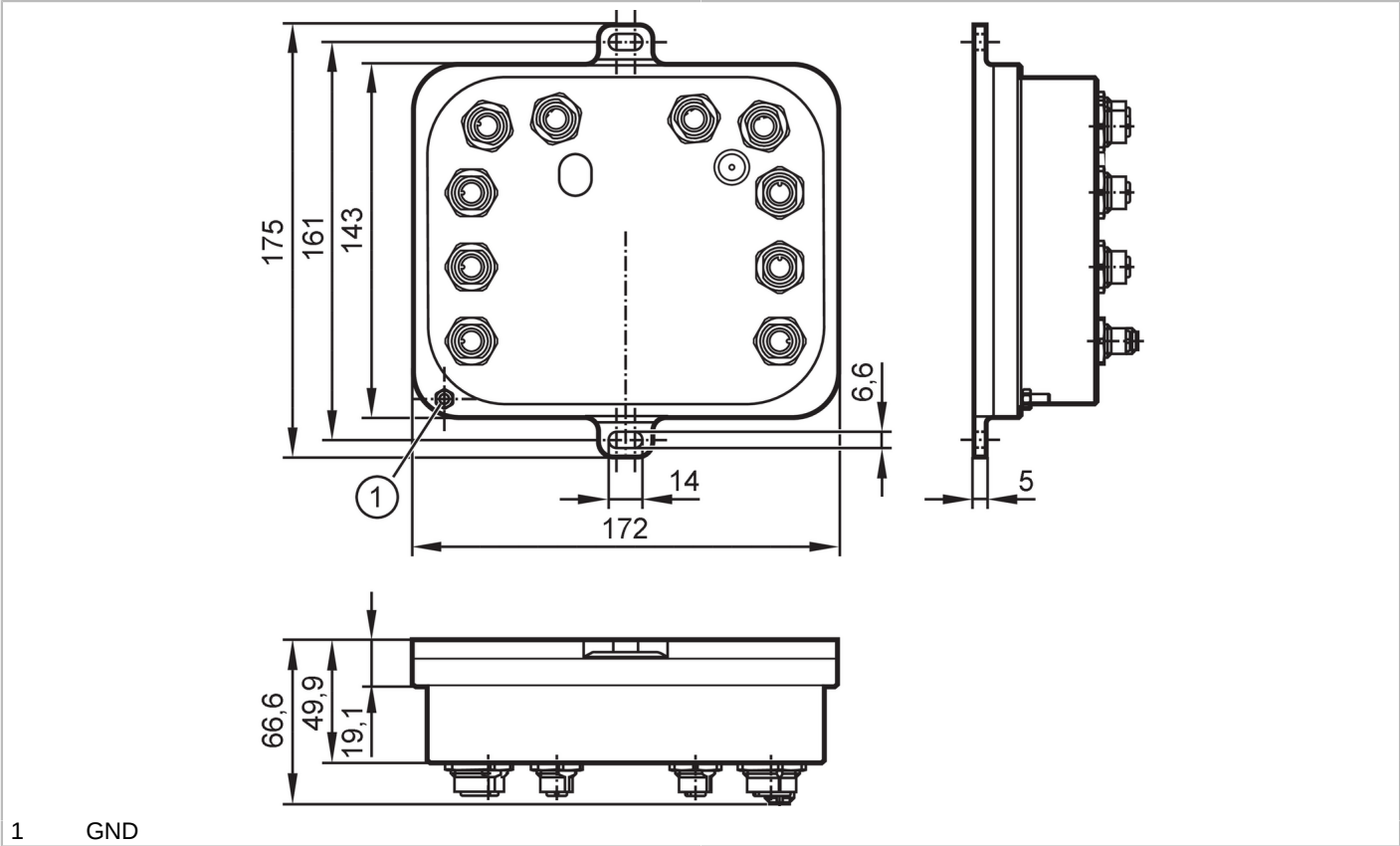




Article to be discontinued  
Discontinuation date: 03/31/2027



1 GND



| Product characteristics            |                                                                                                |
|------------------------------------|------------------------------------------------------------------------------------------------|
| Communication interface            | Ethernet                                                                                       |
| Application                        |                                                                                                |
| Design                             | parameter setting via PC software VES004                                                       |
| Application                        | continuous vibration monitoring                                                                |
| Electrical data                    |                                                                                                |
| Operating voltage tolerance [%]    | 20                                                                                             |
| Operating voltage [V]              | 24 DC; (when using the IEPE input: 24 V + 20%<br>IEPE = Integrated Electronics Piezo Electric) |
| Current consumption [mA]           | 200; ((24 V DC))                                                                               |
| Protection class                   | III                                                                                            |
| Inputs / outputs                   |                                                                                                |
| Total number of inputs and outputs | 8; (configurable)                                                                              |
| Inputs                             |                                                                                                |
| Total number of inputs             | 6                                                                                              |
| Dynamic inputs                     |                                                                                                |
| Number                             | 4                                                                                              |
| Connection                         | S1...S4                                                                                        |



## Diagnostic electronics for vibration sensors

## DIAGNOSTIC ELECTRONICS

|                                          |                            |                                                |
|------------------------------------------|----------------------------|------------------------------------------------|
| Analog input                             | function type              | Current, dynamic                               |
|                                          | input range                | 0...10 mA / IEPE / 4...20 mA                   |
|                                          | input frequency [Hz]       | 0,1...12000                                    |
|                                          | Resolution                 | 16 bit                                         |
|                                          | sampling rate              | 100 kSamples                                   |
| Process value inputs, analog / digital   |                            |                                                |
| Number                                   | 2                          |                                                |
| Connection                               | IN1 (pulse), IN2 (Current) |                                                |
| Digital input                            | function type              | pulse                                          |
|                                          | Circuit                    | HTL                                            |
|                                          | Frequency [Hz]             | 0,1...100000                                   |
| Analog input                             | function type              | Current                                        |
|                                          | input range [mA]           | 4...20                                         |
|                                          | Resolution                 | 12 bit                                         |
| Outputs                                  |                            |                                                |
| Max. load                                | [Ω]                        | 500                                            |
| Short-circuit protection                 | yes                        |                                                |
| Type of short-circuit protection         | yes (non-latching)         |                                                |
| Overload protection                      | yes                        |                                                |
| Multi-function outputs, analog / digital |                            |                                                |
| Number                                   | 1                          |                                                |
| Connection                               | OU1/Supply                 |                                                |
| Digital output                           | Electrical design          | PNP                                            |
|                                          | Output function            | normally open / normally closed (configurable) |
| Analog output                            | function type              | Current                                        |
|                                          | output range [mA]          | 4...20                                         |
| Digital outputs                          |                            |                                                |
| Number                                   | 1                          |                                                |
| Connection                               | OU2                        |                                                |
| Digital output                           | Electrical design          | PNP                                            |
|                                          | Output function            | normally open / normally closed (configurable) |
| Interfaces                               |                            |                                                |
| Communication interface                  | Ethernet                   |                                                |
| Number of Ethernet interfaces            | 1                          |                                                |
| Ethernet Config                          |                            |                                                |
| Transmission standard                    | 10Base-T; 100Base-TX       |                                                |
| Transmission rate                        | 10/100 MBit/s              |                                                |
| Type of connector                        | M12                        |                                                |
| Protocol                                 | TCP/IP                     |                                                |
| Factory settings                         | IP address: 192.168.0.1    |                                                |
| Ethernet/IP IE1;IE2                      |                            |                                                |
| Transmission standard                    | 100Base-TX                 |                                                |
| Transmission rate                        | 100 MBit/s                 |                                                |



## Diagnostic electronics for vibration sensors

## DIAGNOSTIC ELECTRONICS

|                    |                                            |
|--------------------|--------------------------------------------|
| Type of connector  | M12                                        |
| Protocol           | EtherNet/IP                                |
| Factory settings   | IP address: 0.0.0.0                        |
|                    | subnet mask: 0.0.0.0                       |
|                    | gateway IP address: 0.0.0.0                |
|                    | MAC address: see type label                |
| Note on interfaces | CC-C (Conformance Class C) (IRT switch)    |
|                    | Netload Class III                          |
|                    | SNMP (Simple Network Management Protocol)  |
|                    | MRP (Media Redundancy Protocol)            |
|                    | Supported network topologies: line<br>ring |

| Operating conditions |      |        |
|----------------------|------|--------|
| Ambient temperature  | [°C] | 0...60 |
| Storage temperature  | [°C] | 0...60 |
| Protection           |      | IP 67  |

| Tests / approvals |                    |                                              |
|-------------------|--------------------|----------------------------------------------|
| EMC               | EN 61000-4-2 ESD   | 4 kV contact discharge / 15 kV air discharge |
|                   | EN 61000-4-3       | 10 V/m (80...2700 MHz)                       |
|                   | EN 61000-4-4 Burst | 4 kV capacitive coupling probe, earthed      |
|                   | EN 61000-4-6       | 10 V 0,15...80 MHz                           |
|                   | EN 61000-6-4       | industrial environments                      |
| MTTF              | [years]            | 91                                           |

| Mechanical data  |      |                                                   |
|------------------|------|---------------------------------------------------|
| Weight           | [g]  | 1394                                              |
| Housing          |      | rectangular                                       |
| Type of mounting |      | Backplane mounting                                |
| Dimensions       | [mm] | 175 x 172 x 66.6                                  |
| Material         |      | housing: Aluminum Alloy black anodized EN AW-5083 |

| Data memory          |  |                     |
|----------------------|--|---------------------|
| History memory       |  | yes                 |
| Data memory buffered |  | yes                 |
| Data memory type     |  | ring memory; FIFO   |
| Real-time clock      |  | yes                 |
| Memory location      |  | internal            |
| Memory interval      |  | min. 1 min          |
| Memory size          |  | 881664 data records |

| Accessories            |  |                                                                     |
|------------------------|--|---------------------------------------------------------------------|
| Accessories (optional) |  | cross-over Ethernet patch cable for the direct connection to the PC |

| Remarks       |  |        |
|---------------|--|--------|
| Pack quantity |  | 1 pcs. |

| Electrical connection |  |  |
|-----------------------|--|--|
| Connection            |  |  |

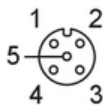


## Diagnostic electronics for vibration sensors

DIAGNOSTIC ELECTRONICS

### Electrical connection - Sensor 1...4

Connector: 4 x M12; coding: A



- 1 L+
- 2 Signal
- 3 GND
- 4 Test

### Electrical connection - Config / IE1 / IE2

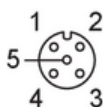
Connector: 3 x M12; coding: D



- 1 TxD+
- 2 RxD+
- 3 TxD-
- 4 RxD-

### Electrical connection - IN 1

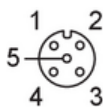
Connector: 1 x M12; coding: A; Maximum cable length: 30 m



- 1 24 V DC
- 2 -
- 3 GND
- 4 IN 1 (pulses)

### Electrical connection - IN 2

Connector: 1 x M12; coding: A; Maximum cable length: 30 m



- 1 24 V DC
- 2 IN 2 (4..20mA)
- 3 GND
- 4 -

### Electrical connection - OU / Supply



- 1 24 V DC
- 2 analog / digital
- 3 GND
- 4 OU2: switch