Interface kit for buffered outputs

FEATURES

- From the Vibro-Meter® product line
- Interface kit:
  Module with a 25-pin D-sub connector input and screw terminal outputs
  Cable with 25-pin D-sub connectors
- DIN rail mounting:
  Single metal mounting adaptor
  Movable mounting adaptor for flexible positioning
- Compact design reduces space requirements
- Clearly defined I/O with spaces for labelling

APPLICATIONS

- Easy to implement and reliable signal interface for sharing signals with VM600 XMx16 / XIO16T card pairs and VibroSmart® VSV3x0 modules

Interface kit module

Interface kit cable

DESCRIPTION

The interface kit for buffered outputs was developed to simplify the expansion of existing machinery monitoring systems that make their transducer input signals available as buffered “raw” outputs that can be shared with other systems.

In particular, the interface kit can be used to reduce the field wiring required when adding a VibroSight® condition monitoring system using VM600 XMx16/ XIO16T monitoring card pairs and/or VibroSmart® VSV3x0 monitoring modules to a machinery protection system where the buffered transducer outputs are available via 25-pin D-sub connectors.

This interface kit consists of an interface module with a 25-pin D-sub connector input and screw terminal outputs, and an associated interface cable with 25-pin D-sub connectors.

DESCRIPTION *(continued)*

The module mounts directly on a standard DIN rail, where its compact design and movable mounting adaptor help ensure that the required space is minimised and that the module can be positioned for efficient wiring.

The inputs to the module are connected to the signal source (that is, the buffered transducer outputs) using the associated 1.8 m cable. The 25-pin D-sub connectors of the module and the cable support retaining screws and sockets to help ensure reliable connections.

The outputs from the module are available as individual screw terminal connections having a clamping range from 0.2 to 4 mm^2 (24 to 11 AWG), which accommodates most field wiring.

As shown in the Wiring diagram on page 2, each interface kit (module and cable) provides straight-through (1:1) passive wiring between the input signals available on a 25-pin D-sub connector and easily identifiable screw terminal outputs, facilitating efficient and reliable interfacing for signal sharing.

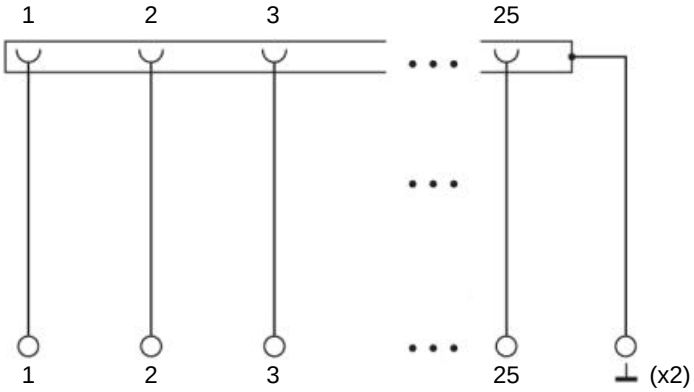
Applications information

The interface kit for buffered outputs is typically used to easily and quickly add a condition monitoring system using VM600 XMx16/XIO16T monitoring card pairs and/or VibroSmart VSV3x0 monitoring modules to an existing machinery protection system, where the transducer input signals are available as buffered transducer outputs on 25-pin D-sub connectors.

For specific applications, contact your nearest Meggitt Sensing Systems representative.

WIRING DIAGRAM

25-pin D-sub connector (input)



Screw terminal connections (output)

SPECIFICATIONS

Electrical

Nominal voltage	: 125 $V_{AC/DC}$
Maximum current (per pin / circuit branch)	: 2 A
Number of positions (circuit branches)	: 25

SPECIFICATIONS *(continued)*

Module

Electrical

Nominal voltage	
• *According to CSA*	: 105 V
• *According to cUL and UL*	: 125 V
Nominal current (*according to* CSA, cUL and UL)	: 2 A

25-pin D-sub connector (input)

Type	: 25-pin D-sub (female)
Number of pins	: 25
Retention	: Integrated retaining sockets to ensure retention and help provide mechanical support

Screw terminal connections (output)

Type	: Screw terminal
Number of pins	: 25 for individual signals. 2 for the 25-pin D-sub connector shell.
Retention	: Screw (M3 thread)
Tightening torque	: 0.5 to 0.6 N•m
Clamping range	
• *Solid wire*	: 0.2 to 4 mm^2 (24 to 11 AWG)
• *Stranded wire*	: 0.2 to 2.5 mm^2 (24 to 13 AWG)
Recommended stripping length	: 8 mm

Cable

Type	: 25-pin D-sub (male) to 25-pin D-sub (male)
Type of wire	: 0.75 mm^2 (28 AWG) with PVC outer jacket
Length	: 1.8 m ±30 mm
Outer diameter	: 7 mm
Retention	: Integrated retaining screws to ensure retention and help provide mechanical support

Environmental

Temperature	
• *Operating*	: −20 to +50 °C (−4 to +122 °F)
• *Storage*	: −20 to +70 °C (−4 to +158 °F)
Humidity	
• *Operating*	: Up to 90%, non-condensing
• *Storage*	: Up to 95%, non-condensing
Restriction of hazardous substances	: RoHS compliant
Altitude	: 2000 m max.

SPECIFICATIONS *(continued)*

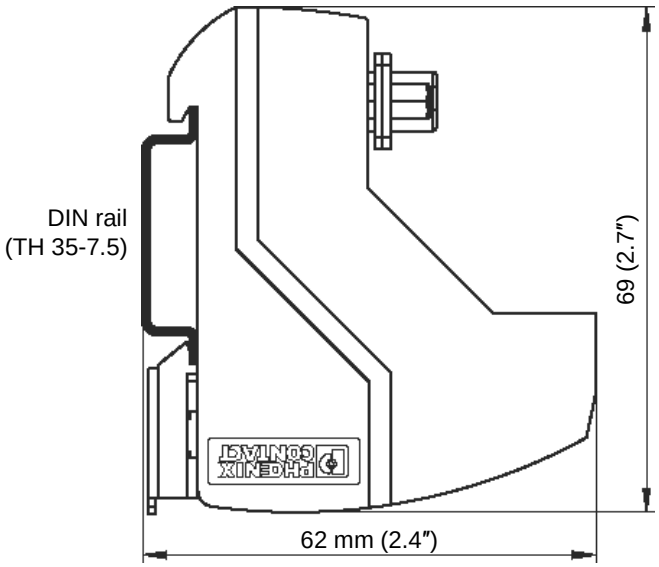
Approvals (module)

Air creepage distance	: DIN EN 50178, IEC 60664, IEC 62103
CSA	: 61010-01-04
UL, cUL	: UL 508 (E238705)

Physical

Mounting	
• *Adaptor*	: Movable metal adaptor that mounts directly on a TH 35-7.5 DIN rail (according to IEC 60715)
• *Orientation*	: Can be mounted in any direction
Electrical connections	: See 25-pin D-sub connector (input) on page 3 and see Screw terminal connections (output) on page 3
Dimensions	
• *Height*	: 69 mm (2.7 inches)
• *Width*	: 57.4 mm (2.3 inches)
• *Depth*	: 62 mm (2.4 inches). See also Mechanical drawing on page 4.
Weight (module)	: Approx. 155 g (0.34 lb)

MECHANICAL DRAWING



Note: All dimensions are in mm (in) unless otherwise stated.

ORDERING INFORMATION

To order please specify

Type	Designation	Ordering number
Interface kit for buffered outputs	Module (25-pin D-sub connector (female) to screw terminal connections)	957.11.10.2125
	Cable (25-pin D-sub connector (male) to 25-pin D-sub connector (male), 1.8 m length)	957.18.25.0301

APPLICATIONS INFORMATION

Refer to the VibroSight® application note 009 *Adding a VibroSight condition monitoring system to an existing machinery protection system* for more information on using the Interface kit buffered outputs.

Headquartered in the UK, Meggitt PLC is a global engineering group specializing in extreme environment components and smart sub-systems for aerospace, defence and energy markets.

Meggitt Sensing Systems is the operating division of Meggitt specializing in sensing and monitoring systems, which has operated through its antecedents since 1927 under the names of ECET, Endevco, Ferroperm Piezoceramics, Lodge Ignition, Sensorex, Vibro-Meter and Wilcoxon Research. Today, these operations are integrated under one strategic business unit called Meggitt Sensing Systems, headquartered in Switzerland and providing complete systems, using these renowned brands, from a single supply base.

The Meggitt Sensing Systems facility in Fribourg, Switzerland was formerly known as Vibro-Meter SA, but is now Meggitt SA. This site produces a wide range of vibration and dynamic pressure sensors capable of operation in extreme environments, leading-edge microwave sensors, electronics monitoring systems and innovative software for aerospace and land-based turbo-machinery.

In this publication, a dot (.) is used as the decimal separator and thousands are separated by thin spaces. Example: 12345.67890.

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