

ED & EDM Series



Description

The ED keyswitches are self-cleaning, short travel sealed tact switches commonly found in panels and various forms of instrumentation. Known for providing great tactile feedback, the ED series is available in three actuation forces and is compliant with RoHS regulations. Throughout the aerospace industry, the EDM sealed tact keyswitches are used in a variety of instrument panels, giving users a high-performance, long-lasting switch with great tactile feedback. EDM keyswitches are built for short travel and are self-cleaning, with three actuation forces available.

Features & Benefits

- Short travel
- Good tactile feedback
- Self cleaning
- 3 actuation forces

Applications

- Aircraft
- Instrument
- Panels
- Radio equipment

Specifications

ED	Disc Element
EDM	Disc Element and double dome
Function	Momentary action
Contact Type	Normally open - SPST
Terminals	Through hole PCB terminations or Tabs
Operating Life	1,000,000 cycles
Packaging	Trays 50 pieces

Electrical Characteristics

	Silver	Gold
Max. Power	1 VA	0.2 VA
Min./Max. Voltage	20 mVDC - 100 VDC	
Min./Max. Current	1 mA to 100 mA	50µA to 50 mA
Dielectric Strength	≥ 250 Vrms	
Contact Resistance	≤ 100 mΩ	
Insulation Resistance	Initial measurement ≥ 1 GΩ After damp heat ≥ 10 MΩ	
Bounce Time	≤ 3 ms	

Environmental Characteristics

Materials	Silver	Gold
Operating Temperature	-25°C to 70°C	-55°C to 85°C

ED & EDM Series

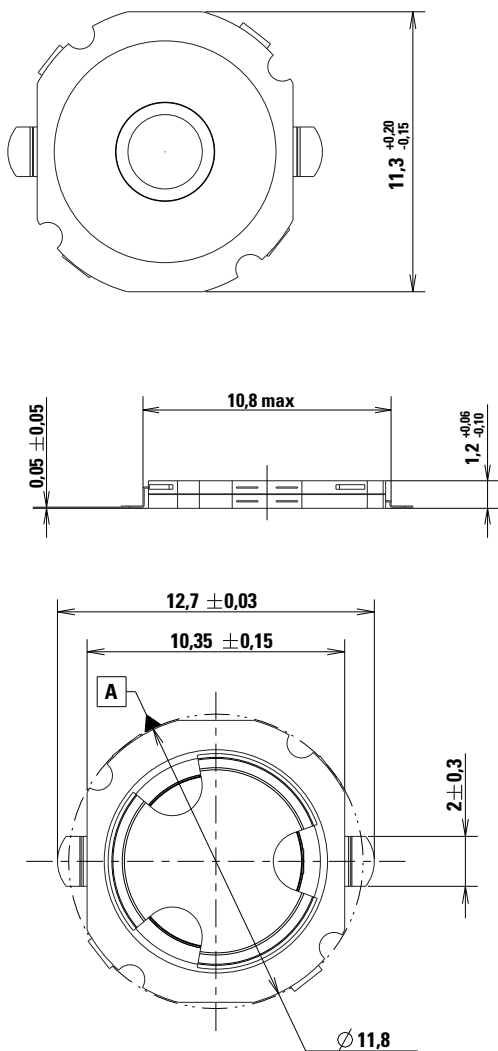


Mechanical Characteristics

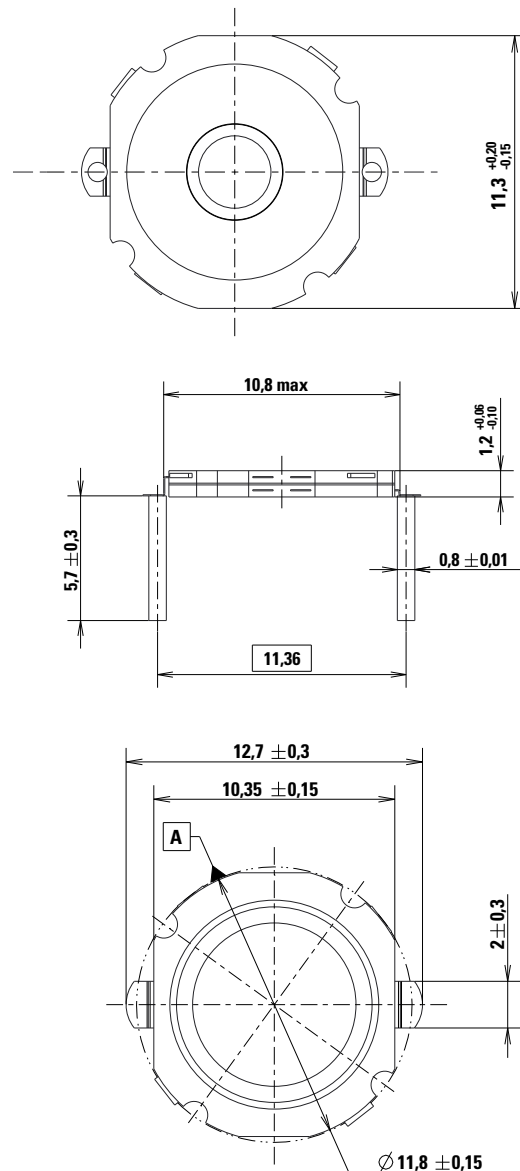
Type	Operating Force N (grams)	Tactile Feeling Δ%	Return Force N	Travel (mm)
EDXXXX LFX	2.4 (240) ± 25%	≥ 30%	≥ 0.4	0.3 ± 0.15
EDM450XXX LFX	4.5 (450) ± 25%	≥ 25%	≥ 1	0.5 ± 0.25
EDM650XXX LFX	6.5 (650) ± 25%	≥ 25%	≥ 1.6	0.6 ± 0.25

Simultaneity: ≤ 0.05 mm

ED/EDM SC



ED/EDM



ED & EDM Series

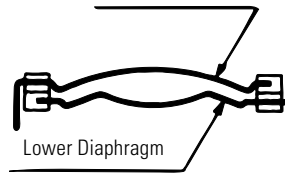


Switch Action Principal

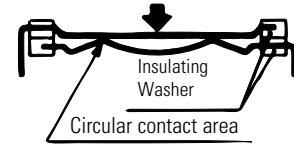
The disc contact is essentially made of two separate conductive dome diaphragms separated by an insulated material.

The upper diaphragm is shaped so that under pressure it collapses suddenly and establishes contact with the lower diaphragm.

Upper Diaphragm
Switch in Resting Position



Pressure
Switch in Active Position



Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.

ED - x - x - 1 - x

- Contact Material**
S: Silver
G: Gold
- Terminals**
AC: with pc pins
SC: with tabs
- Lead Free Compatible**
LFS: RoHS, Silver tabs
LFG: RoHS, Gold tabs
LFT: RoHS, Pure tin (terminals only)
- Disc**
1: Sealed, IP67

EDM - x - x - x - x

- Operation Force**
450: 4.5 N (450 grams)
650: 6.5 N (650 grams)
- Contact Material**
S: Silver
G: Gold
- Lead Free Compatible**
LFS: RoHS, Silver tabs
LFG: RoHS, Gold tabs
LFT: RoHS, Pure tin (terminals only)
- Terminals**
AC: with pc pins
SC: with tabs

- Notes:**
1. AC terminals only available with LFT
 2. SC terminals only available with LFS or LFG

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.