



Piloted Non-Return Valve

A Compact and Reliable Multi-Purpose Fitting
for Safer Pneumatic Installations

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



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PILOTED NON-RETURN VALVE

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Safer Pneumatic Installations

- Designed to protect your installations:
 - Blocks cylinder movement in a vertical or horizontal position
 - Allows the cylinder to stop in a mid-stroke position
 - Maintains loads in case of pressure loss or emergency shut-off*
- New machinery directive 2006/42/EC: our piloted non-return valve conforms to this directive to guarantee safe use and security of equipment.

3 Integrated Functions into 1 Product

- A multi-purpose fitting:
 - **Piloted non-return valve**
 - **Flow regulator**
 - **Manual exhaust**
- 1-piece fitting: **integrated fittings** for pilot port and supply port
- Mounted in pairs directly on the cylinder

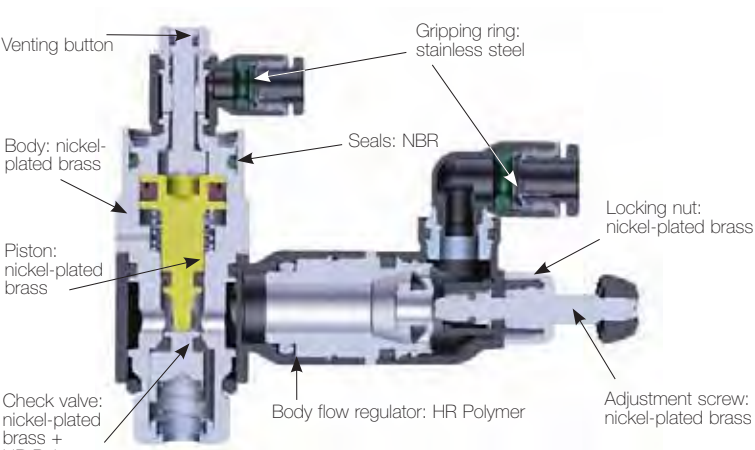
Flexibility

- **All ports can swivel 360°** to suit all pneumatic connection configurations
- The flow regulator can turn on its axis
- Instant fitting ports (LF 3000) for a quicker and more reliable installation

* With a pneumatic stop, very slight movement of the cylinder is still possible.
Only a mechanical stop will ensure a full and immediate stop.

> Technical Characteristics

Constituent Materials



Labels in diagram:

- Venting button
- Gripping ring: stainless steel
- Body: nickel-plated brass
- Seals: NBR
- Piston: nickel-plated brass
- Locking nut: nickel-plated brass
- Check valve: nickel-plated brass + HR Polymer
- Body flow regulator: HR Polymer
- Adjustment screw: nickel-plated brass

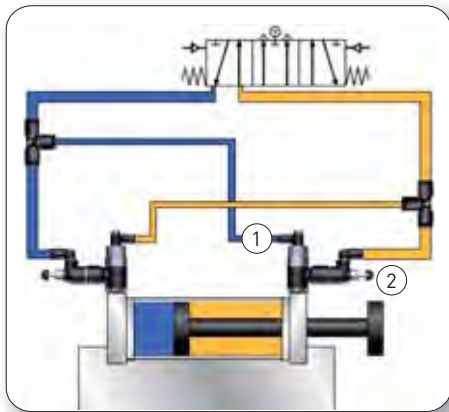
Suitable Fluid	Compressed air
Working Pressure	1 to 10 bar
Working Temperature	-5°C to +60°C
Suitable Tubing	Polyurethane Nylon
Nbr of turns	10 to 15

> Flow Characteristics at 6 bar (NI/min)

Max. Flow	7894 06 10	7894 06 13	7894 08 10	7894 08 13	7894 08 17	7894 10 17	7894 10 21	7894 12 21
Adjustment	250	475	240	585	875	940	1535	1560
Return	365	620	355	815	1085	1205	1860	1940

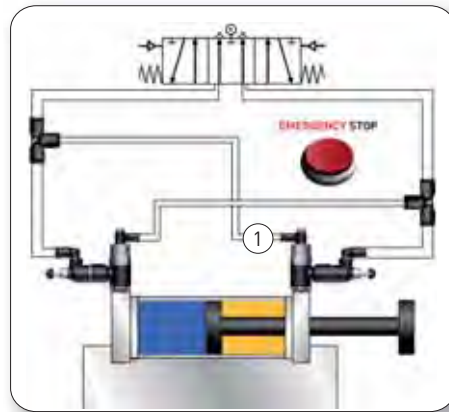
> Working Principle

Normal Operation



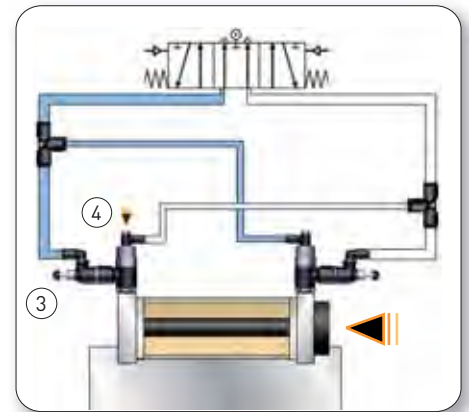
The control valve alternately supplies the two cylinder chambers; the pilot connection ① is connected to the opposite supply chamber with a tee fitting. Exhaust flow is controlled by the flow regulator ②.

Emergency Stop



In case of an emergency stop or pressure drop, pilot pressure ① drops, closing the piloted non-return valves and blocking the cylinder rod.

Venting Operation



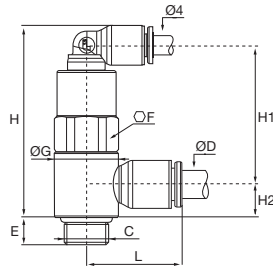
The cylinder can be put into low position using a vent ④ that empties the pressure chamber through the flow regulator ③ and the control valve.

> Precautions of use

- Close the control regulator before venting in order to avoid sudden release of the cylinder rod.
- Do not use in corrosive environments.

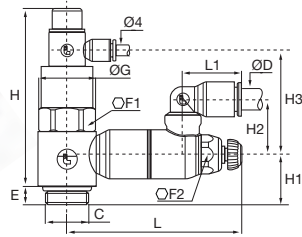
> Dimensions

7892 Piloted non-return valve, BSPP



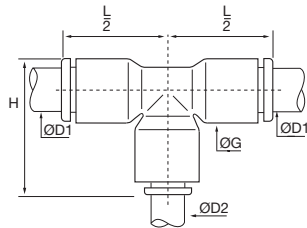
ØD	C		E	F	G	H	H1	H2	L	
6	G1/8	7892 06 10	6	13	14	42	30	7	21	0,028
6	G1/4	7892 06 13	9	17	18,5	45	32	9	23	0,049
8	G1/8	7892 08 10	6	13	14	42	29	9	25	0,029
8	G1/4	7892 08 13	9	17	18,5	45	32	9	27	0,051
8	G3/8	7892 08 17	6	20	22,5	57	41	11	28	0,093
10	G3/8	7892 10 17	6	20	22,5	57	41	11	31	0,094
10	G1/2	7892 10 21	10	24	28	63	47	16	36	0,172
12	G1/2	7892 12 21	10	24	28	63	47	16	36	0,162

7894 Piloted non-return valve with flow regulator and exhaust, BSPP



ØD	C		E	F1	F2	G	H	H1	H2	H3	L mini	L maxi	L1	
6	G1/8	7894 06 10	6	13	8	14	46	7	24	31	48,5	51	16	0,049
6	G1/4	7894 06 13	9	17	10	18,5	49	11	18	31	59,5	65	17	0,081
8	G1/8	7894 08 10	6	13	8	14	46	7	27	31	48,5	51	22	0,050
8	G1/4	7894 08 13	9	17	10	18,5	49	11	23	31	59,5	65	23	0,084
8	G3/8	7894 08 17	7	20	14	22,5	69	13	21	40	67,5	73	23	0,148
10	G3/8	7894 10 17	7	20	14	22,5	69	13	29	40	67,5	73	26	0,152
10	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	0,236

3104 Unequal tee



ØD1	ØD2		G	H	L/2	
6	4	3104 06 04	10,5	22,5	17,5	0,006
8	4	3104 08 04	13,5	29	22,5	0,014
10	4	3104 10 04	16	33	26	0,027
12	4	3104 12 04	19	39	31	0,034

> Regulations



The piloted non-return valve is manufactured from materials without any hazardous prohibited substances.

New machinery directive 2006/42/EC: our piloted non-return valve conforms to this directive to guarantee safe use and security of equipment.

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