

PR6423-10R-010

PR6423 reverse-mount 8 mm eddy-current displacement sensor

Non-contact eddy-current displacement measurement of a conductive shaft or target

PRODUCT SNAPSHOT

BRAND

Emerson

FAMILY

Emerson PR6423 8 mm eddy-current measureme

PART

PR6423-10R-010

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PRODUCT OVERVIEW

Non-contact eddy-current displacement measurement of a conductive shaft or target

1

Uses a reverse-mount PR6423 construction

2

Provides a 3/8-24 UNF-2A sleeve thread

3

Includes a five-metre unarmored cable

4

Maintains the documented PR6423 sensitivity

SYSTEM COMPONENTS

Reverse-mount probe bracket

PR6423-compatible converter

Conductive target

LEMO-connected monitoring input

TECHNICAL NOTE

Confirm reverse-mount clearance and 3/8-24 UNF engagement, support the five-metre lead and verify probe polarity plus gap response after mechanical tightening.

TECHNICAL DATA

PARAMETER	VALUE
Sensor family	PR6423
Sleeve thread	3/8-24 UNF-2A
Armor	No
Mounting style	Reverse mount
Adapter plug	Included
Total cable length	5 m
Cable end	LEMO
Static nominal range	+/-1.0 mm

PARAMETER	VALUE
Recommended dynamic range	50 to 500 um p-p
Sensitivity	8 V/mm
Nominal distance center	Approximately 1.5 mm
Basic air gap	0.4 to 0.7 mm
Operating temperature	-35 to +180 degC; +200 degC short term
Pressure at sensor head	10,000 hPa
Vibration endurance	5 g at 60 Hz

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
5X00119G01	Related Emerson product	View 5X00119G01 page
KJ3222X1-BA1-12P2532X122	Related Emerson product	View KJ3222X1-BA1-12P2532X122 page
KJ4006X1-BD1	Related Emerson product	View KJ4006X1-BD1 page
KC4011X1-BZ1	Related Emerson product	View KC4011X1-BZ1 page
KC4011X1-BW1	Related Emerson product	View KC4011X1-BW1 page
KJ2201X1-BA1	Related Emerson product	View KJ2201X1-BA1 page
3900-02-10	Related Emerson product	View 3900-02-10 page
396P-02-12-55	Related Emerson product	View 396P-02-12-55 page

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Inside-out bearing bracket installations

Uses a reverse-mount PR6423 construction

Reverse-access shaft vibration

Provides a 3/8-24 UNF-2A sleeve thread

Thrust-collar position monitoring

Includes a five-metre unarmored cable

Special machine retrofit points

Maintains the documented PR6423 sensitivity

PRODUCT PRECAUTIONS

- 1 Verify the complete PR6423-10R-010 order code, 3/8-24 UNF-2A reverse mount mounting interface and assigned PR6423 8 mm eddy-current system measuring point before work.
- 2 Place the monitored machine and its protection channel in the approved maintenance state before disturbing PR6423-10R-010.
- 3 Protect the probe tip from impact and keep the mounting thread and bracket free from burrs or contamination.
- 4 Route the 5 m sensor lead without sharp bends, crushing, tensile load or contact with hot and moving surfaces.
- 5 Keep the LEMO or open-end connection clean, dry and fully identified before reconnecting the measurement loop.
- 6 Confirm the paired signal converter or monitor input, cable length and target material match the documented measuring chain.
- 7 Set the static gap within the documented linear region while preserving shaft and probe mechanical clearance.
- 8 Prove polarity, static gap, dynamic response and alarm action before returning the protection channel to service.

ENGINEER FAQ

Q1 Does PR6423-10R-010 match Reverse-mount probe bracket in a Inside-out bearing bracket installations installation?

Verify the complete PR6423-10R-010 marking, the documented Emerson PR6423 8 mm eddy-current measurement system position and the installed Reverse-mount probe bracket before fitting the assembly.

Q2 How should PR6423-10R-010 be wired when it must uses a reverse-mount pr6423 construction?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for PR6423-10R-010; then continuity-test the affected path.

Q3 Which Emerson PR6423 8 mm eddy-current measurement system records should be captured before removing PR6423-10R-010?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with PR6423-10R-010 before disconnection.

Q4 What controlled test confirms that PR6423-10R-010 can provides a 3/8-24 unf-2a sleeve thread?

Apply the approved field or simulated stimulus, observe the Emerson PR6423 8 mm eddy-current measurement system indication and confirm the intended response without bypassing the normal interlocks.

Q5 Which PR6423-compatible converter condition should be checked when PR6423-10R-010 reports an abnormal state?

Check the PR6423-compatible converter supply, seating and connection first, then compare channel diagnostics with the recorded PR6423-10R-010 baseline.

Q6 Can PR6423-10R-010 be moved directly into Reverse-access shaft vibration without validating LEMO-connected monitoring input?

No. Confirm the LEMO-connected monitoring input, revision, connection scheme and Emerson PR6423 8 mm eddy-current measurement system configuration before transferring PR6423-10R-010 to that duty.

Q7 What maintenance evidence is required after PR6423-10R-010 is used for Thrust-collar position monitoring?

Retain the nameplate record, corrective action, final diagnostics and a controlled thrust-collar position monitoring functional-test result for PR6423-10R-010.

Q8 How should PR6423-10R-010 be returned to service in Special machine retrofit points?

Restore power under control, verify includes a five-metre unarmored cable, exercise the intended signal path and release PR6423-10R-010 only after the Emerson PR6423 8 mm eddy-current measurement system remains in its approved operating state.

SOURCE Emerson PR642x Eddy Current Sensor Installation Guide | MHM-97857 Rev. 1.11, January 2026

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