

PR9268-201-100

PR9268 electrodynamic velocity sensor

Self-generated electrodynamic voltage proportional to absolute vibration velocity

PRODUCT SNAPSHOT

BRAND

Emerson

FAMILY

PR9268 vertical case-seismic measurement

PART

PR9268-201-100

ORIGIN / HS

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PRODUCT OVERVIEW

Self-generated electrodynamic voltage proportional to absolute vibration velocity

1

Configured for vertical measurement positions

2

Uses an armored five-metre open-ended cable

3

Produces 28.5 mV per mm/s nominal sensitivity

4

Covers low-frequency case motion through 1 kHz

SYSTEM COMPONENTS

AMS 6500 A6120 monitor or compatible input

Rigid machine-case mounting pad

Open-end field termination

Protection and trending configuration

TECHNICAL NOTE

Mount on a clean rigid surface in the documented vertical orientation, support the five-metre armored lead, preserve polarity and verify the monitor input response before service.

TECHNICAL DATA

PARAMETER	VALUE
Measuring orientation	Vertical; up to 100 degC
Cable construction	Armored
Cable length	5 m
Cable termination	Open ends
Frequency range	4 to 1000 Hz
Natural frequency	4.5 +/-0.75 Hz at 20 degC
Sensitivity	28.5 mV/(mm/s) +/-5%
Damping	0.56 at 20 degC; 0.42 at 100 degC

PARAMETER	VALUE
Measuring-circuit resistance	1875 Ohm +/-10%
Insulation resistance	>1 MOhm at 500 V AC
Inductance	<90 mH
Capacitance to housing	<1.2 nF including cable
Maximum lifting/sinking current	1.8 mA
Operating temperature	-20 to +100 degC
Ingress protection	IP55
Minimum cable bend radius	35 mm

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
1C31169G02	Related Emerson product	View 1C31169G02 page
FX-490	Related Emerson product	View FX-490 page
ES0350-M1A05L-27N0	Related Emerson product	View ES0350-M1A05L-27N0 page
960177-02	Related Emerson product	View 960177-02 page
KJ2003X1-BB1	Related Emerson product	View KJ2003X1-BB1 page
EC3-X33	Related Emerson product	View EC3-X33 page
FX-340	Related Emerson product	View FX-340 page
7379A31G04	Related Emerson product	View 7379A31G04 page

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Vertical bearing-housing vibration

Configured for vertical measurement positions

Hydro-generator case motion

Uses an armored five-metre open-ended cable

Large fan and pump monitoring

Produces 28.5 mV per mm/s nominal sensitivity

Turbine support-structure vibration

Covers low-frequency case motion through 1 kHz

PRODUCT PRECAUTIONS

- 1 Confirm the full PR9268-201-100 marking, vertical measuring orientation and assigned machine location before removal.
- 2 Place the monitored machine and protection logic in the approved maintenance state before sensor work.
- 3 Use the three M6 through bores or M4 blind-hole threads without exceeding the documented 10 mm blind-thread depth.
- 4 Support the 5 m armored cable and maintain at least the documented 35 mm bending radius.
- 5 Preserve the measuring axis and housing contact surface; do not introduce tilt, rocking or loose mounting.
- 6 Identify both open-ended cable conductors and preserve shield and polarity continuity to the monitor channel.
- 7 Measure the sensor circuit and insulation condition before reconnecting it to the monitoring input.
- 8 Run the machine under controlled conditions and verify velocity response, phase behavior and alarm logic.

ENGINEER FAQ

Q1 Does PR9268-201-100 match AMS 6500 A6120 monitor or compatible input in a Vertical bearing-housing vibration installation?

Verify the complete PR9268-201-100 marking, the documented PR9268 vertical case-seismic measurement position and the installed AMS 6500 A6120 monitor or compatible input before fitting the assembly.

Q3 Which PR9268 vertical case-seismic measurement records should be captured before removing PR9268-201-100?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with PR9268-201-100 before disconnection.

Q5 Which Rigid machine-case mounting pad condition should be checked when PR9268-201-100 reports an abnormal state?

Check the Rigid machine-case mounting pad supply, seating and connection first, then compare channel diagnostics with the recorded PR9268-201-100 baseline.

Q7 What maintenance evidence is required after PR9268-201-100 is used for Large fan and pump monitoring?

Retain the nameplate record, corrective action, final diagnostics and a controlled large fan and pump monitoring functional-test result for PR9268-201-100.

Q2 How should PR9268-201-100 be wired when it must configured for vertical measurement positions?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for PR9268-201-100; then continuity-test the affected path.

Q4 What controlled test confirms that PR9268-201-100 can uses an armored five-metre open-ended cable?

Apply the approved field or simulated stimulus, observe the PR9268 vertical case-seismic measurement indication and confirm the intended response without bypassing the normal interlocks.

Q6 Can PR9268-201-100 be moved directly into Hydro-generator case motion without validating Protection and trending configuration?

No. Confirm the Protection and trending configuration, revision, connection scheme and PR9268 vertical case-seismic measurement configuration before transferring PR9268-201-100 to that duty.

Q8 How should PR9268-201-100 be returned to service in Turbine support-structure vibration?

Restore power under control, verify produces 28.5 mv per mm/s nominal sensitivity, exercise the intended signal path and release PR9268-201-100 only after the PR9268 vertical case-seismic measurement remains in its approved operating state.

SOURCE Emerson PR9268 Electrodynamic Velocity Sensor Installation Guide and Product Data Sheet | MHM-97479
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