

Installation and Operating Instructions

Bulletin 440P DIN 50047 IEC/Small Plastic Body Safety Limit Switch

ATTENTION



To avoid electrical shock and unintended operation of equipment, disconnect all power to the limit switch and the controlled equipment before proceeding with any repair or adjustment of the limit switch.

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 fastening, 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.

Electrical life is dependent on load, therefore, operations are not applicable and withdrawn.

Product	Intended Use
440P	Cam actuated

ISO 14119 defines types of interlocking devices and coding:

Product	Type	Coding
440P	1	Uncoded

The products shown on 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:
www.rockwellautomation.com/certification/ce.page

ATTENTION



Operator heads with adjustable or flexible actuators are NOT intended for safety applications.

Specifications

AC/DC Designation	A600; Q600
AC/DC Utilization Category	Alternate current: AC15 (50/60 Hz) Ue (V): 120 240 500 600 Ie (A): 6 3 1.4 1.2 Direct current: DC13 Ue (V): 125 250 500 600 Ie (A): 0.55 0.27 0.13 0.1
Max. Fusing Rate	8A fast acting
Impulse Voltage (Uimp)	2500V
Enclosure Protection	IP66
Pollution Degree	3
Storage Temperature	80°C (176°F)/-25°C (-13°F)
Operating Temperature	80°C (176°F)/-25°C (-13°F)
Direct Opening Action	Normally closed only (safety circuit)
Conductor Sizes	Use copper conductors only
Stranded	0.75mm ² to 2.5mm ² (0.02in ² to 0.09in ²) (18-14AWG)
Solid	0.75mm ² to 2.5mm ² (0.02in ² to 0.09in ²) (18-16AWG)

Visit our website at <http://ab.rockwellautomation.com/> for additional information and product selection.

IMPORTANT

Installation of Allen-Bradley Guardmaster products should be in accordance with local and/or national codes. Servicing energized industrial control equipment can be hazardous if not in accordance with recommended safety procedures.

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

Functional safety information: http://literature.rockwellautomation.com/idc/groups/literature/documents/sr/safety-sr001_-en-e.pdf

Torque/Mounting

Location	Torque
Heads	0.4-0.45Nm
Covers	0.4-0.45Nm
M4 Mounting	2.5-3.0Nm
Wire Clamp	0.9-1.0Nm
Lever Clamp	1.4-1.5Nm
Conduit	1.0Nm

Rotating Operator Heads

When rotating operator heads, follow these steps:

- Loosen the head mounting screws and remove the operating head from the switch enclosure.
- Orient the operator head in 1 of the 4 positions offered. Make sure the loose parts are positioned correctly before affixing the operator head to the switch enclosure.
- Tighten the 4 screws per the recommended torque specifications above.

IMPORTANT

Internal operator head components can become dislodged when removing operator heads. Use caution during removal and assembly.

IMPORTANT

Check for switch operation with a continuity indicator before placing product in service.

Typical Wiring Diagrams

Connector Ratings

	Max. Ratings		Applicable Standards
	AC	DC	
4-Pin Micro (M12)	250V, 4 A	250V, 4 A	IEC 61076-2-101:2003
6-Pin Micro (M12)	30V, 2 A	30V, 2 A	IEC 61076-2-101:2003

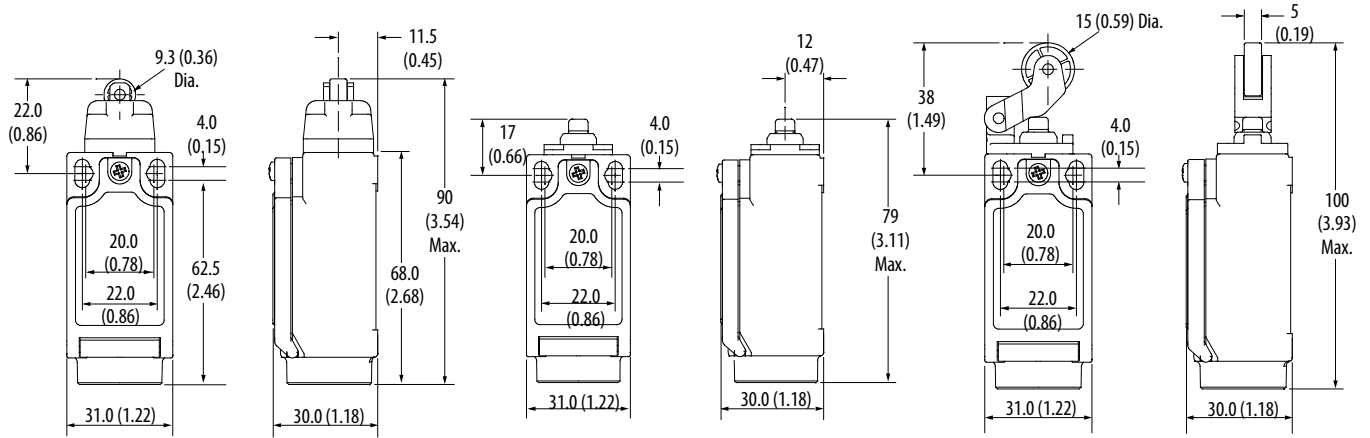
Two-Circuit Type D4 4-Pin Micro Connector

Connector Pinout		4 N.C.	
		Terminal	Contact
<p>Same Polarity</p> <p>1 N.O. + 1 N.C.</p>	1	11	N.C.
	3	12	N.O.
	2	23	N.C.
	4	24	N.O.

Three-Circuit Type R6 6-Pin Micro Connector

Connector Pinout		4 N.C.		4 N.C.	
		Terminal	Contact	Terminal	Contact
<p>3 N.C.</p> <p>2 N.C. + 1 N.O.</p>	1	11	N.C.	11	N.C.
	5	12	N.O.	12	N.C.
	2	21	N.O.	21	N.O.
	6	22	N.C.	22	N.O.
3	33	N.O.	33	N.O.	
4	34	N.C.	34	N.O.	

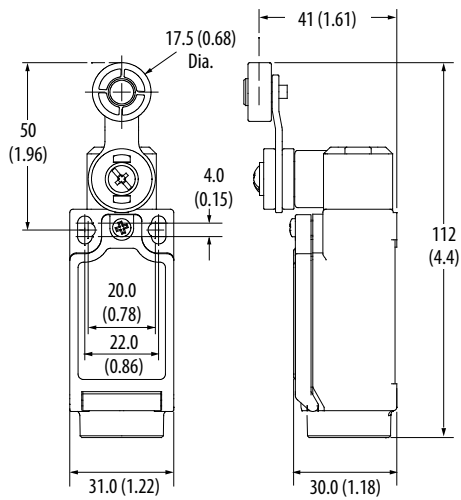
Open Conduit Dimensions [mm (in.)]



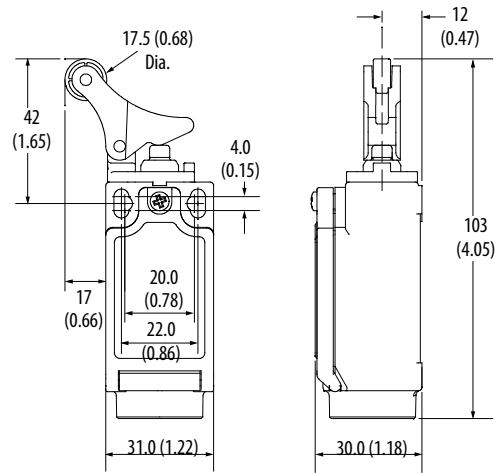
Roller Plunger

Dome Plunger

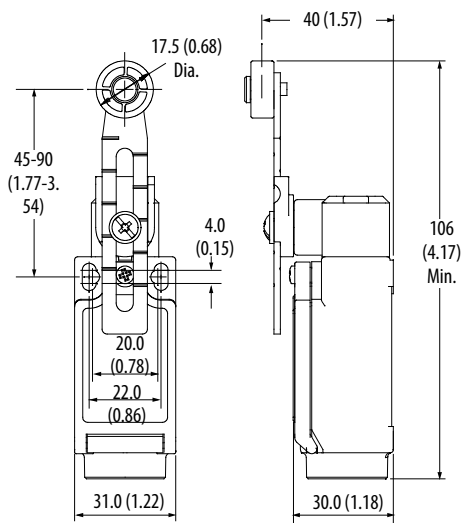
Hinge Lever



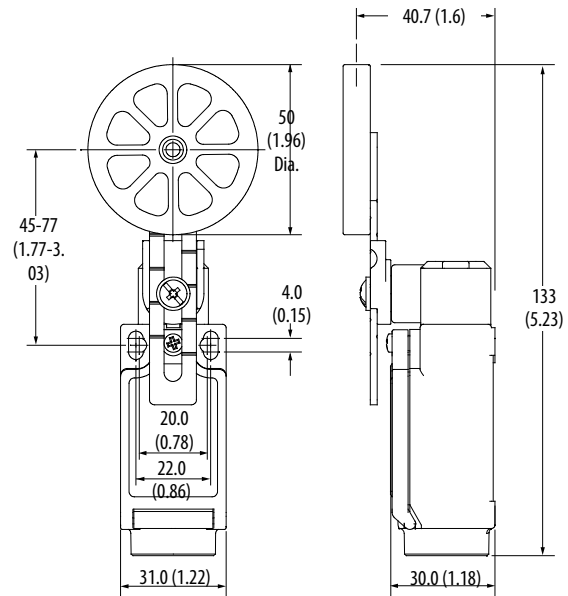
Short Lever



Offset Hinge



Adjustable Lever



Rubber Roller

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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