

## 83880 Series



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### 83880 Series Metal Plunger

<u>Characteristics</u>	<u>Action</u>	<u>Output</u>	<u>Length of Cable/Connector</u>	<u>Part Number</u>
Standard	SPDT-DB Positive Opening	Cable Side	1.0 meter	<a href="#"><b>83880101</b></a>
Standard	SPDT-DB Positive Opening	Cable Side (std)	2.0 meter (std)	<a href="#"><b>83880102</b></a>
Standard	SPDT-DB Positive Opening	Cable Side	3.0 meter	<a href="#"><b>83880103</b></a>
Standard	SPDT-DB Positive Opening	Cable Bottom	1.0 meter	<a href="#"><b>83880111</b></a>
Standard	SPDT-DB Positive Opening	Cable Bottom	2.0 meter	<a href="#"><b>83880112</b></a>
Standard	SPDT-DB Positive Opening	Cable Bottom	3.0 meter	<a href="#"><b>83880113</b></a>
Standard	SPDT-DB Positive Opening	Connector Side	M12 Connector	<a href="#"><b>83880120</b></a>
Standard	SPDT-DB Positive Opening	Connector Bottom	M12 Connector	<a href="#"><b>83880130</b></a>

## Conforms to the following standards

IEC / EN 60947.5.1  
 Dimensional conformity: NFC 63145  
 Low voltage directive: 73/23/EEC and 93/68/EEC  
 Electric shock protection: NFC 20030 or IEC 60536 class 1, degree of pollution 3.

**Temperature specification:** -25°/+70°C -13°/+158°F

## Degree of protection

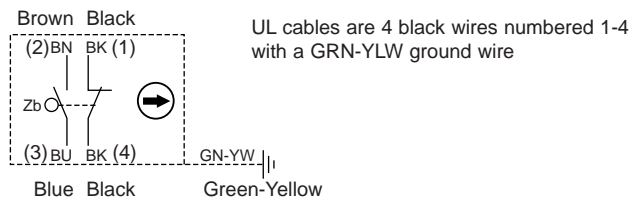
According to IEC 62529: IP 66 / 67  
 According to NEMA : Type 1, 3, 4, 6, 13

## Function

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

## Principle

Snap-Action SPDT-DB



## Electrical characteristics

Assigned impulse voltage (Uimp): 2500 V  
 Assigned insulation voltage (Ui): 500 V  
 Thermal rating (Ith): 10 A  
 With standard contacts: Minimum voltage 10 V  
 Minimum current 100 mA

Use category:  
 according to IEC 947.5.1 AC15 = 250 V / 6 A  
 DC 13 = 24 V / 8 A  
 according to UL 508 A300 - Q150

## Electrical protection

Integral earth wire  
 Short-circuit protection device: IEC 947.5.1  
 Fuse 6 AgC

## Connections

5-core cable HO5VF, 75 mm<sup>2</sup>, ext. Ø 8 mm (non-UL type cable)

## Approvals

UL 508, UL 50

## Types

Standard  
 Plunger or roller at 90°

## Standard Part Number (Cable length = 2.0 meters, exit: side)

### Actuator Type

Metal plunger  
 Metal roller plunger  
 Metal plunger with threaded barrel  
 Roller plunger - metal with threaded barrel  
 Metal roller lever (operates in both directions)

### Mechanical characteristics

Minimum positive opening force N (cmN)  
 Minimum total travel force N (cmN)

Mechanical life millions of operations  
 Weight g

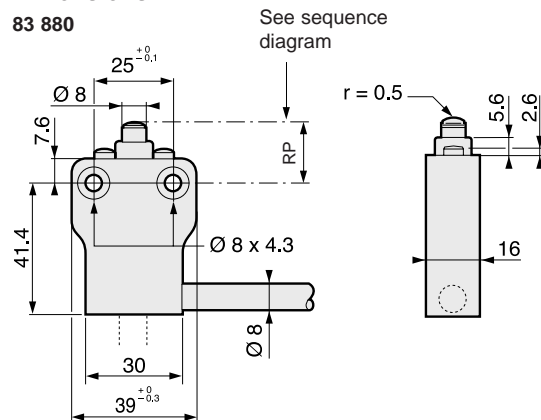
## Sequences

Positions: nominal data

## Dimensions

83 880

mm



(\*) Other cable lengths:

modify the last digit of the part number. For example:

- 0 = M12 connector output
- 1 = 1.0 meter cable
- 2 = 2.0 meter cable (Standard)
- 3 = 3.0 meter cable
- 6 = 6.0 meter cable

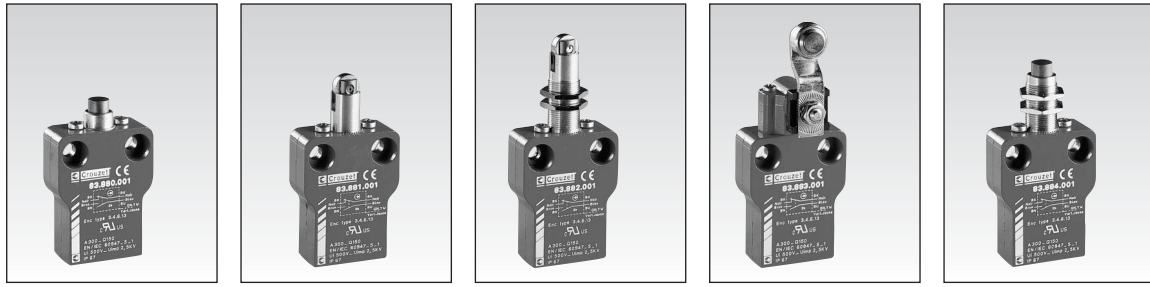
(\*\*) For different cable outputs:

modify the next to the last digit of the part number:

- 0 = Cable side exit (Standard)
- 1 = Cable bottom exit
- 2 = Connector side exit
- 3 = Connector bottom exit

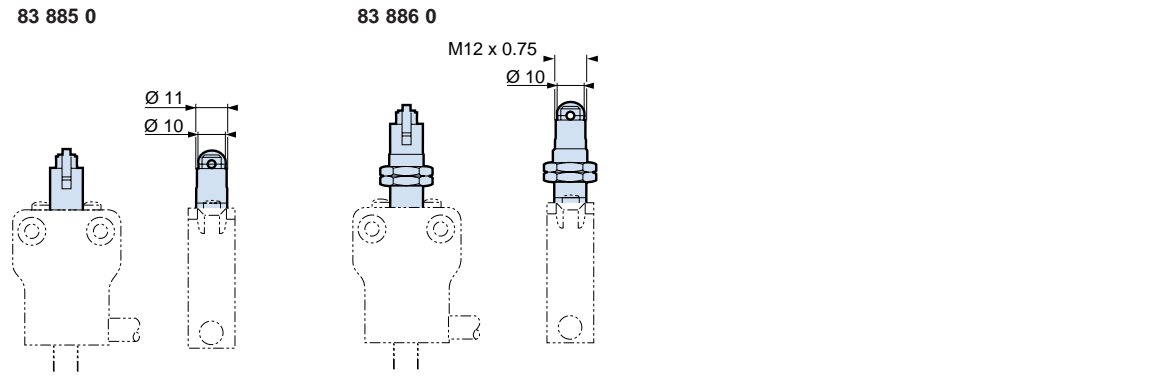
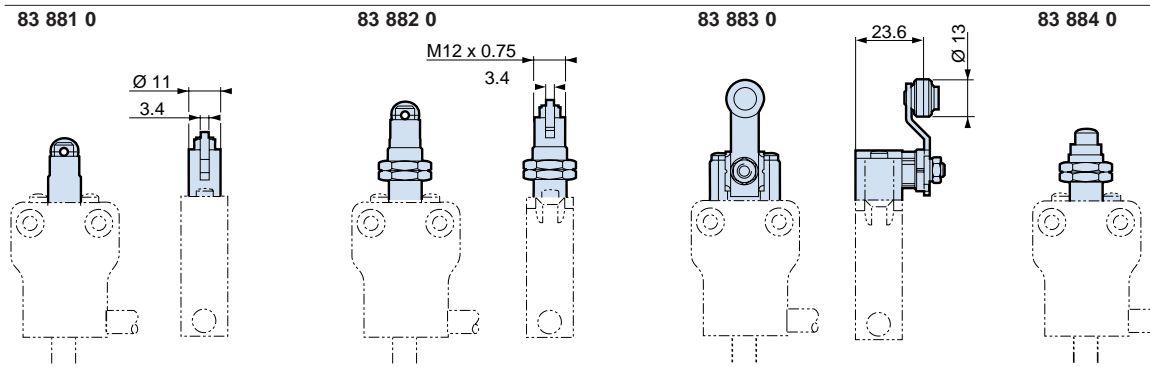
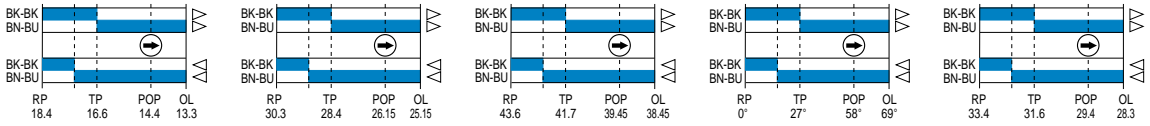
## Other information

For different actuator arms, low voltage / low current contacts / low temperature, special contacts, custom wiring harness, etc...., please consult us.



<b>83 880 0</b>	<b>83 881 0</b>	<b>83 882 0</b>	<b>83 883 0</b>	<b>83 884 0</b>	<b>1</b>
<b>83 880 102</b>	<b>83 881 102</b>	<b>83 882 102</b>	<b>83 883 102</b>	<b>83 884 102</b>	<b>2</b>
<b>83 880 103</b>	<b>83 881 103</b>	<b>83 882 103</b>	<b>83 883 103</b>	<b>83 884 103</b>	

36 (10)	36 (10)	36 (10)	22 in.oz. (15cmN)	36 (10)
108 (30)	108 (30)	108 (30)	52 in.oz. (35cmN)	108 (30)
100 (28)	100 (28)	100 (28)	22 in.oz. (15cmN)	100 (28)
10	10	10	10	10
10.3 (290)	10.4 (295)	11.1 (315)	10.3 (290)	10.9 (310)



mm

**To order, specify:**

Standard products	<b>2</b> Part number Example: Limit switch 83 881 102
Standard products, non stocked	<b>1</b> Type Examples: Limit switch 83 881 003 ; cable length = 3 m - Limit switch 83 881 006 ; cable length = 6 m