



AE series

M8 cylindrical inductive sensors



M8 cylindrical

features

- Extremely reduced measure
- Metal housing
- LED status indicator 360° visible
- IP 67 housing protection
- ATEX models, cat. 3, available on request
- Complete protection against electrical damages
- Standard and long distance models
- Standard and short body housing



web contents



- Application notes
- Photos
- Catalogue / Manuals



code description

	AE	1	/	A	P	-	1	A
series	AE	M8 inductive proximity switch						
housing	1	Standard body						
	6	Short body						
output state	A	NO output state						
	C	NC output state						
output logic	N	NPN logic output						
	P	PNP logic output						
distance	1	Shielded standard 1.5 mm						
	2	Unshielded standard 2.5 mm						
	3	Long distance shielded 2 mm						
	4	Unshielded long distance 4 mm						
connect.	A	Axial cable exit						
	F	M8 plug cable exit						
	H	M12 plug cable exit						

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

available models

standard housing

diameter	installation	distance	plug	distance (mm)	NPN/NO	NPN/NC	PNP/NO	PNP/NC	
M8	shielded	standard	cable	1.5	AE1/AN-1A	AE1/CN-1A	AE1/AP-1A	AE1/CP-1A	
			M8		AE1/AN-1F	AE1/CN-1F	AE1/AP-1F	AE1/CP-1F	
			M12		AE1/AN-1H	AE1/CN-1H	AE1/AP-1H	AE1/CP-1H	
			unshielded	2.5	cable	AE1/AN-2A	AE1/CN-2A	AE1/AP-2A	AE1/CP-2A
					M8	AE1/AN-2F	AE1/CN-2F	AE1/AP-2F	AE1/CP-2F
					M12	AE1/AN-2H	AE1/CN-2H	AE1/AP-2H	AE1/CP-2H
	shielded	long distance	2	cable	AE1/AN-3A	AE1/CN-3A	AE1/AP-3A	AE1/CP-3A	
				M8	AE1/AN-3F	AE1/CN-3F	AE1/AP-3F	AE1/CP-3F	
				M12	AE1/AN-3H	AE1/CN-3H	AE1/AP-3H	AE1/CP-3H	
			unshielded	4	cable	AE1/AN-4A	AE1/CN-4A	AE1/AP-4A	AE1/CP-4A
					M8	AE1/AN-4F	AE1/CN-4F	AE1/AP-4F	AE1/CP-4F
					M12	AE1/AN-4H	AE1/CN-4H	AE1/AP-4H	AE1/CP-4H

available models





short housing

diameter	installation	distance	plug	distance (mm)	NPN/NO	NPN/NC	PNP/NO	PNP/NC	
M8	shielded	standard	cable	1.5	AE6/AN-1A	AE6/CN-1A	AE6/AP-1A	AE6/CP-1A	
			M8		AE6/AN-1F	AE6/CN-1F	AE6/AP-1F	AE6/CP-1F	
			M12		AE6/AN-1H	AE6/CN-1H	AE6/AP-1H	AE6/CP-1H	
			unshielded	2.5	cable	AE6/AN-2A	AE6/CN-2A	AE6/AP-2A	AE6/CP-2A
					M8	AE6/AN-2F	AE6/CN-2F	AE6/AP-2F	AE6/CP-2F
					M12	AE6/AN-2H	AE6/CN-2H	AE6/AP-2H	AE6/CP-2H
	shielded	long distance	2	cable	AE6/AN-3A	AE6/CN-3A	AE6/AP-3A	AE6/CP-3A	
				M8	AE6/AN-3F	AE6/CN-3F	AE6/AP-3F	AE6/CP-3F	
				M12	AE6/AN-3H	AE6/CN-3H	AE6/AP-3H	AE6/CP-3H	
			unshielded	4	cable	AE6/AN-4A	AE6/CN-4A	AE6/AP-4A	AE6/CP-4A
					M8	AE6/AN-4F	AE6/CN-4F	AE6/AP-4F	AE6/CP-4F
					M12	AE6/AN-4H	AE6/CN-4H	AE6/AP-4H	AE6/CP-4H

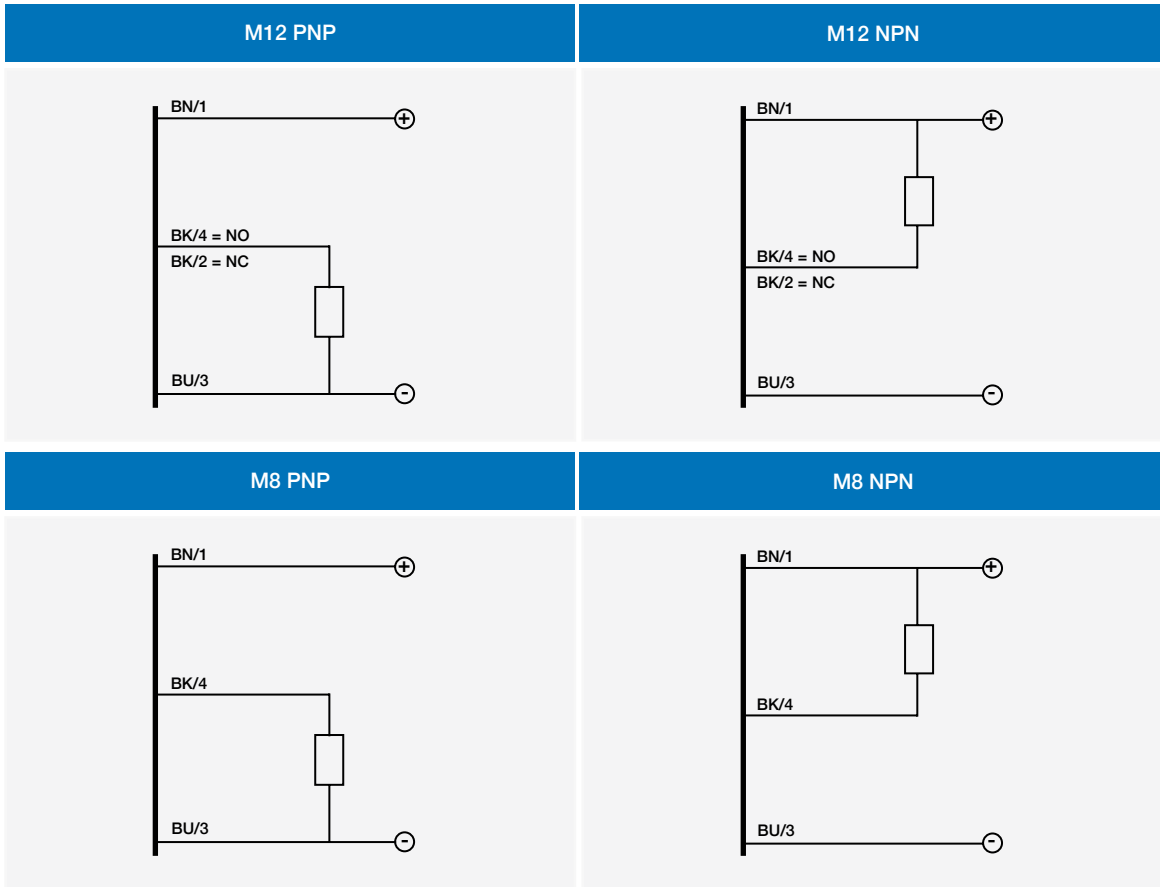
correction factors

code	steel FE 360	copper	alluminium	brass	stainless steel
AE*/**-1*	1	0.29	0.38	0.49	0.78
AE*/**-2*		0.43	0.51	0.59	0.83
AE*/**-3*		0.35	0.43	0.52	0.78
AE*/**-4*		0.47	0.52	0.58	0.79



	AE*/**-1*	AE*/**-2*	AE*/**-3*	AE*/**-4*
				
nominal sensing distance	1.5 mm	2.5 mm	2 mm	4 mm
operating distance	0...1.21 mm	0...2.02 mm	0...1.62 mm	0...3.24 mm
hysteresis	1...20% Sr			
standard target	8x8 mm FE360			12x12 mm FE360
repeatability	5%			
operating voltage	10...30 Vdc			
max ripple content	≤ 10%			
output type	NPN or PNP - NO or NC			
output current	≤ 200 mA			
output voltage drop	≤ 1,8 V @ 200 mA			
no-load supply current	10 mA			
leakage current	≤ 10 µA			
switching frequency	5 kHz			
power on delay	50 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			
weight	20 g connector / 45 g cable			
LEDs	yellow LED output state			
protection degree	IP 67 (EN60529)			
EMC	in conformity with the EMC Directive, according to IEC 60947-5-2			
housing material	nickel-plated brass			
active head material	PBT			
connection	cable 2 m PVC / plug M8 or M12			
tightening torque	3 Nm			

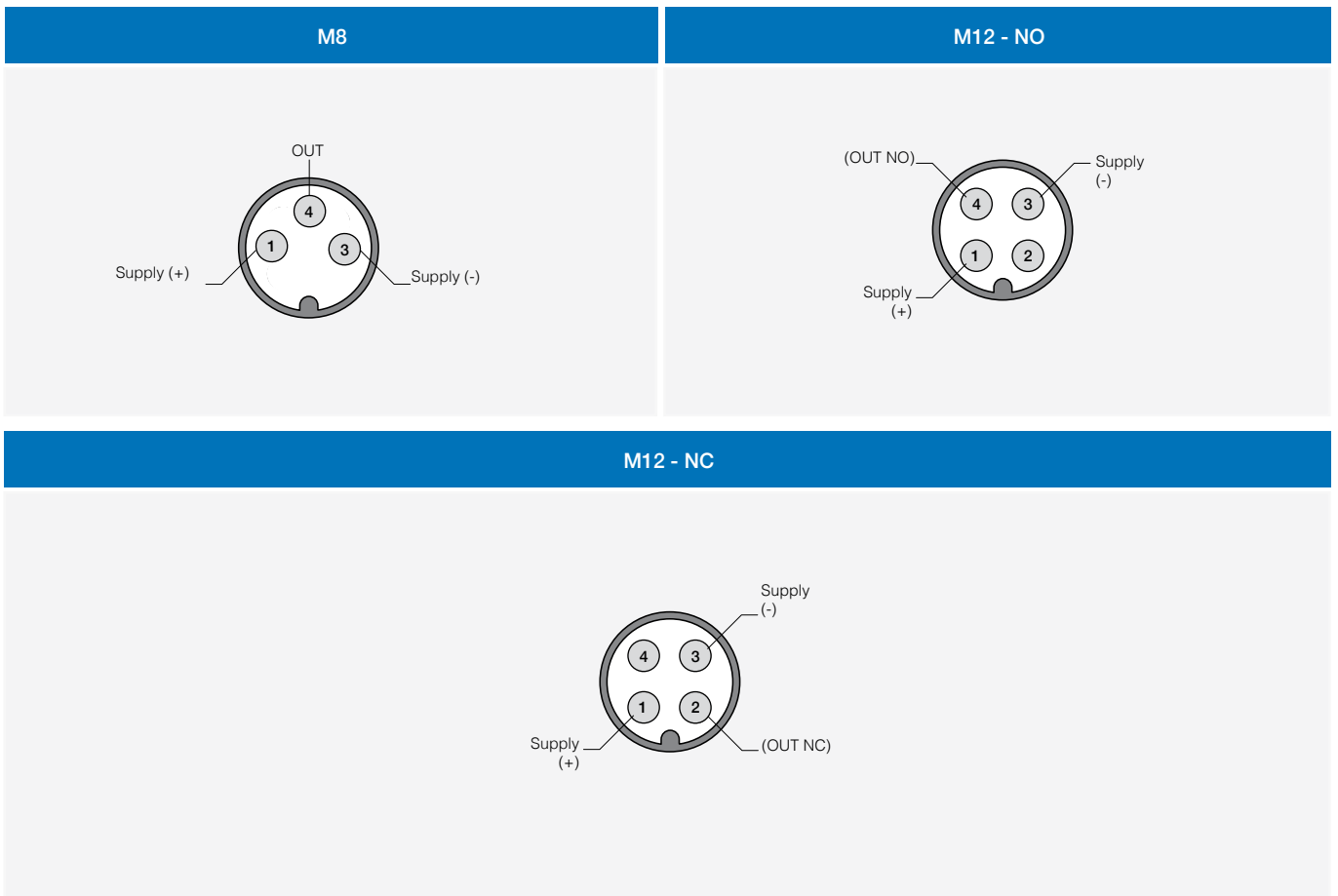
electrical diagrams of connections



BN brown
BU blue
BK black
WH white

BN brown
BU blue
BK black
WH white

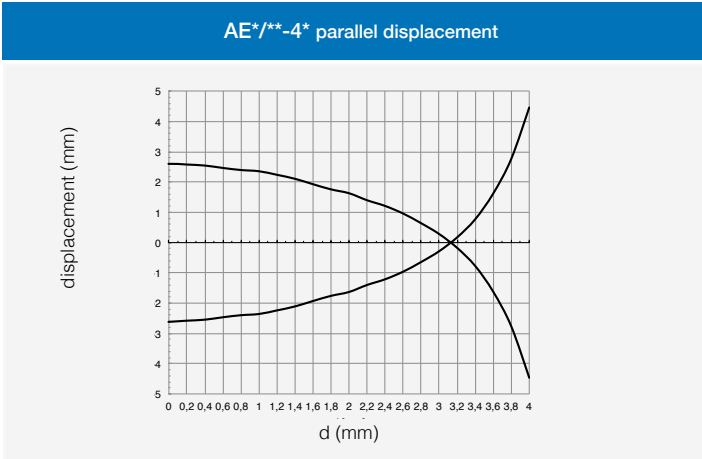
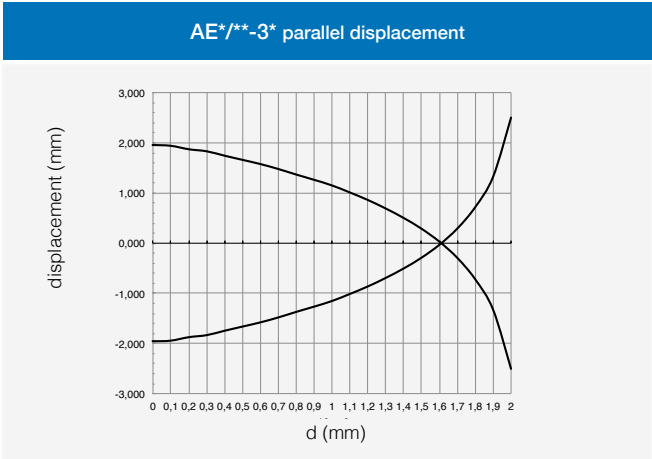
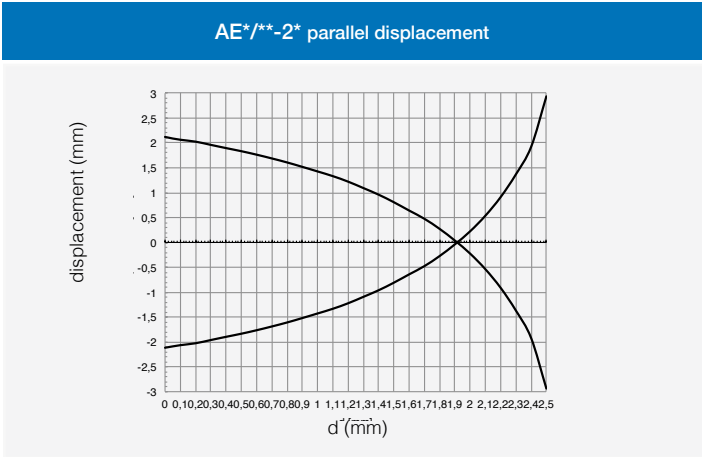
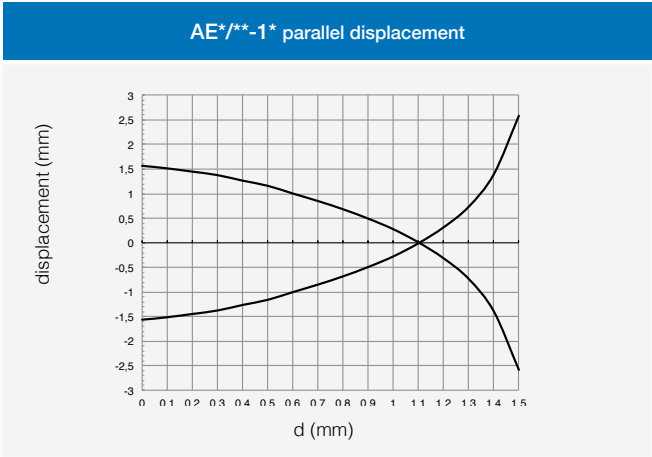
plug



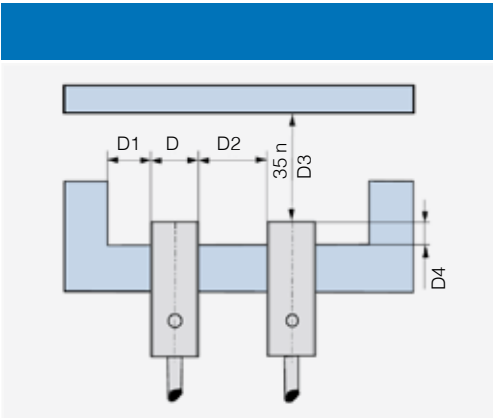
response diagram



M8 cylindrical



installation



code	D4	D1	D2	D3
AE*/**-1*	≥ 0 mm	≥ 3.25 mm	≥ 6.5 mm	≥ 4.5 mm
AE*/**-2*	≥ 4 mm ⁽¹⁾	≥ 6.5 mm	> 17 mm	≥ 7.5 mm
AE*/**-3*	≥ 0 mm	≥ 3.25 mm	≥ 6.5 mm	≥ 6 mm
AE*/**-4*	≥ 4 mm	≥ 6.5 mm	> 17 mm	≥ 12 mm

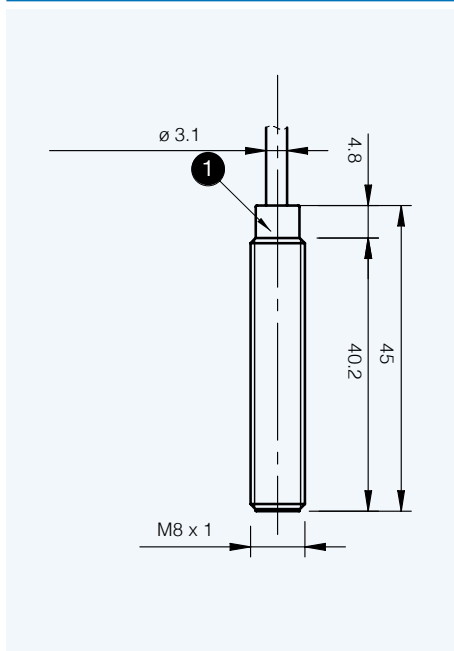
(1) ≥ 0 mm for non magnetic materials



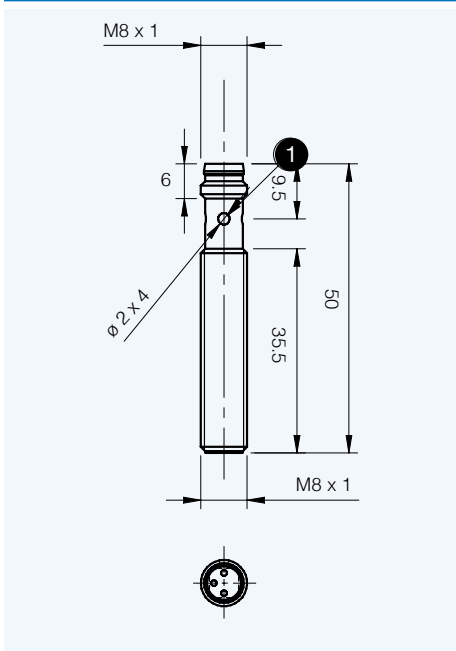
dimensions (mm)

M8 cylindrical

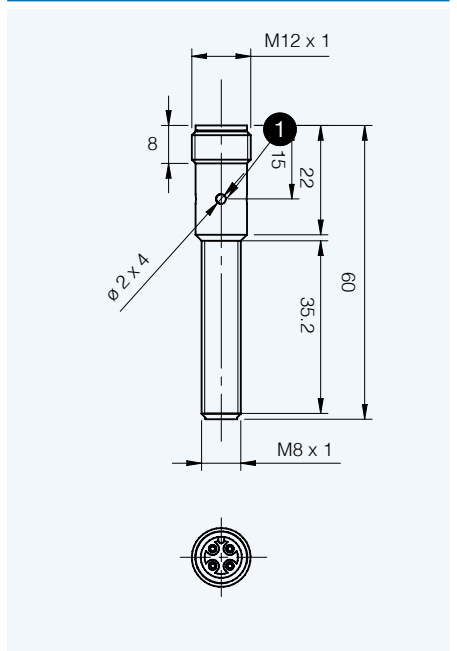
AE1/**-1A
AE1/**-3A



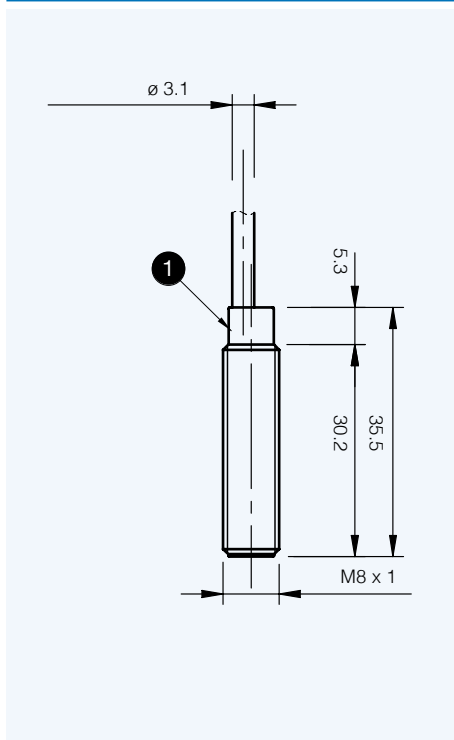
AE1/**-1F
AE1/**-3F



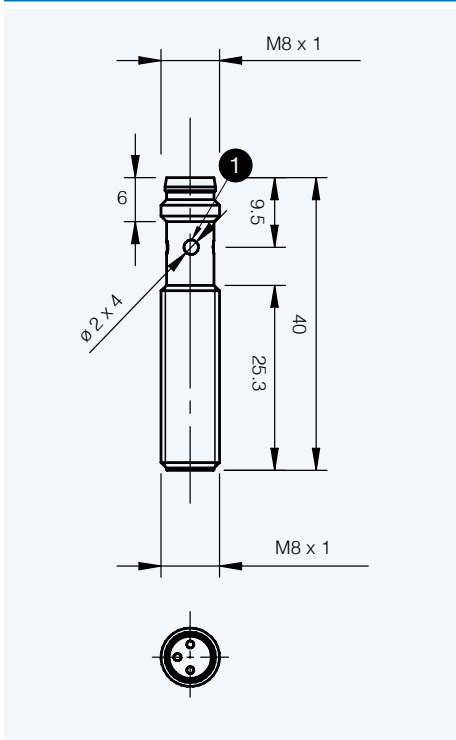
AE1/**-1H
AE1/**-3H



AE6/**-1A
AE6/**-3A



AE6/**-1F
AE6/**-3F

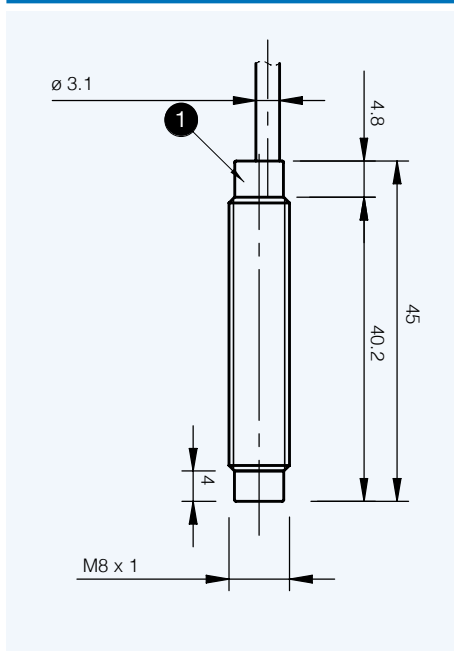


1 LED

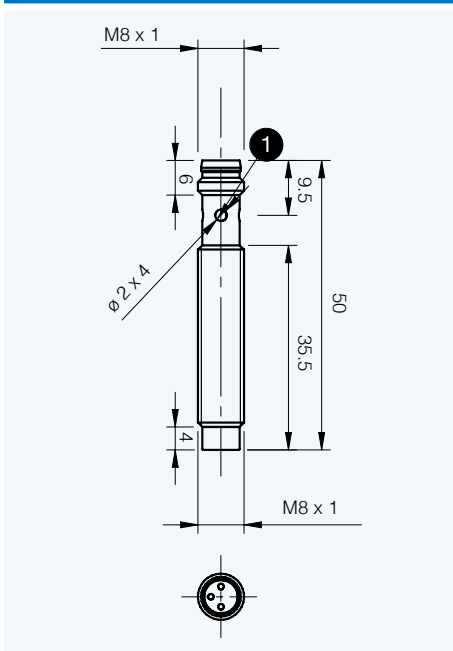
AE



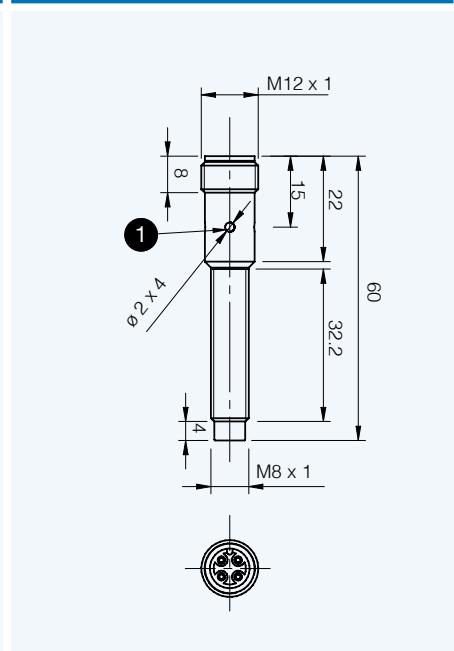
AE1/**-2A
AE1/**-4A



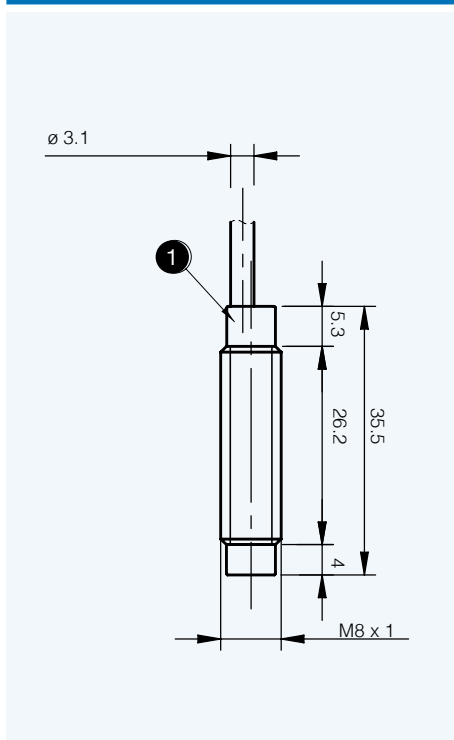
AE1/**-2F
AE1/**-4F



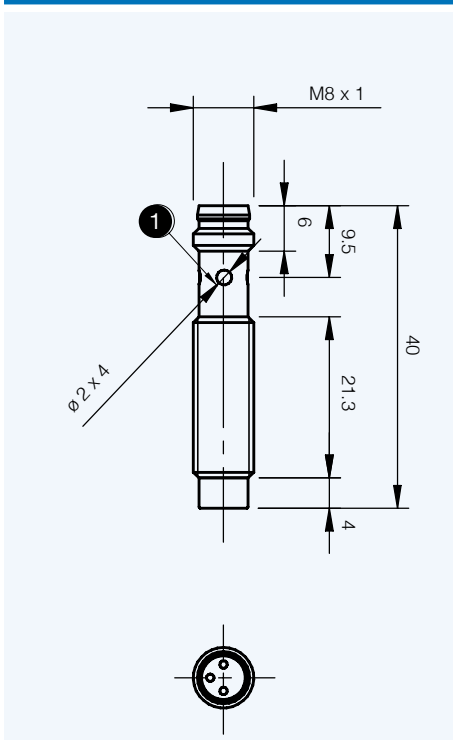
AE1/**-2H
AE1/**-4H



AE6/**-2A
AE6/**-4A

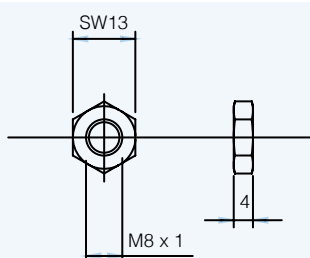


AE6/**-2F
AE6/**-4F



dimensions (mm)

accessories included



metallic
nut (2 x)