

Piloted Non-Return Valve

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

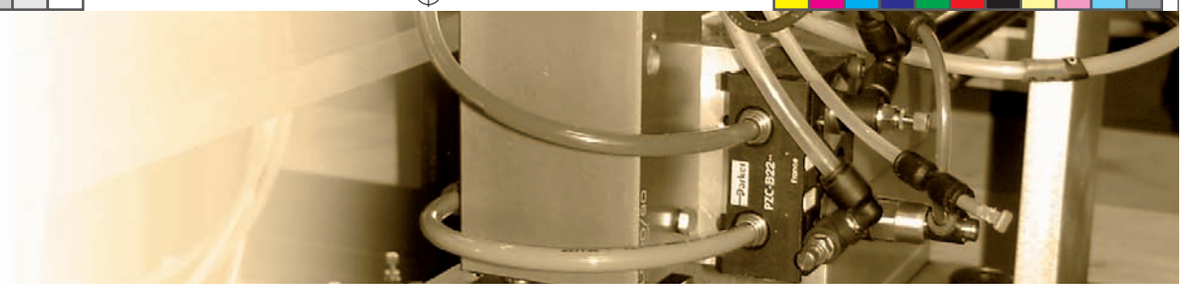
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ENGINEERING YOUR SUCCESS.

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PILOTED NON-RETURN VALVE

Packaging
Assembly machines

Material handling



Robotics

Machine tools

Automotive process

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

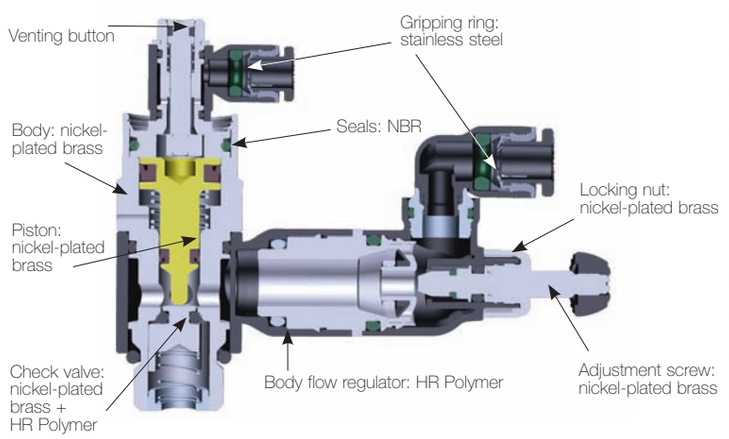
- **All ports** can **swivel** 360° to suit all pneumatic connection configurations
- The flow regulator can turn on its axis
- Instant fitting ports (LF 3000) for a quicker and more reliable installation

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

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> Technical Characteristics

Constituent Materials



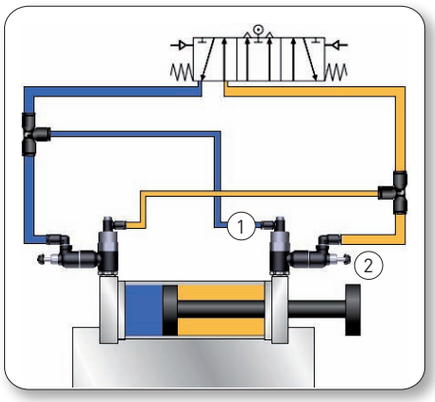
Suitable Fluid	Compressed air
Working Pressure	1 to 10 bar
Working Temperature	-5°C to +60°C
Suitable Tubing	Polyurethane Nylon
Nbr of turns	10 to 15

> Flow Characteristics at 6 bar (Nl/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

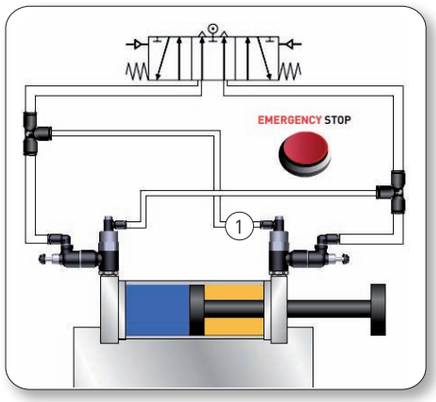
> Working Principle

Normal Operation



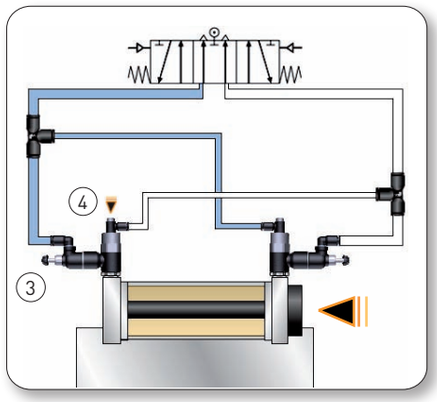
The control valve alternately supplies the two cylinder chambers; the pilot connection (1) is connected to the opposite supply chamber with a tee fitting. Exhaust flow is controlled by the flow regulator (2).

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

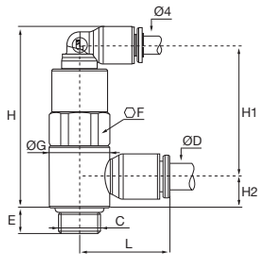
- Close the control regulator before venting in order to avoid sudden release of the cylinder rod.
- Do not use in corrosive environments.

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> Dimensions

7892 Piloted non-return valve, BSPP

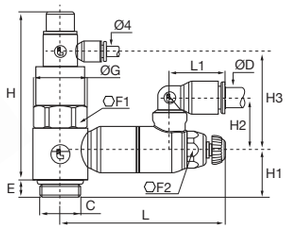




ØD	C		E	F	G	H	H1	H2	L	kg
6	G1/8	7892 06 10	6	13	14	42	30	7	21	0,028
6	G1/4	7892 06 13	9	17	18,5	45	32	9	23	0,049
8	G1/8	7892 08 10	6	13	14	42	29	9	25	0,029
8	G1/4	7892 08 13	9	17	18,5	45	32	9	27	0,051
8	G3/8	7892 08 17	6	20	22,5	57	41	11	28	0,093
10	G3/8	7892 10 17	6	20	22,5	57	41	11	31	0,094
10	G1/2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

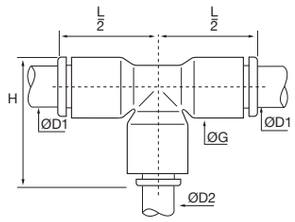




ØD	C		E	F1	F2	G	H	H1	H2	H3	L mini	L maxi	L1	kg
6	G1/8	7894 06 10	6	13	8	14	46	7	24	31	48,5	51	16	0,049
6	G1/4	7894 06 13	9	17	10	18,5	49	11	18	31	59,5	65	17	0,081
8	G1/8	7894 08 10	6	13	8	14	46	7	27	31	48,5	51	22	0,050
8	G1/4	7894 08 13	9	17	10	18,5	49	11	23	31	59,5	65	23	0,084
8	G3/8	7894 08 17	7	20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

Silicone Free

RoHS

REACh

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.

Parker Legris Connectic offers a comprehensive range of connection solutions ; please consult our general catalogue or visit www.legris.com or www.parkerconnectic.com.

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Fluid System Connectors Europe
Legris SAS
Parker Hannifin Corporation
CS 46911 - 74 rue de Paris
35069 Rennes
Phone : +33 (0)2 99 25 55 00
Fax : +33 (0)2 99 25 55 99
www.parkerconnectic.com