



POINTS TO NOTE ABOUT SAFETY

(guide to handling the product)

■ It is very important that you read the User Guide before using the product and keep it in a safe, readily accessible place.

- ① Use the product within the indicated range of ratings for safety. (Be sure the voltage is 28 V AC/DC, 1 A, or less or a minimum voltage, and the current is 5 V 20 mA or more.)
- ② Connect the product correctly as indicated in the wiring diagram. (Check the wiring using a tester or the like before using the product.)
- ③ While the product has a drip-proof construction, do not use it where it may become submerged in water or is subject to constant exposure to water. (Failure to observe this can result in short-circuiting or eclectic shocks. Be sure its external connections are appropriately waterproofed.)
- ④ Use a special mounting frame when fixing a mat switch in place. (Nails and screws directly used on the mat surface can damage the internal switching mechanism.)
- ⑤ Be sure the product is installed on a level floor and never on an irregular surface. (Failure to observe this can result in malfunction or open circuits.)
- ⑥ Do not install the product in a place subject to low/high temperatures or in an environment outside its specifications. (Failure to observe this can result in deterioration of switch performance or a shorter service life.)
- ⑦ Do not drag or pull up the lead wire of the product, and do not subject its lead-out to excessive force. (Failure to observe this can result in malfunction or open circuits.)
- ⑧ The product is of a normally-OFF type. Do not keep it activated (ON) under a heavy load over a long period of time. (Failure to observe this can bring about a functional drop in its switching mechanism.)
- ⑨ When moving or storing the mat switch, do not roll it or keep it bent for a long period of time. (Failure to observe this can result in malfunctions or open circuits.)
- ⑩ Do not use such solvents as thinner, benzene, and toluene on the product. (Failure to observe this can lead to altered properties, discoloration, or other problems.)
- ⑪ Do not drop a sharp metal piece or the like on the product. (Failure to observe this can lead to short circuiting or open circuits.)
- ⑫ If possible, employ a fail-safe open circuit detector (e.g., SC-2, PSSU, PRSU; 4-wire control circuit) that remains powered at all times.
- ⑬ The CVP series of mats and PE30 are not suitable for use as a means of protecting individuals.
- ⑭ Do not twist the product in a lateral direction.
- ⑮ Do not deform, disassemble, or modify the product.

■ Maintenance and Safety

- ① Check to see that the product functions normally before starting work, always turning off the power at the end.
- ② Do not disassemble or attempt to repair the product (on the part of the user). Upon discovery of a problem, stop using the machine for which the product is used, and follow the appropriate safety procedure.

■ Others

- ① Problems with the product arising as a result of not observing the foregoing points will invalidate all right to compensation.
- ② Problems, if any, are deemed to have been compensated for by shipment of a replacement of the product, and OJIDEN will not be liable for any cost of replacement incurred.
- ③ Where accidents or the like, if any, occurring in connection with a problem in the product are concerned, OJIDEN shall not be liable for associated expenditures.

※The specifications, materials, and other particulars of the products introduced herein are subject to change without notice.

※The colors of the products as they appear herein may differ from actual colors because of printing and filming conditions.

■ EN 999/ISO 13852/JIS B 9715 “Positioning of Protective Devices in Relation to Approach Speeds of Human Bodies”

If used as a means of suspending the operation of a machine in an emergency, there must be an adequate distance of safety.

These standards prescribe minimum distances that must be allowed between the hazard-inducing portion of a machine and the protective device used. Referred to as a “safety distance,” it is calculated with reference to the direction of approach of human bodies, response time of the protective device, response time of the machine, and the size of the smallest object detected by the protective device.

Safety Distance

Distance that must be allowed between safety switch and hazard-inducing portion.

Computational Formula

$$S \text{ (mm)} = K \text{ (mm/sec)} \times T \text{ (sec)} + C \text{ (mm)}$$

- S: minimum safety distance between maximum operating area and switch detection area
- K: human body approach speed (gait speed)
- T: length of operation suspension time of entire system
- C: additional distance suited to switch detection capability

