

Switches

Snap-action Microswitches

Ultraminiature



Type **X5**



F1



F1NS



F4



F5

Characteristics	<ul style="list-style-type: none"> ■ small size ■ low current ■ PCB mounting 	<ul style="list-style-type: none"> ■ small size ■ high current ■ long mechanical life ■ PCB mounting from side 	<ul style="list-style-type: none"> ■ small size ■ low current ■ long mechanical life ■ PCB mounting from side ■ sealed (IP54) 	<ul style="list-style-type: none"> ■ small size ■ long mechanical and electrical life ■ solder terminals ■ 2.8 mm quick connect ■ PCB terminals 	<ul style="list-style-type: none"> ■ small size ■ long mechanical and electrical life ■ PCB mounting
Rating	250 VAC, 1.5 A	250 VAC, 5 A	up to 250 VAC, 1 A	250 VAC, 5 A	250 VAC, 5 A
Dimensions (mm)	13 x 6.5 x 6	16 x 6 x 6.5	16 x 6.5 x 6	12.8 x 10 x 5	12.8 x 7 x 5
Actuator	<ul style="list-style-type: none"> ■ plunger ■ plain levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ simulated roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain lever ■ simulated roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ simulated roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ simulated roller levers
Approvals	UL, CSA	UL, CSA		UL, CSA	UL, CSA

Snap-action Microswitches

Ultraminiature



Type **F6**

Subminiature



XC



X4



V4NC



V4N

Characteristics	<ul style="list-style-type: none"> ■ small size ■ sealed construction (IP67) ■ PCB mounting 	<ul style="list-style-type: none"> ■ wide number of force variants ■ long mechanical and electrical life ■ solder terminals ■ PCB terminals 	<ul style="list-style-type: none"> ■ thermoplastic housing ■ wide number of force variants ■ long mechanical and electrical life ■ solder and quick connect terminals 	<ul style="list-style-type: none"> ■ peg mounting option ■ pre-wired ■ sealed (IP67) ■ wide variety of levers ■ solder and quick connect terminals ■ PCB terminals 	<ul style="list-style-type: none"> ■ solder terminals ■ 2.8 mm quick connect ■ PCB terminals ■ sealed (IP67)
Rating	12–30 VDC, 5–300 mA	250 VAC, up to 12 A	up to 250 VAC, 12 A	250 VAC, 5 A	250 VAC, 5 A
Dimensions (mm)	14.65 x 9 x 5.35	19.9 x 9.5 x 6.4	19.9 x 9.65 x 6.4	20 x 10.3 x 6.4	20 x 10.3 x 6.4
Actuator	<ul style="list-style-type: none"> ■ plunger ■ plain levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ simulated roller levers ■ roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ roller levers ■ simulated roller levers 	<ul style="list-style-type: none"> ■ plunger ■ plain levers ■ roller levers ■ simulated roller levers
Approvals	none	ENEC, UL, cUL, CSA	UL, cUL, CSA, ENEC, CCEE	none	UL, CSA

Snap-action Microswitches

Subminiature



Type **V4L**

Miniature



Type **XG**



Type **X3**



Type **G3**

Characteristics	<ul style="list-style-type: none"> long overtravel of 2.2 mm minimum sealed to IP67 pre-wired option available solder terminals 	<ul style="list-style-type: none"> wide number of force variants long mechanical and electrical life solder terminals quick connect PCB terminals 	<ul style="list-style-type: none"> 8 mm creepage and 8 mm clearance distance to the actuator long mechanical and electrical life solder terminals quick connect PCB terminals 	<ul style="list-style-type: none"> low force variants long mechanical and electrical life quick connect and solder terminals
Rating	250 VAC, 5 A	up to 250 VAC, 26 A (XGT 86)	up to 250 VAC, 21 A	up to 250 VAC, 18 A
Dimensions (mm)	20 x 11 x 6.4	27.8 x 15.9 x 10.3	27.8 x 15.9 x 10.3	28 x 16 x 10
Actuator	<ul style="list-style-type: none"> plunger plain lever ice break lever 	<ul style="list-style-type: none"> plunger plain levers roller levers simulated roller levers 	<ul style="list-style-type: none"> plunger straight lever simulated roller levers roller levers 	<ul style="list-style-type: none"> plunger ramp plunger
Approvals	VDE (EN), UL	ENEC, UL, cUL, CSA	UL, cUL, CSA, ENEC, CCEE	ENEC, UL, CSA

Snap-action Microswitches

Miniature



Type **V3S**



Type **V9N**



Type **PN4**



Type **4BR**



Type **3BR**

Characteristics	<ul style="list-style-type: none"> sealed construction (IP67) flying leads robust construction 	<ul style="list-style-type: none"> metal housed sealed construction screw terminals or flying leads sealed (IP67) 	<ul style="list-style-type: none"> precision switching long mechanical life screw terminals 	<ul style="list-style-type: none"> choice of IP54 or IP67 sealed versions precise movements and exceptional repeat accuracy robust metal housing flying lead version available 	<ul style="list-style-type: none"> choice of IP54 or IP67 sealed versions precise movements and exceptional repeat accuracy robust metal housing flying lead version available
Rating	250 VAC, 5 A	250 VAC, 10 A	250 VAC, 15 A	up to 250 VAC, 15 A	up to 250 VAC, 10 A
Dimensions (mm)	32 x 24 x 10	42 x 24.5 x 16	49 x 22 x 17.5	53.1 x 20.6 x 29.2	53.1 x 20.6 x 30.8
Actuator	<ul style="list-style-type: none"> plunger plain levers roller levers 	<ul style="list-style-type: none"> plunger plain levers reverse action levers roller levers 	<ul style="list-style-type: none"> plunger plain lever roller lever 	<ul style="list-style-type: none"> plunger 	<ul style="list-style-type: none"> plunger
Approvals	UL, CSA, ENEC	UL, CSA	UL, CSA	CSA	CSA

Snap-action Microswitches

Standard



Type **4CR**



Type **M9 / C9**



Type **M2V3 / C2V3**

Miniature



Type **BVM3**



Type **V9B**

Characteristics	<ul style="list-style-type: none"> precise movements and exceptional repeat accuracy robust metal housing screw terminals 	<ul style="list-style-type: none"> sealed to IP67 internal earth (ground) screw provided trident spring mechanism for precise movements hazardous area version 	<ul style="list-style-type: none"> sealed to IP65 contains two electrically independent change-over switches rotary action levers can be mounted in four different positions and then adjusted through 360° 	<ul style="list-style-type: none"> positive action forced break contacts internationally recognised V3 housing quick connect terminals 	<ul style="list-style-type: none"> positive action forced break contacts metal housed with screw terminals or flying leads sealed construction (IP67)
Rating	up to 250 VAC, 15 A	up to 250 VAC, 15 A	up to 250 VAC, 10 A	250 VAC, 10 A	250 VAC, 10 A
Dimensions (mm)	53.1 x 20.6 x 30.8	76.7 x 45.8 x 26	66.9 x 38.3 x 30.2	28 x 16 x 10.5	42 x 24.5 x 16
Actuator	<ul style="list-style-type: none"> spring plunger spring plunger with in-line roller 	<ul style="list-style-type: none"> spring plunger adjustable roller lever wobble stick 	<ul style="list-style-type: none"> spring plunger roller levers rod lever wobble stick 	<ul style="list-style-type: none"> plunger plain levers roller levers 	<ul style="list-style-type: none"> plunger plain levers roller levers
Approvals	CSA	UL, CSA, ATEX	UL, CSA	UL, CSA	UL, CSA

Positive-action Switches

Special types



Type **KB5**



Type **KB5EQ**

Double break



Type **K5**



Type **FK4**



Type **XP**

Characteristics	<ul style="list-style-type: none"> positive action double break switching high electrical rating quick connect terminals 	<ul style="list-style-type: none"> positive action double break switching enclosed design long overtravel screw terminals 	<ul style="list-style-type: none"> double break switching long mechanical life high electrical rating 6.3 mm quick connect terminals 	<ul style="list-style-type: none"> double break switching long mechanical and electrical life solder terminals 2.8 mm quick connect PCB terminals 	<ul style="list-style-type: none"> long overtravel single/double pole switching quick connect terminals double break switching forced break option
Rating	250 V, 25 A	250 VAC, 25 A	250 VAC, 25 A	250 VAC, 5 A	250 VAC, 16 A
Dimensions (mm)	41 x 19 x 15.5	54 x 50 x 17.5	41 x 19 x 15.5	18 x 8 x 5	30 x 32 x 12
Actuator	<ul style="list-style-type: none"> plunger plain lever roller levers 	<ul style="list-style-type: none"> plunger plunger roller 	<ul style="list-style-type: none"> plunger plain levers roller levers 	<ul style="list-style-type: none"> plunger plain lever simulated roller levers 	<ul style="list-style-type: none"> plain plunger mushroom/shrouded plunger
Approvals	UL, CSA	UL, CSA	UL, CSA	UL, CSA	ENEC, UL, CSA

Special Switches

	Snap-action				
Type	XT	M0	600	TPS	DS
Characteristics	<ul style="list-style-type: none"> 8 mm contact gap and 8 mm creepage and air-gaps between individual and accessible parts safe mechanical separation by reset springs double break contacts 	<ul style="list-style-type: none"> mid-off function sealed IP6K7 spring return to centre toggle action long overtravel 	<ul style="list-style-type: none"> low and medium torque operation horizontal and vertical actuation 6.35 x 0.8 fast-on 	<ul style="list-style-type: none"> enclosed with snap action long overtravel adjustable operating position screw terminals 	<ul style="list-style-type: none"> enclosed with snap action long overtravel compact construction tapped plunger for attachments screw terminals
Rating	up to 400 VAC, 16.5 A	12 VDC, 100 mA	250 VAC, 5 A	250 VAC, 15 A 380 VAC, 10 A	250 VAC, 15 A
Dimensions (mm)	30 x 32 x 12	13 x 25.5 x 5.5	39.6 x 22 x 16.4	54 x 50 x 18	48 x 51 x 16
Actuator	shrouded plunger	pendulum	wire levers	plain spindle plunger	plain spindle plunger
Approvals	UL, cUL, CSA, ENEC	None	None	UL, CSA	UL, CSA

Momentary Switches

	Momentary		Snap-action	
Type	1427	1430	1429	XKA
Characteristics	<ul style="list-style-type: none"> single pole quick connect snap-in mounting or central-fixing 	<ul style="list-style-type: none"> single pole quick connect snap-in mounting or central-fixing 	<ul style="list-style-type: none"> single pole snap-action function quick connect snap-in mounting 	<ul style="list-style-type: none"> long overtravel micro disconnection snap-in mounting
Rating	250 VAC, 0.2 [0.2] A	250 VAC, 0.2 [0.2] A	250 VAC, 0.2 [0.2] A	250 VAC, 1 A
Dimensions (mm)	various	various	various	28 x 20 x 15
Actuator	plunger	lever	plunger	plain lever round levers
Approvals	ENEC	ENEC	ENEC	UL, cUL, CSA, ENEC