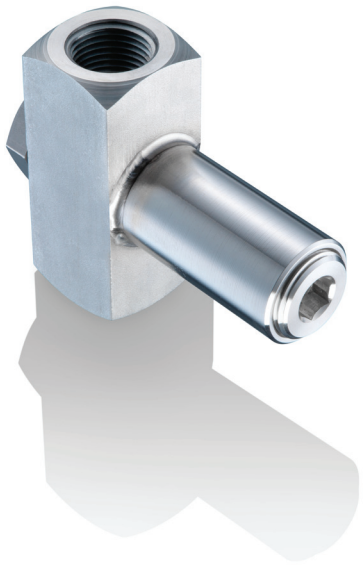
AORP

Over-range protectors



Main Features

- For corrosive gasses and liquids
- Protection of instruments from over pressure
- For pressure gauges, pressure switches and transmitters
- Option: NACE conform

Applications

- Oil & Gas / Chemical
- Water & Waste water
- Energy
- Machinery

Description

These over-range protectors have been designed to protect pressure gauges (or other instruments) against accidential overpressure.
The medium must be a clean gas or fluid without particles and with low viscosity.

Working principle:

The applied pressure works against an adjustable internal spring by means of a bellow or piston.
As soon as the pressure reaches the adjusted setpoint, an internal valve closes and avoids further pressure increase on the outlet side.
When the pressure decreases, the valve will open 20 % below the closing pressure.

Two models are available according to the ranges for the setpoint adjustment (AORP-0, AORP-B, see ordering details on page 2).

Technical data

Inlet:	1/2 NPT female
Outlet:	1/2 NPT female
Max. pressure:	700 bar
Max. temperature:	150 °C
Setpoint:	see ordering details on page 2
Setpoint repeatability:	AORP-0: ± 10 % AORP-B: ± 2 % (when the pressure is increasing over ≥ 5 s)
Dead band: (1)	20 %
Valve:	Stainless steel 1.4404 (316L)
O-ring:	Viton
Body, adjusting screw and cleaning plug:	Stainless steel 1.4404 (316L)
Piston (AORP-0):	Stainless steel 1.4404 (316L)
Bellow (AORP-B):	Stainless steel 1.4404 (316L)
Spring:	1.4310 (301)
Gasket of the cleaning plug:	Aluminium

(1) The valve opens 20 % below the adjusted setpoint for closing.

Options

Customer specific set point adjustment	Code SETP
Compliant with NACE MR0175 and MR0103	Code 0073
Degreased for oxygen applications	Code 0765
Material certificate 3.1	Code Q003

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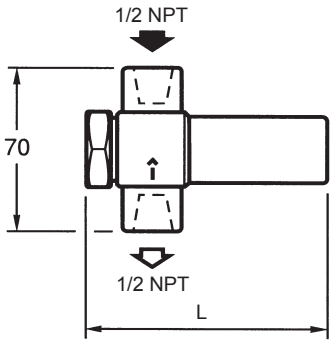
Dimensions (mm)



	L	Weight in kg
AORP-0	90	0.500
AORP-B	117	0.600

Ordering details AORP

	AORP	–		xxx	/
Model					
Over-range protector	AORP				
		–			
Type					
High pressure (piston, ranges 3xx)			0		
Low pressure (bellow, ranges 5xx)			B		
Pressure range for setpoint adjustment (bar)					
-1 ... 0				507	
0.1 ... 0.4				501	
0.4 ... 0.6				502	
0.6 ... 1				503	
1 ... 3				504	
3 ... 6				505	
6 ... 16				506	
3 ... 6				381	
6 ... 18				382	
18 ... 25				383	
25 ... 80				384	
80 ... 160				385	
160 ... 400				386	
Options to be added behind the / (see example below)					/

Ordering example

AORP	–	0385	/	0765

Over-range protector

Pressure range: 80 + 160 bar

Option: Degreased for oxygen applications

2015-03-03