

PR6422-013-041

PR6422 5 mm miniature eddy-current displacement sensor

CONTROLLED ENGINEERING COPY

Protect the fine M6 x 0.5 thread, confirm the ten-metre open-end wiring and PR6422 converter range, then set the narrow air gap with controlled mechanical clearance.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	PR6422-013-041
Manufacturer part	PR6422-013-041
Hardware type	PR6422
System family	Emerson PR6422 5 mm eddy-current measurement system



APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



01 PRE-INSTALLATION PLAN

- 1

Verify the complete PR6422-013-041 order code, M6 x 0.5 mounting interface and assigned PR6422 5 mm eddy-current system measuring point before work.
- 2

Place the monitored machine and its protection channel in the approved maintenance state before disturbing PR6422-013-041.
- 3

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

Route the 10 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

- PR6422-compatible signal converter
- Fine-thread miniature bracket
- Small conductive shaft or target
- Open-end field termination

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	PR6422-013-041 / PR6422-013-041 recorded
Physical interface	PR6422-compatible signal converter
Companion check	Fine-thread miniature bracket
Functional proof	Uses a miniature M6 x 0.5 probe sleeve
Application test	Small-shaft radial vibration

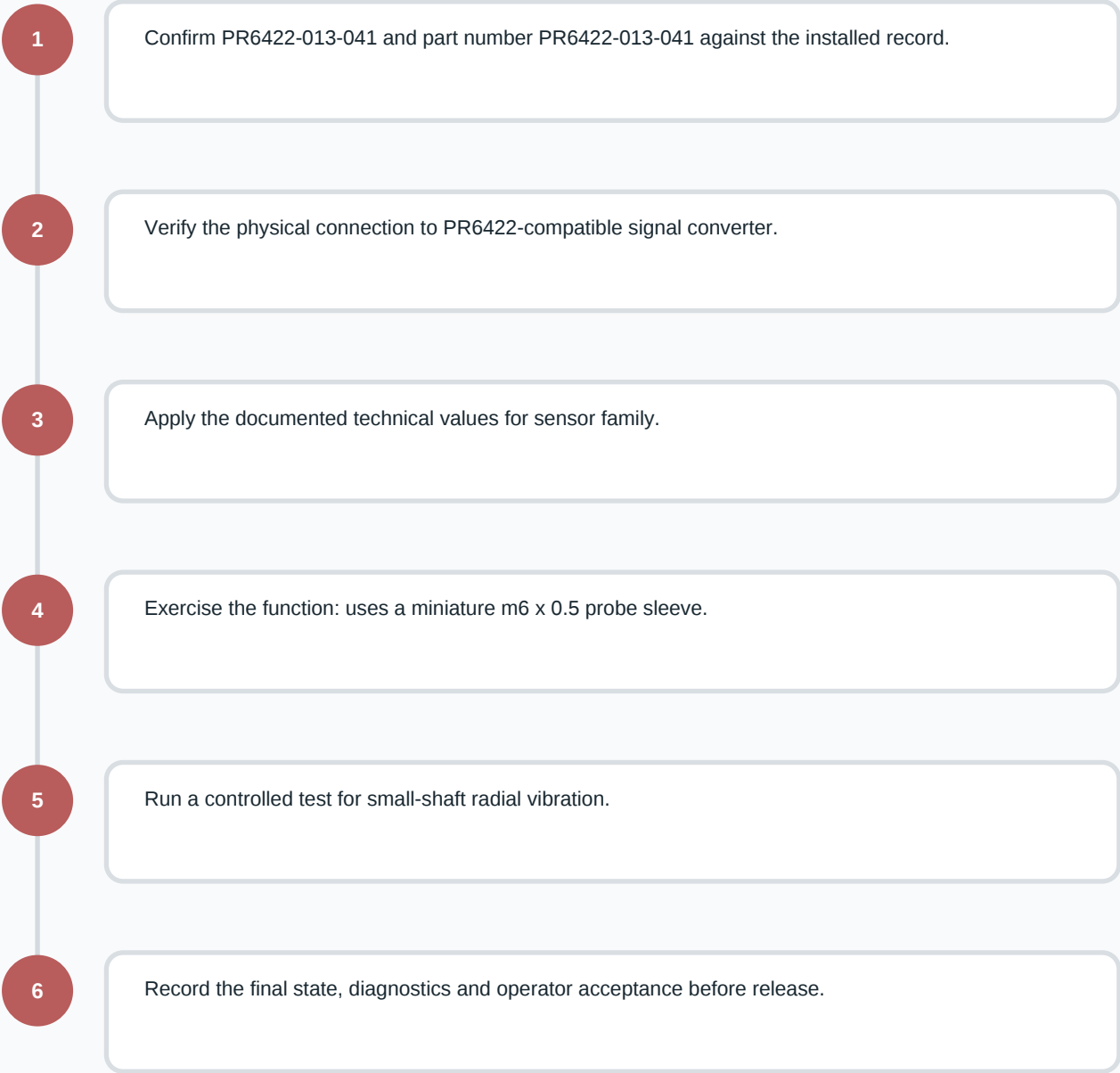
02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Sensor family	PR6422
Sleeve thread	M6 x 0.5
Armor	Yes
Probe length Cx	50 mm
Overall sensor length C	55.3 mm
Adapter plug	Included
Total cable length	10 m
Cable end	Open ends
Static nominal range	+/-0.5 mm
Recommended dynamic range	25 to 250 um p-p
Sensitivity	16 V/mm
Nominal distance center	Approximately 0.8 mm
Basic air gap	0.15 to 0.35 mm
Operating temperature	-35 to +180 degC; +200 degC short term

FIELD NOTE

Protect the fine M6 x 0.5 thread, confirm the ten-metre open-end wiring and PR6422 converter range, then set the narrow air gap with controlled mechanical clearance.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	PR6422-013-041 / PR6422-013-041 recorded
Physical interface	PR6422-compatible signal converter
Companion check	Fine-thread miniature bracket
Functional proof	Uses a miniature M6 x 0.5 probe sleeve
Application test	Small-shaft radial 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	PR6422-013-041
INSTALLED POSITION	Documented Emerson PR6422 5 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
KJ3222X1-BA1-12P2532X112 ...	Related Emerson product	View KJ3222X1-BA1-12P2532X112... page
KJ3221X1-BA1-12P2531X122 ...	Related Emerson product	View KJ3221X1-BA1-12P2531X122... page
775XD11NAWA3WK9	Related Emerson product	View 775XD11NAWA3WK9 page
098-01257-01	Related Emerson product	View 098-01257-01 page
5X00167G01	Related Emerson product	View 5X00167G01 page
PR6423-010-040-CON021	Related Emerson product	View PR6423-010-040-CON021 page
CL6821X1-A5-41B5222X422-65	Related Emerson product	View CL6821X1-A5-41B5222X422-65 page
KJ4001X1-BA3-12P3378X012 ...	Related Emerson product	View KJ4001X1-BA3-12P3378X012... page

SOURCE IDENTIFIERS

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

APTER POWER SALES TEAM

WHATSAPP / PHONE	+86 180 3023 5313
EMAIL	sales13@apterpower.com
WEBSITE	www.apterpower.com

