



Diffuse mode sensor RL29-8-2000/73c/136

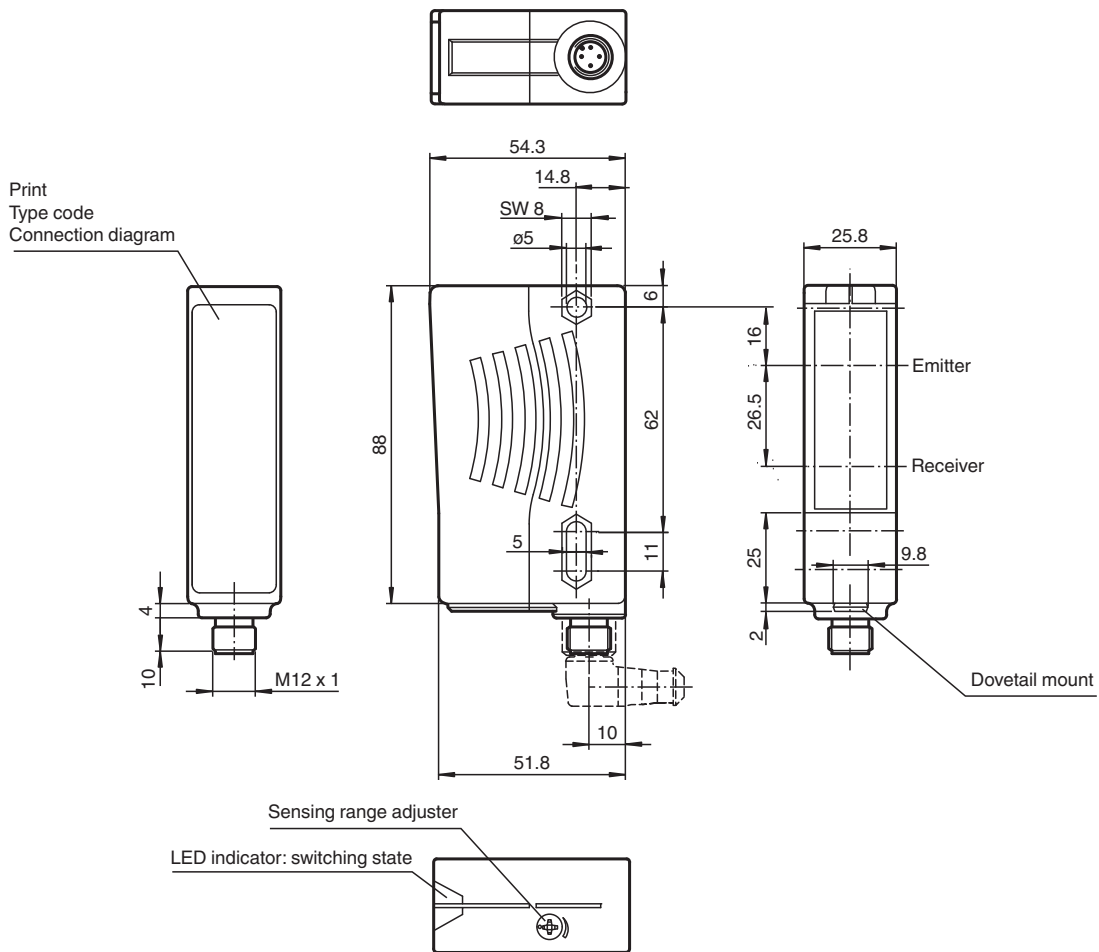


- Highly visible LED
- Good alignability due to red transmission LED
- Powerful push-pull output
- Optimal price/power ratio
- Protection class II

Diffuse mode sensor, plastic housing, 2000 mm adjustable detection range, red light, light on, 2 push-pull outputs, M12 plug



Dimensions



Technical Data

General specifications

Detection range 20 ... 2000 mm , adjustable

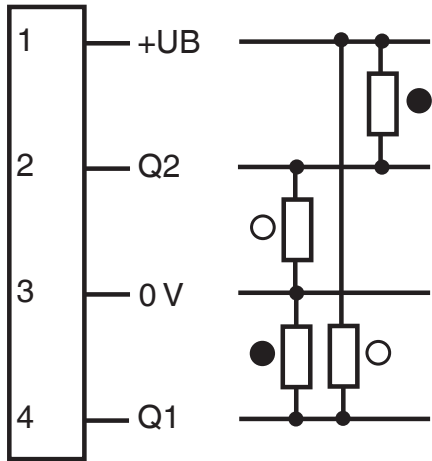
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Technical Data

| | | |
|---|----------------|---|
| Detection range min. | | 20 ... 200 mm |
| Detection range max. | | 20 ... 2000 mm |
| Light source | | LED |
| Light type | | modulated visible red light , 660 nm |
| Black-white difference (6 %/90 %) | | < 40 % |
| Diameter of the light spot | | approx. 50 mm at a distance of 2000 mm |
| Opening angle | | Emitter: 1.2 ° , Receiver: 2 ° |
| Ambient light limit | | 50000 Lux |
| Functional safety related parameters | | |
| MTTF _d | | 1982.2 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| Indicators/operating means | | |
| Function indicator | | LED yellow: switching state |
| Control elements | | Sensing range adjuster |
| Electrical specifications | | |
| Operating voltage | U _B | 10 ... 30 V DC |
| Ripple | | 10 % |
| No-load supply current | I ₀ | ≤ 40 mA |
| Protection class | | 2 , rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1 |
| Output | | |
| Switching type | | light-on |
| Signal output | | 2 push-pull (4 in 1) outputs, short-circuit protected, reverse polarity protected |
| Switching voltage | | max. 30 V DC |
| Switching current | | max. 100 mA |
| Switching frequency | f | 125 Hz |
| Response time | | 4 ms |
| Conformity | | |
| Product standard | | EN 60947-5-2 |
| Approvals and certificates | | |
| CE conformity | | yes |
| EAC conformity | | TR CU 020/2011 |
| UL approval | | cULus |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Ambient temperature | | -25 ... 60 °C (-13 ... 140 °F) |
| Storage temperature | | -40 ... 75 °C (-40 ... 167 °F) |
| Mechanical specifications | | |
| Housing width | | 25.8 mm |
| Housing height | | 88 mm |
| Housing depth | | 54.3 mm |
| Degree of protection | | IP65 |
| Connection | | Plastic connector M12 x 1, 4-pin |
| Material | | |
| Housing | | Plastic ABS |
| Optical face | | plastic |
| Mass | | 70 g |

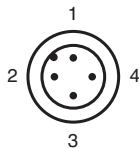
Connection Assignment

Option:



- = Light on
- = Dark on

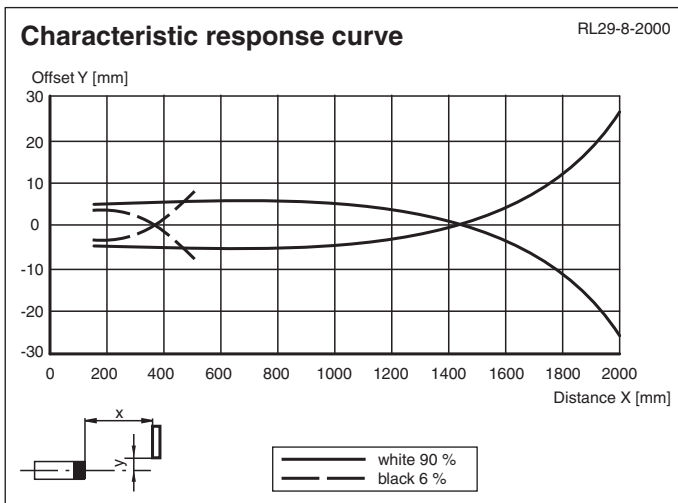
Connection Assignment



Wire colors in accordance with EN 60947-5-2

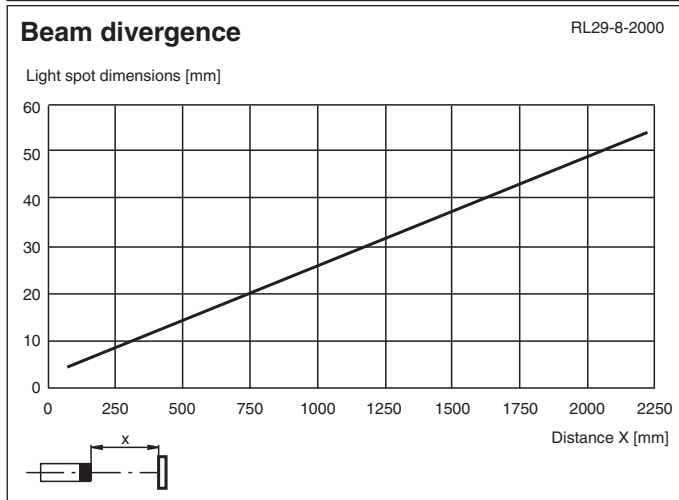
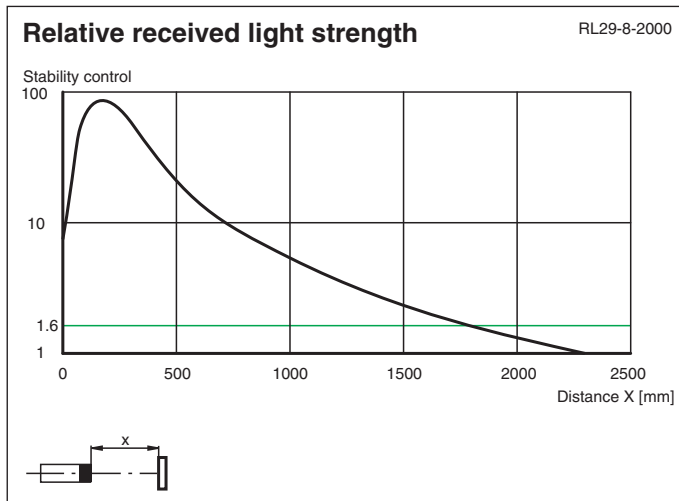
| | | | |
|---|--|----|---------|
| 1 | | BN | (brown) |
| 2 | | WH | (white) |
| 3 | | BU | (blue) |
| 4 | | BK | (black) |

Characteristic Curve










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Characteristic Curve



Accessories

| | | |
|---|---------------------|---|
|  | OMH-05 | Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm |
|  | OMH-21 | Mounting bracket: mounting aid for sensors in the RL* series |
|  | OMH-22 | Mounting aid for RL* series |
|  | OMH-RLK29-HW | Mounting bracket for rear wall mounting |
|  | OMH-RL28-C | Weld slag cover model |
|  | V1-G-2M-PUR | Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey |
|  | V1-W-2M-PUR | Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey |