



Product Information - MPF

FOOD

"MPF" Modular Pressure Transmitter

Introduction

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 on site both for process parameters and enclosure form factor. Diagnostic routines continuously check on the health of the circuitry and visually report any issues that could impact performance.

The illuminated internal display provides a simple user interface to ease start up commissioning and configuration. The optional display interface provides class leading legibility and intuitive configuration functions.

Patent pending dual seals at every enclosure penetration and a fully potted electronic puck assure long life and problem free operation.

The modular design and universal electronics puck significantly lowers cost of ownership as critical spare inventory is reduced to manageable, replaceable components. When accidents do happen, the damaged component is easily and economically replaced saving the cost of full sensor replacement. While the sensor industry trends toward cheaper designs with the inevitable reduction of durability, and longevity, the MPF provides quality and value through innovation.

For more information on this product, or any of our other products, visit www.anderson-negele.com or call our Customer Service Department directly at 1-800-833-0081.

Authorizations



Features

- State of the art sanitary design delivers class leading performance
- Replaceable components reduce cost of ownership
- Diagnostic routines promote reliability, display verifies problem free operation
- Intuitive menu driven setup simplifies commissioning
- Available HART communications simplifies commissioning and maintenance for HART protocol adapters

Applications

- Sanitary pressure line direct or remote 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



RODEM®

PROCESS EQUIPMENT

www.rodem.com 800-543-7312

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: ± 0.1 psi/10°F (5.5°C) typical

Ambient Temperature

Effect: ± 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:

Designed and factory tested to NEMA 4X & IP66; (IP69K when equipped with QDR); Suitable for use in wet locations at up to 100% relative humidity.

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

OPERATIONAL:

Internal Fill:

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

ETR (Extended Temperature Range) FDA approved mineral oil
Optional Neobee M-20

Output:

Analog 2-wire user selectable 4-20 mA
DC or 20-4 mA

Internal Display:

Optional - HART 7.0 digital communications protocol
4 digit LED nominally displays loop current. Process variable selectable - PSI or BAR.

Display Interface:

Optional; modular field replaceable - Millibar, Torr & Kg/cm², PSI, BAR, kPa, In H₂O, In Hg, mm H₂O, mA

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:

24 VDC (18-36 VDC) regulated or unregulated

Input Current Rating:

50mA

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:

3-A compliant, Third Party Verified

Compliance:

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

CE compliant

CSA-B51-03

CRN# CSAOF9754.5R1

ETL Listed

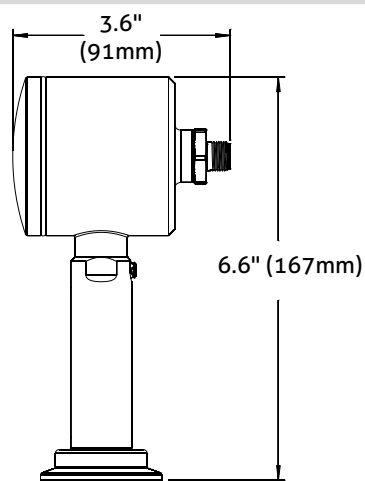
Conforms to UL Std 61010-1 3rd Ed(with Enclosure option #3 only)

Certified to CSA Std C22.2 61010-1 3rd Ed(with Enclosure option #3 only)

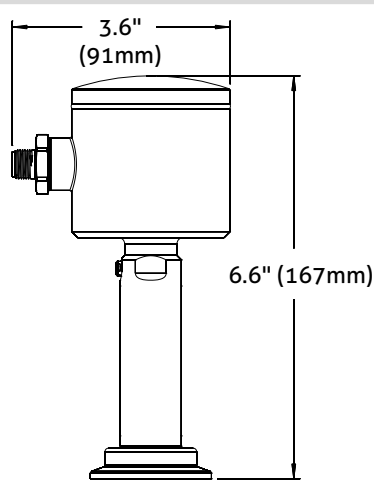
Warranty:

2 years

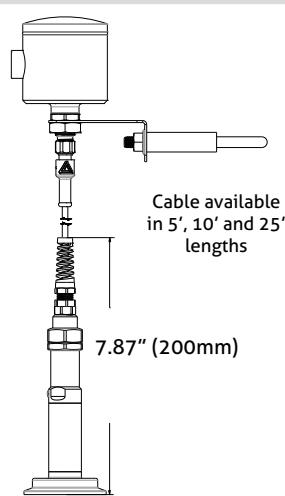
Dimensions



HORIZONTAL ORIENTATION



VERTICAL ORIENTATION

REMOTE MOUNTING
(ALSO AVAILABLE IN A KIT)

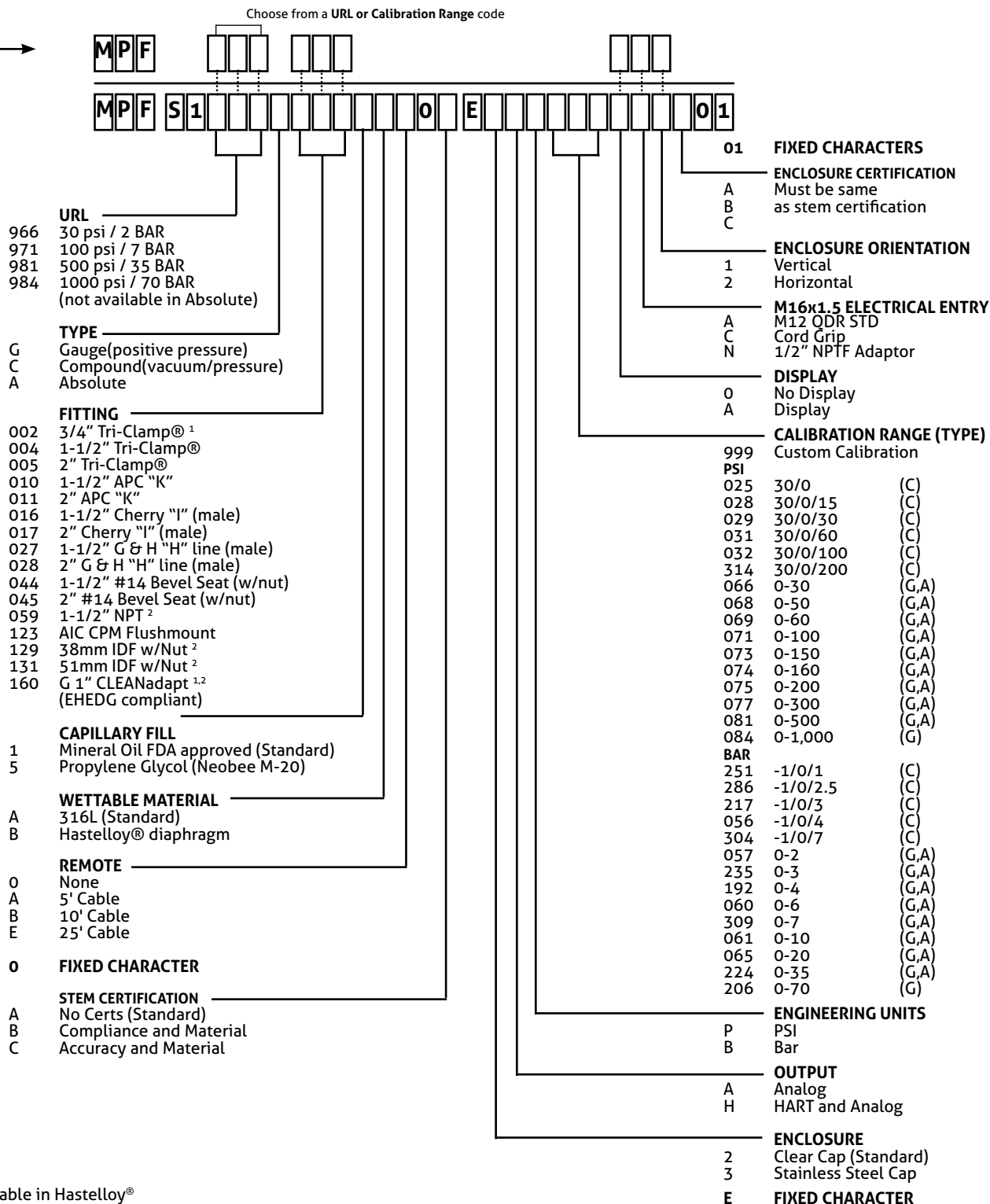
HOW TO ORDER (complete unit)

Quick Order Instructions:

Quick order numbers may be used when standard no charge features are selected. All choices omitted and not covered below default to the standard option. If a choice other than the standard option is required, the full part number must be utilized.

- 1) Select desired **URL** or **CALIBRATION RANGE** 3 place code
 - a) If URL is selected TYPE will default to Compound and will be calibrated from 0 psig to max range
 - b) If CALIBRATION RANGE is selected, Sensor type will default to (C) Compound or (G) Gauge depending on range
- 2) Select **FITTING** 3 place code
- 3) Select fixed "0", **ELECTRICAL ENTRY** and **ENCLOSURE ORIENTATION**

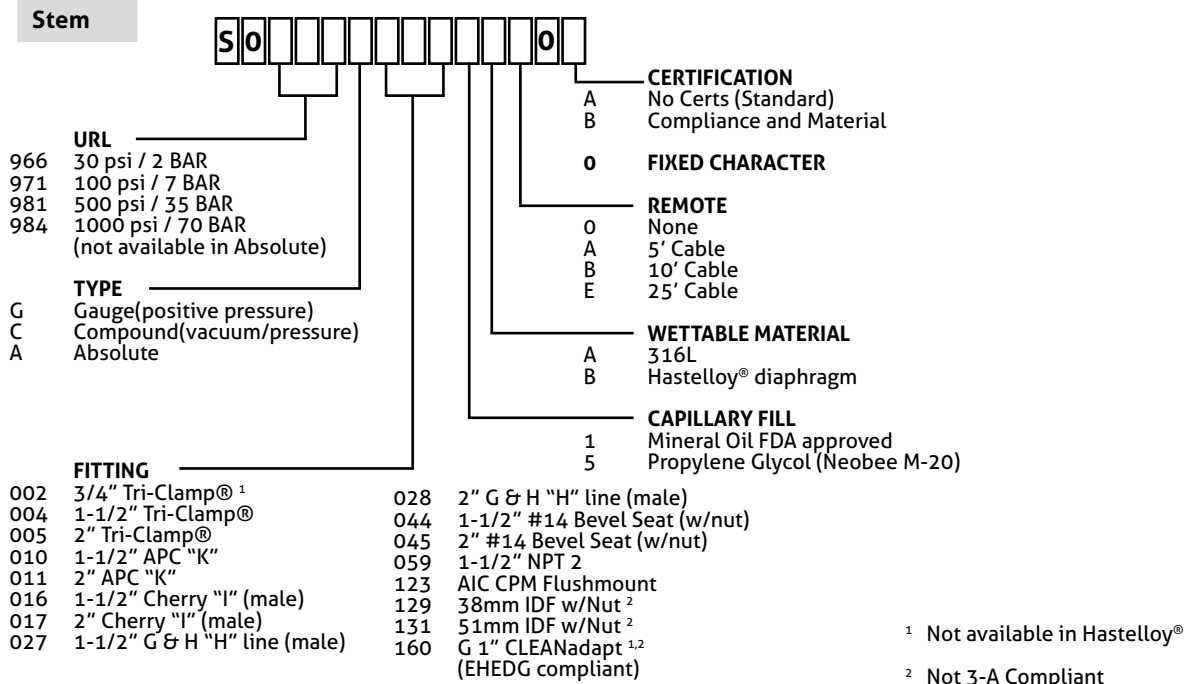
Quick Part



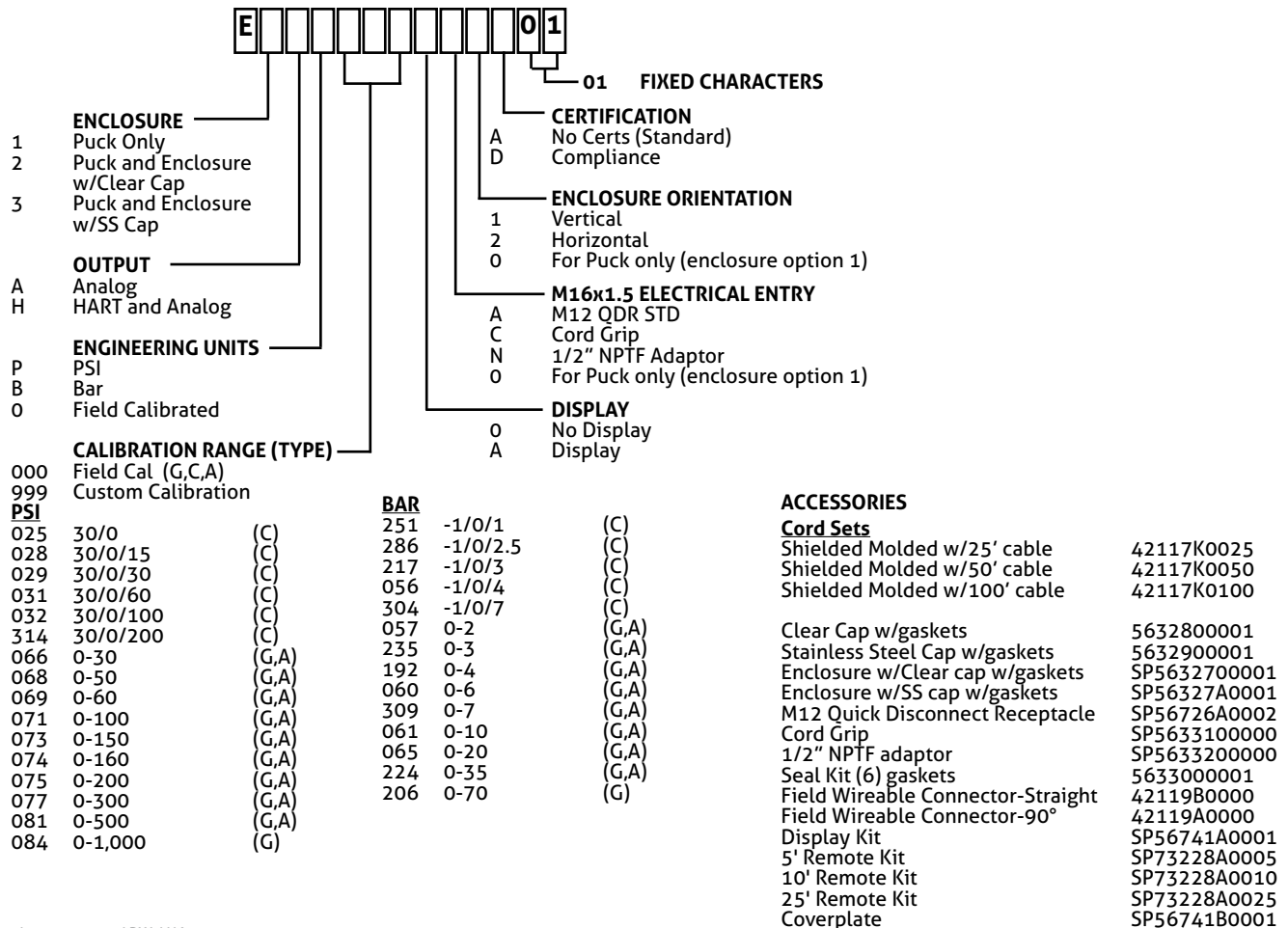
¹ Not available in Hastelloy®

² Not 3-A Compliant

HOW TO ORDER (modular components)



Puck/Enclosure



05070 / 2.1 / 2015-05-07 / PW / NA

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