

Emerson - AMS EZ 1000**EZ1081-03-00-010 EZ1901-090**

8 mm Armored Eddy-Current Sensor and Armored Extension Cable Assembly

Verified model data

Manufacturer	Emerson
Component 1	EZ1081-03-00-010
Component 2	EZ1901-090
Product family	AMS EZ 1000
Assembly type	8 mm armored eddy-current sensor with armored extension cable
Sensor case thread	None; armored EZ1081 case
Sensor case length	30 mm
Unthreaded length	0 mm
Integral sensor cable	1.0 m
Extension cable	9.0 m armored EZ1901
Overall system length	10.0 m; valid under the official ordering rule

Selection summary

Emerson EZ1081-03-00-010 EZ1901-090 combines an armored EZ1081 8 mm eddy-current sensor with an armored EZ1901 extension cable for a documented 10.0 m system length.

The exact components specify a 30 mm sensor case, 0 mm unthreaded section, 1.0 m integral sensor cable and 9.0 m extension cable.

Before installation, verify converter compatibility, the compact 30 mm case and noise-controlled 10 m cable route, target material and diameter, bracket geometry, connector sealing, cable route, total electrical length and field calibration.

APTER POWER

Emerson - AMS EZ 1000**EZ1081-03-00-010 EZ1901-090****Additional verified data**

Linear range	2 mm
Initial gap	0.5 mm
Nominal scale	7.87 V/mm API or 8 V/mm ISO, converter configuration dependent
Sensor protection	IP67; IP68 only when DOC-TEST is assigned
Sensor/first 1 m temperature	-35 to 180°C
Cable/connector temperature	-35 to 150°C
Target material	AISI/SAE 4140 reference steel

Compact Mounting

- Use the 30 mm case where bracket depth is restricted
- Support the armored body without stressing the cable exit
- Verify free metal clearance around the 8 mm tip

Long Cable Route

- Keep the 9 m extension away from motor and switching conductors
- Protect the inline connector from moisture and vibration
- Maintain the documented overall 10 m electrical length

Noise Control

- Check shield and ground practice before changing filters
- Compare noise with machine load and drive operation
- Record calibrated scale and baseline signal after installation

Application checkpoints

- Radial shaft vibration measurement on turbines and compressors
- Axial position or differential movement measurement
- Speed, key and eccentricity sensing with the configured AMS EZ 1000 converter

Evidence boundary: The official ordering rules validate both exact components and their total system length, but Emerson does not publish this pair as one bundled SKU. The approximately 0.1 kg sensor-only value excludes the extension cable, so complete assembly Dimensions and Weight remain blank.

Source basis: Emerson AMS EZ 1000 8 mm Eddy Current Sensor ordering sheet.