



Safety sensor 120VA

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

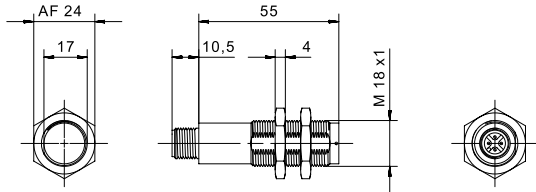


IMAGE 2/3

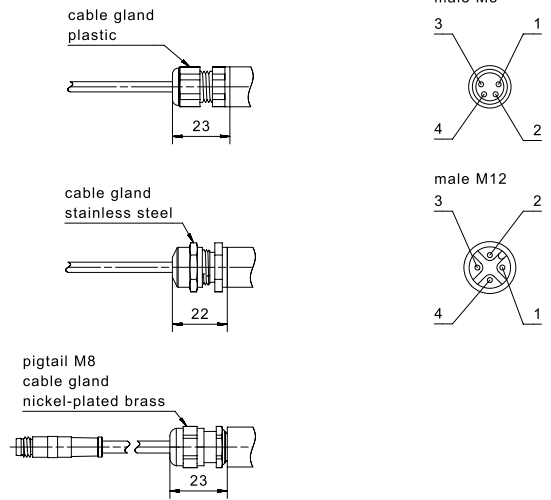
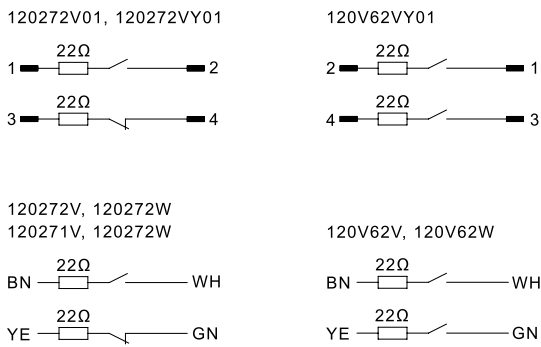


IMAGE 3/3



Product options

IMAGE 1/3



Suitable for front actuation. Assured switching distance (Sao) of up to 13 mm with standard actuators, up to 7 mm with extended-range actuators. Assured switch-off distance (Sar) of up to 35 mm with standard actuators, up to 23 mm with extended-range actuators.

IMAGE 2/3

ORDERING KEY

	120W2V	120W2VY01	120W2W	120Z2V	120Z2VY01
Stainless steel housing M18	x	x	x	x	x
Plastic cable gland	-	-	-	x	-
Nickel-plated brass cable gland	-	-	-	-	-
Stainless steel cable gland	-	-	x	-	-
M8x1 pigtail and connector, 4-pin	-	-	-	-	-
M12x1 housing connector, 4-pin	x	-	-	-	x
Connection cable 1m*	-	-	x	x	-
N.O./N.C. contacts	-	x	x	-	-
N.O./N.C. contacts	-	-	-	x	x
Coded	x	x	x	x	x
Uncoded	-	-	-	-	-

	120Z2VY01	120Z2W	120Z1V	120Z1W
Stainless steel housing M18	x	x	x	x
Plastic cable gland	-	-	x	-
Nickel-plated brass cable gland	x	-	-	-
Stainless steel cable gland	-	x	-	x
M8x1 pigtail and connector, 4-pin	x	-	-	-
M12x1 housing connector, 4-pin	-	-	-	-
Connection cable 1m*	-	x	x	x
N.O./N.C. contacts	-	-	-	-
N.O./N.C. contacts	x	x	x	x
Coded	x	x	-	-
Uncoded	-	-	x	x

* Other cable lengths, cable materials and connector types on request

IMAGE 3/3

MATCHING ACTUATORS

Actuators	Actuation direction	120W2V			120W2VY01			120W2W			120Z2V			120Z2VY01		
		S ₀	S ₁	S ₂	S ₀	S ₁	S ₂	S ₀	S ₁	S ₂	S ₀	S ₁	S ₂	S ₀	S ₁	S ₂
304 200 00	Front	0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18
304 200 00 V		0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18
304 200 00 H		0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18	0.5	4	18
304 200 00 S		3	7	20	3	7	20	3	7	20	3	7	20	3	7	20
304 200 00 VS		3	7	20	3	7	20	3	7	20	3	7	20	3	7	20
304 200 00 SH		3	7	20	3	7	20	3	7	20	3	7	20	3	7	20
300 785		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300 785 V		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300 785 VH		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Actuators	Actuation direction	120W2V			120W2VY01			120W2W			120Z2V		
		S ₀	S ₁	S ₂	S ₀	S ₁	S ₂	S ₀	S ₁	S ₂	S ₀	S ₁	S ₂
304 200 00	Front	0.5	4	18	0.5	4	18	-	-	-	-	-	-
304 200 00 V		0.5	4	18	0.5	4	18	-	-	-	-	-	-
304 200 00 H		0.5	4	18	0.5	4	18	-	-	-	-	-	-
304 200 00 S		3	7	20	3	7	20	-	-	-	-	-	-
304 200 00 VS		3	7	20	3	7	20	-	-	-	-	-	-
304 200 00 SH		3	7	20	3	7	20	-	-	-	-	-	-
300 785		-	-	-	-	-	-	0.5	13	35	0.5	13	35
300 785 V		-	-	-	-	-	-	0.5	13	35	0.5	13	35
300 785 VH		-	-	-	-	-	-	0.5	13	35	0.5	13	35

S₀ = minimum switching distance (mm), S₁ = operating distance (mm), S₂ = assured switch-off distance (mm)

Electrical data

Attribute	120V62VY01	120272VY01
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	
Assured switch-off distance (Sar)	18 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	120V62VY01	120272VY01
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	120V62VY01	120272VY01
Housing design	cylindrical	
Dimensions	M18 x 55mm	M18 x 55 mm
cannot be mounted flush	yes	
Detent present	no	

Material information

Attribute	120V62VY01	120272VY01
Housing material	Edelstahl	
Nut material	Edelstahl	
Housing colour	silber	

Environmental conditions

Attribute	120V62VY01	120272VY01
Protection class	IP69K DIN 40050-9 - IP68 1bar DIN EN 60529	
Protection class, connector	IP67 DIN EN 60529	
Operating temperature min.	-25 °C	
Max. operating temperature	75 °C	
Shock resistance (Norm)	30g / 11ms	
Vibration resistance (Norm)	10 - 55Hz	
Min. storage temperature	-25 °C	
Max. storage temperature	75 °C	

Installation

Attribute	120V62VY01	120272VY01
Mounting type	Fastening nut	
Thread	M18	

Connection

Attribute	120V62VY01	120272VY01
Connector type	M12x1 - 4 polig	M8x1 - 4 polig

Approvals

Attribute	120V62VY01	120272VY01
CE label	yes	

Operating data

Attribute	120V62VY01	120272VY01
Possible actuators	30420000	