



# EPMFSPTA Series - Ex.Proof Proof

MODEL : EPMFSPTA (MICRO SWITCH)

## KEY FEATURES

- Hermetically sealed electrical contacts.
- Better accuracy over the range.
- Precisely adjustable flow setting.
- Low maintenance.
- Viscosity Compensated Design

## APPLICATIONS

- Can be used in Water, glycol, oil & gas, air
- Atomic Power Plants
- Coolant Monitoring
- Pump Seals protection
- Chilled Water
- Compressed Air
- Spot Welding Machines
- Induction Heating equipments
- Water Treatment Plants
- Pump Dry run Protection
- Power Plants
- Steel Plants
- Oil & Gas Industries
- Chemical Process Plants
- Aviation Industries
- Defense Industries
- Atomic Power Plants



Images used are for reference purpose only

## TECHNICAL SPECIFICATIONS

<b>Max. System Pressure</b>	:50 bar( Standard Version) high pressure version can be provided on demand.
<b>Temperature Range</b>	:10 - 100°C
<b>Pressure Drop</b>	:<150mbar at Qmax.
<b>Accessories</b>	:(Refer Accessories Catalog)
<b>Material of Construction</b>	:SS 316, (Refer ordering details for options)
<b>Enclosure</b>	:Die Cast Aluminum Weather Proof to IP67, SS316
<b>Exproof class</b>	:Explosion proof to Gr. IIA/IIB & IIC. with CCOE approval., ATEX approval
<b>Type of Ex protection</b>	:Flameproof Ex 'd'.
<b>Set Point Tolerance</b>	:± 3~5%
<b>Repeatability Tolerance</b>	:± 1~2%
<b>Contact Rating</b>	:5A 230VAC SPDT Micro switch (Refer ordering details for options)
<b>Cable Entry</b>	:1/2" NPT Female, M20 x 1.5 for ATEX enclosures

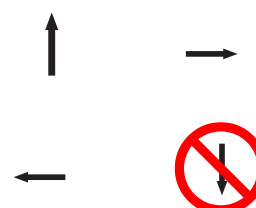
## RANGE TABLE

Line Size	Instrument Connection	Wetted Parts	Min. Setting LPM		Max. Setting LPM		Max. Flow LPM	Max. Pressure		Max. Temp. °C (°F)
			ON	OFF	ON	OFF		kg/cm <sup>2</sup>	psi	
1/2" (15 NB)	1/2" BSP/NPT Male	SS 316	6	5	14	15	40	50	711	100 (212)
3/4" (20 NB)	1/2" BSP/NPT Male	SS 316	13	11	24	22	60	50	711	100 (212)
1" (25 NB)	1" BSP/NPT Male	SS 316	23	17.5	41	36	100	50	711	100 (212)
1.25" (32 NB)	1" BSP/NPT Male	SS 316	43	27.5	70	60	150	50	711	100 (212)
1.5" (15 NB)	1" BSP/NPT Male	SS 316	52	32	82	70	200	50	711	100 (212)
2" (50 NB)	1" BSP/NPT Male	SS 316	67	40	110	94.5	260	50	711	100 (212)
2.5" (65 NB)	1" BSP/NPT Male	SS 316	77	45	135	120	400	50	711	100 (212)
3" (80 NB)	1" BSP/NPT Male	SS 316	80	76	156	130	600	50	711	100 (212)

## MOC OF WETTED PARTS

- Housing : SS316
- Spring : SS316
- Lever : SS316
- Paddle : SS316
- Screws : SS316
- Pivot : SS316

## MOUNTING INSTRUCTIONS



Note: Flow Switch value may differ according to the type of installations.

Wetted parts are those which come directly in contact with the process fluid



# EPMFSPTA Series - Ex.Proof

MODEL : EPMFSPTA (REED SWITCH)

## KEY FEATURES

- Hermetically sealed electrical contacts.
- Better accuracy over the range.
- Precisely adjustable flow setting.
- Low maintenance
- Viscosity Compensated Design
- Hermetically Sealed Contacts
- Low Set point is possible
- Low Pressure Drop Design
- Hermetically Sealed Contacts
- Can work from -20 to 100 °C

## APPLICATIONS

- Can be used in Water, glycol, oil & gas, air
- Atomic Power Plants
- Coolant Monitoring
- Pump Seals protection
- Chilled Water
- Compressed Air
- Spot Welding Machines
- Induction Heating equipments
- Water Treatment Plants
- Pump Dry run Protection
- Power Plants
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- Oil & Gas Industries
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## TECHNICAL SPECIFICATIONS

<b>Max. System Pressure</b>	:50 bar( Standard Version) high pressure version can be provided on demand.
<b>Temperature Range</b>	:10 - 100°C
<b>Pressure Drop</b>	:<150mbar at Qmax.
<b>Accessories</b>	:(Refer Accessories Catalog)
<b>Material of Construction</b>	:SS 316, (Refer ordering details for options)
<b>Enclosure</b>	:Die Cast Aluminum Weather Proof to Ip67, SS316
<b>Exproof class</b>	:Explosion proof to Gr. IIA/IIB & IIC. with CCOE approval., ATEX approval
<b>Type of Ex protection</b>	:Flameproof Ex 'd'.
<b>Set Point Tolerance</b>	:± 3~5%
<b>Repeatability Tolerance</b>	:± 1~2%
<b>Contact Rating</b>	:1A 230VAC SPDT Reed switch 50VA (Refer ordering details for options)
<b>Cable Entry</b>	:1/2" NPT Female, M20 x 1.5 for ATEX enclosures

## RANGE TABLE

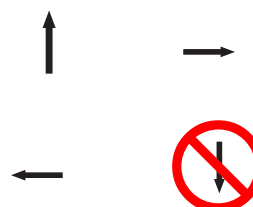
Line Size	Instrument Connection	Wetted Parts	Min. Setting LPM		Max. Setting LPM		Max. Flow LPM	Max. Pressure		Max. Temp. °C (°F)
			ON	OFF	ON	OFF		kg/cm <sup>2</sup>	psi	
1/2" (15 NB)	1/2" BSP/NPT Male	SS 316	6	5	14	15	40	50	711	100 (212)
3/4" (20 NB)	1/2" BSP/NPT Male	SS 316	13	11	24	22	60	50	711	100 (212)
1" (25 NB)	1" BSP/NPT Male	SS 316	15	13	30	28	100	50	711	100 (212)
1.25" (32 NB)	1" BSP/NPT Male	SS 316	15	14	52	50	150	50	711	100 (212)
1.5" (15 NB)	1" BSP/NPT Male	SS 316	17	15	64	61	200	50	711	100 (212)
2" (50 NB)	1" BSP/NPT Male	SS 316	23	17	79	77	260	50	711	100 (212)
2.5" (65 NB)	1" BSP/NPT Male	SS 316	25	17	89	87	400	50	711	100 (212)
3" (80 NB)	1" BSP/NPT Male	SS 316	30	17.5	86	80	600	50	711	100 (212)

## MOC OF WETTED PARTS

- Housing : SS316
- Spring : SS316
- Lever : SS316
- Paddle : SS316
- Screws : SS316
- Pivot : SS316

Wetted parts are those which come directly in contact with the process fluid

## MOUNTING INSTRUCTIONS

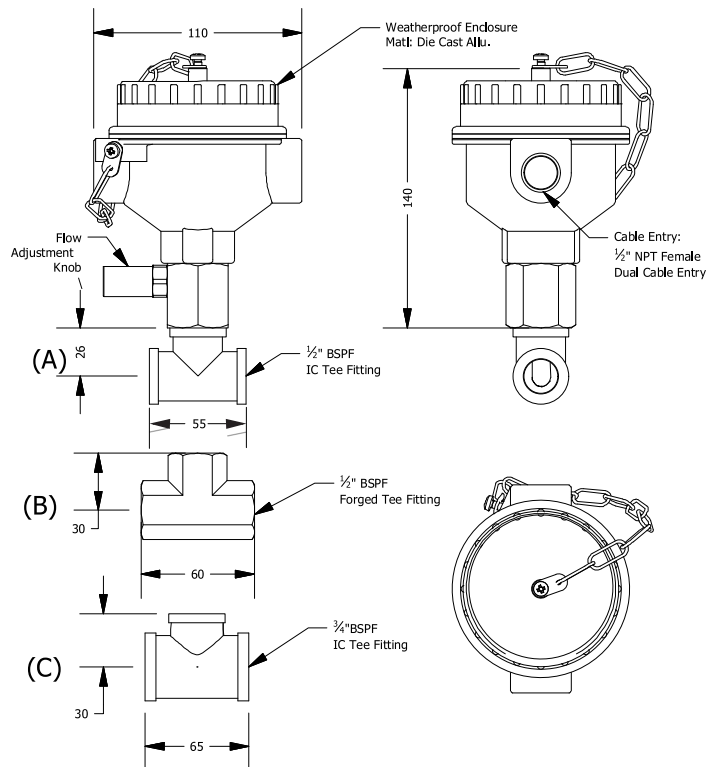


Note: Flow Switch value may differ according to the type of installations.  
 [Please take care of surge currents to avoid damage of Reed switch element. In such cases please apply R.C. Network (Resistor & Capacitor)].  
 For detailed electrical installation please refer I&M manual.



EPMFSPTA Series - Micro Switch / Reed Switch

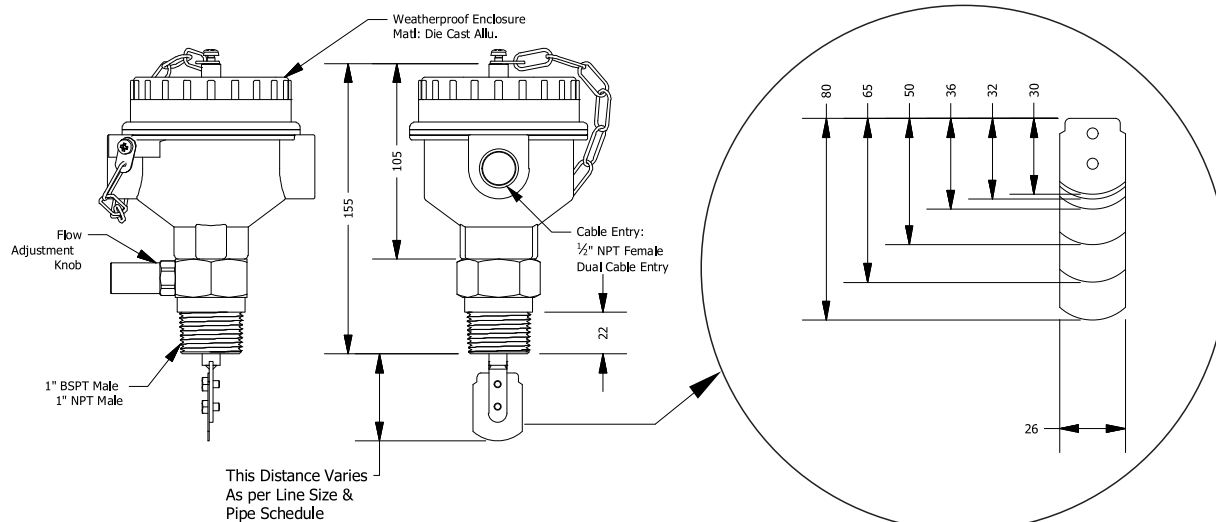
EPMFSPTA - 15-S2-C1/C2/R1/R2/R3/R4



Tee Fittings Options:

- (A) :- Standard 1/2" Tee Fitting Supplied with 1/2" Line Size
- (B) :- Customized 1/2" Tee Fitting for low flow applications.
- (C) :- Standard 3/4" Tee Fitting Supplied with 3/4" Line Size

EPMFSPTA - 25-S2-C1/C2/R1/R2/R3/R4





## IMPORTANT FOR YOUR ORDER

For placing order please fulfill following requirements.

- System Pressure
- Desired Flow Range.
- Fluid Temperature.
- Fluid Characteristics ( Physical & chemical properties)
- In case of lub-oils, viscosity must be indicated.

*(Ex-Proof Certification group IIA/IIB or IIC in CMRI or ATEX must be specified clearly while ordering.)*

## ORDERING INFORMATION

<b>BASIC MODEL</b>	<b>EPMFSPTA - C -</b>	<b>25</b>	<b>S2</b>	<b>C1 - ACCESSORIES CODE</b>
<b>ENCLOSURE PROTECTION</b>				
Ex-proof to Gr. IIA/IIB - CMRI Certified.	_____ -			
Ex-proof to Gr. IIC - CMRI Certified.	_____ <b>C</b>			
Ex-proof to Gr. IIA/IIB - ATEX Certified.	_____ <b>X</b>			
Ex-proof to Gr. IIC - ATEX Certified.	_____ <b>CX</b>			
<b>INSTRUMENT CONNECTION</b>				
1/2" BSP Male	_____	<b>15</b>		
1" BSPT Male	_____	<b>25</b>		
1/2" NPT Male	_____	<b>15N</b>		
1" NPT Male	_____	<b>25N</b>		
1" ANSI 150 Flange	_____	<b>25F</b>		
2" ANSI 150 Flange	_____	<b>50F</b>		
<b>MOC OF COUPLING</b>				
SS316L	_____		<b>S2</b>	
PVC <sup>#</sup>	_____		<b>P</b>	
Polypropylene <sup>#</sup>	_____		<b>PP</b>	
Alloy Steel ( Inconel 625, 6 Moly) <sup>#</sup>	_____		<b>AS</b>	
<b>ELECTRICAL RATING</b>				
5A 230 VAC/DC SPDT Micro Switch	_____			<b>C1</b>
2 X 5A 230 VAC/DC SPDT Micro Switch	_____			<b>C2</b>
1A 110 VAC/DC SPDT Reed Switch 30VA	_____			<b>R1</b>
1A 230 VAC/DC SPDT Reed Switch 50 VA	_____			<b>R2</b>
2 X 1A 110 VAC/DC SPDT Reed Switch 30VA	_____			<b>R3</b>
2 X 1A 230 VAC/DC SPDT Reed Switch 50 VA	_____			<b>R4</b>
<b>ACCESSORIES CODE</b>				
1/2" BSPF TEE fitting Ss304				
For all accessories codes please refer accessories catalogue				<b>T1S1</b>

<sup>#</sup> These to products are made to order, deliver time and costing will differ. Please consult local dealer.

**Authorised Dealer**



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