

Dystrybutor:



PMV

F5 Feedback unit

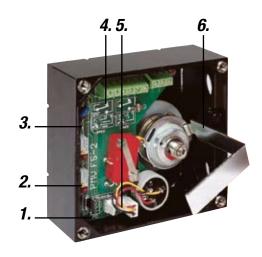
Product Information



Experience In Motion



- 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 ouput 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

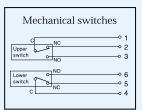


Technical data

Load impedance

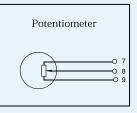
General	
Conduit entries	2x1/2 NPT or 2xPG 13.5 (M20)
Housing material	Die cast aluminum
Surface treatment	ED painting
Weight	0,7 kg (lbs 1,5) Ex proof = 2,1 kg (lbs 4,6)
Mounting	Direct on P5/EP5 and VDI/VDE 3845
Fasteners	Stainless A2/A4
Terminals	2,5 mm ² (AWG 14) Screw terminals
Enclosure	IP66, NEMA 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
nating	0/2,01 200 1 10
NAMUR sensors	
Туре	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	5kΩ (4kΩ at 90°)
Elements	Conductive plastic
Power rating at 70°	1 W
Linearity	1%
Resolution	Essentially infinite
4-20 mA position transmitte	er
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
Lood impodence	2000 - + 0.4 V D0

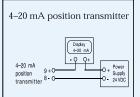
 800Ω at 24 V DC



	Ν	an	nur sensors
Upper switch	$\bigoplus_{\vec{A}}$	+	• 2 • 3
Lower switch	\bigcirc	+	• 5 • 6

Proximity switches	
Upper NC switch NO	> 1 > 2 > 3
Lower ONO switch NC	96 95 94





* Not NAMUR sensors





Modular



F5 mounted on actuator for on/off applications



F5 mounted on positioner P5



F5 mounted on positioner EP5

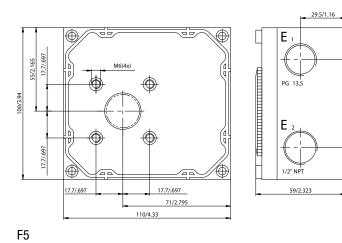
F5 Series Coding

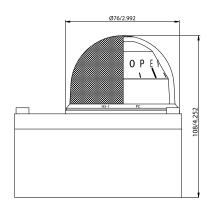
	-
Model (f	or installation on P5/EP5 only)
F5G	F5 with PG 13.5 connections
F5N	F5 with NPT 1/2" connections
Surface	treatment
U	Epoxy, ED
м	Tufram
Switche	
MEC	2 x SPDT switches
NAM	2 x P+F Namur Sensors
PXY	2 x Proximity switches
Feedbac	k
XXX	None
POT	Potentiometer 5 kOhmt
P1K	Potentiometer 1 k0hm
P18	Potentiometer 180 deg
420	4–20 mA transmitter
T18	4-20 mA tranmitter, 180 deg
T27	4-20 mA transmitter, 270 deg
Spindle	
00	Drive coupling for P5/EP5
Seals	1 0
Z	Nitrile, NBR
Model	Nitilio, NDIT
F5IS	F5 Intrinsically safe
F5EX	F5 Explosion proof
	al connections
G	PG13.5, Not F5EX
Z	1/2" NPT
Surface	treatment
U	Epoxy, ED
М	Tufram
Switche	
MEC	2 x SPDT switches
NAM	2 x P+F Namur Sensors
PXY	2 x Proximity switches
Feedbac	
XXX	None
POT	Potentiometer 5 k0hmt
P1K	Potentiometer 1 k0hm
P18	Potentiometer 180 deg
420	4–20 mA transmitter
T18	4-20 mA tranmitter, 180 deg
T27	4-20 mA transmitter, 270 deg
	4-20 IIIA transmitter, 270 deg
Spindle	
00	Drive coupling for P5/EP5
23	01 to 39, see dwg SPNDLS_P5
	ver, indicator
PV9DA	90 deg, direct arrow indicator
PV3RH	30 deg, reverse, Dome indicator
Seals	<u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Z	Nitrile, NBR
-	

Example F5ISNU-MEC420-00-PV9DA-Z

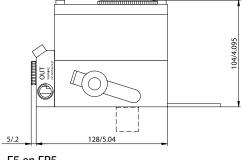
(*For 30, 45, 60 deg rotation, change PV9 to PV3, PV4 or PV6 D=direct, R=reverse, A=arrow indicator, B=blind, H=dome)

Dimensions drawings (mm)



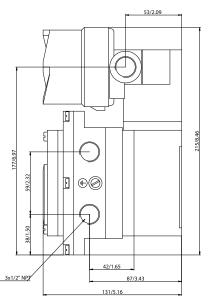


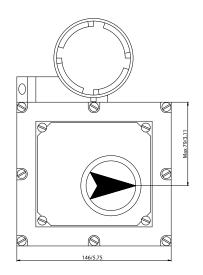
F5 with Dome H5



21/.827







F5EX on EP5EX





p/n: FCD PMENBR0005-02





Palmstierna International AB

Korta Gatan 9 SE-171 54 Solna SWEDEN Tel: +46 (0) 8 555 106 00 Fax: +46 (0) 8 555 106 01 E-mail: infopmv@flowserve.com

Germany

Flowserve Sperberweg 16 D-41468 Neuss GERMANY Tel: +49 (0) 2131 795 74 80 Fax: +49 (0) 2131 795 74 99 E-mail: pmvgermany@flowserve.com

UK Flowserve

Abex Road Newbury, Berkshire, RG14 5EY UK

Tel: +44 (0) 1635 46 999 Fax: +44 (0) 1635 36 034 E-mail: pmvukinfo@flowserve.com

Italy Flowserve Spa Via Prealpi, 30 20032 Cormano (Milano) ITALY

Tel: +39 (0) 2 663 251 Fax: +39 (0) 2 615 18 63 E-mail: infoitaly@flowserve.com

USA. Mexico PMV-USA

1440 Lake Front Circle, Unit 160 The Woodlands, TX 77380 USA Tel: +1 281 292 7500 Fax: +1 281 292 7760 E-mail: pmvusa@flowserve.com

Canada

Cancoppas Limited 2595 Dunwin Drive, Unit 2 Mississuga, Ont L5L 3N9 CANADA Tel: +1 905 569 6246 Fax: +1 905 569 6244 E-mail: controls@cancoppas.com

Asia Pacific Headquarters

Flowserve Pte Ltd. No. 12 Tuas Avenue 20 REPUBLIC OF SINGAPORE 638824 Tel: +65 (0) 687 98900 Fax: +65 (0) 686 24940

South Africa

Flowserve Unit 1, 12 Director Road Spartan Ext. 2 1613 Kempton Park, Gauteng SOUTH AFRICA Tel: +27 (0) 11 397 3150 Fax: +27 (0) 11 397 5300

The Netherlands

Fabromatic BV Rechtzaad 17 4703 RC Roosendaal THE NETHERLANDS Tel: +31 (0) 30 6771946 Fax: +27 (0) 30 6772471 E-mail: fcbinfo@flowserve.com

China

Flowserve Hanwei Building No. 7 Guanghua Road Chao Yang District 100004 Beijing CHINA Tel: +86 (10) 6561 1900 Fax: +86 (10) 6561 1899

www.pmv.nu

Experience In Motion





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

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely Adding its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications. The purchaser for all possible applications and for adding the set of the product is used in numerous applications. The purchaser for all possible applications and for all products the set of the product is used in numerous applications. The purchaser for all possible applications are of the set of the product is used in numerous applications. The purchaser for all possible applications are of the set of the product is used in numerous applications. The purchaser for all possible applications are of the set of the set of the product is and the set of the se

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes onlyand should not be considered certified or as a guarantee of minuted in remnitivity in the specific decision of the short water to be accounted to be accou

©2007 Flowserve Corporation, Irving, Texas, USA. Flowserve and PMV are registered trademarks of Flowserve Corporation.