



# UK1

## UK1D/G7-0ESY

Ultra.M18,PNP+0-10V,M12 plug,Diffuse  
M18 CYLINDRICAL DIRECT DIFFUSE &  
RETRO-REFLECTIVE ULTRASONIC SENSOR UK1 WITH  
TEACH-IN BUTTON

## OVERVIEW

- Models with digital programmable output
- Models with current or voltage analogue outputs
- Adjustable Hysteresis function: model with programmable double digital outputs, specific for levels
- Working area adjusting (window teach or single point teach) by Teach-in button suitable for all models for a fast coming into work
- Multifunction LED indicator: output type, adjustment procedure, NO/NC selection and reverse analog output slope



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	1600mm
Thermal drift of Sr	±2%
Repeat Accuracy	0,50%
Beam angle	15° ± 2°
Resolution	≤3mm

Sensitivity adjustment	Teach-in button
Hysteresis	1%
thermal compensation	Yes
Minimum sensing distance (blind zone)	150mm
Linearity error	1%

### Application

Function Principle	Diffuse reflection
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### Outputs

Output type	PNP + 0...10V
Output Function	NO/NC + positive/negative slope
Switching frequency	3Hz
Response time	500ms

### Electrical data

Operating Voltage	10 - 30Vdc
No-Load supply current	≤50mA
Load current	100mA
Leakage current	10μA @ 30Vcc
Output voltage drop	2,2Vmax. @ IL=100 mA

Max ripple content	5%
LED indicators	green: echo - yellow: output
Time delay before availability	≤300ms
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Impulsive Overvoltage Protection	Yes
Minimum load resistance	3kΩ

#### Mechanical data

Dimensions	M18 x 1 / L = 91,6mm
Housing material	PBT housing
Weight	70g
Connections	M12 Plug
Tightening torque	1Nm
Operating temperature	- 20°C...+ 70°C
Storage temperature	- 35°C...+ 80° C without freeze
Transducer Frequency	230kHz
Diameter/Dimension	M18

#### Test/Approvals

Approvals	CE cULus
EMC compatibility	IEC 60947-5-2
Shocks and vibrations	IEC EN60947-5-2 / 7.4
Degree of protection	IP67

#### Accessories

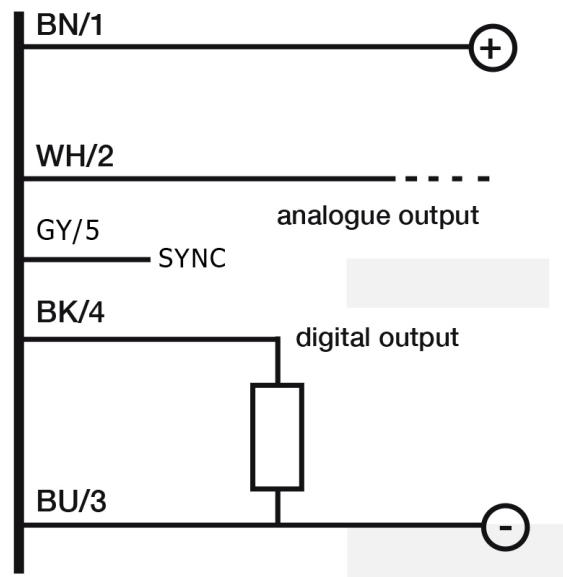
Supplied Accessories	2 nuts M18x1, 2 washers Ø 18
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#### Generical Data

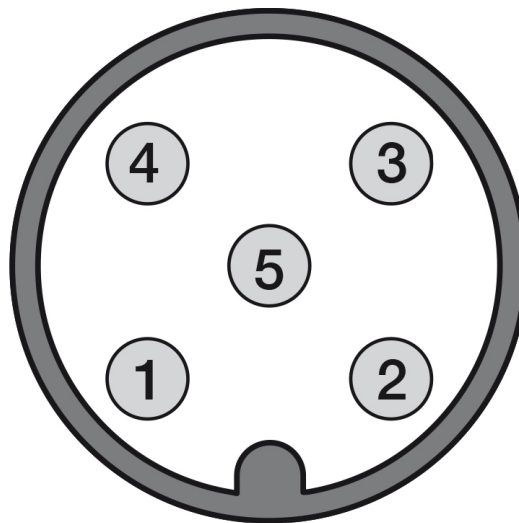
Dimensions	M18 x 1 / L = 91,6mm
Operating Temperature	- 20°C...+ 70°C
Mechanical Protection	IP67

## CONNECTIONS

Electrical diagram

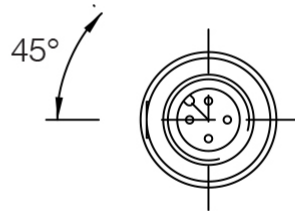
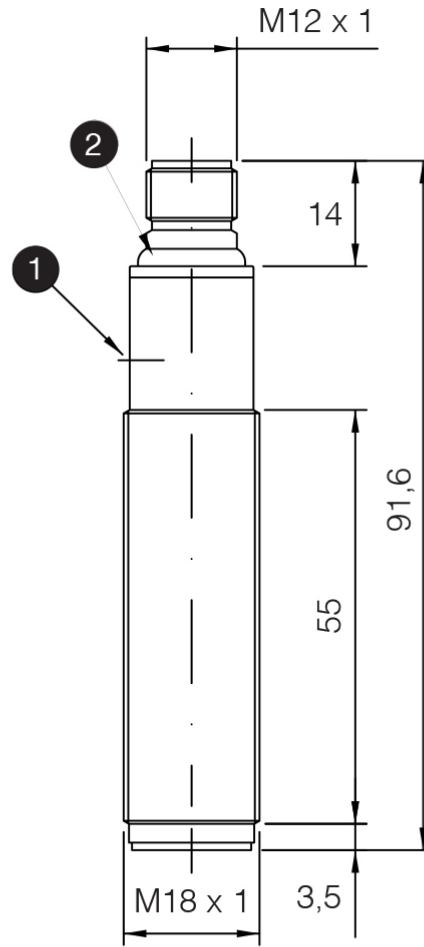


Connector



# OTHERS

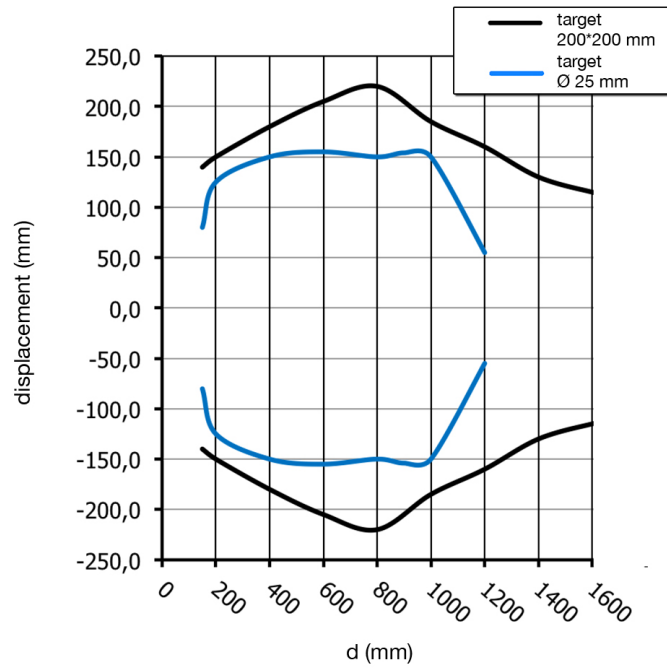
Dimensions



**1** Teach-in

**2** LED

Response curves



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