

M8 Inductive DC Proximity Switches AE1



Compact inductive proximity switches for DC operation

- ø8 x 45mm
- Shielded and unshielded models
- IP67 nickel-plated brass housing
- Short-circuit protection
- Rear-mounted LED operation indicator
- Additional cable exit options available
- Nominal sensing range: Shielded 1.5mm
Unshielded 2.5mm
- Long distance AE1: Shielded 2mm
Unshielded 4mm
- LED status indicator 360° visible
- UL and CUL approved



Options and ordering codes

AE1	/	AN	-	1A	
Standard proximity				1	Shielded
				2	Unshielded
NO output state		A		3	Long distance shielded
NC output state		C		4	Long distance unshielded
NPN output type		N		A	Standard cable exit
PNP output type		P			

Specification

Model	AE1
Hysteresis	10% maximum
Repeatability	5%
Supply voltage	10-30 VDC
Ripple	10% maximum
Maximum consumption	20mA
Switching frequency	3kHz
Output type	NPN or PNP
Output state	NO or NC
Load current	200mA
Residual output voltage	1.2V max. I _L =100mA
Leakage current	<10µA
Time before switch operation	200ms
Output current limit	250-300mA
Short circuit protection	autoreset
Polarity reversal protection	yes
Inductive loads protection	yes
LED status indicator	yes (at the rear)
Insulation resistance	>1000m to 1000VDC
Dielectric strength	1500VAC 50Hz for 1 min
Protection degree	IP67
Temperature range	-25° +70 °C
Temperature drift	10% Sn
Housing material	nickel-plated brass
Front material	PBT
Tightening torque	10 Nm max
Ambient humidity	35%-85% r.h.
Weight (approx.)	cable: 45g, plug: 25g

UL approved models

Other cable options:

Right angle cable

Customised cables

Please contact IMO for price and availability

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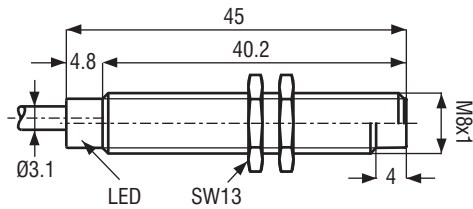


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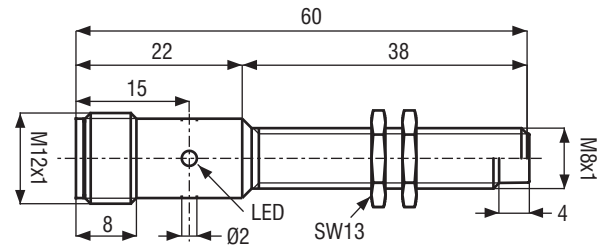
Dimensions (mm)

AE1/**-*A standard cable exit

Cable: $\varnothing 3.1\text{mm}$, 2m length
0.12mm² conductor section, PVC material

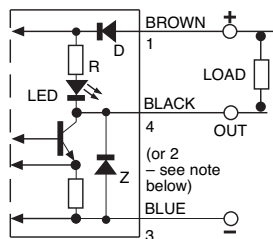


AE1/**-*H M12 plug cable exit

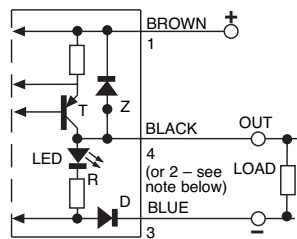


Output circuit – wiring connections

NPN output

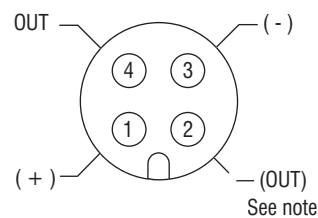


PNP output



NOTE: in case of combined load, i.e. resistive and capacitive, the maximum admissible capacity (C) is 0.05 μF for maximum output voltage and current.

M12 plug - pin connections Cable exit option H



NOTE: (pin connections): At present, all plug exit sensors have the output on pin 4. According to EEC Directives, the output of NC plug exit models will be changing to pin 2 (NO will remain on pin 4). A plug cable to match these NC sensors MUST be a 4-wire type as 3-wire cables are connected to pins 1, 3 and 4 – contact IMO to check stock types.