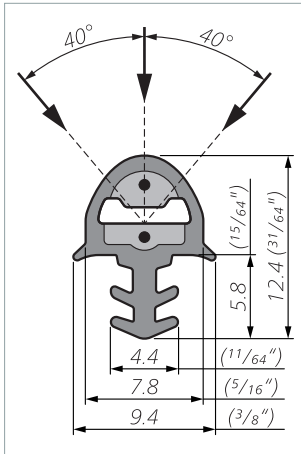




EN | Data sheet

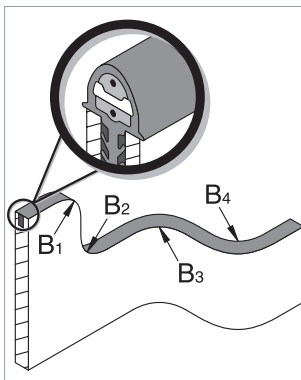
EKS 052 TPE



Dimensions in millimetres (mm)

Dimensional tolerances according to ISO 3302 E2/L2

Bend radii:



Miniature safety edge (without control unit)		EKS/W8k2 052 TPE or EKS/BK 052 TPE	
Testing basis		In accordance with ISO 13856-2	
Sensor colour		Black, window grey (RAL 7040) or light grey (RAL 7035)	
Switching characteristics at $v_{\text{test}} = 50 \text{ mm/min}$ (2 in/min)			
Switching operations		10,000	
Actuation force		+23 °C (+73.4 °F)	–25 °C (–13 °F)
Test piece (rod) Ø 4 mm ($5/32''$)		< 25 N (5.6 lbf)	< 30 N (6.7 lbf)
Test piece (rod) Ø 200 mm ($7\frac{7}{8}''$)		< 40 N (9.0 lbf)	< 50 N (11.2 lbf)
Actuation distance		< 2.0 mm ($5/64''$)	
Actuation angle		±40°	
Test piece (cylinder) Ø 80 mm ($3\frac{5}{32}''$)		±40°	
Finger detection		Yes	
Safety classifications			
ISO 13849-1: B _{10D}		2× 10 ⁶	
Mechanical operating conditions			
Sensor length (min. max.)		10 cm 45 m (4" 147')	
Cable length (min. max.)		10 cm 30 m (4" 98')	
Fixing method		Clamp foot	
Groove width for clamp foot		3.7 ±0.4 mm ($9/64''$)	
Bend radii, minimum		120 150 20 20 mm (4 $23/32''$ 5 $29/32''$ $25/32''$ $25/32''$)	
B ₁ B ₂ B ₃ B ₄		600 N (134 lbf)	
Maximum load (impulse)		60 N (13 lbf)	
Tensile load, cable (max.)		IP67	
IEC 60529: degree of protection		–25 to +80 °C (–13 to +176 °F)	
Operating temperature		–40 to +100 °C (–40 to +212 °F)	
Short-term (15 min)		–40 to +80 °C (–40 to +176 °F)	
Storage temperature		54 g/m (0.5806 oz/ft)	
Weight			
Electrical operating conditions			
Terminal resistance (±1%)		8k2	
Nominal output (max.)		250 mW	
Resistance: sensor activated		< 400 ohms	
Number of /BK-type sensors		Max. 5 in series	
Switching voltage (max.)		DC 24 V	
Switching current (min. max.)		1 10 mA	
Connection cable		Ø 3.7 mm TPE 2× 0.22 mm ² (Ø $9/64''$ TPE 2× AWG24)	

Physical resistance

	TPE
IEC 60529: degree of protection	IP67
UV resistance	Yes
DIN 75200: burning rate	40 mm/min (1.6 in/min)

Chemical resistance

Explanation of symbols:

- + = resistant
- ± = resistant to a certain extent
- = not resistant

	TPE
Acetone	–
Formic acid	–
Armor All	+
Car shampoo	+
Petrol	–
Brake fluid	+
Buraton	+
Butanol	–
Sodium hypochlorite	–
Disinfectant 1%	+
Diesel	–
Acetic acid 10%	–
Ethanol	+
Ethyl acetate	–
Ethylene glycol	+
Greases	±
Anti-frost agent	+
Skin cream	+
Incidin	+
Incidin Plus	+
Cooling lubricant	–
Plastic cleaner	+
Lyso FD 10	+
Metal working oil	–
Microbac	+
Microbac forte	+
Minutil	+
Saline solution 5%	+
Spirit (ethyl alcohol)	+
Terralin	+
Centring oil	–

All tests were carried out at room temperature (+23 °C (+73.4 °F)).