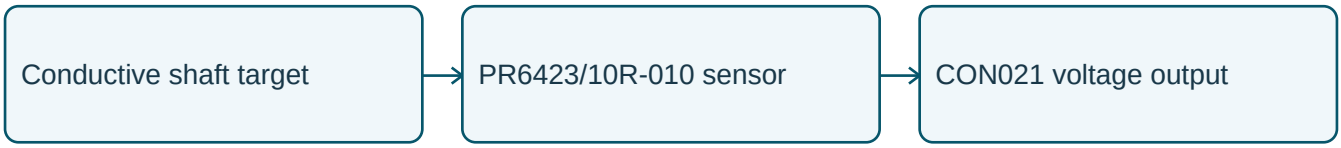
PR6423-10R-010-CON021

01 / System identity and preparation

PR6423-10R-010-CON021 forms a sensor-and-converter measurement chain, converting the distance to a conductive shaft target into a voltage signal for machinery monitoring.



Preparation priorities

Complete chain identity	Match PR6423-10R-010-CON021, the sensor cable option and the actual converter marking before replacement.
Signal relationship	Use the matched sensor, cable and converter adjusted for the target material. The standard PR6423 range is 2 mm.

Guide boundary

This Apter Power guide organizes preparation and acceptance checks. Apply the manufacturer instructions and approved site procedure for detailed wiring, mounting, configuration and functional testing.

Application boundary

Sensor configuration refers to PR6423/10R-010; converter ratings refer to CON021. Measurement performance requires a matched sensor, cable and converter adjusted for the target material. Sensor and converter environmental limits are different.

Product and installation enquiries

sales13@apterpower.com | +86 18030235313

Apply manufacturer instructions and approved site procedures.

02 / Configuration review before service

Complete chain identity	Match PR6423-10R-010-CON021, the sensor cable option and the actual converter marking before replacement.
Signal relationship	Use the matched sensor, cable and converter adjusted for the target material. The standard PR6423 range is 2 mm.
Electrical setup	Match negative supply polarity and selected output range. Keep the IP20 CON021 protected separately from the IP66 sensor.
Measurement acceptance	Adjust the probe gap using the complete measurement-chain output; verify static position and the required dynamic response before releasing the monitoring channel.

Preserve the complete chain

Retain PR6423-10R-010-CON021, its cable option and converter marking. Changing a component can change the calibrated measurement relationship.

Check reverse mounting

Use the PR6423/10R-010 reverse-mount arrangement and matching 3/8-24 UNF mounting thread. Avoid twisting the cable while positioning the sensor.

Mismatch decision

Resolve a different catalog marking, interface, software requirement or installed configuration before proceeding. Physical similarity alone does not establish an approved replacement.

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03 / Hardware and interface checks

Protect cable and adapter

Provide strain relief and thermal-movement allowance. The unarmored cable requires a minimum bending radius of 25 mm; isolate the adapter connection as instructed.

Separate environmental limits

The IP66 sensor does not make the IP20 converter weatherproof. Assess sensor, cable/connector and converter temperatures individually.

Key hardware references

Converter	CON021
Sensor tip diameter	8 mm
Mounting configuration	Reverse mount; 3/8-24 UNF thread
Cable configuration	Unarmored; adapter plug; 5.0 m; LEMO cable end

Preserve the connection record

Photograph and label the affected connections before disconnection. Retain the original routing, module positions and identification with the work order, and compare the restored installation against that record.

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04 / Commissioning and diagnostic decisions

Verify negative supply polarity

Match the CON021 negative DC supply and output range. Do not connect it as an ordinary positive 24 V device without checking the approved wiring.

Set the gap using the signal

Adjust the installed gap using the complete converter-and-sensor output. Confirm target material and measurement response before enabling the monitoring function.

Acceptance checkpoints

Before energization	Use the matched sensor, cable and converter adjusted for the target material. The standard PR6423 range is 2 mm.
Configuration review	Match negative supply polarity and selected output range. Keep the IP20 CON021 protected separately from the IP66 sensor.
Functional release	Adjust the probe gap using the complete measurement-chain output; verify static position and the required dynamic response before releasing the monitoring channel.

Abnormal result

If diagnostics, communication or functional response differ from the approved baseline, stop the release and resolve the configuration or installation issue. Do not bypass an interlock or protective function to obtain a passing test.

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PR6423-10R-010-CON021

05 / Service record and technical references

Lifecycle and support

The current manufacturing and service-support phase for PR6423-10R-010-CON021 is unconfirmed. Obtain guidance for the complete sensor, cable and converter configuration before selecting a replacement.

Technical basis

Emerson PR6423 Specifications Sheet, December 2024; CON021 Specifications Sheet, August 2017; PR 642x Installation Guide, MHM-97857 Rev 1.11, January 2026.

Applicability

Sensor configuration refers to PR6423/10R-010; converter ratings refer to CON021. Measurement performance requires a matched sensor, cable and converter adjusted for the target material. Sensor and converter environmental limits are different.

Related portfolio references

Emerson PR6423/000-010 CON021

Emerson PR6423/004-111 CON041

Navigation only. These listings are not confirmed replacements, compatible accessories or included items.

Handover record

Retain the complete fitted marking, hardware/software revision where applicable, connection record and accepted test results. Confirm separate accessories and documents in the quotation.

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