

INDUSTRIAL AUTOMATION PRODUCT

PR6423-010-000

PR6423 8 mm eddy-current displacement sensor

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

IDENTITY	VERIFIED VALUE
Manufacturer	Emerson
System family	Emerson PR6423 8 mm eddy-current measurement system
Part number	PR6423-010-000
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

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Technical Specifications

Technical values below are limited to the named Emerson product record.

PARAMETER	TECHNICAL VALUE
Sensor family	PR6423
Sleeve thread	M10 x 1
Aarmor	Yes
Probe length Cx	25 mm
Overall sensor length C	34 mm
Adapter plug	Included
Total cable length	4 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
Pressure at sensor head	10,000 hPa
Vibration endurance	5 g at 60 Hz

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System Role and Architecture

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

FUNCTION 1

Uses a compact 25 mm armored probe body

FUNCTION 2

Includes a four-metre integral cable

FUNCTION 3

Provides the PR6423 two-millimetre static span

FUNCTION 4

Connects through the standard LEMO termination

Matched system components

- PR6423-configured CON021 or CON041
- M10 x 1 mounting bracket
- Conductive shaft target
- Compatible vibration or position monitor

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	PR6423-configured CON021 or CON041
Companion hardware	M10 x 1 mounting bracket
Field connection	Conductive shaft target
Primary system function	Uses a compact 25 mm armored probe body
Controlled acceptance duty	Compact bearing radial vibration

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Applications and Engineering Context

Compact bearing radial vibration

Uses a compact 25 mm armored probe body

Short-bracket thrust position

Includes a four-metre integral cable

Pump shaft centerline monitoring

Provides the PR6423 two-millimetre static span

Eccentricity channels

Connects through the standard LEMO termination

TECHNICAL NOTE

Verify the compact 25 mm body clearance, M10 x 1 thread, armored four-metre cable and PR6423 converter calibration before setting the operating gap.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	PR6423-010-000 / PR6423-010-000 recorded
Physical interface	PR6423-configured CON021 or CON041
Companion check	M10 x 1 mounting bracket
Functional proof	Uses a compact 25 mm armored probe body
Application test	Compact bearing radial vibration

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Engineering Precautions

- 1 Verify the complete PR6423-010-000 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 PR6423-010-000.
- 3 Protect the probe tip from impact and keep the mounting thread and bracket free from burrs or contamination.
- 4 Route the 4 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.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
PR6426-010-140	Related Emerson product	View PR6426-010-140 page
1X00781H01L	Related Emerson product	View 1X00781H01L page
38B6041X152	Related Emerson product	View 38B6041X152 page
38B5786X092	Related Emerson product	View 38B5786X092 page
PR6423-003-130-CON021	Related Emerson product	View PR6423-003-130-CON021 page
5X00226G04	Related Emerson product	View 5X00226G04 page
5X00481G04	Related Emerson product	View 5X00481G04 page
KJ2005X1-BK11-2P4688X052...	Related Emerson product	View KJ2005X1-BK11-2P4688X052... page

MANUFACTURER SOURCE RECORD

Emerson PR642x Eddy Current Sensor Installation Guide

MHM-97857 Rev. 1.11, January 2026

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