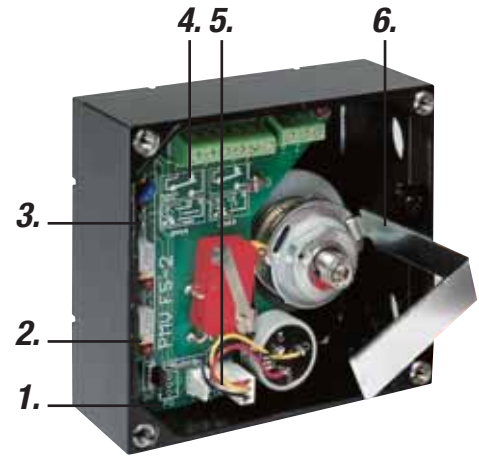


## *F5 Feedback unit*

Product  
Information



1. Jumper for field selection of 90, 60, 45 and 30 deg, operation for 4–20 mA position transmitter.
2. LEDs indicate 4–20 mA output.
3. Test outlet for 4–20 mA position transmitter.
4. Info printed on the PC board.
5. Field selectable direction of 4–20 mA of output signal, direct or reverse.
6. Easy to set cams with no fixed increments for true 100% resolution.



## F5 Feedback Unit

### F5/F5-EX

- Mounts on P5/EP5 without additional mounting bracket.
- Bright visible, flat or dome position indicator.
- Easy to set stepless cams – 100% resolution.
- Switches, mechanical or proximity, P+F Namur sensors.
- Potentiometer or 4–20 mA position transmitter.
- Sturdy, reliable and simple design.
- Explosion proof or intrinsically safe enclosure.
- ATEX, CSA and FM approvals.



Explosion proof

### Easy to install



Install coupling on P5/EP5



Place F5 unit on top, tighten screws



Install indicator and cover



## Technical data

### General

Conduit entries	2x1/2 NPT or 2xPG 13.5 (M20)
Housing material	Die cast aluminum
Surface treatment	ED painting
Weight	0,7 kg (lbs 1,5) Ex proof = 2,1 kg (lbs 4,6)
Mounting	Direct on P5/EP5 and VDI/VDE 3845
Fasteners	Stainless A2/A4
Terminals	2,5 mm <sup>2</sup> (AWG 14) Screw terminals
Enclosure	IP66, NEMA 4
Temp*	-40°C to +85°C (-40°F to +185°F)

### Switches, mechanical

Type	Mechanical SPDT V3
Rating	6/2,5A 250 V AC

### NAMUR sensors

Type	P+F NJ2 V3N
Load Current	≤ 1 mA ≥ 3 mA
Voltage range	5–25 V DC
Hysteresis	0,2%
Temp	-25°C to +85°C (-4°F to +185°F)

### Proximity switches

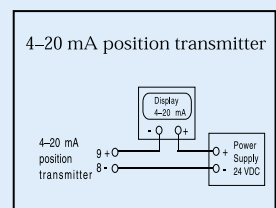
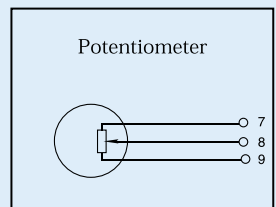
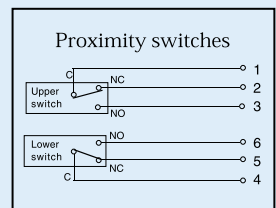
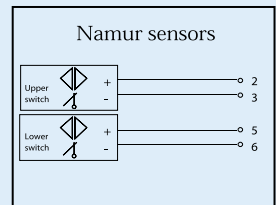
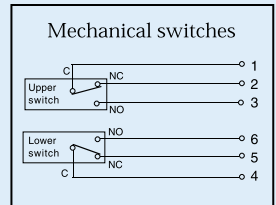
Contact rating	2 W or 2 VA @ 30 V DC/V AC, 0.1 A
Maximum operating time	0.5 milliseconds
Breakdown voltage	200 V DC
Contact resistance	0.2 Ohms
Switch type	SPDT hermetically sealed in one unit
Mechanical and electrical life	> 10 million operations

### Potentiometer

Output	5k (4k at 90°)
Elements	Conductive plastic
Power rating at 70°	1 W
Linearity	1%
Resolution	Essentially infinite

### 4–20 mA position transmitter

Power supply	Max. 28 V DC
Output signal	4–20 mA
LED indication at 4 mA	±1%
LED indication at 20 mA	±1%
Resolution	Infinite
Minimum rotation travel	30°
Maximum rotation travel	90° (270° option)
Linearity	<1% of full scale
Hysteresis	<0,5% of full scale
Output current limit	24 mA DC
Load impedance	800 at 24 V DC



\* Not NAMUR sensors



## Modular



F5 mounted on actuator for on/off applications



F5 mounted on positioner P5



F5 mounted on positioner EP5

## F5 Series Coding

**Model** (for installation on P5/EP5 only)  
 F5G F5 with PG 13.5 connections  
 F5N F5 with NPT 1/2" connections

**Surface treatment**  
 U Epoxy, ED  
 M Tufram

**Switches**  
 MEC 2 x SPDT switches  
 NAM 2 x P+F Namur Sensors  
 PXY 2 x Proximity switches

**Feedback**  
 XXX None  
 POT Potentiometer 5 kOhm  
 P1K Potentiometer 1 kOhm  
 P18 Potentiometer 180 deg  
 420 4-20 mA transmitter  
 T18 4-20 mA transmitter, 180 deg  
 T27 4-20 mA transmitter, 270 deg

**Spindle**  
 00 Drive coupling for P5/EP5

**Seals**  
 Z Nitrile, NBR

**Model**  
 F5IS F5 Intrinsically safe  
 F5EX F5 Explosion proof

**Electrical connections**  
 G PG13.5, Not F5EX  
 Z 1/2" NPT

**Surface treatment**  
 U Epoxy, ED  
 M Tufram

**Switches**  
 MEC 2 x SPDT switches  
 NAM 2 x P+F Namur Sensors  
 PXY 2 x Proximity switches

**Feedback**  
 XXX None  
 POT Potentiometer 5 kOhm  
 P1K Potentiometer 1 kOhm  
 P18 Potentiometer 180 deg  
 420 4-20 mA transmitter  
 T18 4-20 mA transmitter, 180 deg  
 T27 4-20 mA transmitter, 270 deg

**Spindle**  
 00 Drive coupling for P5/EP5  
 23 01 to 39, see dwg SPNDLS\_P5

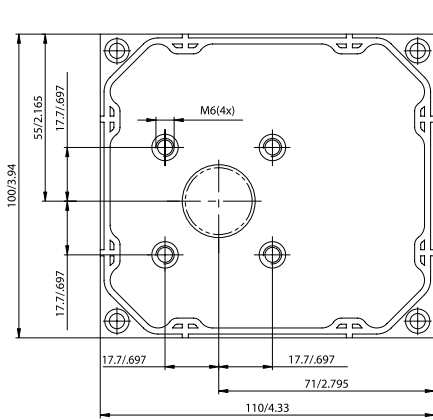
**Frontcover, indicator**  
 PV9DA 90 deg, direct arrow indicator  
 PV3RH 30 deg, reverse, Dome indicator

**Seals**  
 Z Nitrile, NBR

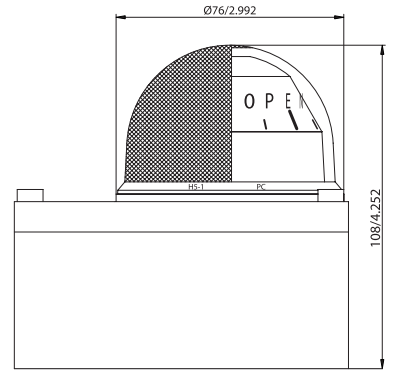
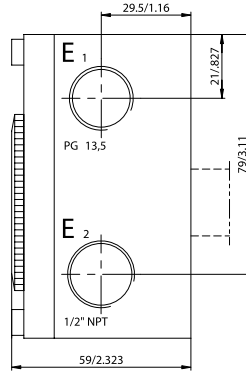
**Example**  
 F5ISNU-MEC420-00-PV9DA-Z

(\*For 30, 45, 60 deg rotation, change PV9 to PV3, PV4 or PV6 D=direct, R=reverse, A=arrow indicator, B=blind, H=dome)

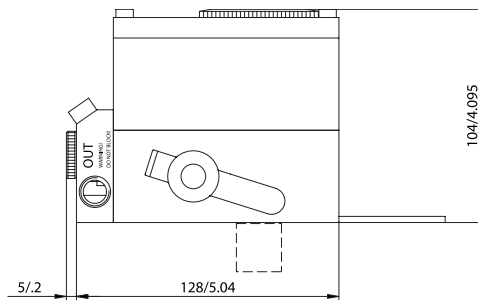
## Dimensions drawings (mm)



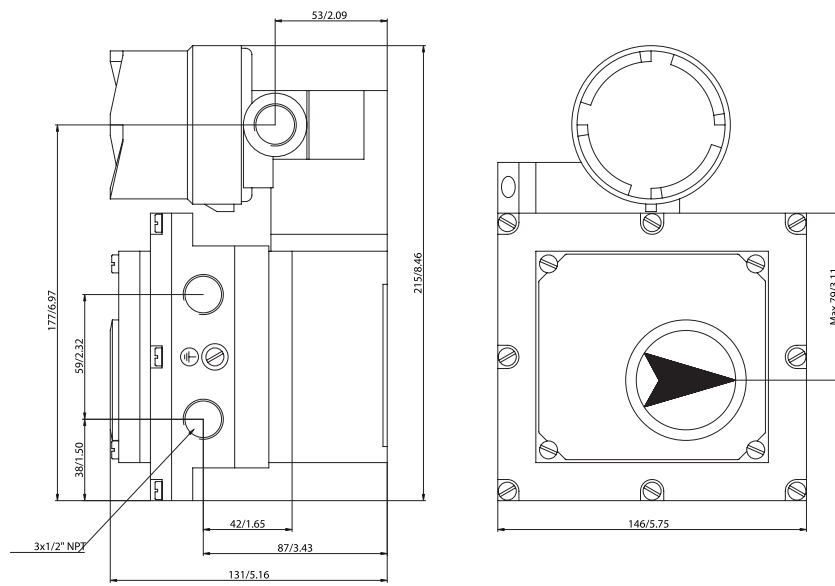
F5



F5 with Dome H5



F5 on EP5



F5EX on EP5EX





p/n: FCD PMENBR0005-02



**Hazardous Locations**



**Intrinsically safe:**

ATEX  II 1 G, EEx ia IIC T4 LCIE 95.D6 IIIX CSA, FM Class 1, Div 1, Group C, D T3C ATEX

**Explosion proof:**

ATEX  II 1 G, EEx d IIB+H2, T4-T6 LCIE 97.D6140 IIIX CSA, FM Div 1, Class 1,2 & 3 Group BCDEF G T4-T6, ATEX

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