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

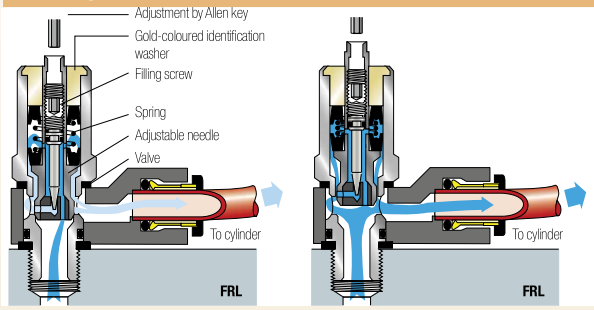
	Model	Flow at 6 bar	Kv
Flow Characteristics	7860 08 13	1500 Nl/min	0.80
	7860 10 13	2100 Nl/min	1.20
	7860 10 17	2200 Nl/min	1.30
	7870 08 13	1500 Nl/min	0.80
	7870 10 13	2000 Nl/min	1.15
	7870 10 17	2000 Nl/min	1.15

Component Materials

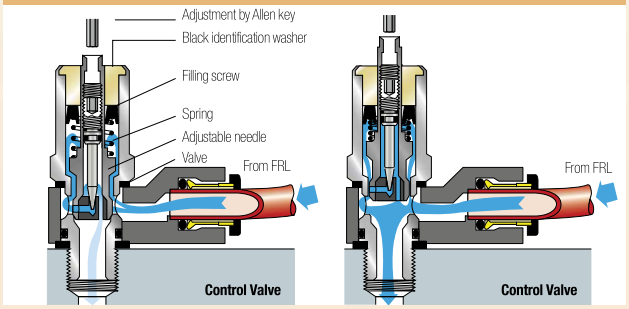
Silicone-free

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

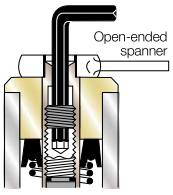
- **RoHS**
- **REACH**
- **PED**

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.

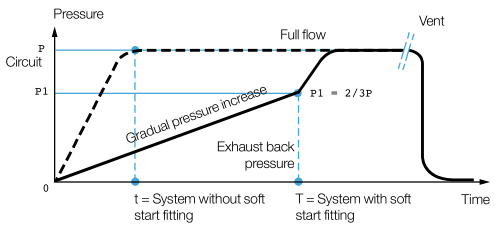
To adjust:
– immobilise the piston using a spanner
– adjust the screw with an Allen key
- 1.5 mm key for 8 mm diameter
- 2.5 mm key for 10 and 12 mm diameter

Max. tightening torque: 0.1 daN.m



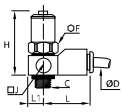
Cylinder Pressure Cycle

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

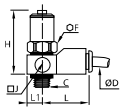
Technical polymer, Nickel-plated brass, NBR



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

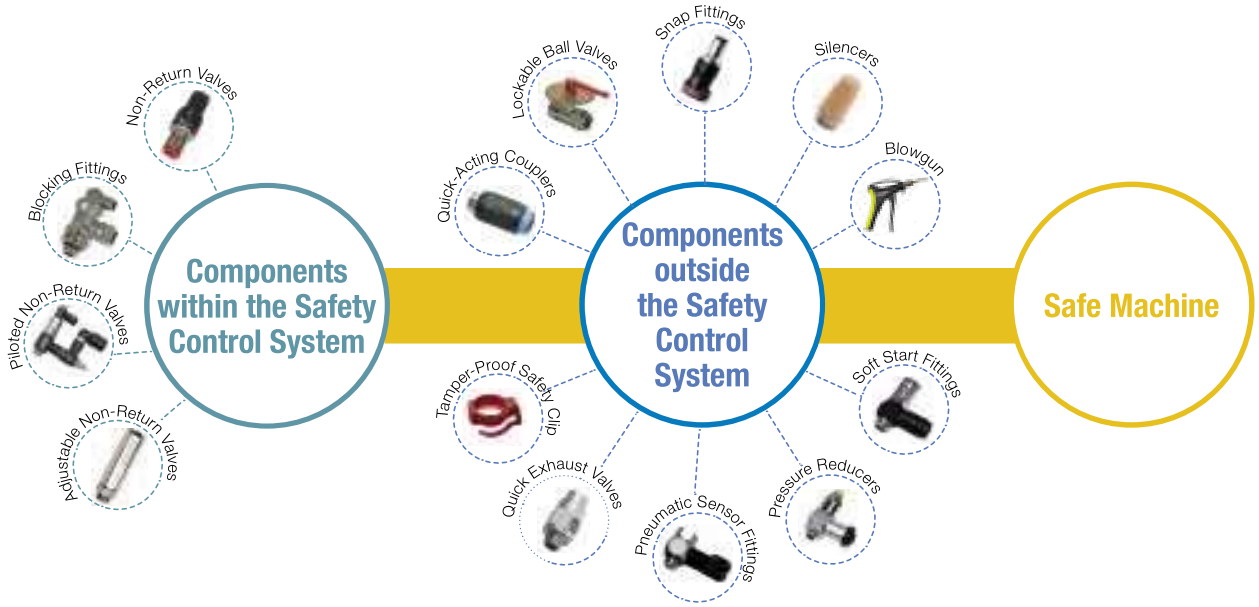


ØD	C		F	H max	H min	J	L	L1	Kg
8	G1/4	7870 08 13	17	61	54	20	35	10	0.066
10	G1/4	7870 10 13	22	62	55	25	41	12.5	0.113
	G3/8	7870 10 17	22	62	55	25	41	12.5	0.116

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

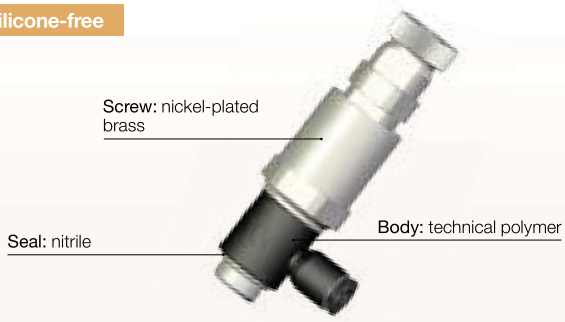
Technical Characteristics (7300)

- **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.

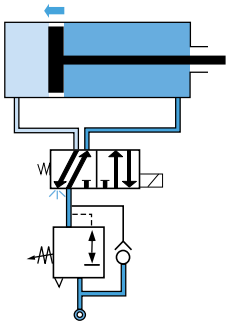
Regulations

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

Operation

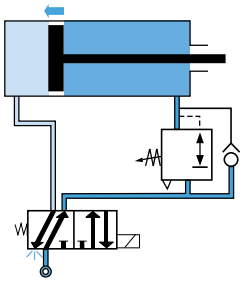
Mounting Upstream of the Control Valve

Adjustment of the piston feed pressure in both directions

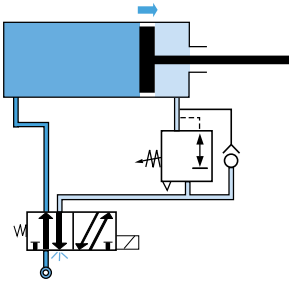


Mounting Downstream of the Control Valve

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

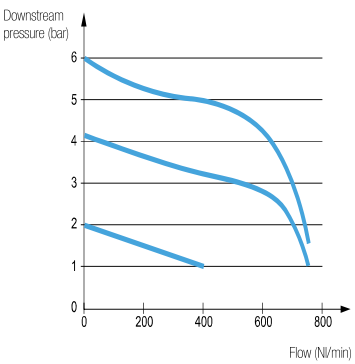


Phase 2: in return direction, pressure is supplied through the control valve

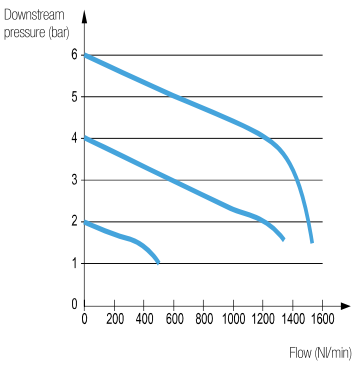


Flow Characteristics at 7 bar (Nl/min)

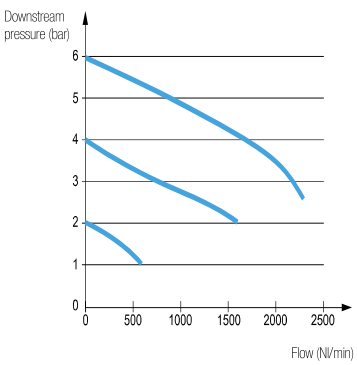
G1/8 Models



G1/4 Models

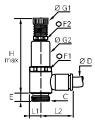


G3/8 Models



7300 Pressure Regulator, Male BSPP Thread

Technical polymer, Nickel-plated brass, NBR



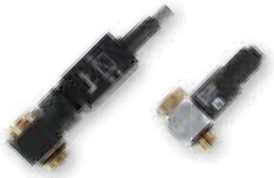
ØD	C		E	F1	F2	G1	G2	H max	L1	L2	Kg
4	G1/8	**7300 04 10**	4.5	17	13	14	17	65	7	18.5	0.047
6	G1/8	**7300 06 10**	4.5	17	13	14	17	65	7	20	0.047
	G1/4	**7300 06 13**	7.5	17	13	14	17	74.5	9.5	22	0.065
8	G1/8	**7300 08 10**	4.5	17	13	14	17	65	7	25	0.048
	G1/4	**7300 08 13**	7.5	17	13	14	17	74.5	9.5	27	0.066
	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	Const. Supply Pressure	max. Supply Pressure
G1/4	G1/4	**DRV13/20**	17	34	9	2 bar	15 bar
G1/4	G1/4	**DRV13/30**	17	34	9	3 bar	15 bar
G1/4	G1/4	**DRV13/40**	17	34	9	4 bar	15 bar
G1/4	G1/4	**DRV13/50**	17	34	9	5 bar	15 bar
G1/4	G1/4	**DRV13/60**	17	34	9	6 bar	15 bar
G1/4	G1/4	**DRV13/70**	17	34	9	7 bar	15 bar
G1/4	G1/4	**DRV13/80**	17	34	9	8 bar	15 bar
G1/4	G1/4	**DRV13/100**	17	34	9	10 bar	15 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:

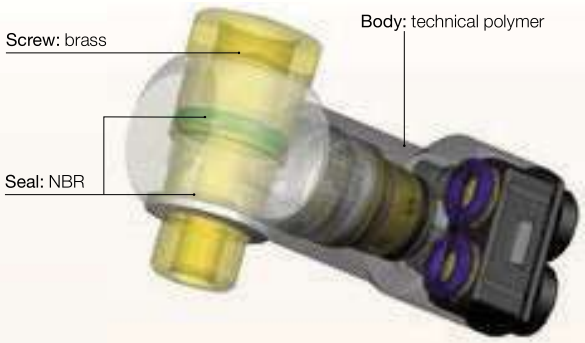
- Supplied with permanent pressure (P1): produces a pneumatic signal when the back pressure threshold is reached
- Supplied from the control valve-cylinder circuit on the opposite side: no unexpected pneumatic signal (S) can appear during pressurisation due to the actuating pressure which supplies the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

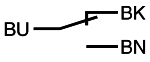
- **RoHS**
- **REACH**
- **PED**

Operation

Pneumatic Installation Diagram

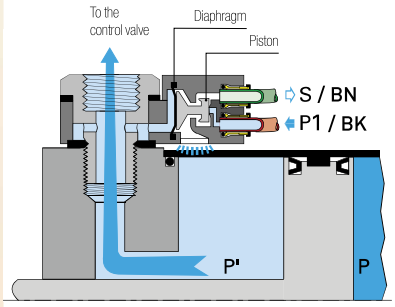
P': Exhaust back pressure
P: Dynamic pressure
P1: Sensor supply pressure
S: Output signal

Electrical Installation Diagram

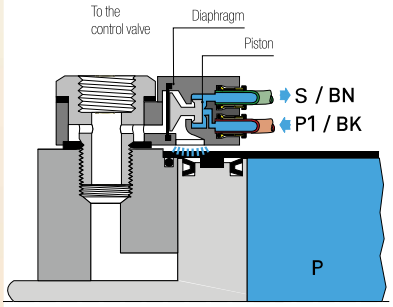


Connection via 3 core 0.5 mm² cable, 2 meters long.
Contactor: 5A / 250 V ∿ or 5W / 48V ⎓

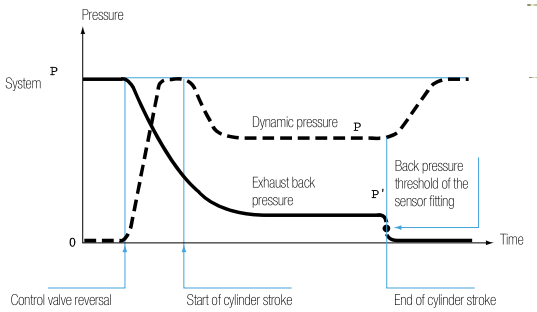
Cylinder in Operation



Cylinder in Final Position

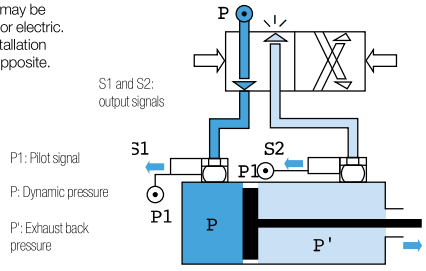


Cylinder Pressure Cycle



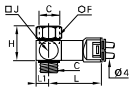
Installation Diagram

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

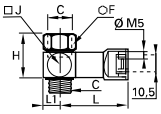


ØD	C		F	H	J	L	L1	Kg
4	M5x0.8	**7818 04 19***	8	16	11	43.5	5.5	0.025
	G1/8	**7818 04 10**	14	23	16	44.5	8	0.043
	G1/4	**7818 04 13**	17	28	19.5	46.5	10	0.061
	G3/8	**7818 04 17**	22	29	23.5	49	12	0.083
	G1/2	**7818 04 21**	27	30	31.5	52.5	16	0.125

* Bolt zinc passivated steel

7818 Pneumatic Sensor, Male/Female BSPP Thread

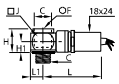
Zamak, NBR, technical polymer, brass



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

Snap Fittings

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

Ø metric:
6 to 10 mm

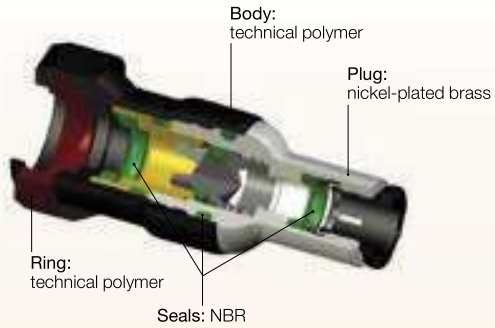
Technical Characteristics

- **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

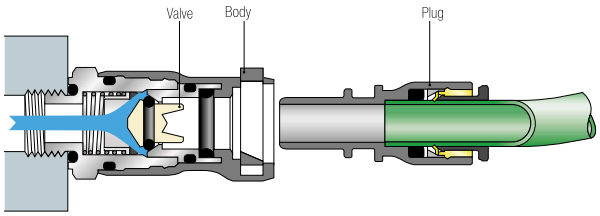
- Partial venting of systems for energy and time-saving during maintenance operations
- Protection of individuals by maintaining pressure if necessary
- Audible click indicates connection
- Circuit identification by coloured rings (on request)

Regulations

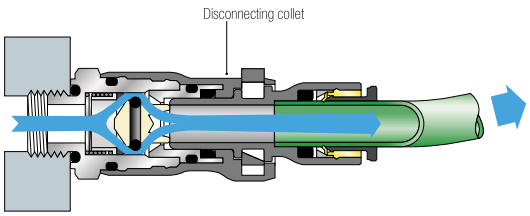
- **RoHS**
- **REACH**
- **PED**

Operation

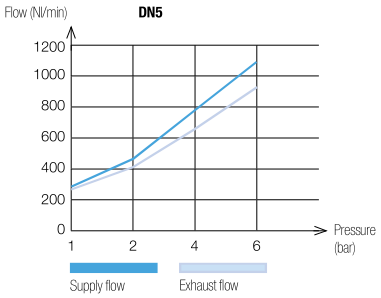
Circuit Closed

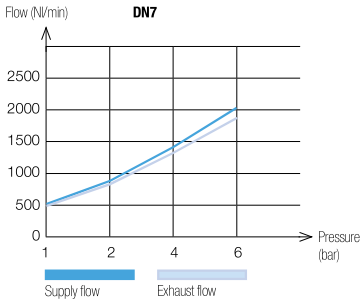


Circuit Open



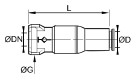
Flow Characteristics - Pressure Drop





7926 Body with Push-In Connection

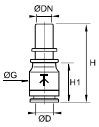
Technical polymer, Nickel-plated brass, NBR



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

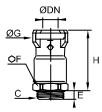
Technical polymer, NBR



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

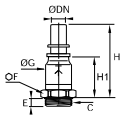
Technical polymer, Nickel-plated brass, NBR



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

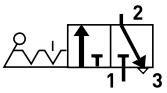
locking nut:
nickel-plated brass

Regulations

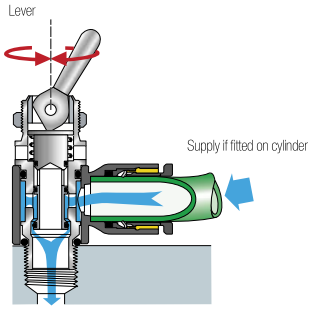
- **RoHS**
- **REACH**
- **PED**

Operation

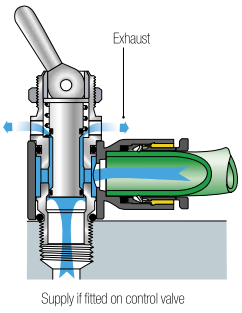
Switch-Operated Valves



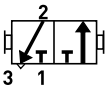
Open



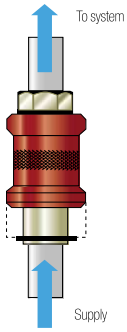
Closed



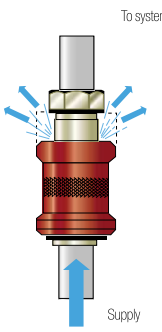
Sleeve Valves



Open: downstream supply

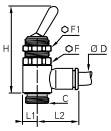


Closed: downstream exhaust



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

Technical polymer, Nickel-plated brass, NBR

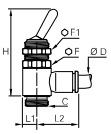


ØD	C		F	F1	H	L1	L2	Kg
4	M5x0.8	**7800 04 19**	14	14	55	7	18.5	0.032
	G1/8	**7800 04 10**	14	14	43	7	18.5	0.023
6	M5x0.8	**7800 06 19**	14	14	55	7	18.5	0.032
	G1/8	**7800 06 10**	14	14	43	7	20	0.023
	G1/4	**7800 06 13**	17	14	50.5	9	22	0.048
8	G1/8	**7800 08 10**	14	14	43	7	25	0.024
	G1/4	**7800 08 13**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

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

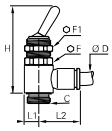
Technical polymer, Nickel-plated brass, NBR



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

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

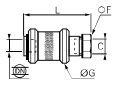
Technical polymer, Nickel-plated brass, NBR



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

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