051
	G1/4	**7894 08 13**	9	17	10	18.5	49	11	23	31	59.5	65	23	0.068
	G3/8	**7894 08 17**	7	20	14	22.5	69	13	21	40	67.5	73	23	0.060
10	G3/8	**7894 10 17**	7	20	14	22.5	69	13	29	40	67.5	73	26	0.061
	G1/2	**7894 10 21**	9	24	17	28	76	12.5	26	47	74	81	26	0.234
12	G1/2	**7894 12 21**	9	24	17	28	76	12.5	27	47	74	81	30	0.237

Metal Quick Exhaust Valves

This range of metal quick exhaust valves is offered in nickel-plated brass, aluminium and stainless steel. The exhaust into the atmosphere accelerates the return speed of the cylinder rod.

Technical Characteristics

- **Compatible Fluids:** Compressed air
- **Working Pressure:** **7970:** 0.7 to 10 bar
  7971 and 7899: 2 to 10 bar
- **Working Temperature:** **7970:** -20°C to +70°C
  7971: -10°C to +70°C
  7899: Threads G1/8 and G1/4: -10°C to +120°C
  Threads G3/8 to G1: -20°C to +80°C

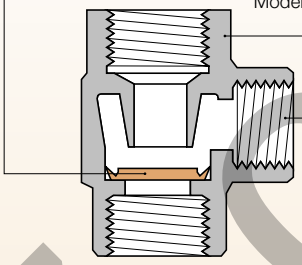
Component Materials

Silicone-free

Lip seals:
7970-7971: polyurethane elastomer
7899: - G1/8 and G1/4 FKM
- G3/8 to G1, polyurethane

Body:
Model 7970: nickel-plated brass
Model 7971: anodised aluminium
Model 7899: stainless steel

Integrated silencer:
stainless steel (model 7971)



Advantages

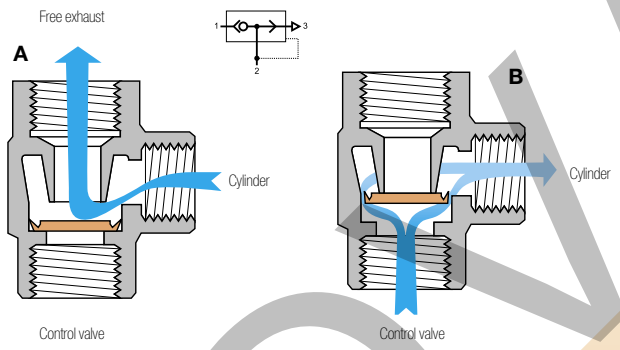
- Cycle time reduction: increased return speed
- Exhaust silencer integrated and 360° orientation available on some versions

Regulations

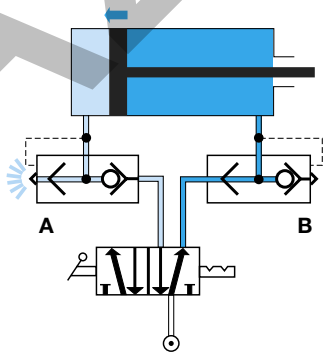
- **RoHS**
- **REACH**
- **PED**

Operation

Mounted on Cylinder

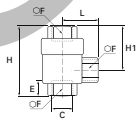


Installation Diagram



7970 Elbow Quick Exhaust Valve, Female BSPP and Metric Thread

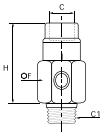
Nickel-plated brass



C		E	F	H	H1	L	Kg
M5x0.8	**7970 19 19**	5	10	24.8	15.6	4	0.029
G1/8	**7970 10 10**	7.5	14	42	28	8	0.084
G1/4	**7970 13 13**	11	19	53	34.5	11	0.150
G3/8	**7970 17 17**	12	21	58	36	12	0.153
G1/2	**7970 21 21**	14	26	71	44	14	0.312
G3/4	**7970 27 27**	16	32	86	52	18	0.449
G1	**7970 34 34**	19	38	94	56	19	0.528

7971 Elbow Quick Exhaust Valve, Male BSPT/ Female BSPP Thread

Treated aluminium

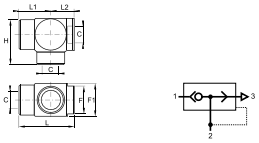


C	C1		F	H	Kg
G1/8	R1/8	**7971 10 10**	18	32.5	0.013
G1/4	R1/4	**7971 13 13**	18	35.5	0.018
G3/8	R3/8	**7971 17 17**	27	45	0.048
G1/2	R1/2	**7971 21 21**	34	52	0.086

Noise level:
7971 10 10: 70 dBa
7971 13 13: 70 dBa
7971 17 17: 72 dBa
7971 21 21: 88 dBa

7899 Quick Exhaust Valve, Female BSPP Thread

Stainless steel 316L



DN	C		F	F1	H	L	L1	L2	Kg
7	G1/8	**7899 00 10**	17	22	31.5	37.5	21	16.5	0.096
	G1/4	**7899 00 13**	17	22	31.5	37.5	21	16.5	0.083
9	G3/8	**7899 00 17**	22	26	37	44.5	25.5	19	0.140
12	G1/2	**7899 00 21**	27	32	45	54	31	23	0.235
18	G3/4	**7899 00 27**	38	46	65	79	44	35	0.800
	G1	**7899 00 34**	38	46	65	79	44	35	0.667

Noise level:
7971 10 10: 70 dBa
7971 13 13: 70 dBa
7971 17 17: 72 dBa
7971 21 21: 88 dBa

Non-Return Valves

Non-return valves allow compressed air to flow in one direction and prevent it from flowing in the other. Protect the circuit upstream.

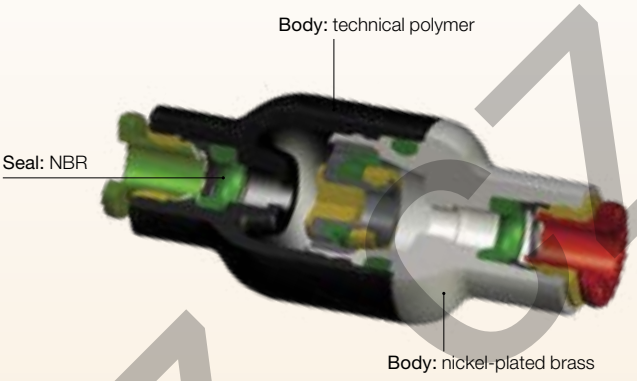
Ø metric:
4 to 12 mm

Technical Characteristics

Compatible Fluids	Compressed air	
Working Pressure	1 to 10 bar	
Working Temperature	0°C to +70°C	
Cracking Pressure	0.3 bar	
Flow Characteristics (Nl/min)	**Model**	**Flow at 6 bar**
	4 mm	350
	6 mm	670
	8 mm	1080
	10 mm	2230
	12 mm	2300

Component Materials

Silicone-free



Advantages

- Available in threaded or push-in version
- Proven endurance according to the requirements of the DI 2006/42/CE

Safe installation:

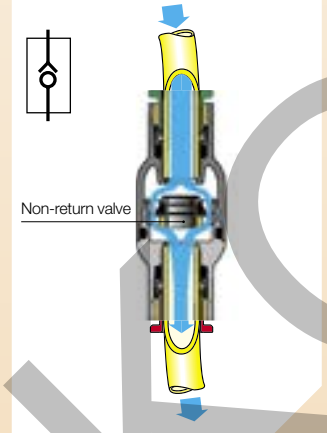
- Symbol showing the operating direction of flow
- Colour code: green for supply version, red for exhaust version

Regulations

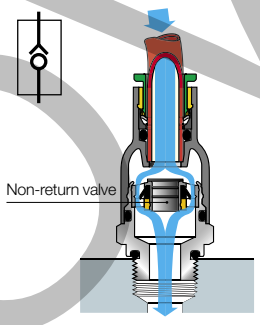
- **RoHS**
- **REACH**
- **PED**
- **B10d: > 40 millions of cycles**

Operation

In-Line Version

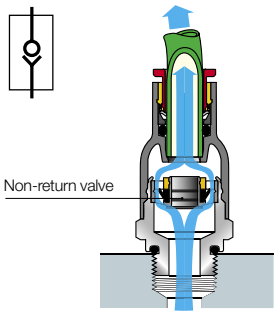


Supply Version



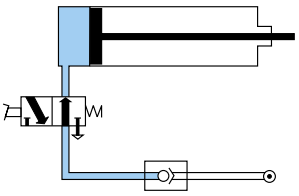
Models 7984-7985

Exhaust Version



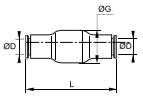
Models 7994-7995

Installation Diagram



7996 In-Line Equal Non-Return Valve

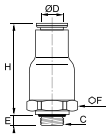
Technical polymer, Nickel-plated brass, NBR



ØD		G	L	Kg
4	7996 04 00	16	38.5	0.008
6	7996 06 00	16	41	0.013
8	7996 08 00	19	51.5	0.017
10	7996 10 00	23	63.5	0.070
12	7996 12 00	23	66.5	0.050

7984 In-Line Non-Return Valve, Supply, Male BSPP and Metric Thread

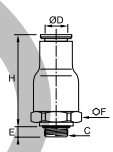
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	H	Kg
4	M5x0.8	7984 04 19	3	9	32	0.008
	G1/8	7984 04 10	5	16	28.5	0.015
6	G1/8	7984 06 10	5	16	30.5	0.015
	G1/4	7984 06 13	5.5	16	30.5	0.015
8	G1/8	7984 08 10	5	19	36	0.021
	G1/4	7984 08 13	5.5	19	36	0.023

7994 In-Line Non-Return Valve, Exhaust, Male BSPP and Metric Thread

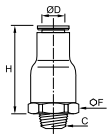
Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F	H	Kg
4	M5x0.8	7994 04 19	3	9	32	0.790
	G1/8	7994 04 10	5	16	28.5	0.018
6	G1/8	7994 06 10	5	16	30.5	0.015
	G1/4	7994 06 13	5.5	16	30.5	0.015
8	G1/8	7994 08 10	5	19	36	0.023
	G1/4	7994 08 13	5.5	19	36	0.023
12	G1/2	7994 12 21	7.5	23	44	0.045

7985 In-Line Non-Return Valve, Supply, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR

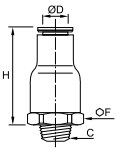


ØD	C		F	H	Kg
4	R1/8	7985 04 10	16	28.5	0.016
6	R1/8	7985 06 10	16	30.5	0.016
	R1/4	7985 06 13	16	30.5	0.021
8	R1/8	7985 08 10	19	36	0.022
	R1/4	7985 08 13	19	36	0.020
12	R1/2	7985 12 21	23	44	0.048

Pre-coated thread

7995 In-Line Non-Return Valve, Exhaust, Male BSPT Thread

Technical polymer, Nickel-plated brass, NBR



ØD	C		F	H	Kg
4	R1/8	7995 04 10	16	28.5	0.015
6	R1/8	7995 06 10	16	30.5	0.016
	R1/4	7995 06 13	16	30.5	0.022
8	R1/8	7995 08 10	19	36	0.022
	R1/4	7995 08 13	19	36	0.026
12	R3/8	7995 12 17	23	42	0.042

Pre-coated thread

Adjustable Non-Return Valves

These nickel-plated brass adjustable non-return valves allow compressed air to flow in one direction and prevent flow in the other. They incorporate precise adjustment of opening pressure in the return diretion.

Technical Characteristics

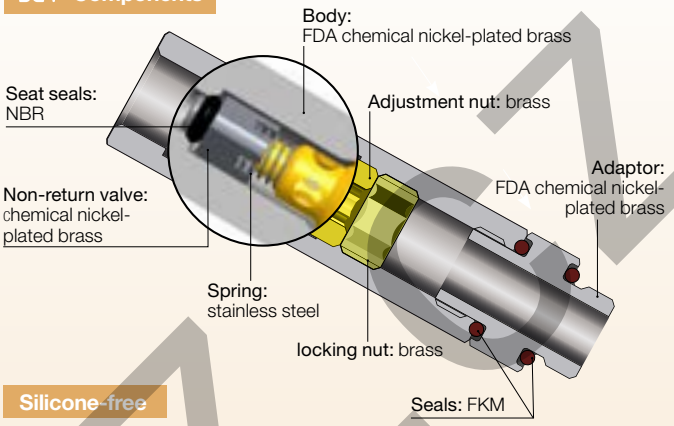
- **Compatible Fluids:** compressed air
- **Working Pressure:** 0 to 12 bar
- **Working Temperature:** -20°C to +80°C

	Threads	0 to 4 turns (values given as an example only)
Cracking Pressure	M5x0.8 - G1/8 - G1/4	1 to 0.10 bar
	G3/8	1 to 0.15 bar
	G1/2	1 to 0.20 bar

Max. Tightening Torques	Threads	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	0.16	0.8	1.2	3	3.5

Component Materials

External Components



Silicone-free

Advantages

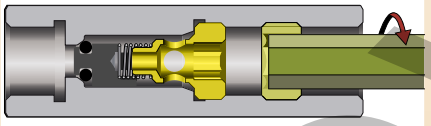
- Adjustment and locking of the non-return valve cracking pressure with two 2 Allen keys prevents the settings from being accidentally changed
- Designed with locking nut to protect initial setting in the event of vibration or accidental handling
- Developed for the food process industry (FDA compliance) and smooth external profile to facilitate cleaning in situ

Regulations

- RoHS
- FDA : 21CFR
- REACH

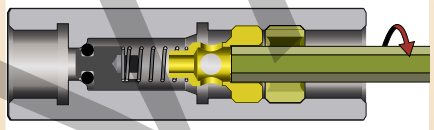
Operation

Step 1



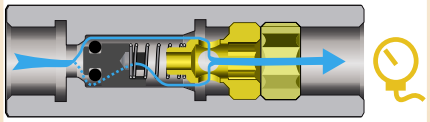
Unscrew the locking nut with an Allen key.

Step 2



Unscrew the adjustment nut with a smaller Allen key to adjust the cracking pressure. The number of turns adjusts the cracking pressure from 1 bar to 0.10 bar.

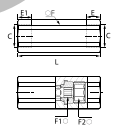
Step 3



Tighten the locking nut with the Allen key to lock the cracking pressure setting. Then, control the pressure with a pressure gauge downstream.

7930 Adjustable Check Valve, Double Female BSPP and Metric Thread

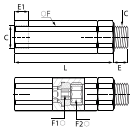
FDA chemical Nickel-plated brass, FKM



C		E	E1	F	F1	F2	L	Kg
M5x0.8	7930 19 19	8	4	13	4	6	49	0.055
G1/8	7930 10 10	8	6	13	4	6	45	0.033
G1/4	7930 13 13	10	7.5	16	6	8	54	0.073
G3/8	7930 17 17	11	8.5	20	8	10	61.5	0.163
G1/2	7930 21 21	13	10	24	10	12	73	0.171

7931 Adjustable Check Valve Supply, Male/ Female BSPP Thread

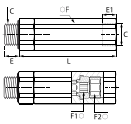
FDA chemical Nickel-plated brass, FKM



C		E	E1	F	F1	F2	L	Kg
G1/8	7931 10 10	5.5	6	13	4	6	51.5	0.043
G1/4	7931 13 13	6.5	7.5	16	6	8	61.5	0.208
G3/8	7931 17 17	7.5	8.5	20	8	10	70	0.125
G1/2	7931 21 21	9	10	24	10	12	82.5	0.212

7932 Adjustable Check Valve Exhaust, Male/ Female BSPP Thread

FDA chemical Nickel-plated brass, FKM



C		E	E1	F	F1	F2	L	Kg
G1/8	**7932 10 10**	5.5	8	13	4	6	51.5	0.009
G1/4	**7932 13 13**	6.5	10	16	6	8	61.5	0.058
G3/8	**7932 17 17**	7.5	11	20	8	10	70	0.123
G1/2	**7932 21 21**	9	13	24	10	12	82.5	0.212

Complementary Products for Adjustable Non-Return Valves

Fittings

LF 3000

LF 3600

Nickel-Plated Accessories

LIQUIfit® non-return valves allow flow in one direction and prevent any return flow. Fitted in the circuit, they provide total protection.

Ø metric: 6 to 12 mm
Ø inch: 1/4" to 1/2"

Technical Characteristics

- **Compatible Fluids:** water, beverages, liquid foodstuffs
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** 1°C to +65°C
- **Cracking Pressure:** 0.02 bar up to O.D. 3/8"
  0.03 bar for O.D. 1/2"

Advantages

- Fully compatible for use with water, beverages, liquid foodstuffs and gas
- Excellent chemical compatibility
- Hygienic design with smooth surfaces

Component Materials

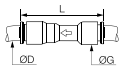
Silicone-free

Regulations

- **RoHS**
- **FDA: 21 CFR**
- **NSF 51**
- **REACH**

7992 Single Non-Return Valve

POM, EPDM



ØD		G	L	Kg
6	7992 06 00WP2	15.5	45.5	0.007
8	7992 08 00WP2	17.5	48.5	0.010
10	7992 10 00WP2	20	57.5	0.014
12	7992 12 00WP2	23.5	67.5	0.022

7992 Single Non-Return Valve Inch

POM, EPDM

ØD		G	L	Kg
1/4	7992 56 00WP2	17	51	0.008
3/8	7992 60 00WP2	20	55	0.011
1/2	7992 62 00WP2	23	68	0.021

5/16" also available = 7992 08 00WP2

Associated Products

The full range of LIQUIfit® products can be found in this catalogue:
- Push-in fittings for metric and inch tubing (Chapter 1)
- Valves (Chapter 4)

To complement the LIQUIfit® range, Parker Legris Advanced PE tubing (Chapter 3) is suited to the most demanding environments, approved for permanent contact with beverage and food products, as well as for water treatment.

Stainless Steel Non-Return Valves

In harsh environments or for corrosive industrial fluids, stainless steel non-return valves allow fluids to flow in one direction and prevent them from flowing in the other.

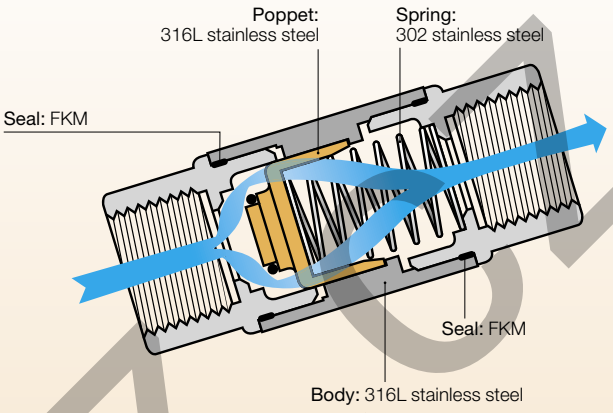
Technical Characteristics

- **Compatible Fluids:** Many fluids
- **Working Pressure:** 0.5 to 40 bar
- **Working Temperature:** -20°C to +180°C

	Threads	Nl/min	Kv
Flow Characteristics	G1/8	18.88	1.60
	G1/4	19.91	1.69
	G3/8	35.54	3.01
	G1/2	36.50	3.10
	G3/4	65.86	5.59
	G1	92.60	7.86
Cracking Pressure	0.25 bar		

Component Materials

Silicone-free



Advantages

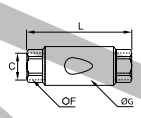
- Mechanical robustness and reduced dimensions
- Suitable for use with many chemicals or in corrosive environments
- Flow direction symbol protects against incorrect installation
- Smooth external surfaces contribute to equipment cleanliness

Regulations

- **RoHS**
- **REACH**
- **PED**

4890 Non-Return Valve, Female BSPP Thread

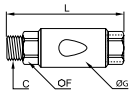
Stainless steel 316L, FKM



DN	C		F	G	L	Kg
10	G1/8	4890 10 10	17	22	50	0.082
	G1/4	4890 13 13	17	22	50	0.073
15	G3/8	4890 17 17	22	30	67	0.183
	G1/2	4890 21 21	24	30	71	0.182
20	G3/4	4890 27 27	32	42	84	0.288
25	G1	4890 34 34	38	42	90	0.418

4891 Non-Return Valve, Supply, Male BSPP Thread/Exhaust, Female BSPP Thread

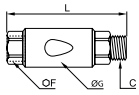
Stainless steel 316L, FKM



DN	C		F	G	L	Kg
10	G1/8	4891 10 10	17	22	56	0.084
	G1/4	4891 13 13	17	22	58	0.082
15	G3/8	4891 17 17	22	30	75	0.191
	G1/2	4891 21 21	24	30	79	0.210
20	G3/4	4891 27 27	32	42	84	0.300
25	G1	4891 34 34	38	42	102	0.519

4892 Non-Return Valve, Supply, Female BSPP Thread/Exhaust, Male BSPP Thread

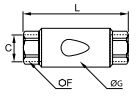
Stainless steel 316L, FKM



DN	C		F	G	L	Kg
10	G1/8	4892 10 10	17	22	56	0.090
	G1/4	4892 13 13	17	22	58	0.082
15	G3/8	4892 17 17	22	30	75	0.191
	G1/2	4892 21 21	24	30	79	0.210
20	G3/4	4892 27 27	32	42	84	0.313
25	G1	4892 34 34	38	42	102	0.514

4895 Non-Return Valve, Female NPT Thread

Stainless steel 316L, FKM



DN	C		F	G	L	Kg
10	NPT1/8	4895 11 11	17	22	50	0.082
	NPT1/4	4895 14 14	17	22	54	0.079
15	NPT3/8	4895 18 18	22	30	67	0.194
	NPT1/2	4895 22 22	24	30	77	0.195

Soft Start Fittings

To prevent the risk of industrial accidents, the pressure increase in the downstream circuit allows soft start of the installation.

Ø metric:
8 to 10 mm

Technical Characteristics

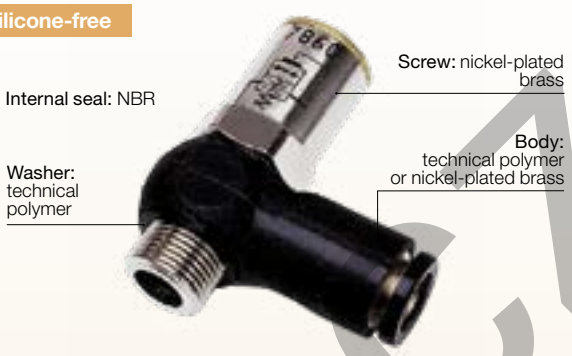
- **Compatible Fluids:** Compressed air
- **Working Pressure:** 3 to 10 bar
- **Working Temperature:** -15°C to +60°C

	Threads	daN.m
Max. Tightening Torques	G1/4	1.3
	G3/8	1.5
	G1/2	1.8

	Model	Flow at 6 bar	Kv
Flow Characteristics	7860 08 13	1500 Nl/min	0.80
	7860 10 13	2100 Nl/min	1.20
	7860 10 17	2200 Nl/min	1.30
	7870 08 13	1500 Nl/min	0.80
	7870 10 13	2000 Nl/min	1.15
	7870 10 17	2000 Nl/min	1.15

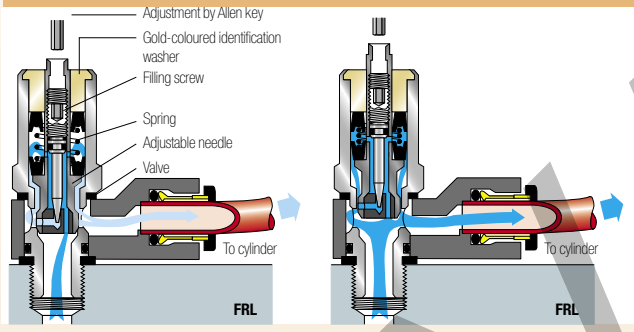
Component Materials

Silicone-free

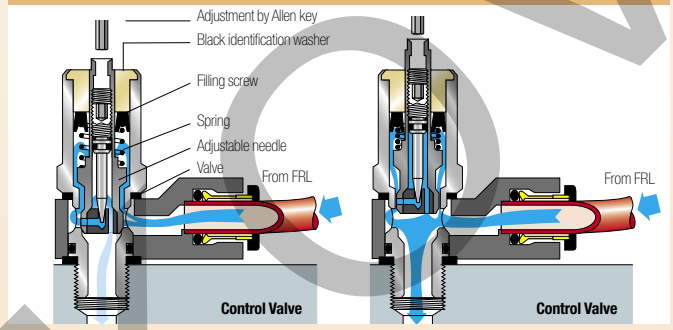


Operation

Filter, Regulator, Lubricator



Control Valve



Advantages

Protection of equipment and personnel:

- Prevents the risk of damage after any stoppage which requires the system to be vented
- Returns the control valve to its initial position in total safety
- Adjustment of the pressurisation speed

Mounted on FRL:

- 7860: yellow identification washer
- Protection for the whole system
- Simultaneous pressurisation speed of the whole system

Mounted on Control Valve:

- 7870: black identification washer
- Protection of individual circuits
- Mounted on the control valve, it optimises the pressurisation speed of a specific cylinder

Regulations

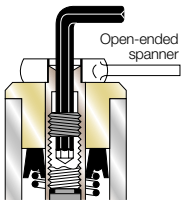
- **RoHS**
- **REACH**
- **PED**

Adjustment of the Filling Screw

Adjusting the screw to regulate the flow of air optimises the time taken to pressurise depending on the air volume to be refilled and the system requirements.

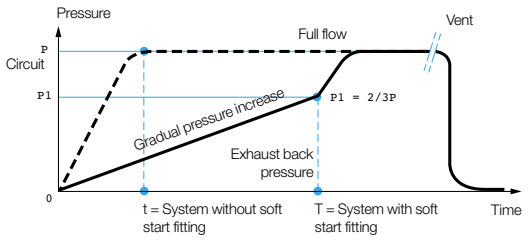
To adjust:
– immobilise the piston using a spanner
– adjust the screw with an Allen key
- 1.5 mm key for 8 mm diameter
- 2.5 mm key for 10 and 12 mm diameter

Max. tightening torque: 0.1 daN.m



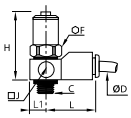
Cylinder Pressure Cycle

When the downstream pressure reaches 2/3 of the supply pressure, full flow is automatically established



7860 Soft Start Fitting for Isolating Valve, Male BSPP Thread

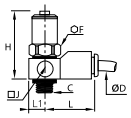
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	H max	H min	J	L	L1	Kg
8	G1/4	**7860 08 13**	17	61	54	20	35	10	0.064
10	G1/4	**7860 10 13**	22	62	55	25	41	12.5	0.112
	G3/8	**7860 10 17**	22	62	55	25	41	12.5	0.115

7870 Soft Start Fitting for Control Valve, Male BSPP Thread

Technical polymer, Nickel-plated brass, NBR

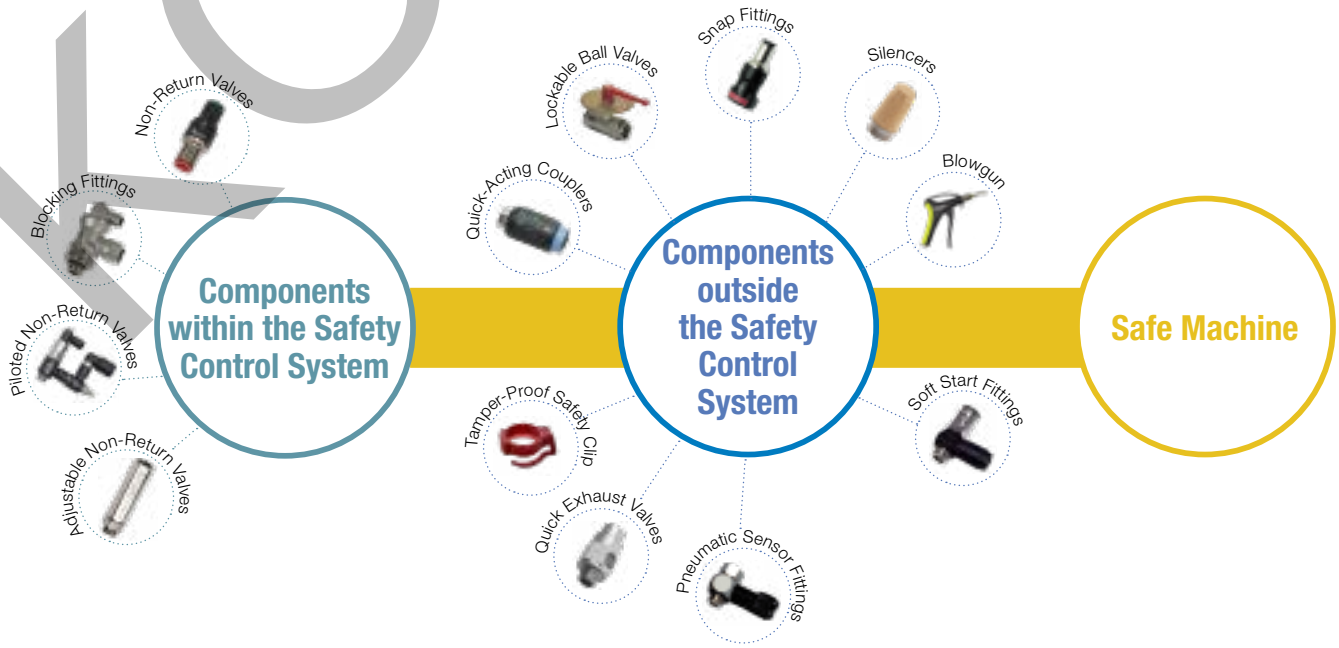


ØD	C		F	H max	H min	J	L	L1	Kg
8	G1/4	**7870 08 13**	17	61	54	20	35	10	0.066
10	G1/4	**7870 10 13**	22	62	55	25	41	12.5	0.113
	G3/8	**7870 10 17**	22	62	55	25	41	12.5	0.116

Our Safety Programm: Conformity to 2006/42/EC Directive and ISO 13849-1 Standard

More than 250 dedicated part numbers for:

- Zero accident for our customers
- Machine integrity
- Compliance of equipment



Pressure Regulator Fittings

Pressure regulators stabilise at the maximum determined value the pressure, whatever the fluctuations of the pressure upstream.

Ø metric:
4 to 10 mm

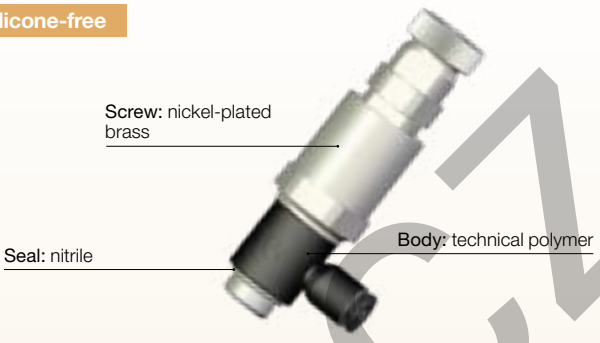
Technical Characteristics (7300)

- **Compatible Fluids:** Compressed air
- **Working Pressure:** Upstream pressure: 1 to 16 bar
  Downstream pressure: 1 to 8 bar
- **Working Temperature:** -10°C to +70°C

Tightening Torque (BSPT)	Thread	G1/8	G1/4	G3/8
	daN.m	0.4	0.5	0.6

Component Materials (7300)

Silicone-free



Advantages

- Lockable adjustment possible of the setpoint
- Output pressure adjustment options marked on the screw
- Installation in a manifold allows optimum output pressures to be delivered to specific parts of the circuit
- Designed for applications where cylinder force needs to be controlled: marking, sleeving, crimping cylinders etc.

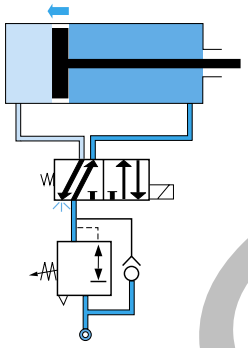
Regulations

- **RoHS**
- **REACH**
- **PED**

Operation

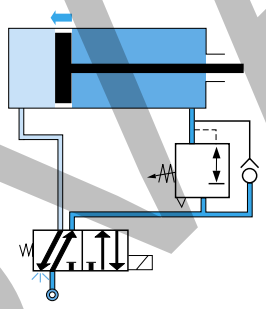
Mounting Upstream of the Control Valve

Adjustment of the piston feed pressure in both directions

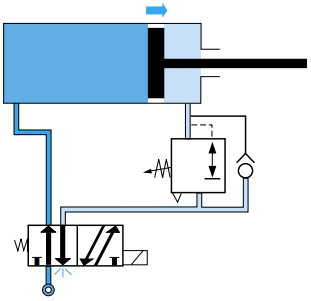


Mounting Downstream of the Control Valve

Phase 1: adjustment of the piston speed in a single direction

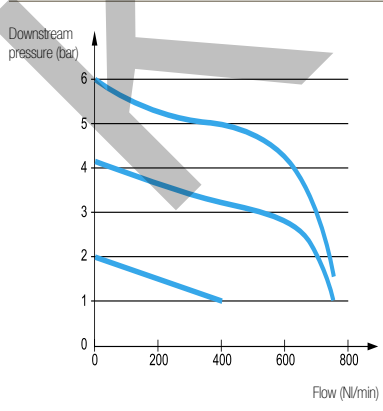


Phase 2: in return direction, pressure is supplied through the control valve

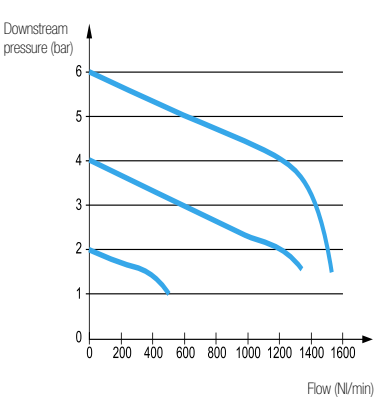


Flow Characteristics at 7 bar (Nl/min)

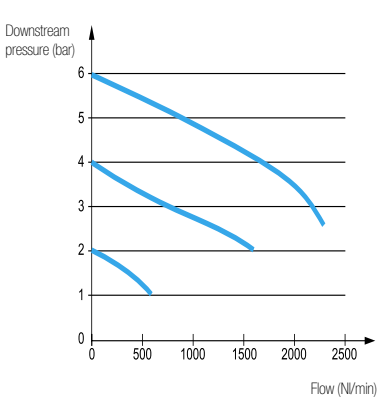
G1/8 Models



G1/4 Models

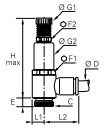


G3/8 Models



7300 Pressure Regulator, Male BSPP Thread

Technical polymer, Nickel-plated brass, NBR



ØD	C		E	F1	F2	G1	G2	H max	L1	L2	Kg
4	G1/8	**7300 04 10**	4.5	17	13	14	17	65	7	18.5	0.047
6	G1/8	**7300 06 10**	4.5	17	13	14	17	65	7	20	0.047
	G1/4	**7300 06 13**	7.5	17	13	14	17	74.5	9.5	22	0.065
8	G1/8	**7300 08 10**	4.5	17	13	14	17	65	7	25	0.048
	G1/4	**7300 08 13**	7.5	17	13	14	17	74.5	9.5	27	0.066
	G3/8	**7300 08 17**	8.5	22	17	18.5	22	84	11.5	28.5	0.122
10	G1/4	**7300 10 13**	7.5	17	13	14	17	74.5	9.5	29	0.066
	G3/8	**7300 10 17**	8.5	22	17	18.5	22	84	11.5	30.5	0.122

DRV Pressure Reducing Valve

Brass

A	A1		HEX	L	L1	Inlet Pressure	Outlet Pressure *
G1/4	G1/4	**DRV13/20**	17	34	9	15 bar	2.6 bar
G1/4	G1/4	**DRV13/30**	17	34	9	15 bar	3.7 bar
G1/4	G1/4	**DRV13/40**	17	34	9	15 bar	4.5 bar
G1/4	G1/4	**DRV13/50**	17	34	9	15 bar	5.4 bar
G1/4	G1/4	**DRV13/60**	17	34	9	15 bar	6.2 bar
G1/4	G1/4	**DRV13/70**	17	34	9	15 bar	8 bar
G1/4	G1/4	**DRV13/80**	17	34	9	15 bar	8.2 bar
G1/4	G1/4	**DRV13/100**	17	34	9	15 bar	10.2 bar

* Tolerance outlet pressure +/- 0.5 bar

Pneumatic Sensor Fittings

The sensor produce a pneumatic or electric output signal when the pressure drop in the exhaust chamber of the cylinder goes below their back pressure threshold.

Ø metric: 4 mm

Technical Characteristics

- **Compatible Fluids:** Compressed air
- **Working Pressure:** 3 to 8 bar
- **Working Temperature:** -15°C to +60°C
- **Back Pressure:** 0.85 to 1 bar
- **Switching Time:** Model 7818: 3 ms
- **Open/Closed Contact:** Model 7828: 2A / 0-48 V
  2A / 250 V 50 Hz

Advantages

- Detection of end of cylinder rod stroke

With Pneumatic Output

Totally pneumatic installation

2 possible installations:

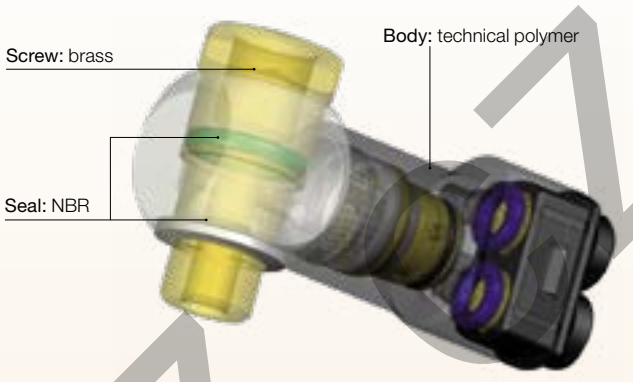
- Supplied with permanent pressure (P1): produces a pneumatic signal when the back pressure threshold is reached
- Supplied from the control valve-cylinder circuit on the opposite side: no unexpected pneumatic signal (S) can appear during pressurisation due to the actuating pressure which supplies the sensor fitting (P1)

With Electrical Output

- Combined electrical and pneumatic installation
- Installation with continuous electrical supply only (BU)
- Guarantees an electrical signal when the back pressure threshold is reached

Component Materials

Silicone-free



Regulations

- **RoHS**
- **REACH**
- **PED**

Operation

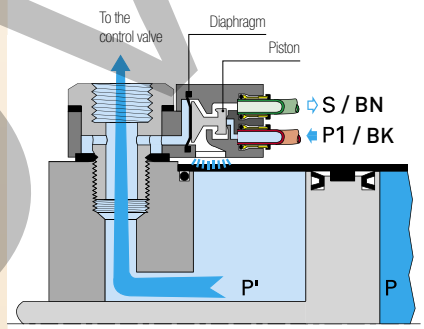
Pneumatic Installation Diagram

P': Exhaust back pressure
P: Dynamic pressure
P1: Sensor supply pressure
S: Output signal

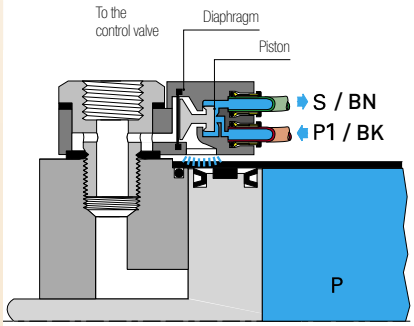
Electrical Installation Diagram

Connection via 3 core 0.5 mm² cable, 2 meters long.
Contactor: 5A / 250 V ~ or 5W / 48V ⎓

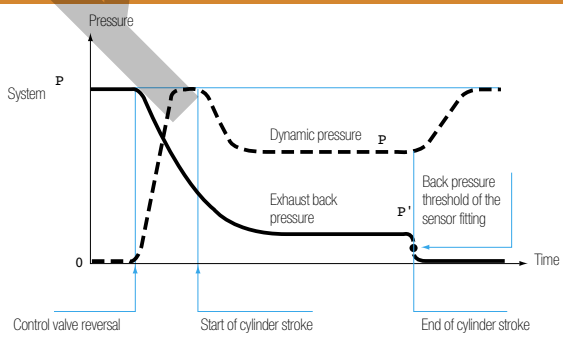
Cylinder in Operation



Cylinder in Final Position

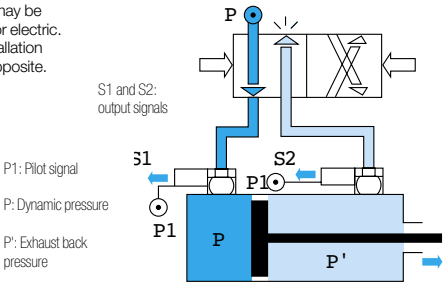


Cylinder Pressure Cycle



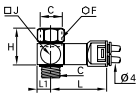
Installation Diagram

Depending on model, S1, S2 and P1 may be pneumatic or electric. See the installation diagrams opposite.



7818 Pneumatic Sensor Fitting, Male BSPP and Metric Thread

Zamak, NBR, technical polymer, brass

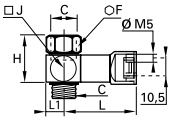


ØD	C		F	H	J	L	L1	Kg
4	M5x0.8	**7818 04 19***	8	16	11	43.5	5.5	0.025
	G1/8	**7818 04 10**	14	23	16	44.5	8	0.043
	G1/4	**7818 04 13**	17	28	19.5	46.5	10	0.061
	G3/8	**7818 04 17**	22	29	23.5	49	12	0.083
	G1/2	**7818 04 21**	27	30	31.5	52.5	16	0.125

* Bolt zinc passivated steel

7818 Pneumatic Sensor, Male/Female BSPP Thread

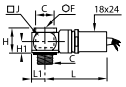
Zamak, NBR, technical polymer, brass



C		F	H	J	L	L1	Kg
G1/8	**7818 19 10**	14	23	16	40.5	8	0.049
G1/4	**7818 19 13**	17	28	19.5	42.5	10	0.065

7828 Pneumatic/Electric Sensor, Male/Female BSPP and Metric Thread

Technical polymer, NBR, brass



C		F	H	H1	J	L	L1	Kg
M5x0.8	**7828 00 19**	8	20	10	11	49	5.5	0.116
G1/8	**7828 00 10**	6	20	10	16	52	8	0.132
G1/4	**7828 00 13**	8	20	10	21	54	10.5	0.142
G3/8	**7828 00 17**	10	22	12	28	57	14	0.171

The snap fittings enable a circuit to be isolated without the need to vent the complete system.

Ø metric:
6 to 10 mm

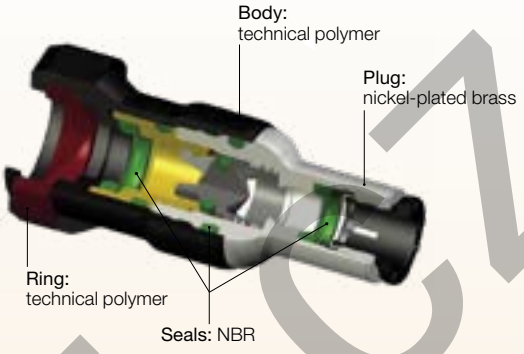
Technical Characteristics

- **Compatible Fluids:** Compressed air
- **Working Pressure:** 0 to 10 bar
- **Working Temperature:** -20°C to +80°C
- **Flow Characteristics at 6 bar:** DN 5 mm: 1000 Nl/min
  DN 7 mm: 1900 Nl/min

Tightening Torque (BSPT)	Thread	G1/8	G1/4	G3/8
	daN.m	0.8	1.2	3

Component Materials

Silicone-free



Advantages

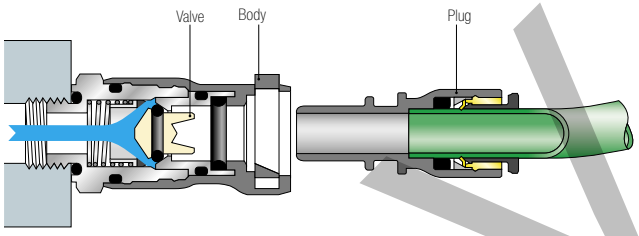
- Partial venting of systems for energy and time-saving during maintenance operations
- Protection of individuals by maintaining pressure if necessary
- Audible click indicates connection
- Circuit identification by coloured rings (on request)

Regulations

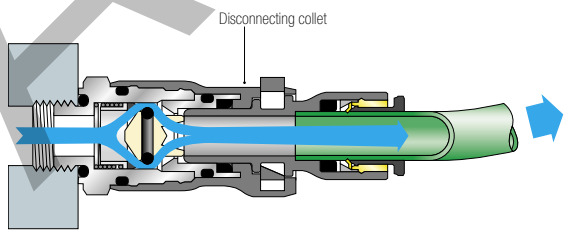
- **RoHS**
- **REACH**
- **PED**

Operation

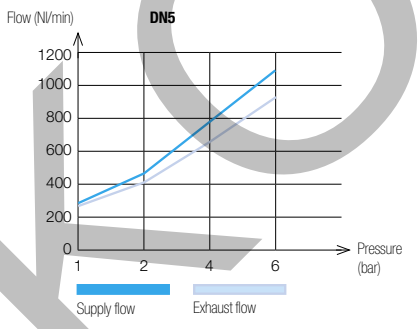
Circuit Closed

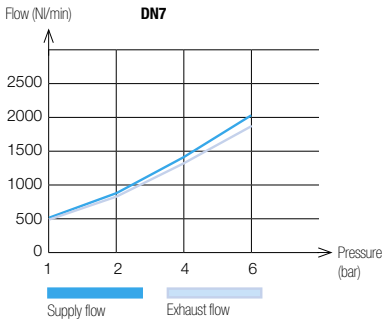


Circuit Open



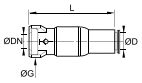
Flow Characteristics - Pressure Drop





7926 Body with Push-In Connection

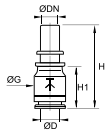
Technical polymer, Nickel-plated brass, NBR



DN	ØD		G	L	Kg
5	6	**7926 05 06**	18.5	44	0.020
5	8	**7926 05 08**	18.5	49	0.024
7.3	10	**7926 07 10**	22	58.5	0.044

7960 Straight Probe, Push-In Connection

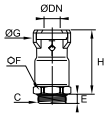
Technical polymer, NBR



DN	ØD		G	H	H1	Kg
5	6	**7960 05 06**	13.5	36.5	17.5	0.007
5	8	**7960 05 08**	13.5	37	18	0.003
7.3	10	**7960 07 10**	16	41	20.5	0.004

7921 Body with Male BSPP Thread

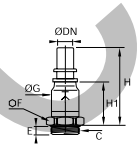
Technical polymer, Nickel-plated brass, NBR



DN	C		E	F	G	H	Kg
5	G1/8	**7921 05 10**	5.5	16	18.5	31.5	0.021
5	G1/4	**7921 05 13**	5.5	16	18.5	31.5	0.023
7.3	G1/4	**7921 07 13**	5.5	20	22	37.5	0.039
7.3	G3/8	**7921 07 17**	5.5	20	22	37.5	0.040

7961 Straight Probe, Male BSPP Thread

Technical polymer, Nickel-plated brass, NBR



DN	C		E	F	G	H	H1	Kg
5	G1/8	**7961 05 10**	5.5	13	13.5	46	27	0.017
5	G1/4	**7961 05 13**	5.5	16	13.5	46	27	0.020
7.3	G1/4	**7961 07 13**	5.5	16	16	51.5	31	0.025
7.3	G3/8	**7961 07 17**	5.5	20	16	51.5	31	0.034

Manually-Operated Valves

Manually-operated provide a significant reduction in the time needed to work on pneumatic circuits and isolate the circuit when the system has to be switched frequently.

Ø metric:
4 to 8 mm

Technical Characteristics

- **Compatible Fluids:** Compressed air
- **Working Pressure:** 0 to 10 bar
  Model 0669: 0 to 16 bar
- **Working Temperature:** -10°C to +80°C
  Model 0669: -5°C to +70°C

Advantages

Manual switch-operated valves:
- 2 models:
  - 3/2: opening, closing, venting
  - 2/2: opening, closing
- Can be positioned through 360°

Manual switch-operated valves:
- Uni-directional use ensures the downstream circuit is vented
- Identification of the venting system by the colour (red)

Component Materials

Silicone-free

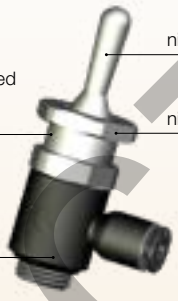
Seals: NBR

Bolt:
Manual switch-operated valve: nickel-plated brass with seal
Sleeve valve: nickel-plated brass

Body:
Manual switch-operated valve: technical polymer
Sleeve valve: nickel-plated brass

Lever:
nickel-plated brass

locking nut:
nickel-plated brass

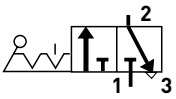


Regulations

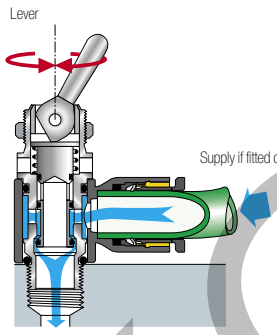
- **RoHS**
- **REACH**
- **PED**

Operation

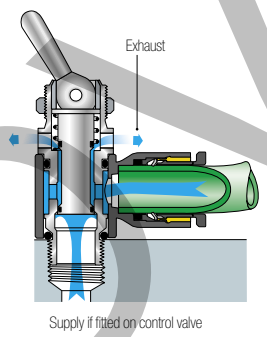
Switch-Operated Valves



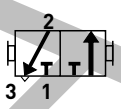
Open



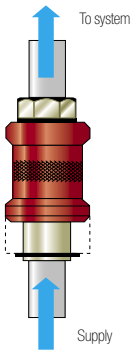
Closed



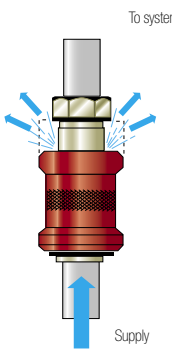
Sleeve Valves



Open: downstream supply

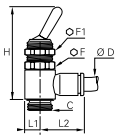


Closed: downstream exhaust



7800 3/2 Manual Switch-Operated Valve, Supply, Male BSPP and Metric Thread

Technical polymer, Nickel-plated brass, NBR

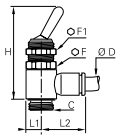


ØD	C		F	F1	H	L1	L2	Kg
4	M5x0.8	**7800 04 19**	14	14	55	7	18.5	0.032
	G1/8	**7800 04 10**	14	14	43	7	18.5	0.023
6	M5x0.8	**7800 06 19**	14	14	55	7	18.5	0.032
	G1/8	**7800 06 10**	14	14	43	7	20	0.023
	G1/4	**7800 06 13**	17	14	50.5	9	22	0.048
8	G1/8	**7800 08 10**	14	14	43	7	25	0.024
	G1/4	**7800 08 13**	17	14	50.5	9	27	0.049

For part numbers 7800 04 19 and 7800 06 19, adaptor sealing is effected by a flat PTFE seal and tightening torque is maximum 0.16 daN.m.

7801 3/2 Manual Switch-Operated Valve, Control, Male BSPP Thread

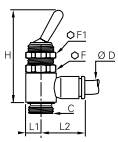
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	F1	H	L1	L2	Kg
4	G1/8	**7801 04 10**	14	14	43	7	18.5	0.023
6	G1/8	**7801 06 10**	14	14	43	7	20	0.023
	G1/4	**7801 06 13**	17	14	50.5	9	22	0.050
8	G1/8	**7801 08 10**	14	14	43	7	25	0.026

7802 2/2 Manual Switch-Operated Valve, Male BSPP Thread

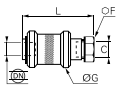
Technical polymer, Nickel-plated brass, NBR



ØD	C		F	F1	H	L1	L2	Kg
4	G1/8	**7802 04 10**	14	14	43	7	18.5	0.023
6	G1/8	**7802 06 10**	14	14	43	7	20	0.024
	G1/4	**7802 06 13**	17	14	50.5	9	22	0.051
8	G1/8	**7802 08 10**	14	14	43	7	25	0.025
	G1/4	**7802 08 13**	17	14	50.5	9	27	0.052

0669 3/2 Sleeve Valve, Female BSPP and Metric Thread

Nickel-plated brass, NBR



DN	C		F	G	L	Kg
2.5	M5x0.8	**0669 02 19**	10	14	30.5	0.012
4	G1/8	**0669 04 10**	14	25	48	0.050
7	G1/4	**0669 07 13**	19	30	58	0.096
10	G3/8	**0669 10 17**	22	35	68	0.154
14	G1/2	**0669 14 21**	27	40	75	0.210
19	G3/4	**0669 19 27**	32	50	83	0.330

- Detects stoppage of a cylinder due to a pressure drop in the exhaust chamber
- For direct mounting to cylinders
- Choice of pneumatic, electrical or electronic output
- Wide range of sizes

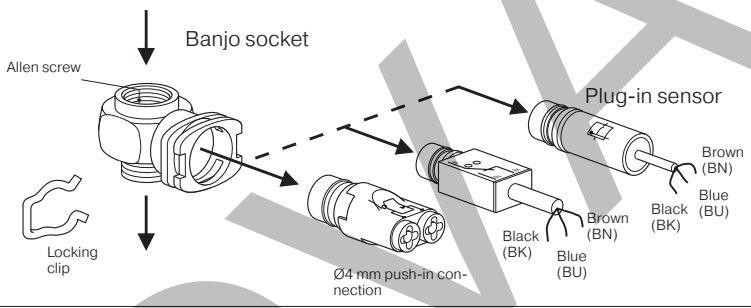
Operating information

Operating pressure:	0 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Operating temperature:	-15°C to +60°C
Storage temperature:	-40°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	10 million
Maximum operating frequency:	10 Hz
Output characteristics:	Pneumatic: Flow at 6 bar 90l/mn Electrical: C/contact 2,5A/250V AC, 5W 48V DC Electronic: PNP N/C or N/O 10 to 30V 75 mA DC
Maximum connecting torque:	M5 = 1Nm; 1/8 = 8Nm; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material:	Thermo plastic
Connection thread:	Brass

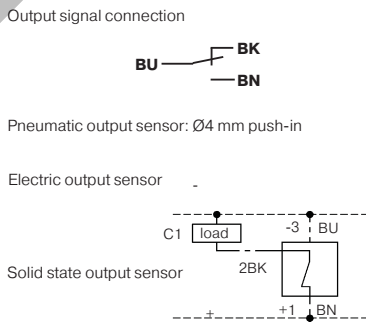
Dimensions and piloting pressures next page

Assembly

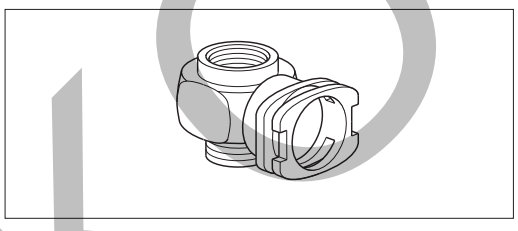
All back pressure sensors are a combination of two distinct parts: a banjo socket + a plug-in sensor.



Connection

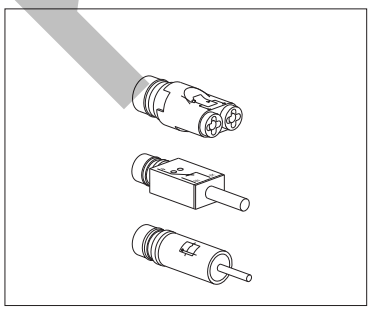


Banjo Sockets



Thread Size for Cylinder Port	Female Thread	Tool Required	Weight Kg	Order Code
M5	M5	8mm flat spanner	0,04	**PWS-B155**
G1/8	G1/8	5mm Allen key	0,04	**PWS-B188**
G1/4	G1/4	8mm Allen key	0,05	**PWS-B199**
G3/8	G3/8	10mm Allen key	0,07	**PWS-B133**
G1/2	G1/2	12mm Allen key	0,11	**PWS-B122**

Plug-in Sensors



Sensing function	Output function	Output Connection	Output characteristics	Weight kg	Order Code
Exhaust back pressure decay	Pneumatic	Push-in Ø4mm	NO valve flow rate at 6 bar 90 l/mn	0,09	**PWS-P111**
	Electrical ~Ve = 3A	3 wires 0,5mm² length 2m	CO contact 12 to 230V ~ / 10VA* 12 to 48 VDC/5W*	0,08	**PWS-M1012**
	Solid state	3 wires 0,1mm² length 2m	PNP type NC 10/30VDC** 75 mA, NO	0,07 0,07	**PWS-E101** **PWS-E111**

* Suitable for low currents : 250 V ~ / 4 mA ; 24 VDC / 10 mA ** Including ripple

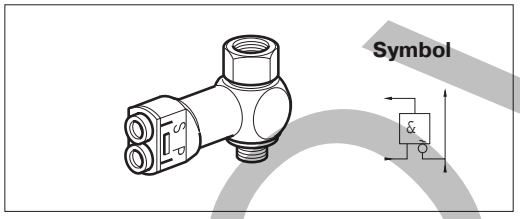
- Detects stoppage of a cylinder due to a pressure drop in the exhaust chamber
- Single unit design
- For direct mounting to cylinders
- Pneumatic output
- Wide range of sizes

Operating information

Operating pressure:	0 to 10 bar
Permissible fluids:	Air or neutral gas 50micron or filtration, lubricated or not
Operating temperature:	-15°C to +70°C
Storage temperature:	-20°C to +70°C
No. of operations with dry air at 6 bar 20°C 1 Hz:	10 million
Maximum operating frequency:	1 Hz
Output characteristics:	Flow @ 6 bar 90l/m
Maximum connecting torque:	M5 = 1Nm; 1/8 = 8Nm; 1/4 = 12Nm; 3/8 = 30Nm; 1/2 = 35Nm
Body material:	Zinc alloy / Thermo plastic
Connection thread:	Brass

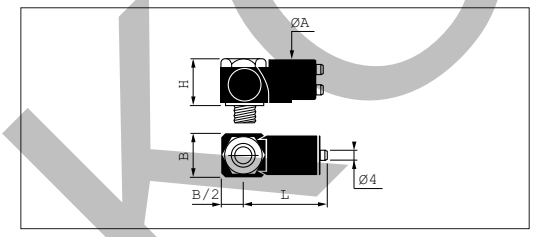
Plug-in & Monoblock back pressure sensors	Pilot	Depilot
	operating pressure	operating pressure
	6bar	6bar
PWS-P111	4,4	0,4
PWS-M1012	1,5	0,6
PWS-E101 & E111	1,5	0,6
PWS-C	1,6 ±0,2	0,3

Back Pressure Sensor for Cylinder Mounting



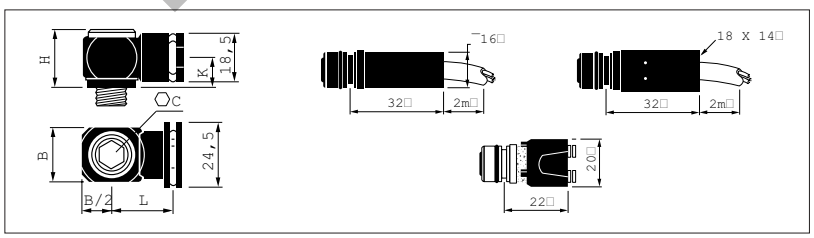
Thread Cylinder Port	Thread Supply Port	Bore Ømm	Weight kg	Order Code
M5	M5	2	0,10	**PWS-C5145**
G1/8	G1/8	5	0,11	**PWS-C5148**
G1/4	G1/4	7	0,10	**PWS-C5149**
G3/8	G3/8	10	0,17	**PWS-C5143**
G1/2	G1/2	14	0,15	**PWS-C5142**

Back Pressure Sensors - Mono block - Dimensions (mm)



Order Code	ØA	B	H	L
PWS-CS145	19	11,0	16,0	42
PWS-CS148	22	16,5	29,0	40
PWS-CS149	22	23,5	26,0	43
PWS-CS143	22	23,5	36,5	43
PWS-CS142	22	32,0	29,5	48

Back Pressure Sensors - Modular - Dimensions (mm)



Order Code	C	B	H	K	L
PWS-B155	8	11	16,5	10	17
PWS-B188	5	16	20,0	10	20
PWS-B199	8	21	20,0	10	22
PWS-B133	10	28	22,0	12	25
PWS-B122	12	33	26,0	14	26