



UK1

UK1F/G9-2ESY

Ultra.M18,NPN+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	2200mm
Thermal drift of Sr	±2%
Repeat Accuracy	0,50%
Beam angle	14° ± 2°
Resolution	≤3mm

Sensitivity adjustment	Teach-in button
Hysteresis	1%
thermal compensation	Yes
Minimum sensing distance (blind zone)	200mm
Linearity error	1%
Minimum distance from background	300mm

Application

Function Principle	Diffuse reflection
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Outputs

Output type	NPN + 0...10V
Output Function	NO/NC + positive/negative slope
Switching frequency	2Hz
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 = 88,3mm
Housing material	PBT housing
Weight	75g
Connections	M12 Plug
Tightening torque	1Nm
Operating temperature	- 20°C...+ 70°C
Storage temperature	- 35°C...+ 80° C without freeze
Transducer Frequency	200kHz
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 = 88,3mm

Operating Temperature

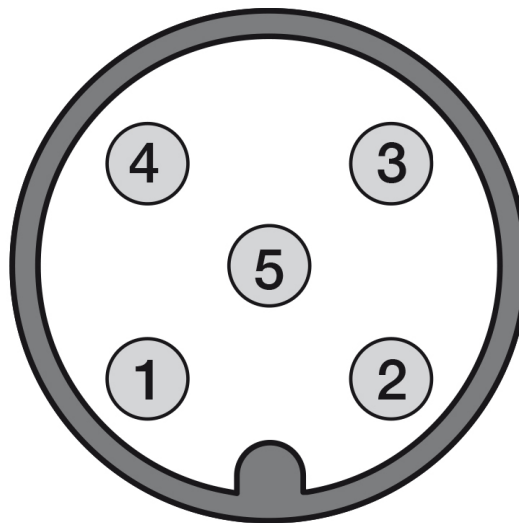
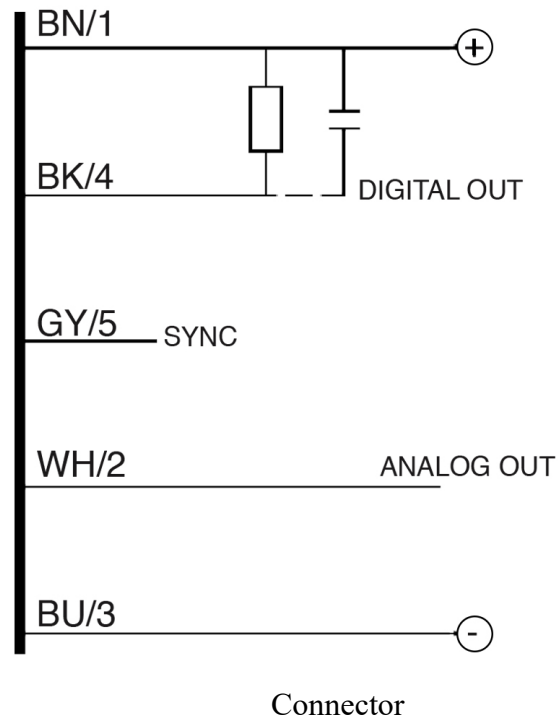
- 20°C...+ 70°C

Mechanical Protection

IP67

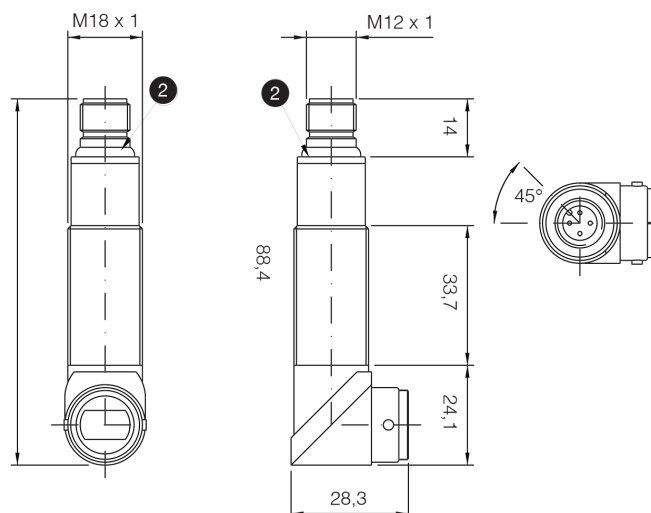
CONNECTIONS

Eletrical diagram



OTHERS

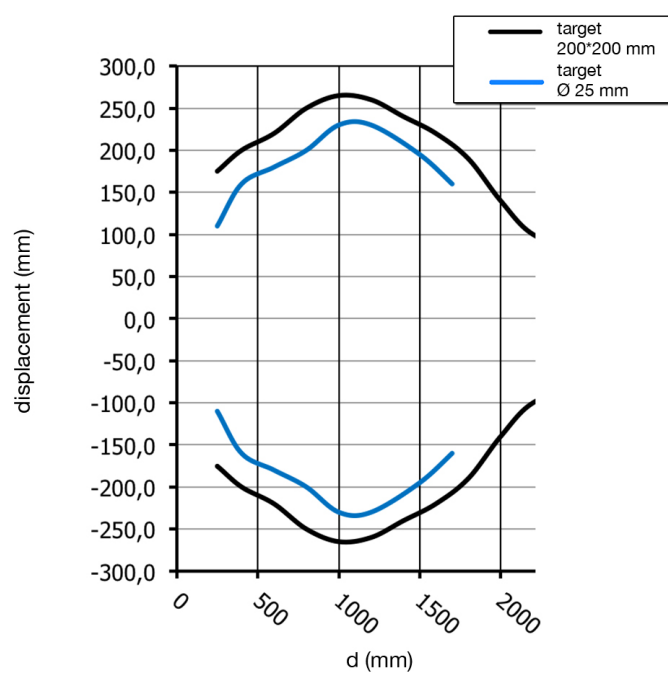
Dimensions



1 Teach-in

2 LED

Response curves



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