EZ1081-04-00-010 + EZ1901-040

Eddy Current System

Emerson EZ1081-04-00-010 + EZ1901-040 combines an armored M10x1 EZ1081 sensor with a 1 m integral cable and an armored EZ1901 extension cable for a documented 5 m system length. The configured sensor provides a 2 mm eddy-current measuring range for compatible EZ1000 conversion electronics.

BRAND	Emerson	ORIGIN	USA
MODEL	EZ1081-04-00-010 + EZ1901-040	PRODUCT	Eddy Current System
FAMILY	AMS EZ1000 8 mm System	SOURCE	Emerson data sheet, December 2024; EZ1081 and EZ1901 ordering tables

MANUFACTURER SOURCE RECORD

AMS EZ1000 8 mm Sensor Data Sheet
Emerson data sheet, December 2024; EZ1081 and EZ1901 ordering tables

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EZ1081-04-00-010 + EZ1901-040

Product Overview

SYSTEM FUNCTION

Emerson EZ1081-04-00-010 + EZ1901-040 combines an armored M10x1 EZ1081 sensor with a 1 m integral cable and an armored EZ1901 extension cable for a documented 5 m system length. The configured sensor provides a 2 mm eddy-current measuring range for compatible EZ1000 conversion electronics.

FUNCTION 1

Forms a calibrated 5 m sensor cable chain

FUNCTION 2

Uses an armored M10x1 EZ1081 probe

FUNCTION 3

Provides a 2 mm measurement range

FUNCTION 4

Supports API or ISO scale-factor configuration

TECHNICAL NOTE

Keep the complete 5 m calibrated cable chain together and record the 40 mm case-length code before replacement. Verify the 0.5 mm initial air gap, target geometry and converter configuration before dynamic acceptance.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Complete configuration	EZ1081-04-00-010 + EZ1901-040
Sensor thread	M10x1
Sensor case length	40 mm
Integral cable	1 m, armored
Extension cable	4 m, armored
Total system length	5 m
Measuring range	2 mm
Initial air gap	0.5 mm
Scale factor	7.87 V/mm ±5% API or 8 V/mm ±5% ISO at 0–45 °C
Protection	IP67; IP68 with DOC-TEST

ENGINEERING BOUNDARY

Keep the complete 5 m calibrated cable chain together and record the 40 mm case-length code before replacement. Verify the 0.5 mm initial air gap, target geometry and converter configuration before dynamic acceptance.

Acceptance Path

1 IDENTITY

The exact probe and extension pair are recorded.

2 MECHANICAL

Thread, target and clearance are correct.

3 ELECTRICAL

Cable length and converter setup match.

4 FUNCTIONAL PROOF

Gap, polarity, response and alarm logic pass.

Applications and Engineering FAQ

APPLICATION	ENGINEERING CONTEXT
Shaft relative vibration	Measures non-contact shaft motion with a compatible converter.
Radial position monitoring	Tracks static position inside the documented linear range.
Key or speed reference	Detects a suitable metallic target when the converter is configured accordingly.
Exact cable-chain replacement	Restores the documented 1 m sensor plus 4 m extension arrangement.

Model-Specific FAQ - Part 1

QUESTION	ANSWER
What total cable length does Emerson EZ1081-04-00-010 + EZ1901-040 create?	The 1 m EZ1081 cable plus the 4 m EZ1901 extension gives the documented 5 m system length.
Which thread is used by Emerson EZ1081-04-00-010 + EZ1901-040?	The EZ1081 sensor code in this configuration uses an M10x1 mounting thread.
What case length is encoded in Emerson EZ1081-04-00-010 + EZ1901-040?	The sensor order code specifies a 40 mm case length.
What measuring range applies to Emerson EZ1081-04-00-010 + EZ1901-040?	The 8 mm EZ1000 sensor system has a 2 mm measuring range.

FAQ, Related Products and Source

QUESTION	ANSWER
Where should the initial gap be set for Emerson EZ1081-04-00-010 + EZ1901-040?	The data sheet states a 0.5 mm initial air gap.
Which scale factors are available for Emerson EZ1081-04-00-010 + EZ1901-040?	The official values are 7.87 V/mm ±5% for API scaling or 8 V/mm ±5% for ISO scaling at 0–45 °C.
Can the extension cable in Emerson EZ1081-04-00-010 + EZ1901-040 be omitted or exchanged casually?	No. The calibrated chain depends on the documented 5 m total length, so any extension change requires confirmation of the complete order and converter setup.
What is the final functional check for Emerson EZ1081-04-00-010 + EZ1901-040?	Verify connector integrity, converter selection, static gap, polarity, linear movement response and the configured alarm path with the full cable chain installed.

MANUFACTURER SOURCE RECORD

AMS EZ1000 8 mm Sensor Data Sheet
Emerson data sheet, December 2024; EZ1081 and EZ1901 ordering tables

Related Products on Apter Power

MODEL	APTER POWER PAGE
Bently Nevada 24701-34-05-00-043-03-02	View Bently Nevada 24701-34-05-00-043-03-02
Bently Nevada 24701-34-05-30-028-04-02-409742	View Bently Nevada 24701-34-05-30-028-04-02-409742
Bently Nevada 24701-34-05-30-036-04-02	View Bently Nevada 24701-34-05-30-036-04-02
Bently Nevada 21000-28-05-00-030-04-02	View Bently Nevada 21000-28-05-00-030-04-02
Bently Nevada 21000-28-05-00-035-01-02	View Bently Nevada 21000-28-05-00-035-01-02
Bently Nevada 21000-28-05-00-056-04-02	View Bently Nevada 21000-28-05-00-056-04-02
Bently Nevada 21000-28-10-00-244-04-02	View Bently Nevada 21000-28-10-00-244-04-02
Bently Nevada 21500-00-12-10-02	View Bently Nevada 21500-00-12-10-02

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