



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

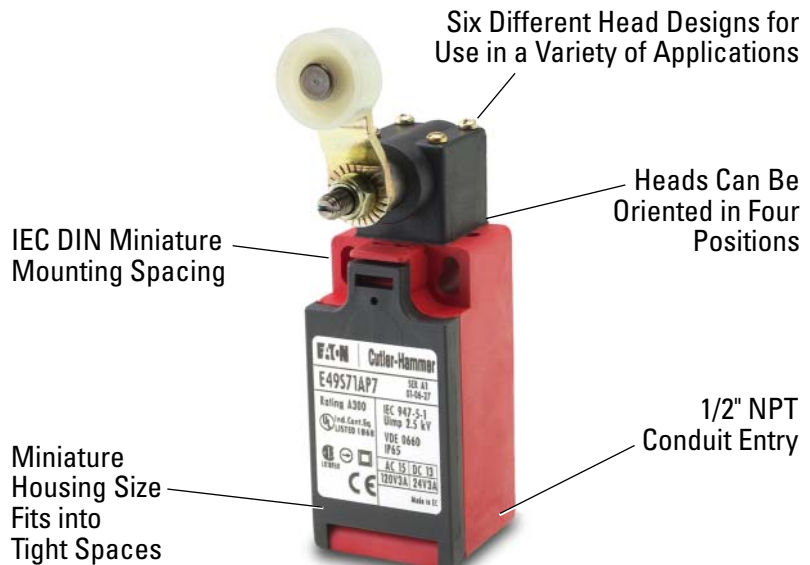
- UL Listed
- CSA Certified
- IEC 947-5-1
- VDE 0660
- CENELEC — EN50047
- NEMA A300 (AC-15)
- NEMA R300 (DC-13)
- Direct opening N.C. contacts 
- Double insulated enclosure 

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

July 2005

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 ^{①②} | 2N.O. Contacts ^③ | 2N.C. Contacts ^③ |
| Side Rotary  | 35° | 55° | 15° | 76° | 1.16 in-lb | 0.76 in-lb | E49AP7 | E49S71AP7 | 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 | 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 | E49S74CP7 | E49S73CP7 |
| Rod Lever ^④  | 35° | 55° | 16° | 76° | 0.80 in-lb | 0.49 in-lb | E49DP7 | E49S71DP7 | 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 | E49S74EP7 | E49S73EP7 |
| Adjustable Roller Lever ^④  | 35° | 55° | 16° | 75° | 0.88 in-lb | 0.58 in-lb | E49UP7 | E49S71UP7 | E49S74UP7 | E49S73UP7 |

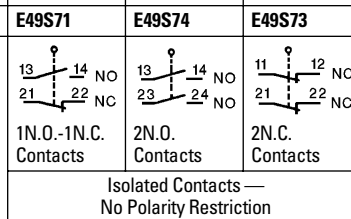
① 1/2" NPT conduit entry (bottom) supplied as standard for 1N.O.-1N.C. Contacts.

② Switching voltage: 500V, snap action.

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

④ Not rated positive open contact.

Catalog Number — Switch Body Only ^①



Specifications

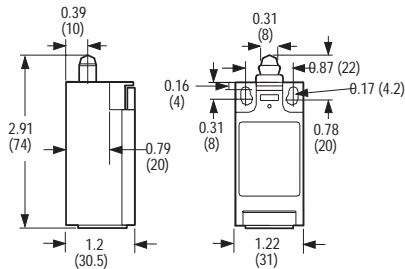
| | |
|-----------------------|---|
| Mechanical Life | 1 million operations |
| Operating Temperature | -22° to 176°F (-30° to 80°C) |
| Housing Material | Self-extinguishing PA-6 (Glass-reinforced, Polyamide) |

Ratings — Isolated Contacts, No Polarity Restriction

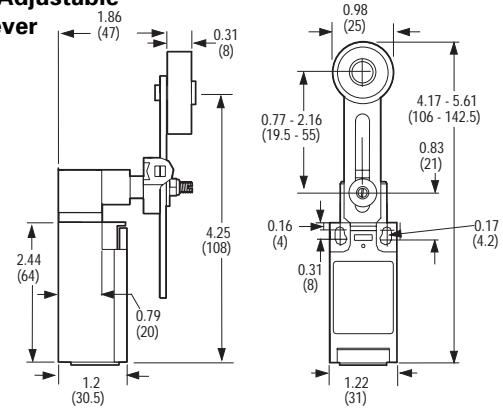
| NEMA A300 (AC-15) 50 or 60 Hz | | | | | NEMA R300 (DC-13) | | |
|-------------------------------|------------|------|-------|-------------|-------------------|---------------|---------|
| Rated Voltage | Current | | | Voltamperes | | Rated Voltage | Current |
| | Continuous | Make | Break | Make | Break | | |
| 24V AC | 10A | 60A | 6.0A | 7200 VA | 720 VA | 24V DC | 1.5A |
| 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)

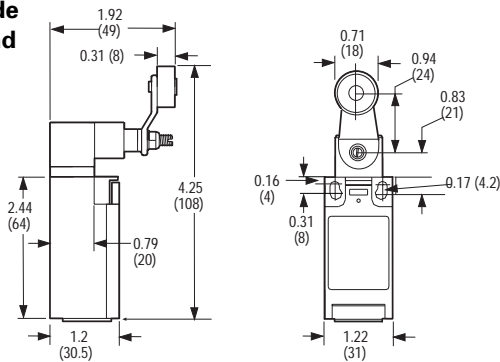
Switch Body with E49S71 Top Push Plunger



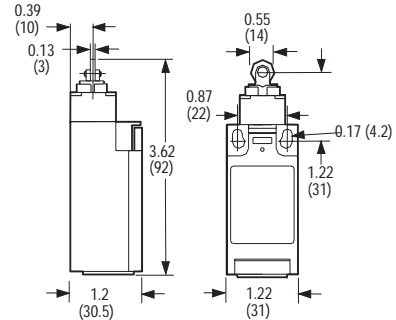
E49UP7 Adjustable Roller Lever



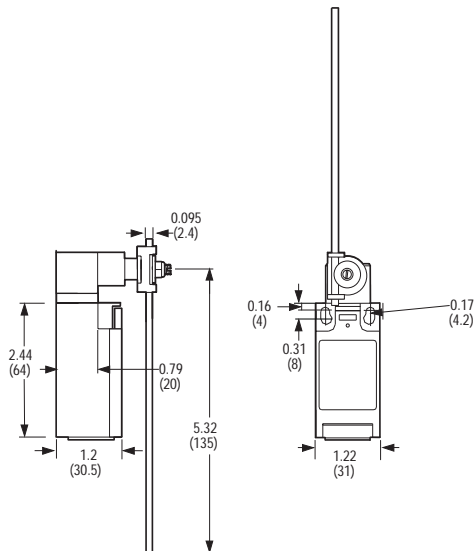
E49AP7 Side Rotary Head



E49CP7 Top Push Roller



E49DP Rod Lever



E49EP7 Offset Roller Lever

