



**GN**IIS CE

### **Model Number**

### OBT50-R3-E2

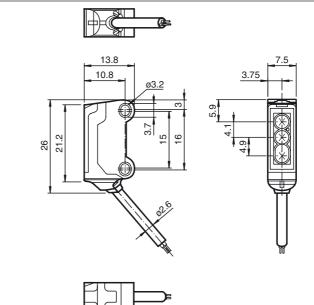
Triangulation sensor (BGS) with 2 m fixed cable

#### **Features**

- 45° cable outlet for maximum moun-٠ ting freedom under extremely tight space constraints
- Improvement in machine availability • with abrasion-resistant, antistatic glass front
- Highly visible light spot, even on dark ٠ materials
- Precision object detection, almost irrespective of the color
- Extremely long detection range paves the way for new applications

### **Product information**

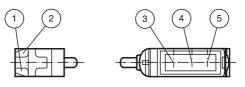
The nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new options. The abrasion-resistant lens allows long operating times close to the moving object.



# **Electrical connection**



### Indicators/operating means



_			
	1	Operating display	green
	2	Signal display	yellow
	3	Emitter	
	4	Receiver 1	
	5	Receiver 2	

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# Technical data

General specifications       3 50 mm         Detection range       3 50 mm         Reference target       standard white, 100 mm x 100 mm         Light source       LED         Light source       LED         Black/White difference (6 %/90 %)       < 15 % at 50 mm         Angle deviation       approx. 35 mm at a distance of 50 mm         Angle deviation       approx. 35 mm at a distance of 50 mm         Angle of divergence       approx. 32 °         Optical face       frontal         Ambient light limit       EN 60947-5-2 : 30000 Lux         Functional safety related parameters       mm         Mitsion Time (T <sub>M</sub> )       20 a         Diagnostic Coverage (DC)       0 %         Indicators/operating means       LED green, statically it Power on , short-circuit : LED green files-finity (approx. 4 Hz)         Function indicator       LED yellow ON: lights when object is detected         Electrical specifications       mm         Operating voltage       U <sub>B</sub> On30 V DC , class 2       No-load supply current l <sub>0</sub> No-load supply current l <sub>0</sub> 10 mA         Signal output       1 PNP output, short-circuit protected, reverse polarity protected, oper odlector         <	Technical data		
Reference target     standard white, 100 mm x 100 mm       Light type     modulated visible red light , 630 nm       Black/White difference (6 %/90 %)     <15 % at 50 mm       Angle deviation     approx. 3.5 mm at a distance of 50 mm       Angle deviation     approx. 2.°       Diameter of the light spot     approx. 2.°       Optical face     frontal       Ambient light limit     EN 60947-5-2: 30000 Lux       Functional safety related parameters     MTTFd       MTTFd     800 a       Mission Time (T <sub>M</sub> )     20 a       Diagnostic Coverage (DC)     0 %       Indicators/operating means     UED green, statically lit Power on , short-circuit : LED green flass- hing (approx. 4 Hz)       Portating voltage     Ug     10 30 V DC , class 2       No-load supply current     Ig     10 30 V DC, class 2       No-load supply current     Ig     10 30 V DC       Signal output     1 PNP output, short-circuit protected, reverse polarity protected, reverse polarity protected, switching type     NO contact       Signal output     1 PNP output, short-circuit protected, reverse polarity protected, reverse polarity protected, reverse polarity protected, switching current     max. 50 v DC       Souting trequency     f     approx. 800 H	General specifications		
Light source   LED     Light type   modulated visible red light , 630 nm     Light type   modulated visible red light , 630 nm     Black/White difference (6 % y60 %)   4 15 % at 50 nm     Angle of divergence   approx. 2 °     Optical face   frontal     Ambient light limit   EN 60947-5-2 : 30000 Lux     Functional safety related parameters   MTTF,     MTTF,   800 a     Mission Time (T <sub>M</sub> )   20 a     Diagnostic Coverage (DC)   0 %     Indicators/operating means   Operation indicator     Coperation indicator   LED green, statically lit Power on , short-circuit : LED green flas- hing (approx. 4 Hz)     Ponctadi supply current   lo     No-load supply current   lo     Voltage supply current   lo     No-load supply current   lo     Signal output   1 PNP output, short-circuit protected, reverse polarity protected, open collector     Switching type   NO contact     Signal output   1 PNP output, short-circuit protected, reverse polarity protected, open collector     Switching requency   f     Ambient combatibility   Directive 2014/30/EU     Directive 2014/30/EU   EN 60947-5-2/207 EN 60947-5-2/A1:2012     Ambient conditions   -     Ambient conditions   -	Detection range		3 50 mm
Light typemodulated visible red light , 630 nmBlackWhite difference (6 %/90 %)<15 % at 50 mm	•		standard white, 100 mm x 100 mm
Black/White difference (6 %/90 %)     < 15 % at 50 mm	Light source		LED
Angle deviationapprox. 2 ° approx. 3.5 mm at a distance of 50 mmAngle of divergenceapprox. 2 °Optical facefrontalAmbient light limitEN 80947-5-2 : 30000 LuxFunctional Safety related parameters800 aMTTFa800 aMission Time (Tw)20 aDiagnostic Coverage (DC)0 %Indicators/operating means0Operation indicatorLED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)Functional Safety related parametersMore and applications10 30 V DC , class 2Operation indicatorLED yellow ON: lights when object is detectedElectrical specifications0Output10 30 V DC , class 2No-load supply current $l_0$ $l_0$ < 10 mA	•		modulated visible red light , 630 nm
Angle division     approx. 2 °       Diameter of the light spot     approx. 2 °       Angle of divergence     approx. 2 °       Optical face     frontal       Ambient light limit     EN 69947-5-2 : 30000 Lux       Functional Safety related parameters     800 a       MTFra     800 a       Mission Time (Two)     20 a       Diagnostic Coverage (DC)     0 %       Indicators/operating means     LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)       Function indicator     LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)       Function indicator     LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)       Protection class     III       Operating voltage     UB     10 30 V DC , class 2       No-load supply current     I0     < 10 mA	• ,,	)	
Dameter of the light spot       approx. 3.5 mm at a distance of 50 mm         Angle of divergence       approx. 2 °         Optical face       frontal         Ambient light limit       EN 60947-5-2 : 30000 Lux         Functional safety related parameters       MTTFq         MTTFq       800 a         Mission Time (T <sub>M</sub> )       20 a         Diagnostic Coverage (DC)       0 %         Indicators/operating means       Operation indicator         LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)         Function indicator       LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)         No-load supply current       10 30 V DC , class 2         No-load supply current       10 30 V DC , class 2         Switching type       NO contact         Signal output       1 PNP output, short-circuit protected, reverse polarity protected, open collector         Switching frequency       f         Bapprox. 80 V DC       Switching frequency         Switching frequency       f         Approx. 80 Hz       Exectormagnetic compatibility         Directive conformity       Exector approx. 80 Hz         Electormagnetic compatibility       Directive 2014/30/EU <td>, ,</td> <td></td> <td>approx, 2 °</td>	, ,		approx, 2 °
Angle of divergence   approx. 2 °     Optical face   frontal     Ambient light limit   EN 60947-5-2 : 30000 Lux     Functional safety related parameters   MTTF <sub>d</sub> MTTF <sub>d</sub> 800 a     Mission Time (T <sub>M</sub> )   20 a     Diagnostic Coverage (DC)   0 %     Indicators/operating means   0     Operation indicator   LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz)     Function indicator   LED yellow ON: lights when object is detected     Electrical specifications   Operation indicator     Output   < 10 m. 30 V DC , class 2	•		
Optical face       frontal         Ambient light limit       EN 60947-5-2 : 30000 Lux         Functional safety related parameters       MTTF <sub>d</sub> B00 a       800 a         Mission Time (T <sub>M</sub> )       20 a         Diagnostic Coverage (DC)       0 %         Indicators/operating means       ED green, statically lit Power on , short-circuit : LED green flass-fning (approx. 4 Hz)         Function indicator       LED gelow ON: lights when object is detected         Electrical specifications       0         Operating voltage       U <sub>B</sub> No-load supply current       0         No-load supply current       0         Witching type       NO contact         Signal output       1 PNP output, short-circuit protected, reverse polarity protected, open collector         Switching voltage       max. 30 V DC         Switching frequency       f         Miseige drop       U <sub>d</sub> Storage temperature       600 µs         Directive conformity       Electromagnetic compatibility         Directive conditions       -         Ambient temperature       -25 60 °C (-13 140 °F)         Storage temperature       -30 70 °C (-22 158 °F)         Mex			
Ambient light limitEN 60947-5-2: 30000 LuxFunctional safety related parameters $000$ aMTTFd $000$ aMTTFd $000$ aDiagnostic Coverage (DC) $0\%$ Indicators/operating means $ED0 green, statically lit Power on , short-circuit : LED green flasshing (approx. 4 Hz)Operation indicatorED yellow ON: lights when object is detectedElectrical specifications000 aOperating voltageU_B10 30 V DC, class 2No-load supply currentI_0<10 m AProtection classIIIOutput000 a000 m ASwitching typeNo contactSwitching typeNo contactSwitching voltagemax. 30 V DCSwitching voltagemax. 30 V DCSwitching voltagemax. 30 V Ar, resistive loadVoltage dropU_dSwitching currentmax. 50 MA, resistive loadVoltage dropU_dSwitching requencyfapprox. 800 HzResponse time600 \mu sDirective conformityElectromagnetic compatibilityDirective conformityMousing height26 mmHousing width7.5 mmHousing width7.5 mmHousing height26 mmJag and the fieldDirective conformityBarrend as a protectionMaterialMaterialHousing height26 mmHousing width7.5 mmHousing depth13.8 mmDegree of $	· ·		
Functional safety related parametersMTTF_d800 aMission Time (T_M)20 aDiagnostic Coverage (DC)0 %Indicators/operating means0%Operation indicatorLED green, statically lit Power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on , short-circuit : LED green factoring the power on a short on the power power on the power on the po	•		EN 60947-5-2 : 30000 Lux
MTTFd800 aMission Time (T_M)20 aDiagnostic Coverage (DC)0 %Indicators/operating meansEED green, statically lit Power on , short-circuit : LED green flass- finiticatorOperation indicatorLED green, statically lit Power on , short-circuit : LED green flass- finitig (approx. 4 Hz)Function indicatorLED yellow ON: lights when object is detectedElectrical specifications0Operating voltageUg gNo-load supply currentIoNo-load supply currentIo% switching typeNO contactSignal output1 PNP output, short-circuit protected, reverse polarity protected, open collectorSwitching outagemax. 30 V DCSwitching requencyfapprox. 800 HzResponse time600 µsDirective conformityElectromagnetic compatibility Directive 2014/30/EUElectromagnetic compatibility Directive 2014/30/EUElectromagnetic compatibility Directive conformityBuding depthAmbient temperature-25 60 °C (-13 140 °F) Storage temperatureStorage temperature-26 60 °C (-13 140 °F)Storage temperature-26 60 °C (-13 140 °F)Mechanical specificationsHousing depth13.8 mmDegree of protectionPG7Connection2 m fixed cableMaterialHousingPURMaseApprovals and certificatesUL approvalE	<u> </u>	eters	
Mission Time (T_M)20 aDiagnostic Coverage (DC)0 %Indicators/operating means0Operation indicatorLED green, statically lit Power on , short-circuit : LED green flasshing (approx. 4 Hz)Function indicatorLED yellow ON: lights when object is detectedElectrical specifications0Operating voltageUB10 30 V DC , class 2No-load supply currentI0Voltage10 30 V DC , class 2Switching typeNO contactSignal output1 PNP output, short-circuit protected, reverse polarity protected, open collectorSwitching voltagemax. 30 V DCSwitching requencyfapprox.800 Hzapprox.800 HzResponse time600 $\mu$ sDirective conformityElectrice approx.800 HzElectroal specifications15 N DCStorage temperature-25 60 °C (-13 140 °F)Storage temperature-30 70 °C (-22 158 °F)Mechanical specifications1967Housing depth13.8 mmDegree of protection1P67Connection2 m fixed cableMaterial	• •		800 a
Diagnostic Coverage (DC)       0 %         Indicators/operating means       LED green, statically lit Power on , short-circuit : LED green flass- hing (approx. 4 Hz)         Function indicator       LED yellow ON: lights when object is detected         Electrical specifications       LED yellow ON: lights when object is detected         Operating voltage       UB       10 30 V DC , class 2         No-load supply current       I0       < 10 mA	u		
Indicators/operating meansOperation indicatorLED green, statically lit Power on , short-circuit : LED green flass hing (approx. 4 Hz)Function indicatorLED yellow ON: lights when object is detectedElectrical specifications0Operating voltageUB 010 30 V DC, class 2No-load supply currentI0 $I0$ < 10 mA			
Operation indicator     LED green, statically lit Power on , short-circuit : LED green flassing (approx. 4 Hz)       Function indicator     LED yellow ON: lights when object is detected       Electrical specifications     UB       Operating voltage     UB     10 30 V DC , class 2       No-load supply current     Ig     <10 mA			
hing (approx. 4 Hz)       hing (approx. 4 Hz)         Function indicator       LED yellow ON: lights when object is detected         Electrical specifications       Operating voltage       UB         Operating voltage       UB       10 30 V DC, class 2         No-load supply current       I0       <10 mA			LED green statically lit Power on short-circuit : LED green flac
Electrical specificationsOperating voltage $U_B$ 10 30 V DC , class 2No-load supply current $I_0$ <10 mA			hing (approx. 4 Hz)
Operating voltage $U_B$ 10 30 V DC , class 2No-load supply current $I_0$ < 10 mA			LED yellow ON. lights when object is detected
No-load supply current     I0     < 10 mA	•		
Protection class     III       Output     Switching type     NO contact       Signal output     1 PNP output, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching current     max. 50 mA , resistive load       Voltage drop     Ud     ≤ 1.5 V DC       Switching frequency     f     approx. 800 Hz       Response time     600 μs       Directive conformity     Electromagnetic compatibility       Directive 2014/30/EU     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient temperature     -25 60 °C (-13 140 °F)       Storage temperature     -30 70 °C (-22 158 °F)       Mechanical specifications     Housing height       Housing height     26 mm       Housing height     26 mm       Housing depth     13.8 mm       Degree of protection     IP67       Connection     2 m fixed cable       Material     Housing       Material     UL approx. 20 g       Cable     PUR       Mass     approx. 20 g       Cable length     2 m		-	
Output     NO contact       Switching type     NO contact       Signal output     1 PNP output, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching current     max. 50 mA, resistive load       Voltage drop     U <sub>d</sub> Voltage drop     U <sub>d</sub> Switching frequency     f       approx. 800 Hz       Response time     600 µs       Directive conformity       Electromagnetic compatibility       Directive 2014/30/EU     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient temperature     -25 60 °C (-13 140 °F)       Storage temperature     -30 70 °C (-22 158 °F)       Mechanical specifications     Image: Second Sec		I <sub>0</sub>	
Switching type     NO contact       Signal output     1 PNP output, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching current     max. 50 mA, resistive load       Voltage drop     Ud     ≤ 1.5 V DC       Switching frequency     f     approx. 800 Hz       Response time     600 μs       Directive conformity     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient compatibility     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient temperature     -25 60 °C (-13 140 °F)       Storage temperature     -30 70 °C (-22 158 °F)       Mechanical specifications     E       Housing width     7.5 mm       Housing height     26 mm       Housing depth     13.8 mm       Degree of protection     IP67       Connection     2 m fixed cable       Material     UL approval       PUR     approx. 20 g       Cable     PUR       Mass     approx. 20 g       Cable length     2 m       UL approval     E87056, cULus Recognized, Class 2 Power Source			
Signal output     1 PNP output, short-circuit protected, reverse polarity protected, open collector       Switching voltage     max. 30 V DC       Switching current     max. 50 mA, resistive load       Voltage drop     U <sub>d</sub> Switching frequency     f       Response time     600 μs       Directive conformity     Electromagnetic compatibility       Directive 2014/30/EU     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient conditions     -25 60 °C (-13 140 °F)       Storage temperature     -30 70 °C (-22 158 °F)       Mechanical specifications     -26 mm       Housing width     7.5 mm       Housing depth     13.8 mm       Degree of protection     IP67       Connection     2 m       Material	•		
open collector   max. 30 V DC     Switching current   max. 30 V DC     Switching current   max. 50 mA, resistive load     Voltage drop   U <sub>d</sub> Switching frequency   f     Arbeint conformity   book us     Directive conformity   Electromagnetic compatibility     Directive 2014/30/EU   EN 60947-5-2:2007 EN 60947-5-2/A1:2012     Ambient conditions   -25 60 °C (-13 140 °F)     Storage temperature   -30 70 °C (-22 158 °F)     Mechanical specifications   -26 mm     Housing width   7.5 mm     Housing depth   13.8 mm     Degree of protection   PF67     Connection   2 m fixed cable     Material   PC/ABS and TPU     Optical face   glass     Cable   PUR     Mass   approx. 20 g     Cable length   2 m     Juagenticates   -20 g     UL approval   E87056, cULus Recognized, Class 2 Power Source			
Switching current     max. 50 mA, resistive load       Voltage drop     U <sub>d</sub> ≤ 1.5 V DC       Switching frequency     f     approx. 800 Hz       Response time     600 μs       Directive conformity       Electromagnetic compatibility     Directive 2014/30/EU       Directive 2014/30/EU     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient conditions       Ambient temperature     -25 60 °C (-13 140 °F)       Storage temperature     -25 60 °C (-22 158 °F)       Mechanical specifications	Signal output		
Voltage drop       U <sub>d</sub> ≤ 1.5 V DC         Switching frequency       f       approx. 800 Hz         Response time       600 μs         Directive conformity       Electromagnetic compatibility         Directive 2014/30/EU       EN 60947-5-2:2007 EN 60947-5-2/A1:2012         Ambient conditions       -25 60 °C (-13 140 °F)         Storage temperature       -25 60 °C (-22 158 °F)         Mechanical specifications       -30 70 °C (-22 158 °F)         Housing width       7.5 mm         Housing depth       13.8 mm         Degree of protection       P67         Connection       2 m fixed cable         Material       PC/ABS and TPU         Optical face       glass         Cable       PUR         Mass       approx. 20 g         Cable length       2 m	Switching voltage		
Switching frequencyfapprox. 800 HzResponse time600 µsDirective conformityElectromagnetic compatibilityEN 60947-5-2:2007 EN 60947-5-2/A1:2012Ambient conditions-25 60 °C (-13 140 °F)Ambient temperature-25 60 °C (-22 158 °F)Mechanical specifications-30 70 °C (-22 158 °F)Housing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialglassCablePURMassapprox. 20 gCable length2 mLabel length2 m	Switching current		max. 50 mA , resistive load
Response time600 μsDirective conformity600 μsElectromagnetic compatibilityEN 60947-5-2:2007 EN 60947-5-2/A1:2012Ambient conditions25 60 °C (-13 140 °F)Ambient temperature-25 60 °C (-13 140 °F)Storage temperature-30 70 °C (-22 158 °F)Mechanical specifications10 °C (-22 158 °F)Housing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterial9UROptical faceglassCablePURMassapprox.20 gCable length2 mUL approvalE87056 , cULus Recognized, Class 2 Power Source	Voltage drop	U <sub>d</sub>	≤ 1.5 V DC
Directive conformityElectromagnetic compatibilityEN 60947-5-2:2007 EN 60947-5-2/A1:2012Directive 2014/30/EUEN 60947-5-2:2007 EN 60947-5-2/A1:2012Ambient conditions-25 60 °C (-13 140 °F)Ambient temperature-30 70 °C (-22 158 °F)Mechanical specifications-30 70 °C (-22 158 °F)Housing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterial-21 mixed cableOptical faceglassCablePURMassapprox.20 gCable length2 mUL approvalE87056, cULus Recognized, Class 2 Power Source	Switching frequency	f	approx. 800 Hz
Electromagnetic compatibility     EN 60947-5-2:2007 EN 60947-5-2/A1:2012       Ambient conditions     -25 60 °C (-13 140 °F)       Ambient temperature     -25 60 °C (-22 158 °F)       Storage temperature     -30 70 °C (-22 158 °F)       Mechanical specifications     -       Housing width     7.5 mm       Housing height     26 mm       Housing depth     13.8 mm       Degree of protection     IP67       Connection     2m fixed cable       Material     -       Housing     PC/ABS and TPU       Optical face     glass       cable     PUR       Mass     approx.20 g       Cable length     2 m	Response time		600 µs
Directive 2014/30/EU       EN 60947-5-2:2007 EN 60947-5-2/A1:2012         Ambient conditions       -25 60 °C (-13 140 °F)         Ambient temperature       -25 60 °C (-22 158 °F)         Mechanical specifications	Directive conformity		
Ambient conditionsAmbient temperature-25 60 °C (-13 140 °F)Storage temperature-30 70 °C (-22 158 °F)Mechanical specificationsHousing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialUHousingPC/ABS and TPUOptical faceglassCablePURMassapprox. 20 gCable length2 m	Electromagnetic compatibility		
Ambient temperature-25 60 °C (-13 140 °F)Storage temperature-30 70 °C (-22 158 °F)Mechanical specificationsHousing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterial9C/ABS and TPUOptical faceglassCablePURMassapprox.20 gCable length2 mUL approvalE87056 , cULus Recognized, Class 2 Power Source	Directive 2014/30/EU		EN 60947-5-2:2007 EN 60947-5-2/A1:2012
Storage temperature-30 70 °C (-22 158 °F)Mechanical specificationsHousing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterial9C/ABS and TPUOptical faceglassCablePURMassapprox.20 gCable length2 mUL approvals and certificatesE87056 , cULus Recognized, Class 2 Power Source	Ambient conditions		
Mechanical specificationsHousing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialHousingPC/ABS and TPUOptical faceglassCablePURMassapprox.20 gCable length2 mUL approvalsE87056 , cULus Recognized, Class 2 Power Source	Ambient temperature		-25 60 °C (-13 140 °F)
Housing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialHousingPC/ABS and TPUOptical faceglassCablePURMassapprox. 20 gCable length2 mUL approvals and certificatesE87056 , cULus Recognized, Class 2 Power Source	Storage temperature		-30 70 °C (-22 158 °F)
Housing width7.5 mmHousing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialHousingPC/ABS and TPUOptical faceglassCablePURMassapprox. 20 gCable length2 mUL approvals and certificatesE87056 , cULus Recognized, Class 2 Power Source	Mechanical specifications		
Housing height26 mmHousing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialIP07Optical faceglassCablePURMassapprox. 20 gCable length2 mUL approvalsE87056 , cULus Recognized, Class 2 Power Source	•		7.5 mm
Housing depth13.8 mmDegree of protectionIP67Connection2 m fixed cableMaterialHousingPC/ABS and TPUOptical faceglassCablePURMassapprox. 20 gCable length2 mUL approvalsE87056 , cULus Recognized, Class 2 Power Source	•		26 mm
Degree of protection   IP67     Connection   2 m fixed cable     Material   PC/ABS and TPU     Optical face   glass     Cable   PUR     Mass   approx. 20 g     Cable length   2 m			13.8 mm
Connection     2 m fixed cable       Material     PC/ABS and TPU       Optical face     glass       Cable     PUR       Mass     approx. 20 g       Cable length     2 m			
Material       Housing     PC/ABS and TPU       Optical face     glass       Cable     PUR       Mass     approx. 20 g       Cable length     2 m			2 m fixed cable
Optical face   glass     Cable   PUR     Mass   approx. 20 g     Cable length   2 m       Approvals and certificates     UL approval   E87056, cULus Recognized, Class 2 Power Source			
Optical face   glass     Cable   PUR     Mass   approx. 20 g     Cable length   2 m       Approvals and certificates   E87056, cULus Recognized, Class 2 Power Source	Housing		PC/ABS and TPU
Cable   PUR     Mass   approx. 20 g     Cable length   2 m     Approvals and certificates   UL approval     E87056 , cULus Recognized, Class 2 Power Source	•		
Mass   approx. 20 g     Cable length   2 m     Approvals and certificates   UL approval     UL approval   E87056 , cULus Recognized, Class 2 Power Source	•		
Cable length   2 m     Approvals and certificates   UL approval     E87056 , cULus Recognized, Class 2 Power Source			
UL approval E87056 , cULus Recognized, Class 2 Power Source	Cable length		
CCC approval CCC approval / marking not required for products rated ≤36 V	UL approval		
	CCC approval		CCC approval / marking not required for products rated <36 V

	OBT50-R3-E2	
ī	Accessories	
	MH-R3-01 Mounting aid for sensors from the R3 se- ries, mounting bracket	
	<b>MH-R3-02</b> Mounting aid for sensors from the R3 se- ries, mounting bracket	
	<b>MH-R3-03</b> Mounting aid for sensors from the R3 se- ries, mounting bracket	
	<b>MH-R3-04</b> Mounting aid for sensors from the R3 se- ries, mounting bracket	
IS-	Other suitable accessories can be found at www.pepperl-fuchs.com	
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group www.pepperl-fuchs.com

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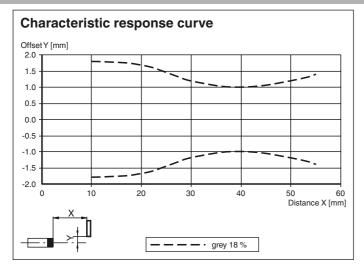
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com

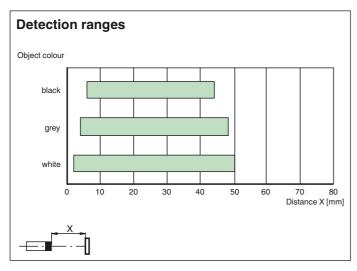
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Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com



## **Curves/Diagrams**





Release date: 2017-07-17 13:44 Date of issue: 2017-07-17 269710\_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information" Pepperl+Fuchs Group USA: +1 330 486 0001 www.pepperl-fuchs.com

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