

Emerson - PR6424

PR6424-003-030

16 mm Eddy Current Sensor

Verified model data

Manufacturer	Emerson
Part number	PR6424-003-030
Official designation	PR6424/003-030
Product family	PR6424
Sensor thread	M18 × 1.5
Cable armor	No
Sleeve length	70 mm
Total sensor length	82.5 mm
Adapter plug	Included
Total cable length	8 m
Cable end	LEMO

Selection summary

Emerson PR6424-003-030 is a 16 mm non-contact probe for larger shaft-displacement, position and vibration measurements.

Its official code defines M18 × 1.5 mounting, no cable armor, a 70 mm sleeve, included adapter, 8 m total cable and LEMO end.

Before installation, verify the shaft diameter and target material, sleeve reach, bracket stiffness, working gap, adapter and cable route, compatible converter and available monitor range.

APTER POWER

Emerson - PR6424**PR6424-003-030****Additional verified data**

Static range	±2.0 mm
Dynamic range	0 to 1000 µm
Sensitivity	4 V/mm
Minimum shaft diameter	80 mm
Operating temperature	-35 to 120°C
Sensor plus 1 m cable weight	Approximately 0.20 kg; component value

Range and Target

- Confirm the 16 mm probe range covers all expected movement
- Use the documented ferromagnetic target or approved calibration
- Reserve gap margin for thermal and axial growth

Mechanical Reach

- Use the M18 × 1.5 thread and 70 mm sleeve correctly
- Keep the long probe body square and free from side load
- Verify surrounding metal clearance over the full movement range

Cable Protection

- Protect the unarmored lead from abrasion and hot surfaces
- Keep the adapter clean, locked and strain relieved
- Separate the signal cable from high-current switching conductors

Application checkpoints

- Large-shaft radial vibration monitoring
- Axial position and differential movement measurement
- Eccentricity monitoring on turbines and compressors

Evidence boundary: Official data gives approximately 0.20 kg for the sensor plus 1 m cable, not the exact 8 m assembly. The official drawing provides local probe dimensions, including 82.5 mm total sensor length, but not one complete W × H × D envelope for the cable assembly; dedicated Weight and Dimensions remain blank.

Source basis: Emerson PR6424 16 mm Sensor Specifications Sheet.