



**General attributes**

Approvals / Conformity	CE
	cULus
Basic standard	IEC 60947-5-7 BWN PR 44 IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Polarity reversal protected	Yes
Power indicator	No
Protection Class	II
Short circuit protected	Yes
MTTF	640 a

**Electrical attributes**

Connection type	Connector
Eff. operating voltage Ue DC	24.00 V
Electrical version	DC, direct current
Limit frequency -3dB	500 Hz
Linear range SI max.	5.00 mm
Linear range SI min. [mm]	1.00 mm
Load resistance RL max.	500 Ohm
No-load current max. Io at Ue	10.0 mA
Operating voltage UB max. DC [V]	28.80 V
Operating voltage UB min. DC [V]	10.00 V
Output current at Se	10.00 mA
Output current at SI max.	20.00 mA
Output current at SI min.	0.00 mA
Rated frequency, AC	DC
Rated insulation voltage Ui	250 AC
Ripple max. (% of Ue)	15 %
Slope I	5.00 mA/mm
Switching function	Current falling on approach
Switching output	PNP / Analog

**Mechanical attributes**

Adjustment indicator	Yes
Ambient temperature Ta max.	70 °C
Ambient temperature Ta min.	-10 °C
Connector type	M12x1-S04
Depth	65.0 mm
Diameter d1	M18x1.0
Housing material	Brass
Measuring speed max.	40.0 m/s
Mech. installation condition	Flush (shielded)
Opt. working temperature max.	50 °C
Opt. working temperature min.	10 °C
Rated operating dist. Se	3.00 mm
Repeat acc. R of end value max	3.0 %
Repeat accuracy per BWN	±8.0 µm
Response time	1.0 ms
Sensing face material	PBT
Surface protection	Nickel-plated
Temp. drift max. of span	±5.0 %
Tightening torque	25 Nm

**Remarks**

When used in Balluff clamping holders, Ua may be reduced by max. 10 %  
 With connector, e.g. BKS-S 20-... total length = switch length +18 mm.  
 Values referenced to axial approach of St 37 target. For other materials correction factors are applied.  
 Load resistance RL max. applies to Vs min. 16V.

For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.



