

LIMIT SWITCHES - LOW PROFILE HOUSING

83731 / 83732 / 83733

- › Low-profile body for easy integration in tight spaces
- › Threaded barrel attachment for precise setting
- › Low switching hysteresis (short differential travel)
- › IP66/IP69 protection
- › Oil-resistant nitrile contact element housing and boot
- › Operating temperature from -40 °C to +70 °C
- › Max rating 10 A 250 Vac
- › Cable output
- › Long mechanical life



Main specifications

	Protected plunger 83731	Roller plunger 83732	Plunger 83733
Function			
Connections			
I (changeover)	0.5 (cable, 0.5 m)		
I (changeover)	1.0 (cable, 1 m)		
I (changeover)	1.5 (cable, 1.5 m)		
I (changeover)	2.0 (cable, 2 m)		
I (changeover)	2.2 (cable, 2.2 m)		
I (changeover)	3.0 (cable, 3 m)		
I (changeover)	5.0 (cable, 5 m)		
I (changeover)	6.0 (cable, 6 m)		
R (normally closed)	x.x (cable, x.x m)*		
C (normally open)	x.x (cable, x.x m)*		
* cable length on demand			
Electrical characteristics			
Operational current /250 VAC (Ie) A	5	5	5
Thermal current (Ith) A	12	12	12
Mechanical characteristics			
Max. Operating force (N)	15	15	6
Max. Total travel force (N)	35	35	25
Max. Allowable overtravel force (N)	40	40	30
Max. Pretravel (mm)	2	2	1.5
Total travel (mm)			
Max. Differential travel (mm)	0.2	0.2	0.2
Min. Overtravel (mm)			
Ambient operating temperature (°C)	-5 → +70	-5 → +70	-5 → +70
Mechanical life (operations)	10 ⁶	10 ⁶	10 ⁶
Weight, 0.5 m cable models (g)	110	120	70
General characteristics			
Conformity to standards	IEC/EN 60947-5-1 CE		
Protection against electric shock	IEC/EN 61140 class I Direct manual operation on plunger or roller is not permitted above 48 V		
Connections			
Cable	PVC (H05VVf), standard length 0.50 m 3 conductors cross-section 0.75 mm ² Sheathed ext. Ø : 7.6 mm		
Electrical protection	Earthing terminal on barrel		

Additional specifications

- Degree of protection: IP66/IP69
- Recommended actuating speed: 0.03 mm/s to 0.5 m/s
- Max tightening torque: 25 N.m (83731/732) ;10 N.m (83733)
- Rated insulation voltage Ui: 250 V
- Impulse withstand voltage Uimp: 2.5 kV
- Pollution degree: 3
- Protection against electric shock: Class II
- Conformity / Certifications: **CE** **ERAC** **CE**

Product adaptations



- › Special cables or wires, special lengths, full wiring with custom connector
- › 83732 with transverse roller (G/90)
- › 83731 with Ø7 inox ball plunger for lateral approach from any direction (SP2347 nitrile; SP2315 silicone)
- › 83731 with flexible spring rod for extra-long overtravel and/or approach from any direction (SP2320)
- › Longer threaded barrel for increased adjustment range and/or thick panel mounting
- › 83731 and 83732 with shorter barrel for even smaller footprint
- › Increased plunger travel (e.g. 10 mm total travel)
- › Silicone versions for outdoor locations: low temperature (-40 °C) and UV resistant

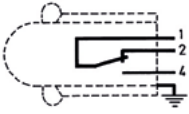
Standard product

Product made to order

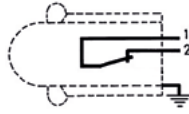
Contact us

Principles

Single break snap-action switch
Changeover - SPDT (form C)



Normally closed - SPST-NC (form B)

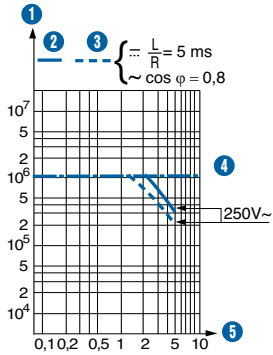


Normally open - SPST-NO (form A)



Curves

Operating curve



- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

Making & breaking capacities IEC/EN 60947-5-1 (6000 cycles)

AC-12 (resistive load)	10 A 24 V~
	10 A 250 V~
AC-15 (electromagnetic load)	4 A 24 V~
	2.5 A 250 V~
DC-12 (resistive load)	10 A 24 V~
DC-13 (electromagnetic load)	3 A 24 V~

Electrical durability

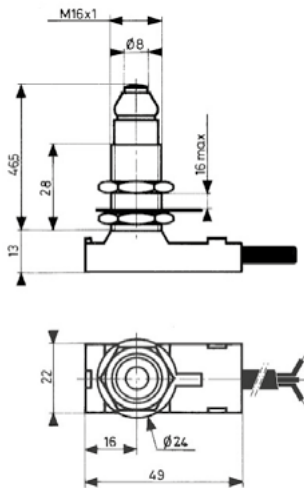
AC-15 (electromagnetic load)	1 A 24 V~ > 500 000 cycles
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For other ratings please consult us

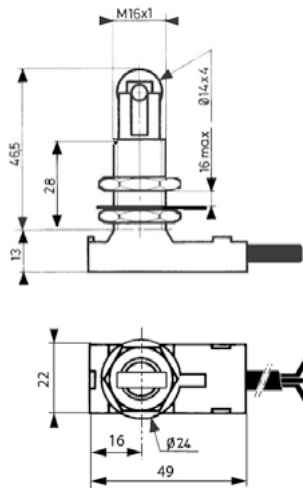
Dimensions

Products and Connections

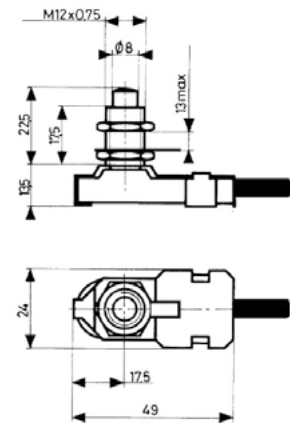
83 731



83 732



83 733



Cable characteristics :

1 (C) = black ; 2 (NC) = brown ; 4 (NO) = grey
H05VV-F 3 x 0.75 mm²
Outer diameter: max 7.6 mm
Standard lengths: see table, page 1
Other lengths on request (length in meters: e.g. 3.5)

Installation recommendations

See "Basic technical concepts"

Operation: direct manual operation of "BOM" versions (having live metal internal case) is not permitted above 48 V.

Connection: the 83123 cable is primarily intended for the internal wiring of the equipment in which it is integrated. When this cable emerges from the equipment and becomes accessible, appropriate retention shall be provided. Torsion and/or bending stress must be avoided at cable entry. Any axial pulling force on cable shall not exceed 60 N.

Earthing: when required, one of the two fixing holes must be used as protective earth terminal.

How to order

Use the 8 digit part numbers when they are defined

Other cases, precise: Type of microswitch - Function - Connection - Adaptation*

* if needed

Example: : 83731 C 2.2

Examples of special adaptations

■ 83732 with transverse roller (G/90)

■ 83731 with Ø7 inox ball plunger for lateral approach from any direction (SP2347 nitrile; SP2315 silicone)

■ 83731 with flexible spring rod for extra-long overtravel and/or approach from any direction (SP2320)

■ Long barrel for increased adjustment range, and/or thick panel mounting

■ 83732 with short barrel for smaller footprint. Total height = 40 mm

■ 83731 with 10 mm plunger travel, 47 mm total height and unprotected plunger

Warning:

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