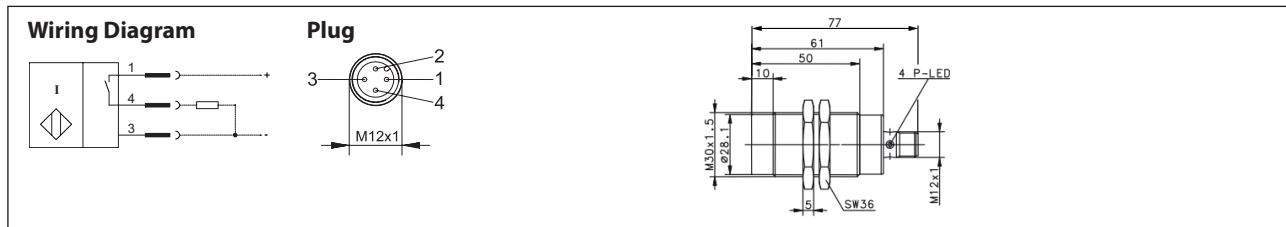


## Inductive Proximity Switch

### Series M30

Description **KIN-M30PS/015-KLS12I**Article number **6532908004**

#### Identifying characteristics in accordance with EN 60947-5-2

Electrical data		
<b>Sensor operation (delivery status)</b>		
Rated operating distance	$S_n$	15 mm
Standard target		45 mm x 45 mm, t = 1 mm, material: FE360
Real sensing distance	$S_r$	13,5 ... 16,5 mm
Assured operating distance	$S_a$	0 ... 12,2 mm
Switching element function		DC, N.O.
Repeat accuracy	R	$\leq 5\%$
Differential travel (hysteresis)	H	$\approx 8\%$
Rated operational voltage	$U_e$	12 - 24 V DC
Operational voltage range	$U_B$	10 - 30 V DC
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	$\leq 2\text{ V}$ specification
Utilization category		DC 13
Rated operational current	$I_e$	200 mA $\pm 10\%$
Minimum operating current	$I_m$	1 mA
Off-state current	$I_r$	$< 0,1\text{ mA}$
No-load supply current	$I_o$	$< 10\text{ mA}$
Switching element		permanent overload and s.c.p.
Short-circuit protection		pulsed, current-limited and thermal
Frequency of operating cycles	f	100 Hz
Mounting		non flush
False polarity protection		yes
Time delay before availability	$t_v$	$< 300\text{ ms}$
<b>IO-Link operation</b>		
Rated operating voltage range	$U_B$	18 – 30 V DC (typ. 24 V DC)
Output		IO-Link
Switching element function		N.O. / N.C. parameterizable
Repeat accuracy	R	$\leq 5\%$ from the end value, $U_B$ and temperature at a constant level
No-load supply current	$I_o$	$< 15\text{ mA}$
Serial output		Short-circuit proof
False polarity protection		yes

**IO-Link specification**

IO-Link Spec V 1.1	compliant (yellow LED)
Speed	COM 2    38,4 kBaud
Process data Device→Master	8 bit
cycle time	10 ms

**Electromagnetic compatibility (EMC)****Sensor operation**

Electromagnetic field test	IEC 61000-4-3
Electrostatic discharge test	IEC 61000-4-2
Electrical fast transient immunity test	IEC 61000-4-4
Radiated disturbance field strength	EN 55011

**IO-Link operation**

acc. to EN 60947-5-7, EN 61131-9

**Mechanical Data**

Front cap	LCP, black
Enclosure	brass, nickel plated
Ambient air temperature	-25 °C ... +70 °C
Type of protection	IP67 / NEMA Type 1 (only in fully locked position with its plugs)
Function indication	LED, yellow
Degree of pollution	3 (Pollution of the sensing surface may decrease operating distance)
Termination type	plug socket M12x1
For attachment	2 x hexagon nut (tightening torque ≤ 70 Nm)

**Product reliability (in acc. with DIN EN 61709 (SN 29500))**

MTTF (at 40 °C) &gt;1150 years

**EU Conformity**

acc. to directive 2014/30/EU (EMC-Directive)

**Approvals****Notes**

To be used with a class 2 power supply according to UL approval.

Further data and information can be found at [www.bernestin.eu](http://www.bernestin.eu).