



Smart Condition Monitoring HE200 | HE205

Safe vibration monitoring unit





Monitor vibration – avoid standstill. Also Ex-protected.



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



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

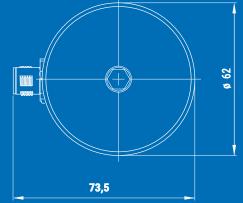
In the HE200, exceeding the respective set limit values is signalled at the two switching outputs.

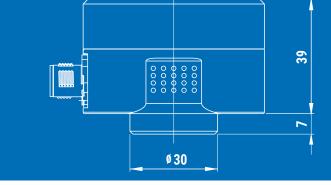
The HE205 signals at the two switching outputs if the set window range is exceeded or not reached (window function).

Benefits:

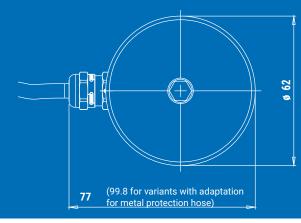
- Analogue output and switching outputs are SIL2/PL d certified
- Standard or with Ex certification
- Condition monitoring according to DIN ISO 10816-3
- Faults are detected at an early stage
- Can also be used in harsh environmental conditions
- Limit switch or window function

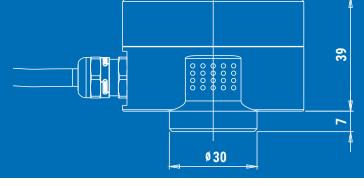






Housing dimensions with M12 plug connector





Housing dimensions with integrated cable

Accessories



Designation	Length	Item number
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
Metal protective tubing for sensors with integrated cable	1.5m / 4.5m / 9.5m	13244 / 13026 / 13243
Rubber protective nozzle		12525

Optional mechanical adapter

Designation	ltem number	Designation	Item number
Magnetic base	10054	M8 M10	11105
Adhesive adapter	11650	M8 M12	11107
M8 to M8 Cone SPM	11112	M8 M16	11108



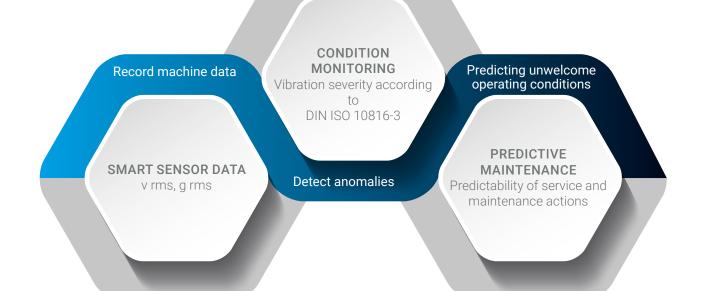
Vibration monitoring unit also in ex-protection version for worldwide use

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.



Sensor data - basis for condition monitoring and predictive maintenance



Type key

HE						
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Type (measurand)	 Vibration monitoring unit mm/s, rms or g rms 2 potential-free switching contacts as limit values Vibration monitoring unit g rms 2 potential-free switching contacts as window function 			
Ex area	No Ex area ATEX/IECEx/UKCA/Inmetro/CCC - Zone 1/21 ATEX/IECEx/UKCA/Inmetro/CCC/cULus Haz. Loc Zone 2/22, DiV2			0,0
				0,1
				0,2
Measuring range	8 mm/s rms	8, ,	128 mm/s rms	1,28
	10 mm/s rms	1,0,	1 g rms	1g ,
	16 mm/s rms	1,6	2 g rms	2,g
	20 mm/s rms	20,	4 g rms	4 ₁ g
	25 mm/s rms	25	6 g rms	6 ₁ g
	32 mm/s rms	32	8 g rms	8 ₁ g
	50 mm/s rms	50,	10 g rms	1,0g
	64 mm/s rms	64		
Frequency range	10 1.000 Hz (Standard)			00
	1 1.000 Hz			0,1
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	-40 °C +85 °C all plug variants and for zone 1/21 as option			00
temperature range	-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
		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.	



