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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

| Function | Connections | Standard 831613 | | High current 831612 | | |
|---|---------------------------------|---------------------|------------|-----------------------|--------------|--------------|
| | | Standard | UL | Standard | UL | UL SP4186 |
| I (changeover) | W2 (solder) | 83161301 | 83161348 | ● | 83161273 | ● |
| I (changeover) | W3 (QC 6.3x0.8) | 83161338 | 83161344 | 83161241 | 83161244 | ● |
| I (changeover) | W6A5 (QC 4.8x0.5) | 83161304 | 83161343 | ●* | ●* | - |
| I (changeover) | W3R5 (QC 6.3x0.8, Rast 5) | 83163023 | 83163107 | ●* | ●* | ●* |
| I (changeover) | W5 (screw + clamp) | 83161303 | 83161349 | ●* | ●* | - |
| I (changeover) | W6D8 (QC 4.8x0.8) | 83161305 | 83161341 | ●* | ●* | - |
| I (changeover) | W7A5 (QC 2.8x0.5) | 83161309 | 83161350 | - | - | - |
| I (changeover) | 2W7A8 (QC 2.8x0.8, double) | 83161310 | ● | ●* | ●* | - |
| R (normally closed) | W2 (solder) | 83161316 | 83163041 | ● | 83161274 | ● |
| R (normally closed) | W3 (QC 6.3x0.8) | 83161311 | 83163066 | ● | ● | ● |
| R (normally closed) | W6A5 (QC 4.8x0.5) | 83161359 | ● | ●* | ●* | - |
| R (normally closed) | W3R5 - W5 - W6D8 - W7A5 - 2W7A8 | ● | ● | ●* | ●* | ●* |
| C (normally open) | W2 (solder) | 83161315 | ● | ● | ● | ● |
| C (normally open) | W3 (QC 6.3x0.8) | 83161312 | 83161346 | ● | ● | ● |
| C (normally open) | W6A5 (QC 4.8x0.5) | 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 - 1/2hp | 20.1 - 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 161-type actuators have reinforced insulation for Ui 250V / Uimp 2,5kV / pollution 2
- Recommended min actuating speed: 0.001 mm/s

- Certification marks: Standard versions:
 UL versions:

Standard product

Product made to order

● Contact us



Main specifications (continued)

| High force 831611 | | Low force 831614 | | Very low force 831615 | | Ultra low force 831615 SP4136 | | 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 |
| Electrical | | | | | | | | | | | |
| 16 | | 10 | | 4 | | 4 | | 12 | | Nom rating (A) | |
| 20 | | 12 | | 5 | | 5 | | 15 | | Therm rating (A) | |
| 16(4) | 16(4) | 10(3) | 10(3) | 4(1) | 4(1) | 4(1) | 4(1) | 12(3) | 12(3) | ENEC rating (A) | |
| - | 16 - 1/2hp | - | 6 - 1/4hp | - | 4 - 1/10hp | - | 4 - 1/10hp | - | 6.1 - 1/3hp | UL rating (A) | |
| Mechanical | | | | | | | | | | | |
| 3 | | 0.5 | | 0.25 | | 0.15 | | 5 | | OF max (N) | |
| 1 | | 0.1 | | 0.05 | | 0.04 | | 0.5 | | RF min (N) | |
| 4.5 | | 1.5 | | 0.40 | | 0.2 | | 6 | | TTF max (N) | |
| 20 | | 20 | | 20 | | 20 | | 20 | | AOF max (N) | |
| 16.1 | | 16.2 | | 16.3 | | 16.3 | | 16.1 | | RP max (mm) | |
| 14.7±0.4 | | 14.7±0.4 | | 14.7±0.4 | | 14.7±0.3 | | 14.5±0.4 | | OP (mm) | |
| 0.35 | | 0.35 | | 0.35 | | 0.35 | | 0.8 | | DT max (mm) | |
| 1.1 | | 1.1 | | 1.1 | | 1.2 | | 0.9 | | OT min (mm) | |
| -60 → +125 | | -60 → +125 | | -40 → +125 | | -40 → +125 | | -60 → +125 | | Temp (°C) | |
| 10 ⁷ | | 3 x 10 ⁷ | | 5 x 10 ⁷ | | 5 x 10 ⁷ | | 5 x 10 ⁴ | | Mech. life (op) | |
| 0.4 | | 0.4 | | 0.4 | | 0.4 | | 3.2 | | Gap (mm) | |
| 5.6 | | 5.6 | | 5.6 | | 5.6 | | 5.6 | | Weight (g) | |

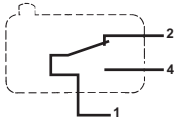
Product adaptations



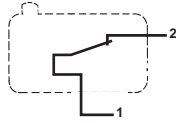
- ▶ Special levers: special shapes and lengths, flexible levers, adjustable, two-pole, pinned,
- ▶ Special connections: angled, with 7mm spacing (RAST 7-W3R7), for PCB, long solder (W2L),...
- ▶ High operating temperature: +150 °C
- ▶ Special contacts (for gold plated contacts: see "V3 Dual-current - 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

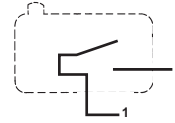
Single break snap-action switch
Changeover - SPDT (form C)



Normally closed - SPST-NC (form B)

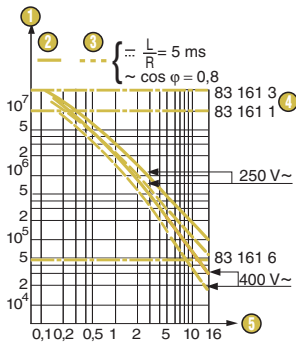


Normally open - SPST-NO (form A)



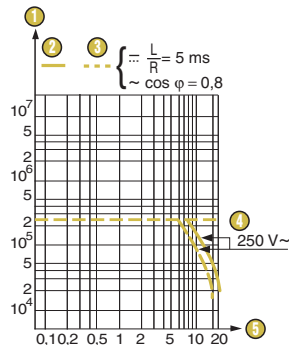
Curves

Operating curve for types
831611* / 831613* / 831616



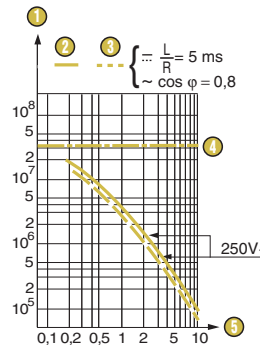
- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

Operating curve for type 831612



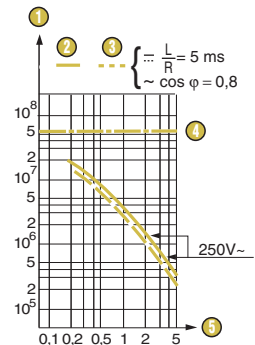
- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

Operating curve for type 831614



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

Operating curve for types
831615 / 831615 SP 4136



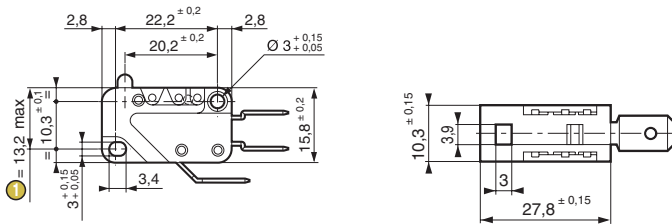
- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

* For 831611 UL and 831613 UL: please consult us

Dimensions

Product

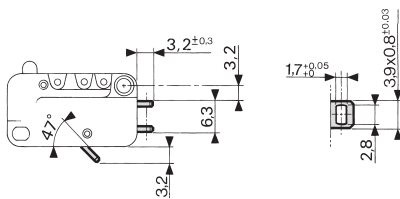
83161



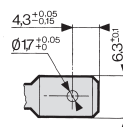
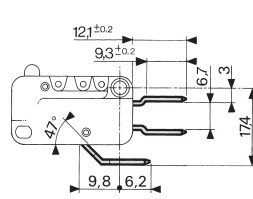
- 1 Total travel position

Connections

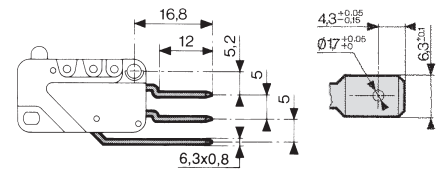
W2 solder



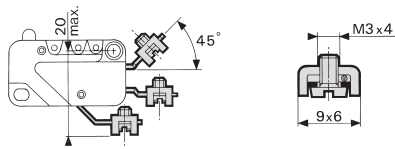
W3 quick-connect 6.3 x 0.8



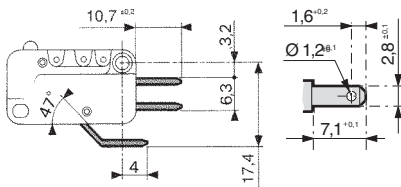
W3R5 quick-connect 6.3 x 0.8
for RAST 5 connector



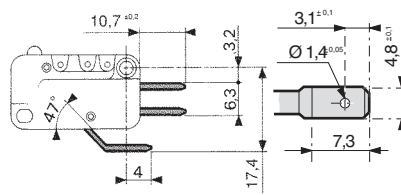
W5 screw with clamp



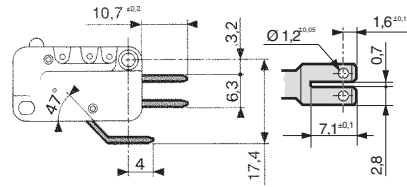
W7A5 quick-connect 2.8 x 0.5



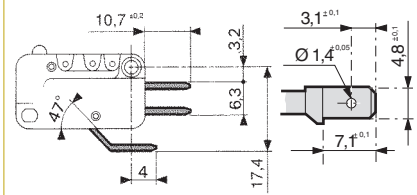
W6A5 quick-connect 4.8 x 0.5



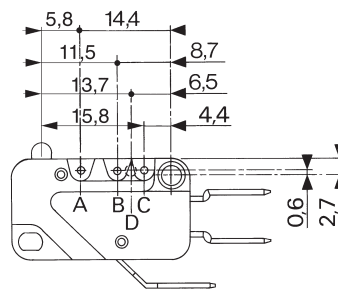
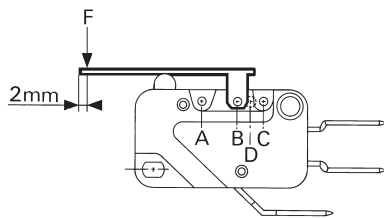
2W7A8 quick-connect 2.8 x 0.8, double



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 :

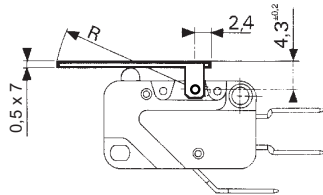
83 161 3 with lever 161 A - R 25.4 position A (coeff. 4)

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

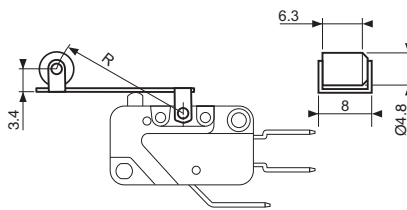
Overtravel: $1.2 \times 4 = 4.8 \text{ mm}$

Actuators

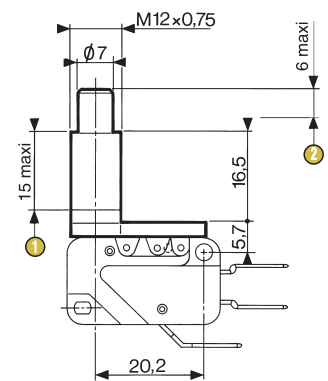
161A flat



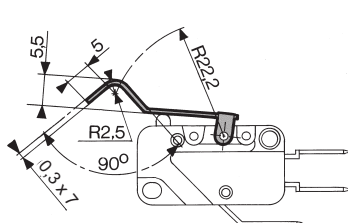
161E roller



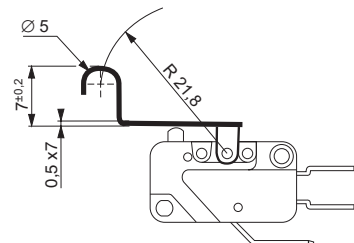
161L telescopic plunger



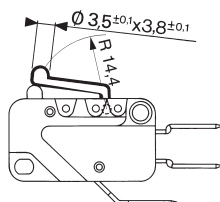
161F dummy roller



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)

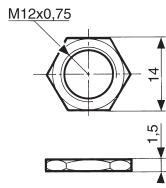
① Thread length

② Total travel

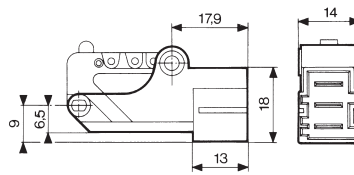
| Nut thickness | Max. torque |
|---------------|-------------|
| 1,5 mm | 0.5 N.m |
| 2 mm | 0.7 N.m |
| 2,5 mm | 1 N.m |

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 | A B C | A B |
| Coefficient | 2 1 | 4 2 1.5 | 2 1 | 4 2 1.5 | 3.6 1.8 |
| Operating position, except 831616 (mm) | 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 (mm) | 14.8 ±1 15 ±0.45 | 15.2 ±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 ±0.7 |

| Part numbers for standard actuators | 79218651 | **Telescopic plunger 161L | Manual actuation | Plastic 161V | Housing 161J | Nut for 161L |
|--|--------------------------------|---------------------------|------------------|---------------------|---------------------|---------------------|
| Actuators | Dummy roller 161G R21.8 | | | | | |
| Fixing positions | A B C | D | | D | | |
| Coefficient | 3.6 1.8 1.2 | 1 | | 1 | | |
| Operating position, except 831616 (mm) | 21.7 ±2 21.7 ±0.7 21.7 ±0.5 | 21.5 ±1 | | 18.55 ±0.45 | | |
| Operating position 831616 (mm) | 21.5 ±2 21.5 ±0.7 21.5 ±0.5 | 21.5 ±1 | | 18.35 ±0.45 | | |

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 | 83161020 | 83161021 | 83161022 | 83161023 | 83161024 | 83161025 | 83161026 | 83161027 | 83161028 | 83161029 | ● |
| | | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | I W3 | STD | 83161032 | 83161033 | 83161034 | 83161035 | 83161036 | 83161037 | 83161038 | 83161039 | 83161040 | 83161041 |
| 831613 | I W6A5 | STD | 83161044 | 83161045 | 83161046 | 83161177 | 83161047 | 83161048 | 83161049 | 83161050 | 83161051 | 83161052 | ● |
| | | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | I W2 | STD | 83163067 | 83163068 | 83163069 | 83163015 | 83163071 | 83163072 | 83163073 | 83163074 | 83163016 | 83163075 |
| 831615 | I W3 | STD | 83163078 | 83163079 | 83163080 | 83163081 | 83163082 | 83163083 | 83161374 | 83163084 | 83163007 | 83163085 | 83161318 83163102 |
| | | UL | ● | ● | ● | 83161328 | ● | ● | 83163221 | ● | ● | ● | ● |
| | | I W6A5 | STD | 83163088 | 83163089 | 83163090 | 83163091 | 83163092 | 83163093 | 83163094 | 83163095 | 83163096 | 83163097 |
| 831616 | I W2 | STD | 83161529 | 83161530 | 83161531 | 83161532 | 83161533 | 83161534 | 83161535 | 83161536 | 83161537 | 83161538 | - |
| | | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | - |
| | | I W3 | STD | 83161541 | 83161542 | 83161543 | 83161544 | 83161545 | 83161546 | 83161547 | 83161548 | 83161514 | 83161549 |
| 831615 | I W6A5 | STD | 83161552 | 83161553 | 83161554 | 83161526 | 83161555 | 83161556 | 83161557 | 83161558 | 83161559 | 83161560 | - |
| | | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | - |
| | | I W3 | STD | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 831616 | I W3 | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | UL | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

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* - Adaptation* + Mounting accessories*
* if needed

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

Examples of special adaptations



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



Door switch for industrial vehicle



Angled W3 terminals



RAST 7mm - W3R7 connections



Long solder terminals (W2L)



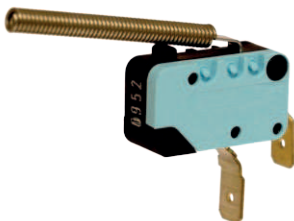
One-way roller lever (active on right, idle-return on left)



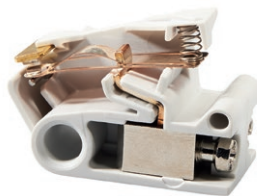
Lever fitted with POM ramp for transverse actuation



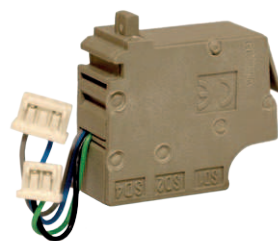
Two-pole lever



Spring lever for extra-long overtravel



Fully specific integrable switching module with terminal block for time switch



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

Warning:

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Product adaptations

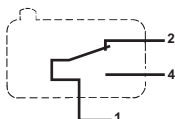


- › Special levers: special shapes and lengths, flexible levers, adjustable, two-pole, pinned,
- › Special connections: angled, with 7mm spacing (RAST 7-W3R7), for PCB, long solder (W2L), ...
- › High operating temperature: +150 °C
- › Reduced or increased switching hysteresis: max 0.1 mm to max 0.8 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)

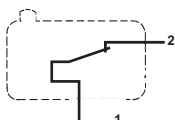
Principles

Single break snap-action switch

Changeover - SPDT (form C)



Normally closed - SPST-NC (form B)

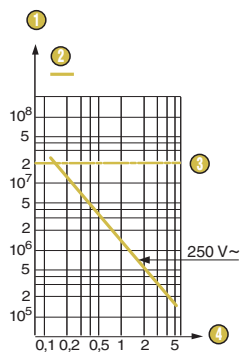


Normally open - SPST-NO (form A)



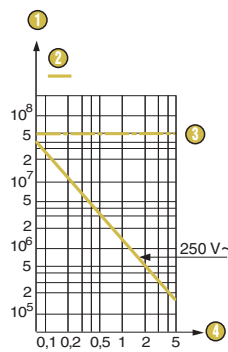
Curves

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



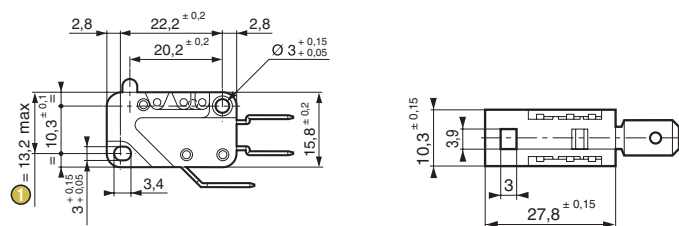
- 1 Number of cycles
- 2 Resistive circuit
- 3 Mechanical life limit
- 4 Current in Amps

* 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

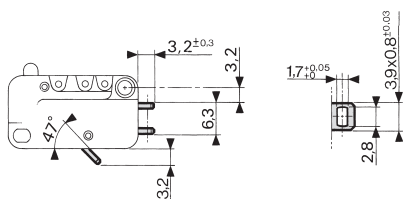
83161



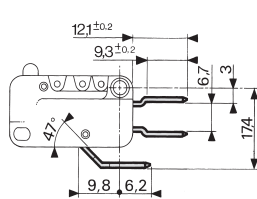
- 1 Total travel position

Connections

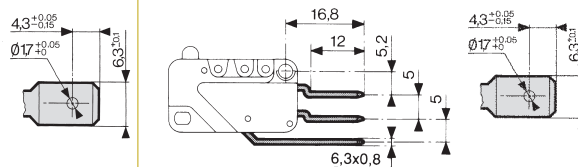
W2 solder



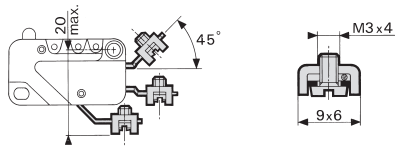
W3 quick-connect 6.3 x 0.8



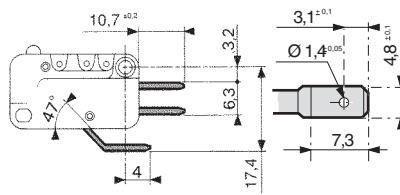
W3R5 quick-connect 6.3x0.8 for RAST 5 connector



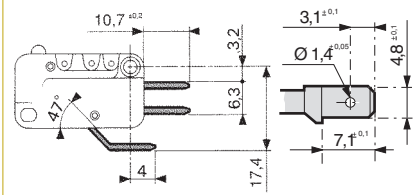
W5 screw



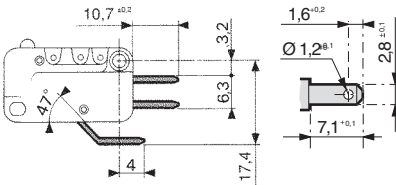
W6A5 quick-connect 4.8 x 0.5



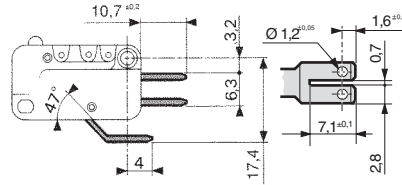
W6D8 quick-connect 4.8 x 0.8



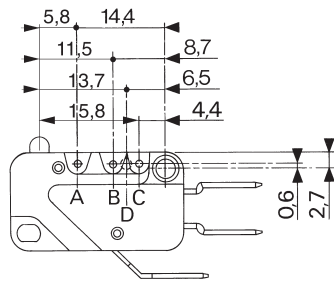
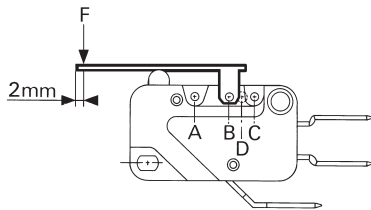
W7A5 quick-connect 2.8 x 0.5



2W7A8 quick-connect 2.8 x 0.8, double



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 :

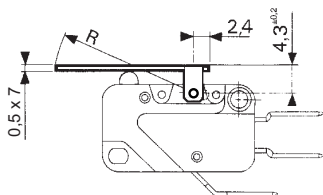
83 161 8 with lever 161 A - R 25.4 position A (coeff. 4)

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

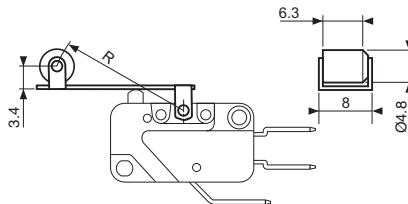
Overtravel: $1.2 \times 4 = 4.8 \text{ mm}$

Actuators

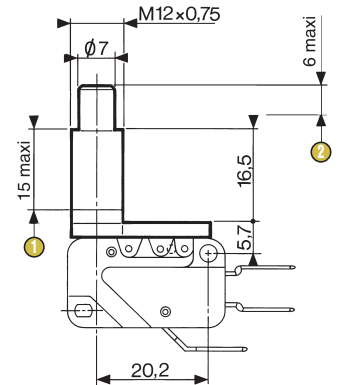
161A flat



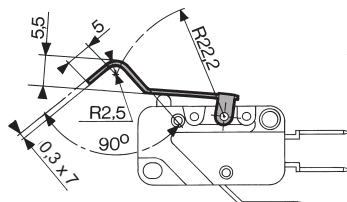
161E roller



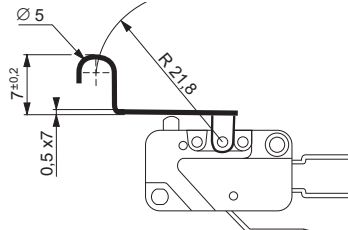
161L telescopic plunger



161F dummy roller



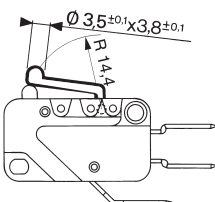
161G dummy roller



- 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 |

161V plastic

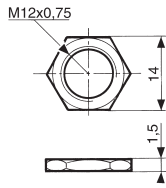


Other shapes and dimensions: consult us

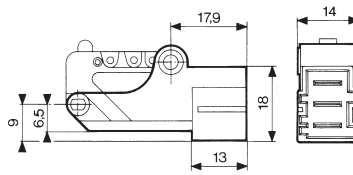
Also available are pinned actuators mounted on position D (factory mounting), same as for 83160 series. (datasheet: SP9640)

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 | A B C | A B |
| Coefficient | 2 1 | 4 2 1.5 | 2 1 | 4 2 1.5 | 3.6 1.8 |
| Operating position (mm) | 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 |

| Part numbers for standard actuators | 79218651 | 79250338 | 70602118 |
|-------------------------------------|--------------------------------|----------------------------------|---------------------|
| Actuators | Dummy roller 161G R21,8 | **Telescopic plunger 161L | Manual actuation |
| | | | |
| | | Plastic 161V | Housing 161J |
| | | | |
| | | | Nut for 161L |
| | | | |
| Fixing positions | A B C | D | D |
| Coefficient | 3 1.8 1.2 | 1 | 1 |
| Operating position (mm) | 21.7 ±2 21.7 ±0.7 21.7 ±0.5 | 21.5 ±1 | 18.55 ±0.45 |

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

** For 831618, 831618 SP4174. Mounted in factory (supplied without nut)

V3 Dual-current - 83161 microswitches with referenced actuators

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

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* - Adaptation* + Mounting accessories*
* if needed

Example: 831618 C W6A5 UL 161L SP9680 + 70602118

Standard product

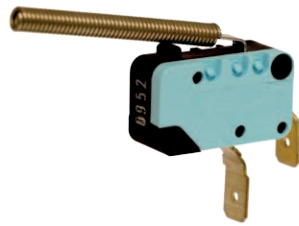
Product made to order

● Contact us

Examples of special adaptations



Plastic lever with no play in rest position



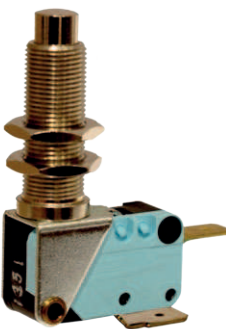
Spring lever for extra-long overtravel



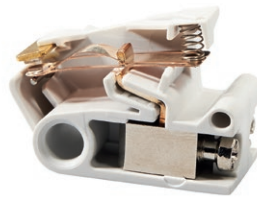
One-way roller lever (active on right, idle-return on left)



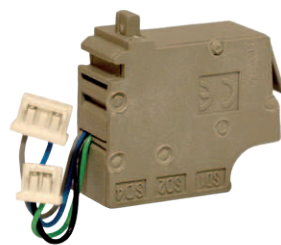
Angled W3 terminals



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

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