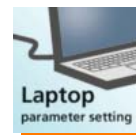
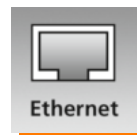


From process monitoring to vibration analysis



Diagnostic electronics type VSE with extended functionality

- Flexible connection of IEPE or vibration sensors to all 4 dynamic channels
- Different filters for real-time peak monitoring
- Reaction times of < 1 ms and variable alarm levels for machine protection
- Increased accuracy and improved internal memory function
- 32 run-time and performance counters



High performance diagnostic electronics

Vibration analysis protects machine components, tools and workpieces during machining against costly consequential damage and avoids scrap.

In addition to the proven MEMS-based accelerometers from ifm electronic (type VSA), accelerometers, microphones, or force sensors which are based on the IEPE standard can also be connected to the revised diagnostic electronics.

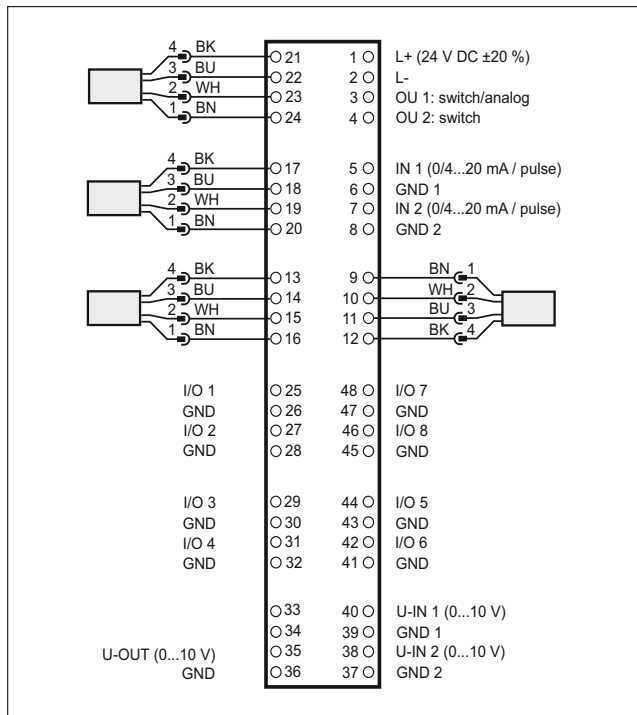
Using the higher accuracy it is now possible to increase the resolution of large measuring ranges.

It is also possible to select different filters for process monitoring and machine protection. Up to 32 counters provide vibration characteristics, performance and run-time information which can be used to optimise production.



Photo: DMG MORI SEIKI AKTIENGESELLSCHAFT







Wiring diagram



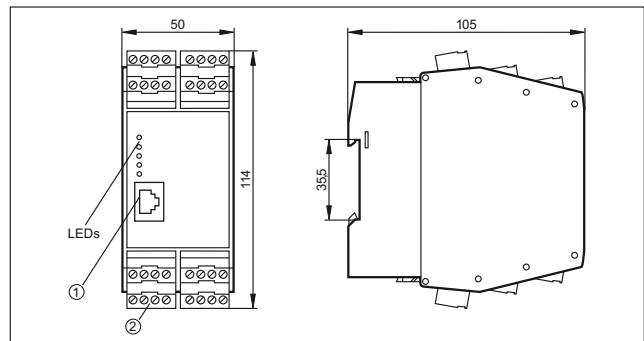
Technical data

| Diagnostic electronics VSE100 | |
|----------------------------------|---|
| Operating voltage [V] | 24 DC ± 20 % |
| Ambient temperature [°C] | 0...70 |
| Protection | IP 20, III |
| Housing | DIN rail 2" |
| Inputs | 4 dynamic inputs (16 bits), IEPE or sensor type VSA for use in any combination 2 speed inputs (0/4...20 mA or 0...10 V or pulse 24 V) 8 x digital inputs / outputs (freely configurable) (PNP 100 mA) |
| Outputs | 2 x digital alarm outputs (PNP 100 mA) or: 1 x digital alarm output + 1 x analogue output 0/4...20 mA / 0...10 V 8 x digital outputs / inputs (freely configurable) (PNP 100 mA) |
| History function | integrated |
| Data interface | Ethernet TCP/IP, (10 / 100 Mbits) |
| Counter function | integrated |

Vibration sensors




| Type | Description | Order no. |
|---|---|-----------|
| For connection to external diagnostic electronics type VSE | | |
|  | Measuring range ± 25 g; IP 69K; Frequency range 0...6,000 Hz; Connection: M12 connector | VSA001 |
|  | Measuring range ± 250 g; IP 69K; Frequency range 0...10,000 Hz; Connection: M12 connector | VSA201 |
|  | Measuring range ± 3.3 g; IP 69K; Frequency range 0...1,000 Hz; Connection: M12 connector | VSA101 |
|  | Measuring range ± 25 g; IP 67; Frequency range 0...10,000 Hz; Connection: PUR cable with, M12 connector, 0.6m | VSA002 |
|  | Measuring range ± 25 g; IP 67; Frequency range 0...10,000 Hz; Connection: PUR cable, 3 m | VSA004 |
|  | Measuring range ± 25 g; IP 67; Frequency range 0...10,000 Hz; Connection: PUR cable, 10 m | VSA005 |

Dimensions



- Ethernet interface
- Combicon connector with screw connectors (optional)

Accessories

| Type | Description | Order no. |
|---|---|--|
|  | Parameter software | VES003 |
|  | octavis OPC Server Software No. connections: 25, 50, 75, 100, 1000 German / English | VOS001 VOS002 VOS003 VOS004 VOS005 |
|  | Connection cable Ethernet cross-over patch cable 2 m, PVC cable, RJ45 plug / RJ45 plug | EC2080 |