DATASHEET

KAB| LVDT CABLE ELECTRONICS

integrated in sensor cable

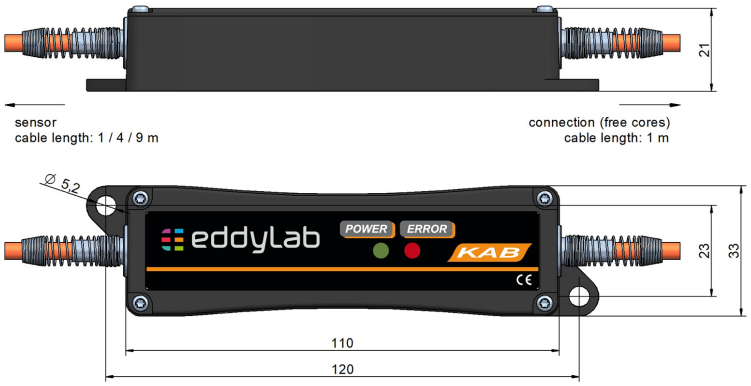
- Configurable output signal (4...20 mA, 0...20 mA, 0...5 V, 0...10 V, ±5 V, ±10 V)
- Low residual noise
- Built-in cable break detection

eddylab

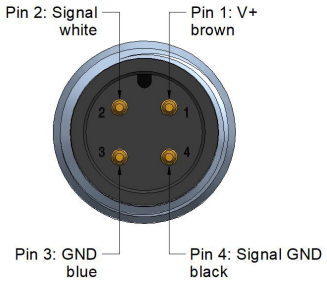
TECHNICAL DATA

ELECTRONICS	KAB CABLE ELECTRONICS
output signal	0...20 mA, 4...20 mA (load <300 Ohm)
	0...5 V, ± 5 V (load >5 kOhm)
	0...10 V, ± 10 V (looad >10 kOhm)
temperature coefficient	-0,0055, ± 0,002 %/K
ripple	< 0,5 mV_{eff} up to 300 Hz, < 4 mV_{eff} up to 20 MHz
max. frequency	300 Hz/ -3 dB (6-pol. Bessel)
isolation stability	> 1000 VDC
power supply	9...36 VDC
current consumption	65 mA at 24 VDC
	140 mA at 12 VDC
sensor supply (standard)	3 V_{eff} 3 kHz, (adjustable, 1-18 kHz)
adjustable setting	frequency, amplitude, phase shift, offset, gain
working temperature	-40...+85 °C
storage temperature	-40...+85 °C
housing	ABS
mounting	hole ø 5,5

ELECTRICAL CONNECTION



FUNCTION	CABLE TPE	CABLE PTFE-UL
V+	brown	yellow
GND	blue	brown
signal	white	white
signal GND	black	green



CABLE BREAK DETECTION

The electronics by eddylab feature a built-in cable break detection. This is achieved by an impedance measurement of the LVDT´s secondary coil. If the sensor cable is cut, the impedance on the secondary connections of the electronics change regardless of the push rod position, triggering the cable break detection. This feature is based on a broken secondary connection. A partial cable break of the primary connections (cables between primary coil and electronics) will not activate this function. The electronics vary in their functional range. The external electronics IMCA offers the widest range. The cable electronics KAB only visualises a cable break by a red LED.

NORMAL OPERATION KAB:

- The green „POWER-LED“ on the front side is on.

CABLE BREAK KAB:

- A front side „ERROR-LED“ flashes in case of an error.

ORDER CODE

KAB – 24V – X (a) – X (b)

type
KAB = cable electronics

(a) output signal
020A = 0...20 mA
420A = 4...20 mA
10V = 0...10 V
5V = 0...5 V
±5V = -5...5 V
±10V = -10...10 V

(b) KAB: type of cable / cable length

E1: for sensor with cable output
- = KAB integrated in sensor cable

E2: for sensor with connector output
A = cable 2 m, M12 straight female connector
B = cable 2 m, M12 angular female connector
C = cable 5 m, M12 straight female connector
D = cable 5 m, M12 angular female connector
E = cable 10 m, M12 straight female connector
F = cable 10 m, M12 angular female connector

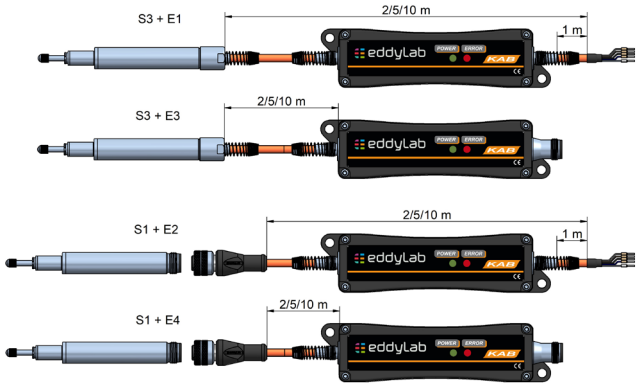
(b) KAB: type of cable / cable length

E3: for sensor with cable output
M12 = KAB integrated in sensor cable, M12 connector

E4: for sensor with connector output
M12A = cable 2 m, M12 straight female conn., M12 conn.
M12B = cable 2 m, M12 angular female conn., M12 conn.
M12C = cable 5 m, M12 straight female conn., M12 conn.
M12D = cable 5 m, M12 angular female conn., M12 conn.
M12E = cable 10 m, M12 straight female conn., M12 conn.
M12F = cable 10 m, M12 angular female conn., M12 conn.

possible combinations

- S3+E1: sensor with cable output, KAB integrated in sensor cable
- S3+E3: sensor with cable output, KAB integrated in sensor cable, M12 connector
- S1+E2: sensor with connector output, cable electronics with cable K4PxM
- S1+E4: sensor with connector output, cable electronics with cable K4PxM, M12 connector



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