

Magnetically Coded Sensors
BML-S2C0-Q53L-M624-L0-KA02
Order Code: BML079L

BALLUFF

Functional safety

MTTF (40 °C) 692 a

Interface

Differential signals no
Error signal yes
Interface Digital A/B (HTL)
Reference signal Pole-periodic
Signal sequence A before B = rising

Material

Cable flame-resistant UL94 V0 and IEC 60332/2
Housing material PBT
Material jacket PUR

Mechanical data

Dimension 10 x 25 x 35 mm
Lateral offset (Y) ±4 mm
Mounting part Through-hole 3.5 mm
Pitch max. ±1.0 °
Pole width 10 mm
Procedure direction Lengthwise to tape
Roll max. ±3.0 °
Weight 11 g (excluding cable)
Yaw max. ± 3.0 °

Range/Distance

Edge separation min. 8 µs
Interpolation factor 100
Non-linearity max. ±400 µm (z=1...5 mm, y=±2 mm)
Non-linearity typ. ±550 µm (z=0.01...6.5mm, y=±4mm)
Read distance 0.01...6.5 mm
Repeat accuracy ≤ 100 µm
Resolution 100 µm (edge separation A/B)
Traverse speed max. 9.52 m/s

Wiring Diagrams

Color	Signal
WH	+A
BN	NC
GN	+B
YE	NC
GY	+Z
PK	NC

Color	Signal
BU	GND
RD	V DC
BK	GND Sense
VT	V DC Sense
GY-PK	+Nerror
RD-BU	NC
TR	Shield