

# 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

<b>AT1</b> / <b>ON</b> - <b>1B</b>	
$\varnothing 30\text{mm}$	
	<b>1</b> Shielded
	<b>2</b> Unshielded
Dual output NO and NC	<b>O</b>
Normally open output	<b>A</b>
Normally closed output	<b>C</b>
NPN output type	<b>N</b>
PNP output type	<b>P</b>
	<b>B</b> Standard cable exit
	<b>H</b> 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

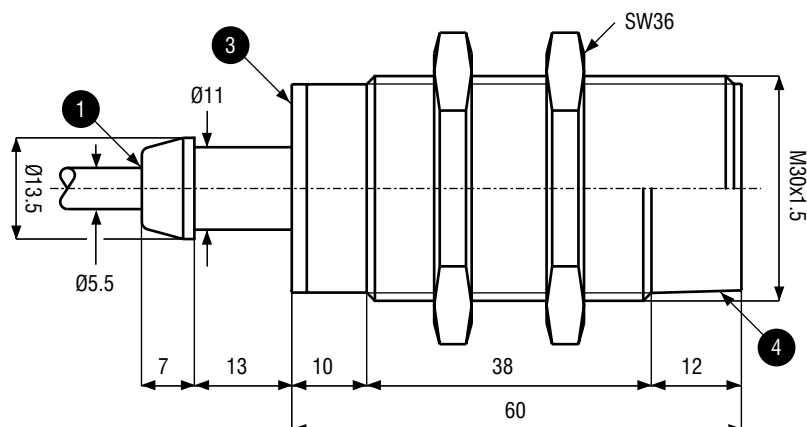
# M30 Inductive 3-wire DC Proximity Switches AT1 continued

**IMO**

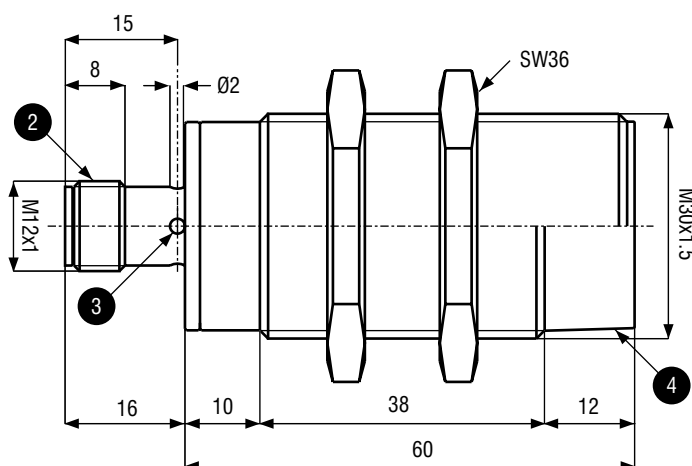
## Dimensions (mm)

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

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



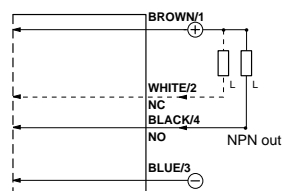
### AT1/\*\*-\*H M12 plug cable exit



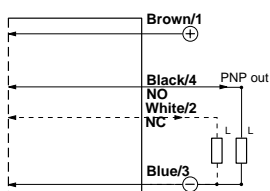
- 1 In line cable exit with tang
- 2 M12 plug-in exit
- 3 Red, output state LED
- 4 Unthreaded section on unshielded models

## Output circuit – wiring connections

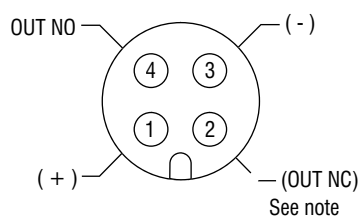
### NPN output PT1



### 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.