



PR6423/002-001 CON041

Emerson 8 mm Eddy Current Sensor with CON041 Converter

Product scope

- Uses an 8 mm eddy-current sensing tip in the PR6423 family.
- Connects open-ended probe wiring to a DIN-rail CON041 converter.
- Supports non-contact displacement measurements on rotating machinery.
- The ordered set combines the PR6423/002-001 probe configuration with the CON041 signal-conditioning module.

Official source basis

Emerson PR6423 8 mm Eddy Current Sensor datasheet (December 2024), MHM-97857 installation guide, and Emerson CON041 datasheet.

Technical facts are limited to the identified manufacturer documentation and the exact ordering configuration shown above.

Request a fast quote	Product reference	
Email: info@apterpower.com Phone: +86 18106909650 apter.com/inquiry.php	Emerson PR6423/002-001 CON041	

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PR6423/002-001 CON041 technical profile

Emerson PR6423/002-001 CON041 identifies an 8 mm eddy-current probe configuration paired with the CON041 DIN-rail converter. The PR6423 sensor family uses an M10×1 case thread and the order code defines the sleeve, adapter, cable and cable-end arrangement.

The measuring chain produces a linearized electrical representation of target distance for shaft radial vibration, axial position and related machinery-monitoring functions. CON041 accepts the open sensor cable end and supplies the documented -23 to -32 VDC operating circuit.

Before installation, match the probe order code, total cable length, converter range, target material and mechanical gap. A converter calibrated for a different PR642x sensor or range cannot be assumed interchangeable without recalibration.

Selection notice

PR6423/002-001 CON041 requires the matching sensor-converter calibration and specified total cable length; changing either item can shift scale and linearity.

Technical specifications

Sensor tip diameter	8 mm
Case thread	M10×1
Sensor family	PR6423
Converter model	CON041
Standard measuring range	2 mm
Extended PR6423 range	3 or 4 mm by converter option
Standard linearity error	≤1.0%
Converter supply	-23 to -32 VDC
Sensor operating temperature	-35 to +180 °C
Short-time sensor temperature	Up to +200 °C
Cable/connector temperature	Up to +175 °C continuous
Storage and transport	-40 to +70 °C
Temperature error	4% per 100 K
Sensor head pressure resistance	10000 hPa
Vibration resistance	5 g at 60 Hz
Sensor cable	PTFE, oil and chemical resistant
Converter mounting	DIN rail
Sensor connection	Open cable ends with crimp sleeves
Applicable standards	DIN 45670 / ISO 10817-1 / API 670
Measurement principle	Eddy current, non-contact

Application and integration notes

Temperature Range	• The PR6423 sensor has a nominal operating range of -35 to +180 °C, with short exposure up to +200 °C. • The protected cable and connector are rated for permanent service up to +175 °C. • Storage and transport limits extend from -40 to +70 °C for the documented sensor family.
Compatibility	• CON041 supports PR6423 measurement chains when the converter range matches the probe calibration. • The open cable-end option is used with CON031 or CON041 rather than the Lemo-based converter variants. • The installed monitoring channel must accept the converter output and the selected measurement polarity.
Monitoring	• The chain is intended for relative shaft vibration, axial position and displacement measurements. • A stable mechanical gap keeps the operating point inside the converter linear range. • Trend reliability depends on secure probe mounting and preservation of the documented cable system.

Request product documentation and quotation support

Send the complete label, system configuration, quantity and destination.



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