



## CHARACTERISTICS

- **ULTRA SMALL:**  
SMALLEST SENSOR ON THE MARKET TODAY.  
SMALL SIZE MEANS EASIER INSTALLATION ON TRICKY MACHINERY.
- **ULTRA FAST:**  
NO MECHANICAL MOVING PARTS MEANS THE SENSOR CAN READ ANY PRACTICAL CYCLE SPEED.
- **ULTRA RELIABLE:**  
COMPLETELY SOLID STATE OPERATION FOR HIGH RELIABILITY AND DURABILITY.
- **IP 67 PROTECTION.**
- **FULLY POTTED SOLID STATE DEVICE:**  
MEANS CIRCUIT IS ISOLATED FROM THE ENVIRONMENT.
- **360° LED MONITORING:**  
ALLOWS YOU TO SEE SIGNAL STATUS FROM ANY ANGLE.
- **NPN AND PNP:**  
BOTH INCLUDED AS STANDARD.
- **M12 CONNECTOR:**  
AUTOMOTIVE SPECIFICATIONS PROVIDES ROBUST WIRING SOLUTIONS.

## APPLICATIONS

- **ONLY SMX, SMP & SMO SYSTEM.**

*Patented:  
UltraSensor technology is protected by international patents.*

*Patented:  
US 20080284415 A 1*

## ULTRASENSOR: ULTRA SMALL, ULTRA FAST, ULTRA RELIABLE

The *UltraSensor* has been designed as a next generation replacement of Proximity and Micro switch systems for monitoring spool movement in progressive divider elements.

A single model will work with all standard SMX and SMP divider blocks as a screw-on accessory without requiring special arrangement or modification to the spool.

The patented concept works by monitoring magnetic flux variations through a hall-effect sensor as the spool enters the sensing range. There are no moving parts which means the solid state device is completely wear free.

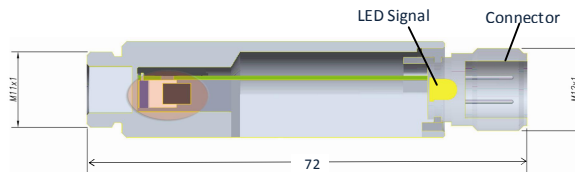
**NPN and PNP connection options are standard within the same sensor.**

Stainless steel AISI 316

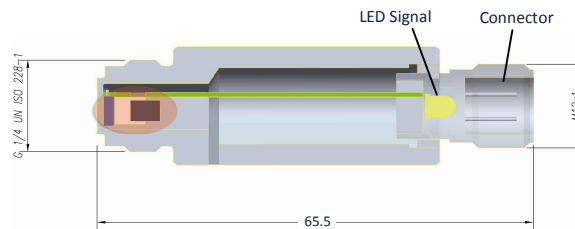


Nickel-plated brass

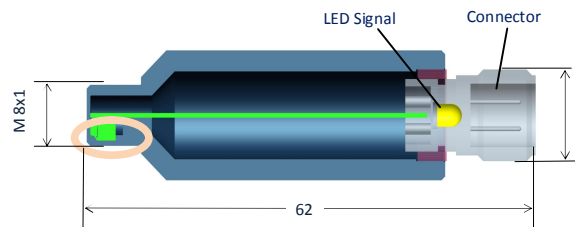
### 1655306 SENSOR FOR SMP



### 1655305 SENSOR FOR SMX



### 1655308 SENSOR FOR SMO



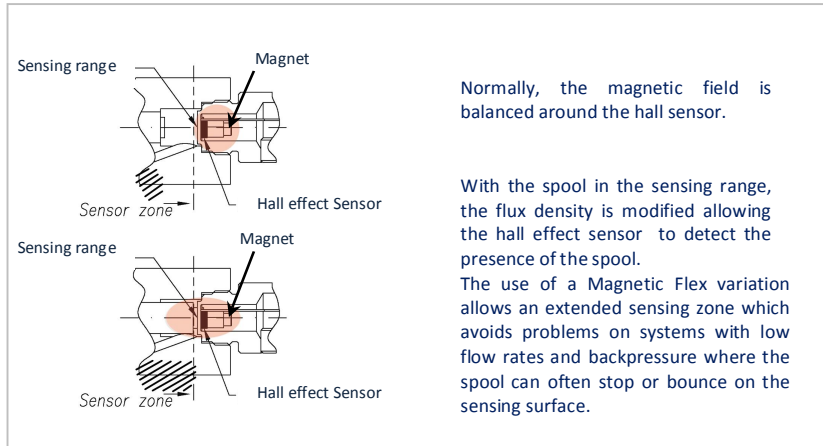
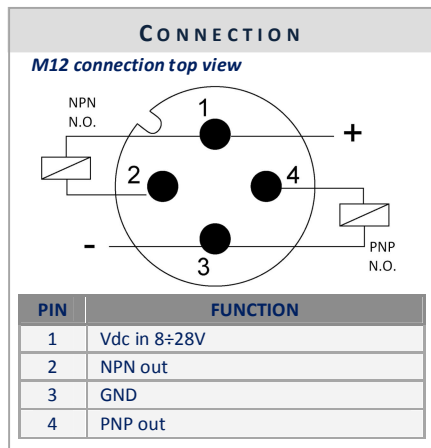
## TECHNICAL INFORMATION

TECHNICAL CHARACTERISTICS	
Material	Stainless steel AISI 316 - Nickel-plated brass
Max. cycle per minute	1000
Voltage	8 ÷ 28 V DC
Short circuit protection	si
Protection degree	IP 67
Operating temperature	-10 °C ÷ +60 °C (-4 °F ÷ +158 °F)
Connector	M12x1
Output signals	NPN 2A N.O. - PNP 0,7A N.O.
Max allowable pressure on the front sensor surface	400 bar

## MOUNTING INFORMATION

CLAMPING TORQUE	
SMX	14 Nm +5%
SMO	10 Nm

## OPERATING PRINCIPLE



## ORDERING INFORMATION

	Material	Part. No.	Q.ty
Sensor for SMP	Nickel-plated brass	<b>1655306</b>	<input type="radio"/>
	Stainless steel AISI 316	<b>1655348</b>	<input type="radio"/>
Sensor for SMX	Nickel-plated brass	<b>1655305</b>	<input type="radio"/>
	Stainless steel AISI 316	<b>1655340</b>	<input type="radio"/>
Sensor for SMO	Nickel-plated brass	<b>1655308</b>	<input type="radio"/>
	Stainless steel AISI 316	<b>1655342</b>	<input type="radio"/>

ACCESSORIES		Part. No.	Q.ty
	M12 female connector	<b>039999</b>	<input type="radio"/>
	M12 female connector +CABLE L 5 mt	<b>0039815</b>	<input type="radio"/>

## Note/contact:

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