



Safety sensor 120

The M18 safety sensor is used in food and packaging machines and has a high switching distance of up to 35 mm.

Technical specifications

- Available connection types: cable outlet and M12 pigtail
- Large switching distances enable concealed installation
- Application-dependent combination of sensor and actuator (e.g. sensor concealed behind stainless steel, actuator in stainless-steel housing in process zone)

Technical drawing

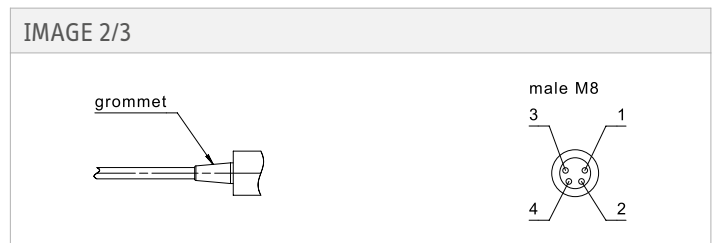
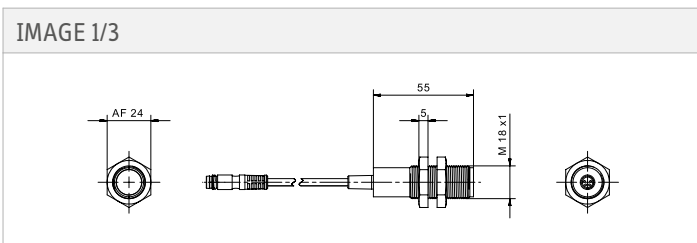
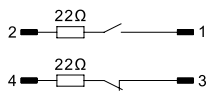
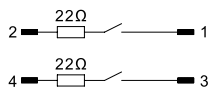


IMAGE 3/3

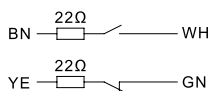
12027108, 12027210



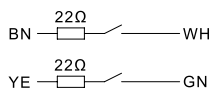
120V6201



120271



120V62



Electrical data

Attribute	120V62	120V6201	120271	12027108	120272	12027210
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		13 mm		4 mm	
Assured switch-off distance (Sar)	18 mm		35 mm		22 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			
Pollution degree	3					
Protection class	III					

Safety-related characteristics

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Coding acc. to EN ISO 14119	Low					
B10d acc. to EN ISO 13849-1	20000000					
Type acc. to EN ISO 14119	4		3		4	
Mission time in years	20 a					
Structure acc. to EN ISO 13849-1	Two-channel					

Mechanical data

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Housing design	cylindrical					
Dimensions	M18 x 55 mm					
cannot be mounted flush	yes					
Detent present	no					

Material information

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Housing material	PBT					
Cable material	PVC					
Nut material	PBT					
Housing colour	schwarz					

Environmental conditions

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Protection class	IP67 DIN EN 60529					
Protection class, connector	-	IP67 DIN EN 60529 (geschraubt) - IP65 DIN EN 60529 (gesteckt)	-	IP67 DIN EN 60529 (geschraubt) - IP65 DIN EN 60529 (gesteckt)	-	IP67 DIN EN 60529 (geschraubt) - IP65 DIN EN 60529 (gesteckt)
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-5 °C	-25 °C	-5 °C	-25 °C	-5 °C	-25 °C
Max. cable temperature range, moving	70 °C	90 °C	70 °C	90 °C	70 °C	90 °C
Min. cable temperature range, fixed installation	-25 °C					
Max. cable temperature range, fixed installation	70 °C	90 °C	70 °C	90 °C	70 °C	90 °C
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C					

Installation

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Mounting type	Fastening nut					
Thread	M18					
Weight	-		48 g		-	

Connection

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Connector type	-	M8x1 - 4 polig	-	M8x1 - 4 polig	-	M8x1 - 4 polig
Cable length	1 m	0.1 m	1 m	0.1 m	1 m	0.1 m
Number of strands	4					
Wire cross section	0.25 mm ²					
Cable colour	-		beige		-	
Cable type	-		Oelflex 4x0,25		-	

Approvals

Attribute	120V62	120V6201	120271	12027108	120272	12027210
CE label	yes				no	yes
Certified in accordance with	ETL		-		ETL	-

Operating data

Attribute	120V62	120V6201	120271	12027108	120272	12027210
Possible actuators	30420000		300785		30420000	