



FLOW  
LEVEL  
PRESSURE  
ANALYTICAL  
TEMPERATURE  
INSTRUMENTATION  
PASTEURIZATION CONTROLS



## "MPF" Modular Pressure Transmitter

- *State of the art sanitary design delivers class leading performance*
- *Replaceable components reduce cost of ownership*
- *Diagnostic routines promote reliability, internal display verifies problem free operation*
- *Intuitive menu driven setup simplifies commissioning*

The industry's first fully modular sanitary pressure transmitter offers not only best in class performance within harsh process environments, but also the ability to be custom configured onsite both for process parameters and enclosure form factor. Diagnostic routines continuously check on the health of the circuitry and measure the loop output current which is displayed on a highly visible internal LED screen. Patent pending dual seals at every enclosure penetration and a fully potted electronic puck assure long life and problem free operation.

electronics puck significantly reduces cost of ownership as critical spare inventory is reduced to manageable, replaceable components. When accidents do happen, a damaged sanitary diaphragm is easily and economically replaced with a new stem. While the sensor industry trends toward cheaper designs with the inevitable reduction of durability, the MPF provides quality and value through innovation.

For more information on this product, or any of our other products, visit [www.andinst.com](http://www.andinst.com) or call our Customer Service Department directly at 1-800-833-0081.

The modular design and universal

### APPLICATIONS

- Sanitary pressure line measurement
- Process sensor control including pressurized fillers, pressurized vessels, filter monitoring, etc
- Aseptic processing, steam injection and other high temperature processes
- Sanitary environment including wash downs, condensing humidity, and wide temperature swings



# MPF Specifications

## PERFORMANCE MECHANICAL & ELECTRICAL:

Calibrated Accuracy:  $\pm 0.10\%$  of calibrated range up to 5:1 turndown  
( $\pm 0.15\%$  if over 5:1 turndown)

Repeatability: 0.05% as calibrated

Long Term Stability: 0.2% URL for 2 years

Process Temperature Effect:  $\pm 0.1$  psi/10°F (5.5°C) typical

Ambient Temperature Effect:  $\pm 0.1$  psi/10°F (5.5°C) typical

Over-Range Capability: 30/100/500 psi stem:  
1.5x URL no effect on accuracy  
2x URL to failure  
1000 psi stem:  
1.1x URL no effect on accuracy  
1.25x URL to failure

Response Time: <100 Milliseconds

Sampling Rate: <50 Milliseconds

Damping: Menu adjustable

Range Turndown Capability: 10 to 1 turn down from URL

Ranges, URL (PSI): 30,100,500,1K gauge and compound  
30,100,500 absolute

Ranges, URL (BAR): 2,7,35,70 gauge and compound  
2,7,35 absolute

## ENVIRONMENTAL:

Process Temperature Limits: 0 to 350°F (-18 to 177°C) with ambient temperatures to 140°F (60°C) and 0 to 330°F (-18 to 165°C) with ambient temperatures to 160°F (71°C)

Ambient Temperature Limits: 32 to 160°F (0 to 71°C)

Enclosure Protection: NEMA 4X & IP66  
IP69K(when equipped with QDR)

## CONSTRUCTION / FINISH:

Product Contact: 316L finished to a Min. Ra =25 microinches. Optional: Hastelloy® diaphragm

Non-Product Contact Metal: 304 finished to a Min. Ra =32 microinches

Non-Product Contact Plastic: polycarbonate threaded cap. Delrin atmospheric vent

Wiring Connection: M16 x 1.5 threaded housing electrical entry

Equipped with:  
Standard - replaceable M12 5 pin Eurofast QDR  
Optional - M16 Cord Grip, M16 x 1.5" NPTF adaptor

## OPERATIONAL:

Internal Fill: ETR (Extended Temperature Range) FDA approved mineral oil  
Optional Neobee 20®

Output: 2 wire user selectable 4-20 mA DC or 20-4 mA

Internal Display: 4 digit LED nominally displays loop current

Loop Resistance: 0-300 ohms at 24 VDC

Electrical Connection: screw terminals with a conductor cross section range of 14-26 AWG

Recommended Cable: Anderson shielded molded cordset, alternatively: 22-24 AWG, foil shielded, 0.17 - 0.26" Cable Sheath OD for use with cord grip or field wiring connector

Electrical Protection: Voltage spike and reverse polarity

Operating Voltage: 18-36 VDC (24 VDC Nominal regulated or unregulated)

Zero Adjustment: one touch

Re-Span: With switch through user interface & with or without a reference pressure source

Electronics Puck: Modular, Field replaceable

Fitting & Sensor Stem: Modular, Field replaceable

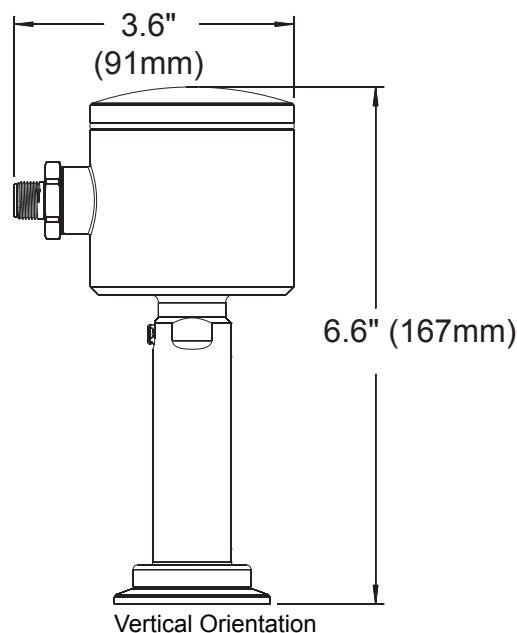
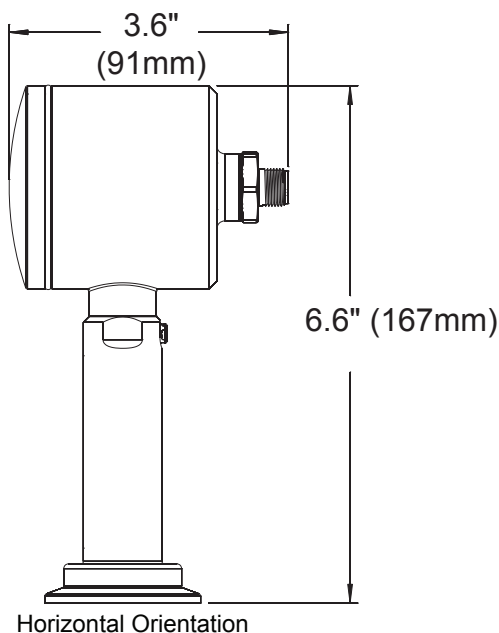
## APPROVALS AND DOCUMENTATION

Sanitary: Authorized to display the 3-A Symbol, Third Party Verified, standard 74-03

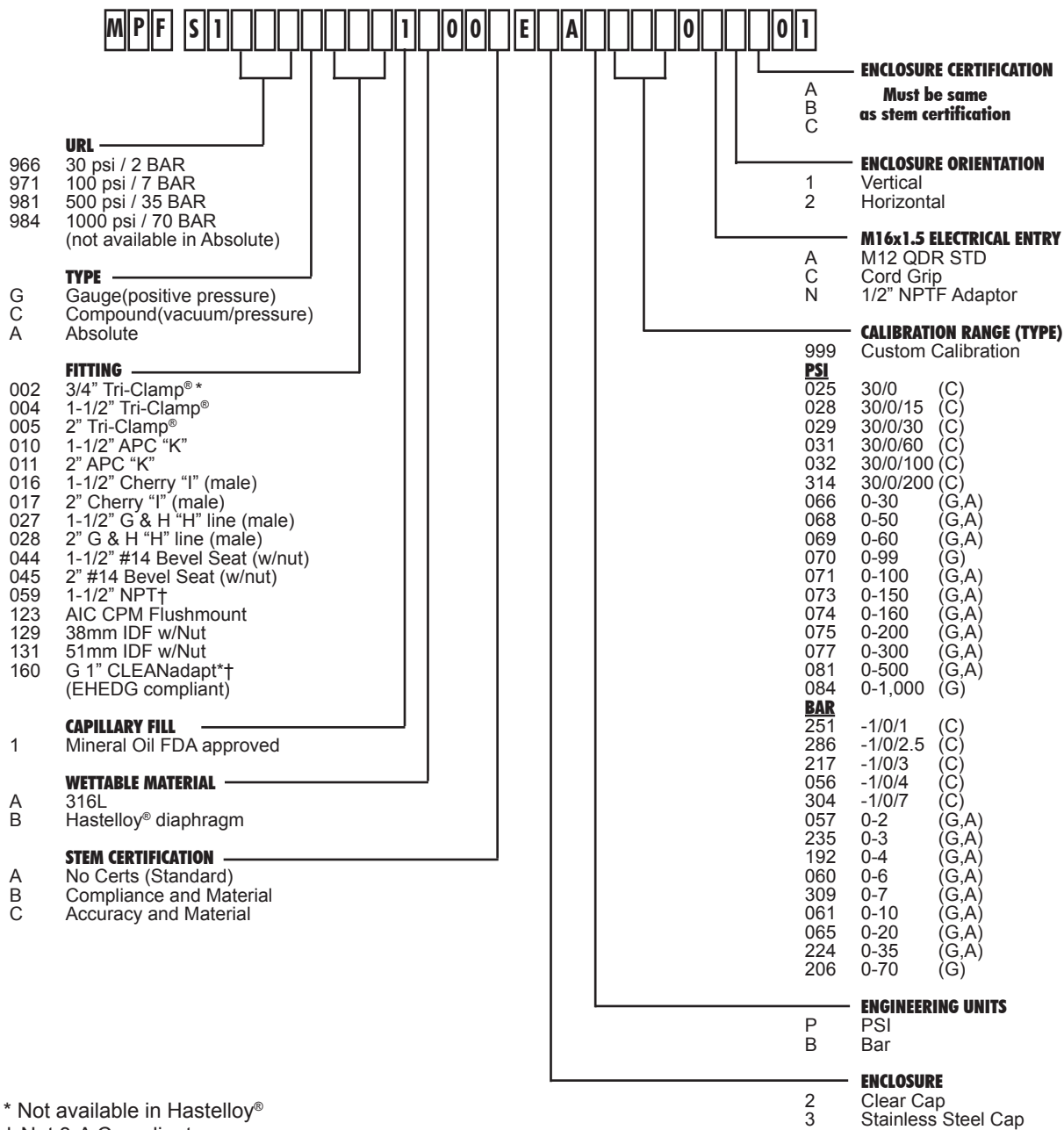
Compliance: Compliant with the Pressure Equipment Directive relative to Sound Engineering Practices(PED)

Warranty: 2 years

## DIMENSIONS

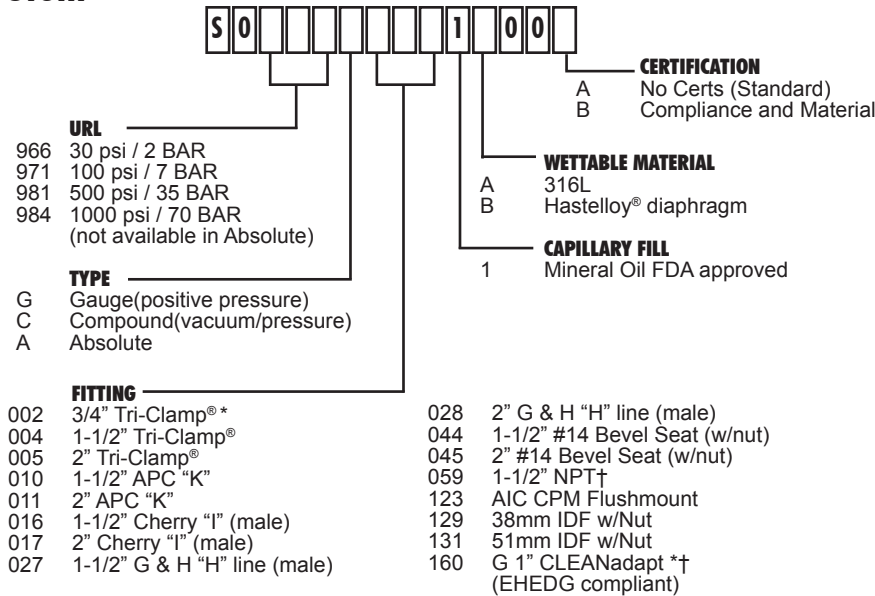


# HOW TO ORDER (complete unit)



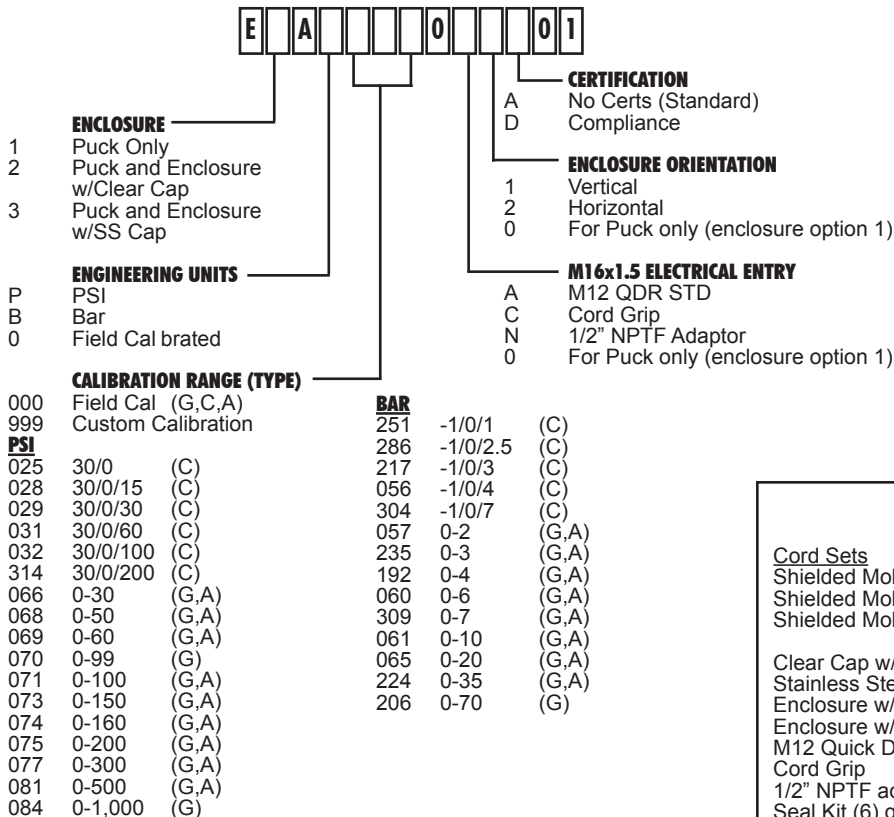
## HOW TO ORDER (modular components)

### Stem



\* Not available in Hastelloy  
† Not 3-A Compliant

### Puck/Enclosure



#### ACCESSORIES

<b>Cord Sets</b>	
Shielded Molded w/25' cable	42117K0025
Shielded Molded w/50' cable	42117K0050
Shielded Molded w/100' cable	42117K0100
<b>Clear Cap w/gaskets</b> 5632800001	
<b>Stainless Steel Cap w/gaskets</b> 5632900001	
<b>Enclosure w/Clear cap w/gaskets</b> SP5632700001	
<b>Enclosure w/SS cap w/gaskets</b> SP56327A0001	
<b>M12 Quick Disconnect Receptacle</b> SP56726A0002	
<b>Cord Grip</b> SP5633100000	
<b>1/2" NPTF adaptor</b> SP5633200000	
<b>Seal Kit (6) gaskets</b> 5633000001	
<b>Field Wireable Connector-Straight</b> 42119B0000	
<b>Field Wireable Connector-90°</b> 42119A0000	