Miniature Snap Switch

Single and Double Pole

D4 Series



Features

- Choice of standard or light operating force
- Long life coil spring mechanism
- RoHS compliant
- Cadmium free
- Various aux actuators
- Various terminal types
- Agency approved extended life versions available

Standard Parts[1]

D413-R1AA-G2	D429-R1TD-G2	D433-R1AA-G2	D443-R1LD-G2	D449-R1LL-G2	D453-R1RA-G2
D413-R1LA-G2	D429-R1AA-G2	D433-R1LD-G2	D443-R1MD-G2	D449-R1MD-G2	D453-R1RD-G2
D413-R1LD-G2	D429-R1LD-G2	D433-R1RA-G2	D443-R1RA-G2	D449-R1ML-G2	D459-R1AA-G2
D413-R1RA-G2	D429-R1LL-G2	D433-R1RD-G2	D443-R1RD-G2	D449-R1RA-G2	D459-R1LD-G2
D419-R1AA-G2	D429-R1MD-G2	D439-R1LL-G2	D449-R1AA-G2	D449-R1RD-G2	D459-R1LL-G2
D423-R1RA-G2	D429-R1ML-G2	D439-V1ML-G2	D449-R1LD-G2	D453-B8AA-G2	D459-R1ML-G2
D423-R1RD-G2		D443-R1AA-G2		D453-R1AA-G2	

[1]The part number configuration matrix below provides details to the part numbers above.
For configurable part numbers that are not listed above, not listed in your region, or for custom part numbers, contact the factory or your distributor.
For information on crossing discontinued U.S. only part numbers, see D4 cross-reference chart at www.cherryswitches.com.

Part Number Breakdown

D413-R1AA-G2 (most part numbers end in –G2; see D4 cross-reference chart for exceptions)

Series

D4

Contact Rating[2]

1	0.1 A
2	3 A
3	5 A
4	10 A
5	15 A
8	21 A

Configuration[3]

85 °C			125 °C	
1	SPST – NO	Standard Op. Force	G	SPST – NO
2	SPST – NC		H	SPST – NC
3	SPDT		M	SPDT
7	SPST – NO	Light Op. Force	N	SPST – NO
8	SPST – NC		P	SPST – NC
9	SPDT		R	SPDT

150 °C		
S	SPST – NO	Light Op. Force
T	SPST – NC	
U	SPDT	

[2]UL AC current rating; see table on reverse for complete details
[3]D48 only available with light operating force

Terminal Type mm (inches)

A1	Welding
B8	Short solder
C1	2.8 x 0.8 (0.110 x 0.032) QC, bifurcated straight**
C3	2.8 x 0.8 (0.110 x 0.032) QC, bifurcated dog leg**
P4	1.2 x 0.5 (0.047 x 0.020) PCB, underside*
P5	1.2 x 0.5 (0.047 x 0.020) PCB, rear*
PA	1.2 x 0.5 (0.047 x 0.020) PCB, housing side*
PB	1.2 x 0.5 (0.047 x 0.020) PCB, cover side*
Q1	4.8 x 0.8 (0.187 x 0.032) QC, straight*

*not available for D48 **not available for D45 or D48

Q3	4.8 x 0.8 (0.187 x 0.032) QC, dog leg*
R1	4.8 x 0.5 (0.187 x 0.020) QC, straight**
R3	4.8 x 0.5 (0.187 x 0.020) QC, dog leg**
S1	Solder with temp stop
V1	6.3 x 0.8 (0.250 x 0.032) QC, straight
V3	6.3 x 0.8 (0.250 x 0.032) QC, dog leg
W9	Screw*
Y5	6.3 x 0.8 (0.250 x 0.032) QC, 5 mm grid
Z5	6.3 x 0.8 (0.250 x 0.032) QC, 7 mm grid

Actuator Type mm (inches)

		Actuation length
AA	Button	N/A
JA	SS lever, standard ratio	21.2 (0.835)
JD	SS lever, standard ratio	35.6 (1.4)
JL	SS lever, standard ratio	69.9 (2.75)
KA	SS lever, high ratio	25.7 (1.01)
KL	SS lever, high ratio	74.4 (2.93)
LA	Lever, standard ratio	21.2 (0.835)
LD	Lever, standard ratio	35.6 (1.4)
LL	Lever, standard ratio	69.9 (2.75)

	Actuation length
MA	25.7 (1.01)
ML	74.4 (2.93)
RA	20.6 (0.811)
RD	34.1 (1.34)
SA	20.6 (0.811)
TA	25.1 (0.988)
TD	38.6 (1.52)
UA	25.1 (0.988)

For actuator details, see D4 actuator reference sheet at www.cherryswitches.com

Electrical Specifications – Contact Ratings

Contact	EN61058	UL1054
1	0.1 (0.5) A, 250 VAC; 0.5 A, 30 VDC; 1 (1) A, 250 VAC	0.1 A, 125/250 VAC; 0.5 A, 30 VDC; 1 A, 125 VAC
2	3 (1) A, 250 VAC	3 A, 125/250 VAC; 1/10 HP, 250 VAC
3	6 (2) A, 250 VAC	5 A, 125/250 VAC; ¼ HP, 250 VAC
4	10 (3) A, 250 VAC	10 A, 125/250 VAC; 6 A, 30 VDC; ½ HP, 125/250 VAC
5	16 (4) A, 250 VAC	15 A, 125/250 VAC; ½ HP, 125-250 VAC
8	21 (8) A, 250 VAC	21 A, 250 VAC; 1 HP, 125 VAC; 2 HP, 250 VAC

UL file number E314201

Environmental and Mechanical Specifications

Operating Temperature	-40 °C to 85, 125 or 150 °C (-40 °F to 185 , 257 or 302 °F)
Flammability Rating	UL 94V-0

Operating life – electrical life at rated load, 85 °C

Contact	EN61058	UL1054[4]
1	50,000	6,000
2	50,000	6,000
3	50,000	6,000
4	50,000	6,000
5	50,000	6,000
7	10,000	6,000

[4]Extended life available

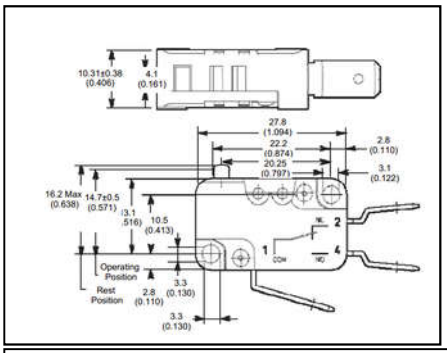
Material Specifications

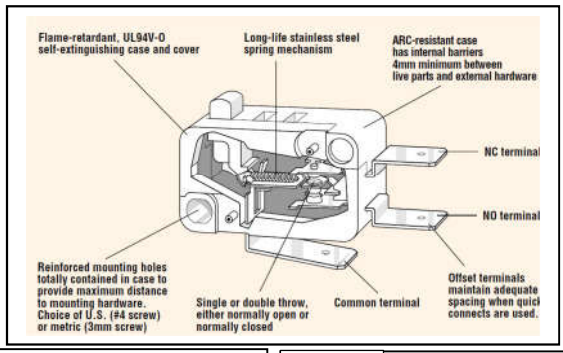
Case	Thermoplastic Polyester PET
Cover	Thermoplastic Polyester PET
Actuating Button	Thermoplastic Acetyl (POM) 85 °C, Thermoplastic Polyester (PET) 125 or 150 °C
Contacts	Gold Cross Point (D41), Silver (D42), Silver Alloy (D43-D48)
Terminals	Brass
Auxiliary Actuator	Stainless Steel or Cold-Rolled Steel (Nickel Plated)
Moving Blade	Silver Plated Brass

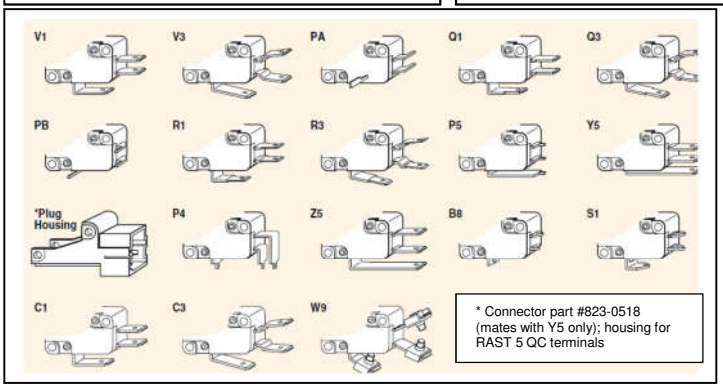
Environmental Specifications

Ambient Temperature	-40 °C to 85 °C/120 °C (-40 °F to 185 °F/248 °F)
Operating Force	70 – 280 cN (model dependent, without actuator)
Total Travel	1.6 mm
Ingress Protection	IP50

Dimensions mm (inches) and terminal configurations







* Connector part #823-0518 (mates with Y5 only); housing for RAST 5 QC terminals

