

Compact limit switch conforming to NFC 63 145

→ Series 83 880 with cable output

- IP 66/67
- Metal case
- cUL approval



Main specifications

Characteristics

Characteristics	Type of output
Standard	Cable length 1 m
Standard	Cable length 2 m
Standard	Cable length 3 m
Standard	Cable length 6 m
Plunger with 90° roller	Cable length 1 m
Plunger with 90° roller	Cable length 2 m
Plunger with 90° roller	Cable length 3 m
Plunger with 90° roller	Cable length 6 m

Mechanical characteristics

Sequence
Snap action

Minimum operating force (N)	10
Minimum operating force (Nm)	-
Minimum total travel force (N)	30
Minimum total travel force (Nm)	-
Min. positive opening travel (N)	28
Min. positive opening travel (Nm)	-
Mechanical life millions of operations	10
Vertical approach speed	1 mm/min → 0.5 m/s
Horizontal approach speed (30° cam)	-
Weight (g)	190

General characteristics

Assigned impulse voltage (Uimp) - V	2500
Assigned insulation voltage (Ui) V	500
Thermal current (Ith) A	10
Low-load switching - Minimum voltage (V)	10
Low-load switching - Minimum current (mA)	100
Assigned working characteristics (EN 60 947.5.1, UL 508)	A300 = AC15 250 V 6 A Q150 = DC13 24 V 8 A
Use category according to IEC 947.5.1	AC15=250 V/6 A DC13=24 V/8 A
Use category according to UL 508	A300 - Q150
Electrical protection	Integral earth wire Short-circuit protection device : IEC/EN 60947.5.1 Fuse 6 AgC
Approvals	UL 508, UL 50

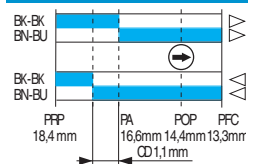
Product adaptations



- Contact type
- Rear output
- Protective scraper seal
- Length of cable/connector/stripping
- Connector output
- Low level contact

Metal plunger

83 880 101
83 880 102
83 880 103
83 880 106
-
-
-
-





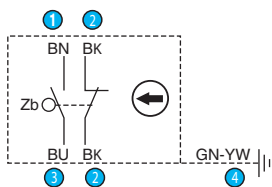
Metal roller plunger	Metal plunger with threaded barrel	Roller plunger - metal with threaded barrel	Steel metal roller lever (2 directions of attack)
83 881 101	83 884 101	83 882 101	83 883 101
83 881 102	83 884 102	83 882 102	83 883 102
83 881 103	83 884 103	83 882 103	83 883 103
83 881 106	83 884 106	83 882 106	83 883 106
83 885 101	-	83 886 101	-
83 885 102	-	83 886 102	-
83 885 103	-	83 886 103	-
83 885 106	-	83 886 106	-
10	10	10	-
-	-	-	0.15
30	30	30	-
-	-	-	0.35
28	28	28	-
-	-	-	0.15
10	10	10	10
1 mm/min → 0.5 m/s	-	1 mm/min → 0.5 m/s	1 mm/min → 0.5 m/s
1 mm/min → 0.3 m/s	1 mm/min → 0.3 m/s	1 mm/min → 0.3 m/s	-
200	220	220	230

Principles

Function

Four-terminal double break two-way contact element (form Zb) with positive opening NC contacts. The 2 moving contacts are electrically isolated from one another.

Snap-action contact

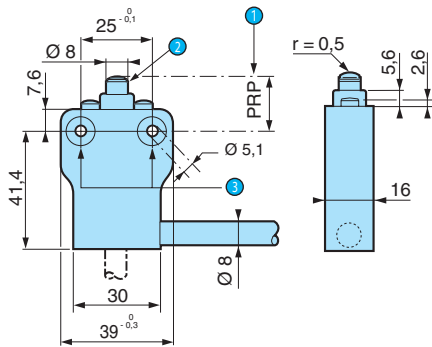


- ① Brown
- ② Black
- ③ Blue
- ④ Green-yellow

Dimensions

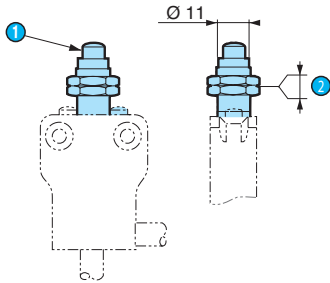
→ Product

83 880 1



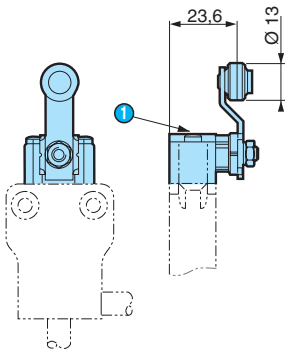
- 1 See sequence diagram
- 2 POP marking
- 3 $\varnothing 10 \times 5.1$ - 4 counterbores

83 884 1



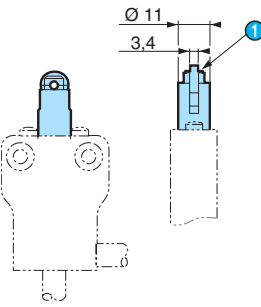
- 1 POP marking
- 2 Max.tightening thickness 8.5

83 883 1



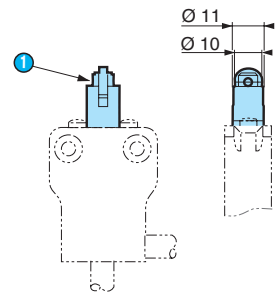
- 1 POP marking

83 881 1



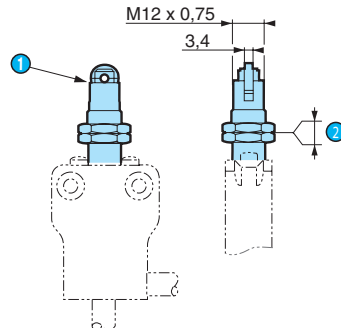
- 1 POP marking

83 885 1



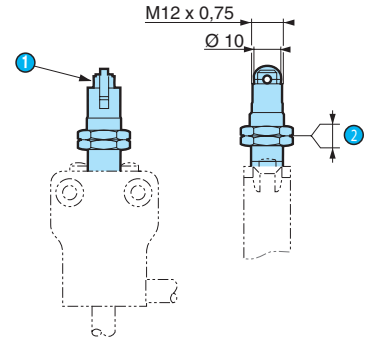
- 1 POP marking

83 882 1



- 1 POP marking
- 2 Max.tightening thickness 10.5

83 886 1



- 1 POP marking
- 2 Max.tightening thickness 10.5