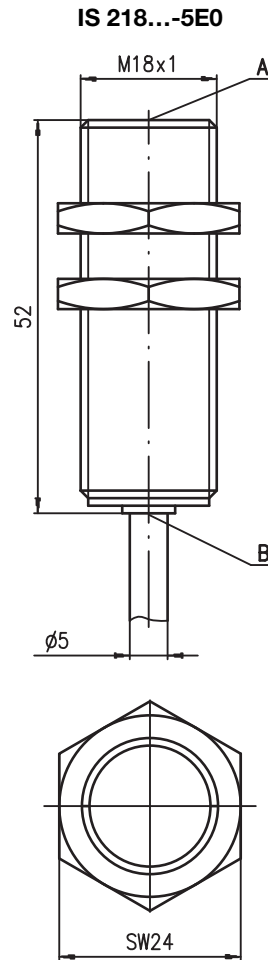


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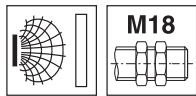


**Dimensioned drawing**

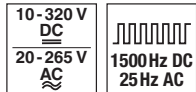


**Tightening torque of the fastening nuts < 20Nm!**

- A Active surface
- B Yellow indicator diode



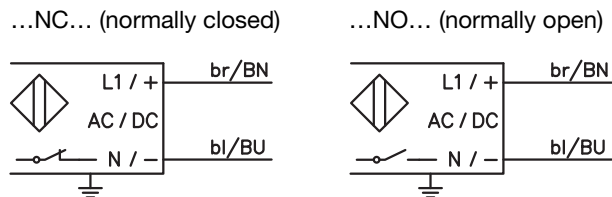
**5 mm**



**Embedded**

- Slim and short cylindrical metal housing M18
- Chromium-plated brass housing
- Built-in short circuit protection, inductive protection and polarity reversal protection
- LED for switching state visible from 360°
- Non-polarized 2-wire design
- AC/DC supply voltage

**Electrical connection**



We reserve the right to make changes • DS\_IS218E\_1N3\_en\_50128374.fm



**Accessories:**

(available separately)

- Mounting clamp (MC 018...)

**Specifications**

<b>General specifications</b>	<b>IS 218...-5E0</b>
Type of installation	embedded installation
Typ. operating range limit $S_n$	5.0mm
Operating range $S_a$	0 ... 4.0mm
<b>Electrical data</b>	
Operating voltage $U_B$ 1)	20 ... 265VAC / 10 ... 320VDC
Residual ripple $\sigma$	$\leq 20\%$ of $U_B$
Output current $I_L$	$\leq 200$ mA AC/DC
Open-circuit current $I_0$	$\leq 1$ mA
Minimum load current $I_m$	2mA
Switching output/function	.../1NC.3... relay, NC contact
	.../1NO.3... relay, NO contact
Voltage drop $U_d$	$\leq 6$ V at 200mA
Hysteresis H of $S_r$	$\leq 10\%$
Temperature drift of $S_r$	$\leq 10\%$ 2)
Repeatability	$\leq 0.5$ mm 3)
<b>Timing</b>	
Switching frequency f	AC: 25Hz DC: 1500Hz
Delay before start-up	$\leq 10$ ms
<b>Indicators</b>	
Yellow LED (visible from 360°)	switching state
<b>Mechanical data</b>	
Housing	chromium-plated brass
Standard measuring plate	18 x 18mm <sup>2</sup> , Fe360
Active surface	PBTP
Weight	approx. 120g
Connection type	cable: 2m, PVC, 2 x 0.34mm <sup>2</sup> , $\varnothing$ 5.0mm
<b>Environmental data</b>	
Ambient temperature	-25°C ... +70°C
Degree of protection	IP 67
Protective circuit 4)	1, 2, 3
Standards applied	IEC/EN 60947-5-2
Electromagnetic compatibility	IEC 60947-5-2 5kV IEC 61000-4-2 Level 2 air 8kV (ESD) IEC 61000-4-3 Level 3 10V/m (RFI) IEC 61000-4-4 Level 3 2kV (Burst)

- 1) Observe the safety regulations and installation instructions regarding power supply and wiring.
- 2) Over the entire operating temperature range
- 3) For  $U_B = 20 \dots 30$ VDC, ambient temperature  $T_a = 23^\circ\text{C} \pm 5^\circ\text{C}$
- 4) 1=polarity reversal protection, 2=short circuit protection, 3=inductive protection for all outputs

**Part number code**

I S 2 1 8 M M / 1 N O . 3 - 5 E 0

<b>Operating principle / construction</b>	IS Inductive switch / Standard
<b>Series</b>	218 Series with M18 x 1 external thread
<b>Housing / thread</b>	MM Metal housing (active surface: plastic) / metric thread
<b>Output function / Supply</b>	1NO.3 Relay, NO contact / AC/DC 1NC.3 Relay, NC contact / AC/DC
<b>Measurement range / type of installation</b>	5E0 Typ. operating range limit 5.0mm / embedded installation
<b>Electrical connection</b>	N/A Cable, PVC, standard length 2000mm

**Order guide**

The sensors listed here are preferred types; current information at [www.leuze.com](http://www.leuze.com).

<b><math>S_n = 5</math>mm</b>	<b>Designation</b>	<b>Part no.</b>
	IS 218 MM/1NC.3-5E0	50128151
	IS 218 MM/1NO.3-5E0	50128152
	Additional types on request	

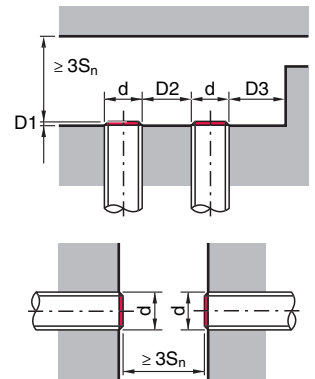
**Tables**

**Reduction factors:**  
for  $S_n = 5.0$ mm

Steel Fe360	1
Copper	0.40
Aluminum	0.40
Brass	0.50
Stainless steel	0.80

**Mounting**

**Embedded installation:**

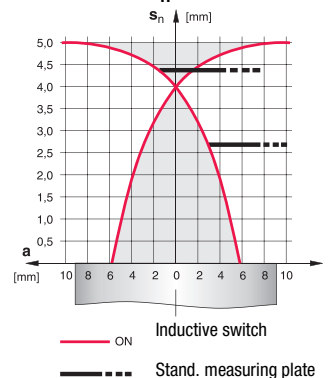


**Ferromagnetic and non-ferromagnetic materials**

$S_n$ [mm]	D1 [mm]	D2 [mm]	D3 [mm]
5.0	0	14.0	5.0

**Diagrams**

**Models with  $S_n = 5.0$ mm**



**Remarks**

**Operate in accordance with intended use!**

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.