Emerson PR9350-02-S2

01 Prepare the fixed-cable circuit

1 Match the S2 construction

Identify the ±25 mm version and its 10 m open-ended cable. Preserve the routing and identify the carrier-frequency electronics before disturbing the signal path.

2 Prepare controlled movement

Arrange a reference movement that does not exceed travel and does not load the tracing pin sideways.

Sensor interval	-25 to +25 mm
Mechanical interface	M3 tracing pin; M4 fixing points
Cable version	Oil-proof fixed 10 m cable

02 Identify each conductor

1 Separate coils and shield

Mark brown as A, white as B and green as C. Keep the black shield conductor distinct from the three coil connections.

2 Verify the receiving arrangement

Check the A6500-LC or other suitable bridge circuit against its own wiring instructions; retain the defined shield grounding point.

Brown	Coil A
White	Coil B
Green	Coil C
Black	Shield; not bonded to sensor housing

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03 Install and energize the bridge

1 Align the tracing pin

Secure the sensor and connect the target linkage without forcing or bending the pin. Confirm smooth movement through the required interval.

2 Apply the specified excitation

Check bridge supply and carrier settings before energizing. A DC voltage input or a 4–20 mA loop is not an equivalent connection.

AC supply	5 Vrms
Carrier	3–5 kHz
Current	27–50 mA
Sensitivity	270 mV/V

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04 Compare known positions

1 Check centre and polarity

Set a known centre position, move in each direction and compare the indicated displacement with the physical reference.

2 Check the required interval

Measure more than one point in each direction. Use the full-range or reduced-range linearity limit according to the travel actually tested.

Full interval	Linearity ±3.5%
60% interval	Linearity ±0.5%
Return to centre	Repeatable indication and free linkage

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05 Investigate abnormal readings

1 Isolate winding faults

With the circuit safely isolated, compare half-winding and complete-winding resistance. Include the 10 m cable resistance in the interpretation rather than rejecting the sensor solely on a remote raw reading.

2 Restore the complete channel

Reconnect the shield and coil conductors, repeat the travel check and restore machine protection through the responsible personnel.

Technical basis: Emerson PR9350 / K20-315 Installation Guide, MHM-97864 Rev. 1.6.

Related product navigation

Emerson PR6423/003-130 CON021

Epro PR6423/018-140 CON021

These are related references, not confirmed substitutes or an automatically approved assembly.