# Emerson CON041 PR6424/000-121

16 mm Eddy Current Sensor and DIN-Rail Converter Set / Exact identity and technical profile

This reference isolates the published characteristics and engineering boundary of Emerson CON041 PR6424/000-121 without importing values from a neighboring suffix.

| | |
|---|---|
| **Sensor model** | PR6424/000-121 |
| **Converter** | CON041 |
| **Probe diameter class** | 16 mm |
| **Thread** | M18 x 1.5 |
| **Probe armor** | None |
| **Cable length** | 6 m |

**TECHNICAL MARKER**

16 mm eddy-current sensor

**TECHNICAL MARKER**

M18 x 1.5 unarmored probe

**TECHNICAL MARKER**

6 m open-ended cable

**TECHNICAL MARKER**

CON041 DIN-rail converter

## Technical boundary

The exact model and its published data govern this reference. Similar family names, suffixes or physical appearance do not establish the same electrical or software behavior.

| | |
|---|---|
| **Identity evidence** | Read CON041 PR6424/000-121 from the installed label and procurement record |
| **Function evidence** | Confirm the published 16 mm eddy current sensor and din-rail converter set role in the EPRO PR6424 / CON041 system |
| **Configuration evidence** | Retain the project, mapping, range, address or interface assigned to this position |
| **Release evidence** | Link final diagnostics to a witnessed field or operator response |

**TECHNICAL DECISION**

Accept CON041 PR6424/000-121 only when its identifier and installed-system role agree.

**CHANGE BOUNDARY**

Any redesign beyond the documented CON041 PR6424/000-121 position requires separate engineering approval.

# Emerson CON041 PR6424/000-121

16 mm Eddy Current Sensor and DIN-Rail Converter Set / Published characteristics

This matrix groups the published CON041 PR6424/000-121 characteristics that control identification, configuration and engineering review. Each entry remains tied to the exact 16 mm eddy current sensor and din-rail converter set record.

| | |
|---|---|
| **Sensor model** | PR6424/000-121 |
| **Converter** | CON041 |
| **Probe diameter class** | 16 mm |
| **Thread** | M18 x 1.5 |
| **Probe armor** | None |
| **Cable length** | 6 m |
| **Cable end** | Open |
| **Nominal sensitivity** | 4 V/mm |
| **Static measuring range** | +/-2 mm |
| **Target material** | 42CrMo4 / AISI 4140 |

### INTERPRETATION

Use every CON041 PR6424/000-121 value with the exact installed configuration.

### DESIGN RECORD

Retain the drawing, project and channel or interface assignments that make CON041 PR6424/000-121 data actionable.

| | |
|---|---|
| **Nameplate check** | Manufacturer and full reference agree with the controlled record |
| **Range check** | Published operating or signal data agree with the configured use |
| **Interface check** | Backplane, terminal, cable, network or memory arrangement is documented |
| **Limit check** | Loading, channel count, supply or lifecycle constraint is reviewed |
| **Evidence close** | Source title and applicable product record are retained with the decision |

### NO BORROWED VALUES

Another Emerson suffix cannot fill a missing CON041 PR6424/000-121 parameter.

### ENGINEERING OUTPUT

Record the exact value used, its purpose and any unresolved item before selection.

# Emerson CON041 PR6424/000-121

16 mm Eddy Current Sensor and DIN-Rail Converter Set / System role and data flow

### Large-shaft radial vibration

Measures dynamic shaft motion on machines meeting the target and diameter requirements.

### Axial position monitoring

Tracks non-contact displacement at a prepared shaft or collar target.

### Turbine protection channels

Feeds the DIN-rail converter output to the documented monitoring input.

### Outage sensor renewal

Restores the exact six-metre open-ended probe execution and converter pairing.

## Signal and configuration path

| | |
|---|---|
| **Field layer** | Sensors, loads, terminal or operator interface assigned by the design |
| **Module layer** | CON041 PR6424/000-121 performs its published 16 mm eddy current sensor and din-rail converter set role |
| **Control layer** | PLC project, address map or runtime application interprets the exchanged data |
| **Acceptance layer** | Diagnostics and intended process response are witnessed together |

## Engineering boundary

Application examples describe system roles only. They do not establish automatic interchangeability, replacement approval or suffix equivalence.

| | |
|---|---|
| **Observed input** | Field, network or operator condition presented to CON041 PR6424/000-121 |
| **Published action** | The documented 16 mm eddy current sensor and din-rail converter set function processes that condition |
| **Configured interpretation** | PLC logic, HMI project or station mapping assigns system meaning |
| **Expected output** | A defined state, value, message or command is produced |
| **Acceptance proof** | The complete path is witnessed under controlled conditions |

### APPLICATION RECORD

Tie each CON041 PR6424/000-121 use case to the installed drawing or project tag.

### EXCEPTION CONTROL

Document and resolve any behavior that differs from the approved response.

# Emerson CON041 PR6424/000-121

16 mm Eddy Current Sensor and DIN-Rail Converter Set / Engineering decisions

### SUPPORTED IDENTITY

CON041 PR6424/000-121

### PUBLISHED FUNCTION

16 mm Eddy Current Sensor and DIN-Rail Converter Set

### SYSTEM CONTEXT

EPRO PR6424 / CON041

### UNSUPPORTED INFERENCE

A nearby model, suffix or family resemblance

## Model-specific questions

**Which probe diameter class is used by Emerson CON041 PR6424/000-121?**

The PR6424 belongs to the 16 mm eddy-current sensor class.

**How long is the probe cable on Emerson CON041 PR6424/000-121?**

The legacy manufacturer order code identifies a six-metre cable.

**What nominal sensitivity applies to Emerson CON041 PR6424/000-121?**

The PR6424 system specification lists 4 V/mm nominal sensitivity.

**Why must Emerson CON041 PR6424/000-121 remain a matched channel?**

Probe geometry, cable execution, converter electronics and target setup together determine the calibrated response.

**What mounting thread applies to Emerson CON041 PR6424/000-121?**

The exact 000 execution uses an M18 x 1.5 unarmored probe body.

**Which cable termination is supplied on Emerson CON041 PR6424/000-121?**

The final code 1 identifies an open cable end for converter termination.

**Which target material is used to calibrate Emerson CON041 PR6424/000-121?**

The published reference target is 42CrMo4, equivalent to AISI 4140.

**What completes commissioning of Emerson CON041 PR6424/000-121?**

Confirm static gap, output direction, displacement response, dynamic signal and the configured monitor alarms.

## Decision closeout

Close the CON041 PR6424/000-121 technical review with the exact identifier, applicable published limits and the installed configuration assumptions explicitly recorded.

| | |
|---|---|
| **Question coverage** | Identity, function, configuration and field handling addressed |
| **Open item** | Any unanswered exact-model point is listed without guessed data |
| **Decision owner** | Responsible engineering or maintenance role identified |
| **Supporting record** | Drawing, project revision, readings and witnessed result attached |

### APPROVAL

The CON041 PR6424/000-121 decision is accepted only within the documented scope.

### REVIEW TRIGGER

A different suffix, wiring arrangement, project or application requires a new review.

# Emerson CON041 PR6424/000-121

16 mm Eddy Current Sensor and DIN-Rail Converter Set / Evidence and support

| | |
|---|---|
| **Exact product** | Emerson CON041 PR6424/000-121 |
| **Technical class** | 16 mm Eddy Current Sensor and DIN-Rail Converter Set |
| **Platform** | EPRO PR6424 / CON041 |
| **Evidence use** | Exact-model characteristics and engineering boundary |
| **Record with** | Installed drawing, project and acceptance evidence |

| | |
|---|---|
| **Retained evidence** | Nameplate, source title, configuration baseline and field record |
| **Installation evidence** | Isolation, conductor/connector record and post-work inspection |
| **Commissioning evidence** | Diagnostics, measurements and intended response |
| **Final record** | Responsible witness, date, exceptions and approved disposition |

## VERIFIED APTER POWER CATALOG REFERENCES

Navigation only; compatibility, substitution and manufacturer endorsement are not implied.

| | |
|---|---|
| **Emerson PR9268 201 100** | View Emerson PR9268 201 100 page |
| **Emerson PR6423 002 030** | View Emerson PR6423 002 030 page |

## MANUFACTURER EVIDENCE RECORD

**Emerson PR6424 16 mm Sensor and CON041 Signal Converter Data Sheets**

Manufacturer specifications and legacy ordering matrix

## CONTACT APTER POWER

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com

Send the exact model, quantity, destination and requested condition for a quotation.