



Safety sensor 120

The use of M18 stainless steel housing with a corresponding hygienic magnet enables the sensor to be used in a large number of industrial applications such as the food processing industry.

Technical specifications

- Protection class IP6K9K, ideal for wash down applications
- Available connection types: cable outlet or 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 1/3

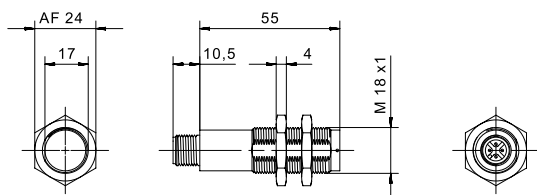


IMAGE 2/3

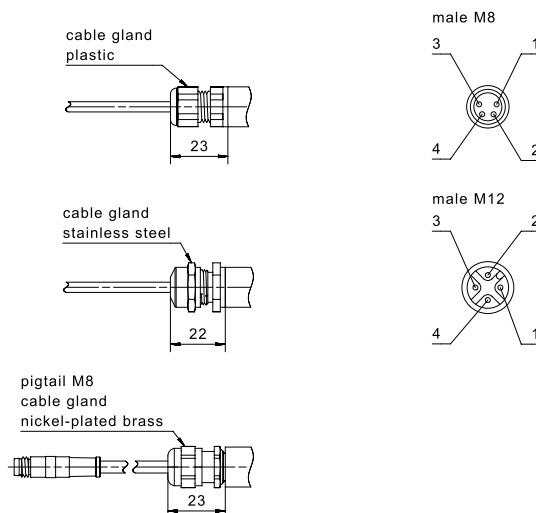
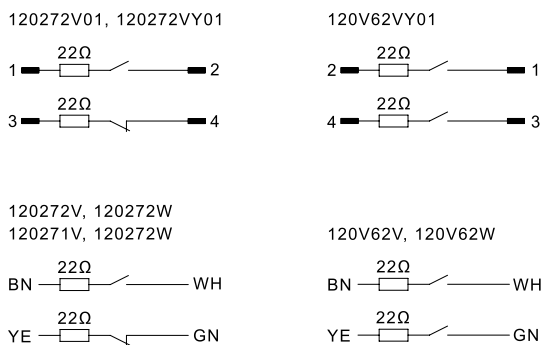


IMAGE 3/3



Electrical data

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
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 (S0 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					

Electrical data

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LED display	No		
Actuation	front		
Switching principle	magnetic		
Series resistor	22 Ohm		
Technology	Reed		
Contact form	NO/NC		
Pollution degree	3		
Protection class	III		

Safety-related characteristics

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
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					

Safety-related characteristics

Attribute	120272VY01	120272V01	120272W
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	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Housing design	cylindrical					
Dimensions	M18 x 57 mm	M18 x 55mm	M18 x 57 mm			
cannot be mounted flush	yes					
Detent present	no					

Mechanical data

Attribute	120272VY01	120272V01	120272W
Housing design	cylindrical		
Dimensions	M18 x 55 mm	M18 x 57 mm	
cannot be mounted flush	yes		
Detent present	no		

Material information

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Housing material	Edelstahl , Kabelverschraubung Kunststoff	Edelstahl	Edelstahl , Kabelverschraubung Edelstahl	Edelstahl , Kabelverschraubung Kunststoff	Edelstahl , Kabelverschraubung Edelstahl	Edelstahl , Kabelverschraubung Kunststoff
Cable material	PVC	–	PVC	PUR		
Nut material	Edelstahl					
Cable type	–			LIY11Y		
Housing colour	silber					

Material information

Attribute	120272VY01	120272V01	120272W
Housing material	Edelstahl	Edelstahl , Kabelverschraubung Messing vernickelt	Edelstahl , Kabelverschraubung Edelstahl
Cable material	-	PVC	PUR
Nut material	Edelstahl		
Cable type	-		
Housing colour	silber		

Environmental conditions

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Protection class	IP69K DIN 40050-9 - IP68 5bar DIN EN 60529	IP69K DIN 40050-9 - IP68 1bar DIN EN 60529	IP69K DIN 40050-9 - IP68 5bar DIN EN 60529			
Protection class, connector	–	IP67 DIN EN 60529	–			
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-5 °C	–	-5 °C			
Max. cable temperature range, moving	70 °C	–	70 °C	80 °C		
Min. cable temperature range, fixed installation	-25 °C	–	-25 °C	-20 °C		
Max. cable temperature range, fixed installation	70 °C	–	70 °C	80 °C		
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C					

Environmental conditions

Attribute	120272VY01	120272V01	120272W
Protection class	IP69K DIN 40050-9 - IP68 1bar DIN EN 60529	IP67 DIN EN 60529	IP69K DIN 40050-9 - IP68 5bar DIN EN 60529
Protection class, connector	IP67 DIN EN 60529		-
Operating temperature min.	-25 °C		
Max. operating temperature	75 °C		
Min. cable temperature range, moving	-	-25 °C	-5 °C
Max. cable temperature range, moving	-	90 °C	80 °C
Min. cable temperature range, fixed installation	-	-25 °C	-20 °C
Max. cable temperature range, fixed installation	-	90 °C	80 °C
Shock resistance (Norm)	30g / 11ms		
Vibration resistance (Norm)	10 - 55Hz		
Min. storage temperature	-25 °C		
Max. storage temperature	75 °C		

Installation

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Mounting type	Fastening nut					
Thread	M18					
Weight	-		48 g		-	

Installation

Attribute	120272VY01	120272V01	120272W
Mounting type	Fastening nut		
Thread	M18		
Weight	-		

Connection

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Connector type	-	M12x1 - 4 polig	-			
Cable length	1 m	-	1 m			
Number of strands	4	-	4			
Wire cross section	0.25 mm ²	-	0.25 mm ²			
Cable colour	-			beige	-	

Connection

Attribute	120272VY01	120272V01	120272W
Connector type	M8x1 - 4 polig		-
Cable length	-	0.1 m	1 m
Number of strands	-	4	
Wire cross section	-	0.25 mm^2	
Cable colour	-		

Approvals

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Certified in accordance with	-					ETL
CE label	yes					

Approvals

Attribute	120272VY01	120272V01	120272W
Certified in accordance with	-	UL / CSA	-
CE label	yes		

Operating data

Attribute	120V62V	120V62VY01	120V62W	120271V	120271W	120272V ▶
Possible actuators	30420000			300785		30420000

Operating data

Attribute	120272VY01	120272V01	120272W
Possible actuators	30420000		