

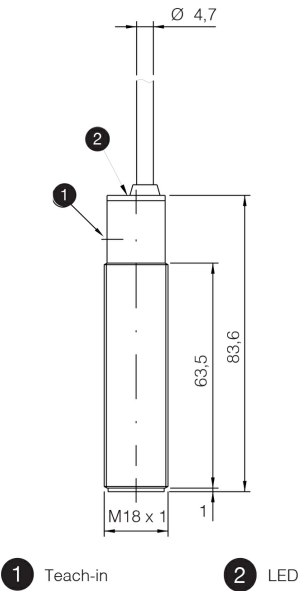


Indicative image



**M18 CYLINDRICAL DIRECT DIFFUSE & RETRO-REFLECTIVE
ULTRASONIC SENSOR UK1 WITH TEACH-IN BUTTON**

- 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



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

Outputs

Output type 0...10V

Output Function Rampa positiva/negativa

Switching frequency 3Hz

Response time 500ms

Electrical data

Operating Voltage 10 - 30Vdc

No-Load supply current $\leq 50\text{mA}$

Load current 100mA

Leakage current $10\mu\text{A}$ @ 30Vcc

Output voltage drop 2,2Vmax. @ $I_L=100\text{ mA}$

Max ripple content 5%

LED indicators green: echo - yellow: output

Time delay before availability $\leq 300\text{ms}$

Short-circuit protection Yes

Reverse Polarity Protection Yes

Impulsive Overvoltage Protection Yes

Minimum load resistance $3\text{k}\Omega$

Mechanical data

Dimensions M18 x 1 / L = 83,6mm

Weight 170g

Housing Material stainless steel AISI 316L

Connections 2m PVC Cable

Tightening torque 50Nm

Operating temperature $-20^{\circ}\text{C} \dots +70^{\circ}\text{C}$

Storage temperature $-35^{\circ}\text{C} \dots +80^{\circ}\text{C}$ 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

Generical Data

Dimensions

M18 x 1 / L = 83,6mm

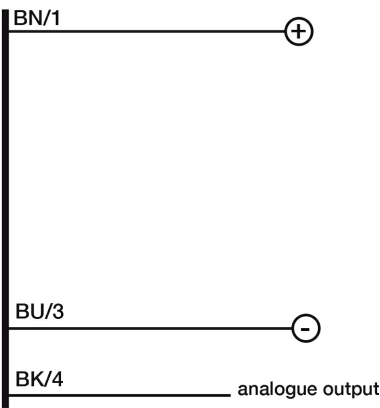
Operating Temperature

- 20°C...+ 70°C

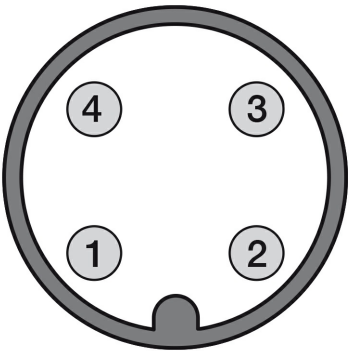
Mechanical Protection

IP67

ELECTRICAL DIAGRAMS OF THE CONNECTIONS

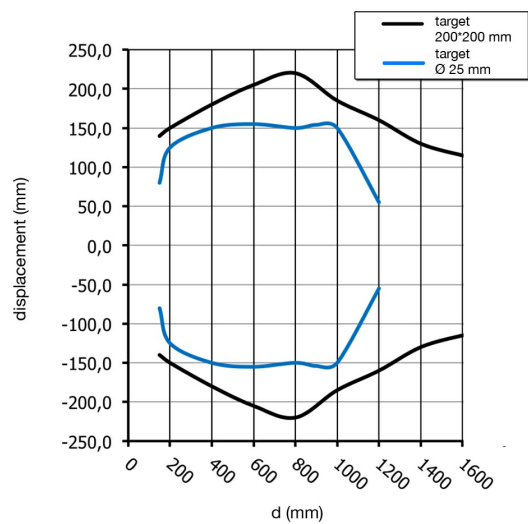


CONNECTOR



RESPONSE CURVES

Parallel offset



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