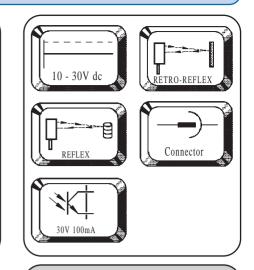
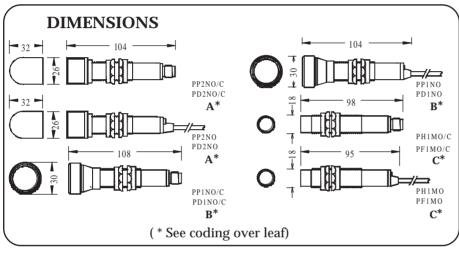
## PHOTOGRAPH NOT AVAILABLE





OPTOMAX
Polarised & Non-polarised
Retro-reflex or Reflex
'M' & 'N' Series

The M & N series OPTOMAX are self-contained photoelectric sensors available in Polarised & Non-polarised Retro-reflex and Reflex versions.

All units operate from 10-30V dc supply and have opto-isolated transistor outputs, rated at 30V dc 100mA maximum, which can be wired for npn or pnp use. Output state can be selected to be normally On or normally Off by simply reversing the supply wires.

Variations include plug & socket connector or cable versions. Cable length is 2 Metres as standard. Sensing head can be inline with the mainbody (Type 1) or at right angle to the main body (Type 2).

All cable version OPTOMAX units have alignment and output LED indi-

cation, as standard. Plug & socket connector versions have output LED indication only.

The OPTOMAX sensor unit is encapsulated to protect against water ingress and vibration and is suitable for installation in many arduous applications. All units are sealed to IP66.

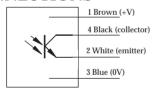
Typical applications include automotive production lines & food processing lines.

- \* Infra-red or Visible Light
- Reflex and Polarised or Non-polarised Retro-Reflex versions Available.
- End and side viewing Configurations.
- \* 10 to 30 V dc supplies.
- Flying Lead or Plug and Socket
- \* Fully Protected against Incorrect Connection
- \* Output State Selected by Supply Reversal

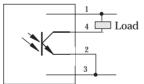


| SPECIFICATION        |  |  |  |  |  |
|----------------------|--|--|--|--|--|
| Supply               | 10 to 30V dc.  |  |  |  |  |
| Supply Rating        | 40mA max. plus load.   |  |  |  |  |
| Output               | Protected opto isolated transistor.  |  |  |  |  |
| <b>Output Rating</b> | 30V 100mA max.   |  |  |  |  |
| Output Mode          | Selectable by supply reversal.   |  |  |  |  |
| Ambient Temp         | -10°C to +50°C.  |  |  |  |  |
| Operating Speed      | 50 per second max.   |  |  |  |  |
| Operating Range      | (Polarised Retro-Reflex) 4 metres max. off standard reflector. (Reflex) 30mm for focused version, up to 300mm for other types. |  |  |  |  |
| Connections          | Flying lead or 4 pin plug and socket.  |  |  |  |  |
| Sensitivity Control  | Accessible on all reflex versions - 0 to 100%.   |  |  |  |  |
| Mounting             | 2 x M18 locknuts supplied.   |  |  |  |  |
| Indication           | Output and variable intensity signal alignment on cable versions Output indication on plug & socket connector versions.        |  |  |  |  |
| Light Source         | Visible modulated red LED or modulated infra-red LED.  |  |  |  |  |
| Enclosure            | Moulded Polycarbonate.   |  |  |  |  |
| Protection           | IP66.  |  |  |  |  |
| Weight               | 100g-connector version, 140g-flying lead version.  |  |  |  |  |
|                      |  |  |  |  |  |

## **CONNECTIONS**



Polarised & Non-polarised Retro-reflex & Reflex



npn TYPICAL CONNECTIONS pnp with units connected as shown, the output will be on with beam made.

If the supply wires (only) are reversed, the output will be on when beam broken.

## **HOW TO ORDER:-**

- 1. **Select basic type** required Reflex or Retro Reflex. See Code \* below and on front page dimension detail.
- Select variations required from the charts and order by model number.
   Note Reflector Discs for Retro Reflex versions to be ordered separately. (See Accessories Section 7000.)
- 3. **Connectors** for Plug and Socket versions to be **ordered separately**. (See Accessories Section 7000.)

| Code *                                      | Туре            | Model | Polarised | In-line<br>End View | Right angle<br>Side View |
|---|-----------------|-------|-----------|---------------------|--------------------------|
| В   | Retro-reflex    | PP1NO | Yes       | Yes                 | No                       |
| A   | Retro-reflex    | PP2NO | Yes       | No                  | Yes                      |
| В   | Retro-reflex    | PD1NO | No        | Yes                 | No                       |
| A   | Retro-reflex    | PD2NO | No        | No                  | Yes                      |
| C   | Reflex          | PH1MO | N/A       | Yes                 | No                       |
| $\left(\begin{array}{c}c\end{array}\right)$ | Focussed Reflex | PF1MO | N/A       | Yes                 | No                       |

**Note:** Units listed are cable versions, for Plug & socket connector types add /C after type number. e.g. **PP1NO** becomes **PP1NO/C**.