

M12/M18 Harsh Environment DC Plug in Proximity Switches PMS/PKS



IP68 Inductive Proximity Switches 10-30VDC

- Double housing construction
- Machining oil resistant
- Immersion proof (IP68)
- Dual outputs NO and NC* in every sensor
- Abrasion resistant sensing face
- M12 plug in
- High electrical noise immunity (IEC801-4 III)
- High switching frequency
- Pin outputs already meet new European Directive
- Nominal sensing range: Shielded 2mm PMS
Unshielded 4mm PMS



Options and ordering codes

	PMS / ON - 1H
M12 IP68 proximity sensor	PMS
M18 IP68 proximity sensor	PKS
M12 Stainless Steel	PMW
M18 Stainless Steel	PKW
Dual outputs NO and NC	0
NPN output type	N
PNP output type	P
Shielded standard 2mm	1
Unshielded standard 4mm	2
M12 plug cable exit	H

Specification

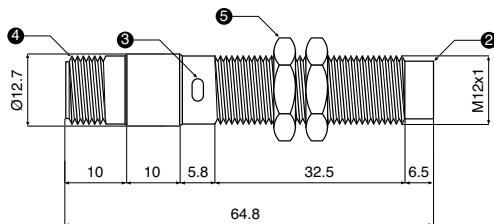
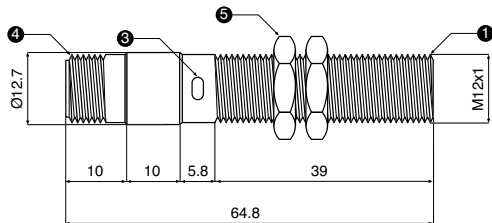
Model	PMS	PKS
Hysteresis	2.5-10%	2.5-10%
Repeatability	5%	5%
Supply voltage	10-30 VDC	10-30 VDC
Ripple	10%	10%
Maximum consumption	18mA	18mA
Switching frequency	2kHz	1kHz
Output type	NPN and PNP, antivalent, NO and NC	
Output state	(dual outputs NO and NC)	
Load current	100mA	400mA
Residual output voltage	1.2V max IL=100mA	0.8V max IL=100mA
Leakage current	<10μA	<10μA
Time before switch operation	100ms	100ms
Output current limit	-150mA	-450mA
Short circuit protection	autoreset	autoreset
Polarity reversal protection	yes	yes
Inductive loads protection	yes	yes
LED status indicator	yes (at the side)	yes (at the side)
Insulation resistance	>2000M to 2000VDC	>2000M to 2000VDC
Dielectric strength	2000VAC 50Hz for 1 min	2000VAC 50Hz for 1 min
Protection degree	IP68	IP68
Temperature range	-25° +70°C	-25° +70°C
Temperature drift	10% Sn	10% Sn
Housing material	nickel-plated brass	nickel-plated brass
Front material	PPS	PPS
Tightening torque	10 Nm max	40 Nm max
Ambient humidity	35%-85% r.h.	35%-85% r.h.
Weight (approx.)	35g	70g

M12/M18 Harsh Environment DC Plug in Proximity Switches PMS/PKS continued



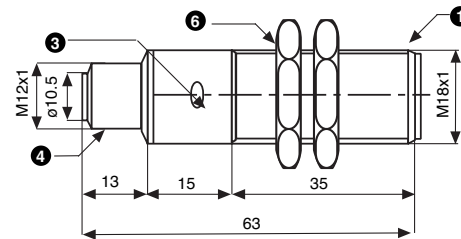
Dimensions (mm)

PMS

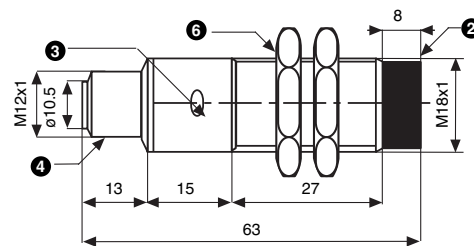


- 1) Shielded
 - 2) Unshielded
 - 3) LED (NO output energised)
 - 4) Connector CD12 series not included
 - 5) Tightening nuts 17mm A/F included
 - 6) Tightening nuts 24mm A/F included
- * Sometimes referred to as antivalent output

PKS



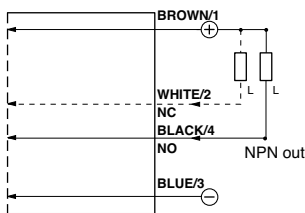
■ PKS/**-1H



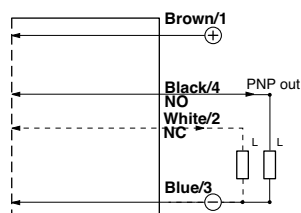
■ PKS/**-2H

Wiring connections

NPN output

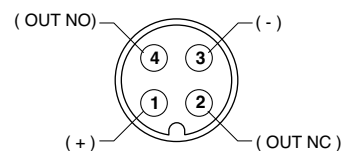


PNP output



Plug-pin connections

M12 plug connector



From 1st January 1996, normally closed (NC) plug-in sensors must have the output on pin 2 according to European Directives. The IMO sensors already meet this standard.