



# PH6 series

Ø 6.5 mm cylindrical  
miniaturized inductive sensors



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## features

- Cable and M8 plug versions
- Reduced dimensions: Ø 6.5 mm x 16 mm (cable) / 29 mm (plug) length
- Supply voltage 10...30 Vdc, output current 200 mA
- Led status indicator
- IP 67 housing protection
- Complete protection against electrical damages



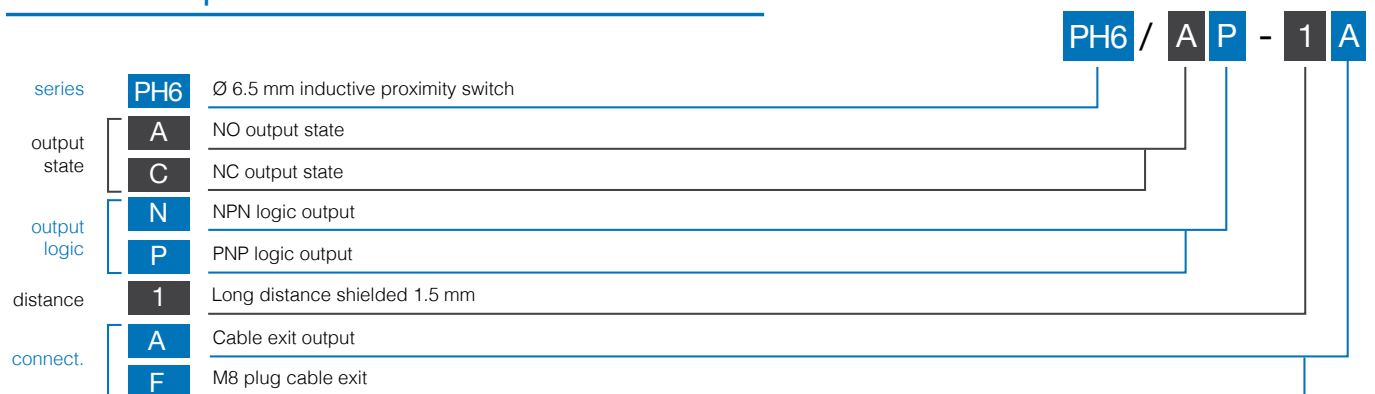
## web contents



- Application notes
- Photos
- Catalogue / Manuals



## code description (\*)




(\*) ATEX models available, contact our Sales Dept. for further information.

## available models

diameter	installation	distance	plug	distance (mm)	NPN/NO	NPN/NC	PNP/NO	PNP/NC
Ø 6.5 mm	shielded	standard	cable	1.5	PH6/AN-1A	PH6/CN-1A	PH6/AP-1A	PH6/CP-1A
			M8		PH6/AN-1A	PH6/CN-1F	PH6/AP-1F	PH6/CP-1F

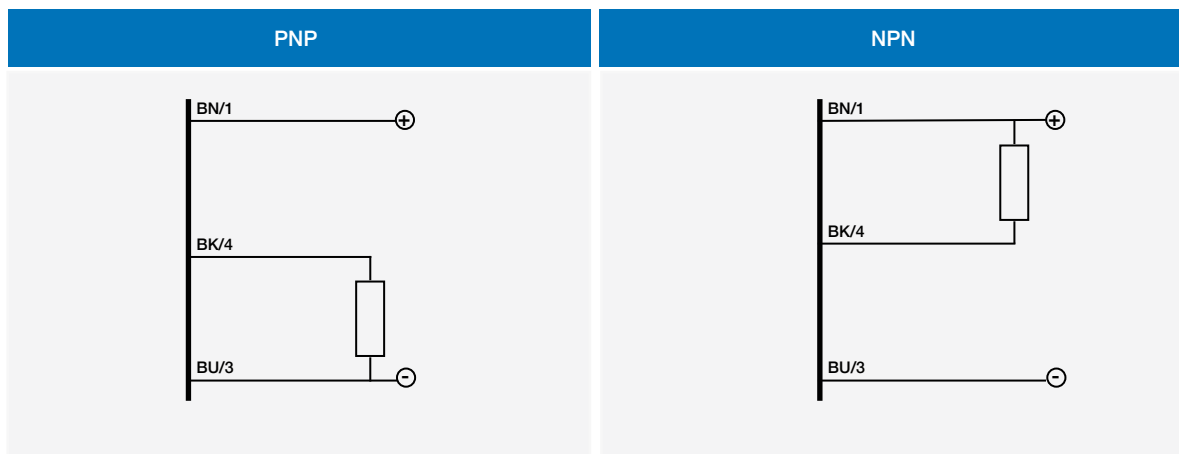
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	PH6/**-1*
	
nominal sensing distance	1.5 mm
hysteresis	≤ 10 % Sr
standard target	6.5 x 6.5 x 1 mm
repeatability	2%
operating voltage	10...30 Vdc
max ripple content	≤ 20%
output type	NPN or PNP - NO or NC
output current	≤ 200 mA
output voltage drop	≤ 2.0 V @ 100 mA
no-load supply current	≤ 10 mA
leakage current	≤ 0,1 mA
switching frequency	≤ 5000 Hz
power on delay	10 ms
ambient temperature range	-25...+70 °C
temperature drift of Sr	≤ 10%
short-circuit protection	•
voltage reversal protection	•
induction protection	•
shocks and vibrations	IEC 60947-5-2 / 7.4
weight	3 g connector M8 32 g cable
protection degree	IP 67
EMC:	
IEC 60255-5	1 kV
IEC 61000-4-2	level 2
IEC 61000-4-3	level 3
IEC 61000-4-4	level 2
housing material	stainless steel V2A
active head material	polyester
connection	2 m PVC cable 3 x 0.14 mm <sup>2</sup>

correction factors

model	steel FE 360	copper	alluminium	brass	stainless steel
CPH6/**-**	1.0	0.40	0.45	0.50	0.80

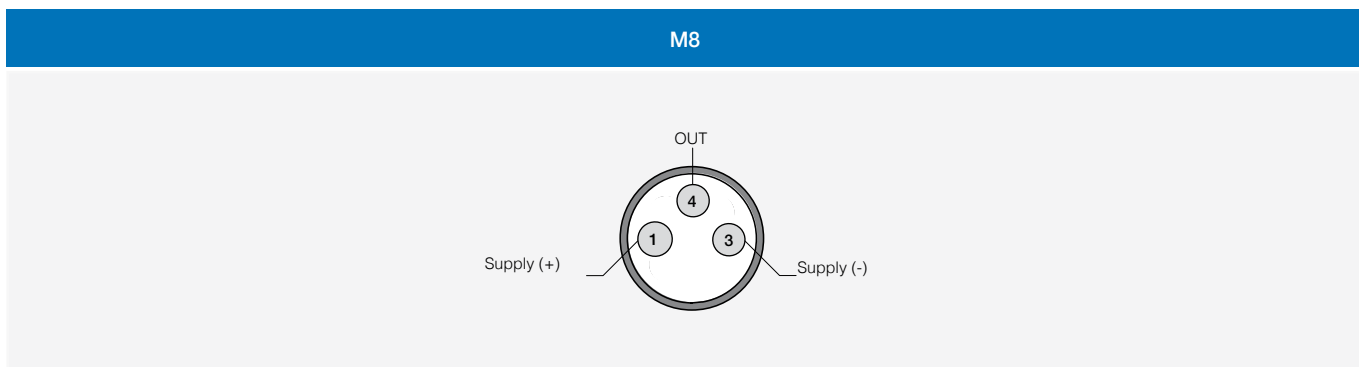
# electrical diagrams of connections



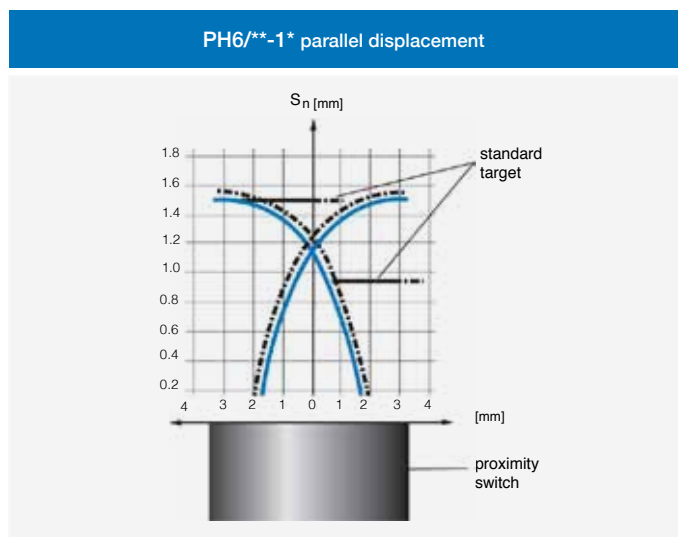
- BN** brown
- BU** blue
- BK** black
- WH** white

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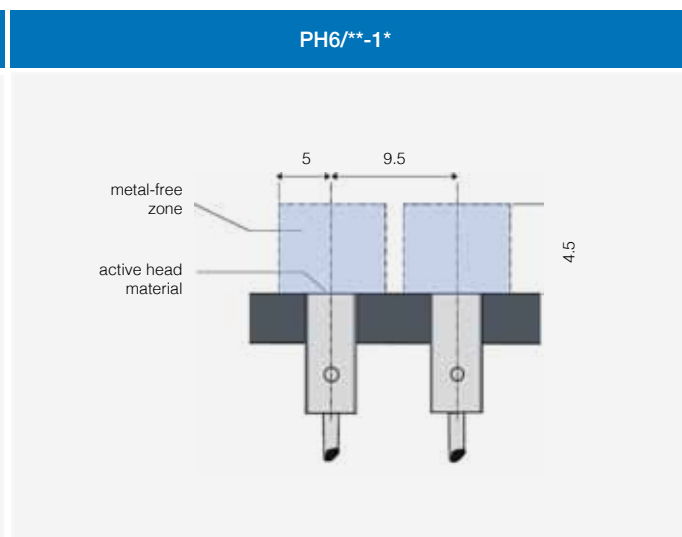
## plug



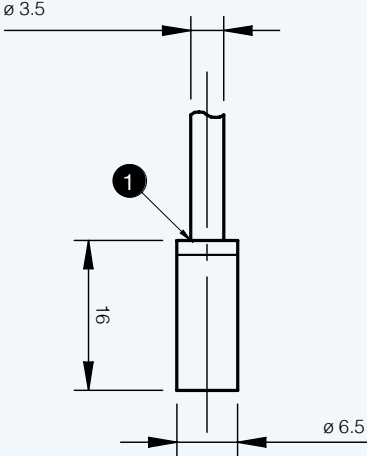
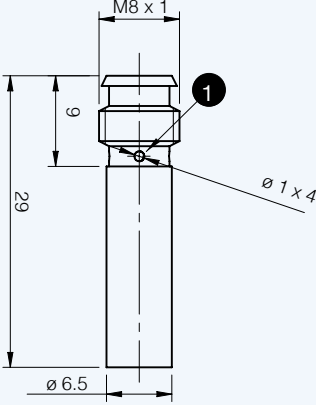
## response diagram



## installation



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PH6/**-1A	PH6/**-1F
 <p>Technical drawing of the PH6/**-1A LED. It shows a cylindrical component with a diameter of <math>\varnothing 6.5</math> mm. The main body has a height of 16 mm. A smaller cylindrical section at the top has a diameter of <math>\varnothing 3.5</math> mm and a height of 1 mm. A callout '1' points to the top section.</p>	 <p>Technical drawing of the PH6/**-1F LED. It shows a cylindrical component with a diameter of <math>\varnothing 6.5</math> mm and a total height of 29 mm. The main body has a height of 20 mm. A smaller cylindrical section at the top has a diameter of <math>\varnothing 1 \times 4</math> mm and a height of 9 mm. A callout '1' points to the top section. The top section is labeled M8 x 1.</p>

1 LED