

### 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.

### ULTRASENSOR M18x1: 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.

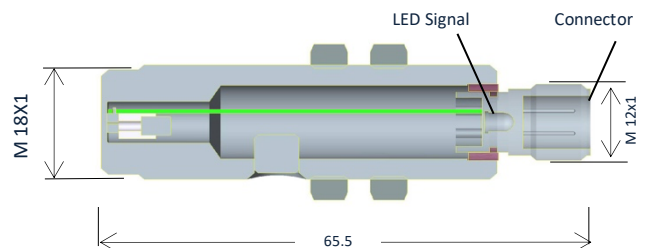
The patented concept works by monitoring magnetic flux variations through a hall-effect sensor as the spool enters the sensing range.

There are no moving parts which means the solid state device is completely wear free.

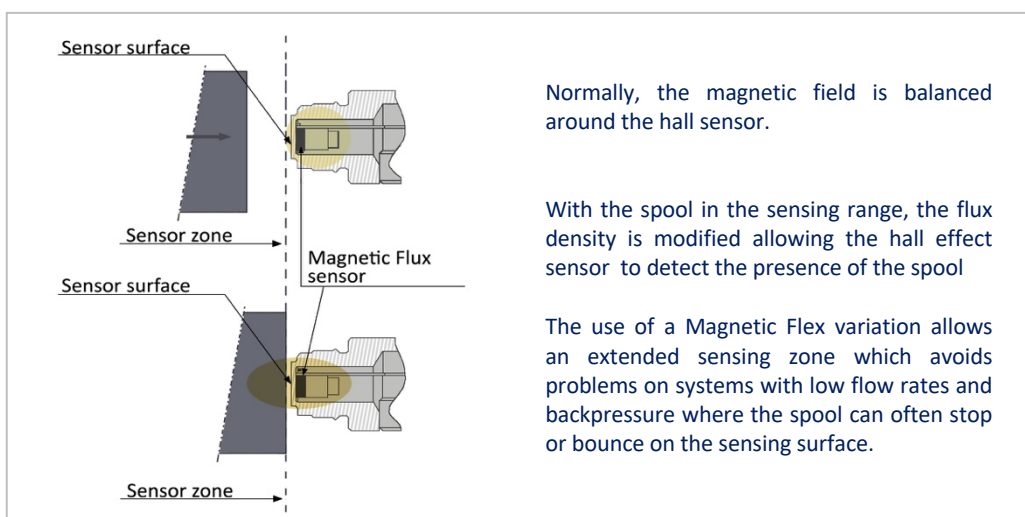
**NPN and PNP connection options are standard within the same sensor.**



**1655326 ULTRASENSOR M18x1**



### OPERATING PRINCIPLE



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

Patented:  
*US 20080284415 A1*

### TECHNICAL INFORMATION

TECHNICAL CHARACTERISTICS	
Material	AISI 316
Max. cycle per minute	1000
Voltage	8 ÷ 28 V DC
Short circuit protection	yes
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	300 bar

### MOUNTING INFORMATION

Connection		
<p>M12 connection top view</p>	PIN	FUNCTION
	1	Vdc in 8÷28V
	2	NPN out
	3	GND
	4	PNP out

### ORDERING INFORMATION

	Part. No.	Q.ty
Ultrasensor M18x1	1655326	<input type="text"/>

ACCESSORIES			
M12 female connector	0039999	<input type="text"/>	
M12 female connector +CABLE L 5 mt	0039815	<input type="text"/>	
2 m cable, M12 female connector	0039168	<input type="text"/>	
2 m cable, 90°- M12 female connector	0039830	<input type="text"/>	
5 m cable, 90°- M12 female connector	0398115	<input type="text"/>	

Info distributor: