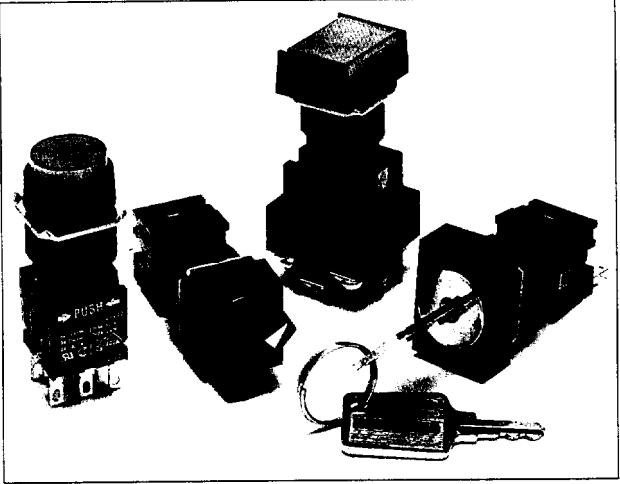


Panel-mounted Switches

A3G

A Range of 16mm Pushbutton, Selector and Key Operated Switches

- Modular construction eases installation and replacement.
- Lamp, LED and Neon illumination.
- Contact block is available with solder, PCB or screw terminals.
- IP40 and IP65 versions.
- UL, CSA and VDE approved.



Ordering Information

■ Pushbutton/Indicator



■ Selector Switch

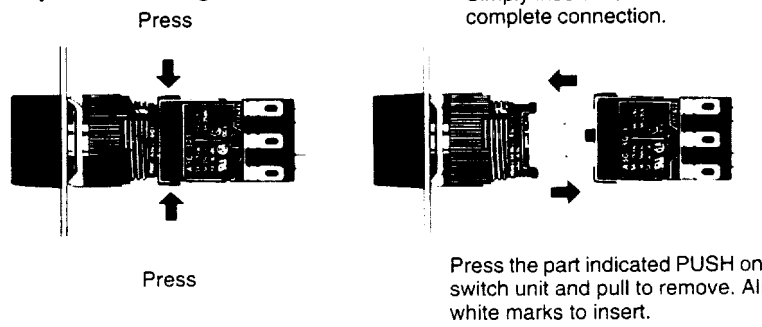


■ Key Switch



Lighted Pushbuttons

Snap-in action switch unit greatly improves wiring efficiency.



Specifications

■ Contact

Type	AC resistive load	DC resistive load
General purpose load	AC 250V 3A AC 125V 5A	DC 30V 3A

■ LED

Rated voltage	Rated current	Operating voltage
DC 5V	30mA	DC 5V \pm 5%
DC 12V	15mA	DC 12V \pm 5%
DC 24V	10mA	DC 24V \pm 5%

■ Incandescent lamp

Rated voltage	Rated current	Operating voltage
6V	60mA	5V
14V	40mA	12V
18V	26mA	15V
28V	24mA	24V

■ Characteristics

Item		Illuminated pushbutton switch	Knob-type selector switch*	Key-type selector switch*
Allowable operating frequency	Mechanical	Momentary operation: 120 operations/minute max. Alternating operation: 60 operations/minute max.	20 operations/minute max.	
	Electrical	20 operations/minute max.	10 operations/minute max.	
Insulation resistance		100M Ω min. (at 500VDC)		
Dielectric strength		1,000VAC, 50/60Hz for 1 minute between terminals of same polarity 2,000VAC, 50/60Hz for 1 minute between terminals of different polarity and also between each terminal and ground**		
Vibration	Malfuction	10 to 55Hz, 1.5mm double amplitude		
Shock	Durability	Approx. 500m/s ² (50G)		
	Malfuction	Approx. 150m/s ² (15G)		
Life expectancy	Mechanical	Momentary operation: 2,000,000 operations min. Alternating operation: 200,000 operations min.	250,000 operations min.	250,000 operations min. (Life of key, 100,000 operations min.)
	Electrical	100,000 operations min.		
Degree of protection		IP40/IP65 (Oil-resistant)	IP65 (Oil-resistant)	
Weight		Approx. 13g (for illuminated type 2-contact switches with solder terminals)	Approx. 9g (for illuminated type 2-contact switches)	Approx. 40g (with one 2-contact switch key)

Note: * Set and reset constitute one operation.

** With LED and incandescent lamp not mounted.

■ Operating Characteristics







Type Features	Illuminated pushbutton switch				Knob-type and key-type selector switches	
	IP40		IP65 oil-resistant type		2-notch	3-notch
	SPDT	DPDT	SPDT	DPDT		
Operating force (OF) max.	250g/245cN	450g/441cN	300g/294cN	500g/490cN	1,000g-cm	
Releasing force (RF) min.	30g/29.4cN					
Total travel (TT)	Approx. 3mm					
Pretravel (PT) max.	2.5mm					
*Lock stroke (LTA) min.	0.5mm					
Set position (SP)	-				90°+5°	45°+10°

* Lock stroke is for alternating operation.



■ Pushbutton/Indicator Switches

Screen

iP Rating Colour	IP40			IP65		
	Rectangular 	Square 	Round 	Rectangular 	Square 	Round 
Blue	A3BJ-500A	A3BA-500A	A3BT-500A	A3BJ-510A	A3BA-510A	A3BT-510A
Yellow	A3BJ-500Y	A3BA-500Y	A3BT-500Y	A3BJ-510Y	A3BA-510Y	A3BT-510Y
Red	A3BJ-500R	A3BA-500R	A3BT-500R	A3BJ-510R	A3BA-510R	A3BT-510R
Red (Neon)	A3GJ-500D	A3GA-500D	A3GT-500D	A3GJ-510D	A3GA-510D	A3GT-510D
Green (Lamp)	A3BJ-500G	A3BA-500G	A3BT-500G	A3BJ-510G	A3BA-510G	A3BT-510G
Green (LED)	A3BJ-500GY	A3BA-500GY	A3BT-500GY	A3BJ-510GY	A3BA-510GY	A3BT-510GY
Green (Neon)	A3GJ-500GN	A3GA-500GN	A3GT-500GN	A3GJ-510GN	A3GA-510GN	A3GT-510GN
White	A3BJ-500W	A3BA-500W	A3BT-500W	A3BJ-510W	A3BA-510W	A3BT-510W
White (Neon)	A3GJ-500WN	A3GA-500WN	A3GT-500WN	A3GJ-510WN	A3GA-510WN	A3GT-510WN
Black	A3BJ-501B	A3BA-501B	A3BT-501B	A3BJ-511B	A3BA-511B	A3BT-511B

Illumination

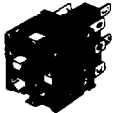
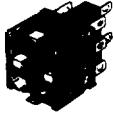

Voltage	5DC/6DC	12/14/18DC	24/28DC
Lamp/LED			
Lamp (all colours)	A3B-006	A3B-014/018	A3B-028
LED - Red	A3B-005R	A3B-012R	A3B-024R
LED - Green	A3B-005G	A3B-012G	A3B-024G
LED - Yellow	A3B-005Y	A3B-012Y	A3B-24Y
LED - White	A3B-005Y	A3B-012Y	A3B-024Y

Voltage	110VAC	240VAC
Neon - Red	A3BH-1ND	A3BH-25ND
Neon - Green	A3BH-1NG	A3BH-25NG
Neon - White	A3BH-1ND	A3BH-25ND

Switch unit

IP Rating	IP40			IP65		
	Rectangular	Square	Round	Rectangular	Square	Round
Momentary	A3GJ-6011-1	A3GA-6011-1	A3GT-6011-1	A3GJ-6011-3	A3GA-6011-3	A3GT-6011-3
Alternate	A3GJ-6021-1	A3GA-6021-1	A3GT-6021-1	A3GJ-6021-3	A3GA-6021-3	A3GT-6021-3
Indicator	M2GJ-7001-1	M2GA-7001-1	M2GT-7001-1	M2GJ-7001-3	M2GA-7001-3	M2GT-7001-3

Contact block

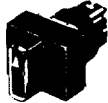


	Standard 	Micro-load 	Screw terminals 
SPDT	A3G-4011	-	-
	-	A3G-4111	-
DPDT	A3G-4021	-	-
	-	A3G-4121	A3G-4024
Indicator	M2G-4901	-	-
	-	-	M2G-4904

Note: For PCB terminals please contact OMRON.

Lighted Pushbuttons

■ Selector Switches

Switch unit

Shape	No. of notches	Reset method	Model
Rectangular (A3GJ) 	2 notches	Manual	A3GJ-S511
		Automatic	A3GJ-S521
	3 notches	Manual	A3GJ-S552
		Combination	A3GJ-S562
		Combination	A3GJ-S572
		Automatic	A3GJ-S582
Square (A3GA) 	2 notches	Manual	A3GA-S511
		Automatic	A3GA-S521
	3 notches	Manual	A3GA-S552
		Combination	A3GA-S562
		Combination	A3GA-S572
		Automatic	A3GA-S582
Round (A3GT) 	2 notches	Manual	A3GT-S511
		Automatic	A3GT-S521
	3 notches	Manual	A3GT-S552
		Combination	A3GT-S562
		Combination	A3GT-S572
		Automatic	A3GT-S582

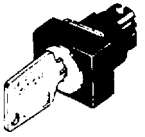
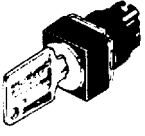
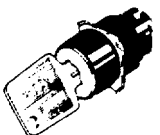
Note: For illuminated types please contact OMRON.

Contact block

	Standard	Micro-load	Screw terminals
SPDT	A3G-4011	-	-
	-	A3G-4111	-
DPDT	A3G-4021	-	-
	-	A3G-4121	A3G-4024
Indicator	M2G-4901	-	-
	-	-	M2G-4904



■ Key Switches
Switch unit

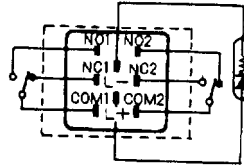
Shape	No. of notches	Reset method	Key release position	Model	
Rectangular (A3GJ) 	2 notches	Manual		A3GJ-K511-C	
				A3GJ-K511-B	
				A3GJ-K511-G	
		Automatic		A3GJ-K521-C	
	3 notches	Manual		A3GJ-K552-A	
				A3GJ-K552-B	
				A3GJ-K552-C	
				A3GJ-K552-F	
		Combination		A3GJ-K562-A	
			A3GJ-K562-B		
		Combination		A3GJ-K572-A	
			A3GJ-K572-C		
	Automatic		A3GJ-K582-A		
	Square (A3GA) 	2 notches	Manual		A3GA-K511-C
					A3GA-K511-B
					A3GA-K511-G
Automatic				A3GA-K521-C	
3 notches		Manual		A3GA-K552-A	
				A3GA-K552-B	
				A3GA-K552-C	
				A3GA-K552-F	
		Combination		A3GA-K562-A	
			A3GA-K562-B		
		Combination		A3GA-K572-A	
			A3GA-K572-C		
Automatic			A3GA-K582-A		
Round (A3GT) 		2 notches	Manual		A3GT-K511-C
					A3GT-K511-B
					A3GT-K511-G
	Automatic			A3GT-K521-C	
	3 notches	Manual		A3GT-K552-A	
				A3GT-K552-B	
				A3GT-K552-C	
				A3GT-K552-F	
		Combination		A3GT-K562-A	
			A3GT-K562-B		
		Combination		A3GT-K572-A	
			A3GT-K572-C		
	Automatic		A3GT-K582-A		

Lighted Pushbuttons

Note: For illuminated types please contact OMRON.

Contact block
See table of Contact Block on previous page.

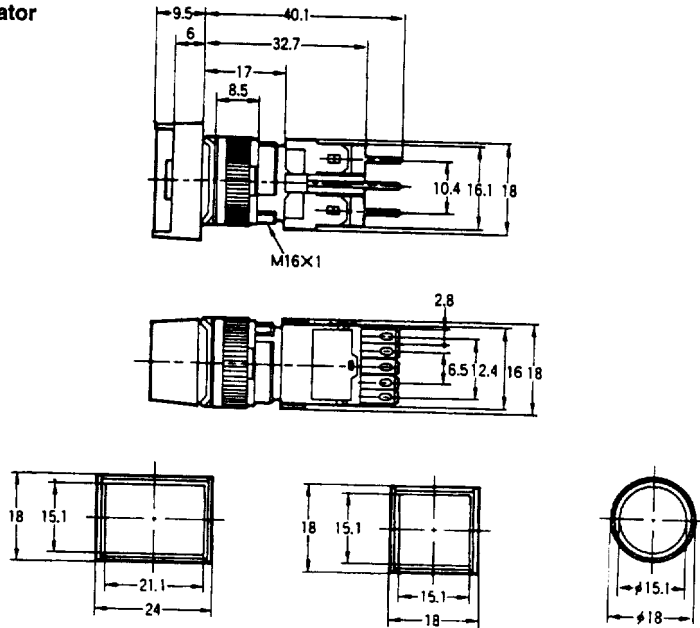
**Terminal Arrangement
(Bottom View)**



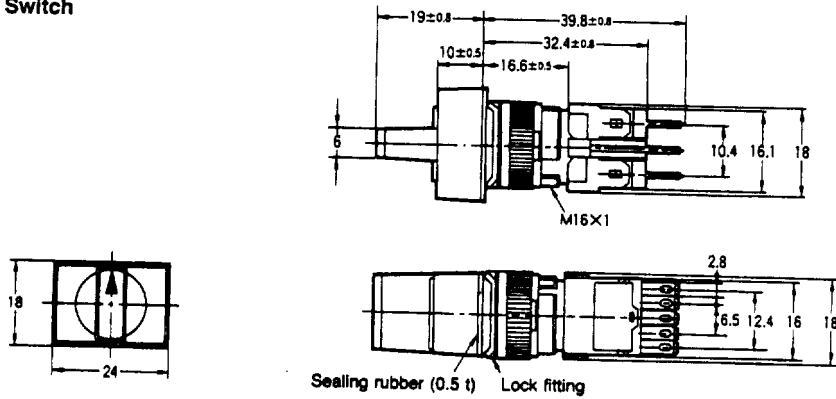
Do not connect L+ and L- terminals for non-illuminated type

Dimensions

Pushbutton/Indicator Switch



Selector Switch



Key Switch

