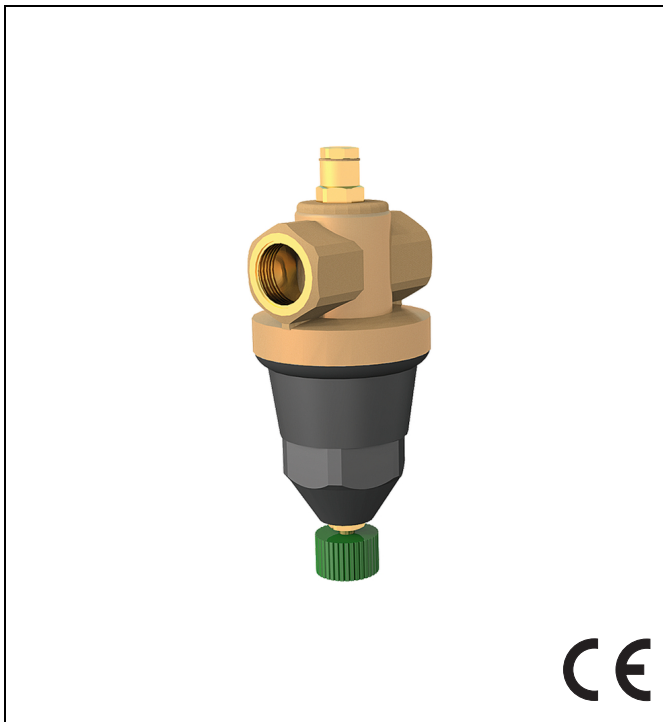


Reducing valve AT 4235

Pressure reducing valve with piston balanced seat
Standard pattern for compressed air

Product specification sheet



Construction

The pressure reducing valve comprises:

- Housing
- Valve piston
- Piston guide with G^{1/4}" pressure gauge connection
- Diaphragm
- Adjustment spring
- Spring bonnet with adjuster
- Pressure gauge not included (see accessories)

Materials

- Brass housing
- Brass valve piston
- Brass piston guide
- High quality synthetic material spring bonnet
- Spring steel adjustment spring
- NBR sealing washer
- NBR Diaphragm
- NBR O-rings

Application

Pressure reducing valves of this type protect installations against excessive pressure from the supply. They can be used for industrial or commercial applications within the range of their specification.

Because pressure reducing valves are subject to wear, they cannot be used as the only means of protection and if the downstream system needs to be protected against excessive pressure to prevent leakage, then a suitable safety valve must be fitted.

Special Features

- Screw with knob for setting pressure
- The adjustment spring is not in contact with the medium
- Compact construction
- Internal threaded connection
- Light weight
- Short installed length
- Inlet pressure balancing - fluctuating inlet pressure does not influence outlet pressure
- Certified to Pressure Equipment Directive 97/23/EC, Reference No. CE 0035

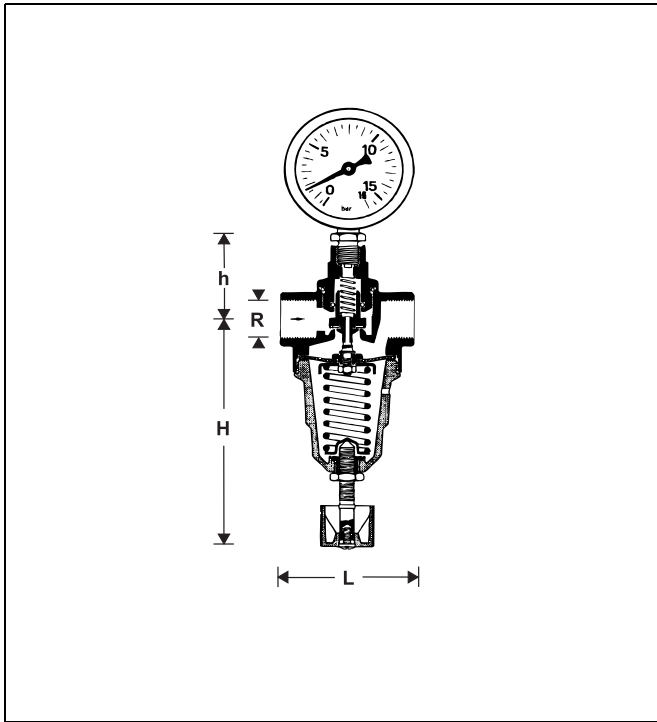
Range of Application

Medium	Compressed air*, non-toxic and non-flammable gases
Inlet pressure	max. 40 bar
Outlet pressure	1.0 - 10.0 bar

Technical Data

Operating temperature	max. 70°C
Nominal pressure	PN40
Minimum pressure drop	1.0 bar
Connection size	1/4" - 2"

* As part of an installation being approved according to PED requirements, this product must also be certified.



Method of Operation

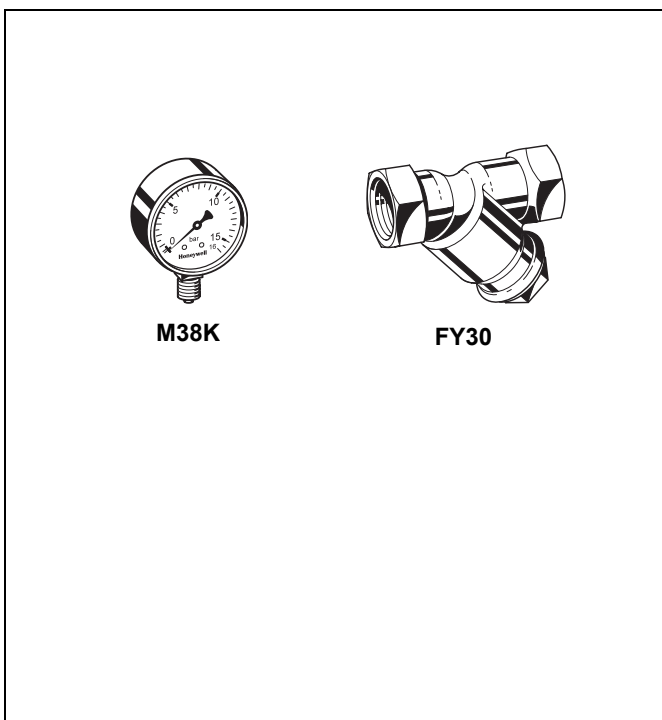
Spring loaded pressure reducing valves operate by means of a force equalising system. The force of a diaphragm operates against the force of an adjustment spring. If the outlet pressure and therefore diaphragm force fall because water is drawn, the then greater force of the spring causes the valve to open. The outlet pressure then increases until the forces between the diaphragm and the spring are equal again.

The inlet pressure has no influence in either opening or closing of the valve. Because of this, inlet pressure fluctuation does not influence the outlet pressure, thus providing inlet pressure balancing.

Options

- AT4235- Standard pattern
- └─ Special Versions available on request
- └─ Connection size

Connection size	R	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Nominal size diameter	DN	8	10	15	20	25	32	40	50
Weight	kg	0.3	0.3	0.45	0.6	1.35	1.8	2.9	3.8
Dimensions	mm								
	L	50	50	65	80	95	105	115	130
	h	90	90	105	105	150	160	200	210
	D	34	34	36	42	57	57	72	72



Accessories

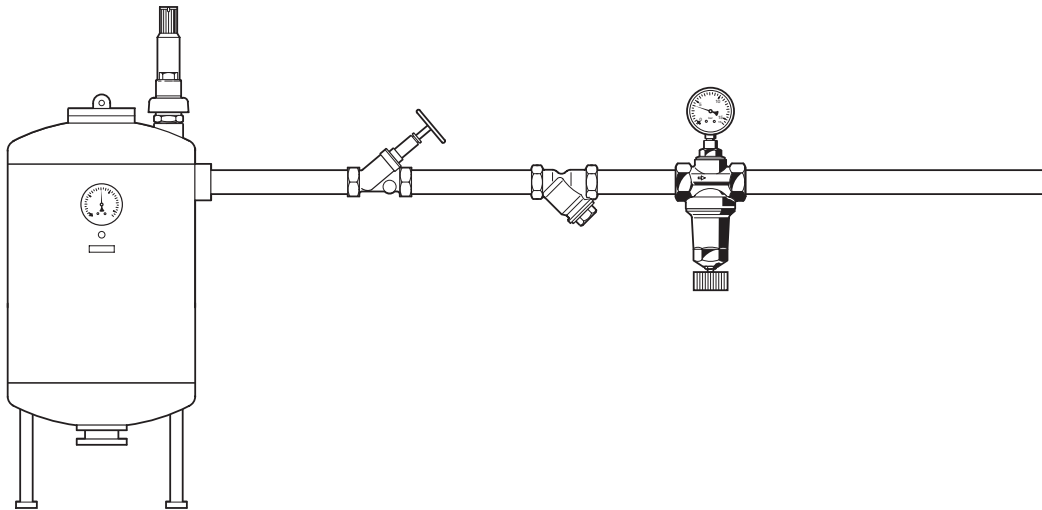
FY30 Strainer

With double mesh strainer, brass housing
A = Mesh size approx. 0.35 mm

M38K Pressure gauge

Housing diameter 50 mm, rear connection thread G1/4". Ranges: 0 - 4, 0 - 10, 0 - 16 or 0 - 25 bar. Please indicate upper value of pressure range when ordering

Installation Example



Connection size	R	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	DN	8	10	15	20	25	32	40	50
W*	mm	45	45	50	50	55	60	60	70
* Minimum distance from wall to centre line of pipework									

Installation Guidelines

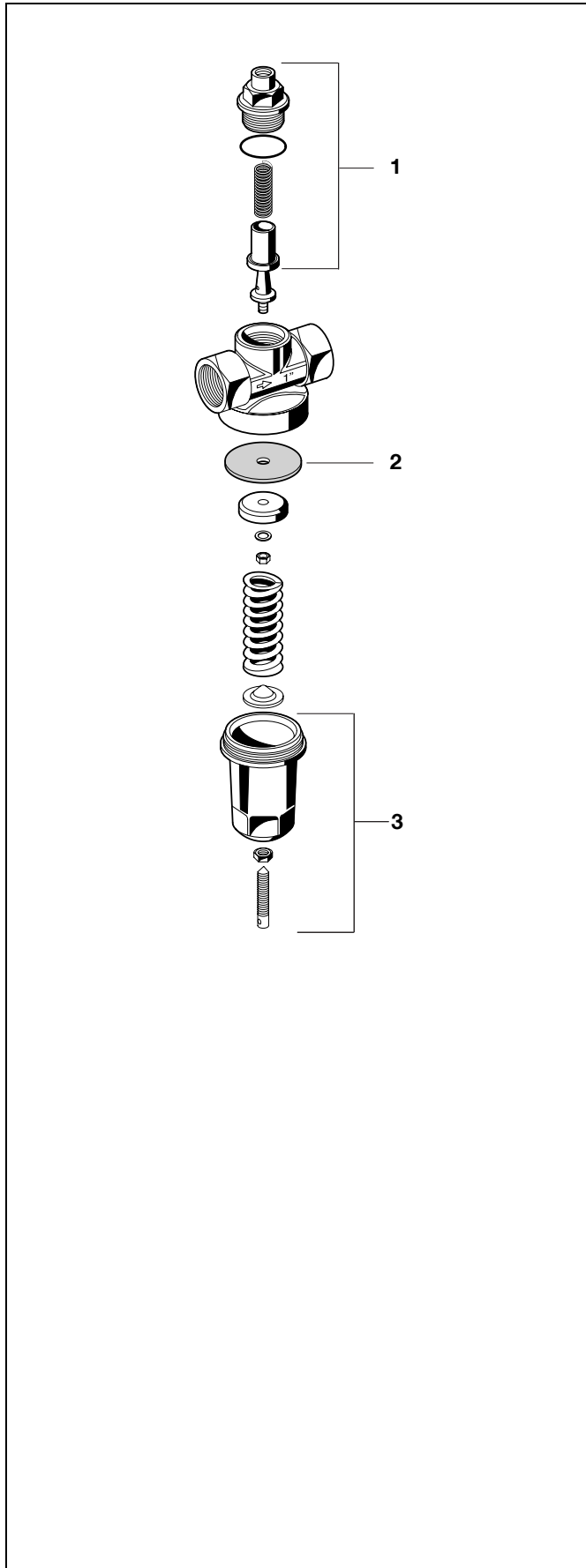
- Install in horizontal pipework with spring hood directed downwards.
- Install shutoff valves
- The installation location should be protected against frost and be easily accessible
 - o Pressure gauge can be read off easily
 - o Simplified maintenance and cleaning
- Install downstream of the filter or strainer
 - o This position ensures optimum protection for the pressure reducing valve against dirt
- Provide a straight section of pipework of at least five times the nominal valve size after the pressure reducing valve (in accordance with DIN 1988, Part 5)

Typical Applications

Pressure reducing valves of this type are suitable for household, industrial and commercial applications within the range of their specifications.

Pressure reducing valves should be installed:

- If the static pressure exceeds the maximum permissible value for the system
- If pressure fluctuations in the downstream system must be avoided



Spare Parts

Pressure Reducing Valve, from 1968 onwards

No.	Description	Dimension	Part No.
1	Valve cone complete	1/4" + 3/8"	0903223
		1/2"	0903224
		3/4"	0903225
		1"	0903226
		1 1/4"	0903227
		1 1/2"	0903228
		2"	0903229
1	Diaphragm	1/4" + 3/8"	2202500
		1/2" + 3/4"	2202700
		1" + 1 1/4"	2203300
		1 1/2" + 2"	2204100
2	Spring bonnet	1/4" + 3/8"	0900272
		1/2" + 3/4"	0900273
		1" + 1 1/4"	0900274
		1 1/2" + 2"	0900275