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Safety sensor 165

Safety doors, bonnets or covers can be safely monitored with the non-contact and therefore wear-free sensors in combination with the matching elobau safety evaluation unit. The magnetic safety sensors are particularly convincing for monitoring safety doors on food processing machines due to their concealed installation behind stainless steel.

The high number of variants at elobau offers solutions for almost all applications.

Technical specifications

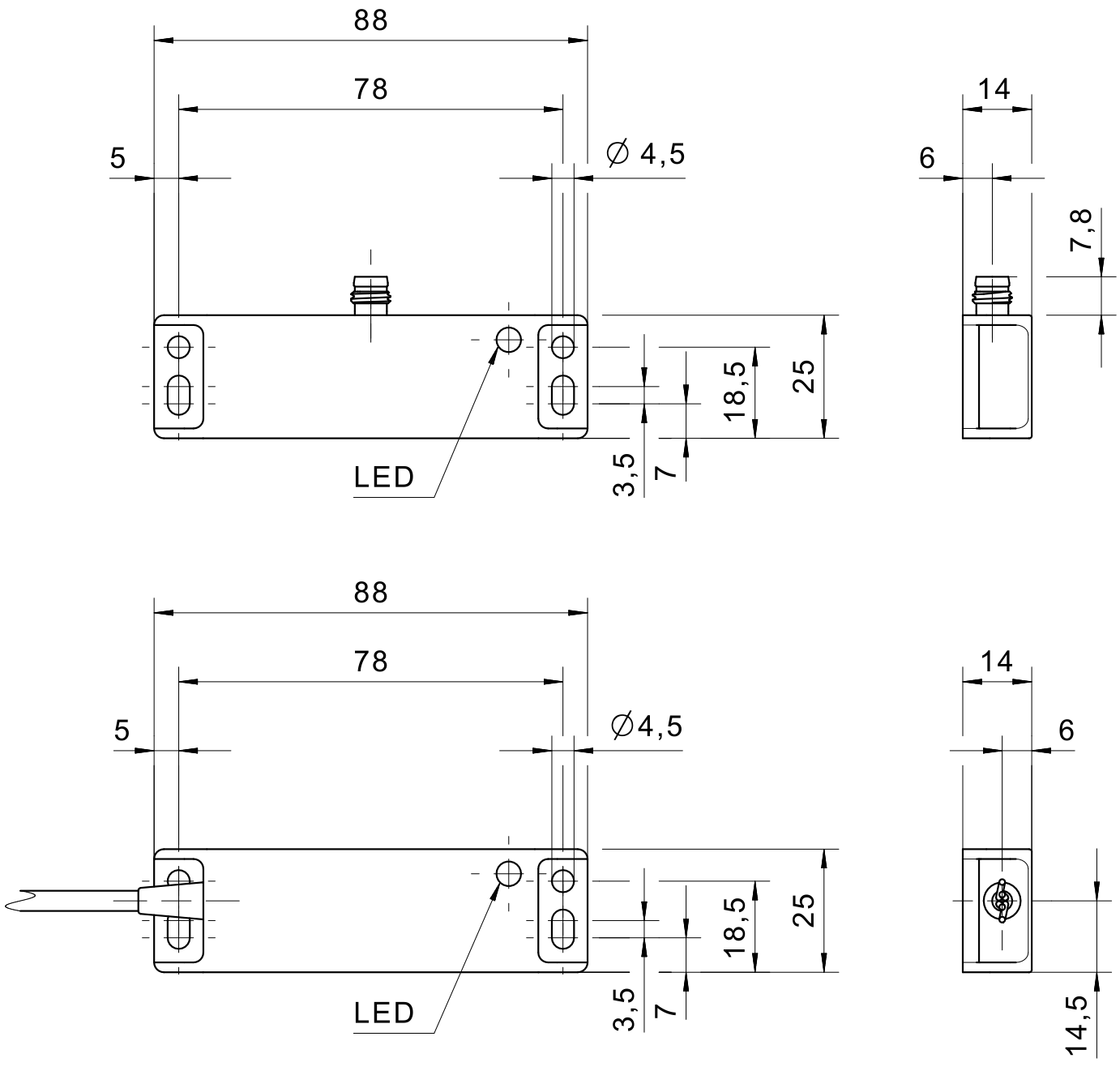
- Sensors can be combined with different actuators (standard or amplified) can be combined for switching distance to suit the application
- Variable connection through cable outlet and M8 housing connector
- Simple diagnosis through optional LED and control contact
- Oblong holes allow easy alignment

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Technical drawing

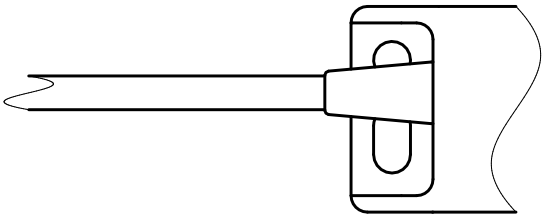
IMAGE 1/3

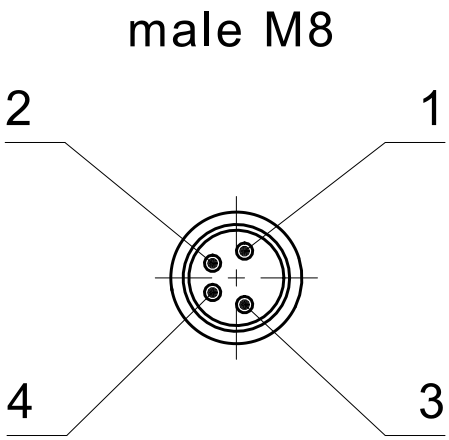


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IMAGE 2/3



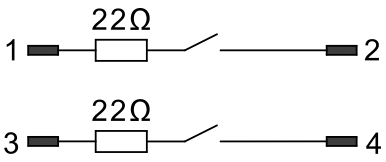


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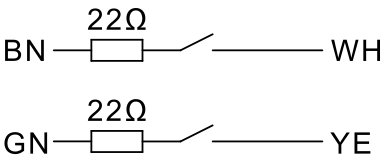
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IMAGE 3/3

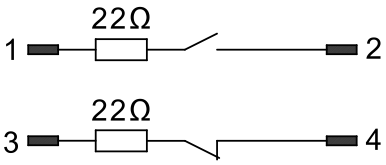
165V62A0D



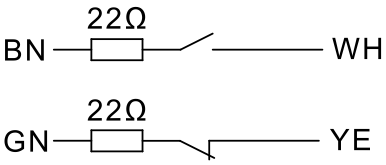
165262GS, 165V62



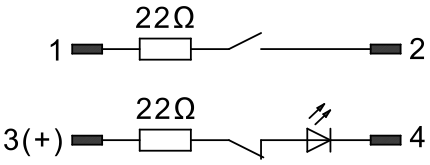
165270A0D



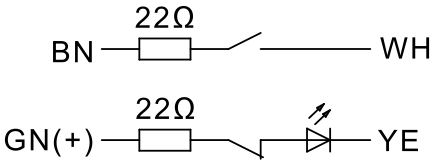
165270



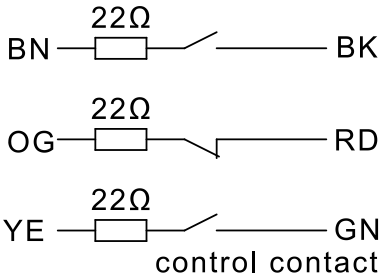
165270A0E



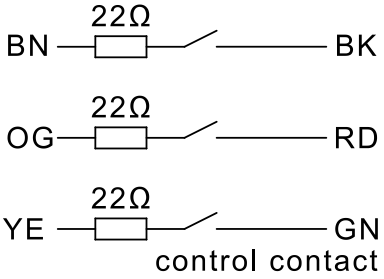
165270AA



165570



165562

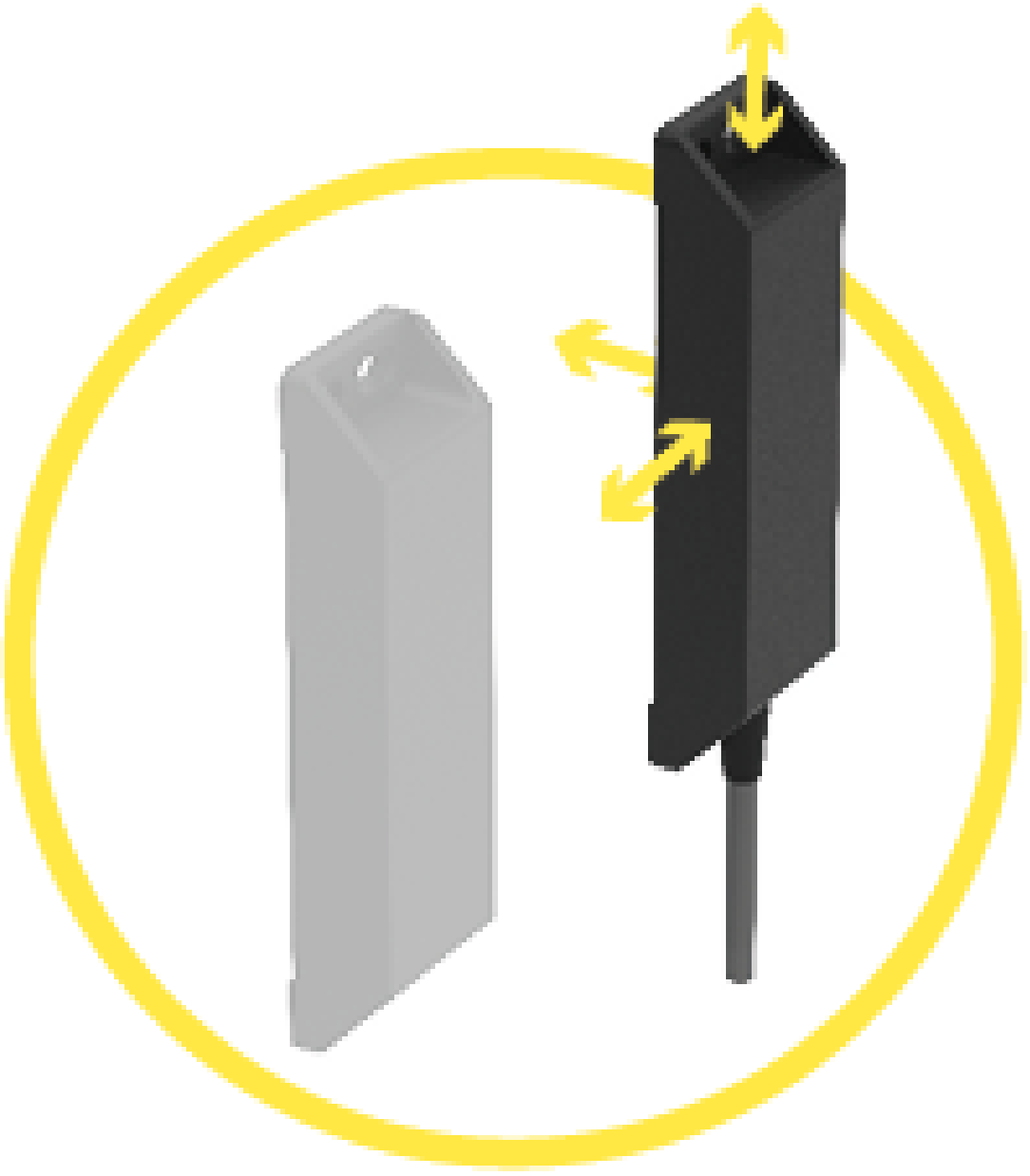


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Product options

IMAGE 1/3



Suitable for front, side and 90° actuation. Operating distance (Sao) from 4 to 7 mm. Assured switch-off distance (Sar) from 16 to 23 mm.

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IMAGE 2/3

MATCHING ACTUATORS

Actuators	Actuation direction	165V62...			165270...			165562			165570		
		SO_{min}	S_{ao}	S_{ar}	SO_{min}	S_{ao}	S_{ar}	SO_{min}	S_{ao}	S_{ar}	SO_{min}	S_{ao}	S_{ar}
30426112	front	0,5	4	16	0,5	4	16	0,5	5	16	0,5	4	17
30426112S		3	7	18	3	7	23	0,5	7	20	0,5	6	21

SO_{min} = minimum switching distance (mm), S_{ao} = operating distance (mm), S_{ar} = assured switch-off distance (mm)

IMAGE 3/3

ORDERING KEY

	165V62	165V62A0D 165270A0E	165270	165270AA
M8× connector, 4-pin		x		
Connection cable 1m*	x		x	x
N.O./N.O. contacts	x	x		
N.O./N.C. contacts			x	x
Additional N.O. control contact				
LED in series to N.C.				x
Coded	x	x	x	x
Uncoded				

	165270A0D	165570	165562
M8× connector, 4-pin	x		
Connection cable 1m*		x	x
N.O./N.O. contacts			x
N.O./N.C. contacts	x	x	
Additional N.O. control contact		x	x
LED in series to N.C.			
Coded	x	x	x
Uncoded			

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Article characteristics

Attribute	165270	165270A0D	165270AA	165270A0E	165V62	165V62A0D
Housing colour	schwarz					
Cable type	LiYY 4x0,25	-	LiYY 4x0,25	-	LiYY 4x0,25	-
Cable colour	grau	-	grau	-	grau	-
Detent present	no					
Installation	arbitrary					
Certified in accordance with	ETL					
CE label	yes					
Contact form	NO/NC				NO/NO	
Min. switching voltage	-					
Max. switching voltage	28.8 V DC					
Max. switching current	0.1 A		0.02 A		0.1 A	
Max. switching power	-					
Switching frequency	5 Hz					
Assured switching distance (Sao)	2.5 mm		3 mm			
Assured switch-off distance (Sar)	16 mm		17 mm		16 mm	
Minimum switching distance (S0 min)	0.5 mm					
LED display	No		single-coloured		No	
Actuation	front		side	front	see technical drawing	
Switching principle	magnetic					
Series resistor	22 Ohm		-	22 Ohm		
Technology	Reed					
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					
Housing design	cuboid				rectangular	
Dimensions	88x25x14					
Free zone	-				20 mm	

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Attribute	165270	165270A0D	165270AA	165270A0E	165V62	165V62A0D
Minimum installation distance (between two sensors)	50 mm					
cannot be mounted flush	no					
Housing material	PBT					
Cable material	PVC	–	PVC	–	PVC	–
Protection class	IP67 DIN EN 60529		IP67 / IP69K DIN EN 60529	IP67 DIN EN 60529		
Protection class, connector	–					IP65 DIN EN 60529
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-5 °C	–	-5 °C	–	-5 °C	–
Max. cable temperature range, moving	70 °C	–	70 °C	–	70 °C	–
Min. cable temperature range, fixed installation	-25 °C	–	-25 °C	–	-25 °C	–
Max. cable temperature range, fixed installation	70 °C	–	70 °C	–	70 °C	–
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C					
Mounting type	screwed					
Weight	63 g					–
Torque for fastening screws	2 N m					
Connector type	–	M8x1 4-polig	–	M8x1 4-polig	–	M8x1 4-polig
Cable length	1 m	–	1 m	–	1 m	–
Number of strands	4	–	4	–	4	–
Wire cross section	0.25 mm²	–	0.25 mm²	–	0.25 mm²	–
Possible actuators	30426112 / 30426192 (30426112S)	30426112	30426112 / 30426192 (30426112S)	30426112 / 30426112S	30426112 / 30426192 (30426112S)	

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Attribute	165570	165562	165V62A0DPC	165V62PC	165270A0DPC	165270PC
Housing colour	schwarz		Gelb			
Cable type	LiYY 6x0,23		-	LiYY 4x0,25	-	LiYY 4x0,25
Cable colour	schwarz		-	grau	-	grau
Detent present	no					
Installation	arbitrary					
Certified in accordance with	CE		CE ETL			
CE label	yes					
Contact form	NO/NC/NO (Kontrollkontakt)	-	NO/NO		NO/NC	
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	2.5 mm			
Assured switch-off distance (Sar)	17 mm	16 mm				
Minimum switching distance (S0 min)	0.5 mm					
LED display	No	single-coloured	No			
Actuation	side		see technical drawing		front	
Switching principle	magnetic					
Series resistor	22 Ohm					
Technology	Reed					
Coding acc. to EN ISO 14119	Low					
B10d acc. to EN ISO 13849-1	20000000					
Type acc. to EN ISO 14119	4	-	4			
Mission time in years	20 a					
Structure acc. to EN ISO 13849-1	Two-channel					
Housing design	rectangular				cuboid	
Dimensions	88x25x14					
Free zone	-		20 mm		-	
Minimum installation distance (between two sensors)	50 mm					

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Attribute	165570	165562	165V62A0DPC	165V62PC	165270A0DPC	165270PC
cannot be mounted flush	no					
Housing material	PBT					
Cable material	PVC		–	PVC	–	PVC
Protection class	IP67 DIN EN 60529	IP67 / IP69K DIN EN 60529	IP67 DIN EN 60529			
Protection class, connector	–					
Operating temperature min.	-25 °C	–	-25 °C			
Max. operating temperature	100 °C	–	55 °C		75 °C	
Min. cable temperature range, moving	-10 °C		–	-5 °C	–	-5 °C
Max. cable temperature range, moving	105 °C		–	70 °C	–	70 °C
Min. cable temperature range, fixed installation	-30 °C		–	-25 °C	–	-25 °C
Max. cable temperature range, fixed installation	105 °C		–	70 °C	–	70 °C
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	100 °C		75 °C			
Mounting type	screwed	Latching detent	screwed			
Weight	76 g		–	63 g		
Torque for fastening screws	2 N m					
Connector type	–		M8x1 4-polig	–	M8x1 4-polig	–
Cable length	1 m		–	1 m	–	1 m
Number of strands	6		–	4	–	4
Wire cross section	0.23 mm²		–	0.25 mm²	–	0.25 mm²
Possible actuators	30426112 / 30426192 (30426112S)		30426112PC / 30426112SPC			