



MFM™-100

MAGNETIC FLUX MEASURING CHAIN

GENERAL SPECIFICATIONS

MFP-100 Sensor

Operation

- Output Magnetic flux to voltage
- Interchangeability < 1% F.S.R.
- Short circuit protection Built-in

Connection

- Integral cable
 - Type Unshielded twisted pair
 - Connector Female bayonet

Environment

- Temperature range
 - Operating 0 to 125°C [32 to 257°F]

Physical Characteristics

- Sensor material Glass-reinforced epoxy and semi-conductive material
- Integral cable length 50 cm [19.7 in]
- Outer jacket material Irradiated polyolefin
- Diameter 3 mm [118 mils]

Extension Cable

Connection

- Type Shielded twinaxial
- Connector
 - Sensor side Male bayonet
 - Conditioner side Free conductors with sleeve

Physical Characteristics

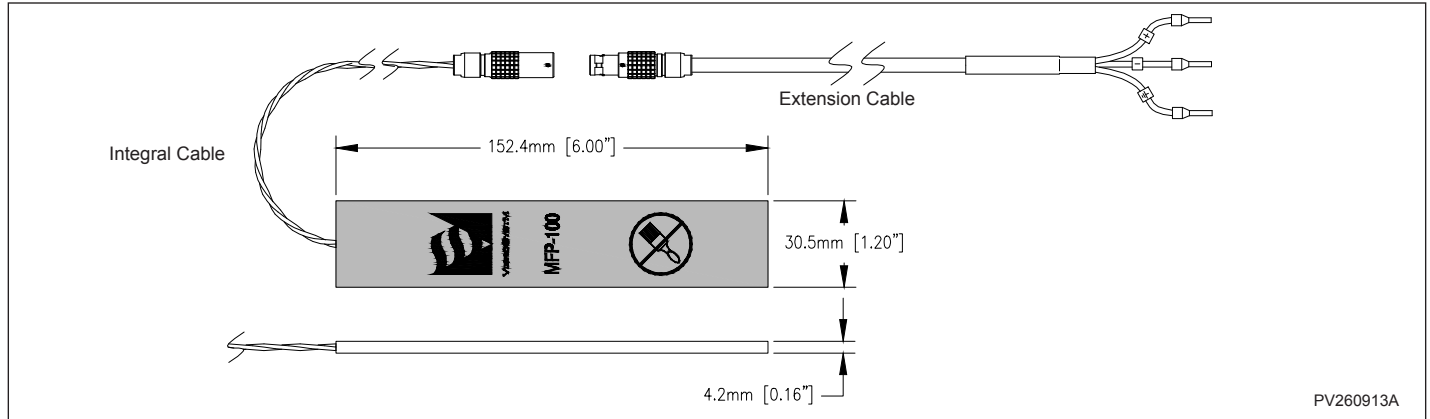
- Available lengths 10, and 20 m [33, and 66 ft]
- Outer jacket material FEP
- Diameter 5 mm [197 mils]

Environment

- Temperature range
 - Operating 0 to 125°C [32 to 257°F]



MFP-100 DIMENSIONS



PV260913A

MFC-100 Signal Conditioner

Operation

- Input MFP-100 sensor
- Flux density output range Up to ± 2 tesla
- Operating frequency 2 to 60 Hz (no attenuation)
- Outputs
 - Raw flux density ± 5 V
 - Maximum flux density 4 to 20 mA (per pole)
- Sensitivity
 - Raw flux density 2.5 V/tesla
 - Maximum flux density 8 mA/tesla
- Accuracy $\pm 1\%$ F.S.R.
- Linearity $\pm 0.5\%$ F.S.R.
- Repeatability $\pm 0.05\%$ F.S.R.
- Minimum detection threshold 0.03 tesla
- Temperature drift < 500 ppm/ $^{\circ}$ C

Power Requirements

- Voltage 24 Vdc $\pm 10\%$
- Consumption 2.4 W

Connection

- Type Screw terminals
- Maximum cable length
 - For voltage output 100 m [328 ft]
 - For current output 300 m [984 ft]

Environment

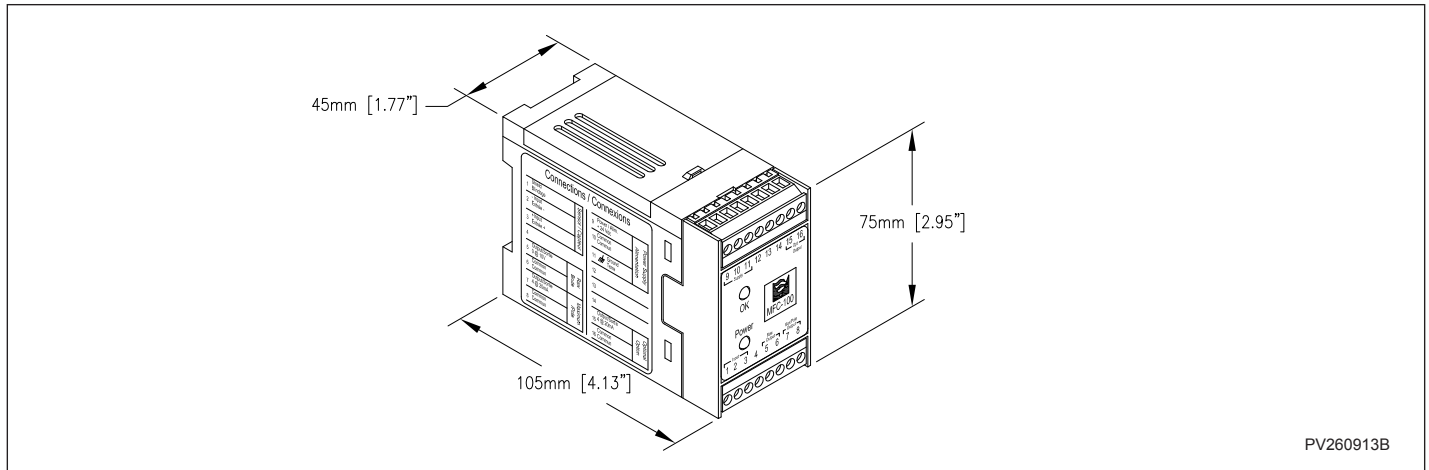
- Temperature range
 - Operating 0 to 55 $^{\circ}$ C [32 to 131 $^{\circ}$ F]
 - Storage (measuring chain) -25 to 70 $^{\circ}$ C [-13 to 158 $^{\circ}$ F]

Physical Characteristics

- Module body ABS
- Mounting type 35 mm DIN Rail



MFC-100 DIMENSIONS



PRODUCT IDENTIFICATION

Product Number	Description
VSM-MFP100	MFP-100 Magnetic flux sensor
VSM-MFC100/2T	MFC-100 Magnetic field signal conditioner (2 Tesla)
VSM-CBL-TWX-MFP-10	Cable / Twinax - MFP-100 - AWG 20 / (10 m/32.8 ft)
VSM-CBL-TWX-MFP-20	Cable / Twinax - MFP-100 - AWG 20 / (20 m/65.6 ft)