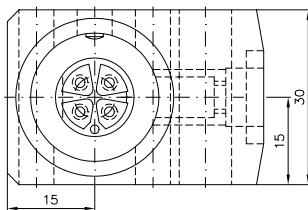


Picture: *sns/ins/e*

The proximity switches *sns/ins* decrease their output current if conductive material such as iron, brass, aluminum, etc. is brought close to the sensor head.

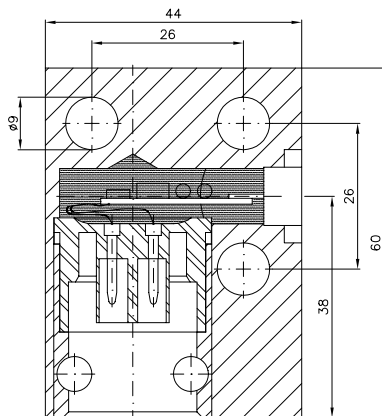
The sensor is available in two versions *e.2* and *e.5* with different range and speed specifications.

The sensors only use 2 wires; both versions are suitable for direct interfacing to the 1 mA sensor inputs of marco controllers.



The sensor *sns/ins/e.2.smr* is electronically identical to the *sns/ins/e.2*, only the housing is different.

Connections	
1	+UB 12 VDC
2	current output



Note

If maximum speed and range are necessary, application tests are recommended, especially if a metal other than iron is to be sensed.

The sensor head is available in a variety of application specific mounting blocks.

Picture: *sns/ins/e.2.smr*

Power supply	12 VDC
Output	0.6 – 2 mA
Switch distance	2 mm for <i>sns/ins/e.5</i> 4 mm for <i>sns/ins/e.2</i>
Switching frequency	5 kHz for <i>sns/ins/e.5</i> 2 kHz for <i>sns/ins/e.2</i>
Operating temperature	-20 to 60 °C
Protection class	IP 68
Approval ATEX	EX I M1 EEx ia I, INERIS 03ATEX0117
Maximum input	$U_i = 13.2 \text{ V}$, $I_i = 2 \text{ A}$ $L_i = 0$, $C_i = 3 \mu\text{H}$
Approval MSHA	as I.S.C.
Russian approval	POCC DE.ГБ05.В02014 NANIO CCVE PPC 00-25498 Rostekhnadzor



Applications

A typical application is the measuring of rotational speed of gear wheels or of other rotating machine parts, if they are equipped with appropriate cams or holes. The direction of rotation can also be determined if two sensors are mounted.

Order Number	Release	Description
<i>sns/ins/e.2.XXX</i>	2.0	Proximity Switch 2kHz, XXX cm Cable
<i>sns/ins/e.2.smr</i>	2.0	Proximity Switch 2kHz with Connector
<i>sns/ins/e.5.XXX</i>	1.0	Proximity Switch 5kHz, XXX cm Cable
<i>sns/ins/e.2.c</i>	2.0	Proximity Switch 2kHz, for China
<i>sns/ins/h.2.100</i>	1.0	I. S. Namur Sensor 2kHz with 1m special cable
<i>sns/ins/pg21</i>	1.0	Reduction Piece PG21, for <i>sns/ins/e*</i>