

# STM

8020018

## Fork Light Sensors Type GLS

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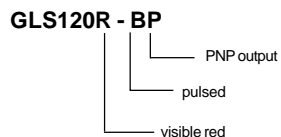
### Types

GLS05R-BP  
GLS10R-BP  
GLS20R-BP  
GLS30R-BP  
GLS50R-BP  
GLS80R-BP  
GLS120R-BP  
GLS180R-BP  
GLS220R-BP

GLS05R-BN  
GLS10R-BN  
GLS20R-BN  
GLS30R-BN  
GLS50R-BN  
GLS80R-BN  
GLS120R-BN  
GLS180R-BN  
GLS220R-BN

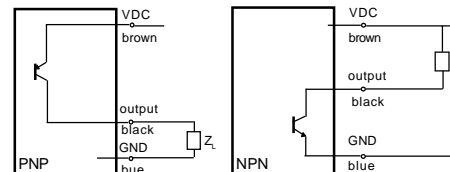
Order code:

eg.:

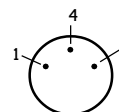


(For information about different cable/connector options please refer to appropriate sensor datasheet.)

### Wiring



1 (brown) + VDC  
4 (black) signal output  
3 (blue) - GND



**⚠ Connect sensor to 10...30 VDC only!  
Do not install supply cable parallel to a power line!**

### Adjustment advice

#### NO/NC:

NO - normally open = dark-on: counterclockw. stop  
NC - normally closed = light-on: clockwise stop

#### Sensitivity:

best object resolution: pot. at counterclockwise stop

best edge detection, minimum hysteresis, excess gain = 2, optimum noise immunity: place a 50%-neutral grey filter into the light beam and set potentiometer exactly on switching point; remove filter thereafter.

good part detection at average excess gain: place potentiometer between 1/8 und 1/4 turn from counterclockwise stop.

maximum excess gain: place potentiometer on clockwise stop.

**⚠ Do not use the sensor for personell safety applications!**

### Technical Data

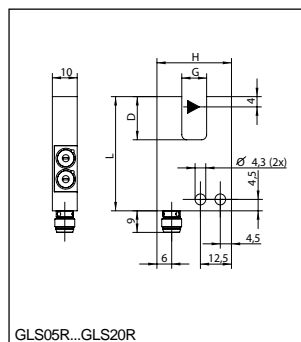
**Operating voltage** 10...30VDC, reverse polarity  
**Current consumpt.** 05 / 10: <25mA  
20...120: <35mA  
180 / 220: <30mA  
**Light type** visible red 640nm  
**Functional principle** pulsed  
**Frequency response** 05 / 10: 3000Hz  
20...220: 1500Hz  
**Switching function** light-on or dark-on (selectable)  
**Function indicator** LED red, in connector  
**Sensitivity adjust** potentiometer 270°  
**Output** PNP (BP) or NPN (BN)  
**Output current** max. 200mA, short circuit proof  
**Response time** 05 / 10: max. 0,17ms  
20...220: max. 0,33ms  
**Housing material** die-cast zinc  
**Operating temp.** -10°C...+60°C  
**Protection class** IP67

For use in class 2 circuits only.



DIN ISO9001:2008

### Dimensions



	G:	D:	L:	H:
GLS05R-BP / GLS05R-BN	5mm	17mm	45mm	25mm
GLS10R-BP / GLS10R-BN	10mm	17mm	45mm	30mm
GLS20R-BP / GLS20R-BN	20mm	24mm	49mm	40mm
GLS30R-BP / GLS30R-BN	30mm	34mm	59mm	50mm
GLS50R-BP / GLS50R-BN	50mm	54mm	79mm	70mm
GLS80R-BP / GLS80R-BN	80mm	54mm	79mm	100mm
GLS120R-BP / GLS120R-BN	120mm	54mm	84mm	140mm
GLS180R-BP / GLS180R-BN	180mm	114mm	144mm	200mm
GLS220R-BP / GLS220R-BN	220mm	114mm	144mm	240mm

