

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	650NI /min	Pilot Pressure	2.40	2.90	3.30	3.60	4.00
	650NI /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	1600NI /min	Pilot Pressure	2.70	3.20	3.50	3.80	4.10
	1600NI /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.

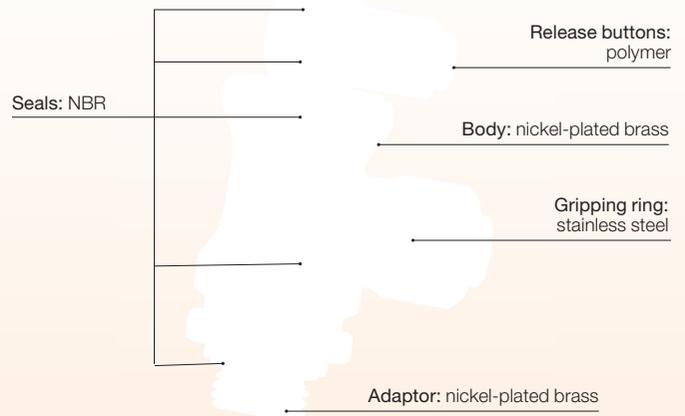
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

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

Component Materials

Silicone-free

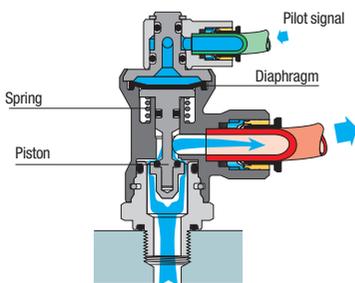


Regulations

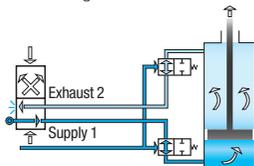
- **RoHS**
- **REACH**
- **PED**
- **B10d >110 millions of cycles**

Operation

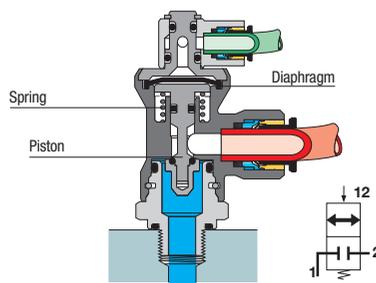
Cylinder in Operation (pilot signal active)



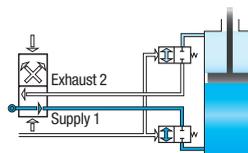
Pilot signal authorises movement



Cylinder Blocked (pilot signal removed)

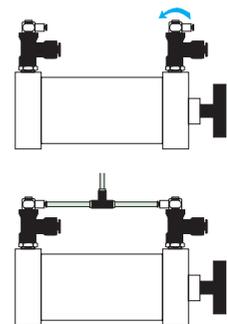


No signal blocks movement



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.



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

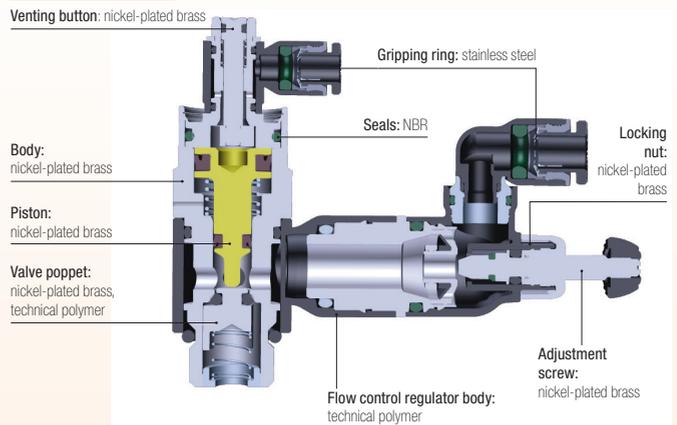
- **Compatible Fluids:** compressed air
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** -5°C to +60°C
- **Cracking Pressure:** 0.3 bar

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

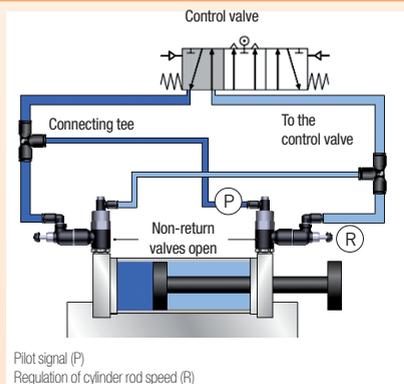


Regulations

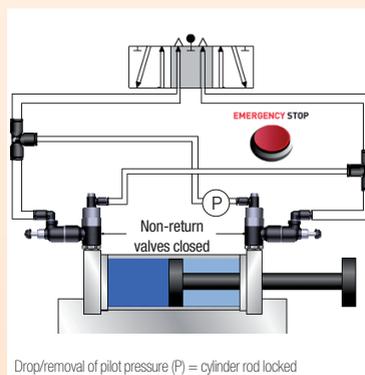
- RoHS
- REACH
- PED

Operation

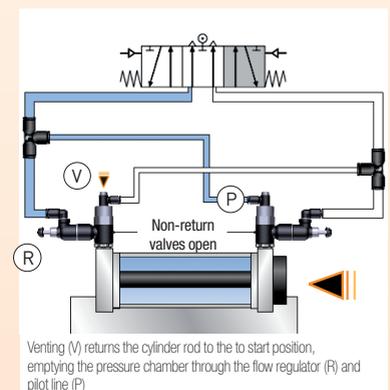
Normal Operation



Emergency Stop or Pressure Drop



Venting Operation



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 (NI/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

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.

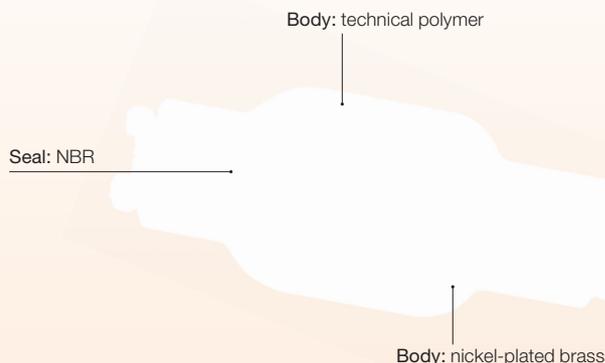
Ø metric:
4 to 12 mm

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 (NI/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:

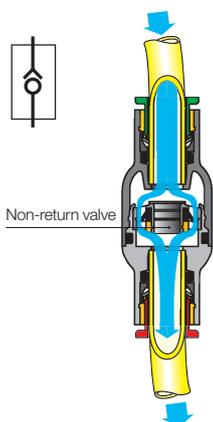
- Symbol showing the operating direction of flow
- Colour code: green for supply version, red for exhaust version

Regulations

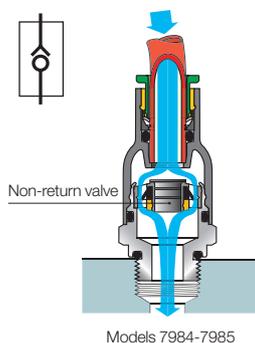
- RoHS
- REACH
- PED
- B10d: > 40 millions of cycles

Operation

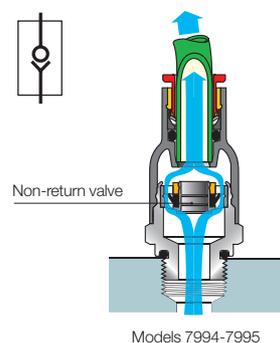
In-Line Version



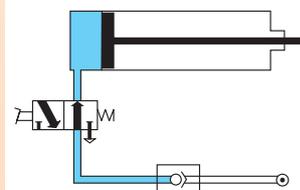
Supply Version



Exhaust Version



Installation Diagram



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 direction.

Technical Characteristics

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

Cracking Pressure	Threads		0 to 4 turns (values given as an example only)			
	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			

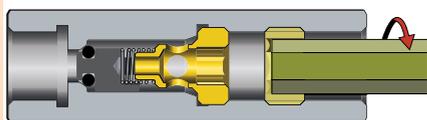
Max. Tightening Torques	Threads	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	0.16	0.8	1.2	3	3.5

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

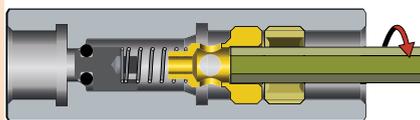
Operation

Step 1



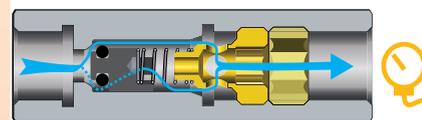
Unscrew the locking nut with an Allen key.

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.

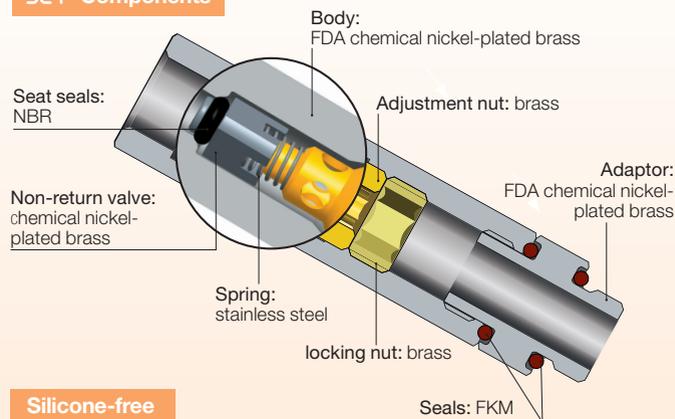
Step 3



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

Component Materials

External Components



Silicone-free

Regulations

- RoHS
- FDA : 21CFR
- REACH

LIQUIfit® Non-Return Valves



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

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

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

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

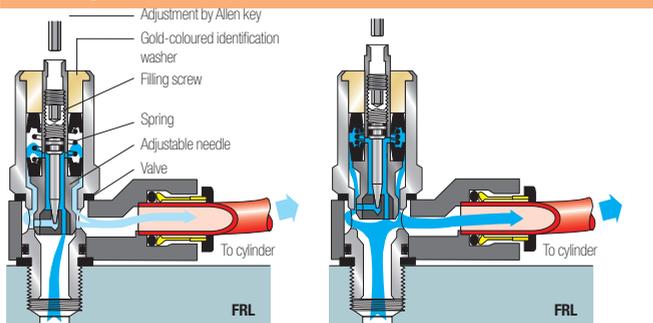
Component Materials

Silicone-free

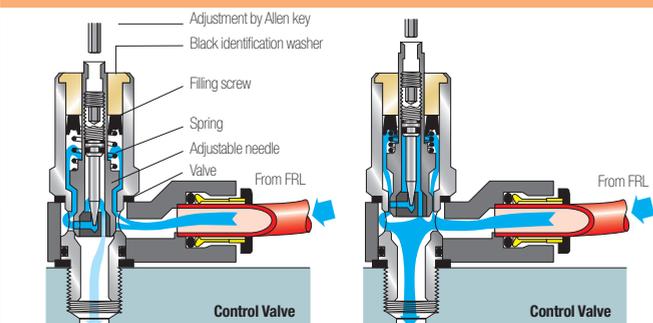
Internal seal: NBR
Screw: nickel-plated brass
Washer: technical polymer
Body: technical polymer or nickel-plated brass

Operation

Filter, Regulator, Lubricator



Control Valve



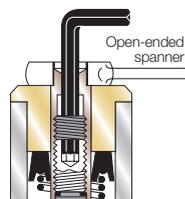
Adjustment of the Filling Screw

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



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

Cylinder Pressure Cycle

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

