



### 83160 Standard 831600 Part number 83160006



- Nominal ratings up to 16 A / 250 VAC
- Self-cleaning contacts
- 3 mm contact gap for type 83 160 6
- High DC switch rating for type 83 160 6 SP 3697
- Choice of actuators
- Approvals NF - UL (except 83 160 6 SP 3697)

	Type	Function	Connections
83160006	Standard 831600	I (changeover)	W3
MADE TO ORDER	Standard 831600	I (changeover)	W2 - W6 - X1 *
MADE TO ORDER	Standard 831600	R (normally closed)	W2 - W3 - W6 - X1 *
MADE TO ORDER	Standard 831600	C (normally open)	W2 - W3 - W6 - X1 *
83160301	Reduced force 831603	I (changeover)	W3
MADE TO ORDER	Reduced force 831603	I (changeover)	W2 - W6 - X1 *
MADE TO ORDER	Reduced force 831603	R (normally closed)	W2 - W3 - W6 - X1 *
MADE TO ORDER	Reduced force 831603	C (normally open)	W2 - W3 - W6 - X1 *
83160401	Low force 831604	I (changeover)	W3
MADE TO ORDER	Low force 831604	I (changeover)	W2 - W6 - X1 *
MADE TO ORDER	Low force 831604	R (normally closed)	W2 - W3 - W6 - X1 *
MADE TO ORDER	Low force 831604	C (normally open)	W2 - W3 - W6 - X1 *
MADE TO ORDER	3 mm contact gap 831606	I (changeover)	W3
MADE TO ORDER	3 mm contact gap 831606	I (changeover)	W2 - W6 - X1 *
MADE TO ORDER	3 mm contact gap 831606	R (normally closed)	W2 - W3 - W6 - X1 *
MADE TO ORDER	3 mm contact gap 831606	C (normally open)	W2 - W3 - W6 - X1 *
MADE TO ORDER	High DC switch rating 831606 SP 3697	I (changeover)	W3
MADE TO ORDER	High DC switch rating 831606 SP 3697	I (changeover)	W2 - W6 - X1 *
MADE TO ORDER	High DC switch rating 831606 SP 3697	R (normally closed)	W2 - W3 - W6 - X1 *
MADE TO ORDER	High DC switch rating 831606 SP 3697	C (normally open)	W2 - W3 - W6 - X1 *

#### Electrical characteristics

Rating nominal / 250 VAC (A)	16
Rating thermal / 250 VAC (A)	20
Rating nominal / 250 VDC (A)	-
Rating thermal / 250 VDC (A)	-
Mechanical characteristics	
Maximum operating force (N)	4
Min. Release force (N)	1,5
Maximum total travel force (N)	6,5
Max. permitted overtravel force (N)	20
Rest position max. (mm)	15,6
Operating position (mm)	14,8 ±0,3
Maximum differential travel (mm)	0,3
Min. overtravel CRA (mm)	1,3
Ambient operating temperature (°C)	-20 → +125
Mechanical life for 2/3 CRA (operations)	10 <sup>7</sup>
Contact gap (mm)	1,2
Weight (g)	6,7

#### Additional specifications

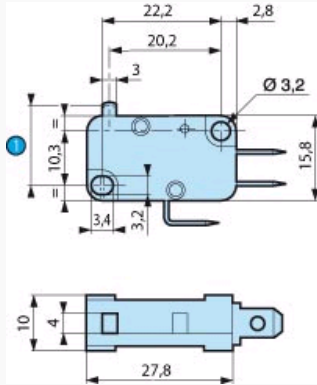
Components

Material

- Case: 83 160 0, 3, 4 and 6 polyamide UL94VO.

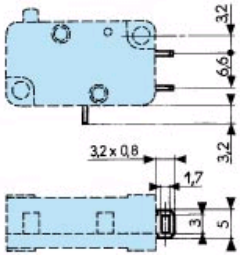
- Contacts: nickel silver
- Lever
- stainless steel
- polyamide roller
- Approvals: NF

**Dimension Diagram : 831600 / 3 / 4 / 6**

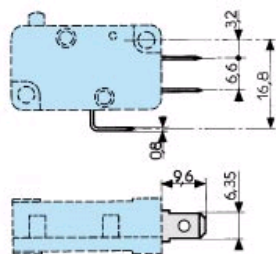


N°	Legend
1	OL = 13.2 max.

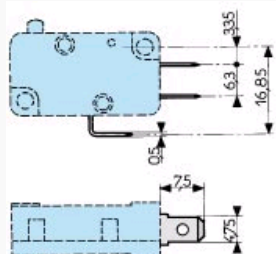
**Dimension Diagram : W2 solder**



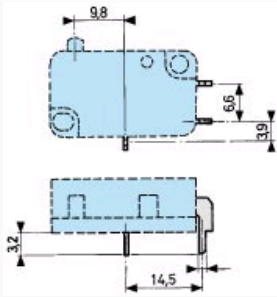
**Dimension Diagram : W3 for 6.35 mm clips**



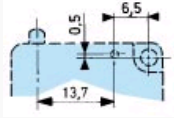
**Dimension Diagram : W6 for 4.75 mm clips**



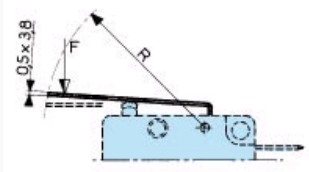
**Dimension Diagram : X1 printed circuit board**



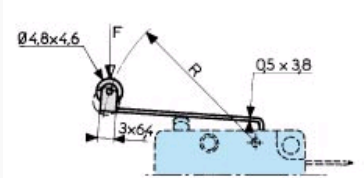
Dimension Diagram : Fixing position



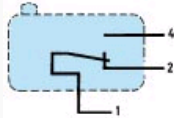
Dimension Diagram : 153 AX



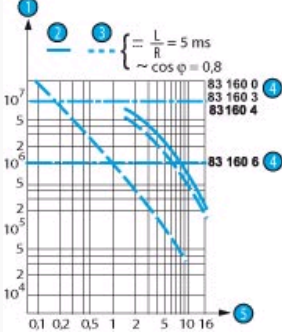
Dimension Diagram : 153 EX



: Single break changeover switch



Curves : Operating curve for types 831600 / 3 / 4 / 6






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

Part numbers for standard actuators

70 545 0 / 153 A R29.7

70 545 0 / 153 E R15.8

70 545 0 / 153 E R28.7

Actuators	Flat 153 AX R29.7			Roller 153 EX R15.8			Roller 153 EX R28.7			
										
Fixing positions	mm	83 1600	83 1603	83 1606	83 1600	83 1603	83 1606	83 1600	83 1603	83 1606
Operating force - max.	N	15.3 ±0.5	15.3 ±0.5	14.4 ±0.6	20.5 ±0.45	20.5 ±0.45	20.3 ±0.55	20.5 ±0.65	20.5 ±0.65	19.6 ±0.75
Release force - min.	N	2	1	2.6	4	2	5	2	1	2.6
Pre-travel - max.	mm	0.4	0.25	0.3	1	0.55	0.75	0.4	0.25	0.3
Differential travel max.	mm	2.5	2.5	3.1	1.2	1.2	1.4	2.5	2.5	3.1
Total travel max.	mm	0.6	0.8	1.5	0.3	0.4	0.7	0.6	0.8	1.5
		2.3	2.3	2.3	2.3	2.3	2.3	4.6	4.6	4.6

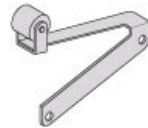
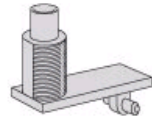
2-pole 153 A2\*\* R15.9

Dummy roller F\*\* R24.3

Telescopic plunger 153L\*\*  
(operating temperature 125°C max.)

Flexible with roller 153 B\*\*

153 V\*\*



\*\* Please consult us

Special adaptations

- Special levers
- Approvals: NF - UL for 83 160 6 SP 3697