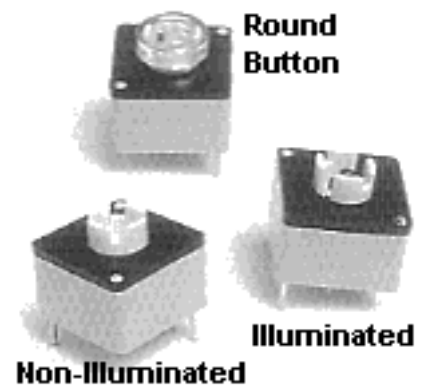


EAO SECME Division

COSMOS Illuminated or non- illuminated tactile feel key switches

Dependable COSMOS key switch modules offer a distinct tactile feel for use with all types of instruments, controls, and equipment. Contacts and terminals are sealed against dust, liquid splashes, wave soldering flux, and washdown solvents. Illuminated COSMOS models combine LEDs with a selection of lens styles suitable for panel use or for installation under membrane-type overlays. The small size and square shape allow the modular switches to be used as building blocks on a 2.54 mm matrix.

1. Standard silver or heavy gold plated contacts
2. 12.3 x 12.3 mm square matrix modules
3. LED full-lens illuminated models available
4. Selection of buttons, lenses, covers, and legends
5. Sealed for soldering and immersion solvent cleaning
6. 1-million operations



Specifications

Contacts: standard silver plated (2 μ)	24 V/125 mA nominal 50V max. 100 mV/10mA min. 3 W nominal power
heavy gold plated (0.5 μ)	24 V/125 mA nominal 50V max 10 mV/500 μ A min 3 W nominal power both: <20 M Ohms resistance
Dielectric strength	300 V RMS, 50 Hz
Insulation resistance	>1,000 M Ohms, 100 VDC
Insulation, self-extinguishing	glass-filled polyamide, 94V-0 (UL94)
Operating force	3 N
Operating travel	0.4 mm nominal, 0.65 mm max
Overtravel	0.25 mm
Maximum bounce	<100 μ sec
Operating life	1-million operations
Vibration resistance	2000/10 Hz, 1.5 mm amplitude
Mechanical shock resistance	100 G
Terminals: standard silver heavy gold	silver over nickel gold on nickel
Operating temperature	-25 to + 85°C
Storage temperature	-40 to + 85°C
Damp heat standard silver heavy gold	10 days (NFC 20603) 21 days (NFC 0603)
Saline mist standard silver heavy gold	24 hours (NFC 20611) 96 hours (NFC 20611)
Sealing	Sealed for soldering and immersion cleaning in solvents (IEC 68-2-45)
Soldering time	5 sec/250°C

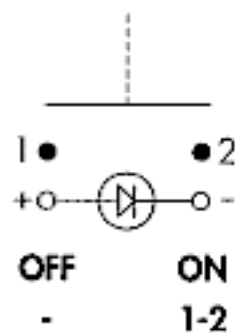
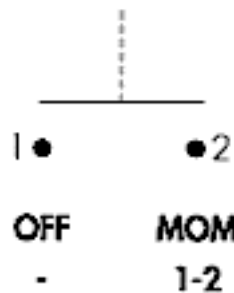
Ordering Information		
Description	Part Number	
	Standard Silver Contacts	Heavy Gold Contacts
1-pole 2-position non-illuminated		
	81 10101 00	81 12151 00
1-pole 2-position illuminated		
Red LED	81 20101 02	81 22151 02
Green LED	81 20101 03	81 22151 03
Yellow LED	81 20101 04	81 22151 04

SWITCH POSITION

SWITCH POSITION

NON-ILLUMINATED

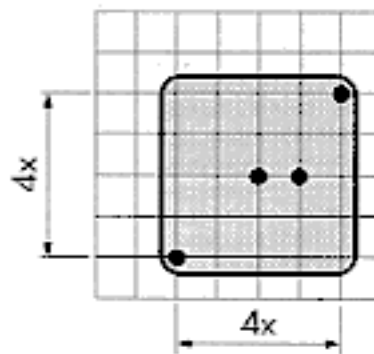
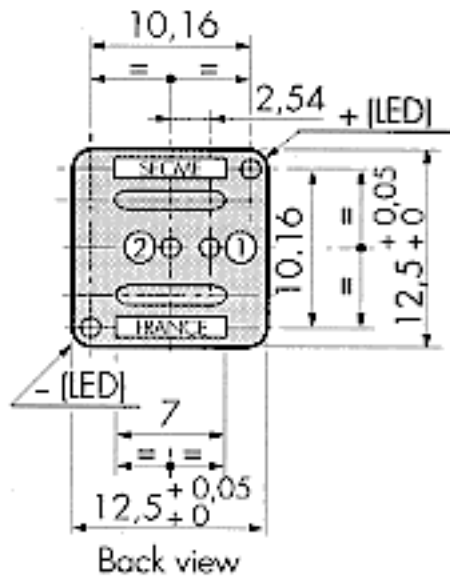
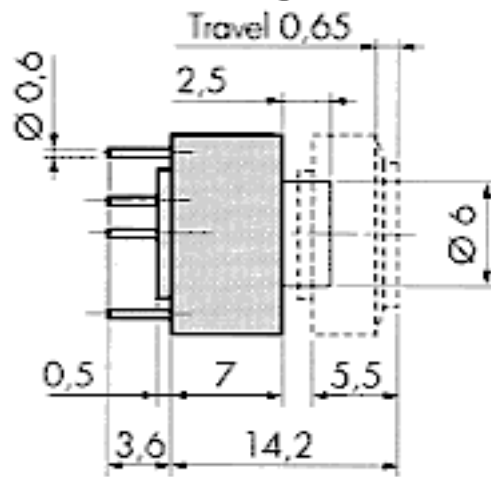
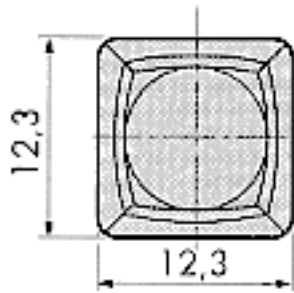
ILLUMINATED



1-pole, 2-position COSMOS key switch

Independent LED circuit

Dimensions & Mounting



PCB side view:
Pitch: x = 2,54 mm
0,8 mm diameter hole