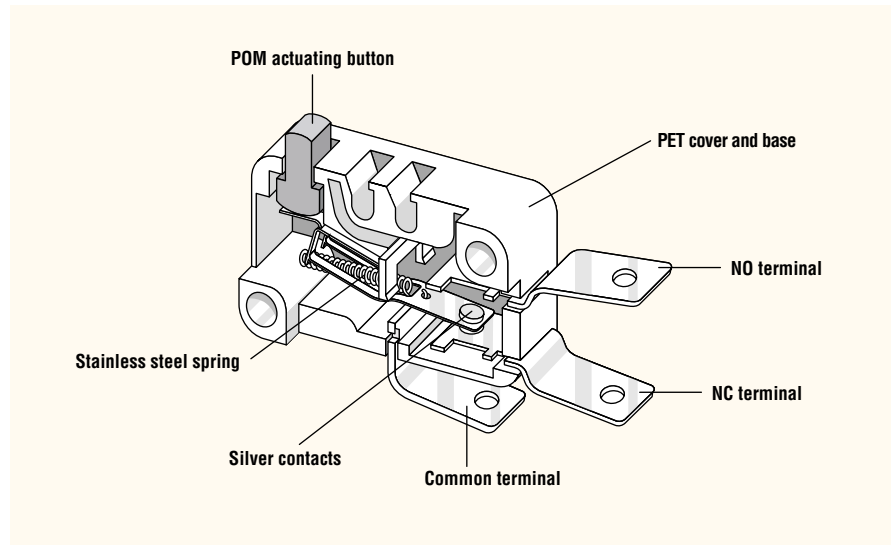


MINIATURE D3 Series

Features

- Self-cleaning effect of wiping contact mechanism provides excellent reliability
- Suitable for low actuation speeds
- Highly flexible, due to two mounting positions and a variety of auxiliary actuators
- Wide variety of terminal types
- >3mm (0.12") contact gap available



Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load	
			According to EN (Min. Operations)	According to UL (Min. Operations)
D36 – Std.	4(2.5)A, 250V~	4A, 250VAC	50,000	6,000
D37 – Std.	10(3)A, 250V~	10A, 1/2HP, 125/250VAC	50,000	6,000
D38 – Std.	16(4)A, 250V~ 10(3)A, 400V~	16A, 125/250VAC, 1HP	50,000	6,000
D36 – Light	4(1)A, 250V~	4A, 250VAC	50,000	6,000
D37 – Light	10(2)A, 250V~	10A, 1/2HP, 125/250VAC	50,000	6,000
D38 – Light	16(2.5)A, 250V~ 10(1.5)A, 400V~	16A, 125/250VAC, 1HP	50,000	6,000

Specifications

Electrical

Temperature Rating:	-40° to +85°C
Flammability Rating:	UL94V-O

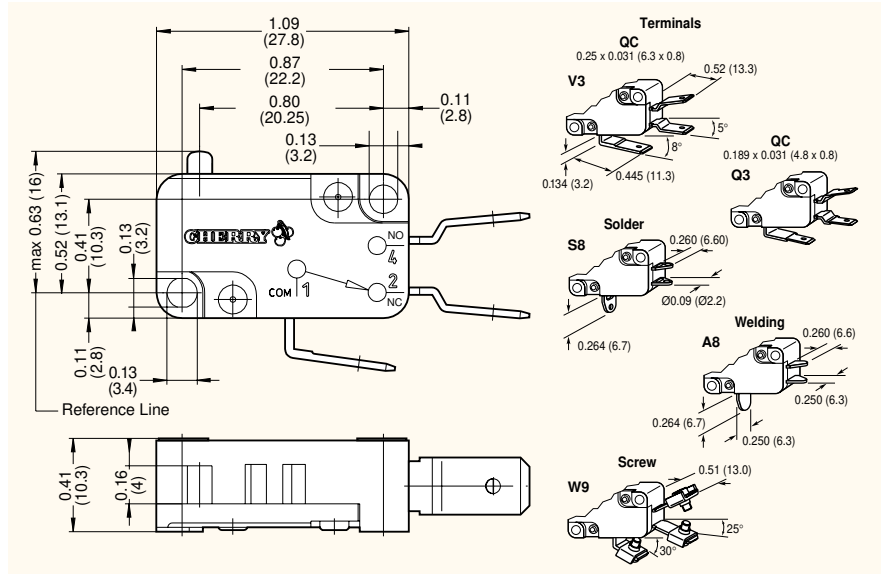
Materials

Case:	PET
Actuator:	POM
Auxiliary Actuator:	Stainless Steel; Nickel-Plated Steel
Terminals:	Copper-Zinc
Contacts:	Silver Cadmium Oxide

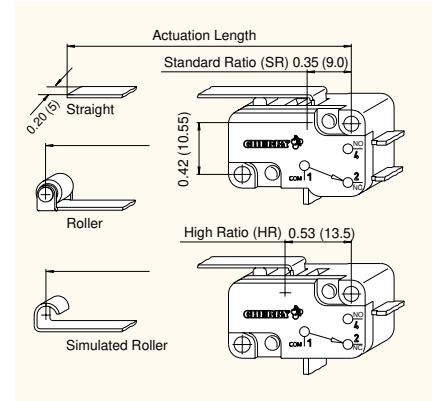
PET = Polyethyleneterephthalate • POM = Polyacetal



Dimensions inches (mm)



Auxiliary Actuators



Actuator Specifications

Actuator Type	Switch Type	Maximum Operating Force (cN)						Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm)	Max. Rest Position inches (mm)	Actuation Length** inches (mm)
		D36 Std.	D37 Std.	D38 Std.	D36 Light	D37 Light	D38 Light						
AA		170	260	400	60	130	200	0.059 (1.5)	0.559/0.598 (14.2/15.2)	0.047 (1.2)	0.012 (0.3)	0.63 (16.0)	—
MA/KA		120	170	265	40	85	130	0.106 (2.7)	0.567/0.630 (14.4/16.0)	0.067 (1.7)	0.024 (0.6)	0.71 (18.0)	1.012 (25.7)
MD/KD		50	80	120	18	40	60	0.232 (5.9)	0.528/0.669 (13.4/17.0)	0.146 (3.7)	0.051 (1.3)	0.85 (21.6)	1.579 (40.1)
ML/KL		22	35	50	10	18	25	0.528 (13.4)	0.433/0.764 (11.0/19.4)	0.335 (8.5)	0.118 (3.0)	1.19 (30.1)	2.929 (74.4)
LA/JA		180	280	425	65	140	210	0.063 (1.6)	0.579/0.618 (14.7/15.7)	0.039 (1.0)	0.016 (0.4)	0.66 (16.8)	0.835 (21.2)
LD/JD		80	130	200	30	65	100	0.138 (3.5)	0.551/0.646 (14.0/16.4)	0.083 (2.1)	0.031 (0.8)	0.75 (19.1)	1.402 (35.6)
LL/JL		35	55	80	15	28	40	0.311 (7.9)	0.488/0.709 (12.4/18.0)	0.193 (4.9)	0.071 (1.8)	0.97 (24.6)	2.752 (69.9)

*Measured above reference line. Refer to dimensional drawing above. **Actuator tolerance ±0.031 inches (0.8mm).

Ordering Information

Series/Prefix	
D3	7
Code	Current Rating
Standard Force	
6	4A, 250VAC (UL, CSA) 4(2.5)A, 250V~ (ENEC)
7	10A, 1/2HP, 125/250VAC (UL, CSA); 10(3)A, 250V~ (ENEC)
8	16A, 125/250VAC, 1HP (UL, CSA) 16(4)A, 250V~; 10(3)A, 400V~ (ENEC)
Light Force	
6	4A, 250VAC (UL, CSA) 4(1)A, 250V~ (ENEC)
7	10A, 1/2HP, 125/250VAC (UL, CSA) 10(2)A, 250V~ (ENEC)
8	16A, 125/250VAC, 1HP (UL, CSA) 16(2.5)A, 250V~; 10(1.5)A, 400V~ (ENEC)

Code	Contact Configuration
Standard Operating Force	
1	SPST NO
2	SPST NC
3	SPDT
Light Operating Force	
7	SPST NO
8	SPST NC
9	SPDT
Code	Terminal Type inches (mm)
V3	0.25 x 0.031 (6.3 x 0.8) QC
Q3	0.189 x 0.031 (4.8 x 0.8) QC
S8	Solder with Temp. Stop
W9	Screw
A8	Welding

Code	Actuator Type	Actuation Length inches (mm)		
		A	D	L
AA	Button	—	—	—
J	Straight, Stainless, SR	0.835 (21.2)	1.402 (35.6)	2.752 (69.9)
K	Straight, Stainless, HR	1.012 (25.7)	1.579 (40.1)	2.929 (74.4)
L	Straight, SR	0.835 (21.2)	1.402 (35.6)	2.752 (69.9)
M	Straight, HR	1.012 (25.7)	1.579 (40.1)	2.929 (74.4)
R	Roller, SR	0.811 (20.6)	1.343 (34.1)	—
S	Simulated Roller, SR	0.811 (20.6)	—	—
T	Roller, HR	0.988 (25.1)	1.520 (38.6)	—
U	Simulated Roller, HR	0.988 (25.1)	—	—

Note: PCB terminals available upon request.

Contact Gap >3mm (0.12 inch)

Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load	
			According to EN (Min. Operations)	According to UL (Min. Operations)
D36	4(3)A, 250V~	4A, 250VAC, 1/3HP 125/250VAC	50,000	10,000
D37	10(4)A, 250V~	10A, 1/2HP, 125/250VAC	50,000	6,000
D3B	8(8)A, 250V~	10A, 1/2HP, 125/250VAC	50,000	10,000

Actuator Specifications

Actuator Code	Switch Type	Maximum Operating Force (cN)	Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm)	Max. Rest Position inches (mm)	Actuation Length inches (mm)	
AA		500	0.075 (1.9)	0.567±0.020 (14.4±0.5)	0.028 (0.7)	0.047 (1.2)	0.63 (16.0)	—	
MA/KA		320	0.134 (3.4)	0.579±0.031 (14.7±0.8)	0.035 (0.9)	0.079 (2.0)	0.71 (18.0)	1.012 (25.7)	
TA		<i>forces and travel available upon request</i>							0.988 (25.1)
UA		<i>forces and travel available upon request</i>							0.988 (25.1)
MD/KD		150	0.295 (7.5)	0.563±0.075 (14.3±1.9)	0.075 (1.9)	0.177 (4.5)	0.86 (21.8)	1.579 (40.1)	
TD		<i>forces and travel available upon request</i>							1.520 (38.6)
KL		65	0.669 (17.0)	0.512±0.165 (13.0±4.2)	0.165 (4.2)	0.409 (10.4)	1.21 (30.8)	2.929 (74.4)	
LA/JA		550	0.075 (1.9)	0.587±0.020 (14.9±0.5)	0.024 (0.6)	0.047 (1.2)	0.66 (16.8)	0.835 (21.2)	
RA		<i>forces and travel available upon request</i>							0.811 (20.6)
SA		<i>forces and travel available upon request</i>							0.811 (20.6)
LD/JD		240	0.177 (4.5)	0.575±0.047 (14.6±1.2)	0.047 (1.2)	0.102 (2.6)	0.76 (19.2)	1.402 (35.6)	
RD		<i>forces and travel available upon request</i>							1.343 (34.1)
JL		100	0.425 (10.8)	0.520±0.110 (13.2±2.8)	0.126 (3.2)	0.256 (6.5)	0.098 (25.0)	2.752 (69.9)	

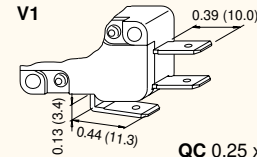
Ordering Information

Code	UL Rating	EN 61058 Rating	Code	Terminal Type	inches (mm)
6	4A, 1/3HP, 125/250VAC	4(3)A, 250V~	V1	0.25 x 0.03 (6.3 x 0.8) QC, Straight	
7	10A, 1/2HP, 125/250VAC	10(4)A, 250V~	V3	0.25 x 0.03 (6.3 x 0.8) QC, Dog Leg	
B	10A, 1/2HP, 125/250VAC	8(8)A, 250V~	Q1	0.19 x 0.03 (4.8 x 0.8) QC, Straight	
			Q3	0.19 x 0.03 (4.8 x 0.8) QC, Dog Leg	
			C1	0.11 x 0.03 (2.8 x 0.8) QC, Bifurcated Straight*	
			C3	0.11 x 0.03 (2.8 x 0.8) QC, Bifurcated Dog Leg*	
			S8	Solder with Temp. Stop	
			W9	Screw (D3B only)	
			A8	Welding	

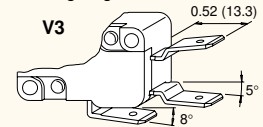
Note: PCB terminals available upon request.
*D36 only.

Terminal Options

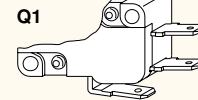
QC 0.25 x 0.03 (6.3 x 0.8)



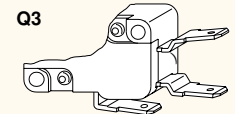
QC 0.25 x 0.03 (6.3 x 0.8) Dog Leg



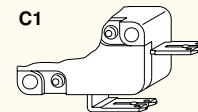
QC 0.19 x 0.03 (4.8 x 0.8) Straight



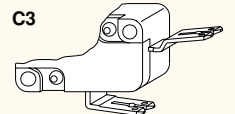
QC 0.19 x 0.03 (4.8 x 0.8) Dog Leg



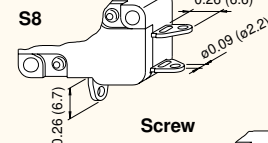
QC 0.11 x 0.03 (2.8 x 0.8) Bifurcated, Straight



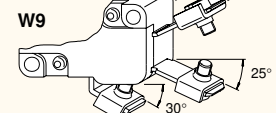
QC 0.11 x 0.03 (2.8 x 0.8) Bifurcated, Dog Leg



Solder



Screw



Welding

