

UK1

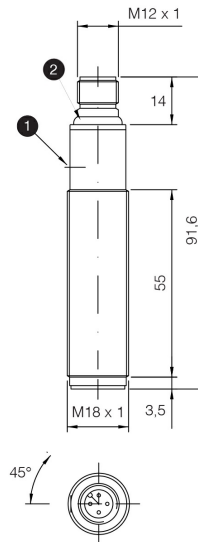


Indicative image



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



1 Teach-in 2 LED

Detection properties

Nominal sensing distance	400mm
Thermal drift of Sr	±2%
Repeat Accuracy	0,50%
Beam angle	10° ± 2°
Resolution	≤3mm
Sensitivity adjustment	Teach-in button
Hysteresis	1%
thermal compensation	Yes
Linearity error	1%
Minimum distance from background	100mm

Application

Function Principle Retroreflective

Outputs

Output type 2x PNP

Output Function NO + NC

Switching frequency 10Hz

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

Mechanical data

Dimensions M18 x 1 / L = 91,6mm

Weight 70g

Housing Material PBT housing

Connections M12 Plug

Tightening torque 1Nm

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 300kHz

Diameter/Dimension M18

Test/Approvals

Approvals CE cULus

EMC compatibility IEC 60947-5-2

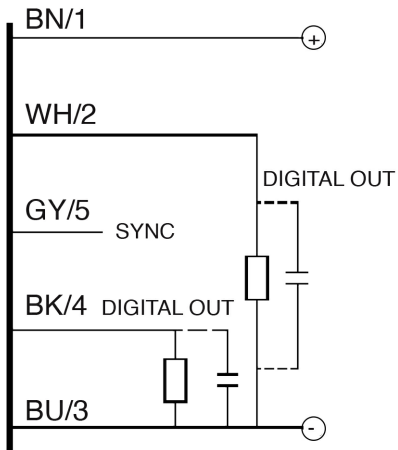
Shocks and vibrations IEC EN60947-5-2 / 7.4

Degree of protection IP67

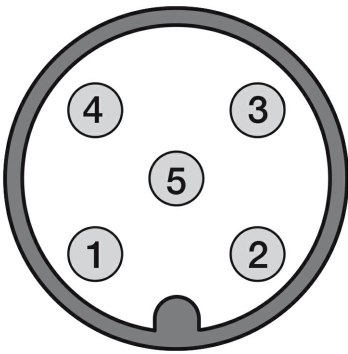
Accessories

Supplied Accessories 2 nuts M18x1, 2 washers $\varnothing 18$

ELECTRICAL DIAGRAMS OF THE CONNECTIONS

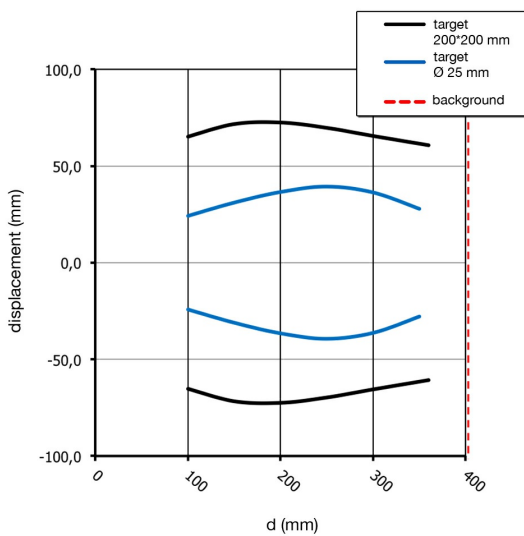


CONNECTOR



RESPONSE CURVES

Parallel offset



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