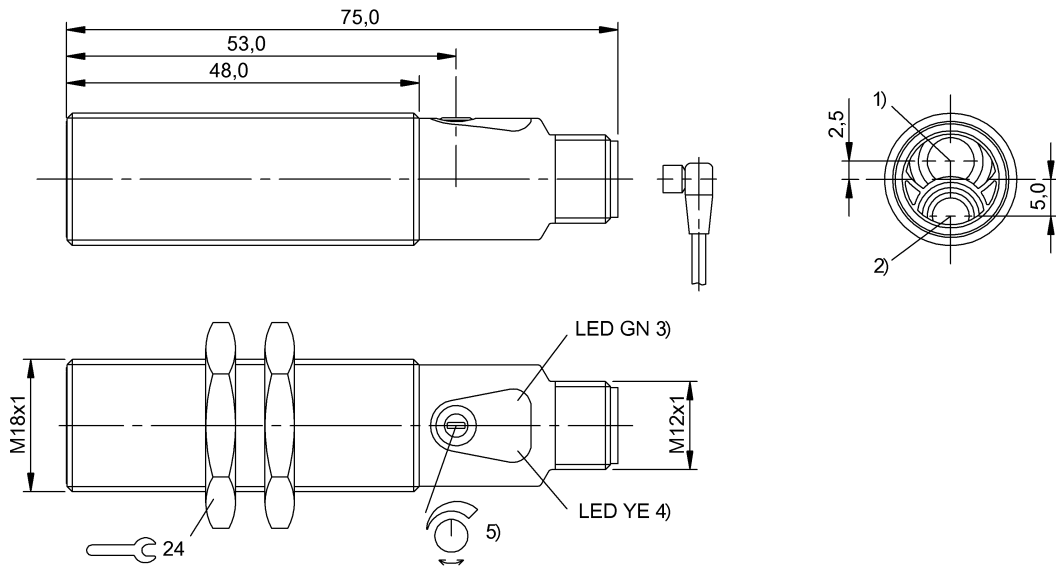


## BOS 18M-PA-RD20-S4 BOS01CF



1) Optical axis receiver 2) Optical axis emitter 3) Operating voltage 4) Light reception/limit area 5) Sn



### Display/Operation

Adjuster	Potentiometer 270° (1x)
Setting	Rated switching distance (Sn)

### Electrical connection

Connection	M12x1-Connector, 4-pole, A-coded
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

### Electrical data

Hysteresis H max. (% of Sr)	10.0 %
Load capacitance max. at Ue	0.1 µF
No-load current I <sub>o</sub> max. at Ue	30 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Pollution degree	3
Protected against miswiring	yes
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub> DC	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Switching frequency	400 Hz
Turn-off delay t <sub>off</sub> max.	1.25 ms
Turn-on delay t <sub>on</sub> max.	1.25 ms
Utilization category	DC -13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	2.5 V

### Environmental conditions

Ambient temperature	-5...55 °C
Protection class	II

Internet [www.balluff.com](http://www.balluff.com)  
 Balluff Germany +49 (0) 7158 173-0, 173-370  
 Balluff USA 1-800-543-8390  
 Balluff China +86 (0) 21-50 644131

Protection type IEC 60529

IP67

### General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	18M
Style	Cylinder Straight optics

### Material

Housing material	Brass
Material sensing surface	Glass
Surface protection	nickel plates

### Mechanical data

Dimension	Ø 18 x 75 mm
Fastening detail	Nut M18x1
Tightening torque max.	15 Nm 30 Nm

### Optical data

Ambient light max.	10000 Lux
Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED Red light
Wave length	626 nm

For definitions of terms, see main catalog  
 Subject to change without notice

eCl@ss 9.1: 27-27-09-03  
 ETIM 6.0: EC001821  
 BOS01CF\_09-03-17\_18:35

## BOS 18M-PA-RD20-S4 BOS01CF

### Output/Interface

Switching output	PNP Normally closed (NC) PNP Normally open (NO)
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### Range/Distance

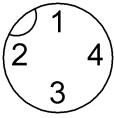
Measuring range	0...600 mm
Range	0...600 mm
Rated operating distance $S_n$	600 mm, Adjustable

Ripple max. (% of $U_e$ )	15 %
Temperature drift max. (% of $S_r$ )	10 %

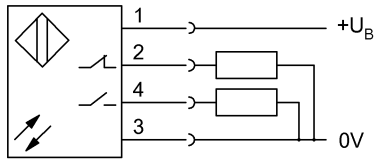
### Remarks

Order accessories separately.  
For additional information, refer to user's guide.  
The sensor is functional again after the overload has been eliminated.  
Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.

### Connector view



### Wiring Diagram



### Symbols for Optoelectronic Sensors

