

## New 'Tele-Teach' Series P43 of Ultrasonic Distance Sensor

PiL introduced a new series of ultrasonic distance sensors with outstanding characteristics into the market:

**Analogue output 0 ... 10 V or 4 ... 20 mA oder  
2 switching outputs NO / NC characteristics,  
Simple exact setting of  
Output slope,  
Large detection range,  
Compact housing  
Sealing IP67  
Cost effective**



**Analogue** sensors or sensors with **2 switching outputs** PNP or NPN are available. Characteristics of the switching sensors can be set to NO, NC or window characteristics. Depending on the used ultrasonic frequency max. range is up to 3500 mm. Small PBTB plastic housing with dimensions of **M18\*1mm** or **M30\*1,5mm** are extremely well protected against all environmental influences with an **IP67** sealing. Sensors are CE approved, according EN 50081-2/ 50082-2. Connector and cable versions are available.

### **Analogue Sensors:**

- Detection ranges 6 – 50 cm; 10 – 80 cm; 20 – 2000 cm; 30 – 350 cm
- Analogue output 0 - 10 V or 4 - 20 mA
- Resolution 1 mm
- Simple exact setting of output slope
- Good Linearity

### **Sensors with switching output:**

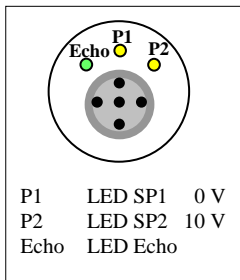
- Switching outputs can be set independently
- NO or NC switching characteristics
- Switching outputs can be combined to define a window or hysteresis.
- High repeatability

### **Applications:**

Distance measurement, level measurement, control of winding and unwinding, loop control, positioning, width measurement, presence detection, collision protection, counting ...

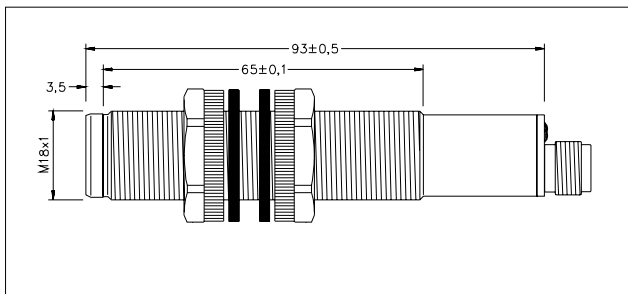
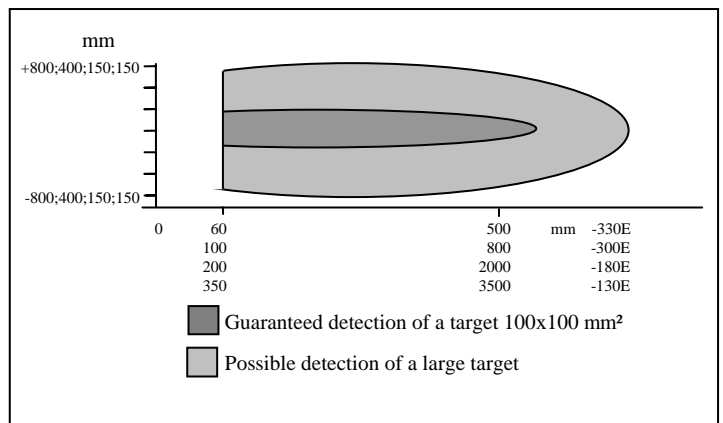
## Technical Data

P43-	T4V/Y-2D-1C/D1-130E	F4V/Y-2D-1C/D1-180E	F4V/Y-2D-1C/D1-300E	F4V/Y-2D-1C/D1-330E
Characteristics	analogue U/I 0 – 10 V 4–20 mA			
Outputs				
Detection range mm	350 - 3500	200 - 2000	100 - 800	60 - 500
Resolution mm	1			
Error in linearity %	<0.3 %			
Response time 90% of final value ms	400 ms	250 ms	100 ms	100 ms
Alignment aid	Teach In			
Output slope adjustment	Teach In			
Display begin and end of slope	LED			
P43-	T4V/Y-2D-001-130E	F4V/Y-2D-001-180E	F4V/Y-2D-001-300E	F4V/Y-2D-001-330E
Characteristics	Switching 2 x PNP or NPN			
Switching frequency Hz	1	1.2	4.7	4.7
Switching hysteresis % of SP	2%			1%
Max. switching current mA	500			
Adjustment switching outputs	Teach In			
<b>All Sensors</b>				
Temperature range °C	-15 -70			
Beam angle °	8			
Temperature compensation	Ja			
Repeatability %	±0.2 % ±2 mm			
Supply voltage VDC	15 - 30			
Current consumption without load mA	< 45			
Sealing IP	67			

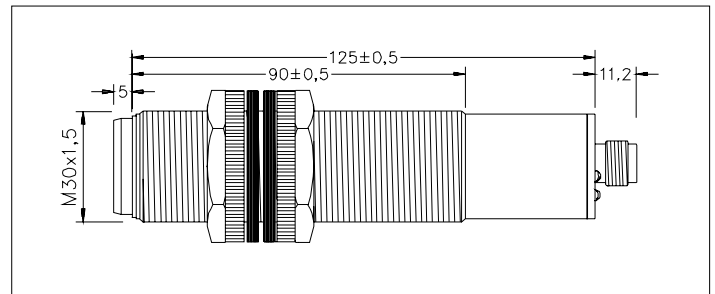


Pin	Colour wire	Function
1	Brown	24 Vdc
3	Blue	0 V GND
2	Grey	NC/SP2
4	Black	0-10V 4-20mA/SP1
5	Pink	Teach In

Detection range



Dimensions sensors with connector



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