



## Sensor de segurança 120

O sensor de segurança M18 é amplamente aplicado na indústria de alimentos e embalagens e oferece uma distância de comutação de até 35 mm.

### Especificação Técnica

- Tipos de conectores disponíveis: cabo ou conector pigtail M12
- Grande distância de comutação que permite a instalação oculta
- Combinação de sensor e atuador dependente da aplicação (por exemplo, sensor oculto atrás de aço inoxidável, atuador em caixa de aço inoxidável na área de processo)

### Desenho técnico

IMAGE 1/3

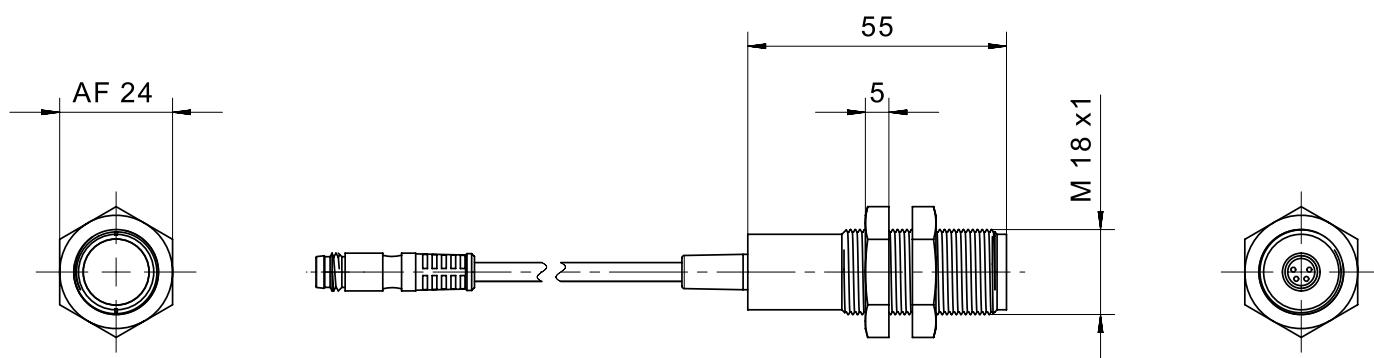


IMAGE 2/3

**grommet**



**male M8**

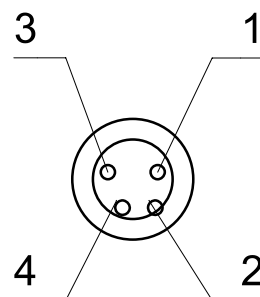
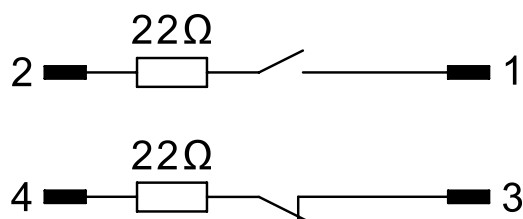
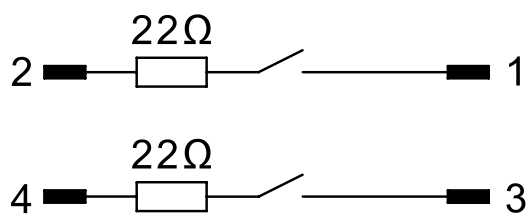


IMAGE 3/3

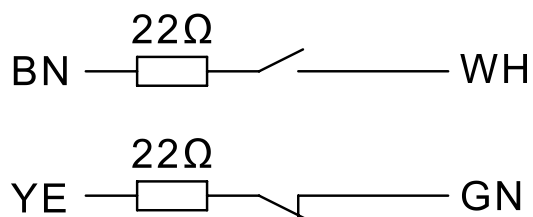
**12027108, 12027210**



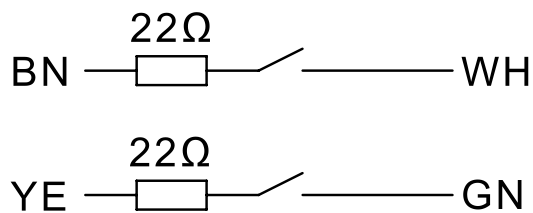
**120V6201**



**120271**



**120V62**



## Product options

IMAGE 1/3



Suitable for front actuation. Offset depending on magnet system: max. 2.5 mm to 8 mm. 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

|  | 120V62 | 120V6201 | 120272 |
|--|--------|----------|--------|
| <b>Plastic housing M18</b>               | X      | X        | X      |
| <b>M8x1 pigtail and connector, 4-pin</b> | -      | 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      |
| <b>Coded</b>                             | X      | X        | X      |
| <b>Uncoded</b>                           | -      | -        | -      |

|  | 12027210 | 120271 | 12027108 |
|--|----------|--------|----------|
| <b>Plastic housing M18</b>               | X        | X      | X        |
| <b>M8x1 pigtail and connector, 4-pin</b> | X        | -      | X        |
| <b>Connection cable 1m*</b>              | -        | X      | -        |
| <b>N.O./N.O. contacts</b>                | -        | -      | -        |
| <b>N.O./N.C. contacts</b>                | X        | X      | X        |
| <b>Coded</b>                             | X        | -      | -        |
| <b>Uncoded</b>                           | -        | X      | X        |

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

IMAGE 3/3

## MATCHING ACTUATORS

| Actuators            | Actuation direction | 120V62             |                 |                 | 120V6201           |                 |                 | 120272             |                 |                 |  |  |
|----------------------|---------------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--|--|
|                      |                     | 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               | 22              |  |  |
| <b>304 200 00 V</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 22              |  |  |
| <b>304 200 00 H</b>  |                     | 0.5                | 4               | 18              | 0.5                | 4               | 18              | 0.5                | 4               | 22              |  |  |
| <b>304 200 00 S</b>  |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 23              |  |  |
| <b>304 200 00 VS</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 23              |  |  |
| <b>304 200 00 SH</b> |                     | 3                  | 7               | 20              | 3                  | 7               | 20              | 3                  | 7               | 23              |  |  |
| <b>300 785</b>       |                     | -                  | -               | -               | -                  | -               | -               | -                  | -               | -               |  |  |

| Actuators            | Actuation direction | 12027210           |                 |                 | 120271             |                 |                 | 12027108           |                 |                 |  |  |
|----------------------|---------------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--------------------|-----------------|-----------------|--|--|
|                      |                     | 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               | 22              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>304 200 00 V</b>  |                     | 0.5                | 4               | 22              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>304 200 00 H</b>  |                     | 0.5                | 4               | 22              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>304 200 00 S</b>  |                     | 3                  | 7               | 23              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>304 200 00 VS</b> |                     | 3                  | 7               | 23              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>304 200 00 SH</b> |                     | 3                  | 7               | 23              | -                  | -               | -               | -                  | -               | -               |  |  |
| <b>300 785</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)

## Características do artigo

| Attribute                           | 120V6201          | 12027108 | 12027210 | 120V62 | 120271 | 120272 |
|-------------------------------------|-------------------|----------|----------|--------|--------|--------|
| 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     |        | 13 mm  | 4 mm   |
| Assured switch-off distance (Sar)   | 18 mm             | 35 mm    | 22 mm    | 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    |          | 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                 | 3        | 4        |        | 3      | 4      |
| Mission time in years               | 20 a              |          |          |        |        |        |
| Structure acc. to EN ISO 13849-1    | Two-channel       |          |          |        |        |        |
| Housing design                      | cylindrical       |          |          |        |        |        |
| Dimensions                          | M18 x 55 mm       |          |          |        |        |        |
| cannot be mounted flush             | yes               |          |          |        |        |        |
| Detent present                      | no                |          |          |        |        |        |
| Housing material                    | PBT               |          |          |        |        |        |
| Cable material                      | PVC               |          |          |        |        |        |
| Nut material                        | PBT               |          |          |        |        |        |
| Housing colour                      | schwarz           |          |          |        |        |        |
| Protection class                    | IP67 DIN EN 60529 |          |          |        |        |        |

## Características do artigo

| Attribute  | 120V6201  | 12027108 | 12027210 | 120V62 | 120271         | 120272   |
|--|---|----------|----------|--------|----------------|----------|
| Protection class, connector                      | IP67 DIN EN 60529 (screwed) - IP65 DIN EN 60529 (plugged) |          |          | -      |                |          |
| 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   |          |          | 70 °C  |                |          |
| Min. cable temperature range, fixed installation | -25 °C  |          |          |        |                |          |
| Max. cable temperature range, fixed installation | 90 °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                                    | Fastening nut   |          |          |        |                |          |
| Thread   | M18   |          |          |        |                |          |
| Weight   | -   |          |          |        | 48 g           | -        |
| Connector type                                   | M8x1 - 4 polig  |          |          | -      |                |          |
| Cable length                                     | 0.1 m   |          |          | 1 m    |                |          |
| Number of strands                                | 4   |          |          |        |                |          |
| Wire cross section                               | 0.25 mm²  |          |          |        |                |          |
| Cable colour                                     | -   |          |          |        | beige          | -        |
| Cable type                                       | -   |          |          |        | Oelflex 4x0,25 | -        |
| CE label   | yes   |          |          |        |                | no       |
| Certified in accordance with                     | -   |          |          | ETL    | -              | ETL      |
| Possible actuators                               | 30420000  | 300785   | 30420000 |        | 300785         | 30420000 |