



### Limit Switches Miniature DIN Models

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Cutler-Hammer® E49 DIN Limit Switches by Eaton's electrical business are designed to International standards. Positive opening normally closed contacts, finger-proof wire-ready terminals, double insulated nylon housing, and environmental ratings to NEMA 4, 4X, 6P, 13 — IP65 make E49 the choice in many packaging, material handling, conveying, sorting and counting, positioning and end-of-travel applications.

#### Ratings and Approvals

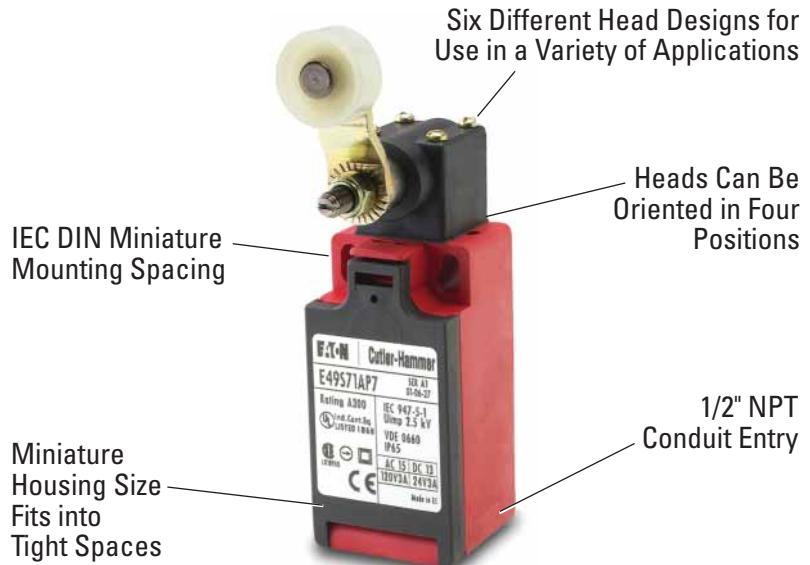
- UL Listed
- CSA Certified
- IEC 947-5-1
- VDE 0660
- CENELEC — EN50047
- NEMA A300 (AC-15)
- NEMA R300 (DC-13)
- Direct opening N.C. contacts 
- Double insulated enclosure 

CE



Unless otherwise noted, the products contained in this document are not designed or intended for use in human safety applications.

### Miniature, Nonmetallic Limit Switches Feature Positive Opening N.C. Contacts for Reliable Sensing in Space-Restrictive Light Industrial Applications









#### Product Features

- Nonmetallic housing is ideal for corrosive environments
- "Fingerproof" terminals and double insulated enclosures protect against accidental shock
- Generous wiring space speeds installation
- Electrically isolated contacts eliminate polarity restrictions for electrical loads
- Positive opening N.C. contacts improve reliability by positively breaking the N.C. contacts during operation, eliminating light welding/sticking conditions

For Customer Service in the U.S. call **1-877-ETN CARE (386-2273)**,  
in Canada call **1-800-268-3578**.  
For Application Assistance in the U.S. and Canada  
call **1-800-426-9184**.

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**Model Selection — Miniature Limit Switches**

Operating Head Type	Specifications						Catalog Numbers			
	Travel to Operate Contacts	Travel to Operate Pos. Break N.C. Contacts	Travel to Reset Contacts	Total Travel	Force to Operate Contacts (Maximum)	Minimum Return Force	Operating Head Only	Assembled Unit (Switch Body and Head)		
								1N.O.-1N.C. Contacts <sup>②</sup>	2N.O. Contacts <sup>③</sup>	2N.C. Contacts <sup>③</sup>
Side Rotary 	35°	55°	15°	76°	1.16 in-lb	0.76 in-lb	E49AP7	E49S71AP7 <sup>⑤</sup>	E49S74AP7	E49S73AP7
Top Push Plunger 	0.12 in (3.0 mm)	0.19 in (4.8 mm)	0.05 in (1.3 mm)	0.23 in (5.8 mm)	1.79 lb	1.14 lb	—	E49S71 <sup>⑤</sup>	E49S74	E49S73
Top Push Roller 	0.11 in (2.8 mm)	0.19 in (4.8 mm)	0.04 in (1.0 mm)	0.23 in (5.8 mm)	1.81 lb	0.95 lb	E49CP7	E49S71CP7 <sup>⑤</sup>	E49S74CP7	E49S73CP7
Rod Lever <sup>④</sup> 	35°	55°	16°	76°	0.80 in-lb	0.49 in-lb	E49DP7	E49S71DP7 <sup>⑤</sup>	E49S74DP7	E49S73DP7
Offset Roller Lever 	0.14 in (3.6 mm)	0.12 in (3.0 mm)	0.06 in (1.5 mm)	0.30 in (7.6 mm)	1.7 lb	0.78 lb	E49EP7	E49S71EP7 <sup>⑤</sup>	E49S74EP7	E49S73EP7
Adjustable Roller Lever <sup>④</sup> 	35°	55°	16°	75°	0.88 in-lb	0.58 in-lb	E49UP7	E49S71UP7 <sup>⑤</sup>	E49S74UP7	E49S73UP7

① 1/2" NPT conduit entry (bottom) supplied as standard for 1N.O.-1N.C. Contacts.

② Switching voltage: 500V, snap action.

③ Switching voltage: 400V, slow make & break.

④ Not rated positive open contact.

⑤ Optional Pre-wired Micro-connector available. Add Suffix **-A5** when ordering. See wiring diagram on **Page 3**.

 Stocked product, typical order quantities guaranteed in stock.

Catalog Number — Switch Body Only (1/2" NPT Conduit Entry) <sup>①</sup>

E49S71 <sup>⑤</sup>

E49S74

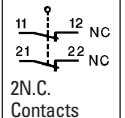
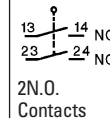
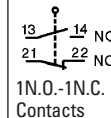
E49S73

Catalog Number — Switch Body Only (20 mm Conduit Entry)

E49S71-20 <sup>⑤</sup>

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Isolated Contacts — No Polarity Restriction

**Specifications**

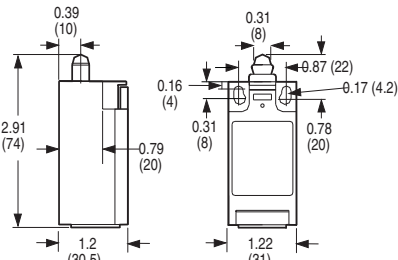
Mechanical Life	1 million operations
Operating Temperature	-22° to 176°F (-30° to 80°C)
Housing Material	Self-extinguishing PA-6 (Glass-reinforced, Polyamide)
Contact Material	90% Silver, 10% Nickel

**Ratings — Isolated Contacts, No Polarity Restriction**

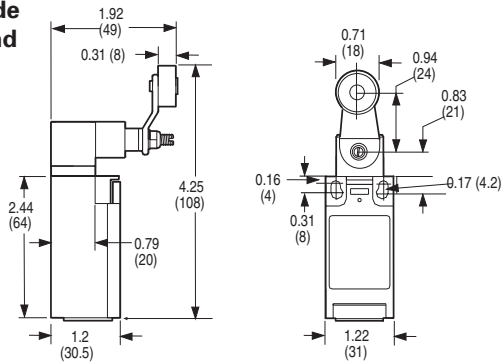
NEMA A300 (AC-15) 50 or 60 Hz				NEMA R300 (DC-13)			
Rated Voltage	Current Continuous	Make Break		Voltamperes Make Break		Rated Voltage	Current
		24V AC	10A	60A	6.0A		
120V AC	10A	60A	6.0A	7200 VA	720 VA	120V DC	0.22A
240V AC	10A	30A	3.0A	7200 VA	720 VA	240V DC	0.11A
480V AC	10A	15A	1.5A	7200 VA	720 VA		
600V AC	10A	12A	1.2A	7200 VA	720 VA		

**Approximate Dimensions in Inches (mm)**

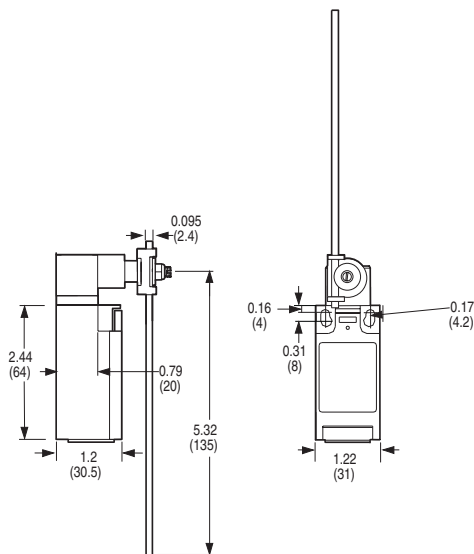
**Switch Body with E49S71 Top Push Plunger**



**E49AP7 Side Rotary Head**

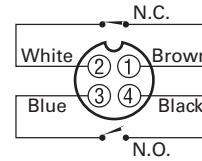


**E49DP Rod Lever**

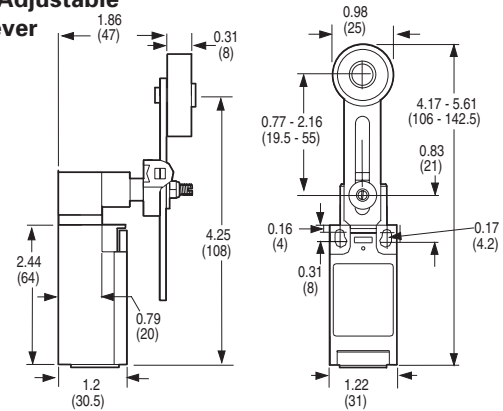


**Wiring Diagram**

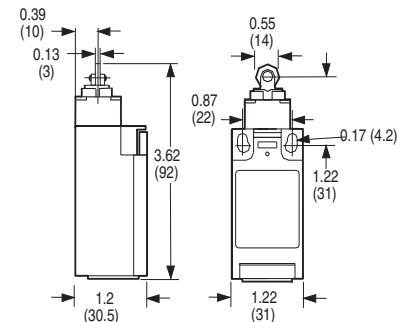
**Optional -A5 Suffix for Pre-wired Micro-Connector**



**E49UP7 Adjustable Roller Lever**



**E49CP7 Top Push Roller**



**E49EP7 Offset Roller Lever**

