

Specification

- Supply** Through beam 24V dc.
Retro-reflex 10-30V dc.
- Supply Rating** EFL1 30mA.
EFR1/OS & PP2EO 45mA.
- Operating Speed** 10 per second max.
- Operating range** Through beam 6 metres.
Retro-reflex 4 metres.
- Output** Opto-isolated Transistor rated at
(thru beam) 45V dc 30mA max.
(retro-reflex) 30V dc 100mA max.
Output 'ON' with beam made.
- Indication** Beam made and Signal strength
LED's.
(Power ON and unit working
LED's on EFL1)
- Ambient Temp.** -10°C to +50°C.
- Enclosure** Glass reinforced polyamide
moulding.
- Protection** IP65
- Connection** Plug in terminal block via M16
cable gland.
- Light source** (Thru beam) Modulated infra-red.
(Retro-reflex) Polarised Visible
light.

Guarantee

The equipment is covered by a 12 months guarantee from the date of shipment. Any faults arising due to faulty materials or workmanship, within the guarantee period, will be corrected free of charge providing the equipment is returned to us carriage paid.

Certificate of Conformity

The equipment covered by these instructions has been manufactured and tested in accordance with our quality assurance procedures and conforms fully with our published specification.

Health and Safety

Provided that the equipment covered by these instructions is installed and operated as directed, it presents no hazard and conforms fully to health and safety regulations.

CE

THIS PRODUCT CONFORMS TO THE REQUIREMENTS FOR CE MARKING

When this product is incorporated into other machinery or apparatus, that apparatus must not then be put into service (in the E.C) until it has been declared in conformity with the appropriate E.C Directive/s.

 **SYNATEL**
INSTRUMENTATION LTD



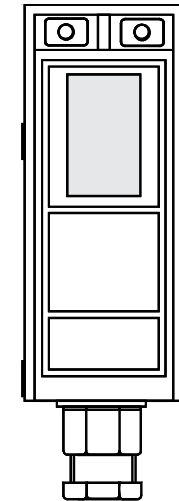
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 **SYNATEL**
INSTRUMENTATION LTD



EF SERIES
Quick Release
Photoelectric Sensors

**OPERATING
INSTRUCTIONS**



Introduction

The E.F. series of photoelectric sensors are available in through beam emitter (EFL1) & receiver (EFR1/OS) and also in polarised visible light retro-reflex (PP2EO) versions.

The through beam units work on 24V dc supply with the receiver providing an opto-isolated transistor output rated at 45V dc 30 mA maximum. The maximum operating range is 6 metres.

The retro-reflex units work on 10-30V dc supply with an opto-isolated transistor output rated at 30V dc 100 mA maximum. The maximum operating range is 4 metres typically, using an 85mm diameter reflector.

Once installed, the E. F. series units have a unique single screw fixing for fast on-line replacement.

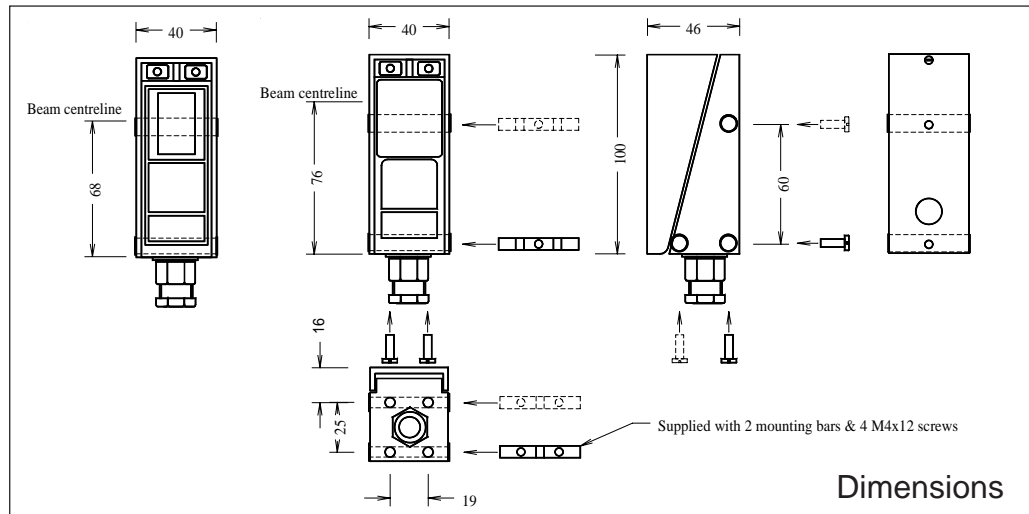
Installation & Commissioning

Ensure that all connections are correct before applying power.

The units are provided with mounting bars and fixing screws (see dimensions drawing) to aid installation.

When installing, mount the units securely to withstand vibration & within specified operating range. The EFL1 emitter has Power ON & Unit Working LED indication. The EFR1/OS receiver & PP2EO retro-reflex have Beam Alignment & Output Energised (ON) LED indication.

The beam alignment LED is used for positioning the units, in-line. The more accurately aligned, the brighter the alignment LED glows. The units can be continued to be aligned, even when the output energised LED has illuminated.



Connections

