

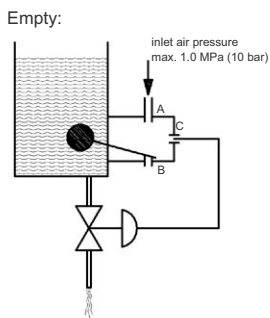
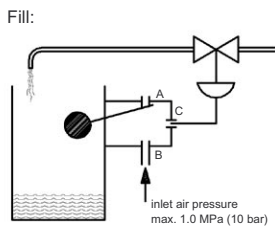
## P 01 04 For pneumatic control applications

Equipped with a directly controlled 3/2 way valve (ON/OFF) for control air of 0 to 10 bar. Operation with other non-corrosive gases or fluids is possible.

Nominal pressure	PN 25 max. 25 bar up to 250° C
Operating temperature	1 to 250°C
Ambient temperature	1 to 80°C
Density of liquid	min. 0.7 kg/dm <sup>3</sup>
Operating differential	fixed 12 mm
Rod extension	see page 31
Control connections	G 1/8" (BSPP) inside thread
Max. control pressure	10 bar
Internal orifice	1.5 mm
Kv Factor	1
Internal leakage rate at 10 bar	max. 1 cm <sup>3</sup> /min
Air flow	90 Ndm <sup>3</sup> /min at 6 bar
Pressure drop	1 bar
Wetside material	Stainless steel (CrNiMo)
Flange material	Stainless steel (CrNiMo)
Switch housing material	Sea water resistant die cast aluminium
Counterflange	see page 33
Weight	approx. 1.7 kg

The air supply to the 3/2 way valve may be connected to either A or B, according to whether filling or emptying operation is desired or whether the actuator is normally closed or open when pressurized.

E.g. pressure can be applied through A to C and exhausted from C through B, alternatively pressure can be applied through B to C and exhausted from C through A.



## 5P 01 04 For critical environments or high temperatures

All parts stainless steel.

As P 01 04, but switch housing also in stainless steel (CrNiMo) and therefore, highly corrosion resistant and suitable for temperatures up to 300°C. Weight approximately 2.2 kg.

## PV 01 04 For moist control air

As P 01 04, but with drain valve for condensate removal.

## FP 01 04 For hazardous applications

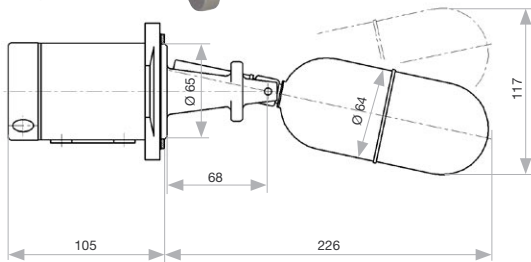
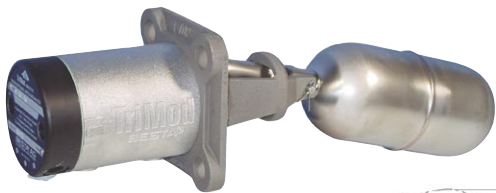
As P 01 04, but functionally tested.

Approved as a safety device for overfill protection.

For hazard classes: A I, A II and B acc. to VbF in Zone 0  
Certificate: PTB No. III B/S 1322 F

## FPV 01 04 For moist control air in hazardous applications

As FP 01 04, but with drain valve for condensate removal.



### M 01 04 For pneumatic proportional control applications

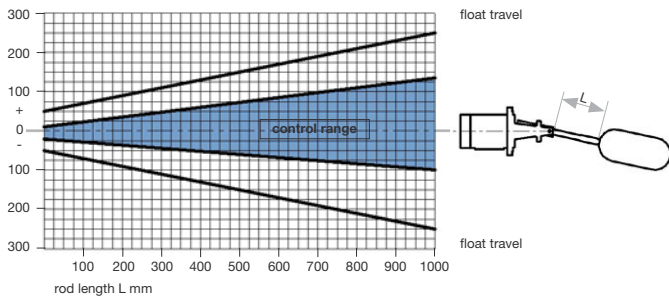
Equipped with a pneumatic control valve which converts the supply pressure of 1.4 bar to an output signal of 0.2 to 1 bar (Option: 7 to 15 PSI), proportional to changes in the liquid level.

Nominal pressure	PN 25 max. 25 bar up to 250°C
Operating temperature	1 to 250°C
Ambient temperature	1 to 80°C
Density of liquid	min. 0.7 kg/dm <sup>3</sup>
Control range	see table on left
Control connections	G 1/8" (BSPP) inside thread
Control pressure	1.4 bar (Instrument air)
Output signal	0.2 to 1 bar
Linearity	±5% (of full scale output)

For operation at higher control pressures up to max. 10 bar

#### Control range

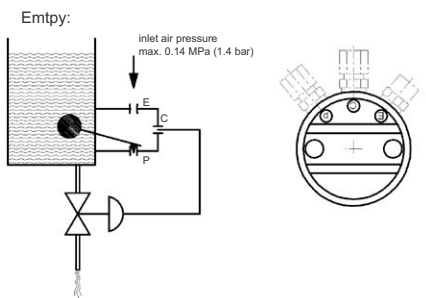
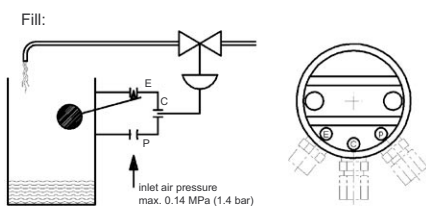
The normal control range is 30 mm, i.e. +15 mm/-15 mm from the centre line, measured in water at 20°C. With the float in the central position, the output is 0.6 bar. The control range can be increased by lengthening the float arm (see graph below).



#### Control function

The standard air connection configuration is shown below. When filling, the output signal is decreasing proportionally to the rising level.

The reverse function is obtained by turning the switch housing 180°C (see drawing below). This can be accomplished without interrupting the process.



Control pressure bar	Output signal in bar		Control range P max./P min.
	min.	max.	
2	0,25	1,5	6
4	0,6	3,1	5,17
6	1,1	4,8	4,36
8	1,8	6,5	3,61
10	2,5	8,3	3,32

#### Air flow

3.5 to 6.0 NI/min. can be increased by using external Booster valve.

Air consumption  
Wetside material  
Flange material  
Housing material

max. 0.4 Nm<sup>3</sup>/h  
Stainless steel (CrNiMo)  
Stainless steel (CrNiMo)  
Sea water resistant die cast aluminium

Counterflange  
Weight

see page 33  
approx. 1.7 kg

### 5M 01 04 For critical environments or high temperatures

All parts stainless steel. As M 01 04, but housing also in stainless steel (CrNiMo) and therefore, highly corrosion resistant and suitable for operating temperatures up to 300°C. Weight approximately 2.2 kg.

### MV 01 04 For moist control air

As M 01 04, but with drain valve for condensate removal.

### FM 01 04 For hazardous applications

As M 01 04, but functionally tested. Approved as a safety device for overfill protection. For hazard classes: A I, A II and B acc. to VbF in Zone 0 Certificate: PTB No. III B/S 1322 F

### FMV 01 04 For moist control air in hazardous applications

As FM 01 04, but with drain valve for condensate removal.