## Photoelectric Switches

## PH8AU

## Slot-type photoelectric switches PH8AU

## $\square$ Description

Slot-type photoelectric switches ideal for conveyer application, such as elevators and multi-level parking lifts.
The emitter and receiver are constructed as a single unit, eliminating the need to adjust the optical axis or sensitivity. Same mounting method as our slot-type magnefically operated reed switches (type PM1U).

## Features

- Protective structure conforms to IP66 (IEC standards), so the product can be used safely in environments with water droplets.
- High speed response time of 1 ms .
- Wide supply operating voltage range from 10 to $30 V$ DC.



## $\square$ Specifications

| Type |  | PH8AU-30DALF | PH8AU-30DBLF |
| :---: | :---: | :---: | :---: |
| Operating distance (slot width) |  | 30 mm |  |
| Detectable object |  | Opaque, over 6mm diameter |  |
| Light emitting element |  | Infrared LED |  |
| Supply voltage |  | 10 to 30V DC (Peak must be within this range) |  |
| Current consumption |  | 45 mA or less |  |
| Detecting output |  | (NPN) transistor open collector output, load current |  |
|  |  | Dark-ON | Light-ON |
| Response time |  | 1 ms or less |  |
| Indicator |  | Output indicator (Red LED) |  |
| Connection |  | 1 m attached cable |  |
| Ambient operating illumination |  | Incandescent lamp: 3000 lx or less, sun light: 10000 lx or less at receiving surface |  |
| Ambient temperature |  | Operating: -25 to $+55^{\circ} \mathrm{C}$ <br> Storage: -30 to $70^{\circ} \mathrm{C}$ (no icing) |  |
| Ambient humidity |  | Operating: 35 to $85 \%$ RH Storage: 35 to $95 \%$ RH |  |
| Degree of protection |  | IP66 (IEC) |  |
| Insulation resistance |  | $20 \mathrm{M} \Omega$ min. (500V DC Megger) |  |
| Dielectric strength |  | 1000 V AC 50/60Hz 1 minute |  |
| Vibration |  | 10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude ( $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ direction respectively 2 hours) |  |
| Shock |  | $500 \mathrm{~m} / \mathrm{s}^{2}$ three times for each of three directions $\mathrm{X}, \mathrm{Y}$ and Z |  |
| Protection circuit |  | Reverse connection and surge voltage |  |
| Material | Lens | PC |  |
|  | Casing | PPS |  |



- Dimensions, mm


Mass 150g

Type number nomenclature


Power supply and output
D: DC supply, NPN transistor open collector output

