



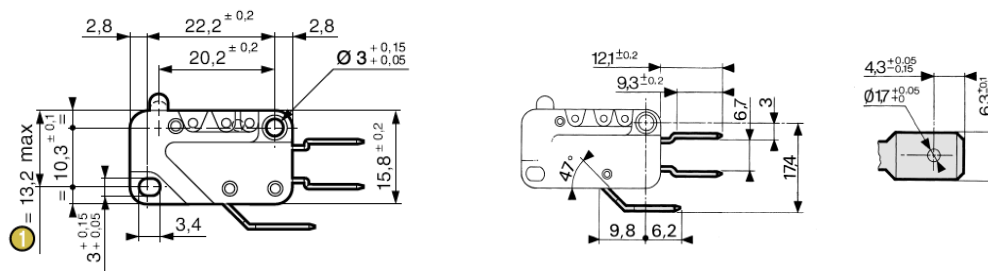
## Microwitch Series MP83 - V3 Size Standard Force



A robust simple snap action switch for general purpose applications. IP40 protection. Three alternative lever positions allow adaptation to various applications. High temperature range of -60°C to +130°C. Easy quick connect wiring.

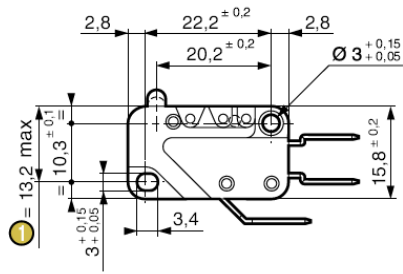
### Descriptions

Approvals	UL 1054
Housing	Glass fiber reinforced
Plunger	PA66
Mechanism Contacts	Change-over, Snap-action with blade in Beryllium Copper
Contact material	Silver alloy, micro-profile
Termination	Brass
Actuator	Stainless steel
Degree of protection	IP40
Class of protection	Ui 250V / Uimp 2.5kV / pollution 2
Micro-switch	$\mu$
Contact-gap	0.40 mm
Dimensions	27.8 x 15.8 x 10.3 mm
Power rating	125 / 250 V AC - 16A - 1/2hpA
Operating range force	0.2 to 0.8 N, depending actuator
Operating temperature range	-60°C to +130°C
Mechanical life	$2 \times 10^7$



① Total travel position

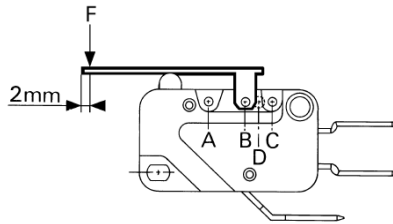
Basic switch



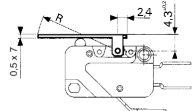
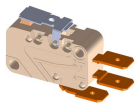
Actuating Force Fa max. (N)	0.8
Release Force Fr min (N)	0.2
Free Position Pr (mm)	16.2
Operating Position Pa (mm)	14.7 ± 0.3
Over-travel sr min. (mm)	1.20
Differential movement sd max. (mm)	0.35

1 Total travel position

Actuator position

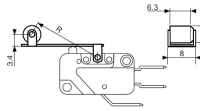
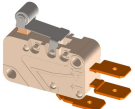


Actuator Type 5740: Flat, R14.2



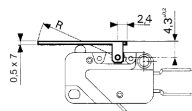
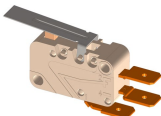
	A	B
Actuating Force Fa max. (N)	0.4	0.8
Release Force Fr min (N)	0.1	0.2
Free Position Pr (mm)	18.2	16.7
Operating Position Pa (mm)	15.2 ± 1	15.2 ± 0.45
Over-travel sr min. (mm)	2.4	1.2
Differential movement sd max. (mm)	0.7	0.35

Actuator Type 5742: Roller, R13.6



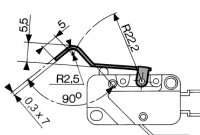
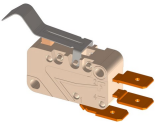
	A	B
Actuating Force Fa max. (N)	0.4	0.8
Release Force Fr min (N)	0.1	0.2
Free Position Pr (mm)	23.5	22
Operating Position Pa (mm)	20.5 ± 1.5	20.5 ± 0.8
Over-travel sr min. (mm)	2.4	1.2
Differential movement sd max. (mm)	0.7	0.35

Actuator Type 7524: Flat, R25.4



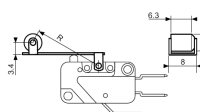
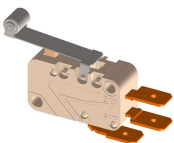
	A	B	C
Actuating Force Fa max. (N)	0.2	0.4	0.5
Release Force Fr min (N)	0.05	0.1	0.1
Free Position Pr (mm)	21.2	18.2	17.5
Operating Position Pa (mm)	15.2 ± 2.5	15.2 ± 1	15.2 ± 0.8
Over-travel sr min. (mm)	4.8	2.4	1.8
Differential movement sd max. (mm)	1.4	0.70	0.55

Actuator Type 7528: Dummy roller



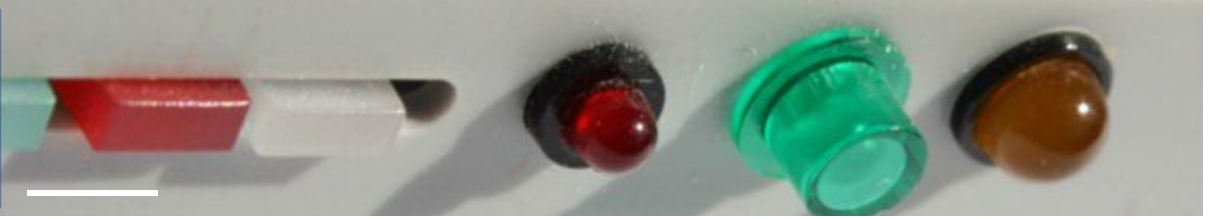
	A	B
Actuating Force Fa max. (N)	0.2	0.45
Release Force Fr min (N)	0.05	0.1
Free Position Pr (mm)	25.8	23.1
Operating Position Pa (mm)	20.4 ± 2.0	20.4 ± 0.7
Over-travel sr min. (mm)	4.3	2.2
Differential movement sd max. (mm)	1.25	0.65

Actuator Type 7529: Roller, R24.1



	A	B	C
Actuating Force Fa max. (N)	0.2	0.4	0.55
Release Force Fr min (N)	0.05	0.1	0.15
Free Position Pr (mm)	26.5	23.5	22.75
Operating Position Pa (mm)	20.5 ± 2.9	20.5 ± 1.5	20.5 ± 1.2
Over-travel sr min. (mm)	4.8	2.4	1.8
Differential movement sd max. (mm)	1.4	0.70	0.55



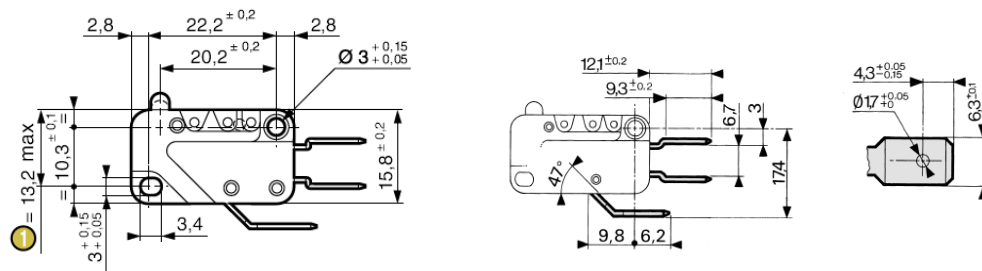


## Microswitch Series MP83 - V3 Size High Force



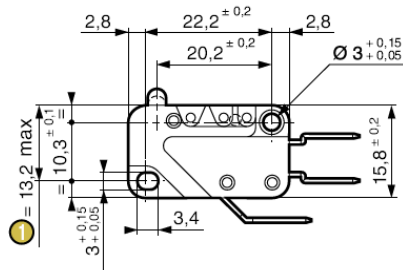
A robust simple snap action switch for general purpose applications. IP40 protection. Three alternative lever positions allow adaptation to various applications. High temperature range of -60°C to 130°C. Easy quick connect wiring.

Descriptions	
Approvals	UL 1054
Housing	Glass fiber reinforced
Plunger	PA66
Mechanism Contacts	Change-over, Snap-action with blade in Beryllium Copper
Contact material	Silver alloy, micro-profile
Termination	Brass
Actuator	Stainless steel
Degree of protection	IP40
Class of protection	Ui 250V / Uimp 2.5kV / pollution 2
Micro-switch	μ
Contact-gap	0.40 mm
Dimensions	27.8 x 15.8 x 10.3 mm
Power rating	125 / 250 V AC - 16A 1/2hpA
Operating range force	0.75 to 3 N, depending actuator
Operating temperature range	-40°C to +130°C
Mechanical life	10 <sup>7</sup>



① Total travel position

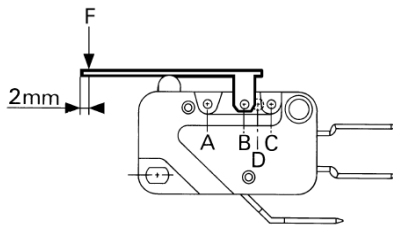
Basic switch



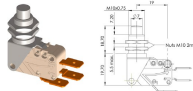
Actuating Force Fa max. (N)	3
Release Force Fr min (N)	1
Free Position Pr (mm)	16.6
Operating Position Pa (mm)	14.7 ± 0.3
Over-travel sr min. (mm)	1.1
Differential movement sd max. (mm)	0.35

1 Total travel position

Actuator position

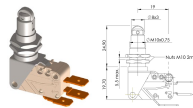


Actuator Type **0300**: Telescopic Pin plunger - Mounting should be done using the threaded collar













Actuating Force	
Fa max. (N)	
Release Force Fr	
min (N)	
Free Position Pr	3
(mm)	1
Operating	/
Position Pa (mm)	/
Over-travel sr	/
min. (mm)	0.35
Differential	7.2
movement sd	
max. (mm)	
Total travel max.	
(mm)	

Actuator Type **0400**: Telescopic Roller plunger - Mounting should be done using the threaded collar



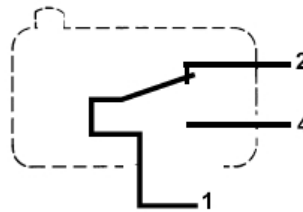
Actuating Force	
Fa max. (N)	
Release Force Fr	
min (N)	
Free Position Pr	3
(mm)	1
Operating	/
Position Pa (mm)	/
Over-travel sr	/
min. (mm)	0.35
Differential	5.5
movement sd	
max. (mm)	
Total travel max.	
(mm)	

Actuator Type 5740: Flat, R14.2		A	B	
 	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	1.5		3
	Free Position Pr (mm)	0.5		1
	Operating Position Pa (mm)	15.2 ± 1		16.6
	Over-travel sr min. (mm)	2.2		1.1
	Differential movement sd max. (mm)	0.7		0.35
Actuator Type 5742: Roller, R13.6		A	B	
 	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	1.5		3
	Free Position Pr (mm)	0.5		1
	Operating Position Pa (mm)	23.3		21.9
	Over-travel sr min. (mm)	20.5 ± 2.9		20.5 ± 0.8
	Differential movement sd max. (mm)	2.2		1.1
		0.7		0.35
Actuator Type 7524: Flat, R25.4		A	B	C
 	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	0.75	1.5	2
	Free Position Pr (mm)	0.25	0.5	0.65
	Operating Position Pa (mm)	20.8	18	17.3
	Over-travel sr min. (mm)	15.2 ± 2.5	15.2 ± 1	15.2 ± 0.8
	Differential movement sd max. (mm)	4.4	2.2	1.65
		1.4	0.70	0.55
Actuator Type 7528: Dummy roller		A	B	
 	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	0.85		1.65
	Free Position Pr (mm)	0.3		0.55
	Operating Position Pa (mm)	25.45		22.9
	Over-travel sr min. (mm)	20.4 ± 2.0		20.4 ± 0.7
	Differential movement sd max. (mm)	3.95		2
		1.25		0.65
Actuator Type 7529: Roller, R24.1		A	B	C
 	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	0.75	1.5	2
	Free Position Pr (mm)	0.25	0.5	0.65
	Operating Position Pa (mm)	26.1	23.3	22.6
	Over-travel sr min. (mm)	20.5 ± 2.9	20.5 ± 1.5	20.5 ± 1.2
	Differential movement sd max. (mm)	4.4	2.2	1.65
		1.4	0.70	0.55

Actuator Type <b>8651</b> : Dummy roller		A	B	C
	Actuating Force			
	Fa max. (N)			
	Release Force Fr min (N)	0.85	1.65	2.5
	Free Position Pr (mm)	0.3	0.55	0.85
	Operating Position Pa (mm)	26.74	24.22	23.38
	Over-travel sr min. (mm)	21.7 ± 2.0	21.7 ± 0.7	21.7 ± 0.5
	Differential movement sd max. (mm)	3.95	2	1.3
		1.25	0.65	0.4

### Electrical diagrams

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



### Ordering information

MP83161165 : 5742

A

#### Actuator

0300: Telescopic Pin plunger  
0400: Telescopic Roller plunger  
5740: Flat, R14.2  
5742: Roller, R13.6  
7524: Flat, R25.4  
7528: Dummy roller  
7529: Roller, R24.1  
8651: Dummy roller

#### Actuator position

Blank for Telescopic  
A  
B  
C