



Smart Condition Monitoring

HE200 | HE205

Safe vibration monitoring unit



Monitor vibration –
avoid standstill.
Also Ex-protected.



The HE200 and HE205 vibration sensors offer condition-based monitoring of systems and machines in SIL2 / PL d and, depending on requirements, also with explosion protection.

They ensure a long service life and safe, efficient operation of machines and systems.

Measured variables via analogue output 4 - 20 mA:

- Vibration speed mm/s, rms
- Vibration acceleration g, rms

The sensors cover a temperature range of -40 to 125 °C.

Switching outputs with adjustable delay time

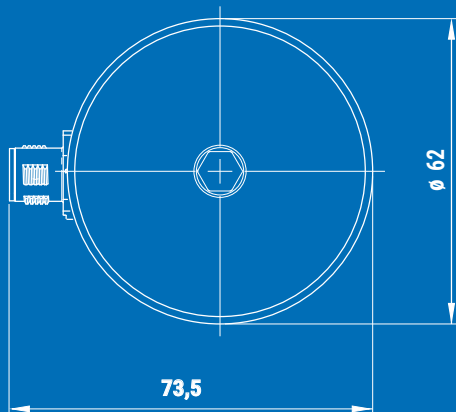
In the HE200, exceeding the respective set limit values is signalled at the two switching outputs.

The HE205 signals at the two switching outputs if the set window range is exceeded or not reached (window function).

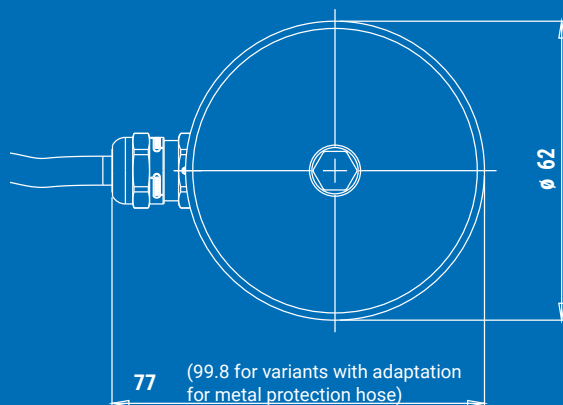
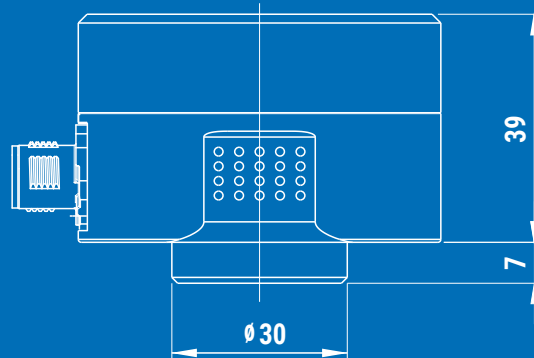
Benefits:

- Analogue output and switching outputs are SIL2/PL d certified
- Standard or with Ex certification
- Condition monitoring according to DIN ISO 10816-3
- Faults are detected at an early stage
- Can also be used in harsh environmental conditions
- Limit switch or window function

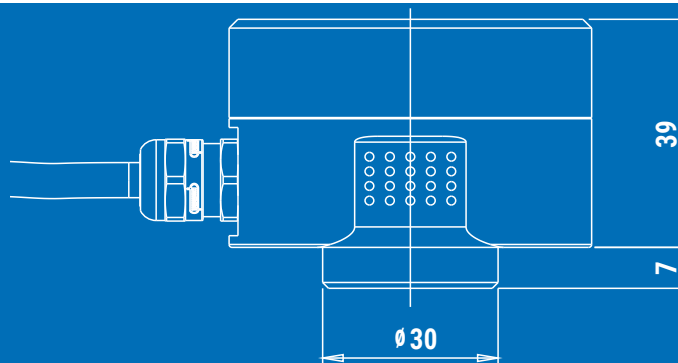
COMPACT
ROBUST
EX-CERTIFIED
SIL2 TÜV-CERTIFIED
RELIABLE
EVALUABLE
SAFE



Housing dimensions with M12 plug connector



Housing dimensions with integrated cable



Accessories



Designation	Length	Item number
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Connection cable type D 8-pole, shielded, M12 socket (additional lengths on request)	1.5 m/3 m/ 5 m/10 m	13053 / 13054 / 11770 / 11886
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Metal protective tubing for sensors with integrated cable	1.5m / 4.5m / 9.5m	13244 / 13026 / 13243
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Rubber protective nozzle		12525
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Optional mechanical adapter

Designation	Item number	Designation	Item number
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Magnetic base	10054	M8 M10	11105
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Adhesive adapter	11650	M8 M12	11107
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M8 to M8 Cone SPM	11112	M8 M16	11108
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Vibration monitoring unit also in ex-protection version for worldwide use

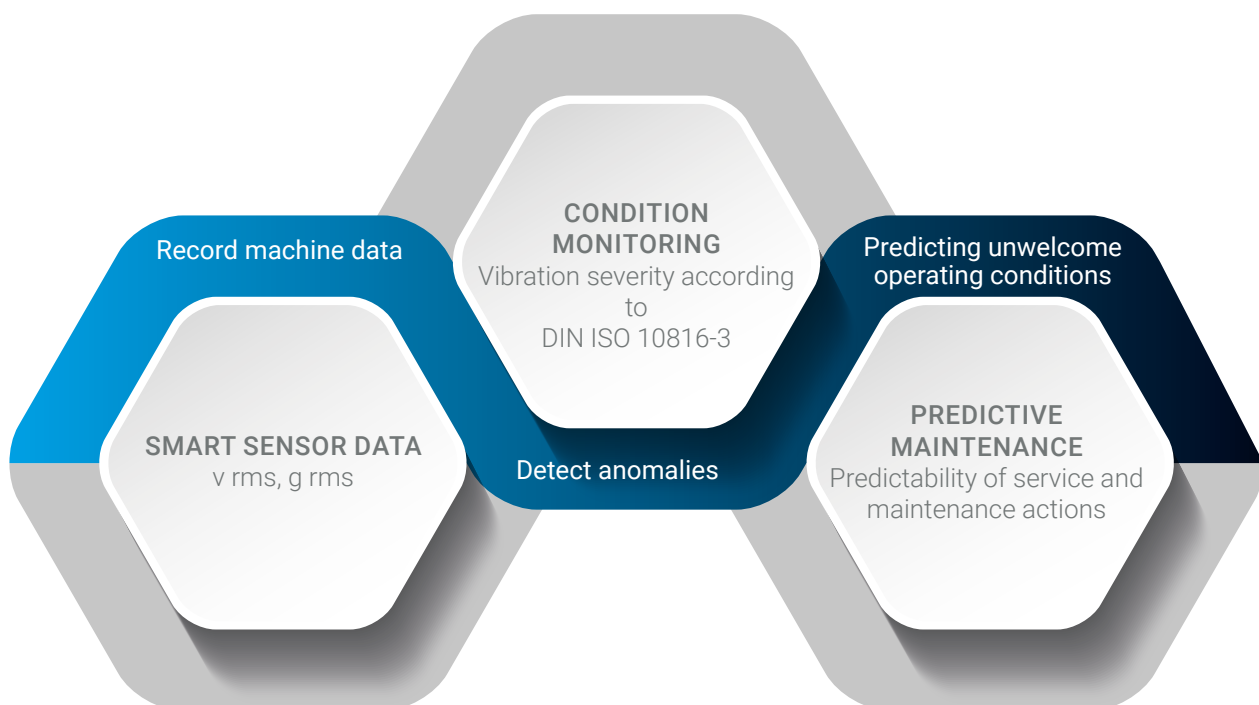
In many industries, an explosive atmosphere can arise when handling flammable substances in conjunction with ambient air containing oxygen. Companies are required to take appropriate measures for explosion protection. To ensure a high level of safety, there are legal guidelines and extensive standards for explosion protection worldwide. Explosion protection is defined by ignition protection types and zoning.

The HE200 and HE205 vibration sensors are available with comprehensive explosion protection certification for worldwide use. For zone 1/21, they are then designed in a flame-proof enclosure with integrated cable. For applications in zone 2/22, versions with increased safety are available as a connector variant or with integrated cable.

EX certifications worldwide



Sensor data - basis for condition monitoring and predictive maintenance



Type key



Type (measurand)	Vibration monitoring unit mm/s, rms or g rms 2 potential-free switching contacts as limit values	HE 2 0 0		
	Vibration monitoring unit g rms 2 potential-free switching contacts as window function	HE 2 0 5		
Ex area	No Ex area	00		
	ATEX/IECEX/UKCA/Inmetro/CCC - Zone 1/21	01		
	ATEX/IECEX/UKCA/Inmetro/CCC/cULus Haz. Loc. - Zone 2/22, Div2	02		
Measuring range	8 mm/s rms	8, 	128 mm/s rms	128
	10 mm/s rms	10, 	1 g rms	1g,
	16 mm/s rms	16, 	2 g rms	2g,
	20 mm/s rms	20, 	4 g rms	4g,
	25 mm/s rms	25, 	6 g rms	6g,
	32 mm/s rms	32, 	8 g rms	8g,
	50 mm/s rms	50, 	10 g rms	10g
	64 mm/s rms	64, 		
Frequency range	10 ... 1.000 Hz (Standard)	00		
	1 ... 1.000 Hz	01		
Housing material	1.4305 (V2A) (Standard)	00		
	1.4404 (V4A)	01		
	1.4305 (V2A) with adaptation for metal protection hose	50		
	1.4404 (V4A) with adaptation for metal protection hose	51		
Measuring head temperature range	-40 °C ... +85 °C all plug variants and for zone 1/21 as option	00		
	-35 °C ... +125 °C integrated cable without Ex and integrated cable Zone 2/22	01		
	-20 °C ... +125 °C for zone 1/21 only as option	02		
Connection	M12 connector (standard) not for zone 1/21	000		
	2 m integrated cable	020		
	5 m integrated cable	050		
	10 m integrated cable	100		
Safety	SIL2, PL d			
Protection class	IP 66/67			
Certifications	CE, UKCA, IEC, cULus Ord Loc.			
Certifications Ex area	ATEX, IECEX, UKCA Ex, INMETRO, CCC, Kosha, cULus Haz. Loc.			

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