



ET series

Cylindrical with extended temperature range



Cylindrical with extended temperature range

features

- Stainless steel housing
- M12, M18 models
- IP68 protection degree
- Complete protection against electrical damages



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- Catalogue / Manuals







code description

ET M 1 / B N - 1 H

series	ET	Extended working temperature range inductive sensors
dimens.	M	M12 diameter
	K	M18 diameter
housing	1	Standard housing
output state	B	NO + NC complementary output
output logic	P	PNP logic
	N	NPN logic
distance	1	Shielded standard (2/5 mm)
	2	Unshielded standard (4/8 mm)
connect.	H	M12 plug cable exit

available models

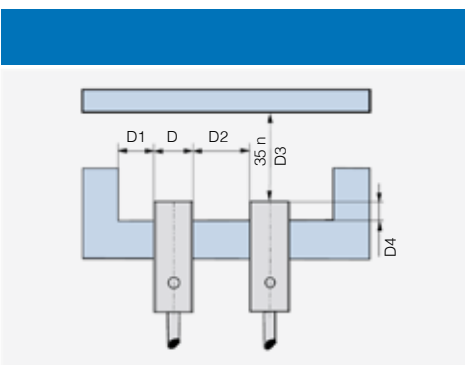
diameter	installation	plug	distance (mm)	PNP / NO + NC	NPN / NO + NC
M12	shielded	M12	2	ETM1/BP-1H	ETM1/BN-1H
	unshielded		4	ETM1/BP-2H	ETM1/BN-2H
M18	shielded		5	ETK1/BP-1H	ETK1/BN-1H
	unshielded		8	ETK1/BP-2H	ETK1/BN-2H

	ETM1/B*-1H	ETM1/B*-2H	ETK1/B*-1H	ETK1/B*-2H
				
nominal sensing distance S_n	2 mm	4 mm	5 mm	8 mm
working distance	0...1.62 mm	0...3.24 mm	0...4 mm	0...6.5 mm
hysteresis	1...20%			
standard target	12 x 12 mm FE360		18 x 18 mm FE360	24 x 24 mm FE360
repeatability	5% @UB=20...30 V; Ta = 23°C ±5°C			
operating voltage	10...30 Vdc			
output type	NPN or PNP - NO + NC			
max ripple content	≤ 10%			
output current	≤ 80 mA			≤ 150 mA
output voltage drop	≤ 2 V @ I _o			≤ 1.5 V @ I _o
no-load supply current			≤ 20 mA	
leakage current			≤ 10 µA	
switching frequency	1,5 kHz			1,2 kHz
power on delay			100 ms	
ambient temperature range			-25...+110 °C	
temperature drift of Sr			≤ 10% Sr	
short circuit protection			●	
voltage reversal protection			●	
induction protection			●	
shocks and vibration	IEC EN 60947-5-2			
weight	30 g			55 g
LEDs	No			
protection degree	IP68 (1m, 7 days)			
EMC	in conformity with the EMC Directive, according to IEC 60947-5-2			
shocks and vibrations	IEC 60947-5-2			
housing material	AISI 303 stainless steel			
active head material	PPS			PSU
connection			M12 plug	
tightening torque (on nuts)	20 Nm			50 Nm
tightening torque (on plug)			2.w5 Nm	

correction factors

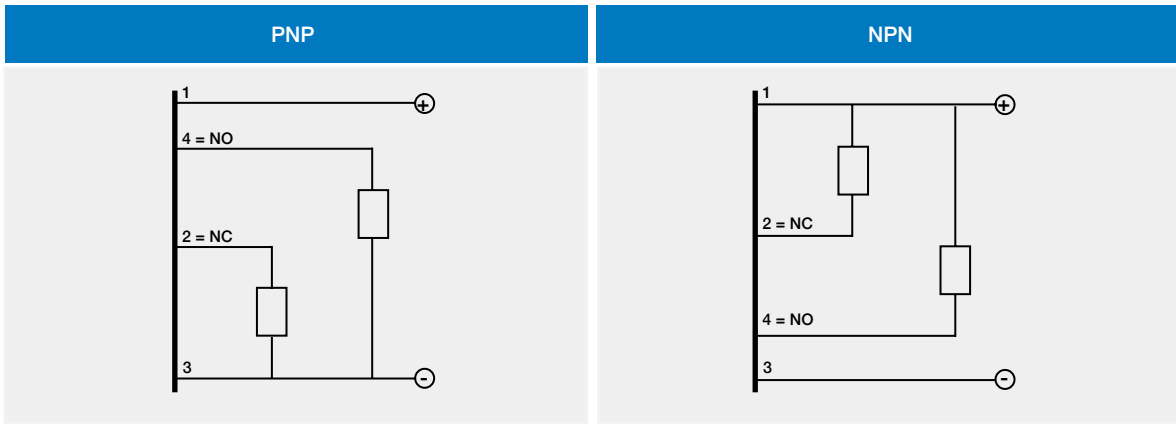
model	FE 360	copper	alluminium	brass	stainless steel
ETM1/B*-1H	1	0.10 ± 10%	0.20 ± 10%	0.30 ± 10%	0.70 ± 10%
ETM1/B*-2H		0.40 ± 10%	0.50 ± 10%	0.60 ± 10%	0.90 ± 10%
ETK1/B*-1H		0.20 ± 10%	0.30 ± 10%	0.40 ± 10%	0.70 ± 10%
ETK1/B*-2H		0.40 ± 10%	0.50 ± 10%	0.50 ± 10%	0.80 ± 10%

installation

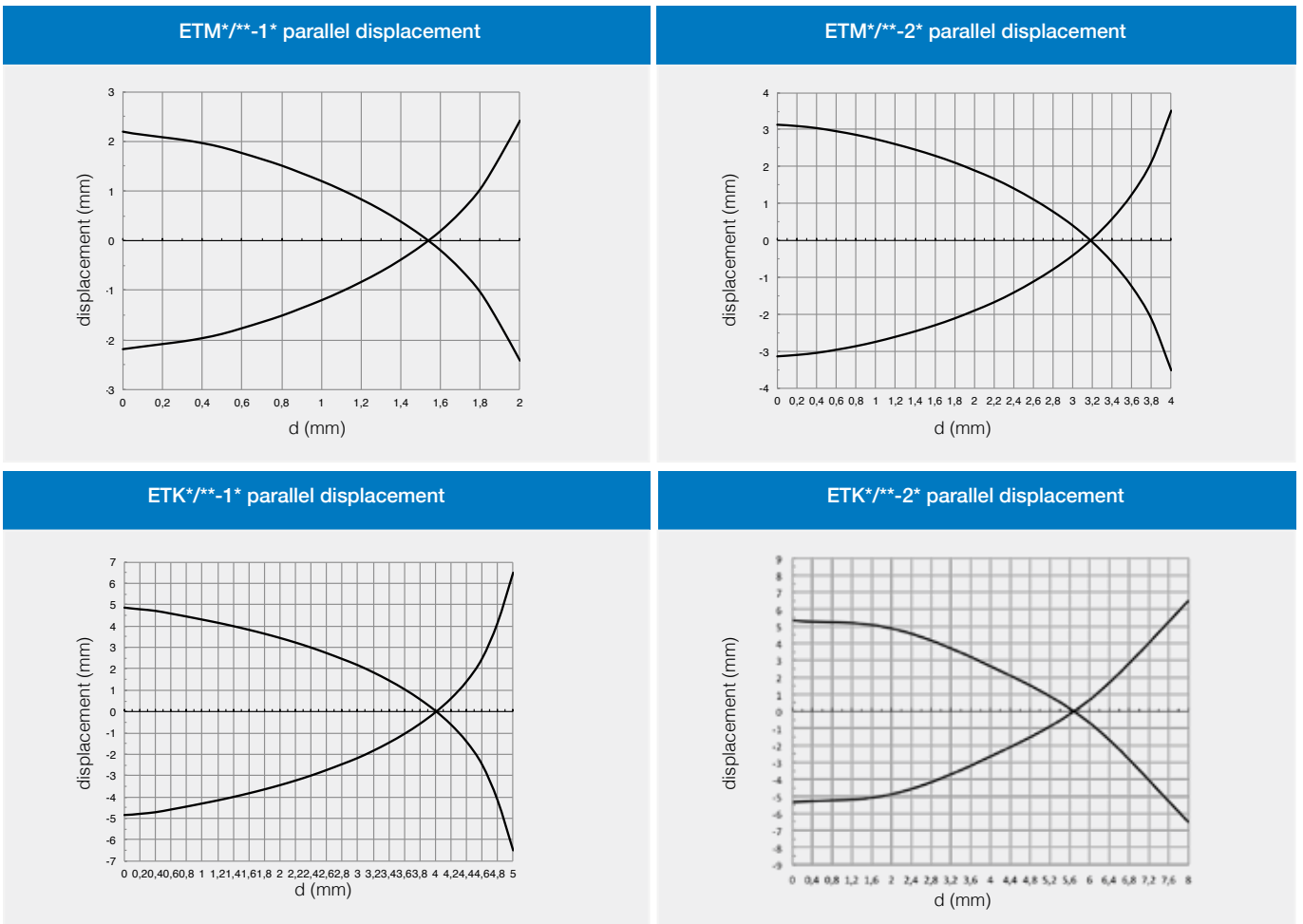


model	D4	D1	D2	D3
ETM1/**-1H	≥ 0 mm ⁽¹⁾	≥ 6 mm	≥ 12 mm	≥ 6 mm
ETM1/**-2H	≥ 6 mm ⁽²⁾	≥ 12 mm	≥ 24 mm	≥ 12 mm
ETK1/**-1H	≥ 0 mm ⁽³⁾	≥ 9 mm	≥ 18 mm	≥ 15 mm
ETK1/**-2H	≥ 8 mm ⁽⁴⁾	≥ 18 mm	≥ 36 mm	≥ 24 mm

⁽¹⁾ ≥ 1,2 mm without ferro-magnetic material
⁽²⁾ ≥ 0 mm without ferro-magnetic material
⁽³⁾ ≥ 3 mm without ferro-magnetic material
⁽⁴⁾ ≥ 12 mm without ferro-magnetic material



response diagram

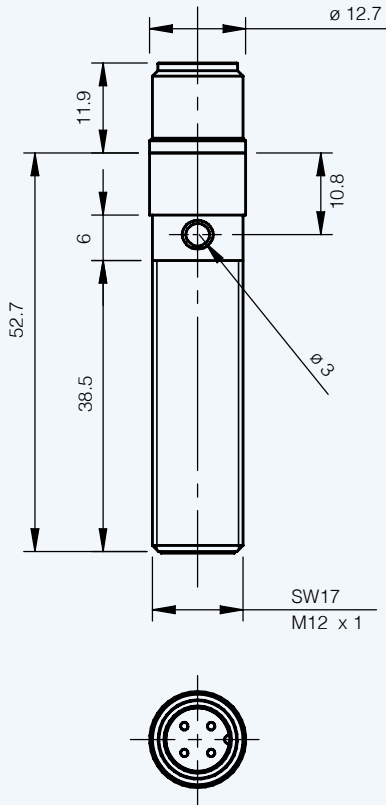




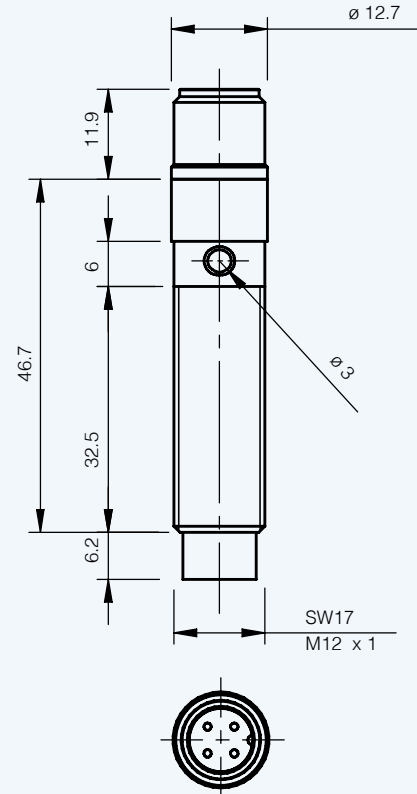
dimensions (mm)

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ETM1/B*-1H

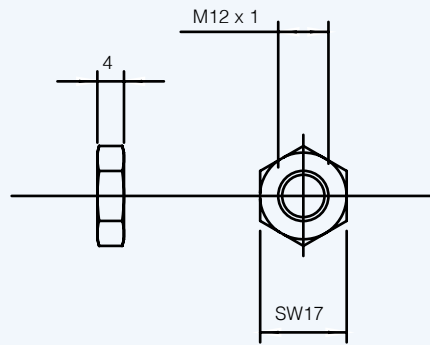


ETM1/B*-2H



dimensions (mm)

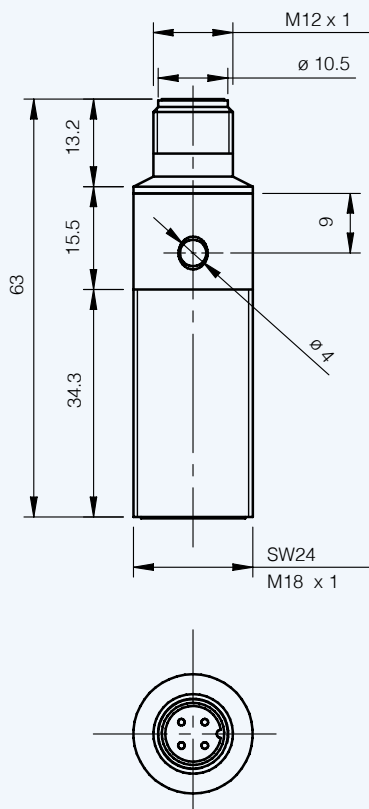
accessories included in all M12 models



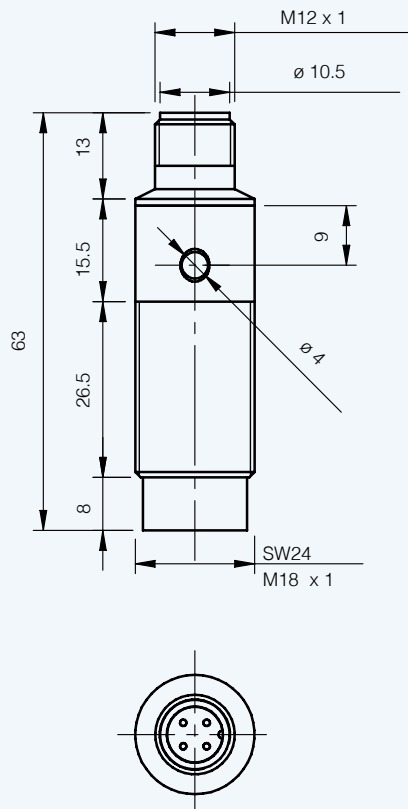
metallic nut (2 x)



ETK1/B*-1H



ETK1/B*-2H



dimensions (mm)

accessories included in all M18 models

