# Sensor, Series ST9
0830100487

AVENTICS Series ST9 Magnetic proximity sensors

The AVENTICS Series ST9 sensors are specifically developed for short-stroke cylinders and offer a lean design and practical handling. They slide easily into the 9 mm dovetail nut and can be securely fastened with a single screw. Especially with extremely short cylinders, the electrical connection located at the side of the housing enables easy tightening and removal of the lines.
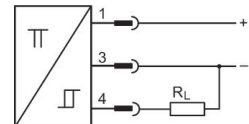
Technical data

Industry	Industrial
Direct mounting for series	KHZ
Slot width	9 mm groove
Type of contact	electronic PNP
Nominal current, actuated state	< 7 mA
Quiescent current (without load)	< 3 mA
Protection class	IP67
	IP65
Min. ambient temperature	-10 °C
Max. ambient temperature	70 °C
Voltage drop U at Imax	≤ 2,0 V
Max. DC switching current	0.2 A
Max. switching frequency	2000 Hz
Switching point precision	±0,1 mT
LED status display	Yellow
Electrical connection 2, type	Plug
Electrical connection 2, thread size	M8
Electrical connection 2, number of poles	3-pin
Min. operating voltage DC	12 V DC
Max. operating voltage DC	36 V DC
Short circuit resistance	Protected against polarity reversal short circuit resistant
Shock resistance	100 g / 11 ms
Vibration resistance	60 g (50 ... 2000 Hz)

Material

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Housing material	Polyamide
Part No.	0830100487

Technical information

If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

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.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

Dimensions
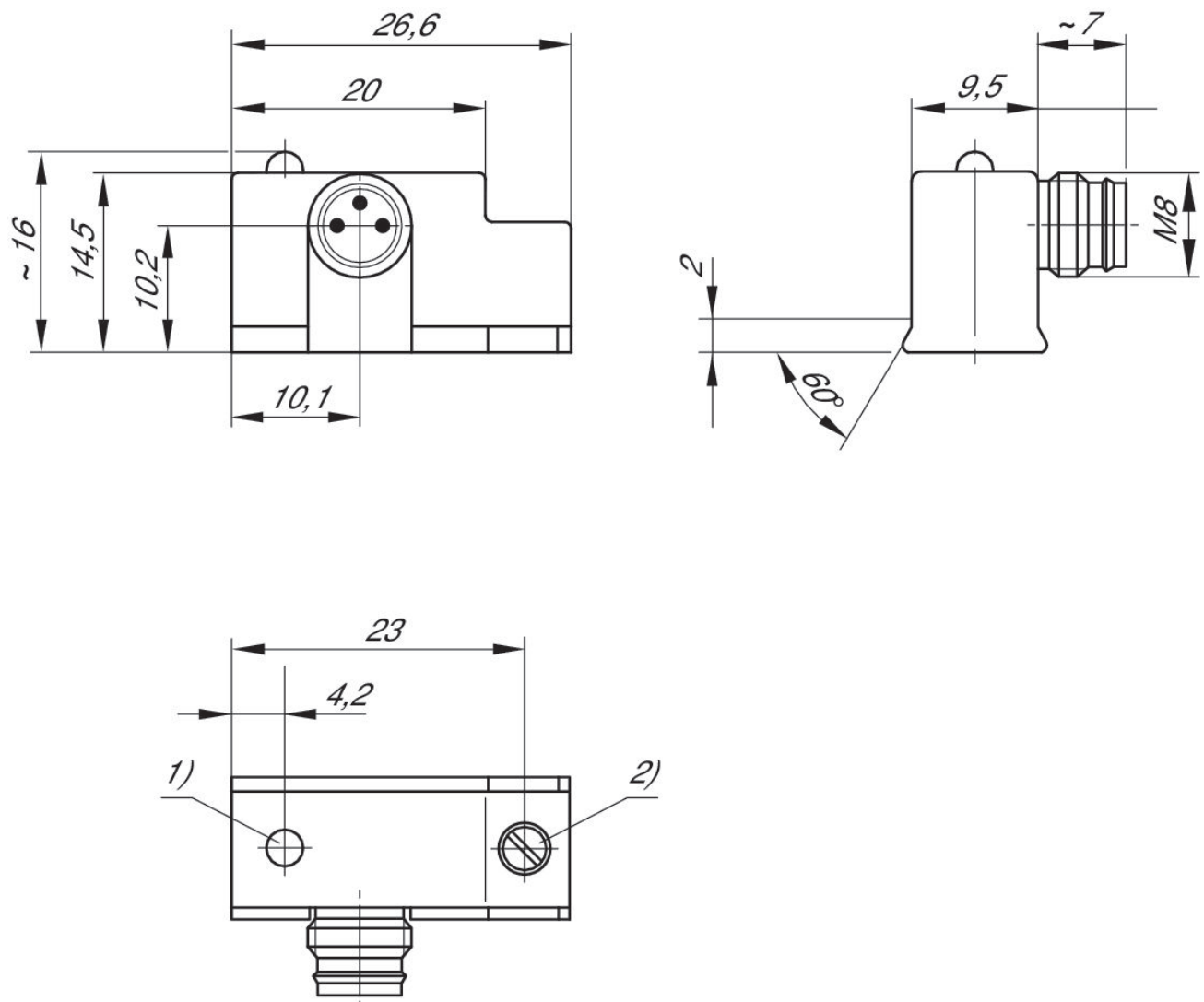
1) LED
2) Clamping screw
M8: combination plug can be combined with valve plug connectors Ø6.5 mm and M8.

Pin assignment M8x1 (3-pin)
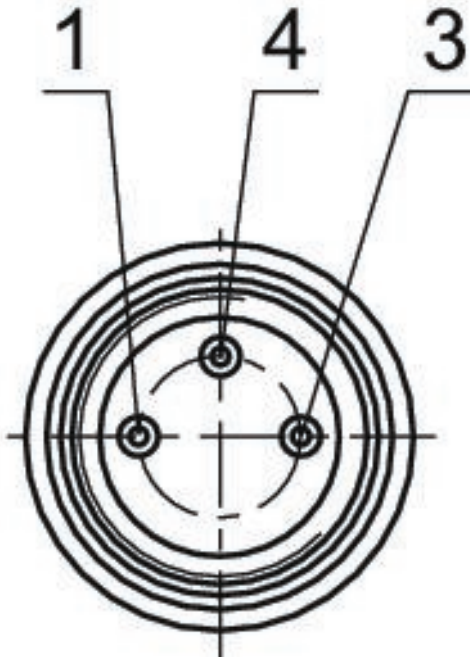

Pin assignments

Pin	Allocation
1	(+)
3	(-)
4	(OUT)