PR9268/301-000

Epro / Horizontal Electrodynamic Velocity Sensor

Epro PR9268/301-000 is a horizontal electrodynamic velocity transducer for absolute casing or bearing-housing vibration monitoring.

Product identity and system role

The PR9268/30x sensing execution uses a moving-coil electrodynamic principle to produce a vibration-velocity signal without an external sensor supply. Its horizontal orientation is relevant to both calibration and field mounting; the housing motion must align with the intended sensitive axis.

A suitable monitor can use this signal for casing-vibration trend and protection on turbomachinery. The PR9268/30x frequency and sensitivity figures apply to this sensor family; the complete 301-000 suffix and connector arrangement should be checked against the physical supplied unit.

Verified technical characteristics

Sensor family	PR9268 electrodynamic velocity
Measurement direction	Horizontal, PR9268/30x execution
Mounting tolerance	±10° from horizontal
Sensitivity	28.5 mV/mm/s, PR9268/30x family
Frequency range	4–1,000 Hz, PR9268/30x family
Power	Self-powered
Protection	IP55, PR9268/30x family
Operating temperature	–20 to +100 °C, PR9268/30x family

Engineering context

Turbine bearing housing

Monitor absolute horizontal vibration at a rigid bearing point with a suitable velocity input.

Compressor casing

Feed vibration-velocity signals to a configured machine-protection or condition-monitoring channel.

Pump casing trend

Compare operating vibration at a repeatable casing location and orientation.

Fan vibration assessment

Track housing movement in the intended horizontal axis using a compatible monitor.

Configuration and verification

Confirm the full suffix: Match PR9268/301-000 to the supplied label and installed termination before changing the channel.

Preserve the axis: Fit the sensing direction within the documented horizontal orientation tolerance.

Prepare the mounting face: Use a clean, rigid surface so structural looseness does not distort the reading.

Check input loading: Match the sensor signal and cable to the approved monitor input.

Selected engineering questions

Why does mounting direction matter for PR9268/301-000?
The PR9268/30x mechanism is calibrated for horizontal installation; orientation error changes its response.

How is a noisy reading from PR9268/301-000 isolated?
Inspect mechanical mounting, cable shield, connector and monitor loading before attributing the change to the sensor.

Does PR9268/301-000 need a field power supply?
The electrodynamic velocity sensor is self-powered, but the monitor input and wiring still must be compatible.

How should PR9268/301-000 be compared with a portable instrument?
Use the same measurement axis, location, speed and bandwidth so the two readings are comparable.

What if a replacement PR9268/301-000 reads differently at low speed?
Check mounting stiffness, orientation, monitor filter and the low-frequency response of the selected sensor execution.

Can PR9268/301-000 be used as a shaft-relative displacement probe?
It measures absolute housing vibration velocity, not the shaft-to-bearing gap measured by a proximity probe.

Source and application boundary

Emerson PR9268 Specifications Sheet, Electrodynamic Velocity Sensor, December 2024.

PR9268/30x family performance is applicable to the horizontal sensing execution. Confirm 301-000 suffix and supplied connector details from the physical item.

Related product references

Separate product listings for project review; confirm each order code and system fit independently.

EPRO PR6423/010-010	EPRO PR6423/10R-010
EPRO PR6424/010-010	EPRO PR6424/006-010

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Send the complete model and installed-system details when requesting a quotation.