

PR6423-002-030

PR6423 8 mm eddy-current displacement sensor

CONTROLLED ENGINEERING COPY

Confirm the M10 x 1 mounting, 45 mm probe length, eight-metre loop and paired converter calibration; set gap only after the bracket is mechanically secure.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	PR6423-002-030
Manufacturer part	PR6423-002-030
Hardware type	PR6423
System family	Emerson PR6423 8 mm eddy-current measurement system



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01 PRE-INSTALLATION PLAN

- 1

Verify the complete PR6423-002-030 order code, M10 x 1 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 PR6423-002-030.
- 3

Protect the probe tip from impact and keep the mounting thread and bracket free from burrs or contamination.
- 4

Route the 8 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.

MATCHED HARDWARE

- CON021 or CON041 signal converter
- Conductive steel target
- Probe mounting bracket
- Compatible machinery-monitoring input

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	PR6423-002-030 / PR6423-002-030 recorded
Physical interface	CON021 or CON041 signal converter
Companion check	Conductive steel target
Functional proof	Uses an M10 x 1 metric sleeve
Application test	Radial shaft vibration

02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Sensor family	PR6423
Sleeve thread	M10 x 1
Armor	No
Probe length Cx	45 mm
Overall sensor length C	54 mm
Adapter plug	Included
Total cable length	8 m
Cable end	LEMO
Static nominal range	+/-1.0 mm
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

FIELD NOTE

Confirm the M10 x 1 mounting, 45 mm probe length, eight-metre loop and paired converter calibration; set gap only after the bracket is mechanically secure.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	PR6423-002-030 / PR6423-002-030 recorded
Physical interface	CON021 or CON041 signal converter
Companion check	Conductive steel target
Functional proof	Uses an M10 x 1 metric sleeve
Application test	Radial shaft vibration

04 RETURN-TO-SERVICE RECORD

- ☐
- Confirm the paired signal converter or monitor input, cable length and target material match the documented measuring chain.
- ☐
- Set the static gap within the documented linear region while preserving shaft and probe mechanical clearance.
- ☐
- Prove polarity, static gap, dynamic response and alarm action before returning the protection channel to service.
- ☐
- Confirm the intended process response before normal operation.

VERIFICATION RECORD

PRODUCT IDENTITY	PR6423-002-030
INSTALLED POSITION	Documented Emerson PR6423 8 mm eddy-current measurement system position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
IC31197G05	Related Emerson product	View IC31197G05 page
KJ3243X1-BK1-C2-A0SE4022	Related Emerson product	View KJ3243X1-BK1-C2-A0SE4022 page
KL2101X1-BA1-C2-A0SE6501T01	Related Emerson product	View KL2101X1-BA1-C2-A0SE6501T01 page
KL2101X1-BB1-SE6504	Related Emerson product	View KL2101X1-BB1-SE6504 page
KJ3241X1-BK1-C2-A0SE4006P2	Related Emerson product	View KJ3241X1-BK1-C2-A0SE4006P2 page
KJ2005X1-BK1-C2-A0SE3007	Related Emerson product	View KJ2005X1-BK1-C2-A0SE3007 page
8752-CA-NS-02	Related Emerson product	View 8752-CA-NS-02 page
KJ3241X1-BA1-12P2506X062	Related Emerson product	View KJ3241X1-BA1-12P2506X062 page

SOURCE IDENTIFIERS

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

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