PR9350/02

Epro / Inductive Linear Displacement Transducer

Epro PR9350/02 is an inductive linear-displacement transducer for measuring bidirectional mechanical travel around a defined zero position.

Product identity and system role

The PR9350/02 execution measures travel from –25 to +25 mm. Its differential inductive coils produce an output related to displacement when supplied with the specified carrier excitation and evaluated by a compatible measuring amplifier.

The housing mounts through internal M4 fixing holes and the tracing-pin end uses an M3 mechanical connection to the moving target. The installed linkage, stroke and zero point must be engineered so that the sensor remains inside its operating range throughout the machine cycle.

Verified technical characteristics

Transducer family	PR9350 inductive displacement
Nominal measuring range	–25 to +25 mm
Sensitivity	270 mV/V
Excitation	5 V rms
Supply current	27–50 mA
Carrier frequency	3–5 kHz
Connection	Three-pole sensor connector
Mounting	Internal M4 fixing holes; M3 tracing-pin end

Engineering context

Turbine expansion

Follow controlled casing or shaft expansion with a suitable mechanical linkage and inductive monitor input.

Differential expansion

Measure relative movement between machine structures when the mounting geometry and reference point are defined.

Valve or actuator travel

Track bidirectional movement within the approved stroke and mechanical contact arrangement.

MMS6410 input

Provide an inductive displacement signal to a configured MMS6410 measuring channel where the sensor/excitation match is verified.

Configuration and verification

Check linkage travel: Ensure the full mechanical motion remains within the transducer range and does not overdrive the tracing pin.

Secure the mount: Use the designed fixing points and prevent body movement relative to the reference structure.

Verify excitation: Match the amplifier carrier and connection to the sensor’s required supply.

Inspect the connector: Confirm the three-pole pin assignment and cable condition.

Selected engineering questions

How is the center position established for PR9350/02?
Set the machine linkage at the approved mechanical reference, then align the transducer and amplifier zero without side loading.

What can cause nonlinear travel readings from PR9350/02?
Overtravel, binding, an incorrect carrier, wiring faults or misaligned linkage can distort the response; test both directions.

Can PR9350/02 be connected to a DC input directly?
It is an inductive transducer requiring suitable carrier excitation and demodulation; use an approved compatible amplifier.

How is a reversed signal from PR9350/02 investigated?
Check connector polarity, linkage motion direction and amplifier channel configuration against the original installation.

What mechanical check protects PR9350/02 during service?
Verify end-to-end travel and stop positions so the tracing pin is not forced beyond its permitted stroke.

How is PR9350/02 tested after mounting?
Move through known reference positions in both directions and compare the amplifier indication with actual displacement.

Source and application boundary

Emerson PR9350 / K20-315 Linear Displacement Transducer Installation Guide, MHM-97864 Rev 1.6, March 2026.

The stated ratings apply to PR9350/02 in the Emerson PR9350/K20-315 guide. Confirm the supplied connector, fitted execution and mounting arrangement.

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.