

M30 Inductive 3-wire DC Proximity Switches AT1



Robust, heavy-duty case proximity switches for DC operation

- Shielded and unshielded models
- IP67 nickel-plated brass housing
- Short-circuit protection
- Inductive loads protection
- Reverse polarity protection
- Side-mounted LED operation indicator
- Integral metal cable support or M12 metal plug
- Nominal sensing range: Shielded 10mm
Unshielded 15mm
- UL and CUL approved



Options and ordering codes

AT1 / ON - 1B	
∅30mm	
Dual output NO and NC	O
Normally open output	A
Normally closed output	C
NPN output type	N
PNP output type	P
	1B
	1
	2
	B
	H
	Shielded
	Unshielded
	Standard cable exit
	M12 plug cable exit

Specification

Model	AT1
Hysteresis	10% maximum
Repeatability	5%
Supply voltage	10-30 VDC
Ripple	10% maximum
Maximum consumption	20mA
Switching frequency	150Hz, 200Hz**
Output type	NPN or PNP
Output state	NO or NC
Load current	≤ 400mA
Residual output voltage	1V max. IL=100mA
Leakage current	<10µA
Time delay before availability	100ms
Output current limit	450-500mA
Short circuit protection	autoreset
Polarity reversal protection	yes
Inductive loads protection	yes
LED status indicator	yes (at the side)
Insulation resistance	>2000mΩ to 2000VDC
Dielectric strength	2000VAC 50Hz for 1 min
Protection degree	IP67
Temperature range	-25° +70 °C
Temperature drift	10% Sn
Housing material	nickel-plated brass
Front material	PBT to UL94 V0
Tightening torque	100 Nm max
Ambient humidity	35%-85% r.h.
Weight (approx.)	270g

Note:

- O** version only available in Plug-in
- A** version pre-wired

Other cable options:

Customised cables
Please contact IMO for price and availability

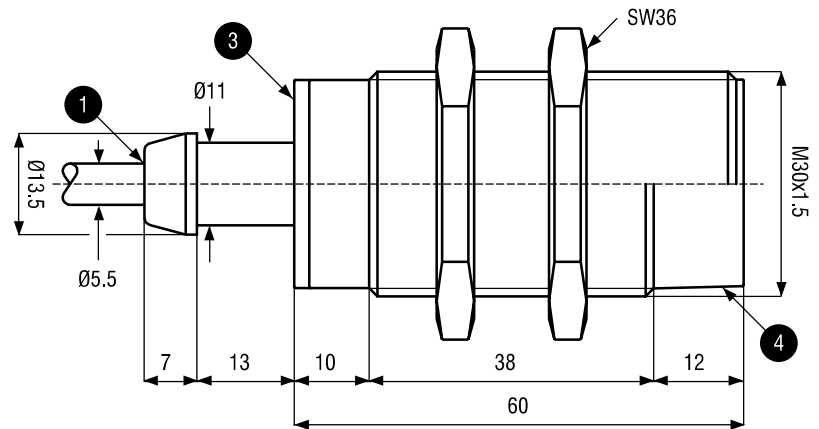
M30 Inductive 3-wire DC Proximity Switches AT1 continued



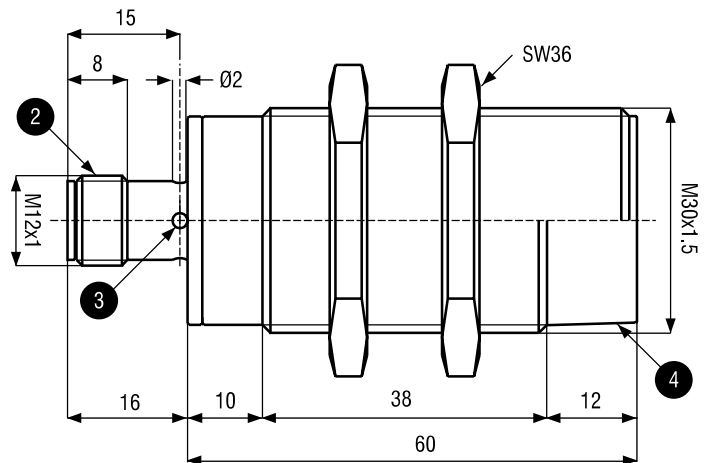
Dimensions (mm)

AT1/**-*B in line cable exit with tang

Cable: $\phi 5\text{mm}$, 2m length, 3 x 0.34mm², PVC material



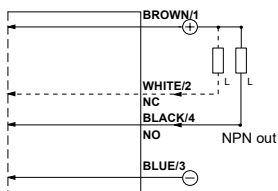
AT1/**-*H M12 plug cable exit



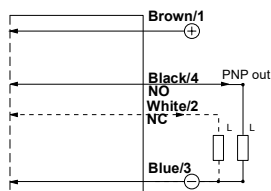
- 1 In line cable exit with tang
- 2 M12 plug-in exit
- 3 Red, output state LED
- 4 Unthreaded section on unshielded models

Output circuit – wiring connections

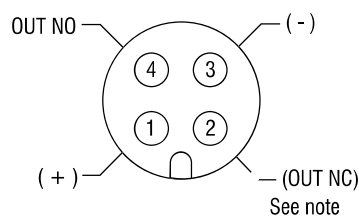
NPN output PT1



PNP output PT1



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.