

## X3

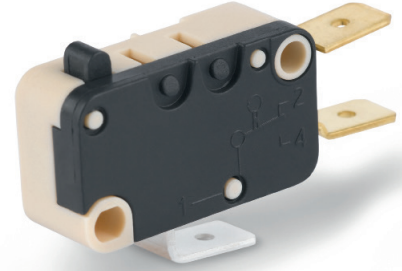
- Characteristics
- 8 mm creepage and clearance distance to the actuator
  - long mechanical and electrical life
  - solder, faston and PCB terminal
  - compliant to glow wire requirements IEC 60335-1, 4. ed.

Rating 250 VAC, 21 A max.

Dimensions (mm) 27,8 × 15,9 × 10,3

- Actuator
- plunger
  - straight lever
  - simulated roller levers
  - roller levers

Approvals UL, cUL, CSA, ENEC, CQC



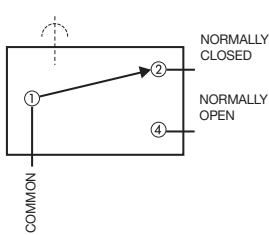
## Preferred Range

Ordering Reference	Actuating Force		Operating pos.		Terminal	Circuit	Actuator	Contacts	Electrical rating	
	(N)	(ozf)	(mm)	(Inch)					ENEC	UL/CSA
X3M302N2KA	1,60	5,55	14,7	0,58	Faston	CO	Plunger	Ag/AgNi10	16 (6) A	20,5 A
X3M302N2NAJ32	0,88	3,15	15,6	0,59	Faston	CO	Plain lever	Ag/AgNi10	16 (6) A	20,5 A
X3M302N2NAJ62	0,57	2,05	14,8	0,58	Faston	CO	Plain lever	Ag/AgNi10	16 (6) A	20,5 A
X3M302N2NAT02	2,00	7,19	20,2	0,80	Faston	CO	Roller lever	Ag/AgNi10	16 (6) A	20,5 A
X3M303N2KA	1,60	5,73	14,7	0,58	Solder	CO	Plunger	Ag/AgNi10	16 (6) A	20,5 A
X3M306N2KA	1,60	5,73	14,7	0,58	Faston	CO	Plunger	Ag/AgNi10	16 (6) A	20,5 A
X3C302N2LB	0,80	2,88	14,7	0,58	Faston	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3C302N2LBJ32	0,35	1,26	15,0	0,59	Faston	CO	Plain lever	Ag/AgNi10	10 (3) A	12 A
X3C303N2LB	0,80	2,88	14,7	0,58	Solder	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3C306N2LB	0,80	2,88	14,7	0,58	Faston	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3L302N6DD	1,50	5,40	14,7	0,58	Faston	CO	Plunger	Ag/AgCdO	21 (8) A	21 A
X3L303N6DD	1,50	5,40	14,7	0,58	Solder	CO	Plunger	Ag/AgCdO	21 (8) A	21 A

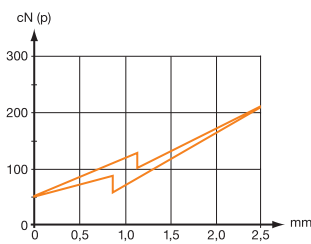
## Specifications

Housing	Thermoplastic
Plunger	Thermoplastic
Mechanism	Snap-action, single pole beryllium bronze blade mechanism with wiping contacts
Contact carrier	Brass
Contacts	Fine silver (Ag), silver nickel (AgNi10), gold-plated (Au), silver cadmium oxide (AgCd0)
Terminals	Solder, Faston and RAST 5 terminals
Temperature range °C	Between -40°C and +125°C
Mechanical life	minimum cycles X3L: 10 <sup>5</sup> / X3M: 10 <sup>6</sup> / X3C: 2 x 10 <sup>6</sup> (Actuation: sinusoidal and maximum up to 80% of the overtravel)
Protection	Enclosure IP40
Mounting	Side mounting via mounting holes
Actuators	Stainless steel (lever)

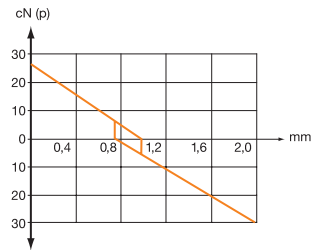
Circuit diagram



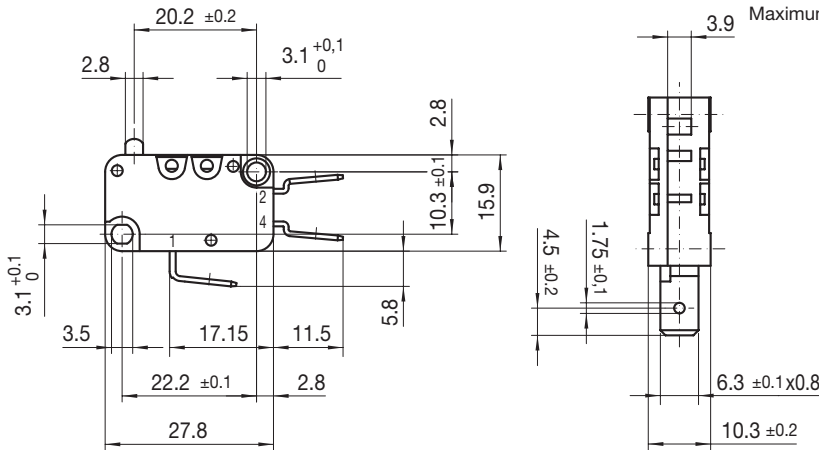
Actuating force/travel



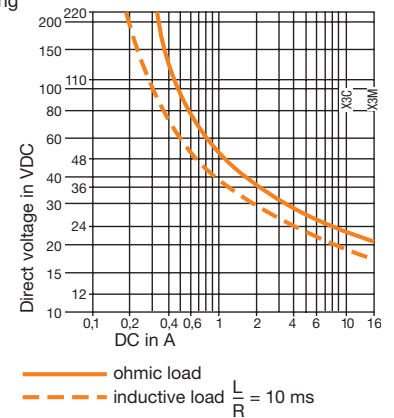
Contact force/travel



Dimensions



Maximum DC rating

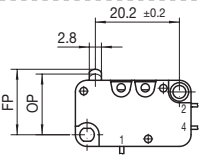
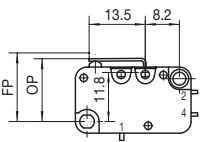
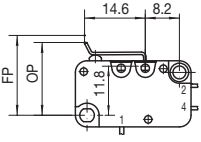
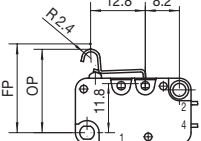
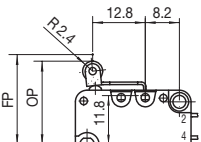


## Recommended maximum electrical ratings

	Voltage (VAC)	Resistive load (A)	Motor load (A)	Approvals ENEC		Approvals UL		Motor load
				(A)	(VAC)	(A)	(VAC)	
X3M	250	16	6	16 (6)	5E4	20,5	250	1½ HP
X3C	250	10	3	10 (3)	5E4	20,5	125	½ HP
						12	250	¼ HP
X3L	250	21	8	21 (8)	1E4	21	250	2 HP
						21	125	1 HP

Current breaking capacities in the tables refer to Ag/AgNi10 contacts with the exception of X3L Ag/AgCd0

## Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free FP Position		Operating OP Position		Movement Differential Maximum		Full overtravel Position		
		(N)	(ozf)	(N)	(ozf)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	
	X3C	0,80	2,88	0,050	0,179	15,75	0,620	14,7	$\left. \begin{matrix} 0,58 \\ +0,2 \\ -0,4 \end{matrix} \right\} 0,58$	$\left. \begin{matrix} +0,008 \\ -0,016 \end{matrix} \right\} 0,25$	0,25	0,009	13,2	0,519
	X3M	1,60	5,76	0,200	0,719	15,75	0,620	14,7						
	X3L	1,50	5,40	0,150	0,540	15,75	0,620	14,7						
	X3C ..	0,80	2,88	0,045	0,162	16,50	0,649	15,1 ± 0,5	0,59 ± 0,019	0,35	0,014	14,0	0,550	
	X3M ..	2,00	7,19	0,180	0,647	16,50	0,649	15,1 ± 0,5	0,59 ± 0,019	0,35	0,014	14,0	0,550	
	X3L ..	1,90	6,83	0,140	0,500	16,50	0,649	15,1 ± 0,5	0,59 ± 0,019	0,35	0,014	14,0	0,550	
Width of lever 7,0 mm/0,28 in – also available with width 4 mm/0,16 in														
	X3C ..	0,65	2,34	0,045	0,162	19,20	0,755	17,5 ± 0,7	0,69 ± 0,028	0,35	0,014	16,4	0,646	
	X3M ..	1,65	5,93	0,160	0,576	19,20	0,755	17,5 ± 0,7	0,69 ± 0,028	0,35	0,014	16,4	0,646	
	X3L ..	1,55	5,58	0,140	0,500	19,20	0,755	17,5 ± 0,7	0,69 ± 0,028	0,35	0,014	16,4	0,646	
Width of lever 7,0 mm/0,28 in														
	X3C ..	0,80	2,88	0,045	0,162	21,80	0,858	20,5 ± 0,6	0,81 ± 0,024	0,35	0,014	19,5	0,768	
	X3M ..	2,00	7,19	0,190	0,683	21,80	0,858	20,5 ± 0,6	0,81 ± 0,024	0,35	0,014	19,5	0,768	
	X3L ..	1,90	6,83	0,140	0,500	21,80	0,858	20,5 ± 0,6	0,81 ± 0,024	0,35	0,014	19,5	0,768	
Width of lever 7,0 mm/0,28 in														
	X3C ..	0,80	2,88	0,045	0,162	21,80	0,858	20,2 ± 0,7	0,79 ± 0,028	0,35	0,014	19,3	0,760	
	X3M ..	2,00	7,19	0,190	0,683	21,80	0,858	20,2 ± 0,7	0,79 ± 0,028	0,35	0,014	19,3	0,760	
	X3L ..	1,90	6,83	0,140	0,500	21,80	0,858	20,2 ± 0,7	0,79 ± 0,028	0,35	0,014	19,3	0,760	
Width of roller 6,6 mm/0,26 in														

## Ordering Reference

Basic type	X3	Microswitch according to DIN 41635, Design A	Example: X3	M	3	02	K	2	A	A	J0	2
Operating force	M	Standard force 1										
	L	Standard force 2										
	C	Low force										
Circuit diagram	3	Change-over (CO)										
	4	Normally closed (NC)										
	5	Normally open (NO)										
Terminals	02	Plug terminal 6,3 × 0,8 mm	13	PCB-terminal, bent to lid								
	03	Solder terminal	14	PCB-terminal, bent to base								
	06	Plug terminal 4,8 × 0,5 mm	15	Plug terminal RAST 5 6,3 × 0,8 mm								
	10	Plug terminal 4,8 × 0,8 mm	16	Plug terminal RAST 5 4,8 × 0,8 mm								
	12	Solder terminal, short										
Body	K	PA66GF25 (Ultramid)										
	N	PA66GF25 (Latamid)										
Contacts materials	2	Silver/AgNi10	3	Silver/Ag Ni 0,15 (Middle current)								
	6	AgCd0										
	8	Gold plated	9	Gold plated (Low current)								
UL/C-UL ratings	<b>UL 1054</b>											
CSA ratings	A	20,5 A, 125/250 VAC 15 A, 125/250 VAC, 100'000 cy. 1½ HP, 250 VAC, ½ HP, 125 VAC	M	6 A, 125/250 VAC ½ HP, 250 VAC, ¼ HP, 125 VAC								
	D	21 A, 125/250 VAC 2 HP, 250 VAC, 1 HP, 125 VAC	N	No approvals								
	E	21 A, 125/250 VAC 15 A, 125/250 VAC, 100'000 cy. 2 HP, 250 VAC, 1 HP, 125 VAC	P	20,5 A, 125/250 VAC 1½ HP, 250 VAC, ½ HP, 125 VAC								
	G	13 A 125/250 VAC ½ HP 250 VAC, ¼ HP, 125 VAC	Q	12 A, 125/250 VAC ¼ HP, 250 VDC, ½ HP, 125 VDC								
	K	20,5 A, 125/250 VAC 1½ HP, 250 VAC, ½ HP, 125 VAC	R	6 A, 125/250 VAC ½ HP, 250 VAC, ¼ HP, 125 VAC								
	L	12 A, 125/250 VAC ½ HP, 250 VAC, ¼ HP, 125 VAC		¼ A, 250 VDC, ½ A, 125 VDC								
	<b>UL 61058</b>											
	S	0,1 A 125/250 V ~6E3 / 5E4 T125 µ 0,5 A 30 VDC 6E3 / 5E4 T125 µ (for contact material 9)	T	6A 250V ~ 6E3 T125 µ (for contact material 3)								
EN/IEC ratings	<b>ENEC 61058</b>											
	A	16 (6) A, 250 V~ 5E4 T125 µ approved	E	5 (2) A, 250 V ~ 5E4 T125 µ approved 0,09 A, 12 VDC 5E4 T125 µ approved								
	B	10 (3) A, 250 V~ 5E4 T125 µ approved	F	0,1 (0,05) A, 250 V ~ 5E4 T125 µ								
	C	6 (3) A, 250 V~ 5E4 T125 µ approved	G	0,5 A, 30 VDC 5E4 T125 µ (for contact material 9)								
	D	21 (8) A, 250 V~ 1E4 T105 µ approved		6 (3) A, 250 V ~ 1E4 T125 µ (for contact material 3)								
	M	no approvals										
Type of actuator	No digit	Without lever	P0 to P9	Straight lever (width 4 mm)								
	J0 to J9	Straight lever (width 7 mm)	T0 to T9	Roller lever								
	L0 to L9	Simulated roller lever	U0 to U9	Outside mounted lever								
	M0 to M9	Customer specified lever (KV)										
Actuator position	No digit	Without lever										
	2	Rear lever										
	4	Front lever										
Customer version	No digit	Standard type										
	AA to AZ	Specials for customers										

## XG

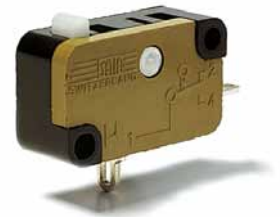
- Characteristics
- wide range of forces and ratings
  - long mechanical and electrical life
  - solder, faston, PCB and screw terminals
  - compliant to IEC 60335-1, 4. ed.

Rating 250 VAC, 26 A max.

Dimensions (mm) 27,8 × 15,9 × 10,3

- Actuator
- plunger
  - plain levers
  - roller levers
  - simulated roller levers

Approvals ENEC, UL, cUL, CSA



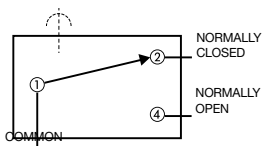
## Preferred Range

Ordering Reference	Actuating Force		Operating pos.		Terminal	Circuit	Actuator	Contacts	Electrical rating	
	(N)	(ozf)	(mm)	(in)					ENEC	UL/CSA
XGG2-88Z1	3,20	11,43	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	16(6) A	15 A
XGG2-88-J23Z1	1,40	5,03	14,9	0,59	Faston	CO	Plain lever	Ag / AgNi10	16(6) A	15 A
XGG2-88-J26Z1	0,91	3,27	14,5	0,57	Faston	CO	Plain lever	Ag / AgNi10	16(6) A	15 A
XGG2-88-J27Z1	0,65	2,34	13,7	0,54	Faston	CO	Plain lever	Ag / AgNi10	16(6) A	15 A
XGG2-88-S20Z1	3,20	11,43	20,2	0,79	Faston	CO	Roller lever	Ag / AgNi10	16(6) A	15 A
XGG2-88-S21Z1	1,55	5,57	20,1	0,79	Faston	CO	Roller lever	Ag / AgNi10	16(6) A	15 A
XGG3-88Z1	3,20	11,43	14,7	0,57	Solder	CO	Plunger	Ag / AgNi10	16(6) A	15 A
XGG6-88Z1	3,20	11,43	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	16(6) A	15 A
XGC2-88Z1	0,80	2,86	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	12(6) A	10 A
XGC2-88-J23Z1	0,35	1,26	15,0	0,59	Faston	CO	Plain lever	Ag / AgNi10	12(6) A	10 A
XGC2-88-S20Z1	0,80	2,86	20,2	0,79	Faston	CO	Roller lever	Ag / AgNi10	12(6) A	10 A
XGC6-88Z1	0,80	2,86	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	12(6) A	10 A
XGK2-88Z1	1,50	5,36	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	12(6) A	12 A
XGK2-88-J26Z1	0,43	1,55	14,7	0,57	Faston	CO	Plain lever	Ag / AgNi10	12(6) A	12 A
XGK2-88-S21Z1	0,71	2,55	20,2	0,80	Faston	CO	Roller lever	Ag / AgNi10	12(6) A	12 A
XGK3-88Z1	1,50	5,36	14,7	0,57	Solder	CO	Plunger	Ag / AgNi10	12(6) A	12 A
XGK6-88Z1	1,50	5,36	14,7	0,57	Faston	CO	Plunger	Ag / AgNi10	12(6) A	12 A
XG02-88Z1	1,20	4,29	14,5	0,57	Faston	CO	Plunger	Ag / AgNi10	16(6) A	15 A
XG02-88-J27Z1	0,25	0,90	13,6	0,54	Faston	CO	Plain lever	Ag / AgNi10	16(6) A	15 A
XG02-88-S20Z1	1,20	4,29	20,1	0,79	Faston	CO	Roller lever	Ag / AgNi10	16(6) A	15 A
XG06-88Z1	1,20	4,29	14,5	0,57	Faston	CO	Plunger	Ag / AgNi10	16(6) A	15 A

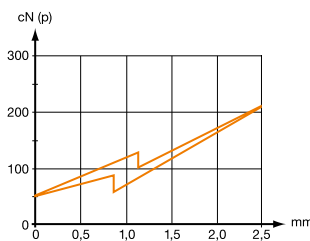
## Specifications

Housing	Melamine-Formaldehyd. Thermosetting
Plunger	POM, PPS, MF depending on temperature/type
Mechanism	Snap-action, single pole beryllium bronze blade mechanisme with wiping contacts
Functions	Change-over, normally-closed (except XGG and XGK) or normally-open
Contacts	Fine silver (Ag), silver nickel (AgNi10), gold-plated (Au), silver cadmium oxide (AgCdO)
Terminals	Solder, faston, screw, PCB and side mounting PCB terminals. RAST 5 terminals (5,0 mm pitch)
Temperature range °C	-40°C to +150°C
Mechanical life	2,5 · 10 <sup>5</sup> cycles minimum, 50 · 10 <sup>6</sup> cycles maximum (Actuation: sinusoidal and maximum up to 80% of the overtravel)
Protection	Enclosure IP40
Mounting	Side mounting via mounting holes
Actuators	Stainless steel

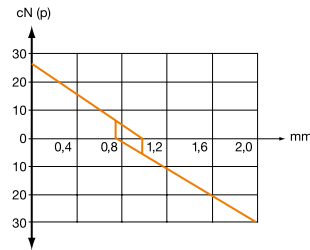
Circuit diagram



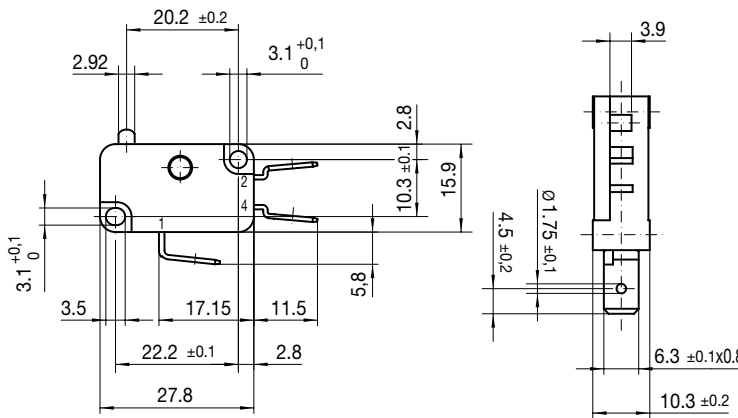
Actuating force/travel



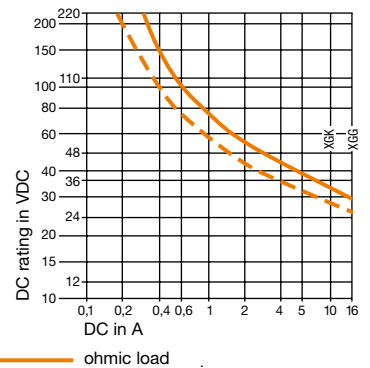
Contact force/travel



Dimensions



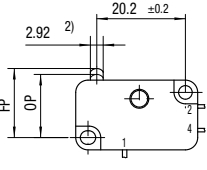
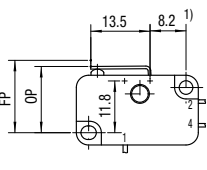
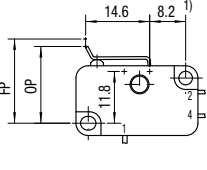
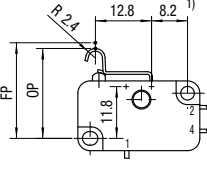
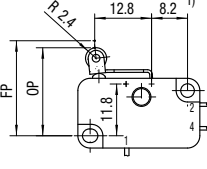
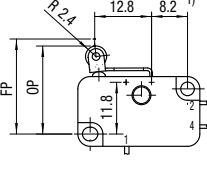
Maximum DC rating



## Recommended maximum electrical ratings

	Voltage (VAC)	Approvals ENEC	UL	(VAC)		Voltage (VAC)	Approvals ENEC	UL	(VAC)		
XGG...-88	250	16 (6)	5E4	15 A	125/250	XGT...-86	250	26 (10)	25E3	25A	125/250
XGA...-88	250	16 (6)	5E4	15 A	125/250	XGD...-86	250	22 (6)	5E4	21A	125/250
XGM...-88	250	16 (6)	5E4	15 A	125/250	XGA...-86	250	20 (8)	5E4	15A	125/250
XGO...-88	250	16 (6)	5E4	15 A	125/250	XGM...-86	250	20 (8)	5E4	15A	125/250
XGB...-88	250	12 (6)	5E4	12 A	125/250	XGO...-86	250	20 (8)	5E4	15A	125/250
XGC...-88	250	12 (6)	5E4	10 A	125/250	XGA...-86	400	10 (6)	5E4	-	-
XGH...-88	250	12 (6)	5E4	10 A	125/250	XGG...-86	400	10 (6)	5E4	-	-
XGK...-88	250	12 (6)	5E4	12 A	125/250	XGM...-86	400	10 (6)	5E4	-	-
XG....-88	400	3 (2)	5E4			XGO...-86	400	10 (6)	5E4	-	-

## Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free Position FP		Operating Position OP		Movement Differential		Total travelled position				
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)	(mm)	(in)			
	XGG..	3,2	11,43	0,4	1,43	15,75	0,62	14,7	$\left. \begin{matrix} 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \\ 0,57 \end{matrix} \right\} \begin{matrix} +0,2 \\ -0,4 \end{matrix} \right\} \begin{matrix} +0,007 \\ -0,015 \end{matrix}$	$\left. \begin{matrix} 0,35 \\ 0,15 \\ 0,35 \\ 0,35 \\ 0,35 \\ 0,15 \\ 0,35 \\ 0,15 \\ 0,15 \\ 0,15 \end{matrix} \right\} \begin{matrix} 0,013 \\ 0,006 \\ 0,013 \\ 0,013 \\ 0,013 \\ 0,006 \\ 0,013 \\ 0,006 \\ 0,006 \\ 0,006 \end{matrix}$	$\left. \begin{matrix} 13,2 \\ 13,2 \\ 13,7 \\ 13,7 \\ 13,2 \\ 13,2 \\ 13,7 \\ 13,2 \\ 13,2 \\ 13,2 \end{matrix} \right\} \begin{matrix} 0,519 \\ 0,519 \\ 0,539 \\ 0,539 \\ 0,519 \\ 0,519 \\ 0,539 \\ 0,519 \\ 0,519 \\ 0,519 \end{matrix}$					
	XGA..	3,2	11,43	0,6	2,14	15,75	0,62	14,7								
	XGM..	2	7,14	0,5	1,79	15,6	0,61	14,5								
	XGO..	1,2	4,29	0,1	0,36	15,6	0,61	14,5								
	XGK..	1,5	5,36	0,2	0,71	15,75	0,62	14,7								
	XGB..	1,5	5,36	0,3	1,07	15,75	0,62	14,7								
	XGC..	0,8	2,86	0,1	0,36	15,75	0,62	14,7								
	XGH..	0,45	1,61	0,05	0,18	15,6	0,61	14,5								
	XGT	3,2	11,43	0,6	2,14	15,75	0,62	14,7								
	XGD..	1,7	6,07	0,15	0,54	15,75	0,62	14,7								
	XGG..	3,2	11,43	0,36	1,29	16,5	0,64	15,1	$\left. \begin{matrix} 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \\ 0,59 \end{matrix} \right\} \pm 0,5$	$\left. \begin{matrix} 0,4 \\ 0,2 \\ 0,4 \\ 0,4 \\ 0,4 \\ 0,2 \\ 0,2 \\ 0,4 \\ 0,2 \\ 0,4 \end{matrix} \right\} \pm 0,019$	$\left. \begin{matrix} 14 \\ 14 \\ 14,4 \\ 14,4 \\ 14,4 \\ 14 \\ 14 \\ 14,4 \\ 14 \\ 14,4 \end{matrix} \right\} \begin{matrix} 0,551 \\ 0,551 \\ 0,566 \\ 0,566 \\ 0,566 \\ 0,551 \\ 0,551 \\ 0,566 \\ 0,551 \\ 0,566 \end{matrix}$					
	XGA..	3,2	11,43	0,54	1,93	16,5	0,64	15,1								
	XGM..	2	7,14	0,45	1,61	16,5	0,64	15								
	XGO..	1,2	4,29	0,09	0,34	16,5	0,64	15								
	XGK..	1,5	5,36	0,18	0,64	16,5	0,64	15,1								
	XGB..	1,5	5,36	0,27	0,96	16,5	0,64	15,1								
	XGC..	0,8	2,86	0,09	0,32	16,5	0,64	15,1								
	XGH..	0,45	1,61	0,04	0,14	16,5	0,64	15								
	Width of lever 7 mm/0,28 in – also available with width 4 mm/0,16 in															
		XGG..	2,6	9,29	0,32	1,14	19,2	0,75				17,5	$\left. \begin{matrix} 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \\ 0,68 \end{matrix} \right\} \pm 0,7$	$\left. \begin{matrix} 0,45 \\ 0,2 \\ 0,45 \\ 0,45 \\ 0,45 \\ 0,2 \\ 0,2 \\ 0,45 \\ 0,2 \\ 0,45 \end{matrix} \right\} \pm 0,027$	$\left. \begin{matrix} 16,4 \\ 16,4 \\ 16,9 \\ 16,9 \\ 16,9 \\ 16,4 \\ 16,4 \\ 16,9 \\ 16,4 \\ 16,9 \end{matrix} \right\} \begin{matrix} 0,645 \\ 0,645 \\ 0,665 \\ 0,665 \\ 0,665 \\ 0,645 \\ 0,645 \\ 0,665 \\ 0,645 \\ 0,665 \end{matrix}$	
XGA..		2,6	9,29	0,48	1,71	19,2	0,75	17,5								
XGM..		1,65	5,89	0,4	1,43	19,2	0,75	17,3								
XGO..		1	3,57	0,08	0,29	19,2	0,75	17,3								
XGK..		1,25	4,46	0,16	0,57	19,2	0,75	17,5								
XGB..		1,25	4,46	0,24	0,86	19,2	0,75	17,5								
XGC..		0,65	2,32	0,08	1,29	19,2	0,75	17,5								
XGH..		1,37	1,32	0,04	0,14	19,2	0,75	17,3								
Width of lever 7 mm/0,28 in																
		XGG..	3,2	11,43	0,38	1,36	21,8	0,85	20,5	$\left. \begin{matrix} 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \\ 0,81 \end{matrix} \right\} \pm 0,6$	$\left. \begin{matrix} 0,4 \\ 0,2 \\ 0,4 \\ 0,4 \\ 0,4 \\ 0,2 \\ 0,2 \\ 0,4 \\ 0,2 \\ 0,4 \end{matrix} \right\} \pm 0,023$	$\left. \begin{matrix} 19,5 \\ 19,5 \\ 19,8 \\ 19,8 \\ 19,8 \\ 19,5 \\ 19,5 \\ 19,8 \\ 19,5 \\ 19,8 \end{matrix} \right\} \begin{matrix} 0,767 \\ 0,767 \\ 0,779 \\ 0,779 \\ 0,779 \\ 0,767 \\ 0,767 \\ 0,779 \\ 0,767 \\ 0,779 \end{matrix}$				
	XGA..	3,2	11,43	0,85	3,04	21,8	0,85	20,5								
	XGM..	2	7,14	0,48	1,71	21,8	0,85	20,3								
	XGO..	1,2	4,29	0,09	0,32	21,8	0,85	20,1								
	XGK..	1,5	5,36	0,19	0,68	21,8	0,85	20,5								
	XGB..	1,5	5,36	0,29	1,04	21,8	0,85	20,5								
	XGC..	0,8	2,86	0,09	0,32	21,8	0,85	20,5								
	XGH..	0,45	1,61	0,04	0,14	21,8	0,85	20,3								
	Width of lever 7 mm/0,28 in															
		XGG..	3,2	11,43	0,37	1,32	21,8	0,85	20,2				$\left. \begin{matrix} 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \end{matrix} \right\} \pm 0,7$	$\left. \begin{matrix} 0,4 \\ 0,2 \\ 0,4 \\ 0,4 \\ 0,4 \\ 0,2 \\ 0,2 \\ 0,4 \\ 0,2 \\ 0,4 \end{matrix} \right\} \pm 0,027$	$\left. \begin{matrix} 19,3 \\ 19,3 \\ 19,7 \\ 19,7 \\ 19,7 \\ 19,3 \\ 19,3 \\ 19,7 \\ 19,3 \\ 19,7 \end{matrix} \right\} \begin{matrix} 0,759 \\ 0,759 \\ 0,775 \\ 0,775 \\ 0,775 \\ 0,759 \\ 0,759 \\ 0,775 \\ 0,759 \\ 0,775 \end{matrix}$	
XGA..		3,2	11,43	0,56	2	21,8	0,85	20,2								
XGM..		2	7,14	0,47	1,68	21,8	0,85	20,1								
XGO..		1,2	4,29	0,09	0,32	21,8	0,85	20,1								
XGK..		1,5	5,36	0,18	0,64	21,8	0,85	20,2								
XGB..		1,5	5,36	0,28	1	21,8	0,85	20,2								
XGC..		0,8	2,86	0,09	0,32	21,8	0,85	20,2								
XGH..		0,45	1,61	0,04	0,14	21,8	0,85	20,1								
Width of roller 6,6 mm/0,26 in																
		XGG..	3,2	11,43	0,37	1,32	21,8	0,85	20,2	$\left. \begin{matrix} 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \\ 0,79 \end{matrix} \right\} \pm 0,7$	$\left. \begin{matrix} 0,4 \\ 0,2 \\ 0,4 \\ 0,4 \\ 0,4 \\ 0,2 \\ 0,2 \\ 0,4 \\ 0,2 \\ 0,4 \end{matrix} \right\} \pm 0,027$	$\left. \begin{matrix} 19,3 \\ 19,3 \\ 19,7 \\ 19,7 \\ 19,7 \\ 19,3 \\ 19,3 \\ 19,7 \\ 19,3 \\ 19,7 \end{matrix} \right\} \begin{matrix} 0,759 \\ 0,759 \\ 0,775 \\ 0,775 \\ 0,775 \\ 0,759 \\ 0,759 \\ 0,775 \\ 0,759 \\ 0,775 \end{matrix}$				
	XGA..	3,2	11,43	0,56	2	21,8	0,85	20,2								
	XGM..	2	7,14	0,05	1,68	21,8	0,85	20,1								
	XGO..	1,2	4,29	0,09	0,32	21,8	0,85	20,1								
	XGK..	1,5	5,36	0,18	0,64	21,8	0,85	20,2								
	XGB..	1,5	5,36	0,28	1	21,8	0,85	20,2								
	XGC..	0,8	2,86	0,09	0,32	21,8	0,85	20,2								
	XGH..	0,45	1,61	0,04	0,14	21,8	0,85	20,1								
	Width of roller 6,6 mm/0,26 in															

<sup>1)</sup> Lever distance 8,2 (0,32) for lever position –.20, lever position (-J20, L20, S20, M20)  
Lever distance 14,0 (0,55) for lever position –.40, lever position (-J40, L40, S40, M40)

<sup>2)</sup> 2,65 mm for switch type XGH, XGO, XGM

<sup>3)</sup> For high temperature T125°C/T 150°C (ENEC, UL)

## Ordering Reference

Basic type	XGG..	3,2 N	11,43 ozf	Example: XGG	4	2	A	-88	J20	Z1
	XGA..	3,2 N	11,43 ozf							
	XGM..	2,0 N	7,14 ozf							
	XGO..	1,2 N	4,29 ozf							
	XGK..	1,5 N	5,36 ozf							
	XGB..	1,5 N	5,36 ozf							
	XGC..	0,8 N	2,86 ozf							
	XGH..	0,45 N	1,61 ozf							
	XGD..	1,7 N	6,07 ozf							
	XGT..	3,2 N	11,43 ozf							

Circuit	No symbol, change-over (CO)
4	Normally closed (NC)
5	Normally open (NO)

Terminals	2	Faston	6,3 × 0,8
	3	Solder	1,7 × 3,2
	4	Faston	1 × 2,8 × 0,5 DIN
	5	Faston	1 × 2,8 × 0,5
	6	Faston	4,8 × 0,5
	7	Screw	
	8	Faston	1 × 2,8 × 0,8 DIN
	9	Faston	1 × 2,8 × 0,8
	10	Faston	4,8 × 0,8
	11	Faston	2 × 2,8 × 0,8
	12	Short solder	∅ 2,3
	13	Print bent (lid)	
	14	Print bent (base)	
	15	Rast 5	6,3 × 0,8
	19	Short solder	∅ 1,7

Other types of terminals are available on request

Version	ENEC	Number of operations at rated load		
		UL	Europe	UL
	No symbol, T85	T90	50,000	6,000
A	T85	T90	50,000	100,000
W	T150	T150	50,000	6,000
AW	T150	T150	50,000	100,000
B	T85	T90	10,000	6,000
V	T125	T130	50,000	6,000
AV	T125	T130	50,000	100,000
C	T85	T90	25,000	6,000

Contacts	-88	Ag / AgNi10
	-81	Gold-plated 4 µm (Au) on Ag
	-86	Ag / Ag CdO

Actuators	No symbol, plunger	
J20 <sup>1)</sup>	J40 <sup>2)</sup>	Plain lever 13,5 mm
J22 <sup>1)</sup>	J42 <sup>2)</sup>	Plain lever 24,0 mm
J23 <sup>1)</sup>	J43 <sup>2)</sup>	Plain lever 27,8 mm
J27 <sup>1)</sup>	J47 <sup>2)</sup>	Plain lever 60,0 mm
M20 <sup>1)</sup>	M40 <sup>2)</sup>	Plain lever formed 14,7 mm
L20 <sup>1)</sup>	L40 <sup>2)</sup>	Cam follower 12,8 mm
L21 <sup>1)</sup>	L41 <sup>2)</sup>	Cam follower 26,2 mm
S20 <sup>1)</sup>	S40 <sup>2)</sup>	Roller lever 12,8 mm
T20 <sup>1)</sup>	T40 <sup>2)</sup>	Roller lever, 150°C version 12,8 mm

Other actuators available on request

- <sup>1)</sup> Lever distance 8,2 (0,32) for lever position –20, lever position (-J20, L20, S20, M20)  
<sup>2)</sup> Lever distance 14,0 (0,55) for lever position –40, lever position (-J40, L40, S40, M40)

Approvals	No symbol, ENEC
Z1	UL, CSA



## 340

- Characteristics
- wiping contacts, leaf spring mechanism
  - 3 mm contact gap
  - compliant to glow wire requirements IEC 60335-1, 4. ed. as optional item

Rating 250 VAC, 16 A max.

Dimensions 28,8 × 20,4 × 10,1

- Actuator
- plunger
  - roller lever
  - plain levers
  - simulated roller lever
  - moulded lever

Approvals ENEC, UL

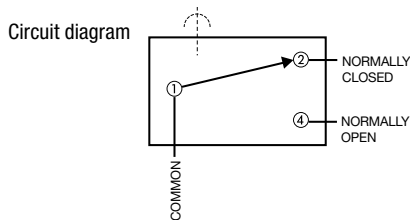


## Popular Products

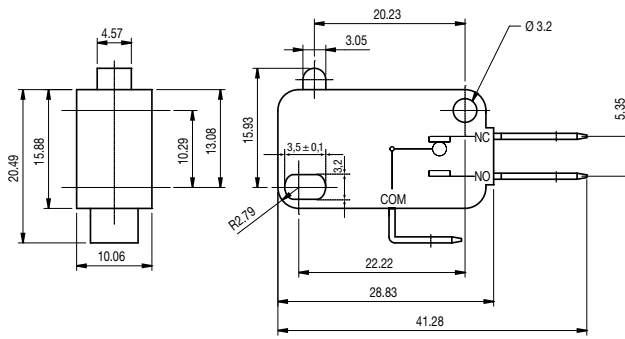
Ordering Reference	Actuating Force (N)	Actuating Force (ozf)	Operating pos. (mm)	Operating pos. (in)	Terminal (mm)	Contact Gap	Actuator	Contacts	Electrical rating ENEC	UL/CSA		
343B120350N0	4,9	17,50	14,7	$\begin{matrix} +0,3 \\ -0,6 \end{matrix}$	0,58	$\begin{matrix} +0,01 \\ -0,02 \end{matrix}$	Faston	3	Plunger	AgCd0	16 (3) A, 250 VAC	12 A, 125–250 VAC

## Specifications

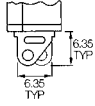
Housing	Glass-filled flame retardant Nylon 6,6
Plunger	Glass-filled flame retardant Nylon 6,6
Mechanism	Snap action, single pole leaf spring mechanism
Functions	Change-over, Normally open, Normally closed
Contacts	Silver
Terminals	Solder, Faston and Rast 5 terminals
Temperature range	-10°C to +85°C
Mechanical life	10 <sup>7</sup> cycles minimum (3 mm gap 10 <sup>6</sup> ) (impact-free actuation)
Protection	IP40 (enclosure)
Mounting	Side mounting
Actuators	Plunger, plain lever, roller lever



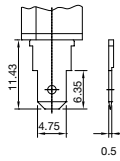
## Dimensions



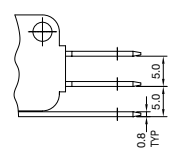
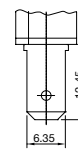
342  
Solder



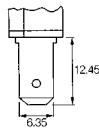
345  
4,75 × 0,5  
Faston



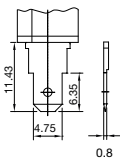
348  
Rast 5  
Faston



343  
6,35 × 0,8  
Faston



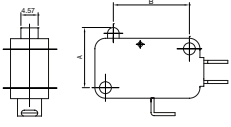
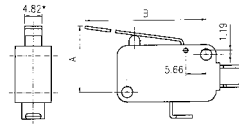
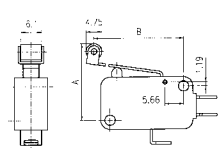
346  
4,75 × 0,8  
Faston



## Recommended maximum electrical ratings

Versions	ENEC	UL/CSA	Motor load
3 mm Wide gap	16(3) A, 250 VAC, 50 E3, T85	12 A, 125-250 VAC, T85	½ HP

## Operating Characteristics 34\_120350

Actuator	Reference	Actuating Force		Release Force		Free Position		Operating Position		Movement Differential		Full Overtravel	
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)	Position (mm)	(in)
Plunger 	34_120350	4,90	17,50	1,20	4,32	15,93	0,63	14,70 +0,3/-0,6	0,58 +0,01/-0,02	0,76	0,03	13,0	0,51
Plain lever (Back position) 	ZD0	4,90	17,50	1,20	4,32	17,00	0,67	15,20 +/-0,5	0,60 +/-0,02	0,80	0,03	14,1	0,56
	ZD1	3,60	12,95	0,63	2,27	18,80	0,74	15,70 +/-0,8	0,62 +/-0,03	1,20	0,05	13,7	0,54
	ZD2	1,40	5,04	0,18	0,65	26,70	1,05	14,60 +/-3,0	0,57 +/-0,12	4,60	0,18	11,1	0,44
Roller lever 	ZDS0	4,90	17,50	1,20	4,32	22,20	0,87	20,60 +/-0,7	0,81 +/-0,03	0,80	0,03	19,5	0,77
	ZDS1	3,60	12,95	0,52	1,87	24,20	0,95	21,20 +/-0,9	0,83 +/-0,04	1,10	0,04	19,5	0,77

## Ordering Reference

Basic type	34	Example: 34   2   B   40   75   NO   ZD0											
Terminal type	2 solder 3 6,35 × 0,8 fast-on 5 4,75 × 0,5 fast-on 6 4,75 × 0,8 fast-on 8 6,35 × 0,8 Rast 5												
	B	No symbol, standard material compliant to glow wire requirements IEC 60335-1, 4. ed.											
Contact gap	120 3 mm												
Operating force	350 490 g (3 mm gap)												
Circuit	No symbol, change-over NO Normally open NC Normally closed												
Actuator	No symbol, plunger ZD0 Plain lever 22,56 mm ZD1 Plain lever 33,90 mm ZD2 Plain lever 84,43 mm  ZDS0 Roller lever 19,67 mm ZDS1 Roller lever 31,70 mm												

## V3S

Characteristics	<ul style="list-style-type: none"> <li>■ sealed (IP67)</li> <li>■ pre-wired</li> <li>■ robust construction</li> </ul>
Rating	250 VAC, 5 A
Dimensions (mm)	32 × 24 × 10
Actuator	<ul style="list-style-type: none"> <li>■ plunger</li> <li>■ plain levers</li> <li>■ roller levers</li> </ul>
Approvals	UL, CSA, ENEC



Miniature sealed

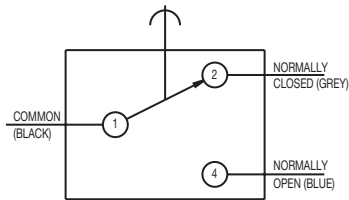
## Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm) (in)		Terminal	Circuit	Actuator	Contacts	Electrical rating
V3SUL	3,9	14,00	IP67	14,5	0,57	Pre-wired	CO	Plunger	Ag	Up to 250 VAC, 5 A
V3SYRUL	3,9	14,00	IP67	20,4	0,80	Pre-wired	CO	Roller lever - short	Ag	Up to 250 VAC, 5 A
V3SYR1UL	2,3	8,26	IP67	22,0	0,86	Pre-wired	CO	Roller lever - long	Ag	Up to 250 VAC, 5 A
V3SY1UL	1,7	7,50	IP67	14,9	0,55	Pre-wired	CO	Plain lever	Ag	Up to 250 VAC, 5 A

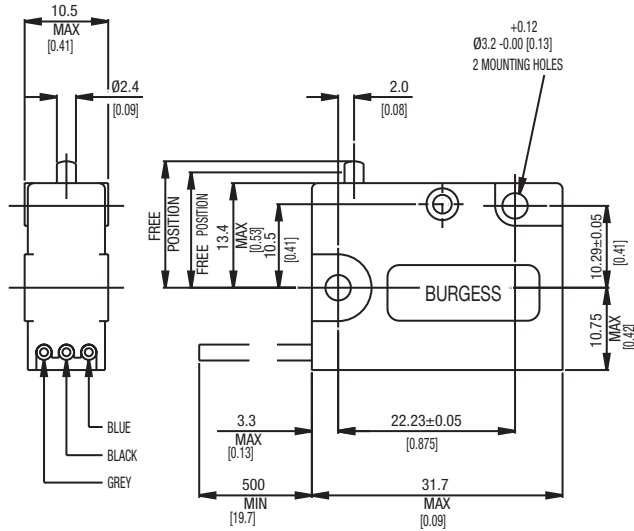
## Specifications

Housing	Glass fibre reinforced flame retardent nylon
Plunger	Acetal (lever types), stainless steel (plunger types)
Mechanism	Snap-action, single pole
Functions	Change-over
Cowl	Silicone rubber
Contacts	Silver
Terminals °C	Pre-wired
Temperature range	-40°C to +85°C
Mechanical life	10 <sup>6</sup> cycles minimum, impact-free actuation
Protection	IP67 (enclosure)
Mounting	Side mounting
Actuators	Plain lever - stainless steel, Roller levers - stainless steel, nylon roller

Circuit diagram




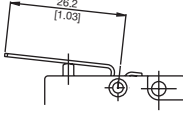
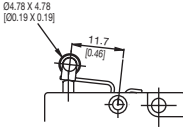
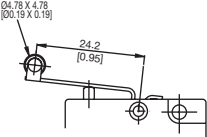
Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Load (A)	Approval
125 VAC	5 (0.75 pf)	UL 1054/CSA 22.2 No. 55 - 6,000 operations (85°C)
250 VAC	5 (0.75 pf)	UL 1054/CSA 22.2 No. 55 - 6,000 operations (85°C)
250 VAC	5	EN61058-1, T85, 10,000 operations
0 - 15 VDC	6	General rating - 50,000 operations (85°C)
15 - 30 VDC	3	General rating - 50,000 operations (85°C)

## Operating Characteristics

Actuator	Reference	Actuating Force Maximum		Release Force Minimum		Free Position Maximum		Operating Position		Movement Differential Maximum	
		(N)	(ozf)	(N)	(ozf)	(mm)	(in)	(mm)	(in)	(mm)	(in)
Plunger 	V3SUL	3,90	14,0	1,10	4,00	15,9	0,63	14,5 ± 0,5	0,57 ± 0,02	0,4	0,016
Plain lever 	V3SY1UL	1,65	6,0	0,42	1,50	13,4	0,71	14,9 ± 1,0	0,59 ± 0,4	1,0	0,040
Roller lever - short 	V3SYRUL	3,90	14,0	1,10	4,00	22,1	0,87	20,45 ± 0,64	0,8 ± 0,025	0,40	0,016
Roller lever - long 	V3SYR1UL	1,65	7,5	0,42	1,50	18,1	0,71	14,9 ± 01.0	0,55 ± 0,039	1,00	0,040

Over travel: Plunger can be depressed flush with housing. The housing should not be used as an end stop.

## Ordering Reference

Basic type	V3S	Example: V3S	Y1	UL
Circuit	No symbol, change-over			
Actuators	No symbol, without lever or actuator			
Y1	Plain lever 26.2 mm			
YR	Roller lever 11.7 mm			
YR1	Roller lever 24.2 mm			
Contact Material	No symbol, Ag			
Terminals	No symbol, fitted with standard 500 mm cables			
Approvals	No symbol, without approval			
UL	UL and CSA approval, ENEC			
Special Features	/□□□□ Burgess specialise in customer specific solutions. Additional product variants are available or can be provided. If your requirements cannot be satisfied from the options listed, please contact us.			

## V3NS

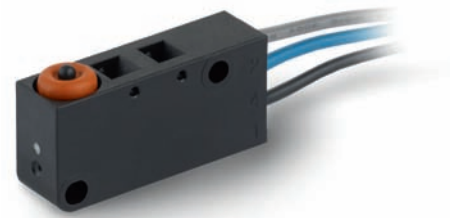
- Characteristics
- sealed (IP67)
  - pre-wired option
  - faston terminals
  - robust construction
  - compliant to glow wire requirements IEC 60335

Rating 250 VAC, 6 A

Dimensions (mm) 33 x 10.4 x 15.9

- Actuator
- plunger
  - plain levers
  - roller levers
  - cam follower lever

Approvals UL, CSA, ENEC



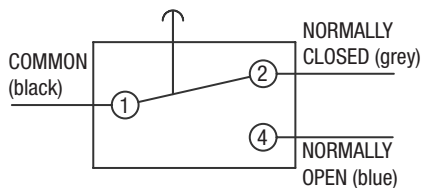
## Preferred Range

Ordering Reference	Actuating Force max. (N)	Force max. (ozf)	Sealing	Operating position (mm)	Operating position (in)	Terminal	Circuit	Actuator	Contacts	Electrical rating
V3NSUL	2.2	8.0	IP67	14.7 ± 0.4	0.58 ± 0.016	Pre-wired	CO	Plunger	Ag	Up to 250VAC, 6A
V3NSY1UL	1.3	4.7	IP67	16.3 ± 0.85	0.64 ± 0.034	Pre-wired	CO	Plain lever	Ag	Up to 250VAC, 6A
V3NSYRUL	2.6	8.0	IP67	21.0 ± 0.45	0.83 ± 0.018	Pre-wired	CO	Roller lever - short	Ag	Up to 250VAC, 6A
V3NSYR1UL	1.6	4.7	IP67	21.7 ± 0.8	0.85 ± 0.032	Pre-wired	CO	Roller lever - long	Ag	Up to 250VAC, 6A
V3NSYCUL	1.6	4.7	IP67	19.45 ± 0.8	0.77 ± 0.032	Pre-wired	CO	Cam follower lever	Ag	Up to 250VAC, 6A
V3NST1UL	2.2	8.0	IP67	14.7 ± 0.4	0.58 ± 0.016	Faston	CO	Plunger	Ag	Up to 250VAC, 6A
V3NST1Y1UL	1.3	4.7	IP67	16.3 ± 0.85	0.64 ± 0.034	Faston	CO	Plain lever	Ag	Up to 250VAC, 6A
V3NST1YRUL	2.6	8.0	IP67	21.0 ± 0.45	0.83 ± 0.018	Faston	CO	Roller lever - short	Ag	Up to 250VAC, 6A
V3NST1YR1UL	1.6	4.7	IP67	21.7 ± 0.8	0.85 ± 0.032	Faston	CO	Roller lever - long	Ag	Up to 250VAC, 6A
V3NST1YCUL	1.6	4.7	IP67	19.45 ± 0.8	0.77 ± 0.032	Faston	CO	Cam follower lever	Ag	Up to 250VAC, 6A

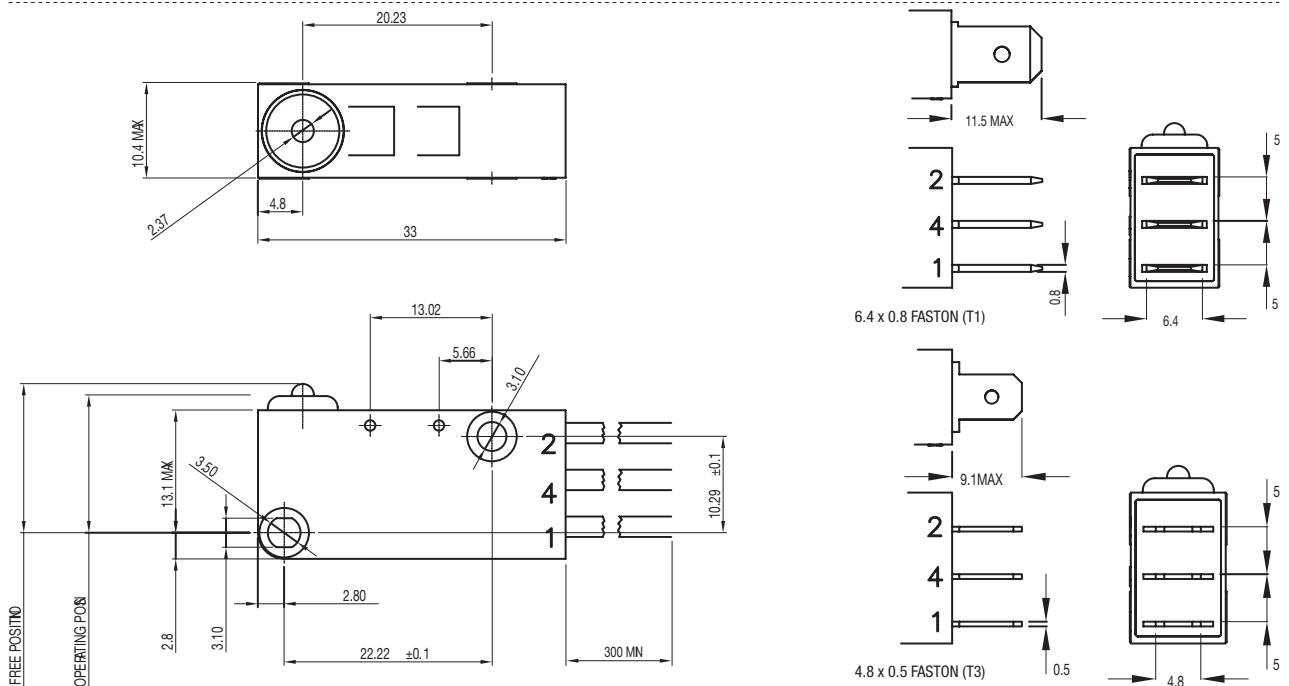
## Specifications

Housing	Glass fibre reinforced flame retardant nylon
Plunger	Polyphenylene Sulphide
Mechanism	Snap-action, single pole
Functions	Change-over
Cowl	Silicone Rubber
Contacts	Silver
Terminals	Pre-wired, Faston
Temperature Range	-40°C to +85°C
Mechanical Life	1 million cycles minimum (impact free operation)
Protection	IP67 (enclosure)
Mounting	Side mounting
Actuators	Plain lever, cam follower lever - stainless steel, roller levers - stainless steel, acetal roller

Circuit diagram



Dimensions

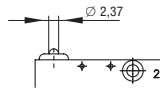
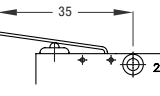
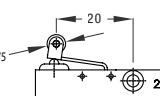
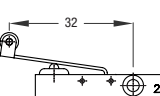
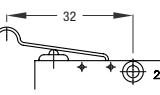


## Recommended maximum electrical ratings

Voltage (max)	Load (A)	Approval
125 VAC	6 (0.75pf)	UL 1054/CSA 22.2 No.55 - 6000 operations (85°C)
250 VAC	6 (0.75pf)	UL 1054/CSA 22.2 No.55 - 6000 operations (85°C)
250 VAC	6 (2)	EN61058-1, T85 50,000 operations
250 VAC	4	General inductive rating - 200,000 operations minimum
250 VAC	5	General resistive rating - 200,000 operations minimum
30 vdc	5	General resistive rating - 200,000 operations minimum
5 vdc	0.001	General resistive rating - 1 million operations minimum



## Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free Position		Operating Position		Movement Differential	
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)
Plunger 	V3NSUL V3NST1UL V3NST3UL	2.2	8.0	0.4	1.4	16	0.63	14.7 ± 0.4	0.58 ± 0.016	0.25	0.01
Y1 lever  Width of lever 4.74	V3NSY1UL V3NST1Y1UL V3NST3Y1UL	1.3	4.7	0.2	0.7	19	0.75	16.3 ± 0.85	0.64 ± 0.034	1.1	0.05
YR lever  Width of roller 6.1	V3NSYRUL V3NST1YRUL V3NST3YRUL	2.6	8.0	0.4	1.4	22.5	0.89	21.0 ± 0.45	0.83 ± 0.018	0.28	0.013
YR1 lever  Width of roller 6.1	V3NSYR1UL V3NST1YR1UL V3NST3YR1UL	1.6	4.7	0.2	0.7	24.1	0.95	21.7 ± 0.8	0.85 ± 0.032	0.5	0.02
YC lever  Width of lever 4.74	V3NSYCUL V3NST1YCUL V3NST3YCUL	1.6	4.7	0.2	0.7	23	0.91	19.45 ± 0.8	0.77 ± 0.032	0.5	0.02

Operating characteristics are specified from the lower mounting hole  
Overtravel: Plunger can be depressed flush with housing. The housing should not be used as an end stop

## Ordering Reference

Basic type	V3NS	Example: V3NS	T3	C2	Y1	UL
Terminals	No symbol, pre-wired with standard 300mm cables					
T1	6.4 x 0.8 Faston					
T3	4.8 x 0.5 Faston					
Circuit	No symbol, change-over					
C2	Normally closed					
C4	Normally open					
Actuators	No symbol, without lever or actuator					
Y1	Plain lever 35mm					
YR	Roller lever 20mm					
YR1	Roller lever 32mm					
YC	Cam follower lever 32mm					
Contact Material	No symbol. Ag					
Approvals	No symbol, without approval					
UL	UL, CSA, ENEC Approval					
Special Features	/••••	Burgess specialise in customer specific solutions Additional product variants are available or can be provided If your requirements cannot be satisfied from the options listed, please contact us.				

# BVM3

## BVM3F

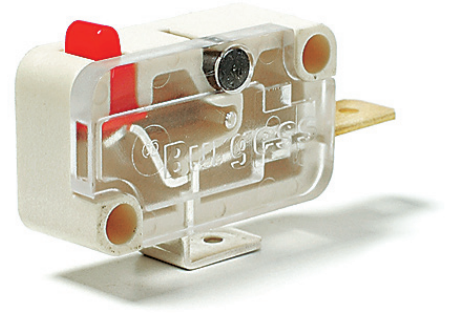
- Characteristics
- positive-action forced break switching
  - > 3 mm contact gap at full travel
  - internationally recognized V3 housing
  - faston terminals

Rating **250 VAC, 10 A**

Dimensions (mm) **28 × 16 × 10.5**

- Actuator
- plunger
  - plain lever
  - roller lever

Approvals ULS, CSA, ENEC



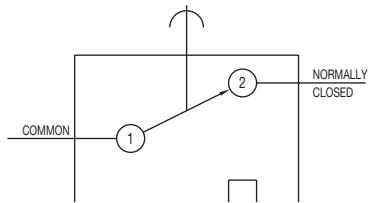
## Preferred Range

Ordering Reference	Actuating Force (N)	Actuating Force (ozf)	Sealing	Terminal	Circuit	Actuator	Contacts	Electrical rating
BVM3FULS	4.5	16.2	IP40	Faston	NC	Plunger	Ag/Ag nickel	Up to 250 VAC, 10 A
BVM3FYULS	4.5	16.2	IP40	Faston	NC	Plain lever	Ag/Ag nickel	Up to 250 VAC, 10 A
BVM3FYRULS	5.0	18.0	IP40	Faston	NC	Roller lever	Ag/Ag nickel	Up to 250 VAC, 10 A

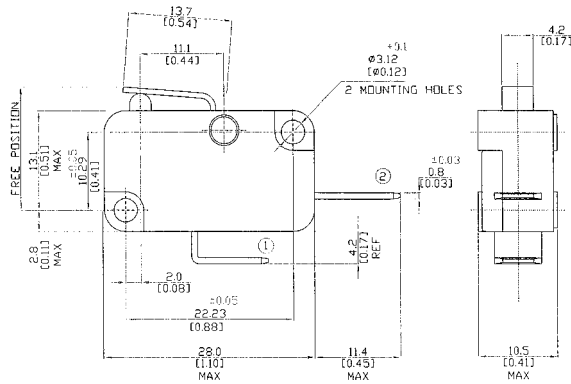
## Specifications

Housing	Glass reinforced nylon
Plunger	Nylon
Mechanism	> 3 mm gap, positive-action, single pole
Functions	Normally closed
Contacts	Fixed silver nickel, Moving silver
Terminals	6.3 mm (0.25 in) faston NC (2) - brass, Common (1) - brass, Ag-plated
Temperature range °C	-40°C to +85°C
Mechanical life	10 <sup>6</sup> cycles minimum, impact-free actuation
Protection	IP40 (enclosure)
Mounting	Side mounting
Actuators	Plain lever - stainless steel, roller lever - stainless steel, nylon roller
Lid	Polycarbonate

Circuit diagram




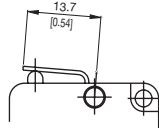
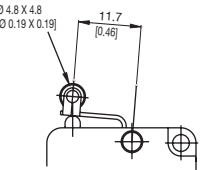
Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Load (A)	Horsepower	Approval
250 VAC	10 (0.75 pf)	-	ULS 1054/CSA 22.2 No. 55 - 100,000 operations
250 VAC	-	½ HP	ULS 1054 - Horsepower - 6,000 operations
250 VAC	10 (3)	-	EN 61058-1 T85 50,000 operations
125 VAC	-	½ HP	ULS 1054 - Horsepower - 6,000 operations
0 - 15 VDC	10	-	General rating - 50,000 operations
15 - 30 VDC	7	-	General rating - 50,000 operations

## Operating Characteristics

Actuator	Reference	Actuating Force at contact break		Actuating Force at total travel		Free Position		Contact gap at total travel	
		Maximum (N)	Maximum (ozf)	Minimum (N)	Minimum (ozf)	Maximum (mm)	Maximum (in)	Minimum (mm)	Minimum (in)
Plunger 	BVM3FULS	4,5	16,2	4,8	17,3	15,8	0,62	3,0	0,12
Y Lever 	BVM3FYULS	4,5	16,2	4,8	17,3	16,8	0,66	3,0	0,12
YR Lever 	BVM3FYRULS	5,0	18,0	5,5	19,8	22,35	0,88	3,0	0,12

Operating characteristics are specified from the mounting holes.

Total travel: Plunger can be depressed flush with housing. The housing should not be used as an end stop.

## Ordering Reference

Basic type	BVM3	Example: BVM3	F	Y	ULS
Terminals	F	Faston 6.3 × 0.8 mm			
Actuators	Y	No symbol, without lever			
	YR	Straight lever 13.7 mm			
		Roller lever 11.7 mm			
Approvals	ULS	UL 100 k operations and CSA approval, ENEC			
Special Features	/□□□□	Burgess specialise in customer specific solutions. Additional product variants are available or can be provided. If your requirements cannot be satisfied from the options listed, please contact us.			