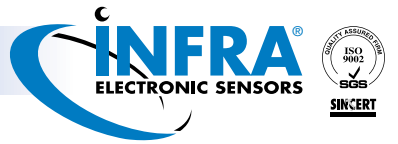


# Optical Bracket Photoelectric Sensors



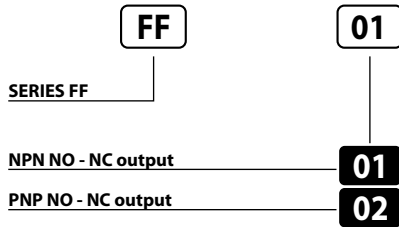
## OPTICAL BRACKETS 12 ÷ 30 V DC NPN OR PNP NO - NC OUTPUT

- 5 mm wide X 29 mm deep slot
- 9-turn sensitivity adjuster
- Operation LED indicator
- 2 m integral cable
- Plastic housing
- Infrared emitter

## FF Series



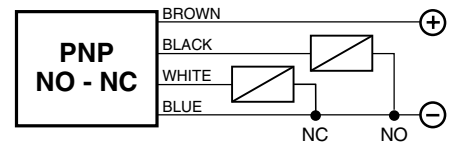
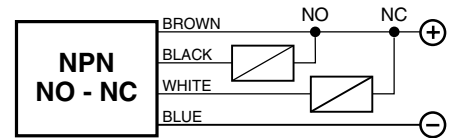
### Identification code



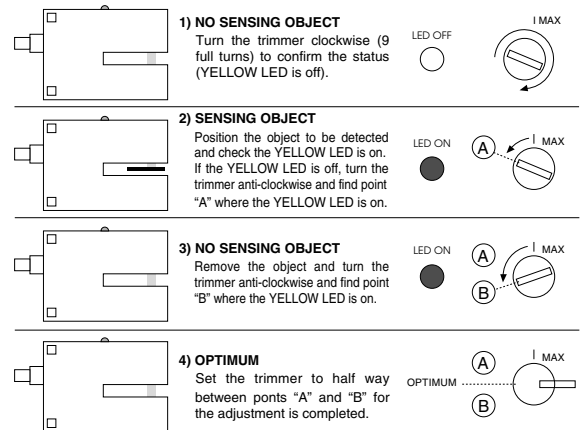
CLEF	5 mm
EMISSION	Infrared (875 nm)
NOMINAL VOLTAGE	12 ÷ 30V DC (-15 /+10%)
RESIDUAL RIPPLE	≤ 10%
MAX. OUTPUT CURRENT	200 mA
ABSORPTION AT 30 V DC	30 mA
VOLTAGE DROP (Sensor ON)	< 1.5 V (I = 100 A)
OPERATION LED	Present
SENSITIVITY ADJUSTMENT	Trimmer 9 turns
SWITCHING FREQUENCY	200 Hz
RESPONSE TIME	5 mS
START UP DELAY	200 mS
SHORT CIRCUIT PROTECTION	Present (self-resetting)
ELECTRIC PROTECTIONS	Against polarity reversal - inductive loads
TEMPERATURE LIMITS	- 10 ÷ +60° C
LIGHT IMMUNITY	2.000 Lux <sup>(1)</sup>
PROTECTION DEGREE	IP 65
CABLE LENGTH	2 m
CABLE SECTION	4 x 0.25 mm <sup>2</sup>
HOUSING MATERIAL	Housing: nylon loaded with fiberglass - Lenses: methacrylate
WEIGHT (Approximate)	110 g

<sup>(1)</sup> Determined with halogen tungsten lamp 3000 °K.  
Note: for a proper use see norms at pages 7, 8, 9 and 10.

### Wiring diagrams

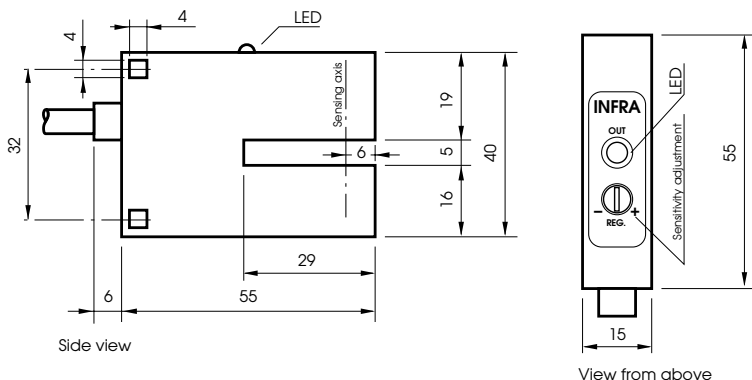


### Adjustment



Note: for proper use see norms at pages 7, 8, 9 and 10.

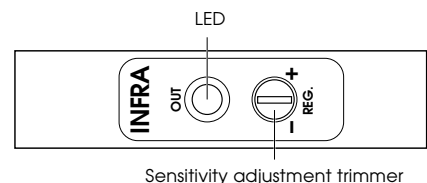
### Dimensions (mm)



### Sensitivity adjustment

1) SENSITIVITY INCREASE  
Screw the trimmer towards right toward position "+"

2) SENSITIVITY DECREASE  
Screw the trimmer towards left toward position "-"



Note: the trimmer needs 9 turns.