

The MFA-4 detects changes in the motion and speed of rotating, reciprocating or conveying equipment. It warns of equipment malfunction and signals through contacts to shut down machinery in case of a slowdown or failure. Its reliability makes it a cost-effective way to protect valuable process equipment.

The single setpoint system suits most industrial applications. This versatile unit can be used on tail pulley shafts, driven pulleys, motor shaft sensing, belt or drag conveyors, screw conveyor flights, bucket elevators, fans and pumps.

A special feature is the adjustable 0-60 second time delay, allowing the monitored device to accelerate to normal running speed before monitoring begins. A wide range of probes is available to suit specific needs, including high temperatures, corrosive, and Class I, II and III installations.



### Product Features

- Up to 100 mm (4") gap between target and probe
- Setpoint adjustment 2 to 3000 PPM
- Adjustable start-up time delay
- Visual indication of probe operation and relay status
- General purpose, suitable for majority of industrial applications

## Technical Specifications

### Features

- setpoint adjustment: 2 to 3000 PPM
- adjustable start-up time delay: 0-60 seconds
- visual indication of probe operation and relay status

### Power

- 115 or 230 VAC, 50/60 Hz, 5VA ±10% of rated voltage

### Dynamic Range

- 0-7200 PPM

### Output

- 2 Form 'C' relay contacts (DPDT), rated 10A @ 115/230 VAC resistive

### Characteristics

- repeatability: ±1 %
- dead band: ±0.25%

### Ambient Temperature Range

- -40 to 60°C (-40 to 140°F)

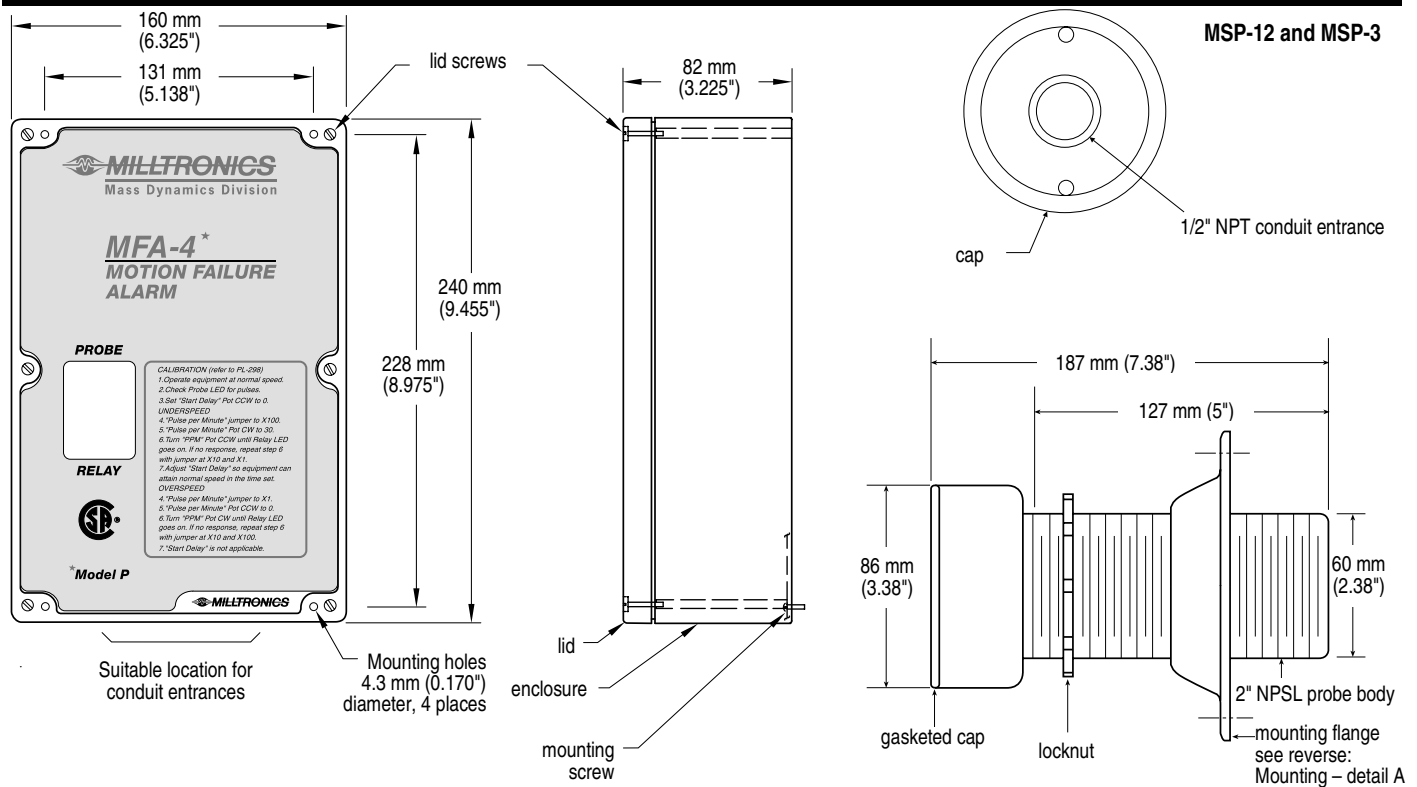
### Enclosure Dimensions

- Nema 4, polycarbonate
- 160 mm x 240 mm x 82 mm (6.3" x 9.5" x 3.2")

### Approvals

- CSA general purpose
- NOT CE compliant

## Dimensions



Specifications are subject to change without notice.

# Motion Failure Alarm MFA-4

## Probes



### Standard MSP-12

- Best selling probe withstands most environmental abuse
- Long lasting phenolic body with internal pre-amp
- Convenient mounting flange and lock nut for fast installation and set-up
- Temperature rating: -40 to 60°C (-40 to 140°F)



### High Temperature MSP-3

- Special probe assembly to withstand operating temperatures to 260°C (500°F)
- Cast aluminum probe with convenient mounting flange and lock nut
- 1.5 m (5 ft.) of high temperature cable provided. Up to 30 m (100 ft.) may be used
- Pre-amp remote mounted in cast aluminum NEMA 4 enclosure 140 mm x 140 mm x 100 mm (5.5" x 5.5" x 4")
- Pre-amp temperature rating -40 to 60°C (-40 to 140°F)



### Stainless High Temperature MSP-9 Probe

- 304 stainless steel probe construction
- Special construction allows operation of probe in environment to 260°C (500°F)
- 1.5 m (5 ft.) special high temperature Teflon® cable provided - up to 30 m (100 ft.) may be used
- Pre-amp remote mounted in enamel painted steel (optional stainless steel) enclosure 150 mm x 150 mm x 100 mm (6" x 6" x 4")



### Mini-Probe MSP-1

- For installations with limited mounting space
- CPVC probe body complete with locknuts
- 1.8 m (6 ft.) cable provided - up to 30 m (100 ft.) may be used
- Pre-amp remote mounted in cast aluminum NEMA 4 enclosure 140 x 140 x 100 mm (5.5 x 5.5 x 4")
- Due to smaller size, probe sensitivity is reduced, gap max.: 12.7 mm (0.5")
- Temperature rating: -50 to 80°C (-60 to 180°F)



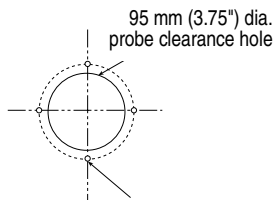
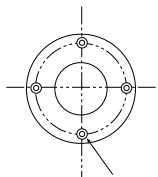
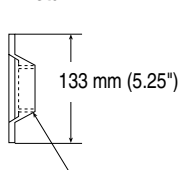
### XPP-5 Probe

- CSA hazardous approved (Class I, Div. 1, Groups A, B, C & D; Class II, Div. 1, Group E, F & G; Class III)
- Phenolic / aluminium body that is fully potted
- Convenient mounting flange and lock nut
- 3/4" NPT male hub connection
- Operating temperature from -40 to 60°C (-40 to 140°F)

## Mounting

### Mounting for XPP-12, MSP-3, XPP-5

#### Detail A



For dimensional and/or mounting details for MSP-9, MSP-1, and XPP-5 see instruction manual.

114 mm (4.5") BCD,  
4 places

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4 places



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