

XC

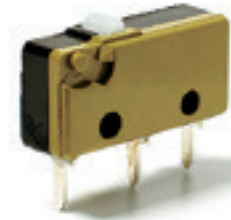
- Characteristics**
- wide range of forces and variants
 - long mechanical and electrical life
 - solder, PCB and faston terminals
 - compliant to glow wire test IEC 60335-1, 4. ed.

Rating 250 VAC, 10 A max.

Dimensions (mm) 19.9 × 9.5 × 6.4

- Actuator**
- Plunger
 - mushroom plunger
 - plain levers
 - simulated roller lever/cam follower
 - roller levers

Approvals ENEC, UL, cUL, CSA



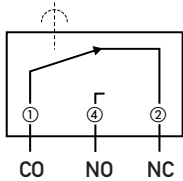
Preferred Range

Ordering Reference	Actuating Force (N)	Actuating Force (ozf)	Operating pos. (mm)	Operating pos. (in)	Terminal	Circuit	Actuator	Contacts	Electrical rating ENEC	UL/CSA
XCG3Z1	1.7	6.07	8.4	0.33	Solder	CO	Plunger	Ag	6(2) A	5 A
XCG3-J1Z1	0.6	2.14	10.2	0.40	Solder	CO	Plain lever	Ag	6(2) A	5 A
XCG3-S1Z1	0.7	2.49	15.6	0.61	Solder	CO	Roller lever	Ag	6(2) A	5 A
XCG5Z1	1.7	6.07	8.4	0.33	Faston 2.8 × 0.5 mm	CO	Plunger	Ag	6(2) A	5 A
XCG5-J1Z1	0.6	2.14	10.2	0.40	Faston 2.8 × 0.5 mm	CO	Plain lever	Ag	6(2) A	5 A
XCG5-S1Z1	0.7	2.49	15.6	0.61	Faston 2.8 × 0.5 mm	CO	Roller lever	Ag	6(2) A	5 A
XCG8-81Z1	1.7	6.07	8.4	0.33	PCB	CO	Plunger	Au	none	0.1 A/125 VAC
XCG8-81-J1Z1	0.6	2.14	10.2	0.40	PCB	CO	Plain lever	Au	none	0.1 A/125 VAC
XCG8-81-S1Z1	0.7	2.49	15.6	0.61	PCB	CO	Roller lever	Au	none	0.1 A/125 VAC
XCF3Z1	3	10.70	8.4	0.33	Solder	CO	Plunger	Ag	10(3) A	10.1 A
XCF3-J1Z1	1.05	3.74	10.2	0.40	Solder	CO	Plain lever	Ag	10(3) A	10.1 A
XCF3-S1Z1	1.1	3.92	15.6	0.61	Solder	CO	Roller lever	Ag	10(3) A	10.1 A
XCG3-U1Z1	1.7	6.07	9.9	0.39	Solder	CO	Mushroom plunger	Ag	6(2) A	5 A
XCG4-U1Z1	1.7	6.07	9.9	0.39	Faston 2.8 × 0.5 mm	CO	Mushroom plunger	Ag	6(2) A	5 A
XCG8-U1Z1	1.7	6.07	9.9	0.39	PCB	CO	Mushroom plunger	Ag	6(2) A	5 A

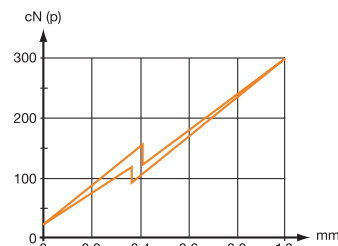
Specifications

Housing	Melamine-Formaldehyd, Thermosetting
Plunger	POM for T85, PBT for T125, PPS for T150
Mechanism	Snap-action system with stainless steel tension spring
Functions	Change-over, NO, NC
Contacts	Fine silver (Ag) or 10 µm Gold (Au), microprofile
Terminals	Solder, faston and various PCB terminals (side of housing or side of lid, as well as 1/10" o lin pitch)
Temperature range °C	Between -40°C and +85°C (special version up to 140°C)
Mechanical life	up to 5 × 10 ⁷ cycles (sinusoidal actuation)
Protection	Enclosure IP40
Mounting	Side mounting through mounting holes
Actuators	Stainless steel, PA66-GF35
Contact Carrier	CuZn or CuSn

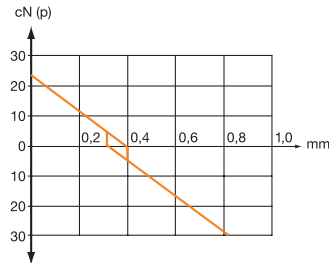
Circuit diagram



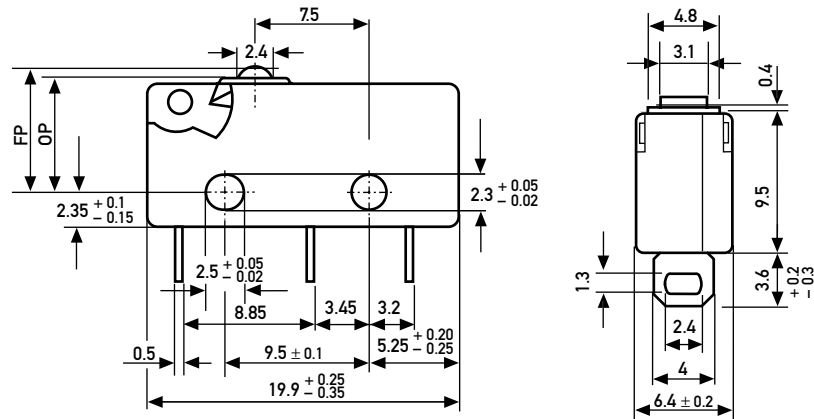
Actuating force/travel



Contact force/travel

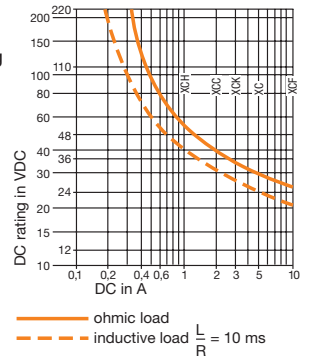


Dimensions



FP = Free Position
OP = Operating Position

Maximum DC rating

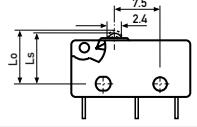
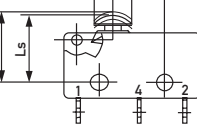
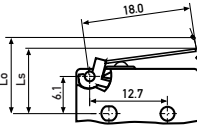
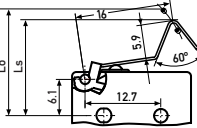
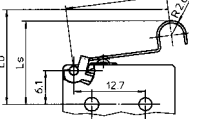
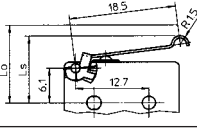
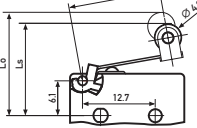
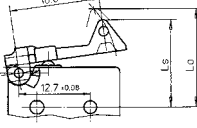
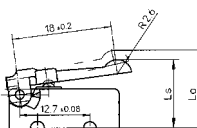


Recommended maximum electrical ratings

	Voltage (VAC)	Resistive load (A)	Motor load (A)	Approvals ENEC (A)	(VAC)	Approvals UL (A)	(VAC)	Motor load	
XCF	250	10	3	10 (3)	1E4	250	10,1	125/250	1/4 HP
XCG	250	6	2	6 (2)	5E4	250	5	250	-
XCK	250	5	3	5 (3)	1E4	250	5	250	-
XCC	250	3	1	3 (1)	5E4	250	2	250	-
XCH	250	1,5	0,3	1,5 (0,3)	5E4	250	1	250	-

Breaking capacities in the tables refer to Ag contacts.

Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free Position		Operating Position		Movement Differential		Total travelled position			
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)	Maximum (mm)	(in)		
	XCF..	3	10.70	0.5	1.78	8.8	0.34	8.4	$\left. \begin{array}{l} +0.1 \\ -0.3 \end{array} \right\}$	$\left. \begin{array}{l} 0.33 \\ 0.33 \\ 0.33 \\ 0.33 \end{array} \right\}$	$\left. \begin{array}{l} +0.003 \\ -0.011 \end{array} \right\}$	0.1	0.003	7.7	0.303
	XCG..	1.7	6.07	0.3	1.07	8.8	0.34	8.4				0.1	0.003	7.7	0.303
	XCK..	1.2	4.28	0.2	0.71	8.8	0.34	8.4				0.1	0.003	7.7	0.303
	XCC..	0.6	2.14	0.1	0.36	8.8	0.34	8.4				0.1	0.003	7.7	0.303
	XCH..	0.35	1.24	0.07	0.24	8.8	0.34	8.4				0.1	0.003	7.7	0.303
	XCF..-U1	3	10.70	0.5	1.78	10.3	0.41	9.9	$\left. \begin{array}{l} +0.1 \\ -0.3 \end{array} \right\}$	$\left. \begin{array}{l} 0.39 \\ 0.39 \\ 0.39 \\ 0.39 \end{array} \right\}$	$\left. \begin{array}{l} +0.003 \\ -0.011 \end{array} \right\}$	0.1	0.003	9.2	0.36
	XCG..-U1	1.7	6.07	0.3	1.07	10.3	0.41	9.9				0.1	0.003	9.2	0.36
	XCK..-U1	1.2	4.28	0.2	0.71	10.3	0.41	9.9				0.1	0.003	9.2	0.36
	XCC..-U1	0.6	2.14	0.1	0.36	10.3	0.41	9.9				0.1	0.003	9.2	0.36
	XCH..-U1	0.35	1.24	0.07	0.24	10.3	0.41	9.9				0.1	0.003	9.2	0.36
	XCF..	1.05	3.74	0.16	0.57	12.2	0.48	10.2 ± 1.0	$\left. \begin{array}{l} 0.401 \pm 0.039 \\ 0.401 \pm 0.035 \\ 0.405 \pm 0.035 \\ 0.404 \pm 0.035 \\ 0.409 \pm 0.035 \end{array} \right\}$	0.6	0.023	8.4	0.33		
	XCG..	0.6	2.14	0.08	0.28	12.2	0.48	10.2 ± 0.9		0.5	0.019	8.5	0.337		
	XCK..	0.42	1.49	0.056	0.19	12.2	0.48	10.3 ± 0.9		0.5	0.019	8.7	0.342		
	XCC..	0.22	0.78	0.025	0.08	12.2	0.48	10.3 ± 0.9		0.4	0.015	8.7	0.342		
	XCH..	0.13	0.46	0.02	0.07	12.2	0.48	10.4 ± 0.9		0.4	0.015	8.8	0.346		
Width of lever 4.0 mm/0.16 in															
	XCF..	1.1	3.92	0.17	0.6	17.6	0.69	15.6 ± 1.1	$\left. \begin{array}{l} 0.614 \pm 0.043 \\ 0.614 \pm 0.039 \\ 0.618 \pm 0.039 \\ 0.618 \pm 0.039 \\ 0.622 \pm 0.039 \end{array} \right\}$	0.6	0.023	14	0.551		
	XCG..	0.7	2.49	0.09	0.32	17.6	0.69	15.6 ± 1.0		0.5	0.019	14.1	0.555		
	XCK..	0.43	1.53	0.058	0.2	17.6	0.69	15.7 ± 1.0		0.4	0.015	14.3	0.562		
	XCC..	0.23	0.82	0.026	0.09	17.6	0.69	15.7 ± 1.0		0.4	0.015	14.3	0.562		
	XCH..	0.14	0.49	0.021	0.07	17.6	0.69	15.8 ± 1.0		0.4	0.015	14.4	0.566		
Width of lever 4.0 mm/0.16 in															
	XCF..	1.05		0.16		17.1		15.1 ± 1.1		0.6		13.3			
	XCG..	0.6		0.08		17.1		15.1 ± 1.0		0.5		13.4			
	XCK..	0.42		0.056		17.1		15.2 ± 1.0		0.5		13.6			
	XCC..	0.22		0.025		17.1		15.2 ± 1.0		0.4		13.6			
	XCH..	0.13		0.02		17.1		15.3 ± 1.0		0.4		13.7			
	XCF..	1.05		0.16		13.7		11.7 ± 1.1		0.6		9.9			
	XCG..	0.6		0.08		13.7		11.7 ± 1.0		0.5		10.0			
	XCK..	0.42		0.056		13.7		11.8 ± 1.0		0.5		10.2			
	XCC..	0.22		0.025		13.7		11.8 ± 1.0		0.4		10.2			
	XCH..	0.13		0.02		13.7		11.9 ± 1.0		0.4		10.3			
	XCF..	1.1	3.92	0.17	0.6	17.6	0.69	15.6 ± 1.2	$\left. \begin{array}{l} 0.614 \pm 0.047 \\ 0.614 \pm 0.043 \\ 0.618 \pm 0.043 \\ 0.618 \pm 0.043 \\ 0.622 \pm 0.043 \end{array} \right\}$	0.6	0.023	14.1	0.555		
	XCG..	0.7	2.49	0.09	0.32	17.6	0.69	15.6 ± 1.1		0.5	0.019	14.2	0.559		
	XCK..	0.43	1.53	0.058	0.2	17.6	0.69	15.7 ± 1.1		0.4	0.015	14.4	0.566		
	XCC..	0.23	0.82	0.026	0.09	17.6	0.69	15.7 ± 1.1		0.4	0.015	14.4	0.566		
	XCH..	0.14	0.49	0.021	0.07	17.6	0.69	15.8 ± 1.1		0.4	0.015	14.5	0.57		
Width of roller 4.0 mm/0.16 in, for high temperature use -T1 lever															
	XCF..	1.3	4.62	0.17	0.6	17.6	0.69	15.6 ± 1.1	$\left. \begin{array}{l} 0.614 \pm 0.043 \\ 0.614 \pm 0.039 \\ 0.618 \pm 0.039 \\ 0.618 \pm 0.043 \\ 0.622 \pm 0.039 \end{array} \right\}$	0.6	0.023	14	0.551		
	XCG..	0.75	2.67	0.09	0.32	17.6	0.69	15.6 ± 1.0		0.5	0.019	14.1	0.555		
	XCK..	0.6	2.13	0.058	0.2	17.6	0.69	15.7 ± 1.0		0.4	0.015	14.3	0.562		
	XCC..	0.31	1.10	0.026	0.09	17.6	0.69	15.7 ± 1.1		0.4	0.015	14.3	0.562		
	XCH..	0.22	0.78	0.021	0.07	17.6	0.69	15.8 ± 1.0		0.4	0.015	14.4	0.566		
	XCF..	1.05	3.74	0.16	0.57	14.3	0.56	12.5 ± 1.1	$\left. \begin{array}{l} 0.49 \pm 0.043 \\ 0.49 \pm 0.039 \\ 0.5 \pm 0.039 \\ 0.5 \pm 0.039 \end{array} \right\}$	0.6	0.023	10.6	0.417		
	XCG..	0.6	2.13	0.08	0.28	14.3	0.56	12.5 ± 1.0		0.5	0.019	10.7	0.421		
	XCK..	0.42	1.49	0.056	0.21	14.3	0.56	12.6 ± 1.0		0.5	0.015	10.8	0.425		
	XCC..	0.22	0.78	0.025	0.11	14.3	0.56	12.6 ± 1.0		0.4	0.015	10.8	0.425		
	XCH..	0.13	0.46	0.02	0.07	14.3	0.56	12.7 ± 1.0		0.4	0.015	10.9	0.429		

Ordering Reference

Basic type	XCF XCG XCK XCC XCH	3 N 1,7 N 1,2 N 0,6 N 0,35 N	10,7 ozf 6,07 ozf 4,28 ozf 2,14 ozf 1,24 ozf	Example: XCF	4	3	V	-81	-J1	Z1
Circuits		No symbol, change-over								
	4	Normally closed (NC)								
	5	Normally open (NO)								
Terminals	3 4 5 8 9 10 11 12 13 14 15	Solder plug 2.8 × 0.5 mm DIN plug 2.8 × 0.5 mm AMP PCB, L = 4.5 mm PCB, 1/10" pitch, L = 4.5 mm PCB, formed to base PCB, formed to lid PCB, formed to base, 1/10" pitch PCB, formed to lid, 1/10" pitch PCB, L = 3.5 mm PCB, 1/10" pitch, L = 3.5 mm								
Version	V W	No symbol, Housing material MF, Europe up to 85°C, UL up to 90°C (High temperature 125°C), Housing material MF / Plunger PBT, Europe up to 125°C, UL up to 130°C (High temperature 140°C), Housing material MF / Plunger PPS, Europe up to 140°C, UL up to 150°C								
Contacts	-81	No symbol, Ag (Ag) μ profile Au 10 μm								
Actuators	-J1 -J2 -J5 -S1 -L1 -L6 -L9 -P5 -P6 -U1	No symbol, plunger Plain lever 18,0 mm (0.71 in) Plain lever 25,0 mm (0.98 in) Plain lever 40,0 mm (1.57 in) Roller lever 16,0 mm (0.63 in) Cam follower 16,0 mm (0.63 in) Cam follower 18,0 mm (0.71 in) Cam follower 18,5 mm (0.73 in) Plastic lever 16,0 mm (0.63 in) Plastic lever 18,0 mm (0.71 in) Mushroom plunger								
		Other actuators on special request.								
Approvals	Z1	No symbol, ENEC UL, CSA								