Emerson PR9268/601-000

Complete Product Information

Emerson PR9268/601-000 is the five-metre vertical high-temperature sensor in the PR9268 family. It retains an armored lead and Harting interface while changing the coil and dynamic range for service up to 200 deg C.

01 Product identity and verified data

Complete model	PR9268/601-000
Product type	electrodynamic velocity sensor
Manufacturer	Emerson
Technical source	Emerson PR9268 Electrodynamic Velocity Sensor Specifications Sheet, December 2024
Measurement orientation	Vertical, high-temperature
Selected cable	5 m armored cable
Selected cable end	Harting plug
Frequency range	10 to 1000 Hz
Sensitivity, pin 3	22.0 mV/(mm/s) +/-5% at 100 kohm load
Sensitivity, pin 1 or 4	16.7 mV/(mm/s) +/-5% at stated load
Natural frequency	8 Hz +/-1.5 Hz at 20 deg C
Operating temperature	-20 to +200 deg C

Engineering purpose

This exact build is the short-lead member of the vertical 60x high-temperature group, useful where the sensor must tolerate hot case surfaces without an unnecessary eight- or ten-metre cable run.

Selected order-code snapshot

Selected sensing build	Vertical, high-temperature; 5 m armored cable; Harting plug.
Dynamic boundary	10 to 1000 Hz with the documented PR9268 load and mounting orientation.
Mechanical limit	Less than 2% amplitude nonlinearity; 10 g continuous and 20 g intermittent acceleration.

02 Technical capability and engineering overview

Protection class	IP65
Housing material	Stainless steel
Typical sensor weight	1050 g
Amplitude linearity	Less than 2%

Maximum acceleration	10 g continuous; 20 g intermittent
Coil resistance, pin 3	3270 ohm +/-10%
Inductance	160 mH maximum

Evidence boundary

The order matrix identifies the selected orientation, cable and termination where the exact suffix is listed; family performance remains conditional on mounting direction, load and temperature.

Engineering overview

The 60x element is calibrated for a vertical nominal axis and begins its documented frequency range at 10 Hz. That lower-frequency boundary differs from the 4 Hz standard-temperature 20x family.

Sensitivity depends on the selected output pin and load: pin 3 is documented at 22.0 mV/(mm/s), while pins 1 or 4 use 16.7 mV/(mm/s) under their stated loads. The wiring record therefore belongs with the sensor identity.

The five-metre armored cable and Harting plug define the physical route. A replacement with code 602 or 603 changes cable length even though the sensing element remains in the same high-temperature group.

Application map

Hot vertical bearing case

Use where the approved measurement point requires the 60x high-temperature element and a five-metre armored path.

Steam-turbine casing

Keep the sensor vertical and verify that connector temperature remains within the installation boundary.

Compressor hot section

Apply the correct pin/load sensitivity rather than treating every PR9268 output conductor as equivalent.

Short local junction route

Select the 601 build when five metres reaches the Harting junction without leaving an unsupported cable coil.

03 System interpretation and selection boundaries

Product boundary	Apply the listed facts to PR9268/601-000 and the documented AMS PR9268 electrodynamic velocity sensor family context only.
Interface boundary	Connector, terminal, bus, cable and companion-device assignments must match the installed drawing.
Electrical boundary	Use exact-model values only; system-level ratings remain conditional on the complete installed configuration.
Configuration boundary	Switches, jumpers, addresses, firmware and project settings must be reconciled before energization.
Diagnostic boundary	Interpret indicators and fault states together with measured inputs, outputs and host-system status.
Acceptance rule	Use the approved system baseline and maintenance procedure for the final as-left decision.

Installed-system context

Use PR9268/601-000 only where the installed drawing calls for its vertical, high-temperature element, selected cable length and stated cable termination.

04 Lifecycle, offered scope and related references

Lifecycle status

Document status	The current Emerson order matrix lists 601-000 as vertical high-temperature with 5 m armor and Harting plug.
Thermal identity	The 60x family uses stainless housing and a -20 to +200 deg C sensor range.
Electrical identity	Pin-dependent sensitivity and higher coil resistance distinguish this build from PR9268/201-000.
Route identity	Code 1 is the five-metre choice; preserve it unless the cable schedule is formally revised.

Available unit details

Included assembly	Vertical high-temperature sensor, 5 m armored cable and Harting plug.
Dispatch evidence	Request the 601-000 label, complete cable, plug face and armor condition.
System dependency	Receiving card input, pin selection and configuration are not part of the sensor offer.

Source and applicability record

Verified source	Emerson PR9268 Electrodynamic Velocity Sensor Specifications Sheet, December 2024
Applicability boundary	The order matrix identifies the selected orientation, cable and termination where the exact suffix is listed; family performance remains conditional on mounting direction, load and temperature.
Product family	AMS PR9268 electrodynamic velocity sensor family

Additional related product references

Related product	Emerson PR6423-10R-010
Related product	Emerson PR6424-006-131-CON041
Related product	Bently Nevada 990-04-50-01-05
Related product	ABB CI858K01 3BSE018135R1

Product-specific purchasing decisions

Why is the output pin important for PR9268/601-000?	Its high-temperature coil has different documented sensitivities for pin 3 and for pins 1 or 4 at their stated loads.

Engineering contact

Discuss the exact marking and installed application with Apter Power.
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