PHOTO MASTER

# Photoelectric Switch PEY Series

BALLING BALLING

BN:-10-----

PEY-102C

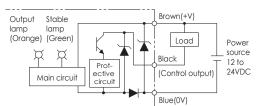
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# **Specification**

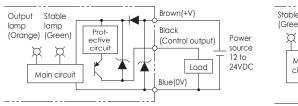
| Туре                   |   |                               |                            | Diffuse reflection type |                                    |           |                  |     |            |  |
|------------------------|---|-------------------------------|----------------------------|-------------------------|------------------------------------|-----------|------------------|-----|------------|--|
|                        | Through-beam type   |                               | Retro-reflection type      |                         | Diffuse-reflection typ<br>Standard |           | Short distance   |     |            |  |
| Model No.              | PEY-155C PEY-155A   |                               | PEY-303C                   | PEY-303A                |                                    |           |                  |     | A PEY-002C |  |
| Power source           | 12 to 24VDC(10 to 30V including ripple 10%)   |                               |                            |                         |                                    |           |                  |     |            |  |
| Current consumption    | Projector : 20mA or less<br>Receiver : 15mA or less   |                               | 20mA or less               |                         | 25mA or less                       |           | 20mA or less     |     |            |  |
| Light source           | Red LED   |                               |                            |                         |                                    |           |                  |     |            |  |
| Detection distance     | 15m   |                               | 0.01 ~ 3m                  |                         | 0.6m                               |           | 10 to 90mm 1 to  |     | 1 to 70mm  |  |
| Detectable object      | Opaque object of \$\phi12mm or more   Opaque object of \$\phi50mm or more   Trasparent/opaque objects |                               |                            |                         |                                    |           |                  |     |            |  |
| Operating mode         | Changeover of LIGHT-ON/DARK-ON  |                               |                            |                         |                                    |           |                  |     |            |  |
| Output                 | NPN   | PNP                           | NPN                        | PNP                     | NPN                                | PNP       | NPN              | PNP | NPN        |  |
| Control output         | 100mA 30VDC or less for both NPN & PNP, residual voltage 1.8V 100mA or less                           |                               |                            |                         |                                    |           |                  |     |            |  |
| Response time          | 0.5msec or less   |                               |                            |                         |                                    |           |                  |     |            |  |
| Sensitivity adjustment | Provided  |                               |                            |                         |                                    |           |                  |     |            |  |
| Indication lamps       | Stable lamp:Green LED , Output lamp:Orange LED  |                               |                            |                         |                                    |           |                  |     |            |  |
| Connection             | length 2m , φ3.8mm , 3cores (Projector of through-beam type is 2 cores.)                              |                               |                            |                         |                                    |           |                  |     |            |  |
| Ambient illuminance    | Sunlight : 10,000lx or less , incandescent lamp : 3,000lx or less                                     |                               |                            |                         |                                    |           |                  |     |            |  |
| Ambient temperature    | -25 to +55 °C (-40 to +70°C when stored)  |                               |                            |                         |                                    |           |                  |     |            |  |
| Ambient humidity       | 35 to 85% (35 to 95% when stored), not icing/not condensing   |                               |                            |                         |                                    |           |                  |     |            |  |
| Vibration resistance   | Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions                              |                               |                            |                         |                                    |           |                  |     |            |  |
| Impact resistance      | 1,000m/s <sup>2</sup> , each 3 time in X, Y and Z directions  |                               |                            |                         |                                    |           |                  |     |            |  |
| Protective structure   | IP67(IEC standard)  |                               |                            |                         |                                    |           |                  |     |            |  |
| Case material          | Main body : ABS resin including glass fiber , lens(Front cover) : PMMA resin                          |                               |                            |                         |                                    |           |                  |     |            |  |
| Weight                 | Approx. 50g<br>and 55g for  | g for projector<br>r receiver |                            |                         |                                    |           |                  |     |            |  |
| Attachment             | Mounting b  | pracket                       | Mounting b<br>Reflector(RF |                         | Mounting                           | g bracket | Mounting bracket |     |            |  |

# **Output circuit**

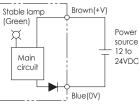
### ▷ NPN output



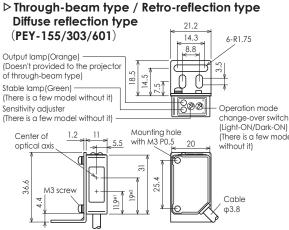
### ▷ PNP output

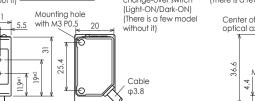


### ▷ Projector of through beam type



# External dimensions

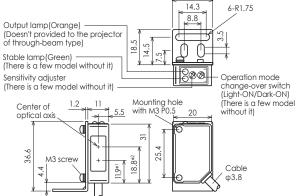




\*1 This is the center position of light-projection for retro-reflection type and diffuse reflection type.

\*2 This is the center position of light-projection/light-reception for through-beam type and the center position of light-reception for retro-reflection type and diffuse reflection type.

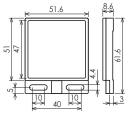
### ▷ Limited range type (PEY-002/102)



21.2

\*1 This is the center position of light-projection. \*2 This is the center position of light-reception.

### ▷ Reflector (RRP-50S-V)



\*RRP-50S-V is attached to PEY-303C.

## HOKUYO AUTOMATIC CO.,LTD.

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