



MFM™-100

MAGNETIC FLUX MEASURING CHAIN

GENERAL SPECIFICATIONS

MFP-100 Sensor

Operation

- Output
- Interchangeability
- Short circuit protection

Magnetic flux to voltage
< 1% F.S.R.
Built-in

Connection

- Integral cable
 - Type
 - Connector

Unshielded twisted pair
Female bayonet

Environment

- Temperature range
 - Operating

0 to 125°C [32 to 257°F]

Physical Characteristics

- Sensor material
- Integral cable length
- Outer jacket material
- Diameter

Glass-reinforced epoxy and semi-conductive material
50 cm [19.7 in]
Irradiated polyolefin
3 mm [118 mils]

Extension Cable

Connection

- Type
- Connector
 - Sensor side
 - Conditioner side

Shielded twinaxial
Male bayonet
Free conductors with sleeve

Physical Characteristics

- Available lengths
- Outer jacket material
- Diameter

10, and 20 m [33, and 66 ft]
FEP
5 mm [197 mils]

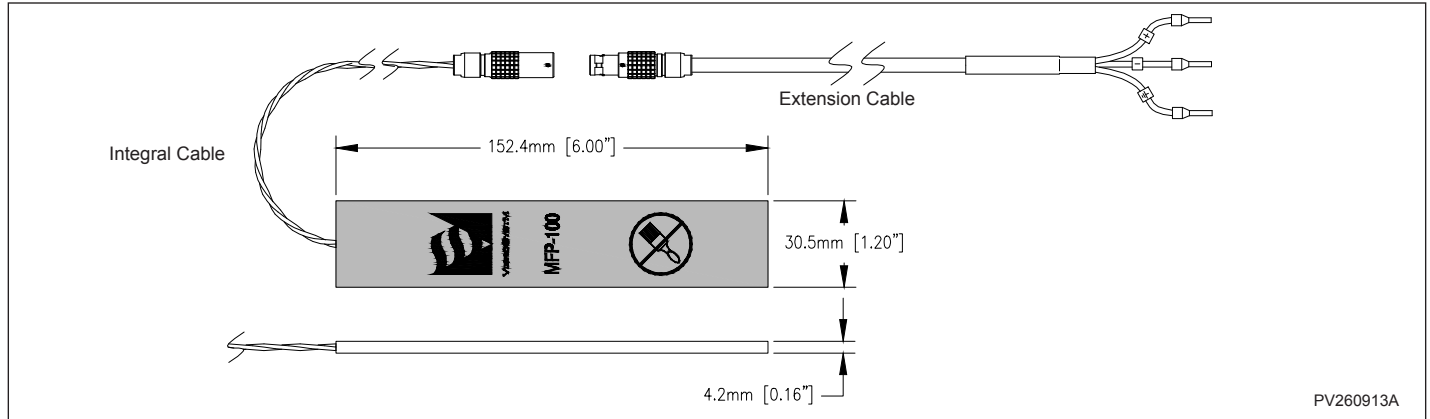
Environment

- Temperature range
 - Operating

0 to 125°C [32 to 257°F]



MFP-100 DIMENSIONS



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] |

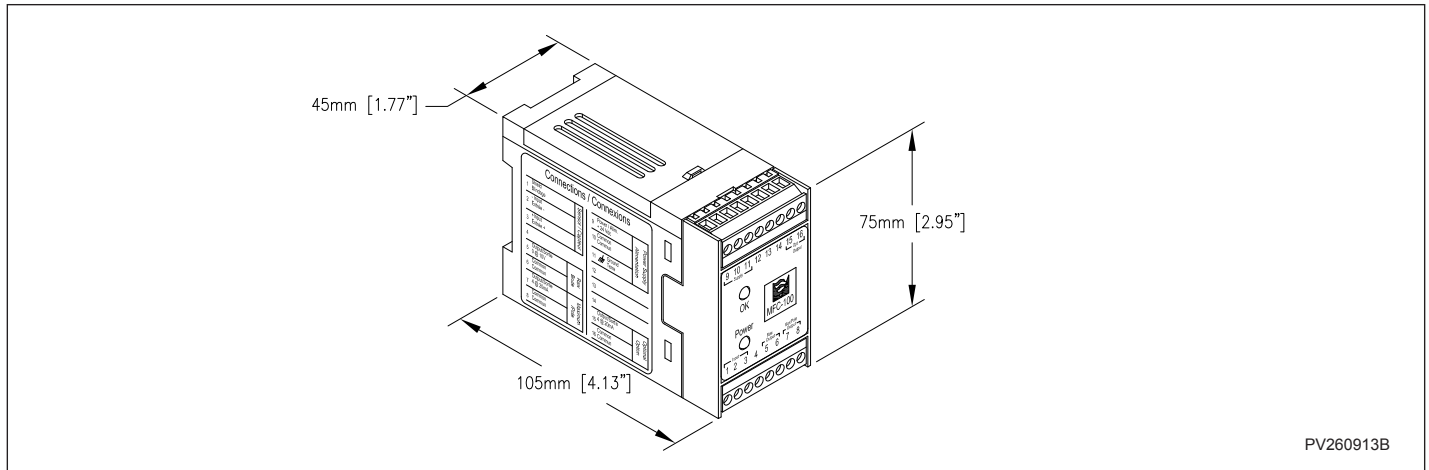
Physical Characteristics

- | | |
|-----------------|----------------|
| • Module body | ABS |
| • Mounting type | 35 mm DIN Rail |

F.S.R.: Calculated on a full scale range



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)