



# IMP Safety Limit Switch

Catalog Numbers 440P-M18001, 440P-M18002

## Summary of Changes

Changed operating temperature to ambient temperature in [Table 1](#).

## Installation

Installation must be in accordance with the following steps and stated specifications and conducted by suitably competent personnel. The unit is not to be used as a mechanical stop.

Guard stops and guides must be fitted. Adherence to the recommended maintenance instructions forms part of the warranty.



**ATTENTION:** The presence of spare actuators can compromise the integrity of safety systems. Personal injury or death, property damage, or economic loss can result. Appropriate management controls, working procedures and alternative protective measures can be introduced to control their use and availability.



**WARNING:** Do not defeat, tamper, remove, or bypass this unit. Severe injury to personnel could result.

Check that the machine is isolated and stopped whenever the interlocked guard door is open.

**IMPORTANT** After installation and commissioning, the actuator, switch, and switch lid mounting screws should be coated with tamper-evident varnish or a similar compound.

IMP switches have knockouts on the sides and bottom of the switch to connect a cable to IMP for wiring to the controller I/O.

**Table 1- Specifications**

Attribute	440P-M18001 and 440P-18002
Safety contacts	1 N.C.
Thermal current	10 A
Auxiliary contacts	1 N.O.
Ingress protection rating	IP30
Ambient temperature	-25...+80 °C (-13...+176 °F)
Mechanical life	10,000,000 operations
Torque settings	0.2 N·m (1.5 lb·in) lid screws 0.7 N·m (6 lb·in) terminal screws 0.6 N·m (5 lb·in) M4 Fixing Screws 0.5 N·m (4 lb·in) M3 Fixing Screws

**IMPORTANT** The safety contacts of these products are described as normally closed (N.C.), for example, with the guard closed, actuator in place (where relevant), and the machine able to be started.

## Maintenance

Every week, check the alignment of the actuator to the switch and the correct operation of the switching circuit. Also check for signs of abuse or interference. Inspect the switch casing and actuator for damage and replace when appropriate.

At least every six months, isolate all power. Remove the lid and end cover. Inspect all terminals for tightness. Clean out any accumulation of fine dirt. Check for any sign of wear or damage, for example, actuator wear, cam assembly wear, contact oxidization, and when appropriate.

Replace covers and tighten screws to specified settings. Reinstate the power and check for correct operation. Re-apply tamper evident varnish or similar compound to fixings.

## Repair

If there is any malfunction or damage, no attempts at repair should be made. The unit should be replaced before machine operation is allowed.

**IMPORTANT** DO NOT DISMANTLE THE UNIT.

Information in regard to UL508: When used in elevated ambients, temperature rating of field wiring shall not be less than ambient.

Use copper conductors only. Use polymeric conduit only. End of line device.

EN ISO 14119 replaces EN 1088 as the harmonized standard for interlocking devices associated with guards.

Functional safety information, see publication [SAFETY-SR001](#).

The products that are shown in this document conform with the Essential Health and Safety Requirements (EHSRs) of the European Machinery Directive. They are third-party certified to EN 60947-5-1 and EN ISO 14119.

Declaration of Conformity and certification are at [rok.auto/certifications](#).

Electrical life is dependent on load, therefore, operations are not applicable and withdrawn.

**Table 2- Intended Use**

Product	Intended Use
440P	Cam actuated

ISO 14119 defines the types of interlocking devices and coding:

**Table 3- Type of Interlocking and Coding**

Product	Type	Intended Use
440P	1	Uncoded



**ATTENTION:** Improper selection or installation of the devices affect the integrity of the safety systems.

Personnel injury or death, property damage, or economic loss can result.

Comply with ISO 14119 including selection, accessibility to the installation, arrangement and mounting, possible substitute actuation, access to the escape release, motivation to defeat, and actuation mode.

Management controls, working procedures, training, and additional protective measures should be used to minimize the motivation to defeat and to manage the use and availability of spare actuators.

Comply with ISO 13857 and ISO 13855 for guard openings and minimum (safe) distances.

Comply with IEC 62061 or ISO 13849-1 and ISO 13849-2 for functional safety.

The following specifications supersede the ratings in the existing installation instructions.

- Electrical life is dependent on load, therefore, operations are not applicable and withdrawn.

Improper selection or installation of the devices affects the integrity of the safety systems.

Personnel injury or death, property damage, or economic loss can result.

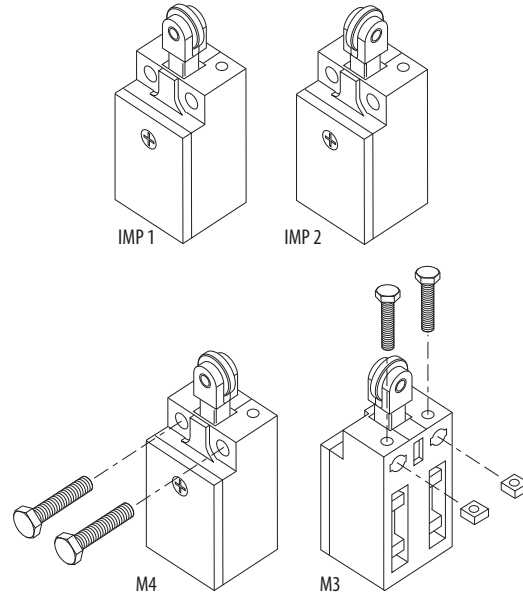
Comply with ISO 14119 including selection, accessibility to the installation, arrangement and mounting, possible substitute actuation, access to the escape release, motivation to defeat, and actuation mode.

Management controls, working procedures, training, and additional protective measures should be used to minimize the motivation to defeat and to manage the use and availability of spare actuators.

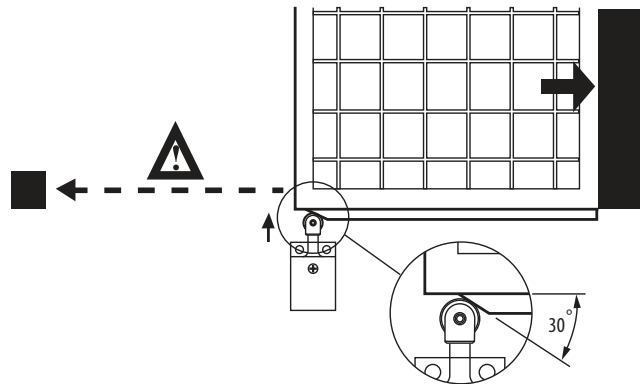
Comply with ISO 13857 and ISO 13855 for guard openings and minimum (safe) distances.

Comply with IEC 62061 or ISO 13849-1 and ISO 13849-2 for functional safety.

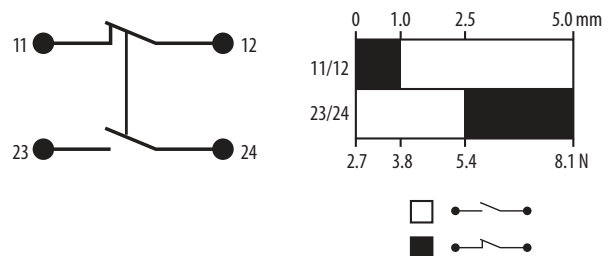
**Figure 1 - IMP Switch Mount**



**Figure 2 - Switch Operation**

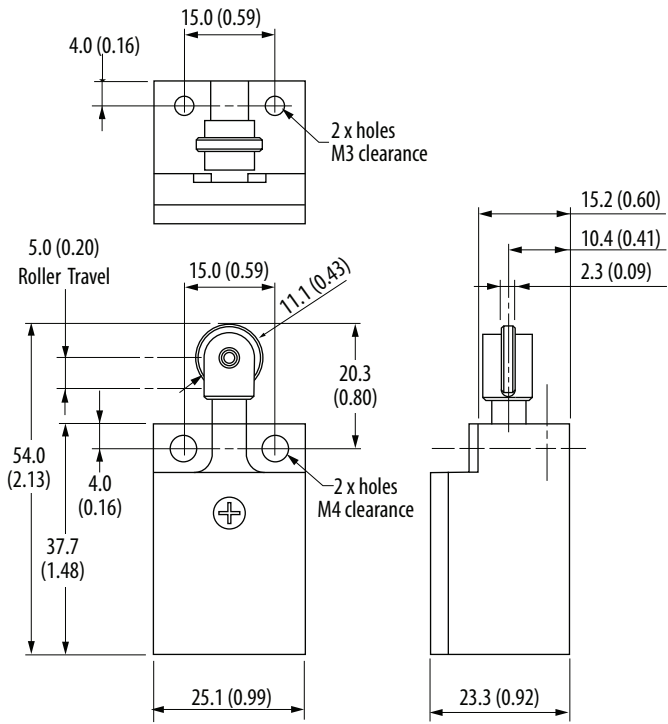


**Figure 3 - Typical Wiring Diagram — 1 N.O. and 1 N.C.**

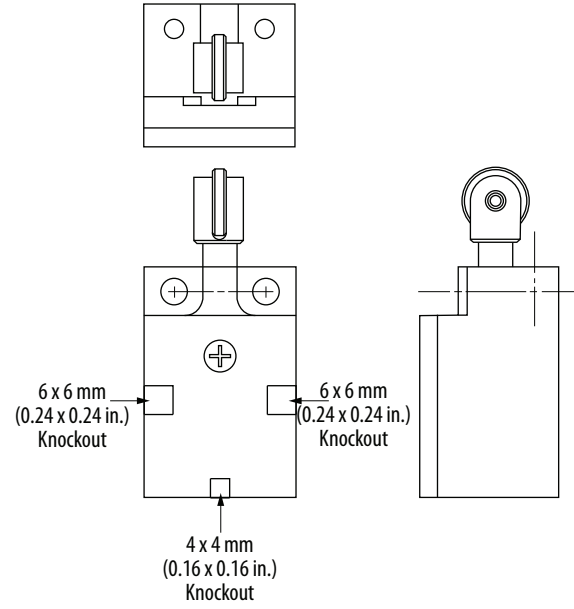


**Figure 4 - Approximate Dimensions [mm (in.)]**

IMP 1  
440P-M18001



IMP 2 (440P-M18002) has the same dimensions as IMP 1.



# Rockwell Automation Support

Use the following resources to access support information.

<b>Technical Support Center</b>	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	<a href="https://rockwellautomation.custhelp.com/">https://rockwellautomation.custhelp.com/</a>
<b>Local Technical Support Phone Numbers</b>	Locate the phone number for your country.	<a href="http://www.rockwellautomation.com/global/support/get-support-now.page">http://www.rockwellautomation.com/global/support/get-support-now.page</a>
<b>Direct Dial Codes</b>	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	<a href="http://www.rockwellautomation.com/global/support/direct-dial.page">http://www.rockwellautomation.com/global/support/direct-dial.page</a>
<b>Literature Library</b>	Installation Instructions, Manuals, Brochures, and Technical Data.	<a href="http://www.rockwellautomation.com/global/literature-library/overview.page">http://www.rockwellautomation.com/global/literature-library/overview.page</a>
<b>Product Compatibility and Download Center (PCDC)</b>	Get help determining how products interact, check features and capabilities, and find associated firmware.	<a href="http://www.rockwellautomation.com/global/support/pcdc.page">http://www.rockwellautomation.com/global/support/pcdc.page</a>

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## Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

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