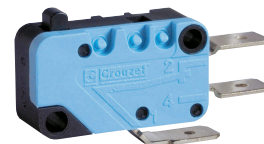


MINIATURE MICROSWITCHES - PREMIUM

V3 - 83161

- High precision flexible leaf snap-action mechanism
- Operation without balance-point, even at extremely slow actuating speed
- Broad range of operating forces from 0.15 N to 5 N
- Ratings from 4 A to 20(8) A 250 V~, 10(4) A 400 V~ and 1/2 HP 125-250 V~
- Contact gap less or greater than 3 mm (micro-disconnection (μ) or full disconnection)
- Operating temperature from -60 °C up to +150 °C - High resistance to shock and vibration
- Mechanical life up to 50 million cycles
- ENEC and cURus approved
- Wide choice of actuators on 4 possible fixing positions (pre-assembled or retrofittable)



Main specifications

		Standard 831613		High current 831612		
		Standard	UL	Standard	UL	UL SP4186
Function	Connections					
I (changeover)	W2	83161301	83161348	●	83161273	●
I (changeover)	W3	83161338	83161344	83161241	83161244	●
I (changeover)	W6A5	83161304	83161343	●*	●*	-
I (changeover)	W3R5	83163023	83163107	●*	●*	●*
I (changeover)	W5	83161303	83161349	●*	●*	-
I (changeover)	W6D8	83161305	83161341	●*	●*	-
I (changeover)	W7A5	83161309	83161350	-	-	-
I (Changeover)	2W7A8	83161310	●	●*	●*	-
R (Normally closed)	W2	83161316	83163041	●	83161274	●
R (Normally closed)	W3	83161311	83163066	●	●	●
R (Normally closed)	W6A5	83161359	●	●*	●*	-
R (Normally closed)	W3R5 - W5 - W6D8 - W7A5 - 2W7A8	●	●	●*	●*	●*
C (Normally open)	W2	83161315	●	●	●	●
C (Normally open)	W3	83161312	83161346	●	●	●
C (Normally open)	W6A5	83161325	●	●*	●*	-
C (Normally open)	W3R5 - W5 - W6D8 - W7A5 - 2W7A8	●	●	●*	●*	●*
Electrical characteristics						
Rating nominal / 250 V AC (A)		16		20		
Rating thermal / 250 V AC (A)		20		22		
Rating ENEC/NF / 250 V AC (A)		16(4)	16(4)	20(8)	20(8)	20(8)
Rating UL / 125/250 V AC (A)		-	16 - 1/2HP	-	15 - 1/2HP	20 - 1/2HP
Mechanical characteristics						
Maximum operating force (N)		0.8		1**		
Min. Release force (N)		0.2		0.2		
Maximum total travel force (N)		2		2.5		
Max. Allowable overtravel force (N)		20		20		
Maximum rest position (mm)		16.2		16.1		
Operating position (mm)		14.7±0.3		14.7±0.4		
Maximum differential travel (mm)		0.35		0.35		
Min. overtravel (mm)		1.2		1.1		
Ambient operating temperature (°C)		-60 → +125		-60 → +125		
Mechanical life for 2/3 OT (operations)		2 x 10 ⁷		2.5 x 10 ⁵		
Contact gap (mm)		0.4		0.4		
Weight (g)		5.6		5.6		

* Please consult us ** Also available with 3N operating force (831612 SP4165)

Additional specifications

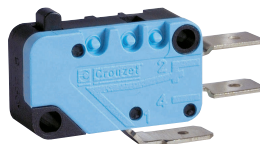
- Case: PA6 GF (UL 94-V2 / GWFI 960 °C) - Standard versions
PBT GF (UL 94-V0 / GWFI 960 °C) - UL versions
PET GF (UL 94-V0 / GWFI 960 °C / GWIT 775 °C) - On request
- Button: PA66
- Moving blade: silver-plated beryllium copper
- Contacts: silver alloy, micro-profile (831612: silver cadmium oxyde)
- Terminals: brass (except W2 : copper nickel)
- Levers: stainless steel or polyamide, polyamide roller
- Nuts for 161L: nickel-plated brass
- Degree of protection: IP40 (mechanism)
- Proof tracking index: PTI 250
- Protection against electric shock: button and actuators have reinforced insulation for Ui 250V / Uimp 2,5kV / pollution 2
- Recommended min actuating speed: 0.001 mm/s
- Approvals: Standard versions: NF - ENEC
UL versions: NF - ENEC - cURus

Standard product

Product made to order



Contact us



Main specifications (continued)

High force 831611		Low force 831614		Very low force 831615		Ultra low force 83161 5 SP 4136		Wide contact gap 831616		Func.	Conn.
Standard	UL	Standard	UL	Standard	UL	Standard	UL	Standard	UL		
83161102	83161058	83161402	83161431	83161502	●	83161520	●	83161601	●	I	W2
83161118	83161165	83161401	●	83161501	83161513	83161519	83161573	83161602	83161636	I	W3
83161110	83161182	83161403	83161407	83161503	83161508	●	83161577	●*	●*	I	W6A5
●	●	●	●	83161516	83161518	●	83161575	83161619	●	I	W3R5
83161113	83161055	●	83161408	83161509	83161511	●	●	83161603	●	I	W5
83161123	●	●	83161429	83161507	●	●	●	●	●	I	W6D8
83161189	●	83161405	●	●	●	●	●	●*	●*	I	W7A5
83161059	●	●	●	●	●	●	●	●*	●*	I	2W7A8
83161117	●	●	●	83161595	●	●	●	83161609	●	R	W2
83161109	●	●	●	83161528	●	●	●	83161605	●	R	W3
83161070	●	83161424	●	●	●	●	●	●*	●*	R	W6A5
●	●	●	●	●	●	●	●	●*	●*	R	Others
83161104	83161082	●	83161435	●	●	83161589	●	●	●	C	W2
83161103	83161188	83161404	83161412	●	●	●	●	83161606	●	C	W3
83161125	83161111	●	●	83161504	●	●	●	●*	●*	C	W6A5
●	●	●	●	●	●	●	●	●*	●*	C	Others
16		10		4		4		12		Electrical	
20		12		5		5		15		Nom rating (A)	
16(4)	16(4)	10(3)	10(3)	4(1)	4(1)	4(1)	4(1)	12(3)	12(3)	Therm rating (A)	
-	16 - 1/2HP	-	6 - 1/4HP	-	4 - 1/10HP	-	4 - 1/10HP	-	6 - 1/3HP	ENEC rating (A)	
										UL rating (A)	
3		0.5		0.25		0.15		5		Mechanical	
1		0.1		0.05		0.04		0.5		OF max (N)	
4.5		1.5		0.40		0.2		6		RF min (N)	
20		20		20		20		20		TTF max (N)	
16.1		16.2		16.3		16.3		16.1		AOF max (N)	
14.7±0.4		14.7±0.4		14.7±0.4		14.7±0.3		14.5±0.4		RP max (mm)	
0.35		0.35		0.35		0.35		0.8		OP (mm)	
1.1		1.1		1.1		1.2		0.9		DT max (mm)	
-60 → +125		-60 → +125		-40 → +125		-40 → +125		-60 → +125		OT min (mm)	
10 ⁷		3 x 10 ⁷		5 x 10 ⁷		5 x 10 ⁷		5 x 10 ⁴		Temp (°C)	
0.4		0.4		0.4		0.4		3.2		Mech. life (op)	
5.6		5.6		5.6		5.6		5.6		Gap (mm)	
										Weight (g)	

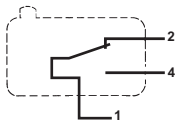
Product adaptations



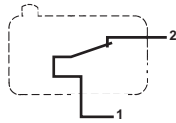
- › Special levers: special shapes and lengths, flexible levers, adjustable, pinned,
- › Special connections: angled, with 7mm spacing (RAST 7-W3R7), for PCB, ...
- › High operating temperature: +150 °C
- › Special contacts (for gold plated contacts: see "V3 Dual-current - 83161")
- › Reduced or increased switching hysteresis: max 0.1 mm to max 0.8 mm differential travel
- › Specific operating force easily achievable
- › Telescopic plunger and adjustable fixing by threaded barrel: plastic version (161L accessory) or metal version (SP9603)
- › Housing material complying with IEC 60335-1 for unattended appliances: GWFI 850° C / GWIT 775° C (SP9680)
- › 400 V~ ENEC approved versions

Principles

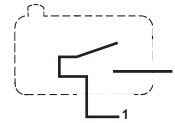
Single break snap-action switch
Changeover - SPDT (form C)



Normally closed - SPST-NC (form B)

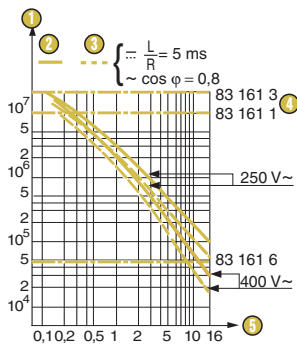


Normally open - SPST-NO (form A)

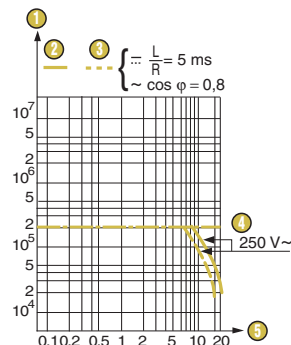


Curves

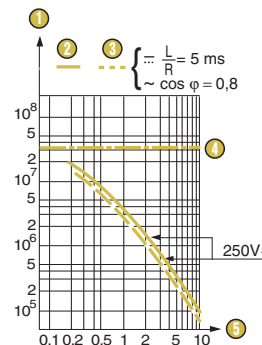
Operating curve for types
831611* / 831613* / 831616



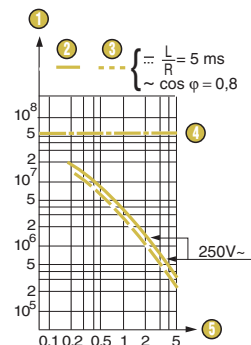
Operating curve for type 831612



Operating curve for type 831614



Operating curve for types
831615 / 831615 SP 4136



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

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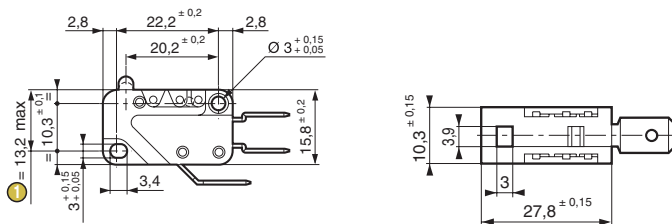
- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

* For 831611 UL and 831613 UL: please consult us

Dimensions

Product

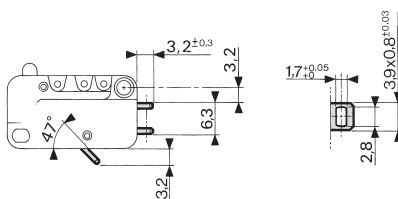
83161



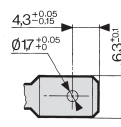
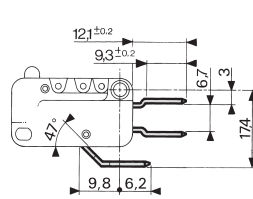
- 1 Total travel position

Connections

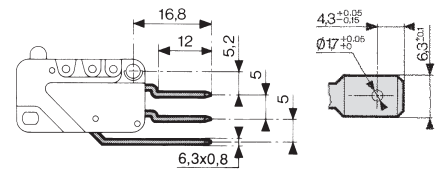
W2 solder



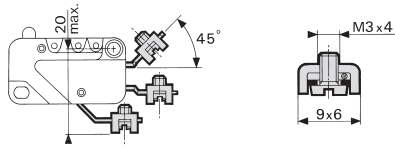
W3 quick-connect 6.3 x 0.8



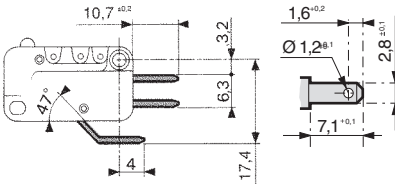
W3R5 quick-connect 6.3 x 0.8
for RAST 5 connector



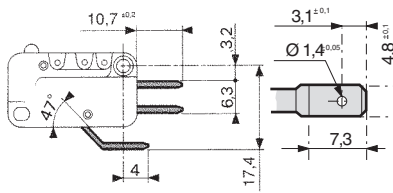
W5 screw with clamp



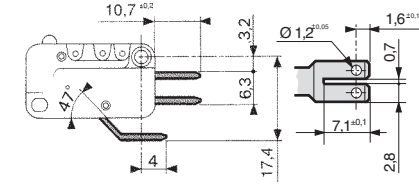
W7A5 quick-connect 2.8 x 0.5



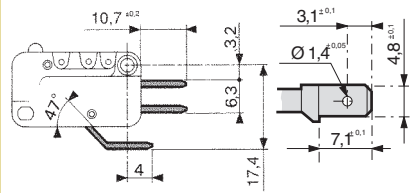
W6A5 quick-connect 4.8 x 0.5



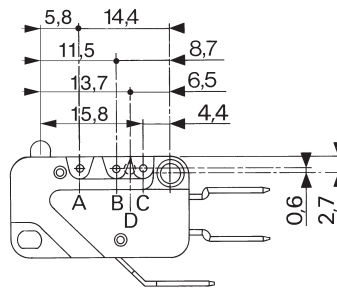
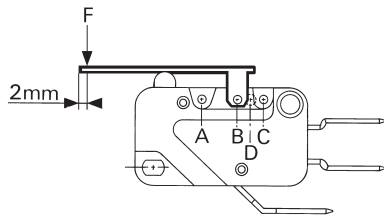
2W7A8 double quick-connect 2.8 x 0.8



W6D8 quick-connect 4.8 x 0.8



Actuator mounting positions



To calculate force

Divide the switch force by the coefficient given in the table.

To calculate travel

Multiply the switch travel by the same coefficient.

Example :

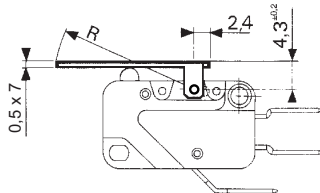
83 161 3 with lever 161 A - R 25.4 position A (coeff. 4)

Operating force: $0.8 : 4 = 0.2 \text{ N}$

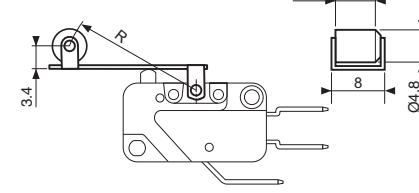
Overtravel: $1.2 \times 4 = 4.8 \text{ mm}$

Actuators

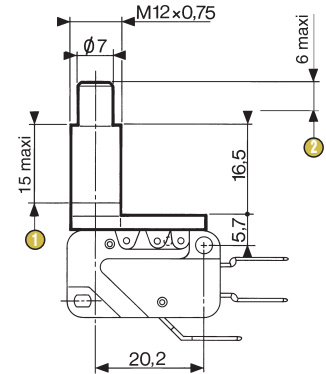
161A flat



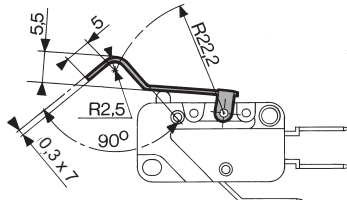
161E roller



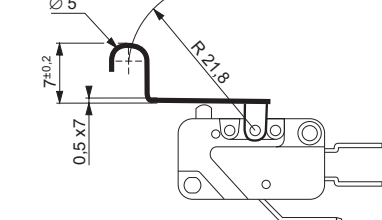
161L telescopic plunger



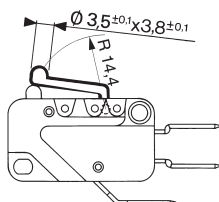
161F dummy roller



161G dummy roller



161V plastic



Other shapes and dimensions: consult us

Also available are pinned actuators mounted on position D (factory mounting), same as for 83160 series. (datasheet: SP9640)

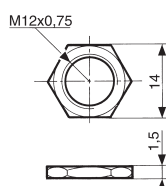
① Thread length

② Total travel

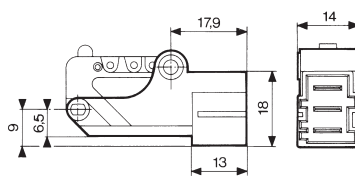
Nut thickness	Max. torque
1,5 mm	0.5 N.m
2 mm	0.7 N.m
2,5 mm	1 N.m

Mounting accessories

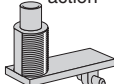
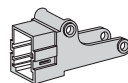
Nut for 161L



Housing 161J for connections W3 R5



Actuators and mounting accessories

Part numbers for standard actuators		79215740	70507524	79215742	70507529	70507528					
Actuators		Flat 161A R14,2	Flat 161A R25,4	Roller 161E R13,6	Roller 161E R24,1	Dummy roller 161F R22,2					
											
Fixing positions	A	B	A	B	C	A	B				
Coefficient	2	1	4	2	1,5	3	1,8				
Operating position (except 831616)	15,2 ±1	15,2 ±0,45	15,2 ±2,5	15,2 ±1	15,2 ±0,8	20,5 ±2,9	20,5 ±1,5	20,5 ±1,2	20,4 ±2	20,4 ±0,7	
Operating position 831616	14,8 ±1	15 ±0,45	14,4 ±2,5	14,8 ±1	14,9 ±0,8	20,1 ±1,5	20,3 ±0,8	19,7 ±2,9	20,1 ±1,5	20,2 ±1,2	20,2 ±2
Part numbers for standard actuators		79218651	79250338			70602118					
Actuators		Dummy roller 161G R21,8	**Telescopic plunger 161L	Manual action	Plastic 161V	Housing 161J	Nut for 161L				
											
Fixing positions	A	B	D		D						
Coefficient	3	1,8	1		1						
Operating position (except 831616)	21,7 ±2	21,7 ±0,7	21,5 ±1		18,35 ±0,45						
Operating position 831616	21,5 ±2	21,5 ±0,7	21,5 ±1								

Except where otherwise indicated, flat and roller levers are supplied unmounted.

For factory mounting, specify fixing position A, B or C.

** For 831611, 831612, 831613, 831616 mounted in factory (supplied without nut)

V3-83161 microswitches with referenced actuators

Actuators			161A R14.2		161A R25.4			161E R13.6		161E R24.1			161L
			79215740		70507524			79215742		70507529			
			Pos A	Pos B	Pos A	Pos B	Pos C	Pos A	Pos B	Pos A	Pos B	Pos C	Pos D
831611	I W2	STD UL	83161020 ●	83161021 ●	83161022 ●	83161023 ●	83161024 ●	83161025 ●	83161026 ●	83161027 ●	83161028 ●	83161029 ●	● ●
	I W3	STD UL	83161032 ●	83161033 ●	83161034 ●	83161035 ●	83161036 ●	83161037 ●	83161038 ●	83161039 ●	83161040 ●	83161041 ●	83161064 83161098
	I W6A5	STD UL	83161044 ●	83161045 ●	83161046 ●	83161177 ●	83161047 ●	83161048 ●	83161049 ●	83161050 ●	83161051 ●	83161052 ●	● ●
831613	I W2	STD UL	83163067 ●	83163068 ●	83163069 ●	83163015 ●	83163071 ●	83163072 ●	83163073 ●	83163074 ●	83163016 ●	83163075 ●	83161320 ●
	I W3	STD UL	83163078 ●	83163079 ●	83163080 ●	83163081 83161328	83163082 ●	83163083 ●	83161374 83163221	83163084 ●	83163007 ●	83163085 ●	83161318 83163102
	I W6A5	STD UL	83163088 ●	83163089 ●	83163090 ●	83163091 83161327	83163092 ●	83163093 ●	83163094 83163222	83161095 ●	83163096 83163220	83163097 ●	● 83161352
831615	I W2	STD UL	83161529 ●	83161530 ●	83161531 ●	83161532 ●	83161533 ●	83161534 ●	83161535 ●	83161536 ●	83161537 ●	83161538 ●	- -
	I W3	STD UL	83161541 ●	83161542 ●	83161543 ●	83161544 ●	83161545 ●	83161546 ●	83161547 ●	83161548 ●	83161514 ●	83161549 ●	- -
	I W6A5	STD UL	83161552 ●	83161553 ●	83161554 ●	83161526 ●	83161555 ●	83161556 ●	83161557 ●	83161558 ●	83161559 ●	83161560 ●	- -

Standard product

Product made to order



Contact us

Installation recommendations

See "Basic technical concepts"

How to order

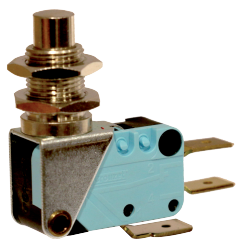
Use the 8 digit part numbers when they are defined

Other cases, precise:

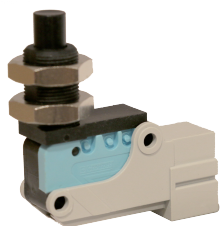
Type of microswitch - Function - Connection - UL approval* - Actuator* - Fixing position* - Mounting accessories* - Adaptation*
* if needed

Example: 831613 C W3R5 UL 161E R13.6 B 79250338 SP9680

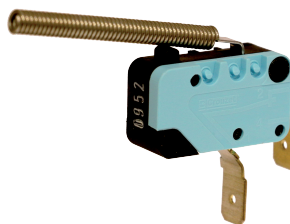
Examples of special adaptations



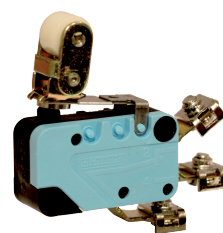
Telescopic plunger and adjustable fixing . 4mm overtravel. Metal version for heavy duty (SP9603)



Door switch for industrial vehicle



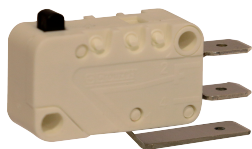
Spring lever for extra-long overtravel



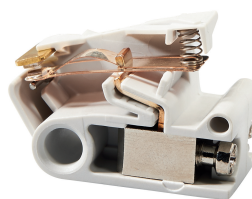
One-way roller lever (active on right, idle-return on left)



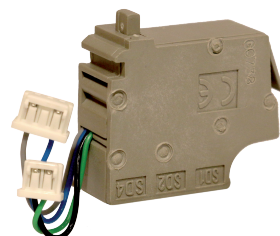
Angled W3 terminals



RAST 7mm - W3R7 connections



Fully specific integrable switching module with terminal block for time switch

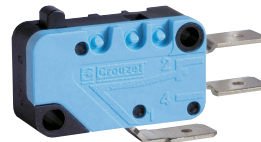


Auxiliary contact for power switches and circuit breakers. Integrates the V3-83161 mechanism

MINIATURE MICROSWITCHES - PREMIUM

V3 Dual-current - 83161

- › High precision flexible leaf snap-action mechanism
- › Operation without balance-point, even at extremely slow actuating speed
- › Broad range of operating forces from 0.15 N to 3 N
- › Use from 1 mA 4 V_{DC} to 5 A 250 V_{AC}
- › Operating temperature from -60 °C up to +150 °C - High resistance to shock and vibration
- › Mechanical life up to 50 million cycles
- › ENEC and cURus approved
- › Wide choice of actuators on 4 possible fixing positions (pre-assembled or retrofittable)



Main specifications

Function	Connections	Dual-current 831618		Dual-current High force 831618 SP 4174		Dual-current Very low force 831619		Dual-current Ultra low force 831619 SP 4136	
		Standard	UL	Standard	UL	Standard	UL	Standard	UL
I (Changeover)	W2	83161801	83168021	83168015	83168008	83161928	●	83161901	●
I (Changeover)	W3	83161806	83161873	83161832	83161894	83161906	●	83161904	83161917
I (Changeover)	W6A5	83161812	83161813	●	●	●	●	●	83161911
I (Changeover)	W3R5	●	●	●	●	●	●	●	●
I (Changeover)	W5	●	●	●	●	●	●	●	●
I (Changeover)	W6D8	●	●	●	●	●	●	83161915	●
I (Changeover)	W7A5	83161803	●	●	●	●	●	●	●
I (Changeover)	2W7A8	●	●	●	●	●	●	●	●
R (Normally closed)	W2	83161807	●	●	●	●	●	●	●
R (Normally closed)	W3	83161821	●	●	●	83161907	●	83161916	●
R (Normally closed)	W6A5	●	●	●	●	●	●	●	●
R (Normally closed)	W3R5 - W5 - W6D8 W7A5 - 2W7A8	●	●	●	●	●	●	●	●
C (Normally open)	W2	83161818	●	●	●	●	●	●	●
C (Normally open)	W3	83161822	83161827	●	●	●	●	●	●
C (Normally open)	W6A5	83161826	83161819	●	●	●	83161908	●	●
C (Normally open)	W3R5 - W5 - W6D8 W7A5 - 2W7A8	●	●	●	●	●	●	●	●
Electrical characteristics									
Rating nominal / 250 V AC (A)		5*		5*		4*		4*	
Rating thermal / 250 V AC (A)		6		6		5		5	
Rating ENEC/NF / 250 V AC (A)		0.1(0.04)	0.1(0.04)	0.1(0.04)	0.1(0.04)	0.1(0.04)	0.1(0.04)	0.1(0.04)	0.1(0.04)
Rating UL / 125 V AC (A)		-	1	-	1	-	1	-	1
Mechanical characteristics									
Maximum operating force (N)		0.8		3		0.25		0.15	
Min. Release force (N)		0.2		1		0.05		0.04	
Maximum total travel force (N)		2		4.5		0.40		0.2	
Max. permitted overtravel force (N)		20		20		20		20	
Maximum rest position (mm)		16.2		16.1		16.3		16.3	
Operating position (mm)		14.7±0.3		14.7±0.4		14.7±0.4		14.7±0.3	
Maximum differential travel (mm)		0.35		0.35		0.35		0.35	
Min. overtravel (mm)		1.2		1.1		1.1		1.2	
Ambient operating temperature (°C)		-60 → +125		-60 → +125		-40 → +125		-40 → +125	
Mechanical life for 2/3 OT (operations)		2 x 10 ⁷		10 ⁷		5 x 10 ⁷		5 x 10 ⁷	
Contact gap (mm)		0.4		0.4		0.4		0.4	
Weight (g)		5.6		5.6		5.6		5.6	

Additional specifications

- Case: PA6 GF (UL 94-V2 / GWFI 960 °C) - Standard versions
- PBT GF (UL 94-V0 / GWFI 960 °C) - UL versions
- PET GF (UL 94-V0 / GWFI 960 °C / GWIT 775 °C) - On request
- Button: PA66
- Moving blade: silver-plated beryllium copper
- Contacts: gold alloy on silver alloy, crossbar (dual-current)
- Terminals: brass (except W2 : copper nickel)
- Levers: stainless steel or polyamide, polyamide roller
- Nuts for 161L: nickel-plated brass

- Degree of protection: IP40 (mechanism)
- Proof tracking index: PTI 250
- Protection against electric shock: button and actuators have reinforced insulation for U_i 250V / U_{imp} 2,5kV / pollution 2
- Recommended min actuating speed: 0.001 mm/s
- Approvals: Standard versions: NF - ENEC
- UL versions: NF - ENEC -cURus

Standard product

Product made to order



Contact us

Product adaptations

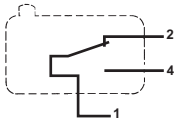


- › Special levers: special shapes and lengths, flexible levers, adjustable, pinned,
- › Special connections: angled, with 7mm spacing (RAST 7-W3R7), for PCB, ...
- › High operating temperature: +150 °C
- › Reduced or increased switching hysteresis: max 0.1 mm to max 0.8 mm differential travel
- › Specific operating force easily achievable
- › Telescopic plunger and adjustable fixing by threaded barrel: plastic version (161L accessory) or metal version (SP9603)
- › Housing material complying with IEC 60335-1 for unattended appliances: GWFI 850° C / GWIT 775° C (SP9680)

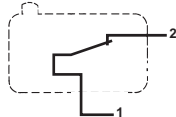
Principles

Single break snap-action switch

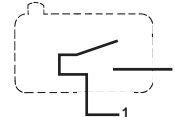
Changeover - SPDT (form C)



Normally closed - SPST-NC (form B)

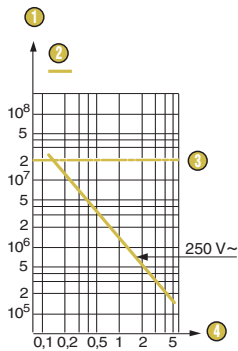


Normally open - SPST-NO (form A)



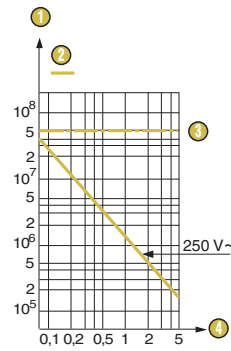
Curves

Operating curve for type 831618 and 831618 SP 4174



- ① Number of cycles
- ② Resistive circuit
- ③ Mechanical life limit
- ④ Current in Amps

Operating curve for types 831619 and 831619 SP 4136



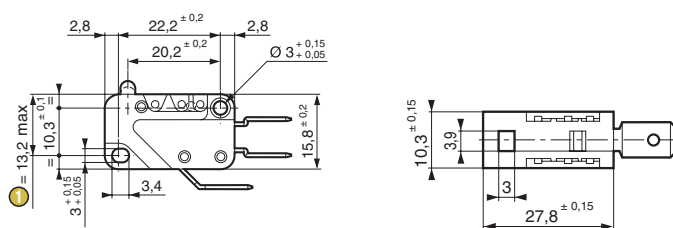
- ① Number of cycles
- ② Resistive circuit
- ③ Mechanical life limit
- ④ Current in Amps

* These models are designed to operate equally well on low-current (1 mA 4 V minimum recommended) 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.

Dimensions

Product

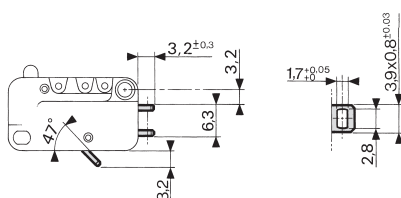
83161



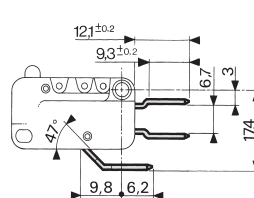
- ① Total travel position

Connections

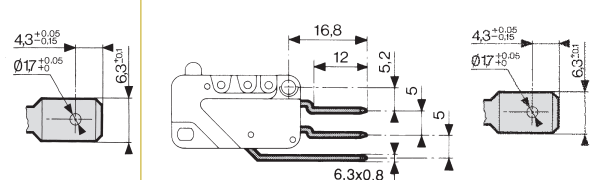
W2 solder



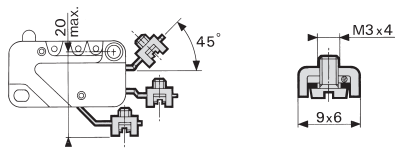
W3 quick-connect 6.3 x 0.8



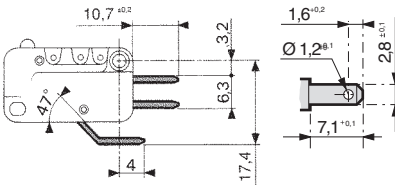
W3R5 quick-connect 6.3x0.8 for RAST 5 connector



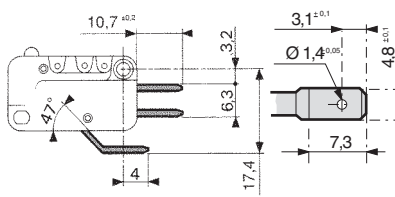
W5 screw



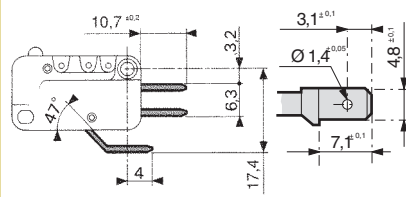
W7A5 quick-connect 2.8 x 0.5



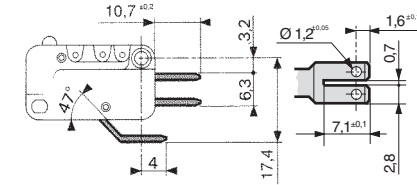
W6A5 quick-connect 4.8 x 0.5



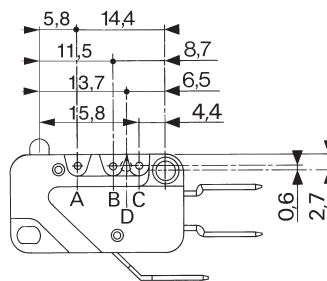
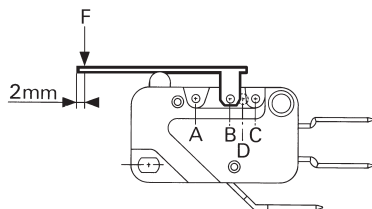
W6D8 quick-connect 4.8 x 0.8



2W7A8 double quick-connect 2.8 x 0.8



Actuator mounting positions



To calculate force

Divide the switch force by the coefficient given in the table.

To calculate travel

Multiply the switch travel by the same coefficient.

Example :

83 161 8 with lever 161 A - R 25.4 position A

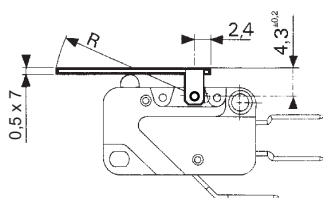
(coeff. 4)

Operating force: $0.8 : 4 = 0.2 \text{ N}$

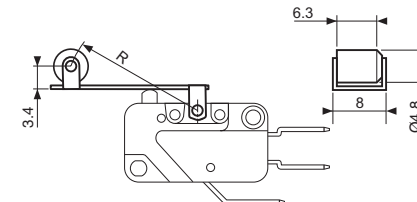
Overtravel: $1.2 \times 4 = 4.8 \text{ mm}$

Actuators

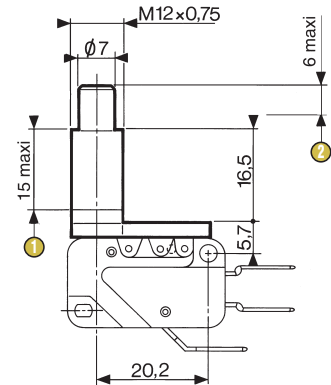
161A flat



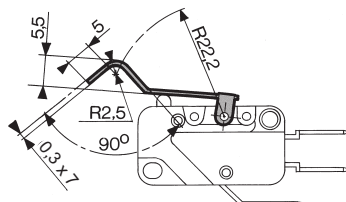
161E roller



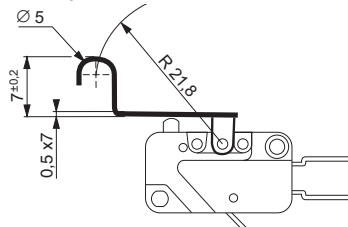
161L telescopic plunger



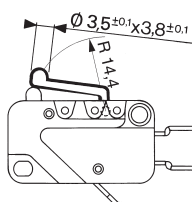
161F dummy roller



161G dummy roller



161V plastic



Other shapes and dimensions: consult us

Also available are pinned actuators mounted on position D (factory mounting), same as for 83160 series. (datasheet: SP9640)

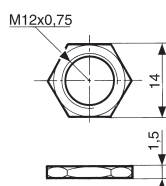
1 Thread length

2 Total travel

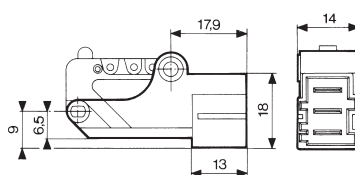
Nut thickness	Max. torque
1.5 mm	0.5 N.m
2 mm	0.7 N.m
2.5 mm	1 N.m

Mounting accessories

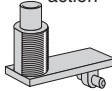
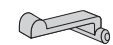
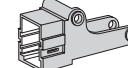
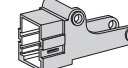
Nut for 161L



Housing 161J for connections W3 R5



Actuators and mounting accessories

Part numbers for standard actuators		79215740	70507524	79215742	70507529	70507528						
Actuators		Flat 161A R14,2	Flat 161A R25,4	Roller 161E R13,6	Roller 161E R24,1	Dummy roller 161F R22,2						
												
Fixing positions	A	B	A	B	C	A	B					
Coefficient	2	1	4	2	1,5	2	1	4	2	1,5	3	1,8
Operating position (except 831616)	15,2 ±1	15,2 ±0,45	15,2 ±2,5	15,2 ±1	15,2 ±0,8	20,5 ±1,5	20,5 ±0,8	20,5 ±2,9	20,5 ±1,5	20,5 ±1,2	20,4 ±2	20,4 ±0,7
Operating position 831616	14,8 ±1	15 ±0,45	14,4 ±2,5	14,8 ±1	14,9 ±0,8	20,1 ±1,5	20,3 ±0,8	19,7 ±2,9	20,1 ±1,5	20,2 ±1,2	20,2 ±2	20,2 ±2
Part numbers for standard actuators		79218651			79250338			70602118				
Actuators		Dummy roller 161G R21,8	**Telescopic plunger 161L	Manual action	Plastic 161V	Housing 161J	Nut for 161L					
												
Fixing positions	A	B	D	D								
Coefficient	3	1,8	1	1								
Operating position (except 831616)	21,7 ±2	21,7 ±0,7	21,5 ±1	18,35 ±0,45								
Operating position 831616	21,5 ±2	21,5 ±0,7	21,5 ±1									

Except where otherwise indicated, flat and roller levers are supplied unmounted.
For factory mounting, specify fixing position A, B or C.

** For 831618, 831618 SP 4174 mounted in factory (supplied without nut)

V3 Dual-current - 83161 microswitches with referenced actuators

Actuators			161A R14.2		161A R25.4			161E R13.6		161E R24.1			161L
			79215740		70507524			79215742		70507529			
			Pos A	Pos B	Pos A	Pos B	Pos C	Pos A	Pos B	Pos A	Pos B	Pos C	Pos D
831618	I W2	STD	83161838	83161839	83161840	83161841	83161842	83161843	83161844	83161845	83161846	83161847	83161833
		UL	●	●	●	●	●	●	●	●	●	●	●
	I W3	STD	83161850	83161851	83161852	83161853	83161854	83161855	83161856	83161857	83161858	83161859	83161820
		UL	●	●	●	●	●	●	●	●	●	●	●
	I W6A5	STD	83161862	83161863	83161864	83161865	83161866	83161867	83161824	83161868	83161869	83161870	●
		UL	●	●	●	●	●	●	●	●	●	●	●

Installation recommendations

See "Basic technical concepts"

How to order

Use the 8 digit part numbers when they are defined

Other cases, precise:

Type of microswitch - Function - Connection - UL approval* - Actuator* - Fixing position* - Mounting accessories* - Adaptation*
* if needed

Example: 831618 C W6A5 UL 161L 70602118 SP9680

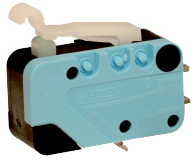
Standard product

Product made to order

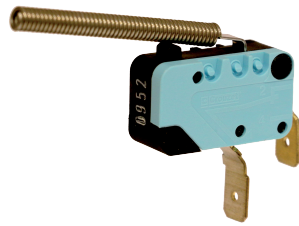


Contact us

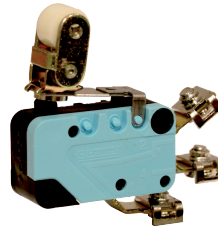
Examples of special adaptations



Plastic lever with no play in rest position



Spring lever for extra-long overtravel



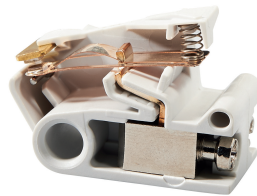
One-way roller lever (active on right, idle-return on left)



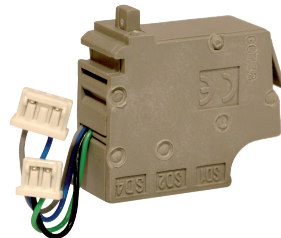
Angled W3 terminals



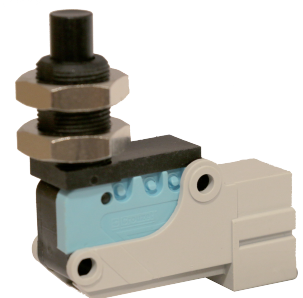
Telescopic plunger and adjustable fixing. 4mm overtravel.
Metal version for heavy duty. Long barrel.



Fully specific integrable switching module with terminal block for time switch



Auxiliary contact for power switches and circuit breakers. Integrates the V3 83161 mechanism



Door switch for industrial vehicle

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Crouzet:

[83161301](#) [83161343](#) [83161165](#) [83161813](#) [83161344](#) [83161327](#) [83163221](#) [83161407](#)