

# Screwless Clamp Terminal Socket

# PYF□□S

- Screwless clamping greatly contributes to reducing wiring time.
- No over or under tightening of cable connection so better contact reliability is achieved.
- Double wiring possible on all the terminals, and easy bridge and branch connections.
- Use either solid or stranded wires from 0.2 to 1.5 mm<sup>2</sup> (AWG24 to AWG16).
- Safe terminal arrangement: Coil terminals separated from contact terminals.
- Unique ejector enables easy relay replacement.
- Nameplate available
- Finger-protection



## Ordering Information

### ■ List of Models

|                      | 4-pole for MY4/MY2   | 2-pole for MY2       |
|----------------------|----------------------|----------------------|
| Socket               | PYF14S               | PYF08S               |
| Clip & Release Lever | PYCM-14S             | PYCM-08S             |
| Nameplate            | R99-11               |                      |
| Socket Bridge        | PYDM-14SR, PYDM-14SB | PYDM-08SR, PYDM-08SB |

## Specifications

### ■ Ratings/Characteristics

| Item                       | PYF14S                                                                            | PYF08S                                                | Remarks |
|----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------|---------|
| Relay                      | MY2 Series<br>MY4 Series                                                          | MY2 Series                                            | ---     |
| Dimensions                 | 31 × 85 × 36.5 mm max. (W × H × D)                                                | 23.2 × 85 × 36.5 mm max. (W × H × D)                  | ---     |
| Rated voltage              | 250 VAC                                                                           |                                                       | ---     |
| Rated carry current        | 10 A at 55°C with MY2 (S)<br>7 A at 70°C with MY2 (S)<br>5 A at 70°C with MY4 (S) | 10 A at 55°C with MY2 (S)<br>7 A at 70°C with MY2 (S) | VDE0627 |
| Applicable wires           | 0.2 to 1.5 mm <sup>2</sup> (AWG24 to AWG16)<br>Solid wire<br>Stranded wire        |                                                       | ---     |
| Number of wire connections | 2 wires per terminal (1 wire per hole)                                            |                                                       | ---     |
| Clamping force             | 10 N min. (0.2 mm <sup>2</sup> )<br>40 N min. (1.5 mm <sup>2</sup> )              |                                                       | EN60999 |

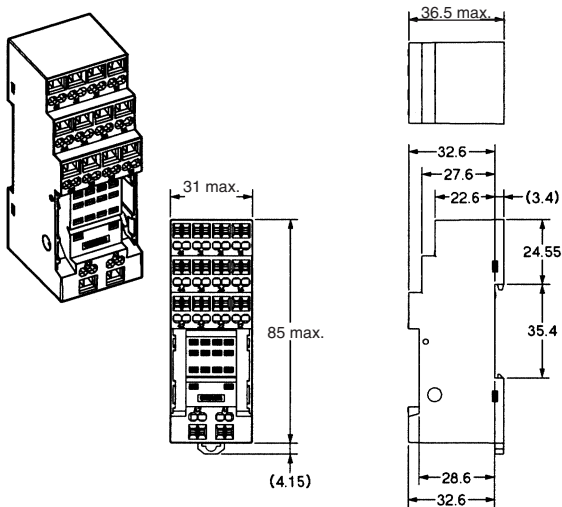
### ■ Approved Standards

| Standard                             | File No.      |
|--------------------------------------|---------------|
| VDE0627 (IEC664, EN60999)            | 112467UG      |
| UL508 (UL1059)                       | E87929 Vol. 3 |
| CSA C22.2 No. 14 (CSA C22.2 No. 158) | LR31928       |

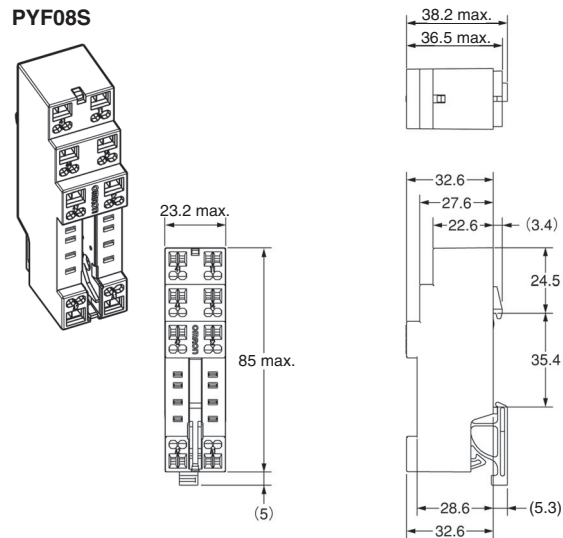
# Dimensions

**Note:** All units are in millimeters unless otherwise indicated.

PYF14S

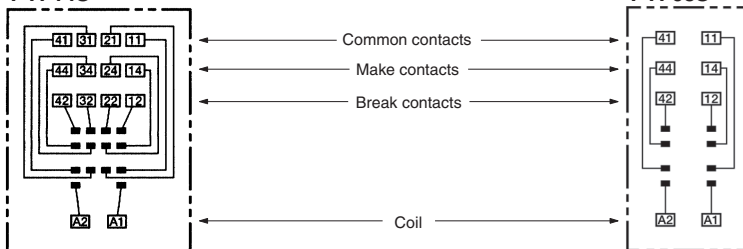


PYF08S



## Terminal Arrangement

PYF14S

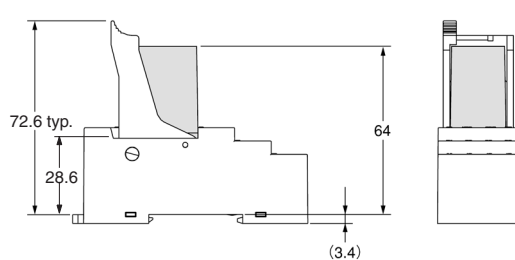


PYF08S

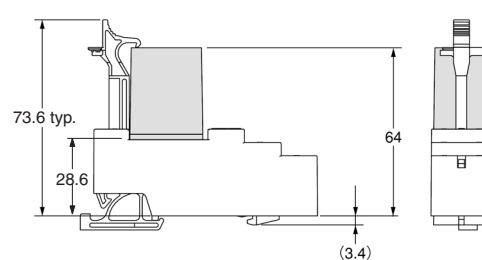
**Note:** In case MY2 relay will be used in combination with PYF14S terminals 21, 22, 24 and 31, 32, 34 are not connected.

## Mounting Height (With Lever)

PYF14S

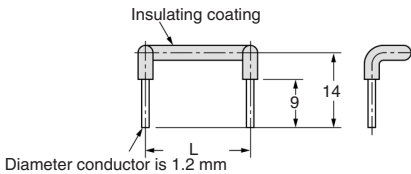


PYF08S



■ Accessories (Option)

**Socket Bridge for PYF-S**



**List of models**

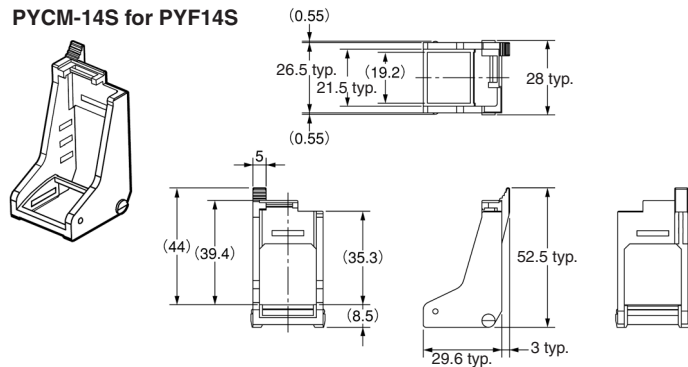
| Socket | Model number | Length L (mm) | Color of insulating coating |
|--------|--------------|---------------|-----------------------------|
| PYF14S | PYDM-14SR    | 27.5          | Red                         |
|        | PYDM-14SB    |               | Blue                        |
| PYF08S | PYDM-08SR    | 19.7          | Red                         |
|        | PYDM-08SB    |               | Blue                        |

**Specification**

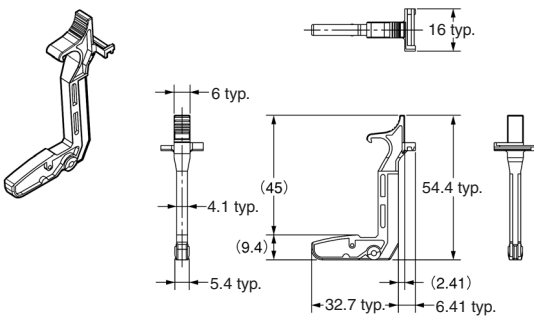
| Item                          | Characteristic         |
|-------------------------------|------------------------|
| Rated ON current              | 10 A                   |
| Rated insulation voltage      | 250 VAC                |
| Temperature rise              | 35°C max.              |
| Dielectric strength           | 1,500 VAC for 1 minute |
| Ambient operating temperature | -55 to 70°C            |

**Levers for PYF-S**

**PYCM-14S for PYF14S**



**PYCM-08S for PYF08S**



**Installation**

■ Tools

A flat-blade screwdriver should be used to mount the cables.

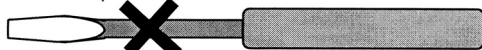
**Applicable Screwdriver**

- Flat-blade, Parallel-tip, 2.5 mm diameter (3.0 mm max.)

- Flat-blade, Parallel-tip



- Flat-blade, Flared-tip



**Cannot be used.**

Examples: FACOM AEF.2.5 × 75E (AEF. 3 × 75E)  
VESSEL No. 9900-(-)2.5 × 75 (No. 9900-(-)3 × 100)  
WAGO 210-119  
WIHA 260/2.5 × 40 (260/3 × 50)

\*Chamfering the tip of the driver improves insertion when used as an exclusive tool.

## ■ Applicable Wires

### Applicable Wire Sizes

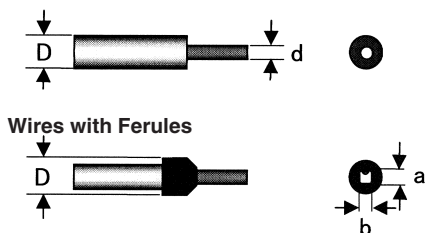
0.2 to 1.5 mm<sup>2</sup>, AWG24 to AWG16

### Applicable Wire Type

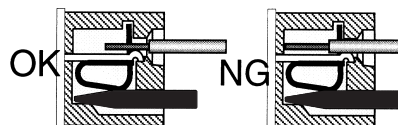
Solid wires, stranded wires, flexible wires, or wires with ferules can be used.

(See note 1.)  $< 2.2 \leq \text{Diameter } D \text{ (mm)} \leq 3.2$  (3.5: see note 2.)

Conductor diameter  $d$  (mm) or length of sides  $a$  and  $b$  (mm)  $\leq 1.9$



**Note: 1.** If the outer diameter  $D$  of the wire is less than 2.2 mm and the exposed conductor length is less than 8 mm potentially bad connection might occur in case wire is pushed to far inside. Please see following drawing.



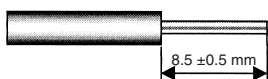
**2.** If the outer diameter  $D$  of the wire exceeds 3.2 mm, it might be difficult to use double wiring.

### Examples of Applicable Wires (Confirmed Using Catalog Information)

| Type of wire                     | Conductor type | See note 1, above.  | Recommended wire sizes              | See note 2, above.  |
|----------------------------------|----------------|---------------------|-------------------------------------|---------------------|
| Equipment wire 2491X             | Flexible       |                     | 0.5, 0.75, 1.0 mm <sup>2</sup>      | 1.5 mm <sup>2</sup> |
| BS6004                           | Solid          | 0.5 mm <sup>2</sup> |                                     |                     |
| Switchgear BS6231                | Solid          |                     | 1.0 mm <sup>2</sup>                 | 1.5 mm <sup>2</sup> |
| Switchgear BS6231                | Flexible       |                     | 0.5, 0.75 mm <sup>2</sup>           | 1.0 mm <sup>2</sup> |
| Tri-rated control and switchgear | Flexible       |                     | 0.5, 0.75, 1.0, 1.5 mm <sup>2</sup> |                     |
| Conduit                          | Stranded       |                     | 1.5 mm <sup>2</sup>                 |                     |
| UL1007                           | Flexible       | 18AWG               | 16AWG                               |                     |
| UL1015                           | Flexible       |                     | 18AWG, 16AWG                        |                     |
| UL1061                           | Flexible       | 18AWG               |                                     |                     |
| UL1430                           | Flexible       | 18AWG               | 16AWG                               |                     |

## ■ Wiring

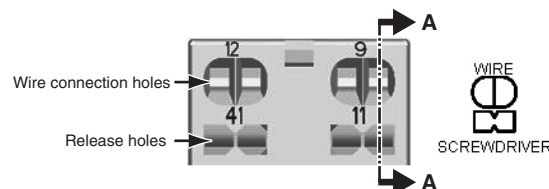
Use wires of the applicable sizes specified above. The length of the exposed conductor should be 8 to 9 mm.



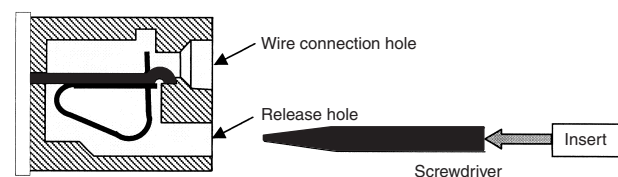
**Fig. 1 Exposed Conductor Length**

Use the following wiring procedure.

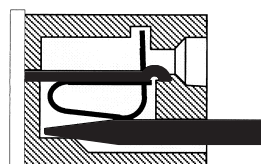
1. Insert the specified screwdriver into the release hole located beside the wire connection hole where the wire is to be inserted.



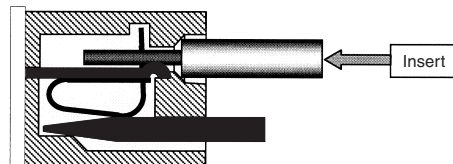
**Fig. 2 Wire Connection Holes and Release Holes**



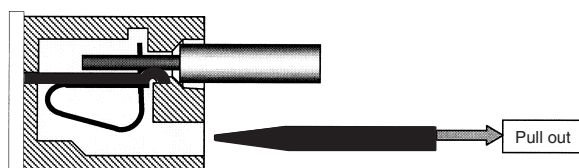
**Fig. 3 Section A-A of Fig. 2**



2. Insert the exposed conductor into the wire connection hole.



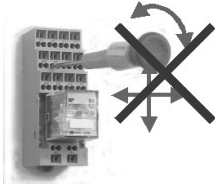
3. Pull out the screwdriver.



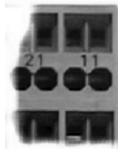
# Precautions

## Precautions for Connection

- Do not move the screwdriver up, down, or from side to side while it is inserted in the hole. Doing so may cause damage to internal components (e.g., deformation of the coil spring or cracks in the housing) or cause deterioration of insulation.
- Do not insert the screwdriver at an angle. Doing so may break the side of socket and result in a short-circuit.



- Do not insert two or more wires in the hole. Wires may come in contact with the spring causing a temperature rise or be subject to sparks. (There are two wiring holes for each terminal.)



- Insert the screwdriver along the hole wall as shown below.



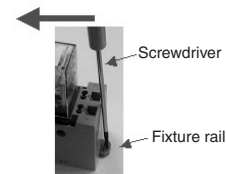
- If lubricating liquid, such as oil, is present on the tip of screwdriver, the screwdriver may fall out resulting in injury to the operator.
- Insert the screwdriver into the bottom of the hole. It may not be possible to connect cables properly if the screwdriver is inserted incorrectly.

## General Precautions

- Use the clip to prevent relays floating or falling out of the socket.
- Do not use the product if it has been dropped on the ground. Dropping the product may adversely affect performance.
- Confirm that the socket is securely attached to the mounting track before wiring. If the socket is mounted insecurely it may fall and injure the operator.
- Ensure that the socket is not charged during wiring and maintenance. Not doing so may result in electric shock.
- Do not pour water or cleansing agents on the product. Doing so may result in electric shock.
- Do not use the socket in locations subject to solvents or alkaline chemicals.
- Do not use the socket in locations subject to ultraviolet light (e.g., direct sunlight). Doing so may result in markings fading, rust, corrosion, or resin deterioration.
- Do not dispose of the product in fire.

## Removing from Mounting Rail

To remove the socket from the mounting rail, insert the tip of screwdriver in the fixture rail, and move it in the direction shown below.



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.