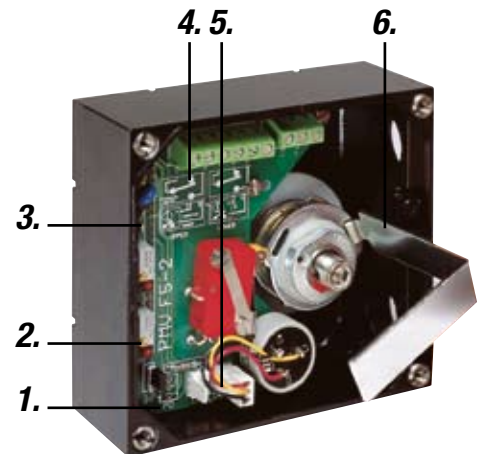


F5 Feedback unit

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 and 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



Easy to install



Install coupling



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 ² (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	≤ 1mA ≥ 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

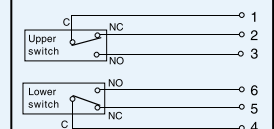
Output	5kΩ (4kΩ at 90°)
Elements	Conductive plastic
Power rating at 70°	1 W
Linearity	1%
Resolution	Essentially infinite

4–20 mA position transmitter

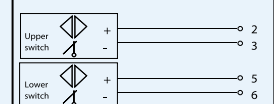
Power supply	Max. 28 V DC
Output signal	4–20 mA
LED indication at 4 mA	±1%
LED indication at 20 mA	±1%
Resolution	Infinite
Minimum rotation travel	30°
Maximum rotation travel	90° (270° option)
Linearity	<1% of full scale
Hysteresis	<0,5% of full scale
Output current limit	24 mA DC
Load impedance	800Ω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

* Not NAMUR sensors

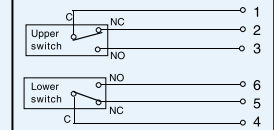
Mechanical switches



Namur sensors



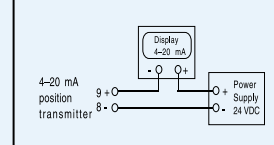
Proximity switches



Potentiometer



4–20 mA position transmitter





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

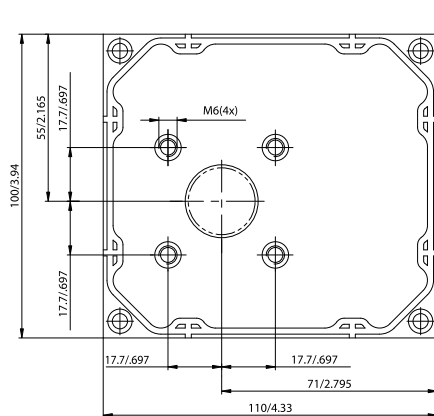
Frontcover, indicator
PV9DA 90 deg, direct arrow indicator
PV3RH 30 deg, reverse, Dome indicator

Seals
Z Nitrile, NBR

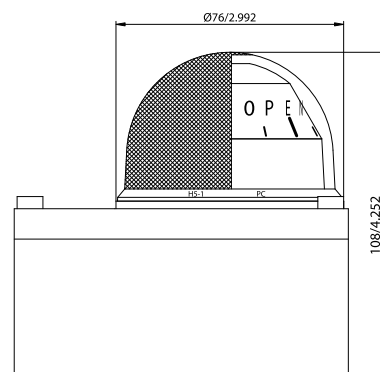
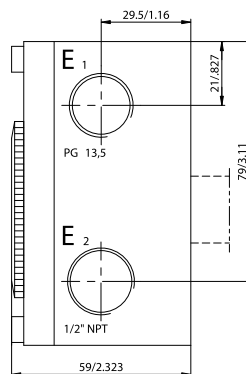
Example
F5ISNU-MEC420-00-PV9DA-Z

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

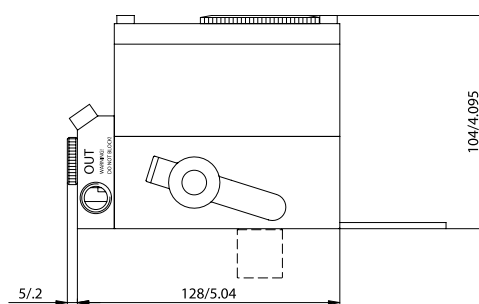
Dimensions drawings (mm)



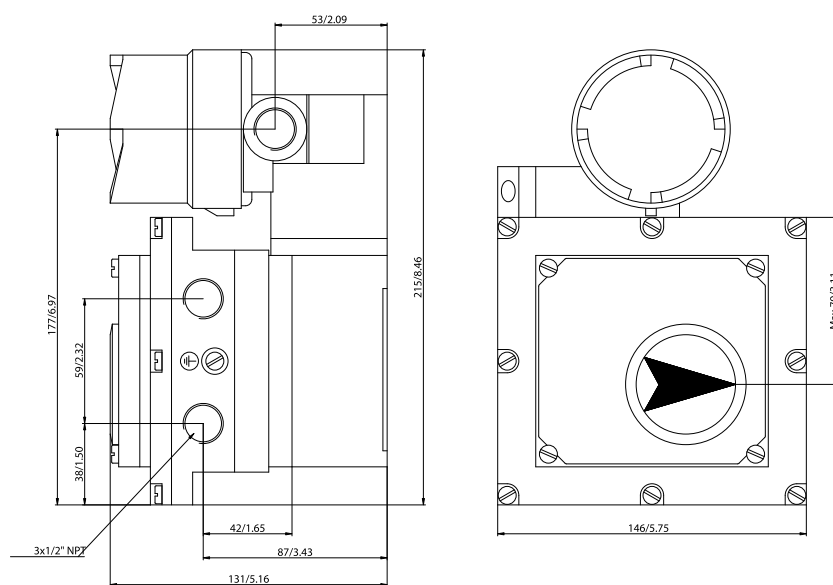
F5



F5 with Dome H5



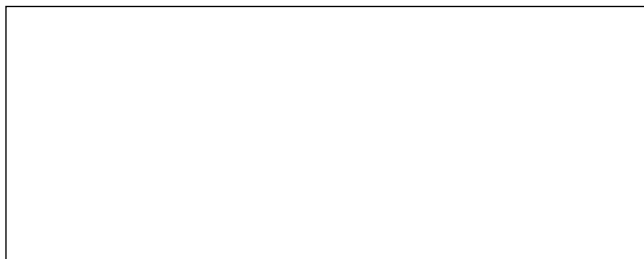
F5 on EP5



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 BCDEFG T4-T6, ATEX

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