



Safety sensor 165

The 165 series stainless steel safety sensors are flexible in use thanks to their robust housing design.

The polished stainless steel housing, high IP69K protection class and the high temperature resistance of up to +80 °C make this ideal for use in hygienic or wet areas of a machine or system. Almost unrivalled robustness!

Technical specifications

- Food-safe cable allows installation in the process zone
- Simple diagnosis through optional control contact
- IP6K9K protection class (DIN 40050-9)

Technical drawing

IMAGE 1/3

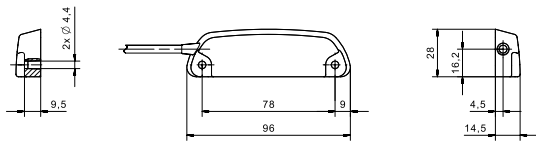


IMAGE 2/3

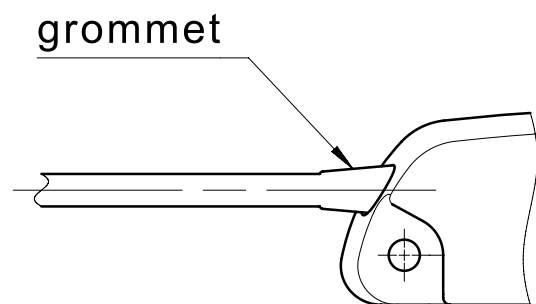
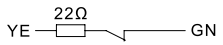
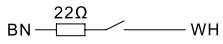
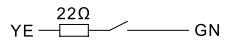
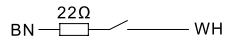


IMAGE 3/3

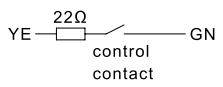
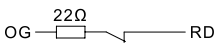
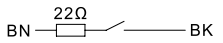
165270VL



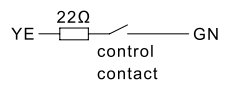
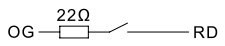
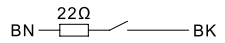
165V62VL



165570V, 165570VL



165562V, 165562VL



Electrical data

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Min. switching voltage	19.2 V DC					
Max. switching voltage	28.8 V DC					
Max. switching current	0.1 A					
Max. switching power	3 W					
Switching frequency	5 Hz					
Assured switching distance (Sao)	4 mm		5 mm		4 mm	
Assured switch-off distance (Sar)	16 mm				17 mm	
Minimum switching distance (SO min)	0.5 mm					
LED display	No					
Actuation	front					
Switching principle	magnetic					
Series resistor	22 Ohm					
Technology	Reed					
Contact form	NO/NO	NO/NC	NO/NO/NO (Kontrollkontakt)		NO/NC/NO (Kontrollkontakt)	
Pollution degree	3					
Protection class	III					

Safety-related characteristics

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Coding acc. to EN ISO 14119	Low					
B10d acc. to EN ISO 13849-1	20000000					
Type acc. to EN ISO 14119	4					
Mission time in years	20 a					
Structure acc. to EN ISO 13849-1	Two-channel					

Mechanical data

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Housing design	rectangular					
Dimensions	28 x 96 x 14,5 mm					
Minimum installation distance (between two sensors)	50 mm					
cannot be mounted flush	yes					
Detent present	no					

Material information

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Housing material	Edelstahl					
Cable material	PVC					
Housing colour	silber					

Environmental conditions

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Protection class	IP69K DIN 40050-9 - IP67 EN 60529					
Operating temperature min.	-25 °C					
Max. operating temperature	80 °C		105 °C	80 °C	105 °C	80 °C
Min. cable temperature range, moving	-20 °C		-10 °C	-20 °C	-10 °C	-20 °C
Max. cable temperature range, moving	80 °C		105 °C	80 °C	105 °C	80 °C
Min. cable temperature range, fixed installation	-20 °C		-30 °C	-20 °C	-30 °C	-20 °C
Max. cable temperature range, fixed installation	80 °C		105 °C	80 °C	105 °C	80 °C
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	80 °C		105 °C	80 °C	105 °C	80 °C

Installation

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Mounting type	screwed					
Installation	arbitrary					
Torque for fastening screws	5 N m					
Weight	140 g				145 g	

Connection

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Cable length	1 m					
Number of strands	4		6			
Wire cross section	0.25 mm ²		0.22 mm ²	0.25 mm ²	0.22 mm ²	0.25 mm ²
Cable type	LiYY 4x0,25		LiYY 6x0,23	LiYY 6x0,25	LiYY 6x0,23	LiYY 6x0,25
Cable colour	grau		schwarz			

Approvals

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
CE label	yes					
Certified in accordance with	FDA (Kabel)		CE	FDA (Kabel)	CE	FDA (Kabel)

Operating data

Attribute	165V62VL	165270VL	165562V	165562VL	165570V	165570VL
Possible actuators	30426112V					