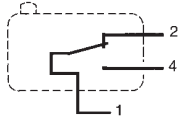


## General specifications

### Layout



### Components

#### Material

- Case : glass-filled polyamide (self-extinguishing version to UL 94 VO and IEC 695-2-1 850° C - available on request)
- Button : polyamide
- Contacts : nickel silver or gold alloy (dual-current)

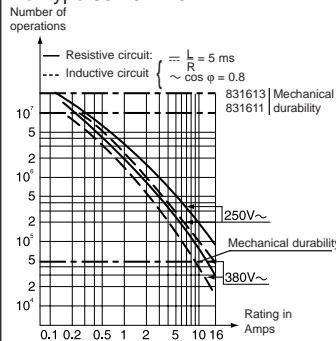
#### Actuators

- flat : stainless steel
- roller : stainless steel, glass-filled polyamide roller
- other types of polyamide

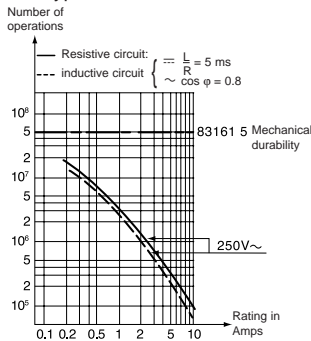
Approvals: NF - UL/cUL

### Operating curve

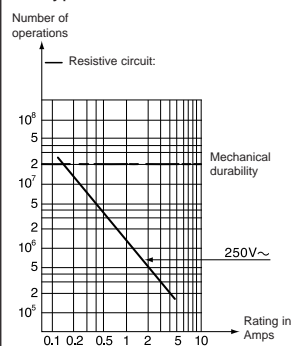
For type 83 161 1 3



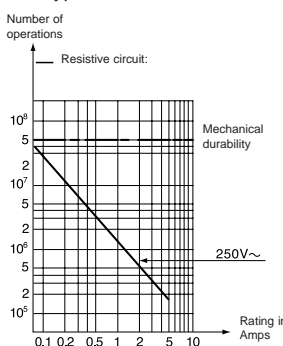
For type 83 161 5 - 5 SP 4136



For type 83 161 8



For type 83 161 9 SP 4136



For types 83 161 8 - 9 SP 4136 dual-current

Models 83 161 8 and 83 161 9 SP 4136 are designed to operate equally well on dual-current (1 mA 4 V minimum) or medium-current (5 A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

## Types

Part numbers for standard products with connections of type

2  
3  
6

### Features

#### Electrical characteristics

Current rating at 125/250 V	Current	A
	Horsepower	HP

#### Mechanical characteristics

Operating force - max.	N (oz.)
Release force - min.	N (oz.)
Total travel force - max.	N (oz.)
Permitted overtravel force - max.	N (oz.)
Rest position - max.	mm (in.)
Tripping point	mm (in.)
Differential travel	mm (in.)
Overtravel - min. (OT)	mm (in.)
Ambient operating temperature	°C (°F)
Mechanical durability (for 2/3 OT)	Operations
Contact gap	mm (in.)
Weight	g (oz.)

#### Contact type

C (Form C) SPDT

B (Form B) SPNC

A (Form A) SPNO

#### Connections



2 solder



3 for 1/4" Quick Connects

#### Actuators and mounting positions

Part numbers for standard actuators **A** 79 215 740

Actuators-Length mm (in.) Flat **161A** R14.2 (.56)



Mounting positions	A	B
Coefficient	2	1
Tripping point (except 83 161 6)	15.2 $\pm 1(.6 \pm 0.004)$	15.2 $\pm 0.45(.6 \pm 0.018)$
Tripping point 83 161 6	14.8 $\pm 1(.59 \pm 0.004)$	15 $\pm 0.45(.59 \pm 0.018)$

Part numbers for standard actuators **H** 79 218 651

Actuators-Length mm (in.) Dummy roller **161G** R21.8 (.86)



Mounting positions	A	B
Coefficient	3	1.8
Tripping point (except 83 161 6)	21.7 $\pm 2(.85 \pm 0.08)$	21.7 $\pm 0.7(.85 \pm 0.03)$
Tripping point 83 161 6	21.5 $\pm 2(.85 \pm 0.08)$	21.5 $\pm 0.7(.85 \pm 0.03)$

## Other information

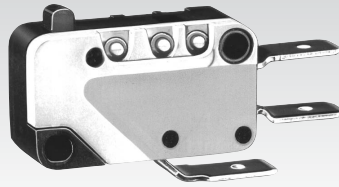
For other forces, actuators, connections and temperatures, please consult us.

Normally stocked items

Catalog products produced to order

Products and specifications subject to change without notice.

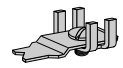
Order/Technical Support – Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com



<b>83161.1(10.1A)</b>	<b>83161.2(15.1A)</b>	<b>83161.3(10.1A)</b>	<b>83161.5(4A)</b> <b>83161.9(0.1A)</b>	<b>83161.5SP4136</b> <b>83161.9SP4136</b>	<b>83161.6</b>	<b>83161.8(0.1A)</b>
<b>831611C2.0</b>	<b>831612C2.0</b>	<b>831613C2.0</b>	<b>831615C2.0</b>	•	<b>831616C2.0</b>	<b>831618C2.0</b>
<b>831611C3.0</b>	<b>831612C3.0</b>	<b>831613C3.0</b>	<b>831615C3.0</b>	•	<b>831616C3.0</b>	<b>831618C3.0</b>
<b>831611C6.0</b>	<b>831612C6.0</b>	<b>831613C6.0</b>	<b>831615C6.0</b>	•	<b>831616C6.0</b>	<b>831618C6.0</b>
High Force	High Current	Standard	Low Force	Ultra Light Force	Wide Gap	Dual Current

10.1 1/2	15.1 1/2	10.1 1/2	4 1/10	4 1/10	6.1 1/3	0.1 N/A
3 (10.5)	0.8 (2.8)	0.8 (2.8)	0.25 (0.9)	0.15 (0.54)	5 (18)	0.8 (2.8)
1 (3.5)	0.2 (0.7)	0.2 (0.7)	0.05 (0.18)	0.04 (0.14)	0.5 (1.8)	0.2 (0.7)
4.5 (15.8)	2 (7.0)	2 (7.0)	0.35 (1.2)	0.2 (0.72)	6 (21.6)	0.2 (.07)
20 (70.5)	20 (70.5)	20 (70.5)	20 (70.5)	20 (70.5)	20 (70.5)	20 (70.5)
16.1 (0.63)	16.2 (0.64)	16.2 (0.64)	16.3 (0.64)	16.3 (0.64)	16.1 (0.63)	16.2 (0.64)
14.7 <sup>±0.4</sup> (.58 <sup>±0.16</sup> )	14.7 <sup>±0.3</sup> (.58 <sup>±0.16</sup> )	14.7 <sup>±0.3</sup> (.58 <sup>±0.16</sup> )	14.7 <sup>±0.4</sup> (.58 <sup>±0.16</sup> )	14.7 <sup>±0.3</sup> (.58 <sup>±0.16</sup> )	14.5 <sup>±0.4</sup> (.58 <sup>±0.16</sup> )	14.7 <sup>±0.4</sup> (.58 <sup>±0.16</sup> )
0.35 (0.014)	0.35 (0.014)	0.35 (0.014)	0.35 (0.014)	0.35 (0.014)	0.8 (0.03)	0.35 (0.014)
1.1 (0.05)	1.2 (0.05)	1.2 (0.05)	1.1 (0.05)	1.2 (0.05)	0.9 (0.035)	1.2 (0.05)
-20 +125 (-4 +257)	-20 +125 (-4 +257)	-20 +125 (-4 +257)	-20 +125 (-4 +257)	-20 +125 (-4 +257)	-20 +125 (-4 +257)	-20 +125 (-4 +257)
10 <sup>7</sup>	2 x 10 <sup>7</sup>	2 x 10 <sup>7</sup>	5 x 10 <sup>7</sup>	5 x 10 <sup>7</sup>	5 x 10 <sup>4</sup>	2 x 10 <sup>7</sup>
0.4 (0.016)	0.4 (0.016)	0.4 (0.016)	0.4 (0.016)	0.4 (0.016)	3.2 (0.126)	0.4 (0.016)
5.6 (.2)	5.6 (.2)	5.6 (.2)	5.6 (.2)	5.6 (.2)	5.6 (.2)	5.6 (.2)

<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>
<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>
<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>



5 screw



6 for 3/16" Quick Connects



7 for .11 Quick Connects

<b>B 70 507 524</b>	<b>E 79 215 742</b>	<b>G 70 507 529</b>	<b>F 70 507 528</b>
Flat <b>161A</b> R25.4 (1)	Roller <b>161E</b> R13.6 (.54)	Roller <b>161E</b> R24.1 (.95)	Dummy <b>161F</b> roller R22.2 (.84)
A 4	A 2	A 4	A 3
B 2	B 1	B 2	B 1.8
C 1.5	C 1	C 1.5	C 1.5
15.2 <sup>±2.5</sup> (.6 <sup>±1</sup> )	20.5 <sup>±1.5</sup> (.81 <sup>±0.06</sup> )	20.5 <sup>±2.0</sup> (.81 <sup>±0.11</sup> )	20.4 <sup>±2</sup> (.8 <sup>±0.08</sup> )
15.2 <sup>±1</sup> (.6 <sup>±0.04</sup> )	20.5 <sup>±0.8</sup> (.81 <sup>±0.03</sup> )	20.5 <sup>±1.5</sup> (.81 <sup>±0.06</sup> )	20.5 <sup>±0.7</sup> (.81 <sup>±0.03</sup> )
14.4 <sup>±2.5</sup> (.56 <sup>±1</sup> )	20.1 <sup>±1.5</sup> (.79 <sup>±0.06</sup> )	19.7 <sup>±2.0</sup> (.76 <sup>±0.11</sup> )	20.2 <sup>±2</sup> (.79 <sup>±0.08</sup> )
14.8 <sup>±1</sup> (.58 <sup>±0.04</sup> )	20.3 <sup>±0.8</sup> (.80 <sup>±0.03</sup> )	20.1 <sup>±1.5</sup> (.79 <sup>±0.06</sup> )	20.2 <sup>±1</sup> (.79 <sup>±0.03</sup> )
14.9 <sup>±0.8</sup> (.59 <sup>±0.03</sup> )		20.2 <sup>±1.2</sup> (.79 <sup>±0.05</sup> )	

<b>L</b>	<b>V 161V</b>	<b>C 70 507 526</b>	<b>D 79 215 835</b>
** Telescopic plunger Manual action <b>161L</b>		Flat <b>161A</b> R50 (1.9)	Flat <b>161A</b> R60 (2.39)
D Factory Mount only	D Factory Mount only	A	A
1	1	B	B
21.5 <sup>±1</sup> (.85 <sup>±0.04</sup> )	18.35 <sup>±0.45</sup>	C	C
21.5 <sup>±1</sup> (.85 <sup>±0.04</sup> )		6	7
		15.2 <sup>±0.3</sup>	15.2 <sup>±0.3</sup>
		3	3.5
		15.2 <sup>±1.5</sup>	15.2 <sup>±2.3</sup>

For factory mounting, specify fixing position A, B or C \*\* For 83 161 1, 83 161 3, 83 161 6, 83 161 8, mounted in factory (supplied without nut)

To order, please specify :

<b>1</b> Switch Type	<b>2</b> Contact Type	<b>3</b> Connection	Example : 831612 C 3 • C A	<b>4</b> Actuators	<b>5</b> Actuator Position
831612 831619 831613 831616 831615 831611 831618	A B C	2 3 5 6 7		Ø A B C D E	
To order actuators separately, use the 8 digit P/N Example switch is 831612, SPDT, 1/4" Q.C., C actuator mounted in A position					