



## 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

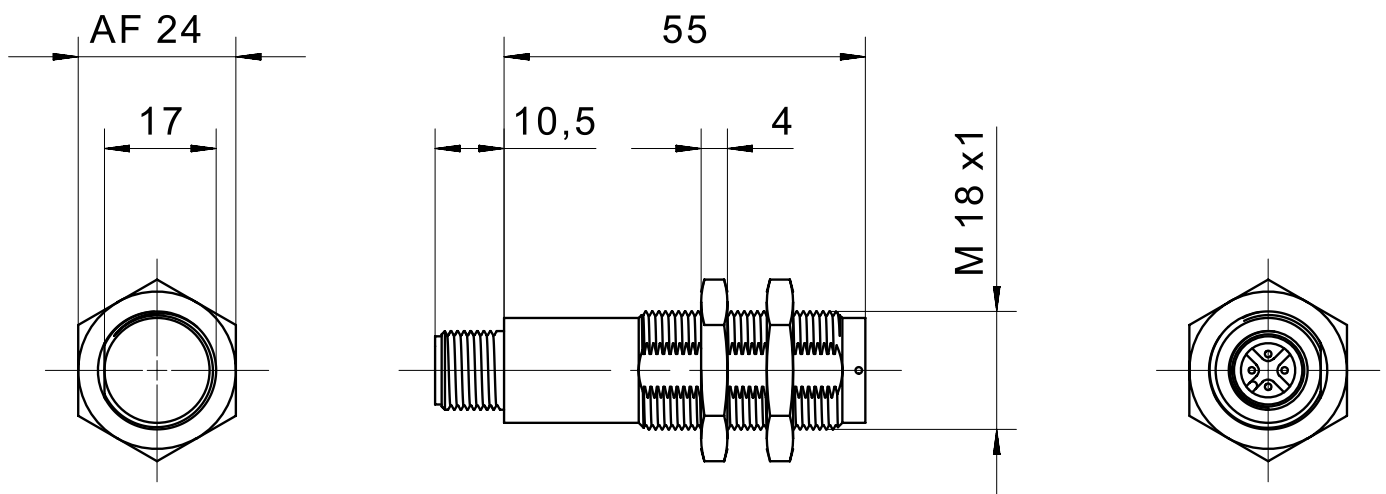
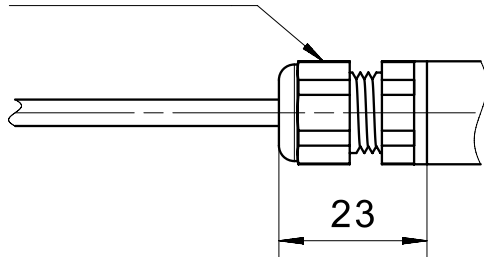
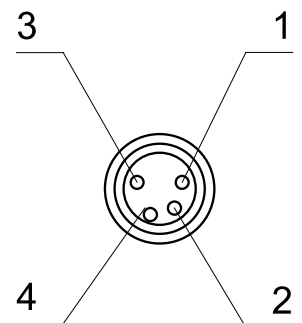


IMAGE 2/3

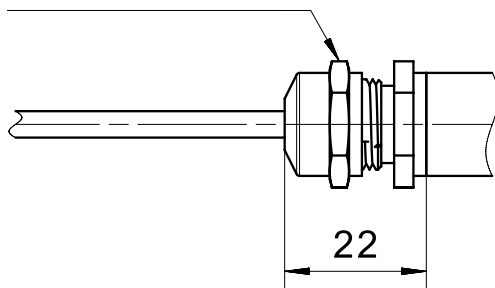
cable gland  
plastic



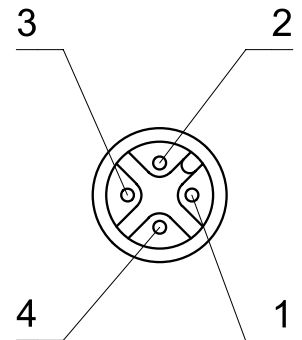
male M8



cable gland  
stainless steel



male M12



pigtail M8  
cable gland  
nickel-plated brass

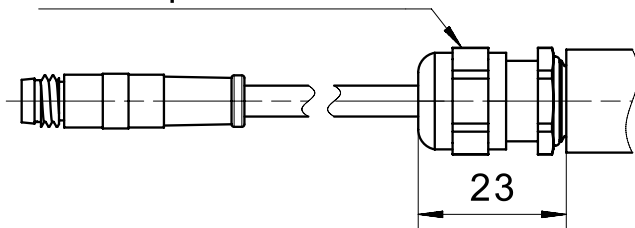
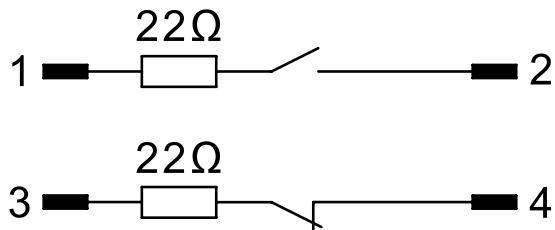
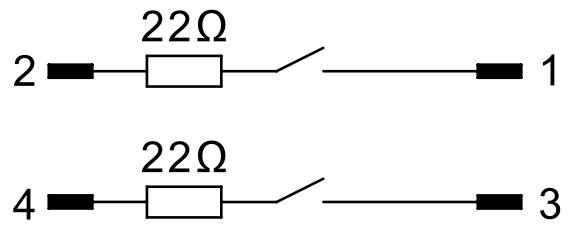


IMAGE 3/3

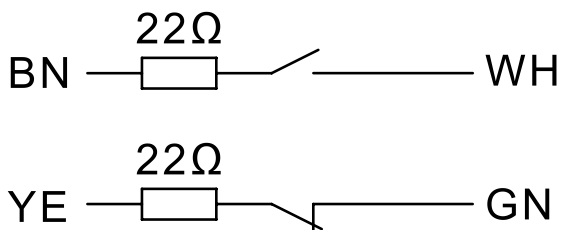
120272V01, 120272VY01



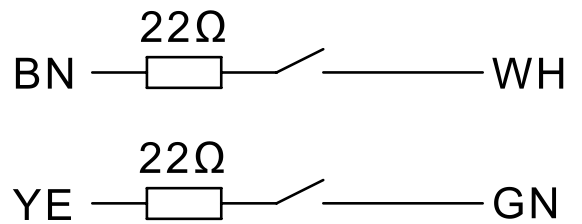
120V62VY01



120272V, 120272W  
120271V, 120272W



120V62V, 120V62W



## 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

|  | 120V62V | 120V62VY01 | 120V62W | 120272V | 120272VY01 |
|--|---------|------------|---------|---------|------------|
| <b>Stainless steel housing M18</b>       | X       | X          | X       | X       | X          |
| <b>Plastic cable gland</b>               |         | -          | -       | X       | -          |
| <b>Nickel-plated brass cable gland</b>   |         | -          |         | -       | -          |
| <b>Stainless steel cable gland</b>       |         | -          | X       | -       | -          |
| <b>M8x1 pigtail and connector, 4-pin</b> |         | -          | -       | -       | -          |
| <b>M12x1 housing connector, 4-pin</b>    |         | X          | -       | -       | X          |
| <b>Connection cable 1m*</b>              |         | -          | X       | X       | -          |
| <b>N.O./N.O. contacts</b>                |         | X          | X       | -       | -          |
| <b>N.O./N.C. contacts</b>                |         | -          | -       | X       | X          |
| <b>Coded</b>                             |         | X          | X       | X       | X          |
| <b>Uncoded</b>                           |         | -          | -       | -       | -          |

|  | 120272V01 | 120272W | 120271V | 120271W |  |
|--|-----------|---------|---------|---------|--|
| <b>Stainless steel housing M18</b>       | X         | X       | X       | X       |  |
| <b>Plastic cable gland</b>               | -         | -       | X       | -       |  |
| <b>Nickel-plated brass cable gland</b>   | X         | -       | -       | -       |  |
| <b>Stainless steel cable gland</b>       | -         | X       | -       | X       |  |
| <b>M8x1 pigtail and connector, 4-pin</b> | X         | -       | -       | -       |  |
| <b>M12x1 housing connector, 4-pin</b>    | -         | -       | -       | -       |  |
| <b>Connection cable 1m*</b>              | -         | X       | X       | X       |  |
| <b>N.O./N.O. contacts</b>                | -         | -       | -       | -       |  |
| <b>N.O./N.C. contacts</b>                | X         | X       | X       | X       |  |
| <b>Coded</b>                             | X         | X       | -       | -       |  |
| <b>Uncoded</b>                           | -         | -       | X       | X       |  |

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

IMAGE 3/3

## MATCHING ACTUATORS

| Actuators            | Actuation direction | 120V62V            |                 |                 | 120V62VY01         |                 |                 | 120V62W            |                 |                 | 120272V            |                 |                 | 120272VY01         |                 |                 |
|----------------------|---------------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|
|                      |                     | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> |
| <b>304 200 00</b>    | Front               | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              |
| <b>304 200 00 V</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              |
| <b>304 200 00 H</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 18              |
| <b>304 200 00 S</b>  |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              |
| <b>304 200 00 VS</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              |
| <b>304 200 00 SH</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 20              |
| <b>300 785</b>       |                     | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               |
| <b>300 785 V</b>     |                     | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               |
| <b>300 785 VH</b>    |                     | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               |

| Actuators            | Actuation direction | 120V62V            |                 |                 | 120V62VY01         |                 |                 | 120V62W            |                 |                 | 120272V            |                 |                 |  |  |  |
|----------------------|---------------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--|--|--|
|                      |                     | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> | S <sub>0_min</sub> | S <sub>ao</sub> | S <sub>ar</sub> |  |  |  |
| <b>304 200 00</b>    | Front               | 0.5                | 4               | 18              | 0.5                | 4               | 18              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>304 200 00 V</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>304 200 00 H</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>304 200 00 S</b>  |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>304 200 00 VS</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>304 200 00 SH</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | -                  | -               | -               | -                  | -               | -               |  |  |  |
| <b>300 785</b>       |                     | -                  | -               | -               | -                  | -               | -               | 0.5                | 13              | 35              | 0.5                | 13              | 35              |  |  |  |
| <b>300 785 V</b>     |                     | -                  | -               | -               | -                  | -               | -               | 0.5                | 13              | 35              | 0.5                | 13              | 35              |  |  |  |
| <b>300 785 VH</b>    |                     | -                  | -               | -               | -                  | -               | -               | 0.5                | 13              | 35              | 0.5                | 13              | 35              |  |  |  |

S<sub>0\_min</sub> = minimum switching distance (mm), S<sub>ao</sub> = operating distance (mm), S<sub>ar</sub> = assured switch-off distance (mm)

## Article characteristics

| 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 (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  |             |
| 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                      | cylindrical                                |             |
| Dimensions                          | M18 x 55mm                                 | M18 x 55 mm |
| cannot be mounted flush             | yes  |             |
| Detent present                      | no   |             |
| Housing material                    | Edelstahl                                  |             |
| Nut material                        | Edelstahl                                  |             |
| Housing colour                      | silber                                     |             |
| Protection class                    | IP69K DIN 40050-9 - IP68 1bar DIN EN 60529 |             |
| Protection class, connector         | IP67 DIN EN 60529                          |             |
| Operating temperature min.          | -25 °C                                     |             |

#### Article characteristics

| Attribute                   | 120V62VY01      | 120272VY01     |
|-----------------------------|-----------------|----------------|
| 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           |                |
| Mounting type               | Fastening nut   |                |
| Thread                      | M18             |                |
| Connector type              | M12x1 - 4 polig | M8x1 - 4 polig |
| CE label                    | yes             |                |
| Possible actuators          | 30420000        |                |