

# EP5 Fail Freeze

## Description

EP5 Fail Freeze offers enhanced system safety gained from its fail freeze characteristic.

In the event that the 4-20 mA input signal is lost, EP5 Fail Freeze will fail in place.

The unit is loop powered and needs no additional power supply.

It features a rugged design, high gain, high capacity gold plated spool valve, external zero adjustment, gauge ports, replaceable filter, tapped exhaust port, all in an IP65/NEMA 4 enclosure.

Additional capabilities include the direct mounting of a sealed feedback unit, F5, with the ability to include switches, position transmitter or a potentiometer. The F5 mounts on top of the EP5 Fail Freeze requiring no additional brackets or linkage.

PMV also offers a wide range of mounting kits, cams and accessories, to easily customize the EP5 Fail Freeze to fit your application.



EP5 Fail Freeze

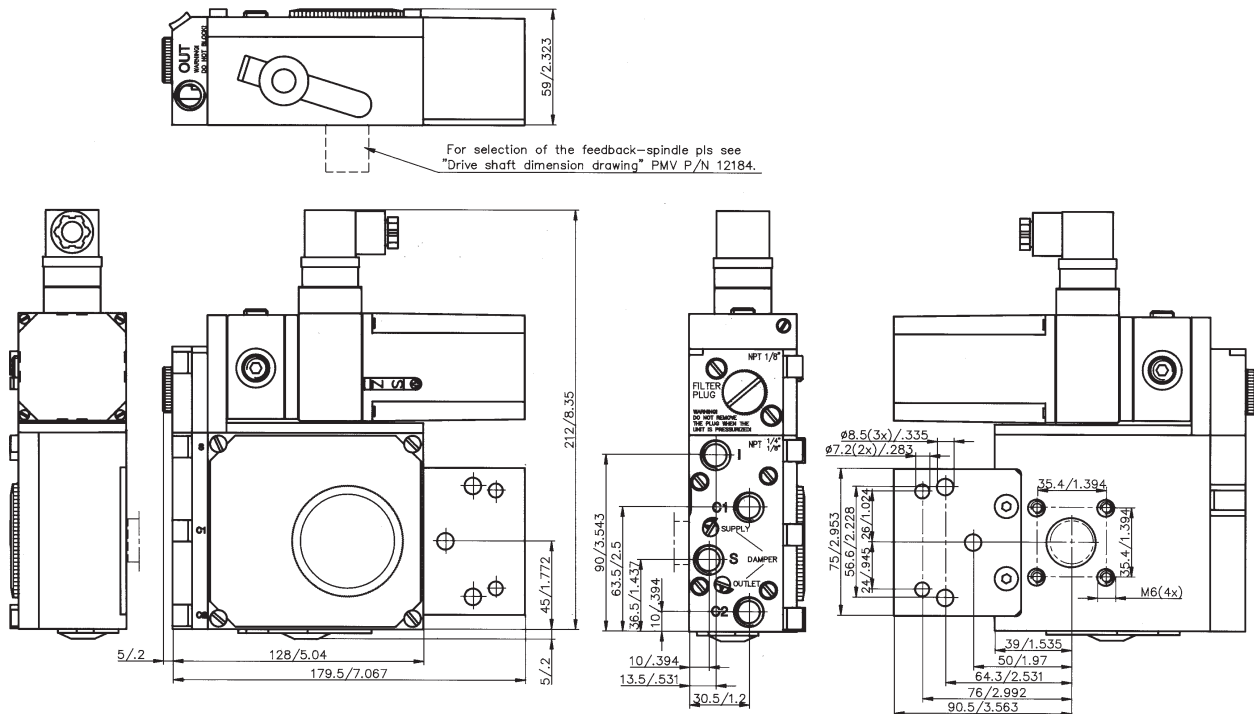
## Options

- 1/2" NPT conduit connection
- H5, Dome style indicator
- F5 Feedback Unit

## Technical Specifications:

<b>Input signal</b>	4-20 mA two wire	
<b>Air supply</b>	1,5 - 7 bar (20-100 Psi) Oil free, dry air filtered to 5 microns	
<b>Air connections</b>	1/4" NPT or G	
<b>Gauge connections</b>	1/8" NPT or G	
<b>Electrical connections</b>	DIN 43650, 30 mm square connector (standard) or 1/2" NPT	
<b>Linearity</b>	≤ 1,5%	
<b>Repeatability</b>	≤ 0,5%	
<b>Hysteresis + deadband</b>	≤ 1%	
<b>Gain factor</b>	Min. 66% / % ISA S75.13-1989 Min. 1000 kPa/kPa at 20% load	
<b>Air delivery capacity</b>	200nl/ min (6,9 SCFM) at 0,2 MPa/ 29 Psi 370 nl/ min (12,8 SCFM) at 0,4 MPa/ 58 Psi 540 nl/ min (18,8 SCFM) at 0,6 MPa/ 87 Psi	<b>Low Bleed</b> 156 nl/ min (0,62 SCFM) 288 nl/ min (0,62 SCFM) 421 nl/ min (0,62 SCFM)
<b>Air consumption</b>	6,1 nl/ min (0,22 SCFM) at 0,2 MPa/ 29 Psi 13,6 nl/ min (0,48 SCFM) at 0,4 Mpa/ 58 Psi 22 nl/ min (0,78 SCFM) at 0,6 MPa/ 87 Psi	2,7 nl/ min (0,1 SCFM) 6,1 nl/ min (0,21 SCFM) 9.9 nl/ min (0,35 SCFM)
<b>Supply pressure effect</b>	0,1% / 0,1 MPa (15 Psi)	
<b>Voltage drop</b>	5,5 - 6 Volts	
<b>Position sensitivity</b>	None	
<b>Fail freeze level</b>	Input signal < 2 mA (+0,5 mA)	
<b>Fail freeze drift rate</b>	+2% setpoint/hour at constant temp	
<b>EMC</b>	BSEN 50081-2:1994 & BSEN 50082-2:1995	
<b>Temp range</b>	-20° to 70C° (-4° to 158°F)	
<b>Materials</b>	Die cast aluminium, Zinc, Nylon, Stainless steel	
<b>Surface treatment</b>	Epoxy coating, black	
<b>Ingress protection</b>	IP65/NEMA 4	
<b>Weight</b>	2,4 kg (5,3 lbs)	

# Dimensional Drawing, EP5 Fail Freeze



## Ordering Information

1. Model	EP5FS	EP5 fail freeze
2. Spool valve	HP or LB	High Performance or Low bleed
3. Air connection	N or G	NPT 1/4" or G 1/4"
4. Surface treatment	U	Epoxy coating
5. Spindle	01	01 to 35 See dwg SPNDLSP5
6. Cam	K01	K01 to K17, K01 = linear 90 deg, standard
7. Front over	PV9DA	90 deg*, direct, arrow indicator
8. Input signal	4	4-20 mA input
9. Temperature	Z	Nitrile seals -20 °C

\* For 30, 45 and 60 deg rotation, change PV9 to PV3, PV4 or PV6.

Example: EP5FSHPNU-23K01-PV9DA-4Z  
1 2 3 4 5 6 7 8 9

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