

Installation and Operating Instructions

Bulletin 440P DIN 50041 IEC/Large Metal Body Safety Limit Switch

IMPORTANT: SAVE THESE INSTRUCTIONS FOR FUTURE USE.

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 to recommended safety procedures.
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Specifications

AC/DC Designation	A600; Q600
AC/DC Utilization Category	Alternating 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	10 A fast acting
Impulse Voltage (Uimp)	2500V
Enclosure Protection	IP66
Pollution Degree	3
Storage/Operating Temperature	-25...+65 °C (-13...+149 °F)
Direct Opening Action	Normally closed only (safety circuit)
Conductor Sizes	Use copper conductors only
Stranded [mm² (in.²)]	0.75...2.5 (0.02...0.09) (18...14 AWG)
Solid [mm² (in.²)]	0.75...2.5 (0.02...0.09) (18...16 AWG)

See the Sensors catalog for additional information and product selection.

ATTENTION	Operator heads with adjustable or flexible actuators are NOT intended for safety applications.
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Torque/Mounting

Location		Torque
Heads		1.2 N•m (0.86 lb•ft)
Covers		1.6 N•m (1.18 lb•ft)
M5 Mounting		2.5...3.0 N•m (1.84...3.21 lb•ft)
Wire Clamp		0.9...1.0 N•m (0.66...0.74 lb•ft)
Lever Clamp	M5 Hex Screw	1.8 N•m (1.33 lb•ft)
	M3/M4 Hex Screw	1.5 N•m (1.11 lb•ft)
	Adj. Lever Screw	1.0 N•m (0.74 lb•ft)
Conduit		1.0 N•m (0.74 lb•ft)

Rotating Operator Heads

When rotating operator heads, follow these steps:

1. Loosen the head mounting screws and remove the operating head from the switch enclosure.

IMPORTANT	Internal operator head components can become dislodged when removing operator heads. Use caution during removal and assembly.
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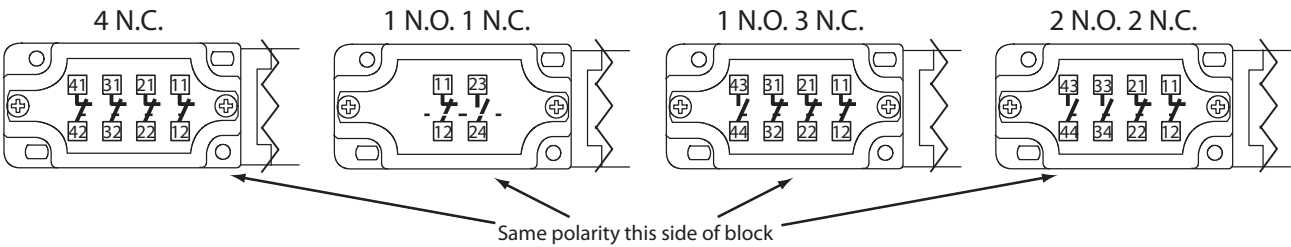
2. Orient the operator head in one of the four positions offered. Make sure the loose parts are positioned correctly before affixing the operator head to the switch enclosure.
3. Tighten the four screws per the recommended torque specifications above.

IMPORTANT	Check for switch operation with a continuity indicator before placing product in service.
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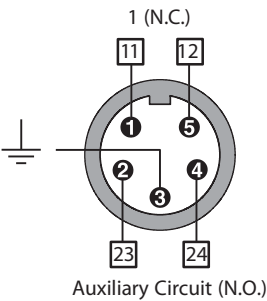
Typical Wiring Diagrams

Connector Ratings

	Max. Ratings		Applicable Standards
	AC	DC	
5-Pin Mini (M12)	300V, 2.5 A	300V, 2.5 A	IEC 61076-2-101:2003
12-Pin (M23)	60V, 2.5 A	60V, 2.5 A	IEC 61076-2-101:2003



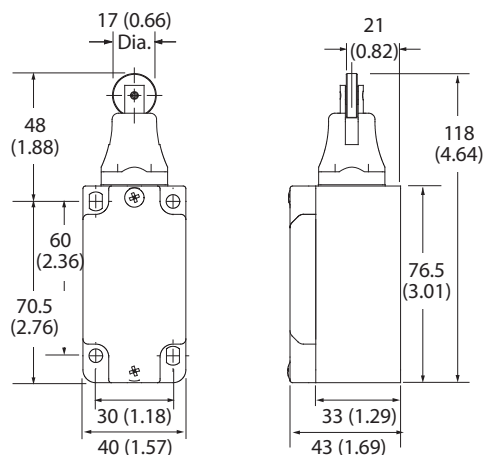
N5 Connector 2-Circuit 5-Pin Mini Connector



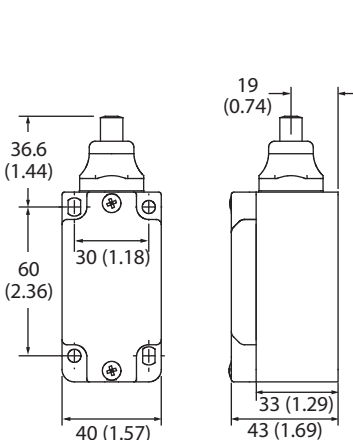
M9 12-Pin M23 Connector

Connector Pinout		4 N.C.		3 N.C., 1 N.O.		3 N.C.	
		Terminal	Contact	Terminal	Contact	Terminal	Contact
	1	11	N.C.	11	N.C.	11	N.C.
	3	12	N.C.	12	N.C.	12	N.C.
	4	21	N.C.	21	N.C.	21	N.C.
	6	22	N.C.	22	N.C.	22	N.C.
	7	31	N.C.	31	N.C.	33	N.O.
	8	32	N.C.	32	N.C.	34	N.O.
	9	41	N.C.	43	N.O.	43	N.O.
	10	42	N.C.	44	N.O.	44	N.O.
	12	Ground					

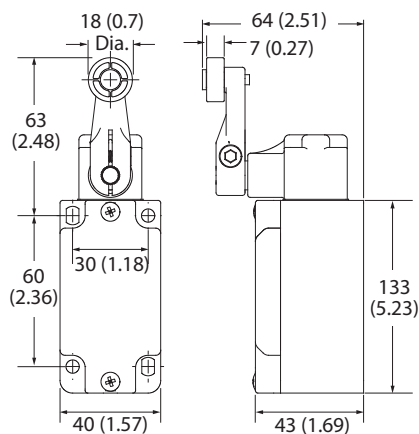
Open Conduit Dimensions—[mm (in.)]



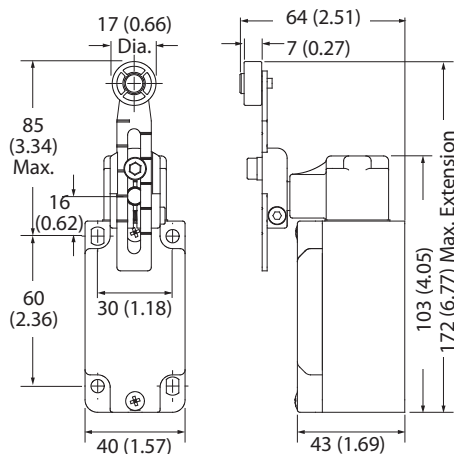
Roller Plunger



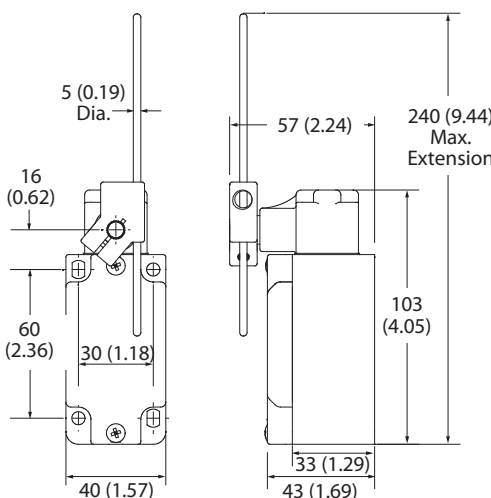
Dome Plunger



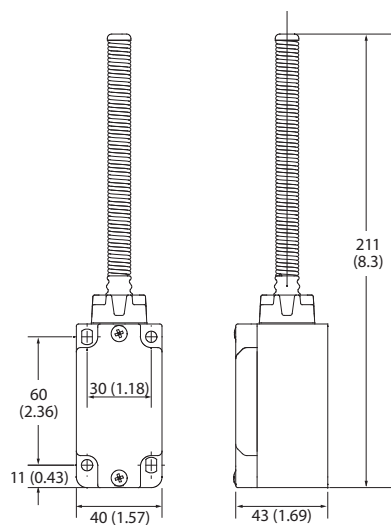
Short Lever



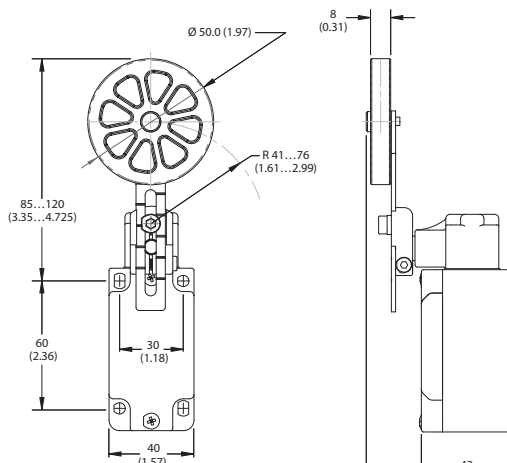
Adjustable Lever



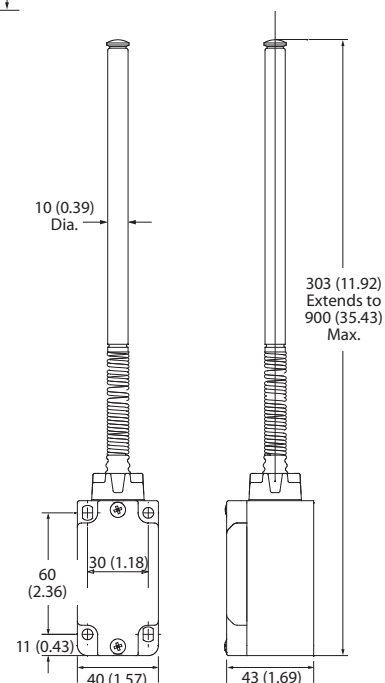
Rod Lever



Spring Rod



Adjustable Lever with Rubber Roller



Telescopic Arm

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