

# 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.

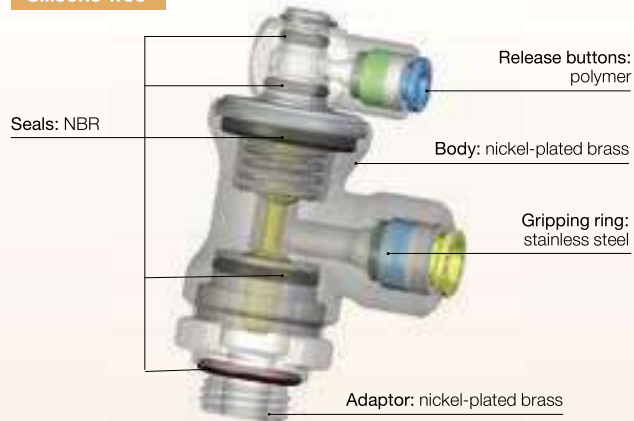
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

## 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

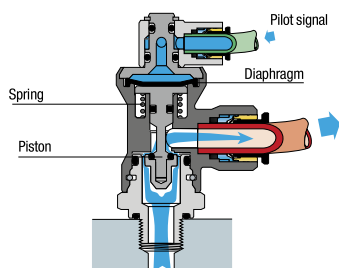


## Regulations

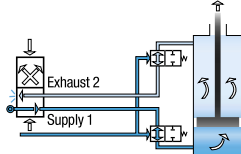
- RoHS
- PED
- REACH
- B10d >110 millions of cycles

## Operation

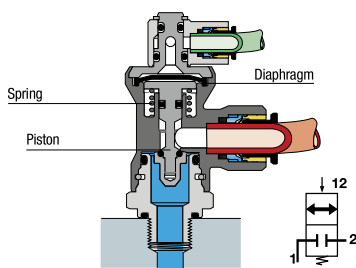
### Cylinder in Operation (pilot signal active)



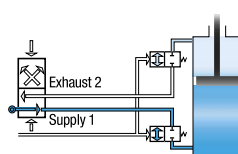
Pilot signal authorises movement



### Cylinder Blocked (pilot signal removed)

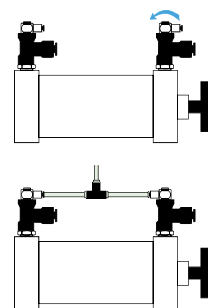


No signal blocks movement



### Installation

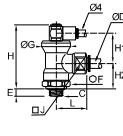
Mounted in pairs, blocking fittings are installed directly on the cylinder. Being fully orientable, they offer excellent flexibility in the design and installation of pneumatic circuits.



# Blocking Fittings

## 7880 Blocking Fitting, Male BSPP Thread

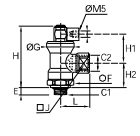
Nickel-plated brass, NBR



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

## 7881 Blocking Fitting, Male/Female BSPP Thread

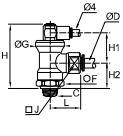
Nickel-plated brass, NBR



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

## 7885 Blocking Fitting, Male BSPT Thread

Nickel-plated brass, NBR

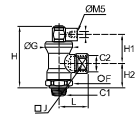


ØD	C		F	G	H	H1	H2	J	L	Kg
6	R1/8	<b>7885 06 10</b>	21	24	51.5	25	20	17	28	0.127
	R1/4	<b>7885 06 13</b>	21	24	51.5	25	20	17	28	0.131
8	R1/4	<b>7885 08 13</b>	21	24	51.5	25	20	17	28	0.126
	R3/8	<b>7885 08 17</b>	21	24	51.5	25	20	17	28	0.131
10	R3/8	<b>7885 10 17</b>	24	28	57	25	24	27	35	0.217
12	R1/2	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

Pre-coated thread

## 7886 Blocking Fitting, Male/Female BSPT Thread

Nickel-plated brass, NBR

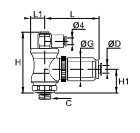


C1	C2		F	G	H	H1	H2	J	L	Kg
R1/8	R1/4	<b>7886 13 10</b>	21	24	51.5	25	20	17	26.5	0.121
R1/4	R1/4	<b>7886 13 13</b>	21	24	51.5	25	20	17	26.5	0.126
R3/8	R3/8	<b>7886 17 17</b>	24	28	57	25	24	27	34	0.225
R1/2	R1/2	<b>7886 21 21</b>	24	28	57	25	24	27	40	0.235

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	<b>7883 04 10</b>	21.5	53	21	46.5	52	12	0.166
	G1/8	<b>7883 06 10</b>	21.5	53	21	46.5	52	12	0.163
6	G1/4	<b>7883 06 13</b>	21.5	53	21	46.5	52	12	0.166
	G1/4	<b>7883 08 13</b>	27	57.5	24.5	54	60	14	0.252
8	G3/8	<b>7883 08 17</b>	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

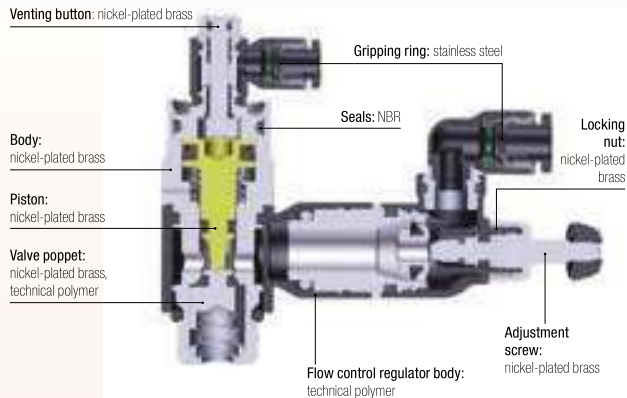
- **Compatible Fluids:** compressed air
- **Working Pressure:** 1 to 10 bar
- **Working Temperature:** -5°C to +60°C
- **Cracking Pressure:** 0.3 bar

## 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

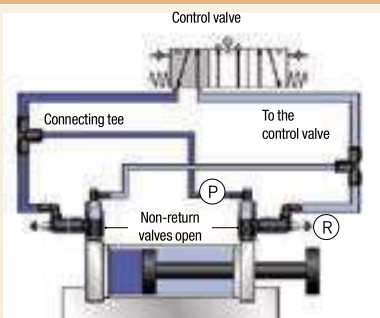


## Regulations

- RoHS
- REACH
- PED

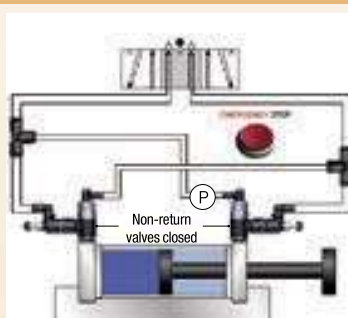
## Operation

### Normal Operation



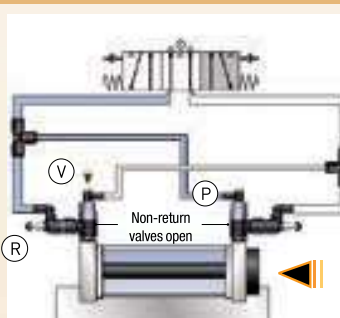
Pilot signal (P)  
Regulation of cylinder rod speed (R)

### 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)

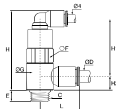
Model	Pilot and depilot threshold					
		2 bar	4 bar	6 bar	8 bar	10 bar
G1/8	Pilot Pressure	1.2	1.72	2.44	2.96	3.56
	Depilot Pressure	0.56	0.96	1.12	1.76	2.12
G1/4	Pilot Pressure	0.92	1.52	2.12	2.68	3.28
	Depilot Pressure	0.64	1.16	1.68	2.16	2.64
G3/8	Pilot Pressure	1.12	1.84	2.56	3.32	4.08
	Depilot 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 (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

# Piloted Non-Return Valves

## 7892 Piloted Non-Return Valve, Male BSPP Thread

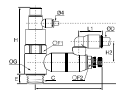
Technical polymer, Nickel-plated brass, NBR



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

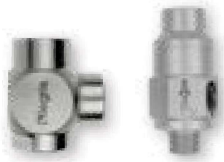
## 7894 Piloted Non-Return Valve with Flow Regulator Exhaust, Male BSPP Thread

Technical polymer, Nickel-plated brass



ØD	C		E	F1	F2	G	H	H1	H2	H3	L	L max	L1	Kg
6	G1/8	<b>7894 06 10</b>	6	13	8	14	46	7	24	31	48.5	51	16	0.041
	G1/4	<b>7894 06 13</b>	9	17	10	18.5	49	11	18	31	59.5	65	17	0.067
8	G1/8	<b>7894 08 10</b>	6	13	8	14	46	7	27	31	48.5	51	22	0.051
	G1/4	<b>7894 08 13</b>	9	17	10	18.5	49	11	23	31	59.5	65	23	0.068
8	G3/8	<b>7894 08 17</b>	7	20	14	22.5	69	13	21	40	67.5	73	23	0.060
	G3/8	<b>7894 10 17</b>	7	20	14	22.5	69	13	29	40	67.5	73	26	0.061
10	G1/2	<b>7894 10 21</b>	9	24	17	28	76	12.5	26	47	74	81	26	0.234
	G1/2	<b>7894 12 21</b>	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 +180°C

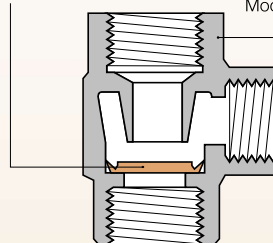
## Component Materials

### 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

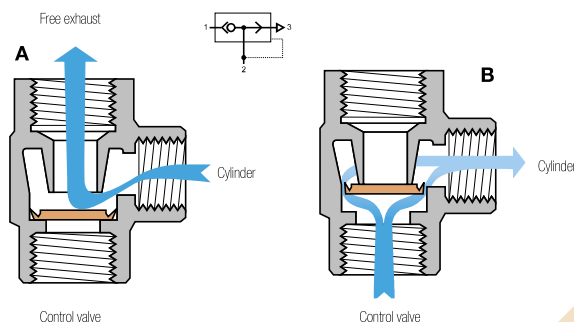
- Cycle time reduction: increased return speed
- Exhaust silencer integrated and 360° orientation available on some versions

## Regulations

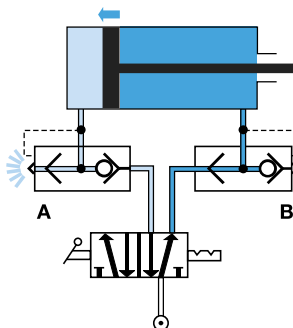
- RoHS
- REACH
- PED

## Operation

### Mounted on Cylinder

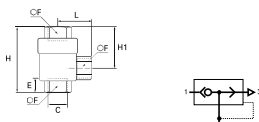


### Installation Diagram



## 7970 Elbow Quick Exhaust Valve, Female BSPP and Metric Thread

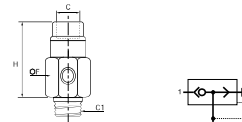
Nickel-plated brass



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

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

Treated aluminium



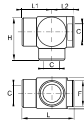
C	C1		F	H	Kg
G1/8	R1/8	<b>7971 10 10</b>	18	51	0.013
G1/4	R1/4	<b>7971 13 13</b>	18	49	0.018
G3/8	R3/8	<b>7971 17 17</b>	27	56	0.048
G1/2	R1/2	<b>7971 21 21</b>	34	70	0.086

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

# Metal Quick Exhaust Valves

## 7899 Quick Exhaust Valve, Female BSPP Thread

Stainless steel 316L



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