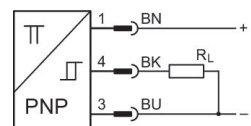


## AVENTICS Series ST6 Magnetic proximity sensors

The AVENTICS Series ST6 sensors are suitable for mounting in the 6 mm T-slot as well as sensor mounting to the cylinder. They are suited for mounting to all AVENTICS round cylinders, tie rod cylinders, and profile cylinders. With their optimized, compact shape, the sensors can be flush-fit into existing slots and integrated into any machine environment, even with sensor mounting. Retaining ribs on the side of the sensor enable simple mounting, including in hard-to-reach locations or for overhead assembly. The durable mounting screw holds the sensor in the desired position and can withstand shocks or vibrations.

- Universal sensors for the standardized 6 mm nut
- Mounting from above in the nut ("drop-in" mounting)
- Wide range of versions with different line lengths and connections
- Combined mounting screw with hexagon socket and slotted screw
- ATEX versions available
- High and low temperature versions available



## Technical data

|                                  |                                                                                         |
|----------------------------------|-----------------------------------------------------------------------------------------|
| Industry                         | Industrial                                                                              |
| Slot width                       | 6 mm T-slot                                                                             |
| Cable                            | with cable                                                                              |
| Switch descr.                    | PNP                                                                                     |
| Min. operating voltage DC        | 10 V DC                                                                                 |
| Max. operating voltage DC        | 30 V DC                                                                                 |
| Quiescent current (without load) | < 10 mA                                                                                 |
| Certificates                     | ATEX<br>CE declaration of conformity<br>cULus<br>RoHS<br>UL (Underwriters Laboratories) |
| ATEX ID                          | ATEX                                                                                    |
| ATEX class G                     | II 3G Ex nA IIC T4 Gc X                                                                 |
| ATEX class D                     | II 3D Ex tc IIIC T135°C Dc X                                                            |
| Protection class                 | IP65<br>IP67                                                                            |
| Min. ambient temperature         | -20 °C                                                                                  |
| Max. ambient temperature         | 50 °C                                                                                   |

|                                          |                                                                |
|------------------------------------------|----------------------------------------------------------------|
| Voltage drop U at I <sub>max</sub>       | ≤ 2,5 V                                                        |
| Max. DC switching current                | 0.1 A                                                          |
| Max. switching frequency                 | 1000 Hz                                                        |
| Switching point precision                | ±0,1 mT                                                        |
| Switching logic                          | NO (make contact)                                              |
| LED status display                       | Yellow<br>Yellow                                               |
| Electrical connection 2, type            | Plug                                                           |
| Electrical connection 2, thread size     | M8x1                                                           |
| Electrical connection 2, number of poles | 3-pin                                                          |
| Short circuit resistance                 | short circuit resistant<br>Protected against polarity reversal |
| Shock resistance                         | 30 g / 11 ms                                                   |
| Vibration resistance                     | 10 - 55 Hz, 1 mm                                               |
| Cable length L                           | 0.3 m                                                          |

## Material

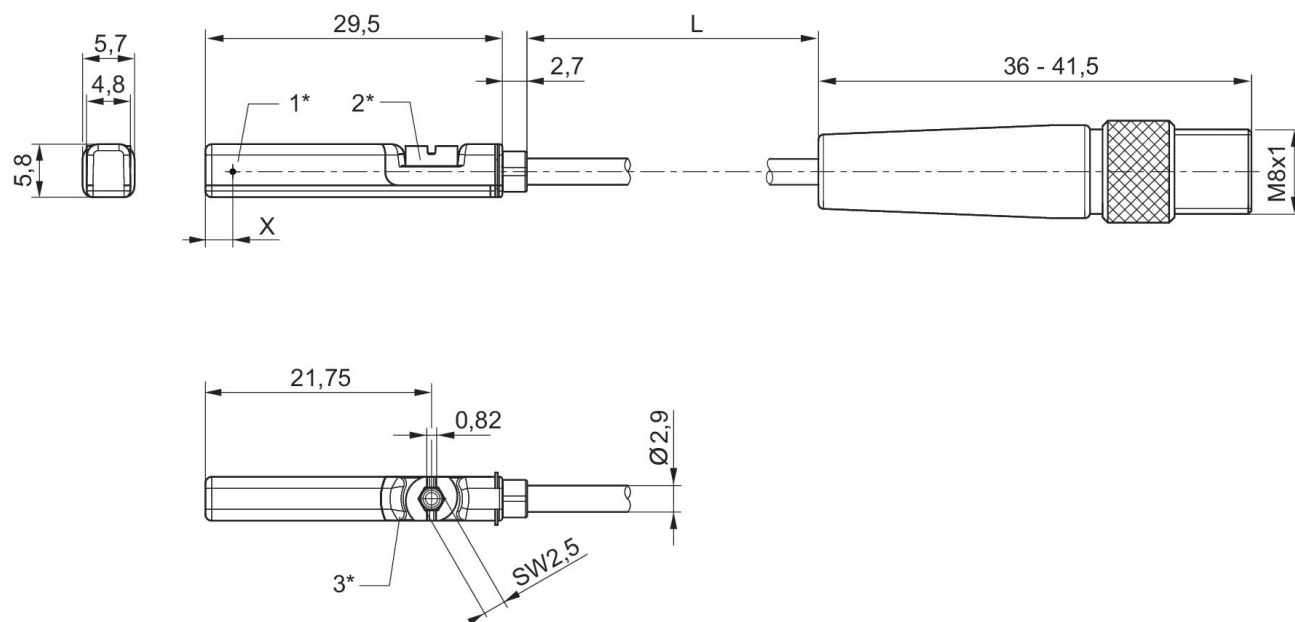
|                        |                 |
|------------------------|-----------------|
| Housing material       | Polyamide       |
| Material cable sheath  | Polyurethane    |
| Material locking screw | Stainless Steel |
| Part No.               | R412022860      |

## Technical information

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

## Dimensions

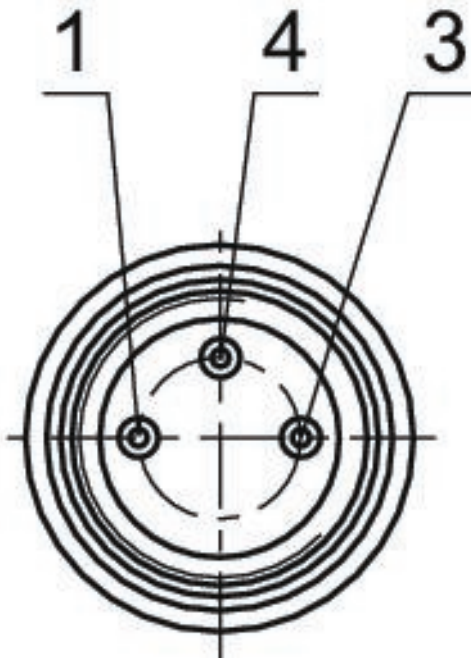


1\* = switching point 2\* = locking screw 3\* = LED window, transparent

L = cable length

X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignment M8x1 (3-pin)



Pin assignments

| Pin | Allocation |
|-----|------------|
| 1   | (+)        |
| 3   | (-)        |