OMRON

Switch Selection

SWITCH SELECTION

Select suitable switches from wide variations
according to the applications and shapes

Basic Switches/ Door Interlock Power Switches/ Miniature Detection Switches/ Tactile Switches/ Rocker Switches/
Pushbutton Switches/ DIP Switches/ Thumbwheel Switches

Miniature switches to be installed in devices and mounted on the PCB.
Enable to select suitable switches from wide variations according to the applications and shapes.

Detection Switches
Used to detect the positions of objects.

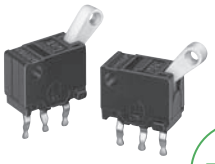
Basic Switches
- Miniature types (V-size)
- Subminiature types (S-size)
- Ultra subminiature types (J-size)

P.6

Door Interlock Power Switches
- Door interlock power

P.13

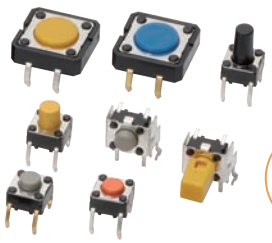
Miniature Detection Switches
- Detection



P.13

Manual Switches
Used to allow workers to make inputs to equipment.

Tactile Switches
- Through-hole mounting types
- Illuminated types
- Sealed types
- Surface mounting types



P.14

Rocker Switches
- Miniature types
- Illuminated types
- Reset function types

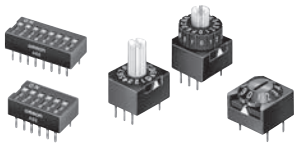
P.19

Pushbutton Switches/ Indicators
- Round types
- Square types

P.21

Setting Switches
Used to set up the operation of equipment.

DIP Switches
- Slide types
- Piano types
- Rotary types



P.24

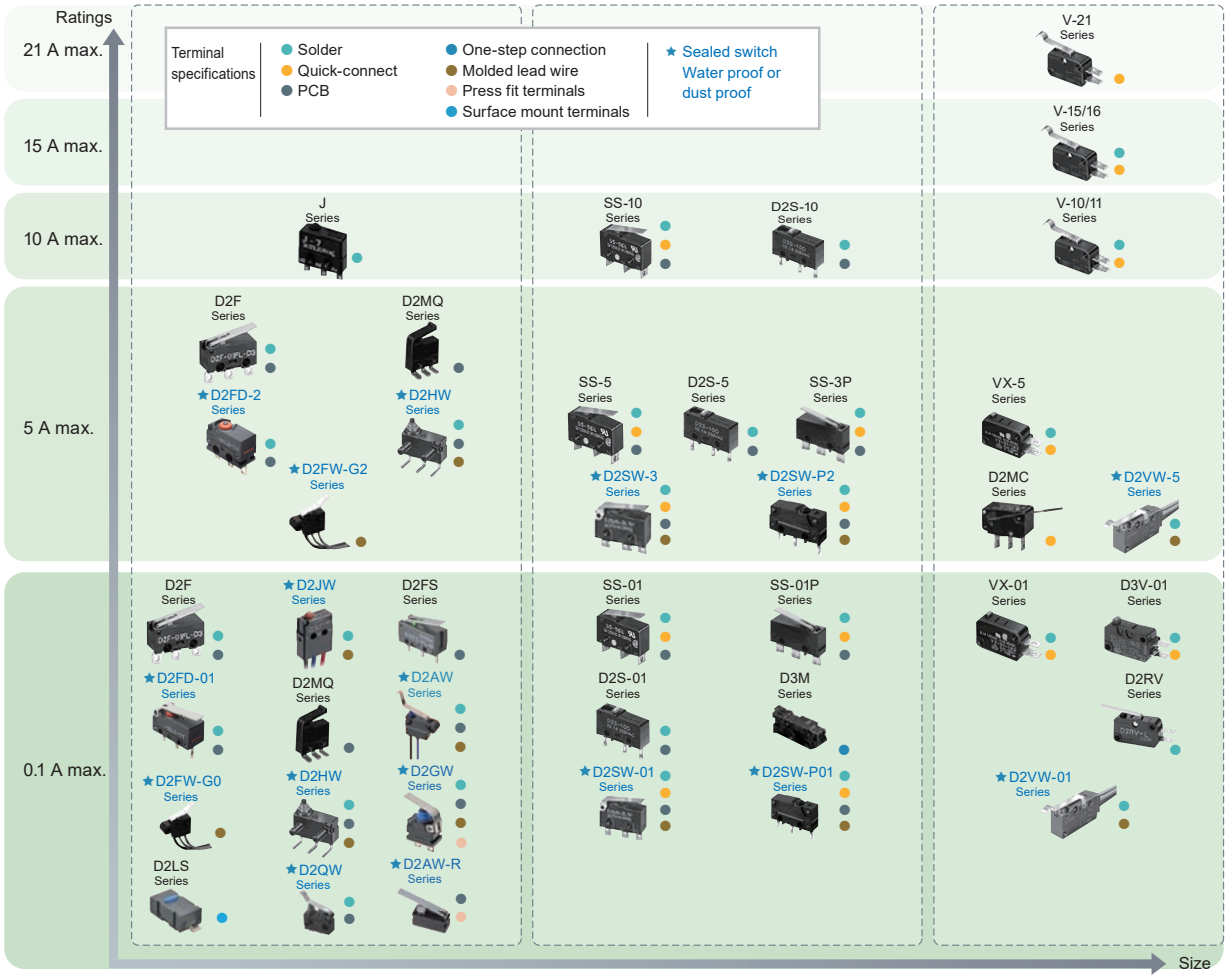
Thumbwheel Switches
- Push operation types
- Rotary operation types

P.32

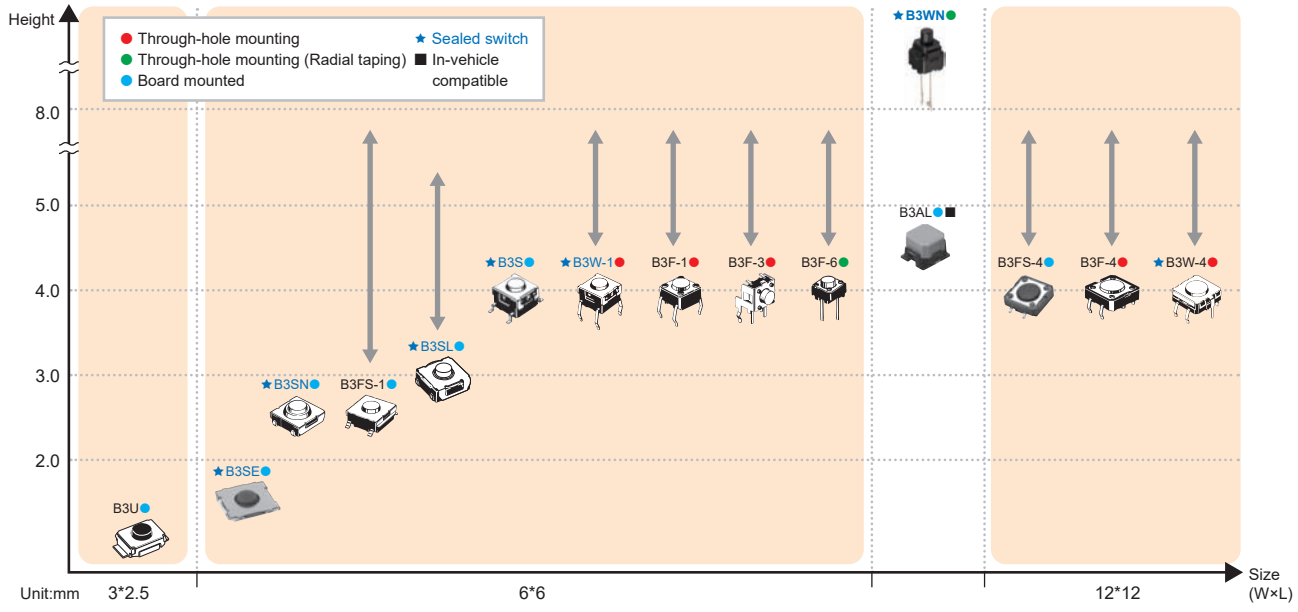
P.34 Application Examples

- OMRON Switches Do you know about them?
- Application Example Details (Smart Building / Smart Home / Entertainment / Factory Automation)

P.6 Basic Switches Line Up

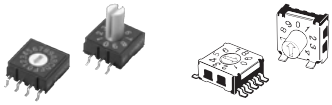


P.14 Tactile Switches Line Up



P.24

DIP Switches Line Up

	Slide	Piano	Rotary
Board hole insertion terminals	 Standard types A6T; High reliability types A6TN; Box types A6E-N; Sealed types A6D	 Box types A6FR; Thin types A6TR; Sealed types A6DR	 Standard types A6R A6RV; Sealed types A6A; Miniature types/ Sealed types A6C A6CV
Board surface mounted terminals	 High reliability types A6SN; High solder Heat resistant type A6S-H; Half pitch types A6H A6HF	 Thin types A6SR; Half pitch types A6HR	 Standard types A6RS; Miniature types A6K A6KS A6KSV

P.22

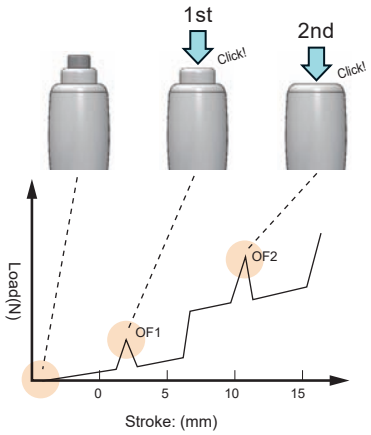
Pushbutton Hand Switches Line Up

Product type

Standard types	Type with sub-switch	Wireless type with sub-switch
		
C2U	C2UW	C2UW-L

Built-in functions

Two step snap action mechanism (double action)



Sub-switch + Touch sensor function

Can be used for operations separate from the main switch (such as for lighting irradiation lamps)

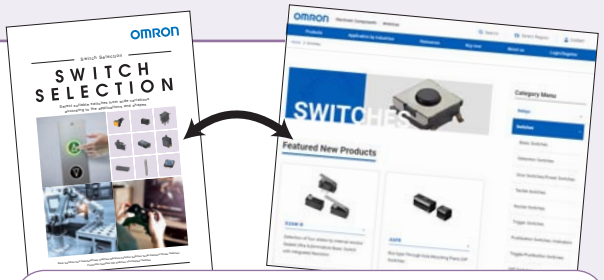
To prevent incorrect operation!

Easy Selection!

OMRON Web Application Guide

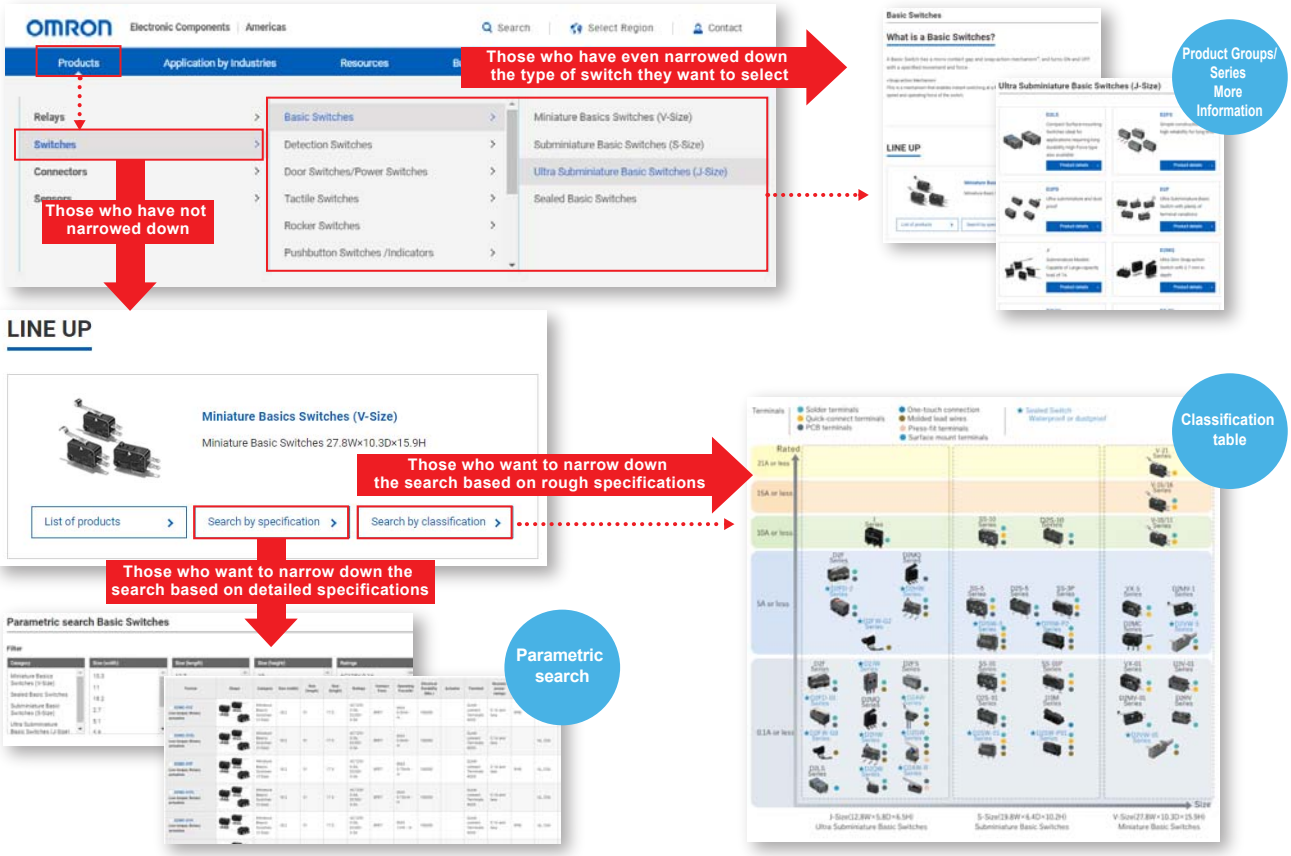
OMRON Electronic Components Business website has been renewed!

OMRON Electronic Components **Search**

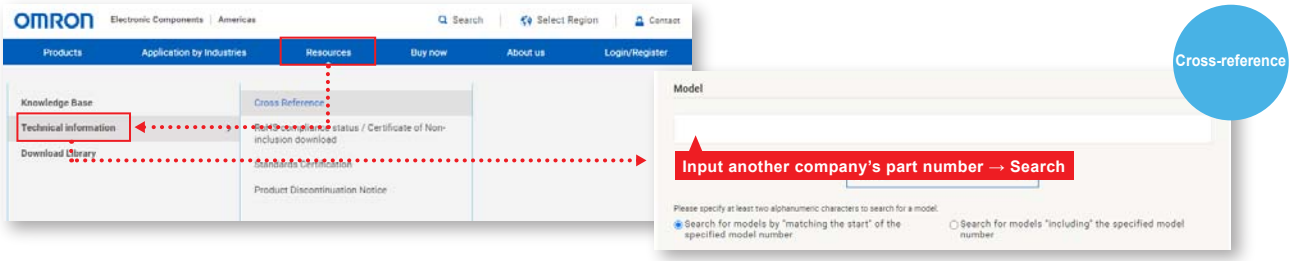


This selection guide has QR codes and they are linked to OMRON's website. It is convenient for you to use them in conjunction with our website.

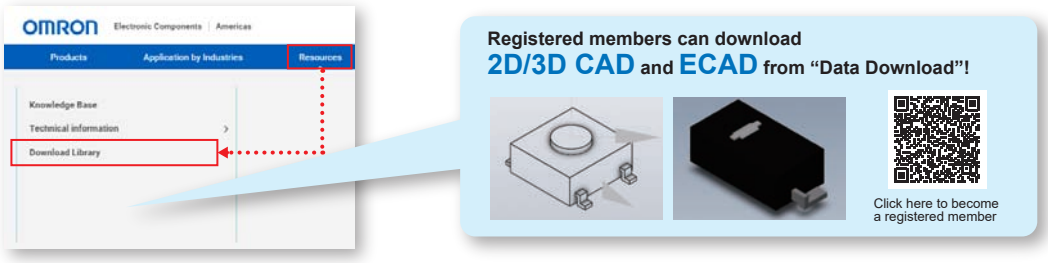
Want to select an OMRON switch!



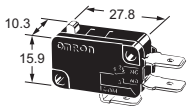
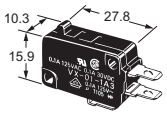
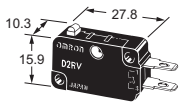
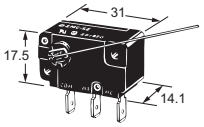
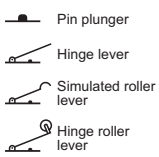
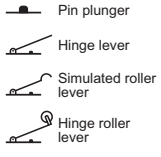
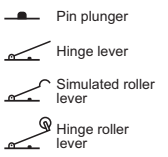
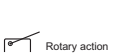
Need to find the equivalent of another company's part number!



Want to know information on technical data, environmental compliance, and standards certification right away!

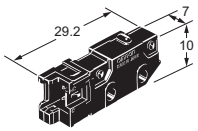
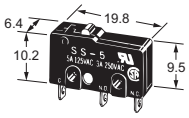


Basic Switches

Classification		Miniature types (V-size)					Miniature types (V-size)		
Model		V			VX		D2RV	D2MC	
Appearance									
		V-21	V-16	V-11	VX-5	VX-01		D2MC-5	D2MC-01
Features		•Standard miniature basic switch offers high reliability.			•Compact basic switch with low load operation and high contact reliability.		•High reliability for micro load applications, even in adverse atmosphere.	•Rotary-action switch with low torque operation.	
Contact form		SPDT / SPST-NC / SPST-NO			Miniature basic switch with low operating force and high contact reliability		SPST-NO	SPDT	
Contact	Specification	Rivet			Rivet	Crossbar	Reed switches	Rivet	Crossbar
	Material	Silver alloy			Silver alloy	Gold alloy		Silver alloy	Gold alloy
	Gap	1 mm			0.5 mm			0.5 mm	
Ratings (resistive load)		21 A at 250 VAC 0.6 A at 125 VDC 0.3 A at 250 VDC	16 A at 250 VAC 0.6 A at 125 VDC 0.3 A at 250 VDC	15 A at 250 VAC 0.6 A at 125 VDC 0.3 A at 250 VDC	5 A at 250 VAC	0.1 A at 125 VAC 0.1 A at 30 VDC	Switching voltage 100 V DC max. Switching current 0.25 ADC max. Contact capacity 10 WDC max.	5 A at 125 VAC 5 A at 250 VAC	0.5 A at 125 VAC 0.5 A at 30 VDC
Inrush current	NC	50 A max.	40 A max.	36 A max.	15 A max.	---	---	15 A max.	0.5 A max.
	NO							7 A max.	
Minimum applicable load (reference values)		160 mA at 5 VDC			160 mA at 5 VDC	1 mA at 5 VDC	0.1 mA at 5 VDC	160 mA at 5 VDC	1 mA at 5 VDC
Contact resistance (initial values)		15 mΩ max.			30 mΩ max.	50 mΩ max.	150 mΩ max.	20 mΩ max.	100 mΩ max.
Operating force (see note1)		3.92 N max.	1.96 N max. 3.92 N max.	0.98 N max.	0.25 N max. 0.49 N max.		0.25 N max. 0.49 N max. 0.98 N max.	0.5 mN·m max. 0.75 mN·m max. 1.00 mN·m max.	
Durability (see note1)	Mechanical	50,000,000 operations min.			50,000,000 operations min.	10,000,000 operations min.	10,000,000 operations min.	10,000,000 operations min.	
	Electrical	100,000 operations min.		1,000,000 operations min.	500,000 operations min.	1,000,000 operations min.	3,000,000 operations min.	100,000 operations min.	
Degree of protection		IEC IP40			IEC IP40		IEC IP40	IEC IP40	
Ambient operating temperature		-25 to +80°C	-25 to +105°C (Heat resistive:-25 to +150°C)		-25 to +105°C		-10 to +60°C	-25 to +80°C	
Ambient operating humidity		85%RH max. (for +5 to +35°C)			85%RH max. (for +5 to +35°C)		85%RH max. (for +5 to +35°C)	85%RH max. (for +5 to +35°C)	
Actuators									
Terminals		Quick-connect (#250)	Solder Quick-connect (#187) Quick-connect (#250)		Solder Quick-connect (#187)		Solder	Quick-connect (#205)	
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.							

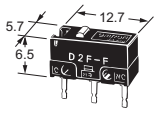
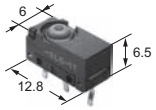
Note 1: For pin plunger type

Basic Switches

Classification		Subminiature types (S-size)			
Model		D3M	SS		
Appearance					
			SS-10	SS-5	SS-01
Features		·Quick-connect terminals simplify wiring.	·S-size standard basic switch offers high reliability and easy-to-use.		
Contact form		SPST-NC / SPST-NO	SPDT / SPST-NC / SPST-NO		
Contact	Specification	Crossbar	Rivet		Crossbar
	Material	Gold alloy	Silver alloy	Silver	Gold alloy
	Gap	0.5 mm	0.5 mm		0.25 mm
Ratings (resistive load)		0.1A at 30 VDC	10.1 A at 250 VAC	5 A at 125 VAC 3 A at 250 VAC	0.1 A at 125 VAC 0.1 A at 30 VDC
Inrush current	NC	1A max.	20A max.		1 A max.
	NO		15 A max.	10 A max.	
Minimum applicable load (reference values)		1mA at 5 VDC	160mA at 5 VDC		1 mA at 5 VDC
Contact resistance (initial values)		100 mΩ max.	OF 1.47 N : 30 mΩ max.	OF 1.47 N : 30 mΩ max. OF 0.49 N : 50 mΩ max.	OF 1.47 N : 50 mΩ max. OF 0.49 N : 100 mΩ max. OF 0.25 N : 150 mΩ max.
Operating force (see note1)		1.50 N max.	1.47 N max.	0.49 N max. 1.47 N max.	0.25 N max. 0.49 N max. 1.47 N max.
Durability (see note1)	Mechanical	500,000 operations min.	10,000,000 operations min.	30,000,000 operations min.	
	Electrical	200,000 operations min.	50,000 operations min.	200,000 operations min.	
Degree of protection		IEC IP40	IEC IP40		
Ambient operating temperature		-25 to +85°C	-25 to +85°C		
Ambient operating humidity		80%RH max. (for +5 to +35°C)	85%RH max. (for +5 to +35°C)		
Actuators		Pin plunger Hinge lever Simulated roller lever Hinge roller lever	Pin plunger Hinge lever Simulated roller lever Hinge roller lever		
Terminals		The terminals connect to JST's XA Connector	Solder Quick-connect (#110) PCB		
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.			

Note 1: For pin plunger type

Basic Switches

Classification		Ultra subminiature types (J-size)				
Model		D2F			D2FD	
Appearance						
		D2F-5	D2F	D2F-01	D2FD-2	D2FD-01
Features		·Ultra subminiature basic switches with wide variations, which meet a wide range of applications.			·Dust proof basic switch conforms to IP6X.	
Contact form		SPDT			SPDT	
Contact	Specification	Crossbar			Crossbar	
	Material	Silver alloy		Gold alloy	Silver alloy	Gold alloy
	Gap	0.25 mm			0.25 mm	
Ratings (resistive load)		3 A at 125 VAC 5 A at 250 VAC 2 A at 30 VDC	1 A at 125 VAC 0.5 A at 30 VDC	0.1 A at 30 VDC	2 A at 125 VAC 2 A at 30 VDC	0.1 A at 125 VAC 0.1 A at 30 VDC
Inrush current	NC	---	---	---	---	---
	NO					
Minimum applicable load (reference values)		100 mA at 5 VDC		1 mA at 5 VDC	100 mA at 5 VDC	1 mA at 5 VDC
Contact resistance (initial values)		30 mΩ max.	50 mΩ max.	100 mΩ max.	30 mΩ max.	100 mΩ max.
Operating force (see note1)		1.47 N max.	0.74 N max.	0.74 N max. 1.47 N max.	2.0 N max.	
Durability (see note1)	Mechanical	1,000,000 operations min.			300,000 operations min.	
	Electrical	30,000 operations min.		100,000 operations min.	30,000 operations min.	100,000 operations min.
Degree of protection		IEC IP40			IEC IP6X	
Ambient operating temperature		-40 to +85°C			-20 to +70°C	
Ambient operating humidity		85%RH max. (for +5 to +35°C)			85%RH max. (for +5 to +35°C)	
Actuators		Pin plunger Hinge lever Simulated roller lever (R1.3) Simulated roller lever (R2.5) Hinge roller lever			Pin plunger Hinge lever Simulated roller lever	
Terminals		PCB (straight, right angle, left angle, self-clinching) Solder			Self-clinching PCB Solder	
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.				

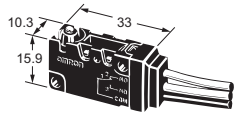
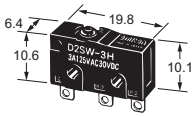
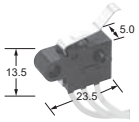
Note 1: For pin plunger type

Basic Switches (Long life)

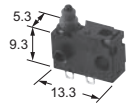
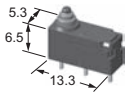
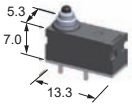
Classification		Ultra subminiature types (J-size)				
Model		D2LS				
Appearance						
		D2LS-10 D2LS-11	D2LS-21	D2LS-11(10M)	D2LS-21(10M)	D2LS-21(20M)
Features		・Surface mount type ・High load capacity and long life				
Contact form		SPDT				
Contact	Specification	Crossbar				
	Material	Silver				
	Gap	0.4 mm				
Ratings (resistive load)		1 mA at 6 VDC				
Inrush current	NC	---				
	NO					
Minimum applicable load (reference values)		1 mA at 5 VDC				
Contact resistance (initial values)		100 mΩ max.				
Operating force (see note1)		1.2±0.4 N	0.6±0.2 N	1.2±0.4 N	0.6±0.2 N	0.6±0.2 N
Durability (see note1)		5,000,000 operations min. (300 times/minute)		10,000,000 operations min. (300 times/minute)		20,000,000 operations min. (300 times/minute)
Degree of protection		IEC IP40				
Ambient operating temperature		-25 to +85°C				
Ambient operating humidity		85%RH max. (for +5 to +35°C)				
Actuators		---				
Terminals		---				

Note: The above values are initial values.
*1. Contact us for test conditions.

Basic Switches (Sealed types)

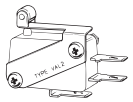
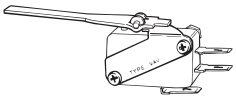
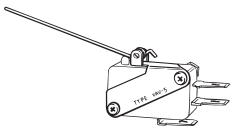
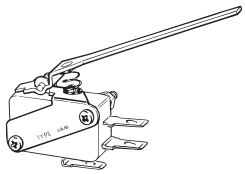
Classification		Sealed types					
Model		D2VW		D2SW		D2FW-G	
Appearance							
		D2VW-5	D2VW-01	D2SW-3	D2SW-01	D2FW-G2	D2FW-G0
Features		·High capacity and robustness ·Sealed switch capable of handling inrush currents ·Miniature internal structure is succeeded		·Sealed switch capable of handling inrush currents ·Subminiature internal structure is succeeded		·M4 mounting sealed basic switch ·High dustproof performance, even in severe environmental conditions	
Contact form		SPDT / SPST-NC / SPST-NO		SPDT / SPST-NC / SPST-NO		SPDT / SPST-NC / SPST-NO	
Contact	Specification	Rivet	Crossbar	Rivet	Crossbar	Crossbar	
	Material	Silver alloy	Gold alloy	Silver	Gold alloy	Silver alloy	Gold alloy
	Gap	0.5 mm		0.5 mm		0.25 mm	
Ratings (resistive load)		5 A at 125 VAC 5 A at 250 VAC 5 A at 30 VDC	0.1 A at 125 VAC 0.1 A at 30 VDC	3 A at 125 VAC 2 A at 250 VAC 3 A at 30 VDC	0.1 A at 125 VAC 0.1 A at 30 VDC	1 A at 30 VDC	0.1 A at 30 VDC
Inrush current	NC	15 A max.	---	20 A max.	1 A max.	---	
	NO			10 A max.			
Minimum applicable load (reference values)		160 mA at 5 VDC	1 mA at 5 VDC	160 mA at 5 VDC	1 mA at 5 VDC	100 mA at 5 VDC	1 mA at 5 VDC
Contact resistance (initial values)		Terminal model : 50 mΩ max. Molded lead wire 300 mm : 100 mΩ max. Molded lead wire 1,000 mm : 200 mΩ max.		Terminal model: 30 mΩ max. Molded lead wire : 50 mΩ max.	Terminal model : 50 mΩ max. Molded lead wire : 70 mΩ max.	100 mΩ max.	150 mΩ max.
Operating force (see note1)		1.96 N max.		1.77 N max.		Leaf lever : 2.45 N Long leaf lever : 2.94 N	
Durability (see note1)	Mechanical	10,000,000 operations min.		5,000,000 operations min.		300,000 operations min.	
	Electrical	100,000 operations min.	1,000,000 operations min.	200,000 operations min.		30,000 operations min.	100,000 operations min.
Degree of protection		IEC IP67 (Excluding the terminals on terminal model)		IEC IP67 (Excluding the terminals on terminal model)		IEC IP67 (Excluding the terminals on terminal model)	
Ambient operating temperature		-40 to +85°C		-40 to +85°C		-40 to +85°C	
Ambient operating humidity		95%RH max. (for +5 to +35°C)		95%RH max. (for +5 to +35°C)		95%RH max. (for +5 to +35°C)	
Actuators		Pin plunger Hinge lever Simulated roller lever Hinge roller lever		Pin plunger Hinge lever Simulated roller lever Hinge roller lever		Leaf lever Long leaf lever	
Terminals		Molded lead wire Solder		Molded lead wire Solder Quick-connect (#110) PCB		Molded lead wire	
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.					

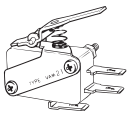
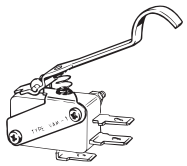
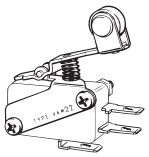
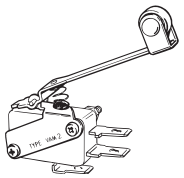
Note 1: For pin plunger type

Classification		Sealed types				
Model		D2QW	D2HW	D2AW	D2AW-R	D2GW
Appearance						
Features		・Longest stroke of all seal switches, easy to use even without a lever ・High contact reliability due to slide structure	・Small sealed snap-action switch with a very long stroke for reliable ON/OFF action. ・Various mounting, lever, and terminal specifications ・Wide rating range from 1 mA to 2 A / 5 V to 42 V	・High contact reliability due to slide structure ・Various mounting, lever, and terminal specifications ・High insulation resistance	・Sealed Ultra Subminiature Switch with Integrated Resistors. Four states (ON/OFF, short circuit, open circuit) are output. ・"Normal/abnormal operation" can be determined by the switch alone	・The industry's smallest class ・Leaf lever specification also lined up ・High contact reliability due to slide structure
Contact form		SPST-NC / SPST-NO	SPDT / SPST-NC / SPST-NO	SPST-NC / SPST-NO	Series circuit / Parallel circuit	SPST-NC / SPST-NO
Contact	Specification	Slide	Crossbar	Slide	Slide	Slide
	Material	Gold plated / Silver plated	Gold alloy	Silver plated	Silver plated	Silver plated
	Gap	---	0.5 mm	---	---	---
Ratings (resistive load)		0.1 A at 30 VDC 10 mA at 14 VDC	0.1 A at 125 VAC 2 A at 12 VDC 1 A at 24 VDC 0.5 A at 42 VDC	0.1 A at 12 VDC	5 to 14 VDC 0.25 W / 0.5 W	10 mA at 13.5 VDC
Inrush current	NC	---	---	---	---	---
	NO					
Minimum applicable load (reference values)		1 mA at 5 VDC	1 mA at 5 VDC	1 mA 5 VDC	---	1 mA at 5 VDC
Contact resistance (initial values)		Terminal model : 100 mΩ max. Molded lead wire : 150 mΩ max.	Terminal model: 100 mΩ max. Molded lead wire : 150 mΩ max.	Terminal model: 100 mΩ max. Molded lead wire : 150 mΩ max.	---	Terminal model : 500 mΩ max. Molded lead wire : 700 mΩ max.
Operating force (see note1)		1.5 N max.	0.75 N max.	1.0 N max.	1.0 N max.	1.2 N max.
Durability (see note1)	Mechanical	500,000 operations min.	1,000,000 operations min.	200,000 operations min.	200,000 operations min.	200,000 operations min.
	Electrical	0.1 A at 30 VDC : 200,000 operations min. 10 mA at 14 VDC : 500,000 operations min.	100,000 operations min.	200,000 operations min.	200,000 operations min.	200,000 operations min.
Degree of protection		IEC IP67 (Excluding the terminals on terminal model)	IEC IP67 (Excluding the terminals on terminal model)	IEC IP67 (Excluding the terminals on terminal model)	IEC IP67 (Excluding the terminals on terminal model)	IEC IP67 (Excluding the terminals on terminal model)
Ambient operating temperature		-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C
Ambient operating humidity		95%RH max. (for +5 to +35°C)	95%RH max. (for +5 to +35°C)	95%RH max. (for +5 to +35°C)	70°C 95%RH 500 hours	70°C 95%RH 500 hours
Actuators		Pin plunger Simulated leaf lever Leaf lever Bent leaf lever	Pin plunger Hinge lever Simulated roller lever Hinge roller lever Leaf lever Simulated leaf lever	Pin plunger Long straight leaf lever Leaf lever Simulated leaf lever Long leaf lever	Pin plunger Long straight leaf lever Leaf lever	Pin plunger Hinge lever Leaf lever
Terminals		Molded lead wire Solder PCB	Molded lead wire Solder PCB (straight, right angle, left angle)	Molded lead wire Solder PCB	PCB Press-fit terminals (Right angled, Left angled)	Molded lead wire Solder PCB Press-fit terminals (Right angled, Left angled)
Approved standard		See "Information on Standards certification/conformity" (available on the website) for information on the availability of certified standards.				

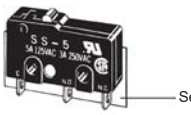
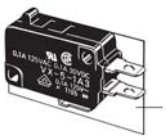
Note 1: For pin plunger type

Actuator (sold separately)

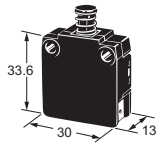
Model	Appearance	Applicable switches
Leaf spring VAL		V D2VW pin plunger type with OF over 1.96N
Roller Leaf Spring VAL2 VAL02		V D2VW pin plunger type with OF over 1.96N
Long Hinge Lever VAV		V D2RV D2VW pin plunger type with OF over 0.98N
Hinge Wire Lever VAV-5		V D3V-01 VX D2MV D2RV D2VW pin plunger type with OF over 0.25N
Reverse Long Hinge Lever VAM		V D3V-01 VX D2MV D2RV

Model	Appearance	Applicable switches
Reverse Hinge Lever VAM21		V D3V-01 VX D2MV D2RV
Reverse Hinge Modified Lever VAM-1		V D3V-01 VX D2MV D2RV
Reverse Roller Modefied Lever VAM22		V D3V-01 VX D2MV D2RV
Reverse Long Hinge Roller Lever VAM2		V D3V-01 VX D2MV D2RV

Separator (sold separately)

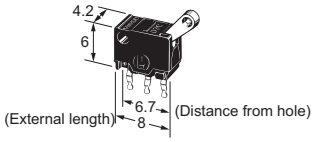
Model	Thickness (mm)	Appearance	Applicable switches
SEPATOR FOR SS T0.13	0.13		SS SS-P D2S D2SW D2SW-P
SEPATOR FOR V T0.13	0.13		V D3V-01 VX D2RV D2VW

Door Interlock Power Switches

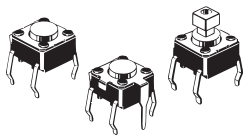
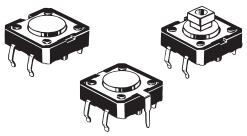
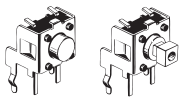
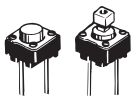
Classification		Door interlock power switches	
Model		D2D	
Appearance			
		Standard	Pull-on lock
Features		·Door interlock power switch with contact gap,3 mm.	
Contact form		DPST-NO/DPST-NO+SPST-NC/SPST-NC/SPST-NO/ SPST-NO+SPST-NC	
Contact	Specification	Rivet	
	Material	Silver	
	Gap	3 mm min.	1 mm
Ratings (resistive load)		16 A at 250 VAC	10 A at 250 VAC
Inrush current	NC	30 A max.	24 A max.
	NO		
Minimum applicable load (reference values)		160 mA at 5 VDC	
Contact resistance (initial values)		50 mΩ max.	
Operating force (see note1)		5.88 N max. 2.94 N max.	19.61 N max. 1.96 N max.
Durability (see note1)	Mechanical	10,000,000 operations min.	
	Electrical	100,000 operations min.	
Degree of protection		IEC IP40	
Ambient operating temperature		-25 to +85°C	
Ambient operating humidity		85%RH max. (for +5 to +35°C)	
Actuators		Pin plunger	
Terminals		Quick-connect (#250)	
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.	

Note 1: For pin plunger type

Miniature Detection Switches

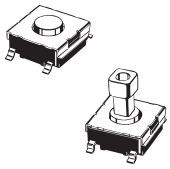
Classification		Ultra-miniature detection switches	
Model		D3C	
Appearance			
		Standard	Low operating force
Features		·Detection switch with lever action.	
Contact form		SPDT	
Contact	Specification	Slide	
	Material	Silver plated	
Ratings (resistive load)		0.1 A at 30 VDC	
Minimum applicable load (reference values)		1 mA at 5 VDC	
Contact resistance (initial values)		50 mΩ max.	
Operating force (see note1)		1.28 N max.	0.39 N max.
Durability (see note1)	Mechanical	---	
	Electrical	50,000 operations min	
Degree of protection		IEC IP00	
Ambient operating temperature		-20 to +80°C	
Ambient operating humidity		85%RH max. (for +5 to +35°C)	
Actuators		Rotary lever	
Terminals		PCB	
Approved standard		See “Information on Standards certification/ conformity” (available on the website) for information on the availability of certified standards.	

Tactile Switches (Unsealed)

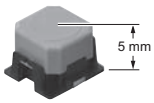
Sealed / unsealed		Unsealed												
Mounting		Through-hole mounting												
Model		B3F												
Size		6×6 mm			12×12 mm				6×6 mm					
Appearance														
Series		B3F-1000	B3F-1000-G		B3F-4000	B3F-5000	B3F-5001		B3F-3000		B3F-3000-G	B3F-6000		
		Standard	Micro load		Standard	Long durability	High reliability		Side-operate		Side-operate, Micro load	Radial taping		
Features		・Standard tactile switch with through-hole terminals Wide range of models, including 6×6 mm,12×12 mm, side-operated, radial taping packaged, high-force and gold plated types.												
Contact materials		Silver plated	Gold plated		Silver plated	Silver plated	Gold plated		Silver plated		Gold plated	Silver plated		
Ratings (resistive load)		1 to 50 mA, 3 to 24 VDC	100 µA to 50 mA, 3 to 24 VDC		1 to 50 mA, 3 to 24 VDC				1 to 50 mA, 3 to 4 VDC		100 µA to 50 mA, 3 to 24 VDC	1 to 50 mA, 3 to 24 VDC		
Minimum applicable load (reference values)		10 µA at 1 VDC												
Contact resistance (initial values)		100 mΩ max.												
Operating force		0.98 N	1.47 N	2.55 N	1.76 N	1.27 N	2.55 N	1.27 N	1.27 N	0.98 N	1.47 N	2.55 N	1.76 N	0.98 N	1.47 N
Durability		1,000,000 operations min.	300,000 operations min.	100,000 operations min.	300,000 operations min.	3,000,000 operations min.	1,000,000 operations min.	10,000,000 operations min.	10,000,000 operations min.	1,000,000 operations min.	300,000 operations min.	100,000 operations min.	300,000 operations min.	1,000,000 operations min.	300,000 operations min.
Plunger	Flat type (height:4.3 mm)	○	○	○	○	○	○	○	○	○	○	○	---	○	○
	Flat type (height:5.0 mm)	○	○	○	○	---	---	---	---	○	○	○	○	○	○
	Flat type (height:9.5 mm)	○	○	○	○	---	---	---	---	---	---	---	---	---	---
	Projected type (height:7.3 mm)	○	○	○	○	○	○	○	○	○	○	○	---	○	○
	Others	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Degree of protection		IEC IP00												
Washing		Not possible												
Ambient operating temperature		-25 to +70°C												
Ambient operating humidity		35 to 85%RH (for +5 to +35°C)												
Packaging		Bag							Bag			Radial taping		
Key top (sold separately)	4×4 mm	○			---				○			○		
	φ6 mm	○			---				○			○		
	D-shaped	○			---				○			○		
	9×9 mm	---			○				---			---		
	12×12 mm	---			○				---			---		
	φ9.5 mm	---			○				---			---		

Tactile Switches (Unsealed)

The products with this mark are also available in package reels of 100 pcs.

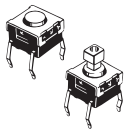
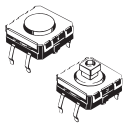
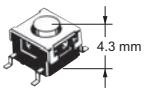
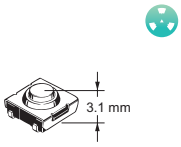
Sealed / unsealed		Unsealed						
Mounting		Surface mount						
Model		B3FS					B3U	
Size		6×6 mm			12×12 mm		3×2.5 mm	
Appearance								
Series		B3FS-1000			B3FS-4000		B3U-1000	B3U-3000
							Top-operated	Side-operated
Features		•Standard tactile switch with surface mounting terminals.					•Surface mounted ideal for high-density mounting.	
Contact materials		Silver plated					Silver plated	
Ratings (resistive load)		1 to 50 mA, 3 to 24 VDC					1 to 50 mA, 3 to 12 VDC	
Minimum applicable load (reference values)		10 µA at 1 VDC					10 µA at 1 VDC	
Contact resistance (initial values)		100 mΩ max.					100 mΩ max.	
Operating force		0.98 N	1.47 N	2.55 N	1.47 N	2.55 N	1.5 N	1.59 N
Durability		1,000,000 operations min.	300,000 operations min.	100,000 operations min.	3,000,000 operations min.	1,000,000 operations min.	200,000 operations min.	100,000 operations min.
Plunger	Flat type (height:3.1 mm)	○	○	○	---	---	---	---
	Flat type (height:3.4 mm)	---	---	---	---	---	---	---
	Flat type (height:4.3 mm)	○	○	○	○	○	---	---
	Flat type (height:5.1 mm)	---	---	---	---	---	---	---
	Projected type (height:7.3 mm)	○	○	---	○	○	---	---
	Others	---	---	---	---	---	○	○
Degree of protection		IEC IP00					IEC IP40	
Washing		Not possible					Not possible	
Ambient operating temperature		-25 to +70°C					-25 to +70°C	
Ambient operating humidity		35 to 85%RH (for +5 to +35°C)					35 to 85%RH (for +5 to +35°C)	
Packaging		Bag/Embossed taping			Embossed taping		Embossed taping	
Key top (sold separately)	4×4 mm	○			---		---	
	φ6 mm	○			---		---	
	D-shaped	○			---		---	
	9×9 mm	---			○		---	
	12×12 mm	---			○		---	
	φ9.5 mm	---			○		---	

Tactile Switches (Unsealed)

Sealed / unsealed			Unsealed					
Mounting			Surface mount					
Model			B3AL					
Size			6×6.9 mm					
Appearance								
Series			B3AL-1000	B3AL-1001	B3AL-1002	B3AL-1003	B3AL-1006	B3AL-1005	B3AL-1004
Features			・Long-stroke tactile switch with high operating force and high durability.						
Contact materials			Silver plated						
Ratings (resistive load)			1 to 50 mA, 5 to 16 VDC						
Minimum applicable load (reference values)			---						
Contact resistance (initial values)			100 mΩ max.						
Operating force			1.96 N	2.45 N	3.0 N	3.5 N	4.0 N	4.5 N	5.0 N
Durability			1,000,000 operations min.						500,000 operations min.
Plunger	Others	Long-stroke	○	○	○	○	○	○	○
		Middle-stroke	---	---	○	○	---	---	---
Degree of protection			IEC IP00						
Washing			Not possible						
Ambient operating temperature			-40 to +90°C						
Ambient operating humidity			35 to 85%RH (for +5 to +35°C)						
Packaging			Bag/Embossed taping						

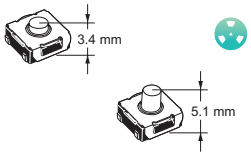
Tactile Switches (Sealed)

The products with this mark are also available in package reels of 100 pcs.

Sealed / unsealed		Sealed							
Mounting		Through-hole mounting				Surface mount			
Model		B3W				B3S		B3SN	
Size		6×6 mm		12×12 mm		6×6 mm		6×6 mm	
Appearance									
Series		B3W-1000		B3W-4000		B3S-1000			
Features		•Standard sealed tactile switch with through-hole terminals. Sealed construction for highly reliable operation in locations exposed to dust or water.				•Surface mounting tactile switch with sealed structure.		•Surface mounting thin type tactile switch with sealed structure.	
Contact materials		Silver plated				Silver plated		Silver plated	Gold plated
Ratings (resistive load)		1 to 50 mA, 3 to 24 VDC				1 to 50 mA, 3 to 24 VDC		1 to 50 mA, 3 to 24 VDC	
Minimum applicable load (reference values)		10 µA at 1 VDC				10 µA at 1 VDC		10 µA at 1 VDC	
Contact resistance (initial values)		100 mΩ max.				100 mΩ max.		100 mΩ max.	
Operating force		1.57 N max.	2.26 N max.	1.96 N max.	3.43 N max.	1.57 N max.	2.26 N max.	1.57 N	1.76 N
Durability		1,000,000 operations min.	300,000 operations min.	3,000,000 operations min.	1,000,000 operations min.	500,000 operations min.	300,000 operations min.	100,000 operations min.	
Plunger	Flat type (height:3.1 mm)	---	---	---	---	---	---	○	○
	Flat type (height:3.4 mm)	---	---	---	---	---	---	---	---
	Flat type (height:4.3 mm)	○	○	○	○	○	○	---	---
	Flat type (height:5.0 mm)	○	○	---	---	---	---	---	---
	Projected type (height:7.3 mm)	○	○	○	○	---	---	---	---
	Others	---	---	---	---	---	---	---	---
Degree of protection		IEC IP67				IEC IP67		IEC IP67	
Washing		Possible				Possible		Possible	
Ambient operating temperature		-25 to +70°C				-25 to+ 70°C		-25 to +70°C	
Ambient operating humidity		35 to 85%RH (for +5 to +35°C)				35 to 85%RH (for +5 to +35°C)		35 to 85%RH (for +5 to +35°C)	
Packaging		Bag				Bag/Embossed taping		Bag/Embossed taping	Embossed taping
Key top (sold separately)	4×4 mm	○		---		---		---	
	φ6 mm	○		---		---		---	
	D-shaped	○		---		---		---	
	9×9 mm	---		○		---		---	
	12×12 mm	---		○		---		---	
	φ9.5 mm	---		○		---		---	

Tactile Switches (Sealed)

The products with this mark are also available in package reels of 100 pcs.

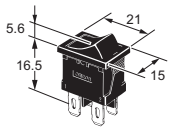
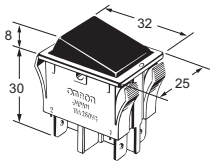
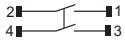
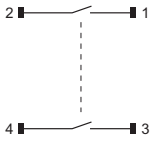
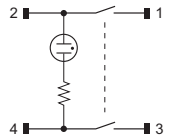
Sealed / unsealed		Sealed		
Mounting		Surface mount		
Model		B3SL		B3SE
Size		6×6 mm		6×6 mm
Appearance				
Features		•Surface mounting tactile switch with sealed structure and middle stroke.		•6×6 mm surface mounting tactile switch with high durability, ultra thin, and sealed structure.
Contact materials		Silver plated		Silver plated
Ratings (resistive load)		1 to 50 mA, 3 to 12 VDC		1 to 50 mA at 3 to 12 VDC
Minimum applicable load (reference values)		10 µA at 1 VDC		10 µA at 1 VDC
Contact resistance (initial values)		100 mΩ max.		100 mΩ max.
Operating force		1.96 N	3.5 N	1.96 N
Durability		100,000 operations min.		1,000,000 operations min.
Plunger	Flat type (height:3.1 mm)	---	---	---
	Flat type (height:3.4 mm)	○	○	---
	Flat type (height:4.3 mm)	---	---	---
	Flat type (height:5.1 mm)	○	○	---
	Projected type (height:7.3 mm)	---	---	---
	Others	---	---	○ height : 2 mm
Degree of protection		IEC IP67		IEC IP67
Washing		Not possible		Not possible
Ambient operating temperature		-25 to +90°C		-25 to + 70°C
Ambient operating humidity		35 to 85%RH (for +5 to +35°C)		35 to 85%RH (for +5 to +35°C)
Packaging		Embossed taping		Embossed taping

Sealed / unsealed		Sealed	
Mounting		Through-hole mounting	
Model		B3WN	
Size		8×8 mm	
Appearance			
Features		• Top class industrial sealing performance with double seals Compatible with radial taping	
Contact materials		Silver plated	
Ratings (resistive load)		1 to 50 mA, 3 to 12 VDC	
Minimum applicable load (reference values)		10 µA at 1 VDC	
Contact resistance (initial values)		100 mΩ max.	
Operating force		1.96 N	2.55 N
Durability		100,000 operations min.	
Plunger	Flat type (height:4.3 mm)	---	---
	Flat type (height:5.0 mm)	---	---
	Flat type (height:9.5 mm)	---	---
	Projected type (height:7.3 mm)	---	---
	Others	○ height : 13 mm	○ height : 13 mm
Degree of protection		IEC IP67	
Washing		Possible	
Ambient operating temperature		-25 to + 80°C	
Ambient operating humidity		35 to 85%RH (for +5 to +35°C)	
Packaging		Radial taping	

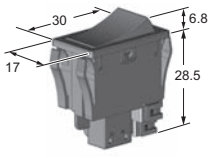
Tactile Switch Key Top

Classifications		Key top					
Model		B32					
Applicable type		6×6 mm switches B3F-1000 / -1000-G / -3000 / -3000-G / -6000 / B3W-1000 / B3FS-1000			12×12 mm switches B3F-4000 / -5000 / -5001 / B3W-4000 / B3FS-4000		
Color	Size	4×4 mm	φ6 mm	D type	9×9 mm	12×12 mm	φ9.5 mm
Ivory		○	○	○	○	○	○
Black		○	○	○	○	○	○
Orange		○	---	---	○	○	○
Yellow		○	---	---	○	○	○
Blue		○	---	---	○	○	---
Green		○	---	---	○	○	---
White		○	---	---	○	○	---
Red		○	---	---	○	○	---

Rocker Switches

Classifications		Miniature Rocker Switches		Illuminated Rocker Switches	
Model		A8L		A8A	
Appearance					
Features		•Miniature rocker switch for high capacity switching.		•Illuminated Rocker Switches.	
Contact form		SPST	DPST	DPST	
				Non-illuminated 	Illuminated 
Case color		Black		White / Black / Gray	
Cap color		Black		Non-illuminated:White/Red/Green/Blue/Yellow/Black Illuminated:Red/Green/Orange	
Marking		With / Without		With / Without	
Ratings (resistive load)		10 A at 250 VAC 10 A at 125 VAC		16 A at 250 VAC 16 A at 125 VAC	
Inrush current		100 A max.		100 A max.	
Operating force		SPST : 2.16 N DPST : 3.92 N		19.6 N max.	
Durability	Mechanical	50,000 operations min.		40,000 operations min.	
	Electrical	10,000 operations min.		20,000 operations min.	
Protection of Degree		IEC IP40		IEC IP40	
Terminals		Solder / PCB / Quick-connect (#187)		Quick-connect (#250)	
Ambient operating temperature		-20 to +55°C		-20 to +50°C	
Ambient operating humidity		45 to 85%RH (for +5 to +35°C)		45 to 85%RH (for +5 to +35°C)	
Approved standard	UL	●		●	
	CSA	●		●	
	EN	●		●	
Optional accessories (sold separetely)		---		A8A-RUBBER CAP	

Rocker Switches

Classifications		Rocker Switches with reset function			
Model		A8GS			
Appearance					
Features		·Small size rocker switch with reset function.			
Contact form		SPST		DPST	
		With reset function	Without reset function	With reset function	Without reset function
		Micro load contact terminal×1 + - a b Power contact terminal×1 + - 1 2	Micro load contact terminal×1 a b Power contact terminal×1 1 2	Micro load contact terminal×1 Power contact terminal×1 + - 1 2 a b Power contact terminal×2 + - 1 2 3 4	Micro load contact terminal×1 Power contact terminal×1 1 2 a b Power contact terminal×2 1 2 3 4
Case color		Black			
Cap color		Black			
Marking		With / Without			
Ratings (resistive load)		Power contact : 10 A at 250 VAC / 16 A at 125 VAC Micro load contact : 0.2 A at 5 VDC Reset coil : 455 mA at at 5 VDC / 300 mA at at 3.3 VDC			
Inrush current		117 A max. (Power contact)			
Operating force		Micro load contact SPST : 1.0 N / Power contact SPST : 1.5 N / DPST 2.0 N			
Durability	Mechanical	Switch operation : 30,000 operations min. Coil operation : 10,000 operations min.			
	Electrical	Switch operation : 10,000 operations min.			
Protection of Degree		IEC IP40			
Terminals		Micro load contact terminal : CT connector Power contact terminal : Quick-connect treminals(#187), Solder terminals			
Ambient operating temperature		-10 to +55°C			
Ambient operating humidity		90%RH max. (for +5 to +35°C)			
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.			

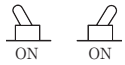
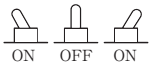
Pushbutton Switches

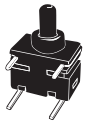
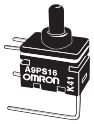
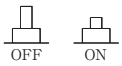
Panel cutout		Round (12dia.)			Round (8dia.)	Round (16dia.)	Square
Model		A3C	A3D	M2C	M2D	A16□-P	A3A
Appearance							
Features		·Pushbutton switch (illuminated/non-illuminated) with cylindrical 12dia. body.	·Pushbutton switch (illuminated) with cylindrical 8dia. body.	·Indicator with cylindrical 12dia. body.	·Indicator with cylindrical 8dia. body.	·Pushbutton switch (illuminated/non-illuminated) with cylindrical 16dia. body and PCB terminals.	·Lighted pushbutton switch with square body.
Body		20 mm	18 mm	20 mm	18 mm	21 mm	12.5 mm
Shape of pushbutton		Rectangular Square Round	Rectangular Square Round	Rectangular Square Round	Rectangular Square Round	Rectangular Square Round	Square Round
Color of pushbutton	Illuminated	LED / Incandescent lamp Red Green Yellow Pure White Blue	LED / Incandescent lamp Red Green White Yellow	LED / Incandescent lamp Red Green Yellow Pure White Blue	LED / Incandescent lamp Red Green White Yellow	LED lamp Red Green Yellow Pure White Blue Pure Yellow	LED lamp Red Green Yellow
	Non-Illuminated	Red Green Yellow White Blue Black	---	---	---	Red Green Yellow Pure White Blue Black Pure Yellow	Red Green Yellow Light gray Blue Black Gray Dark gray
Contact form		SPDT	SPDT	---	---	DPDT / SPDT	SPDT / SPST-NO
Action		Momentary Alternate	Momentary Alternate	---	---	Momentary Alternate	Momentary Alternate
Operating force		2.45 N max.	2.45 N max.	---	---	P40 : 4.41 N max. IP66 : 4.91 N max.	2.45 N max.
Ratings (resistive load)	Standard load	0.5 A at 250 VAC 1 A at 125 VAC 1 A at 30 VDC	---	---	---	3 A at 250 VAC 5 A at 125 VAC 3 A at 30 VDC	SPST-NO : 2 A at 250 VAC 6 A at 125 VAC 4 A at 30 VDC SPDT : 3 A at 125 VAC 2 A at 30 VDC
	Micro load	0.1 A at 125 VAC 0.1 A at 30 VDC	0.1 A at 30 VDC	---	---	---	---
Minimum applicable load		1 mA at 5 VDC	1 mA at 5 VDC	---	---	1 mA at 5 VDC	1 mA at 5 VDC
Durability		100,000 operations min.	100,000 operations min.	---	---	100,000 operations min.	50,000 operations min.
Degree of protection		IEC IP40	IEC IP40	IEC IP40	IEC IP40	IEC IP40/66	IEC IP40
Terminals		Solder	Solder	Solder	Solder	PCB	Solder PCB
Ambient operating temperature		-10 to +55°C	-10 to +55°C	-10 to +55°C	-10 to +55°C	-10 to +55°C	-10 to +55°C
Ambient operating humidity		35 to 85%RH	35 to 85%RH	35 to 85%RH	35 to 85%RH	35 to 85%RH	35 to 85%RH
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.					

Pushbutton Hand Switches

Model		C2U	C2UW	
Appearance				
Series			C2UW-D	C2UW-L
Features		·Double action hand switch.	·Double action hand switch with a sub switch.	·Wireless ·Double action hand switch with a sub switch.
Body		105 mm	167.3 mm	
Shape of pushbutton		Round	Round	
Color of pushbutton	Illuminated	---	---	
	Non-Illuminated	Non-illuminated	Non-illuminated	
Contact form		DPST	Main switch : DPST Sub switch : SPST-NO	
Action		Momentary	Momentary	
Operating force		1st stage : 4.9 N 2nd stage : 15.69 N	Main switch 1st stage : 4.7 N 2nd stage : 12.6 N Sub switch : 4 N max.	
Ratings (resistive load)	Standard load	2 A at 30 VDC 2 A at 125 VAC	Main switch : 0.1 A at 30 VDC Sub switch : 1 to 50 mA, 3 to 24 VDC	---
	Micro load	---	---	---
Minimum applicable load		---	Main switch : 1 mA at 5 VDC Sub switch : 10 µA at 1 VDC	---
Durability		200,000 operations min.	Main switch : 400,000 operations min. (Load condition : 10 mA at 14 VDC) Sub switch : 400,000 operations min.	Main switch : 400,000 operations min. Sub switch : 400,000 operations min.
Degree of protection		IEC IP00	IEC IP00	IEC IP00
Terminals		Lead wire	Lead wire	Holder Connector
Ambient operating temperature		-10 to +40°C	0 to +40°C	
Ambient operating humidity		75%RH max. (for +5 to +35°C)	90%RH max. (for +5 to +35°C)	
Approved standard		See “Information on Standards certification/conformity” (available on the website) for information on the availability of certified standards.		

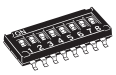
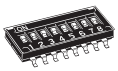
Toggle/Pushbutton Switches

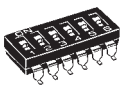
Name		Toggle					
Model		A9TS					
Terminals		DIP Terminal		Right Angle Terminal		Vertical Mount Terminal	
Appearance							
Features		·Ultra-compact push switch of board insertion type, washable					
Contact material		Gold plated					
Contact form		SPDT	DPDT	SPDT	DPDT	SPDT	DPDT
Switching Functions		A9TS11-0011	A9TS21-0011	A9TS11-0012	A9TS21-0012	A9TS11-0013	A9TS21-0013
							
		A9TS12-0011	A9TS22-0011	A9TS12-0012	A9TS22-0012	A9TS12-0013	A9TS22-0013
							
Operating force		4.9 N max.					
Ratings (resistive load)		14 mA at 28 VAC/DC 0.1 μA (minimum current) at 20 mVAC/DC					
Contact resistance (initial values)		80 mΩ max.					
Durability	Mechanical	50,000 operations min.					
	Electrical						
Degree of protection		IEC IP64					
Washing		Possible					
Ambient operating temperature		-20 to +80°C					
Ambient operating humidity		45 to 85%RH (for +5 to +35°C)					

Name		Pushbutton					
Model		A9PS					
Terminals		DIP Terminal		Right Angle Terminal		Vertical Mount Terminal	
Appearance							
Features		·Ultra-compact push switch of board insertion type, washable					
Contact material		Gold plated					
Contact form		SPST	DPST	SPST	DPST	SPST	DPST
Switching Functions		A9PS16-0011	A9PS26-0011	A9PS16-0012	A9PS26-0012	A9PS16-0013	A9PS26-0013
							
Action		Momentary					
Operating force		4.9 N max.					
Ratings (resistive load)		14 mA at 28 VAC/DC 0.1 μA (minimum current) at 20 mAC/DC					
Contact resistance (initial values)		80 mΩ max.					
Durability	Mechanical	50,000 operations min.					
	Electrical						
Degree of protection		IEC IP64					
Washing		Possible					
Ambient operating temperature		-20 to +80°C					
Ambient operating humidity		45 to 85%RH (for +5 to +35°C)					

Slide DIP Switches

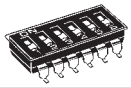
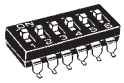
The products with this mark are also available in package reels of 100 pcs.

Mounting		Surface mounting					
Model		A6H					
Terminal pitch		1.27 mm (Half pitch)					
Appearance							
Features		·Slide DIP switch with ultra low profile,1.55 mm and half pitch.					
Actuator types		Flat actuator			Flat actuator with seal tape		
Packaging		Tube	Embossed taping standard reel (4,000 pcs)	Embossed taping small reel (500 pcs)	Tube	Embossed taping standard reel (4,000 pcs)	Embossed taping small reel (500 pcs)
Contact material		Gold plated					
Ratings (resistive load)		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC					
Contact resistance (initial values)		200 mΩ max.					
No. of poles	1	---	---	---	---	---	---
	2	A6H-2101	A6H-2101-P	A6H-2101-PM	A6H-2102	A6H-2102-P	A6H-2102-PM
	3	---	---	---	---	---	---
	4	A6H-4101	A6H-4101-P	A6H-4101-PM	A6H-4102	A6H-4102-P	A6H-4102-PM
	5	---	---	---	---	---	---
	6	A6H-6101	A6H-6101-P	A6H-6101-PM	A6H-6102	A6H-6102-P	A6H-6102-PM
	7	---	---	---	---	---	---
	8	A6H-8101	A6H-8101-P	A6H-8101-PM	A6H-8102	A6H-8102-P	A6H-8102-PM
	9	---	---	---	---	---	---
	10	A6H-0101	A6H-0101-P	A6H-0101-PM	A6H-0102	A6H-0102-P	A6H-0102-PM
Durability		1,000 operations min.					
Washing		Not possible			Possible		
Degree of protection		IEC IP40					
Ambient operating temperature		-20 to +70°C					
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)					

Mounting		Surface mounting					
Model		A6HF			A6S-H		
Terminal pitch		1.27 mm (Half pitch)			2.54 mm (Standard pitch)		
Appearance							
Features		·Slide DIP switches with a height of 2.3 mm and half pitch.			·Standard surface mounting slide DIP switches. Washable, with seal tape available.		
Actuator types		Flat actuator with seal tape			Flat actuator		
Packaging		Tube	Embossed taping standard reel (2,000 pcs)	Embossed taping small reel (500 pcs)	Tube	Embossed taping standard reel (900 pcs)	Embossed taping small reel (400 pcs)
Contact material		Gold plated			Gold plated		
Ratings (resistive load)		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC		
Contact resistance (initial values)		200 mΩ max.			200 mΩ max.		
No. of poles	1	---	---	---	A6S-1101-H	A6S-1101-PH	---
	2	A6HF-2102	A6HF-2102-P	A6HF-2102-PM	A6S-2101-H	A6S-2101-PH	---
	3	---	---	---	A6S-3101-H	A6S-3101-PH	A6S-3101-PMH
	4	A6HF-4102	A6HF-4102-P	A6HF-4102-PM	A6S-4101-H	A6S-4101-PH	A6S-4101-PMH
	5	---	---	---	A6S-5101-H	A6S-5101-PH	---
	6	A6HF-6102	A6HF-6102-P	A6HF-6102-PM	A6S-6101-H	A6S-6101-PH	A6S-6101-PMH
	7	---	---	---	A6S-7101-H	A6S-7101-PH	---
	8	A6HF-8102	A6HF-8102-P	A6HF-8102-PM	A6S-8101-H	A6S-8101-PH	A6S-8101-PMH
	9	---	---	---	A6S-9101-H	---	---
	10	A6HF-0102	A6HF-0102-P	A6HF-0102-PM	A6S-0101-H	---	A6S-0101-PMH
Durability		1,000 operations min.			1,000 operations min.		
Washing		Possible			Not possible		
Degree of protection		IEC IP40			IEC IP40		
Ambient operating temperature		-30 to +85°C			-20 to +70°C		
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)			35 to 95%RH (for +5 to +35°C)		

Note: Default actuator setting is OFF for Slide DIP Switches and Piano DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

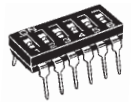
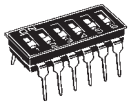
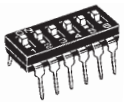
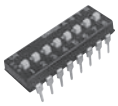
The products with this mark are also available in package reels of 100 pcs.

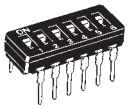
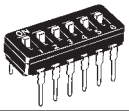
Mounting		Surface mounting					
Model		A6S-H					
Terminal pitch		2.54 mm (Standard pitch)					
Appearance							
Features		·Standard surface mounting slide DIP switches. Washable, with seal tape available.					
Actuator types		Flat actuator with seal tape			Raised actuator		
Packaging		Tube	Embossed taping standard reel (800/900 pcs)	Embossed taping small reel (400 pcs)	Tube	Embossed taping standard reel (700/800 pcs)	Embossed taping small reel (400 pcs)
Contact material		Gold plated					
Ratings (resistive load)		25 mA at 24 VDC / 10 µA (minimum current) at 3.5 VDC					
Contact resistance (initial values)		200 mΩ max.					
No. of poles	1	A6S-1102-H	A6S-1102-PH	---	A6S-1104-H	A6S-1104-PH	---
	2	A6S-2102-H	A6S-2102-PH	A6S-2102-PMH	A6S-2104-H	A6S-2104-PH	---
	3	A6S-3102-H	A6S-3102-PH	---	A6S-3104-H	A6S-3104-PH	---
	4	A6S-4102-H	A6S-4102-PH	A6S-4102-PMH	A6S-4104-H	A6S-4104-PH	A6S-4104-PMH
	5	A6S-5102-H	A6S-5102-PH	---	A6S-5104-H	A6S-5104-PH	---
	6	A6S-6102-H	A6S-6102-PH	A6S-6102-PMH	A6S-6104-H	A6S-6104-PH	A6S-6104-PMH
	7	A6S-7102-H	A6S-7102-PH	---	A6S-7104-H	A6S-7104-PH	---
	8	A6S-8102-H	A6S-8102-PH	A6S-8102-PMH	A6S-8104-H	A6S-8104-PH	A6S-8104-PMH
	9	A6S-9102-H	A6S-9102-PH	---	A6S-9104-H	A6S-9104-PH	---
	10	A6S-0102-H	A6S-0102-PH	A6S-0102-PMH	A6S-0104-H	A6S-0104-PH	A6S-0104-PMH
Durability		1,000 operations min.					
Washing		Possible			Not possible		
Degree of protection		IEC IP40					
Ambient operating temperature		-20 to +70°C					
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)					

Mounting		Surface mounting				
Model		A6SN				
Terminal pitch		2.54 mm (Standard pitch)				
Appearance						
Features		·Surface mounting slide DIP switch with high contact reliability. Washable, even without seal tape available.				
Actuator types		Flat actuator			Raised actuator	
Packaging		Tube	Embossed taping standard reel (750 pcs)		Tube	Embossed taping standard reel (700 pcs)
			Without seal tape	With seal tape		
Contact material		Gold plated				
Ratings (resistive load)		25 mA at 24 VDC / 10 µA (minimum current) at 3.5 VDC				
Contact resistance (initial values)		200 mΩ max.				
No. of poles	1	A6SN-1101	---	---	A6SN-1104	---
	2	A6SN-2101	A6SN-2101-P	A6SN-2102-P	A6SN-2104	A6SN-2104-P
	3	A6SN-3101	A6SN-3101-P	A6SN-3102-P	A6SN-3104	A6SN-3104-P
	4	A6SN-4101	A6SN-4101-P	A6SN-4102-P	A6SN-4104	A6SN-4104-P
	5	A6SN-5101	A6SN-5101-P	A6SN-5102-P	A6SN-5104	A6SN-5104-P
	6	A6SN-6101	A6SN-6101-P	A6SN-6102-P	A6SN-6104	A6SN-6104-P
	7	A6SN-7101	A6SN-7101-P	A6SN-7102-P	A6SN-7104	A6SN-7104-P
	8	A6SN-8101	A6SN-8101-P	A6SN-8102-P	A6SN-8104	A6SN-8104-P
	9	A6SN-9101	A6SN-9101-P	A6SN-9102-P	A6SN-9104	A6SN-9104-P
	10	A6SN-0101	A6SN-0101-P	A6SN-0102-P	A6SN-0104	A6SN-0104-P
Durability		1,000 operations min.				
Washing		Possible				
Degree of protection		IEC IP40				
Ambient operating temperature		-30 to +85°C				
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)				

Note: Default actuator setting is OFF for Slide DIP Switches and Piano DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

Slide DIP Switches

Mounting		Through-hole mounting				
Model		A6T			A6TN	
Terminal pitch		2.54 mm (Standard pitch)			2.54 mm (Standard pitch)	
Appearance						
Features		·Standard through-hole mounting slide DIP switch. Washable, with seal tape available.			·Through-hole mounting slide DIP switch with high contact reliability.Washable, even without seal tape available.	
Actuator types		Flat actuator	Flat actuator with seal tape	Raised actuator	Flat actuator	Raised actuator
Packaging		Tube			Tube	
Contact material		Gold plated			Gold plated	
Ratings (resistive load)		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC	
Contact resistance (initial values)		200 mΩ max.			200 mΩ max.	
No. of poles	1	A6T-1101	A6T-1102	A6T-1104	A6TN-1101	A6TN-1104
	2	A6T-2101	A6T-2102	A6T-2104	A6TN-2101	A6TN-2104
	3	A6T-3101	A6T-3102	A6T-3104	A6TN-3101	A6TN-3104
	4	A6T-4101	A6T-4102	A6T-4104	A6TN-4101	A6TN-4104
	5	A6T-5101	A6T-5102	A6T-5104	A6TN-5101	A6TN-5104
	6	A6T-6101	A6T-6102	A6T-6104	A6TN-6101	A6TN-6104
	7	A6T-7101	A6T-7102	A6T-7104	A6TN-7101	A6TN-7104
	8	A6T-8101	A6T-8102	A6T-8104	A6TN-8101	A6TN-8104
	9	A6T-9101	A6T-9102	A6T-9104	A6TN-9101	A6TN-9104
	10	A6T-0101	A6T-0102	A6T-0104	A6TN-0101	A6TN-0104
Durability		1,000 operations min.			1,000 operations min.	
Washing		Not possible	Possible	Not possible	Possible	
Degree of protection		IEC IP40			IEC IP40	
Ambient operating temperature		-20 to +70°C			-30 to +85°C	
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)			35 to 95%RH (for +5 to +35°C)	

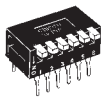
Mounting		Through-hole mounting			
Model		A6D		A6E-N	
Terminal pitch		2.54 mm (Standard pitch)		2.54 mm (Standard pitch)	
Appearance					
Features		·Through-hole mounting slide DIP switch with high environmental resistance by sealed construction.		·Box type through-hole mounting slide DIP switches.	
Actuator types		Flat actuator	Raised actuator	Flat actuator	Raised actuator
Packaging		Tube		Tube	
Contact material		Gold plated		Gold plated	
Ratings (resistive load)		30 mA at 30 VDC / 10 μA (minimum current) at 3.5 VDC		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC	
Contact resistance (initial values)		100 mΩ max.		200 mΩ max.	
No. of poles	1	---	---	---	---
	2	A6D-2100	A6D-2103	A6E-2101-N	A6E-2104-N
	3	A6D-3100	A6D-3103	A6E-3101-N	A6E-3104-N
	4	A6D-4100	A6D-4103	A6E-4101-N	A6E-4104-N
	5	A6D-5100	A6D-5103	A6E-5101-N	A6E-5104-N
	6	A6D-6100	A6D-6103	A6E-6101-N	A6E-6104-N
	7	A6D-7100	A6D-7103	A6E-7101-N	A6E-7104-N
	8	A6D-8100	A6D-8103	A6E-8101-N	A6E-8104-N
	9	A6D-9100	A6D-9103	A6E-9101-N	A6E-9104-N
	10	A6D-0100	A6D-0103	A6E-0101-N	A6E-0104-N
Durability		2,000 operations min.		1,000 operations min.	
Washing		Possible		Not possible	
Degree of protection		Internally sealed (IEC IP64 equivalency)		IEC IP40	
Ambient operating temperature		-20 to +70°C		-20 to +70°C	
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)		35 to 95%RH (for +5 to +35°C)	

Note: Default actuator setting is OFF for Slide DIP Switches and Piano DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

Piano DIP Switches

The products with this mark are also available in package reels of 100 pcs.

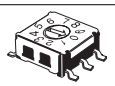
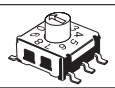
Mounting		Surface mounting						
Model		A6HR			A6SR			
Terminal pitch		1.27 mm (Half pitch)			2.54 mm (Standard pitch)			
Appearance								
Features		·Miniature piano DIP switch with half pitch terminals.			·Piano DIP switch with surface mounting terminals.			
Actuator types		Long actuator			Short actuator		Long actuator	
Packaging		Tube	Embossed taping standard reel (1,000 pcs)	Embossed taping small reel (500 pcs)	Tube	Embossed taping standard reel	Tube	Embossed taping standard reel
Contact material		Gold plated			Gold plated			
Ratings (resistive load)		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)		200 mΩ max.			200 mΩ max.			
No. of poles	1	---	---	---	---	---	---	---
	2	A6HR-2104	A6HR-2104-P	A6HR-2104-PM	A6SR-2101	A6SR-2101-P	A6SR-2104	A6SR-2104-P
	3	---	---	---	---	---	---	---
	4	A6HR-4104	A6HR-4104-P	A6HR-4104-PM	A6SR-4101	A6SR-4101-P	A6SR-4104	A6SR-4104-P
	5	---	---	---	---	---	---	---
	6	A6HR-6104	A6HR-6104-P	A6HR-6104-PM	A6SR-6101	A6SR-6101-P	A6SR-6104	A6SR-6104-P
	7	---	---	---	---	---	---	---
	8	A6HR-8104	A6HR-8104-P	A6HR-8104-PM	A6SR-8101	A6SR-8101-P	A6SR-8104	A6SR-8104-P
	9	---	---	---	---	---	---	---
	10	A6HR-0104	A6HR-0104-P	A6HR-0104-PM	A6SR-0101	A6SR-0101-P	A6SR-0104	A6SR-0104-P
Durability		1,000 operations min.			1,000 operations min.			
Washing		Not possible			Not possible			
Degree of protection		IEC IP40			IEC IP40			
Ambient operating temperature		-30 to +85°C			-20 to +70°C			
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)			35 to 95%RH (for +5 to +35°C)			

Mounting		Through-hole mounting				
Model		A6TR		A6DR	A6FR	
Terminal pitch		2.54 mm (Standard pitch)		2.54 mm (Standard pitch)	2.54 mm (Standard pitch)	
Appearance						
Features		·Low profile piano DIP switch with through-hole terminals.		·Through-hole mounting piano DIP switch with high environmental resistance by sealed construction.	·Box type through-hole mounting piano DIP switch.	
Actuator types		Short actuator	Long actuator	Long actuator	Short actuator	Long actuator
Packaging		Tube		Box	Tube	
Contact material		Gold plated		Gold plated	Gold plated	
Ratings (resistive load)		25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC		30 mA at 30 VDC / 10 μA (minimum current) at 3.5 VDC	25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC	
Contact resistance (initial values)		200 mΩ max.		100 mΩ max.	200 mΩ max.	
No. of poles	1	---	---	---	---	---
	2	A6TR-2101	A6TR-2104	A6DR-2100	A6FR-2101	A6FR-2104
	3	---	---	---	A6FR-3101	A6FR-3104
	4	A6TR-4101	A6TR-4104	A6DR-4100	A6FR-4101	A6FR-4104
	5	---	---	---	A6FR-5101	A6FR-5104
	6	A6TR-6101	A6TR-6104	A6DR-6100	A6FR-6101	A6FR-6104
	7	---	---	---	A6FR-7101	A6FR-7104
	8	A6TR-8101	A6TR-8104	A6DR-8100	A6FR-8101	A6FR-8104
	9	---	---	---	A6FR-9101	A6FR-9104
	10	A6TR-0101	A6TR-0104	A6DR-0100	A6FR-0101	A6FR-0104
Durability		1,000 operations min.		2,000 operations min.	1,000 operations min.	
Washing		Not possible		Possible	Not possible	
Degree of protection		IEC IP40		Internally sealed (IEC IP64 equivalency)	IEC IP40	
Ambient operating temperature		-20 to +70°C		-20 to +70°C	-20 to +70°C	
Ambient operating humidity		35 to 95%RH (for +5 to +35°C)		35 to 95%RH (for +5 to +35°C)	35 to 95%RH (for +5 to +35°C)	

Note: Default actuator setting is OFF for Slide DIP Switches and Piano DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

Rotary DIP Switches

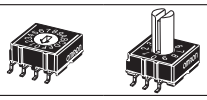
The products with this mark are also available in package reels of 100 pcs.

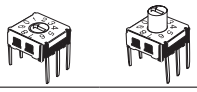
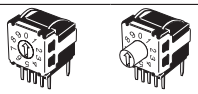
Mounting					Surface mounting			
Model					A6KS			
Size					7.2×7.2 mm			
Appearance					 			
Features					·Top actuated miniature (7.2×7.2 mm) rotary DIP switch with surface mounting terminals.			
Packaging					Tube		Embossed taping standard reel	
Contact materials					Gold plated			
Ratings (resistive load)					25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)					200 mΩ max.			
Position					10	16	10	16
Types	Flat	Real code	Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	A6KS-102RF	A6KS-162RF	A6KS-102RF-P	A6KS-162RF-P
				5×2 Terminals	A6KS-104RF	A6KS-164RF	A6KS-104RF-P	A6KS-164RF-P
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
	Extended actuator		Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	A6KS-102RS	A6KS-162RS	A6KS-102RS-P	A6KS-162RS-P
				5×2 Terminals	A6KS-104RS	A6KS-164RS	A6KS-104RS-P	A6KS-164RS-P
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
Durability					20,000 steps min.			
Washing					Not possible			
Degree of protection					IEC IP60			
Ambient operating temperature					-30 to +80°C			
Ambient operating humidity					35 to 95%RH (for +5 to +35°C)			

Mounting					Surface mounting			
Model					A6KSV			
Size					7.2×7.2 mm			
Appearance					 			
Features					·Side actuated miniature (7.2×7.2 mm) rotary DIP switch with surface mounting terminals.			
Packaging					Tube		Embossed taping standard reel	
Contact materials					Gold plated			
Ratings (resistive load)					25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)					200 mΩ max.			
Position					10	16	10	16
Types	Flat	Real code	Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	A6KSV-104RF	A6KSV-164RF	A6KSV-104RF-P	A6KSV-164RF-P
	Extended actuator		Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	A6KSV-104RS	A6KSV-164RS	A6KSV-104RS-P	A6KSV-164RS-P
Durability					20,000 steps min.			
Washing					Not possible			
Degree of protection					IEC IP60			
Ambient operating temperature					-30 to +80°C			
Ambient operating humidity					35 to 95%RH (for +5 to +35°C)			

Note: Default rotor setting is 0 for Rotary DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

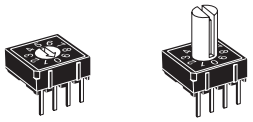
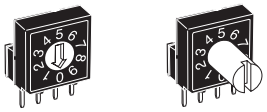
The products with this mark are also available in package reels of 100 pcs.

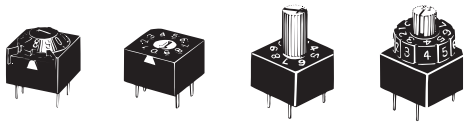
Mounting					Surface mounting			
Model					A6RS			
Size					9.8×9.9 mm			
Appearance								
Features					·Surface mounting rotary DIP switch.			
Packaging					Tube		Embossed taping standard reel	
Contact materials					Gold plated			
Ratings (resistive load)					25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)					200 mΩ max.			
Position					10	16	10	16
Types	Flat	Real code	Top actuated	4×1 Terminals	A6RS-101RF	A6RS-161RF	A6RS-101RF-P	A6RS-161RF-P
				3×3 Terminals	A6RS-102RF	A6RS-162RF	A6RS-102RF-P	A6RS-162RF-P
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
	Extended actuator		Top actuated	4×1 Terminals	A6RS-101RS	A6RS-161RS	A6RS-101RS-P	A6KS-161RS-P
				3×3 Terminals	A6RS-102RS	A6RS-162RS	A6RS-102RS-P	A6KS-162RS-P
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	---	---
				5×2 Terminals	---	---	---	---
Durability					5,000 steps min.			
Washing					Not possible			
Degree of protection					IEC IP60			
Ambient operating temperature					-25 to +80°C			
Ambient operating humidity					35 to 95%RH (for +5 to +35°C)			

Mounting					Through-hole mounting			
Model					A6K		A6KV	
Size					7.2×7.2 mm			
Appearance								
Features					·Miniature (7.2×7.2 mm) rotary DIP switch with through-hole terminals.			
Packaging					Tube			
Contact materials					Gold plated			
Ratings (resistive load)					25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)					200 mΩ max.			
Position					10	16	10	16
Types	Flat	Real code	Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	A6K-102RF	A6K-162RF	---	---
				5×2 Terminals	A6K-104RF	A6K-164RF	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	A6KV-102RF	A6KV-162RF
				5×2 Terminals	---	---	A6KV-104RF	A6KV-164RF
	Extended actuator		Top actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	A6K-102RS	A6K-162RS	---	---
				5×2 Terminals	A6K-104RS	A6K-164RS	---	---
			Side actuated	4×1 Terminals	---	---	---	---
				3×3 Terminals	---	---	A6KV-102RS	A6KV-162RS
				5×2 Terminals	---	---	A6KV-104RS	A6KV-164RS
Durability					20,000 steps min.			
Washing					Not possible			
Degree of protection					IEC IP60			
Ambient operating temperature					-30 to +80°C			
Ambient operating humidity					35 to 95%RH (for +5 to +35°C)			

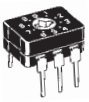
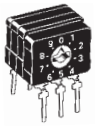
Note: Default rotor setting is 0 for Rotary DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

Rotary DIP Switches

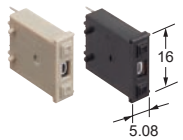
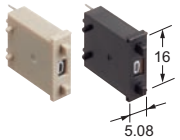
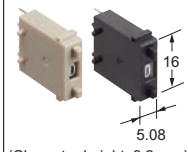
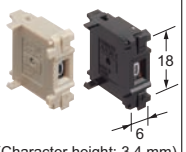
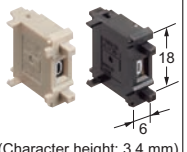
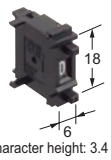
Mounting					Through-hole mounting			
Model					A6R		A6RV	
Size					9.8×9.9 mm			
Appearance								
Features					·Through-hole mounting rotary DIP switch.			
Packaging					Tube			
Contact materials					Gold plated			
Ratings (resistive load)					25 mA at 24 VDC / 10 μA (minimum current) at 3.5 VDC			
Contact resistance (initial values)					200 mΩ max.			
Position					10	16	10	16
Types	Flat	Real code	Top actuated	4×1 Terminals	A6R-101RF	A6R-161RF	---	---
				3×3 Terminals	A6R-102RF	A6R-162RF	---	---
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	A6RV-101RF	A6RV-161RF
				3×3 Terminals	---	---	A6RV-102RF	A6RV-162RF
				5×2 Terminals	---	---	---	---
	Extended actuator		Top actuated	4×1 Terminals	A6R-101RS	A6R-161RS	---	---
				3×3 Terminals	A6R-102RS	A6R-162RS	---	---
				5×2 Terminals	---	---	---	---
			Side actuated	4×1 Terminals	---	---	A6RV-101RS	A6RV-161RS
				3×3 Terminals	---	---	A6RV-102RS	A6RV-162RS
				5×2 Terminals	---	---	---	---
Durability					5,000 steps min.			
Washing					Not possible			
Degree of protection					IEC IP60			
Ambient operating temperature					-25 to +80°C			
Ambient operating humidity					35 to 95%RH (for +5 to +35°C)			

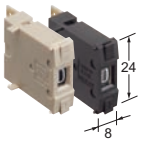
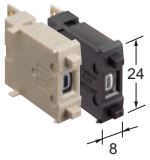
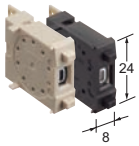
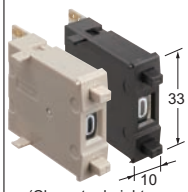
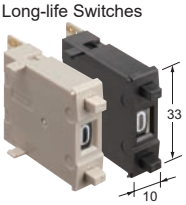
Mounting			Through-hole mounting	
Model			A6A	
Size			10×10 mm	
Appearance				
Features			·Sealed rotary DIP switch with various selections for code setting.	
Packaging			Box	
Contact materials			Gold plated	
Ratings (resistive load)			0.1 A at 28 VDC / 1 mA (minimum current) at 5 VDC	
Contact resistance (initial values)			200 mΩ max.	
Position			10	16
Types	Cone	Real code	A6A-10R	A6A-16R
		Complementary code	A6A-10C	A6A-16C
	Flat	Real code	A6A-10RF	A6A-16RF
		Complementary code	A6A-10CF	A6A-16CF
	Extended actuator	Real code	A6A-10RS	A6A-16RS
		Complementary code	A6A-10CS	A6A-16CS
	Wheel	Real code	A6A-10RW	A6A-16RW
		Complementary code	A6A-10CW	A6A-16CW
Durability			2,000 steps min.	
Washing			Possible	
Degree of protection			Internally sealed (IEC IP64 equivalency)	
Ambient operating temperature			-10 to +70°C	
Ambient operating humidity			45 to 85%RH (for +5 to +35°C)	

Note: Default rotor setting is 0 for Rotary DIP Switches.
Be sure to read the Safety precautions common to all DIP Switches for correct use.

Mounting				Through-hole mounting			
Model				A6C		A6CV	
Size				9×6.6 mm		9×7.1 mm	
Appearance							
Features				･Internally sealed DIL-IC top actuated type DIP switch.		･Internally sealed DIL-IC side actuated type rotary DIP switch.	
Packaging				Tube		Box	
Contact materials				Gold plated		Gold plated	
Ratings (resistive load)				0.1 A at 30 VDC / 10 μA (minimum current) at 3.5 VDC		0.1 A at 30 VDC / 10 μA (minimum current) at 3.5 VDC	
Contact resistance (initial values)				200 mΩ max.		200 mΩ max.	
Position				10	16	10	16
Types	Flat	Real code	Top actuated	A6C-10R(N)	A6C-16R(N)	---	---
			Side actuated	---	---	A6CV-10R	A6CV-16R
Durability				2,000 steps min.		2,000 steps min.	
Washing				Possible		Possible	
Degree of protection				Internally sealed (IEC IP64 equivalency)		Internally sealed (IEC IP64 equivalency)	
Ambient operating temperature				-20 to +70°C		-20 to +70°C	
Ambient operating humidity				35 to 95%RH (for +5 to +35°C)		35 to 95%RH (for +5 to +35°C)	

Thumbwheel Switches Line up

Operation Method		Push Operation											
Model		A7DP-2		A7D-2		A7D-1		A7CN-L2		A7CN-2		A7CN-1	
Shape (mm)		Push-operated Switches  (Character height: 3.2 mm)		 (Character height: 3.2 mm)		 (Character height: 3.2 mm)		Locking Switches  (Character height: 3.4 mm)		 (Character height: 3.4 mm)		 (Character height: 3.4 mm)	
Features		·3.3 to 30 VDC ·Saves space ·Misoperation prevention function enabled ·Can be manufactured with stoppers						·3.3 to 28V DC ·Saves space ·Misoperation prevention function enabled					
Installation method		One-step mounting (Front mounting) 				Screw mounting (Back mounting) 		One-step mounting (Front mounting) 				Screw mounting (Back mounting) 	
Terminals		PCB Terminals 						PCB Terminals 					
Dust resistance		Yes (IP50)						Yes (IP50)					
Case color		Light gray	Black	Light gray	Black	Light gray	Black	Light gray	Black	Light gray	Black	Black	
Switch units according to output codes	03 (decimal code)	---		---		---		---		---		---	
	06 (binary code ecimal)	A7DP-206	A7DP-206-1	A7D-206	A7D-206-1	A7D-106	A7D-106-1	A7CN-L206	A7CN-L206-1	A7CN-206	A7CN-206-1	A7CN-106-1	
	07 (binary coded decimal, with component-adding provision)	---		---		---		---		---		---	
	19 (decimal code, with component-adding provision)	---		---		---		---		---		---	
	54 (binary coded hexadecimal)	---		---		---		---		---		---	
	55 (binary coded decimal, with component-adding provision)	---		---		---		---		---		---	
End caps		A7D-2M	A7D-2M-1	A7D-2M	A7D-2M-1	A7D-1M	A7D-1M-1	A7CN-2M	A7CN-2M-1	A7CN-2M	A7CN-2M-1	A7CN-1M-1	
Spare unit		A7D-2PA	A7D-2PA-1	A7D-2PA	A7D-2PA-1	A7D-1PA	A7D-1PA-1	A7CN-2PA	A7CN-2PA-1	A7CN-2PA	A7CN-2PA-1	A7CN-1PA-1	
Connector	Solder terminals	---						---					
	PCB terminals	---						---					

Operation Method		Push Operation										Rotary Operation
Model		A7BL		A7BS		A7BS-20□-S		A7PS		A7PH		A7MD
Shape (mm)		Locking Switches  (Character height: 4.8 mm)		 (Character heights: Decimal: 4.8 mm, Hexadecimal: 3.2 mm)		Switches with External Stoppers  (Character height: 4.8 mm)		 (Character heights: Decimal: 6.8 mm, Hexadecimal: 4.0 mm)		Long-life Switches  (Character heights: Decimal: 6.8 mm, Hexadecimal: 4.0 mm)		 (Character height: 2.8 mm)
Features		·50 VAC or 3.3 to 28 VDC ·With misoperation prevention function ·Can be manufactured with stoppers		·50 VAC or 3.3 to 28 VDC ·Can be manufactured with stoppers		·50 VAC or 3.3 to 28 VDC ·Stopper can be changed as desired		·50 VAC or 3.3 to 28 VDC ·Easier to see and operate ·Can be manufactured with stoppers		·125 VAC or 3.3 to 28 VDC ·Easier to see and operate ·High mechanical durability 2,000,000 operations min. ·Can be manufactured with stoppers		·3.3 to 28 VDC ·Rotary Operation
Installation method		One-step mounting (Front mounting) 						One-step mounting (Front mounting) 				Secured to panel with PCB. 
Terminals		Solder Terminals 						Solder Terminals 				PCB Terminals 
Dust resistance		Yes (IP50)						Yes (IP50)				Yes (simple dust resistance)
Case color		Light gray	Black	Light gray	Black	Light gray	Black	Light gray	Black	Light gray	Black	Black
Switch units according to output codes	03 (decimal code)	---		---		---		A7PS-203	A7PS-203-1	A7PH-203	A7PH-203-1	---
	06 (binary code decimal)	A7BL-206	A7BL-206-1	A7BS-206	A7BS-206-1	A7BS-206-S	A7BS-206-S-1	A7PS-206	A7PS-206-1	A7PH-206	A7PH-206-1	A7MD-106-P-09
	07 (binary coded decimal, with component-adding provision)	A7BL-207	A7BL-207-1	A7BS-207	A7BS-207-1	A7BS-207-S	A7BS-207-S-1	A7PS-207	A7PS-207-1	A7PH-207	A7PH-207-1	---
	19 (decimal code, with component-adding provision)	---		---	---	---		A7PS-219	A7PS-219-1	---		---
	54 (binary coded hexadecimal)	---		A7BS-254	A7BS-254-1	---		A7PS-254	A7PS-254-1	A7PH-254	A7PH-254-1	---
	55 (binary coded decimal, with component-adding provision)	---		A7BS-255	A7BS-255-1	---		A7PS-255	A7PS-255-1	---		---
End caps		A7B-M	A7B-M-1	A7B-M	A7B-M-1	A7B-M	A7B-M-1	A7P -M	A7P-M-1	A7P-M	A7P-M-1	A7MD-1M
Spare unit		A7B-PA	A7B-PA-1	A7B-PA	A7B-PA-1	A7B-PA	A7B-PA-1	A7P-PA	A7P-PA-1	A7P-PA	A7P-PA-1	A7MD-PA
Connector	Solder terminals	A7B-C						NRT-C/NRT-CN				---
	PCB terminals	A7B-CP						NRT-CP				---

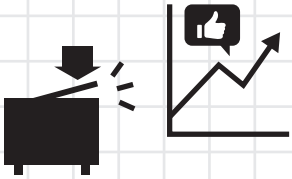
OMRON Switches Do you know about them?

OMRON switches have a proven track record in many of our familiar applications. Our customers appreciate their “click feeling,” “durability,” and “ease of design.”

Three reasons why customers choose OMRON switches

1 Good Feeling

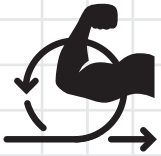
A Satisfying Click



OMRON has established a technology to create an **“exquisite operational feeling”** by adding several parameters in addition to load and stroke.
The wide variation of the feeling **improves the operability of the customer’s equipment**.

2 Long Life

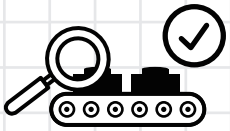
Strong durability and long life switching



OMRON has achieved **“strong durability”** through its proprietary switch production technologies accumulated over more than 80 years, as well as through its technologies for properly adjusting and managing these technologies. Please consider OMRON products for **applications that require long-life switching**.

3 Easy Design

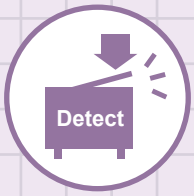
Less variation, easy equipment design



Over the years, OMRON has refined its technology for adjusting changes in characteristics of each process from raw materials to finished products by feeding back to the previous process, thereby making switches with **“negligible variation between individuals or lots.”** We help our customers to **design their devices more easily**.

Types of switches by application

01 Detection Switches



Detects presence or absence of objects and their positions

Basic Switches  P.6

Ultra-miniature detection switches  P.13

02 Operation Switches

Electrically connected by human operation

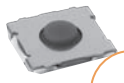
Tactile Switches  P.14

Pushbutton Switches/ Indicators  P.21

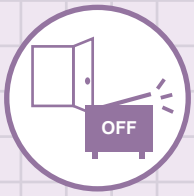
Long Durability Switches

Specialized in click-sensitive applications with long life

Basic Switches  P.9

Tactile Switches  P.14

03 Interlock Switches

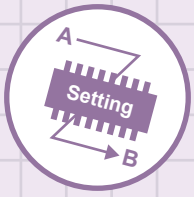


Enables safe disconnection to prevent excessive current flow to the user

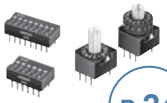
Door switches  P.13

Basic Switches  P.6

04 Setting switch

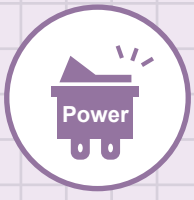


Changes the mode of the device

DIP Switches  P.24

Thumbwheel Switches  P.32

05 Power Switch



Turns equipment power ON and OFF

Rocker Switches  P.19

Application Example

Commercial Air Conditioning

Cover open/close detection
D3DC

Board mode switching
A6S-H
A6SN
P.25

Mechanism position detection
D3M
P.7

Elevator

Operation buttons
D2LS
P.9
B3SL
P.18

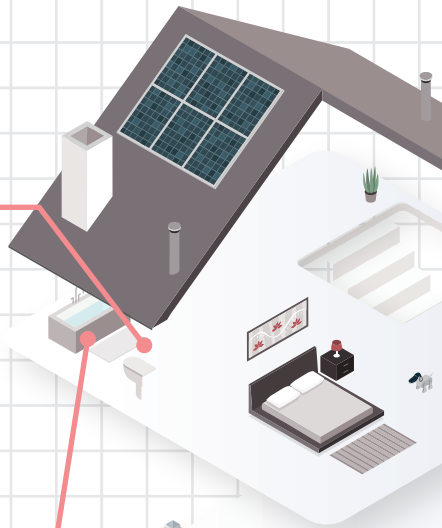
Board setting switch
A6E-N
P.26

Power ON/OFF
A8L
P.19

Toilet

Cover open/close detection
Waterproof
D2SW-P

Bidet toilet/Operation buttons
Waterproof
B3S
P.17
Waterproof
B3W-1
P.17



Bathroom

Bathroom dryer cover open/close detection
Waterproof
D2SW-P

For bathroom operation panel
Waterproof
B3S
P.17
Waterproof
B3W-1
P.17

Smart Building

Supports comfortable operation of smart buildings and safety of equipment.

Electric Locks

Detect

Door open/close detection

D2F P.8

D3C P.13

Automatic Doors and Gates

Detect

Door position detection

V P.6

D3V

SS P.7

Smart Home

We continue to support daily life invisibly.

Security Devices

Detect

Cover open/close detection

D2F P.8

For setting

A6S-H
A6SN P.24

Operation button for reset (gold-plated)

B3SN P.17

Air purifiers

Detect

Cartridge tank open/close detection

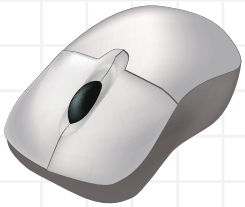
Waterproof
D2SW-P

Mode setting operation button

Waterproof
B3W-1 P.17

Application Example

Mouse



For control buttons

D2LS P.9

B3F-1 P.14

Arcade Controllers

For control buttons

D2LS P.9

For operation levers and position detection

V P.6

Industrial Robots

Operation buttons for teaching pendants

B3FS-1 P.15

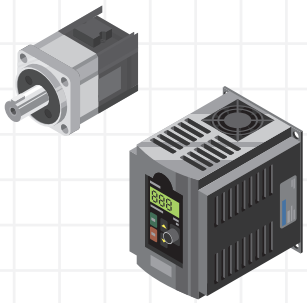
D2LS P.9

A16P P.21

For power supply

A8L P.19

Servo Inverter



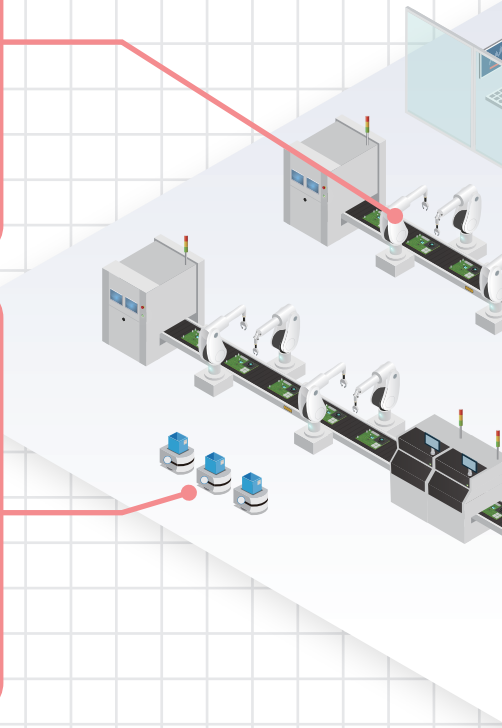
For mode setting

B3SN P.17

A6DR P.27

A6FR P.27

A6S-H P.24



Entertainment

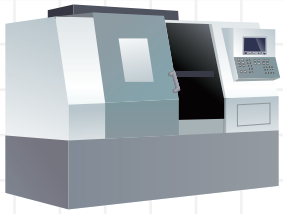
Contributing to the entertainment industry with high reliability and comfortable operation.

Gaming controllers

For control buttons

D2LS P.9

Machine Tools



For control buttons

B3FS-1 P.15
B3FS-4

Waterproof
B3W-1 P.17

D2LS P.9

For mode setting

A6FR P.27

Cover open/close interlock

D2D P.13

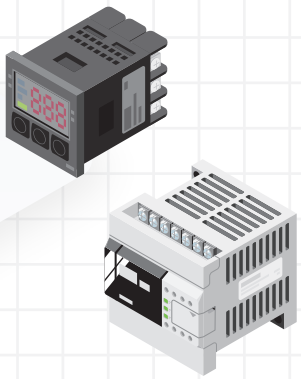
Mechanism position detection

V P.6

Factory Automation

It is also used in a variety of applications in safety-first factories.

Temperature Controllers and PLCs



Mode setting for temperature controllers

A6S-H P.24
A6T P.26

Operation button for temperature controllers

B3F-1 P.14
B3FS-1 P.15
D2LS P.9

Mode setting for PLC

A6C P.31
A6CV
A7 P.32

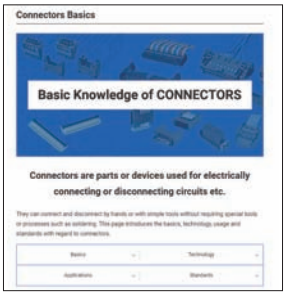
Information of Related Products

The Solution [Micro switches]

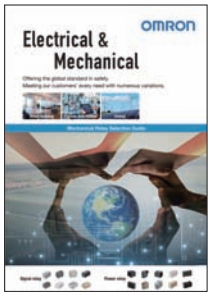
Cat. No. B146-E1

The Solution [Manual Switches]

Cat. No. A306-E1



Basic Knowledge of SWITCHES



Mechanical Relay Selection Guide

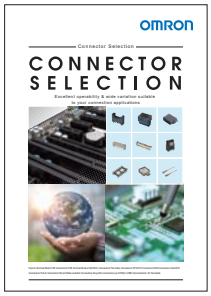
Cat. No. Y225-E1

MOS FET Relays SELECTION GUIDE

Cat. No. Y112-E1

Sensor Selection Guide

Cat. No. Y232-E1



Connector Selection Guide

Cat. No. Y271-E1

Please check each region's Terms & Conditions by region website.

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