

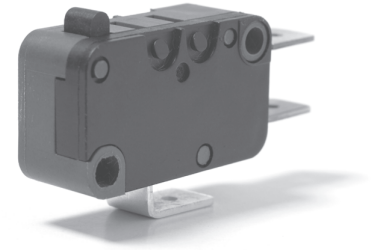
X3

Snap-action Microswitches

Miniature

X3

Characteristics	■ 8 mm creepage and 8 mm clearance distance to the actuator ■ Long mechanical and electrical life
Rating	250 VAC, 21 A
Dimensions (mm)	27,8 × 15,9 × 10,3
Actuator	Plain lever, simulated roller cam follower levers, roller levers
Approvals	UL, cUL, CSA, ENEC, CCEE



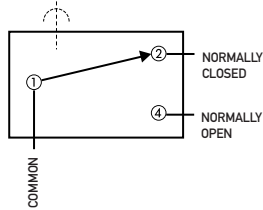
Preferred Range

Ordering Reference	Actuating Force (N)	(ozf)	Operating pos. (mm)	Terminal	Circuit	Actuator	Contacts	Electrical rating ENEC	UL/CSA
X3M302K2KA	1.60	5.72	14,7 +0.2/-0.4	Faston	CO	Plunger	Ag/AgNi10	16 (6) A	20.5 A
X3M302K2KAJ32	0.88	3.15	15 ± 1.0	Faston	CO	Plain lever	Ag/AgNi10	16 (6) A	20.5 A
X3M302K2KAJ62	0.57	2.04	14,8 ± 1.5	Faston	CO	Plain lever	Ag/AgNi10	16 (6) A	20.5 A
X3M302K2KAT02	2.00	7.15	20,2 ± 0.7	Solder	CO	Roller lever	Ag/AgNi10	16 (6) A	20.5 A
X3M303K2KA	1.60	5.72	14,7 +0.2/-0.4	Solder	CO	Plunger	Ag/AgNi10	16 (6) A	20.5 A
X3M306K2KA	1.60	5.72	14,7 +0.2/-0.4	Faston	CO	Plain lever	Ag/AgNi10	16 (6) A	20.5 A
X3C302K2LB	0.80	2.86	14,7 +0.2/-0.4	Faston	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3C302K2LBJ32	0.35	1.25	15 ± 1.0	Faston	CO	Plain lever	Ag/AgNi10	10 (3) A	12 A
X3C303K2LB	0.80	2.86	14,7 +0.2/-0.4	Solder	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3C306K2LB	0.80	2.86	14,7 +0.2/-0.4	Faston	CO	Plunger	Ag/AgNi10	10 (3) A	12 A
X3L302K6DD	1.50	5.36	14,7 +0.2/-0.4	Faston	CO	Plunger	Ag/AgCdO	21 (8) A	21 A
X3L303K6DD	1.50	5.36	14,7 +0.2/-0.4	Solder	CO	Plunger	Ag/AgCdO	21 (8) A	21 A

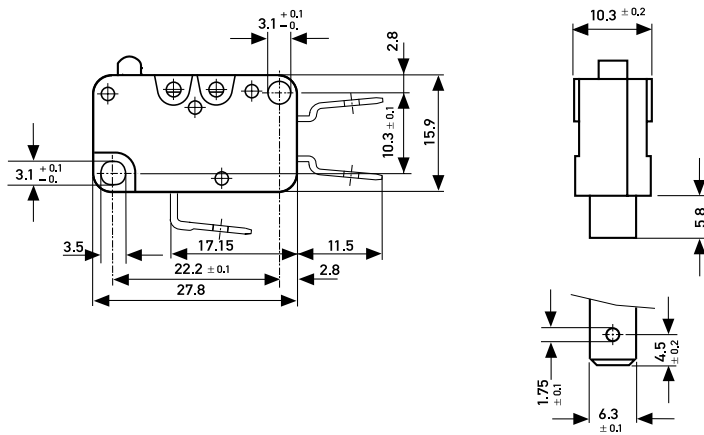
Specifications

Housing	Thermoplastic
Plunger	Thermoplastic
Mechanism	Snap-action, single pole beryllium bronze blade mechanism with wiping contacts
Contact carrier	Brass
Contacts	Fine silver (Ag) and AgNi10
Terminals	Solder, Faston and RAST 5 terminals
Temperature range °C	Between -40°C and +125°C
Mechanical life	10 ⁶ cycles minimum (sinusoidal and up to 80% of the overtravel)
Protection	Enclosure IP40
Mounting	Side mounting via mounting holes
Actuators	Plain lever, formed lever, simulated roller lever, roller lever

Circuit diagram



Dimensions



Recommended maximum electrical ratings

	Voltage (VAC)	Resistive load (A)	Motor load (A)	Approvals ENEC (A)		Approvals UL (VAC)		Motor load
				(A)	(VAC)	(A)	(VAC)	
X3M	250	16	6	16 (6)	5E4 250	20,5	250	1½ HP
X3C	250	10	3	10 (3)	5E4 250	20,5	125	½ HP
						12	250	⅓ HP
						12	125	⅓ HP
X3L	250	21	8	21 (8)	1E4 250	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

Ordering Reference

Type	X3	
Actuating Force	M Standard force Fs max.: 160 cN	
	L Standard force Fs max.: 150 cN	
	C Low force Fs max.: 80 cN	
Circuit	3 Change-over	
	4 Normally closed (NC)	
	5 Normally open (NO)	
Terminals	02 Faston terminal 6.3 × 0.8 mm	13 PCB-terminal, bent to lid
	03 Solder terminal	14 PCB-terminal, bent to base
	06 Faston terminal 4.8 × 0.5 mm	15 Faston terminal RAST 5 6.3 × 0.8 mm
	10 Faston terminal 4.8 × 0.8 mm	16 Faston terminal RAST 5 4.8 × 0.8 mm
	12 Solder terminal, short	
Housing design	K Thermoplastic	
Contacts	2 Ag/AgNi10	
	6 AgCd0	
	8 Gold plated	
Approval classes in accordance with UL/cUL/CSA	A 125/250 VAC, 20.5 A 125/250 VAC, 15 A 100'000 cy. 250 VAC, 1½ HP; 125 VAC, ½ HP	M 125/250 VAC, 6 A 250 VAC, ½ HP; 125 VAC, ½ HP
	D 250 VAC, 21 A 250 VAC, 2 HP; 125 VAC, 1 HP	N No approvals
	E 125/250 VAC, 21 A 125/250 VAC, 15 A 100'000 cy. 250 VAC, 2 HP; 125 VAC, 1 HP	P 125/250 VAC, 20.5 A 250 VAC, 1½ HP; 125 VAC, ½ HP 250 VDC, ¼ A; 125 VDC, ¼ A
	K 125/250 VAC, 20.5 A 250 VAC, 1½ HP; 125 VAC, ½ HP	Q 125/250 VAC, 12 A 250 VAC, ½ HP; 125 VAC, ½ HP 250 VDC, ¼ A; 125 VDC, ¼ A
	L 125/250 VAC, 12 A 250 VAC, ½ HP; 125 VAC, ½ HP	R 125/250 VAC, 6 A 250 VAC, ½ HP; 125 VAC, ½ HP 250 VDC, ¼ A; 125 VDC, ¼ A
Approval classes in accordance with ENEC	A 250 V, 16 (6) A ~ 5E4 T125 µ approved	
	B 250 V, 10 (3) A ~ 5E4 T125 µ approved	
	C 250 V, 6 (3) A ~ 5E4 T125 µ approved	
	D 250 V, 21 (8) A ~ 1E4 T105 µ approved	
Actuators	No digit Without lever	
	J0 Plain lever	
	L0 Simulated roller lever	
	M0 Customer specified lever (KV)	
	T0 Roller level	
	U0 Externally mounted lever	
Actuator position	No digit Without lever	
	2 Rear lever	
	4 Front lever	