

# Vibro Meter 111-412-000-013-A2-B1-E010-F0-G000-H05

## Manual

|                |                            |
|----------------|----------------------------|
| Brand          | Vibro Meter                |
| Product Series | Sheet18                    |
| Product Type   | Proximity Measuring System |

### Description

Manufacturer : Meggitt (Vibro-Meter)

Product No. : 111-412-000-013-A2-B1-E010-F0-G000-H05

Product Type : Proximity Measuring System

111-412-000-013

Environment (A) : 2 = Explosive Ex i

Body thread (B) : 1 = M10 × 1

Integral cable length (E) : 010 = 1.0 m ±100 mm

Optional protection (F) : 0 = None

Flexible hose length (G) : 000 = None

Total system length (H) : 05 = 5 m

Weight : 0.22 Kg

#### KEY FEATURES AND BENEFITS

From the vibro-meter® product line

Non-contact measurement system based on eddy-current principle

Ex certified versions for use in hazardous areas (potentially explosive atmospheres)

Conforms to API 670 recommendations

1, 5 and 10 m systems

Temperature-compensated design

Voltage or current output with protection against short circuits

Frequency response:

DC to 20 kHz (−3 dB)

Measurement range:

2 or 4 mm

Temperature range:

-40 to +180 °C

#### APPLICATIONS

Shaft relative vibration and gap/position

measurement chains for machinery

protection and/or condition monitoring

Ideal for use with VM600Mk2/VM600 and

VibroSmart® machinery monitoring systems

API 670 applications

#### General

Transducer input requirements : High-frequency power source from an IQS900 signal conditioner

#### Environmental

Temperature ranges

Transducer : -40 to +180°C with drift <5% (operating).

+180 to +220°C with drift >5% (short-term survival).

Transducer and cable : -40 to +195°C if used in an Ex Zone

Cable, connector and optional

protection

: -40 to +200°C

Protection rating

(according to IEC 60529)

: The head of the proximity transducer (transducer tip and integral cable) is rated IP68

#### Vibration

(according to IEC 60068-2-26)

: 5 g peak between 10 and 500 Hz

Shock acceleration

(according to IEC 60068-2-27)

: 15 g peak (half sine-wave, 11 ms duration)

#### Physical characteristics

Transducer construction : Wire coil Ø8 mm, Torlon (polyamide-imide) tip, encapsulated in stainless steel body (AISI 316L) with high-temperature epoxy glue

Integral and extension cables : FEP covered 70 Ω coaxial cable, Ø3.6 mm

Connectors : Self-locking miniature coaxial connectors.

Note: When connecting, these should be hand-tightened until locked.

#### Optional protection

Flexible stainless steel hose

(protection tube)

: The stainless steel hose provides additional mechanical protection but is not leak-tight

FEP sheath

(extruded fluorinated ethylene propylene)

: The FEP sheath provides resistance to almost all chemicals and low permeability to liquids, gases and moisture. It is also flexible, low friction and mechanically tough.