

## A6 Series — Miniature Switches and Pilot Devices: 16mm

Key features of the A6 series switches and pilot lights include:

- 16mm (5/8") mounting hole
- LED illumination
- Compact design saves space
- Momentary, Maintained, Selectors, and E-Stops
- Gold-clad Silver contacts for reliable low level switching
- Snap action contacts
- IP40 (dustproof) or IP65 (oiltight) versions



A2

Switches & Pilot Devices



UL Recognized  
File No. E55996



CSA Certified  
File No. LR21451



Certificate No.  
2030010305027380

























Specifications	<b>Degree of Protection</b>	IP40: Dustproof IP65 Waterproof/Oiltight/Corrosion Resistant			
	<b>Contact Configuration</b>	SPDT, DPDT			
	<b>Maximum Voltage</b>	250V AC/DC			
	<b>Thermal Current</b>	3A			
	<b>Minimum Applicable Load</b>	5V AC/DC, 1mA (subject to operating conditions)			
	<b>Contact Material</b>	Gold-clad silver			
	<b>Terminal Style</b>	.110" Solder/ Quick Connect			
	<b>Operating Temperature</b>	LED Type: -25° to +55°C (no freezing)			
	<b>Operating Humidity</b>	45 to 85% RH			
	<b>Contact Resistance</b>	50mΩ maximum (initial value)			
	<b>Insulation Resistance</b>	100MΩ minimum (500V DC megger)			
	<b>Vibration Resistance</b>	10 to 55Hz, amplitude 1.5mm p-p			
	<b>Shock Resistance</b>	Damage limits: 500m/sec <sup>2</sup> (approx. 50G) Operating extremes: 200m/sec <sup>2</sup> (approx. 20G)			
<b>Electrical Life</b>	100,000 operations minimum (at full rated load)				
<b>Mechanical Life</b>	Maintained: 100,000 operations minimum Momentary: 1,000,000 operations minimum Selector/Keylock: 250,000 operations minimum				
<b>Dielectric Strength</b>	Switch Unit: 2,000VAC, 1 min. between live/dead part and terminals of different poles; 1,000V AC, 1 minute between terminals of the same pole; 1,500V AC, 1 minute between contact and lamp terminals. Illumination Unit: 2,000VAC, 1 min. between live part/ground				
<b>Soldering Temperature</b>	20W/5 seconds or 260°C/3 seconds				
Contact Ratings	<b>Operating Voltage</b>	<b>24V</b>	<b>120V</b>	<b>240V</b>	
	<b>AC (50/60Hz)</b>	<b>Resistive</b>	—	1.0A	0.5A
		<b>Inductive</b>	—	0.7A	0.5A
	<b>DC</b>	<b>Resistive</b>	1.0A	0.2A	—
<b>Inductive</b>		0.7A	0.1A	—	
LED Lamp Ratings	<b>Rated Voltage/Current</b>	5V DC ±5%	6V AC/DC (±10%)	12V AC/DC (±10%)	24V AC/DC (±10%)
		8mA	DC: A, R, W, Y: 6mA G, S: 5mA AC: A, R, W, Y: 8mA G, S: 7mA	DC: 8mA AC: 9mA	DC: 8mA AC: 9mA





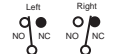


1. AC Inductive Load, PF = 0.6 – 0.7; DC Inductive Load, L/R = 7ms.
2. Minimum applicable load (reference value) is 5V AC/DC/1mA (applicable range is subject to the operating conditions and load).
3. LED lamp contains a built-in current-limiting resistor and a protection diode.
4. LED's don't "burn out." Luminance is reduced to 50% of initial intensity after being lit for 50,000 hours continuously.

## AS6 Selector and Keylock Switches (Assembled)

### Part Numbers: AS6 Selector Switches and Keylock Switches (2- & 3- Position)

Style	Function	Selector Switches	Keylock Switches	
<b>Round Selector</b> 	2-Position 90°	Maintained 	AS6M-2Y2P	AS6M-2KT2P①
	Spring Return Right 	AS6M-21Y2P	AS6M-21KT2PB	
<b>Round Keylock</b> 	3-Position 45°	Maintained 	AS6M-3Y2P	AS6M-3KT2P①
	Spring Return Right → Center 	AS6M-31Y2P	AS6M-31KT2P①	
	Spring Return Left → Center 	AS6M-32Y2P	AS6M-32KT2P①	
	2-Way Return → Center 	AS6M-33Y2P	AS6M-33KT2PD	
<b>Square Selector</b> 	2-Position 90°	Maintained 	AS6Q-2Y2P	AS6Q-2KT2P①
	Spring Return to Right 	AS6Q-21Y2P	AS6Q-21KT2PB	
	3-Position 45°	Maintained 	AS6Q-3Y2P	AS6Q-3KT2P①
	Spring Return Right → Center 	AS6Q-31Y2P	AS6Q-31KT2P①	
<b>Square Keylock</b> 	3-Position 45°	Spring Return Left → Center 	AS6Q-32Y2P	AS6Q-32KT2P①
	2-Way Return → Center 	AS6Q-33Y2P	AS6Q-33KT2PD	
	Rectangular Selector	2-Position 90°	Maintained 	AS6H-2Y2P
<b>Rectangular Keylock</b> 	2-Position 90°	Spring Return Right 	AS6H-21Y2P	AS6H-21KT2PB
	3-Position 45°	Maintained 	AS6H-3Y2P	AS6H-3KT2P①
<b>Rectangular Keylock</b> 	3-Position 45°	Spring Return Right → Center 	AS6H-31Y2P	AS6H-31KT2P①
	Spring Return Left → Center 	AS6H-32Y2P	AS6H-32KT2P①	
	2-Way Return → Center 	AS6H-33Y2P	AS6H-33KT2PD	

### Contact Operations (for all selectors)

Contacts	Operator Position and Contact Operation	
2-pos. (DPDT)	Left	
	Right	
3-pos. (DPDT)	Left	
	Center	
	Right	

### Key Retention Codes

Code	Description
A	Key not retained in any position (removable in all positions)
B	Key retained in right position only
C	Key retained in left position only
D	Key retained in left and right (3 position only)
E	Key retained in center only (3 position only)
G	Key retained right and center (3 position only)
H	Key retained left and center (3 position only)



- For more information on these options, contact your IDEC representative.
- Key cannot be removed in a spring return position.



- In place of ①, specify Key Retention Code. See table on right.
- All models are IP65 and DPDT.
- Available as assembled units only.
- For accessories, see page A2-25.
- For dimensions, see page A2-27.

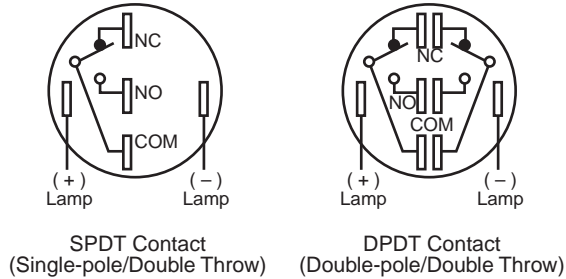
## Schematics — A Series: 5/8" (16mm)

Switches & Pilot Devices

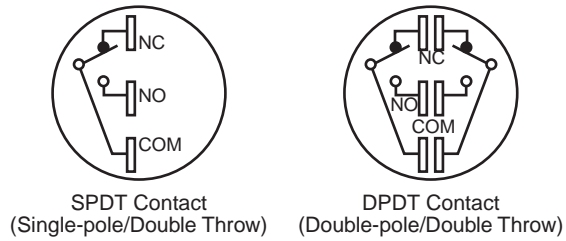
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### Terminal Arrangement (Top View)

#### Illuminated Pushbuttons



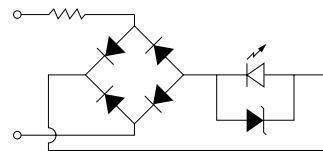
#### Non-illuminated Pushbuttons and Selector Switches



### IDEC's Superbright LED

#### Internal Circuit

LATD-1,-2,-6 (GS)

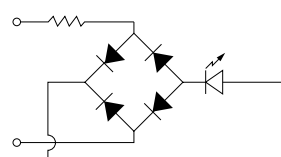


- LED Chip
- Protective Diode
- Zener Diode

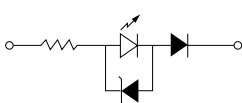
LATD-5 (ARWY)



LATD-1,-2,-6 (ARWY)

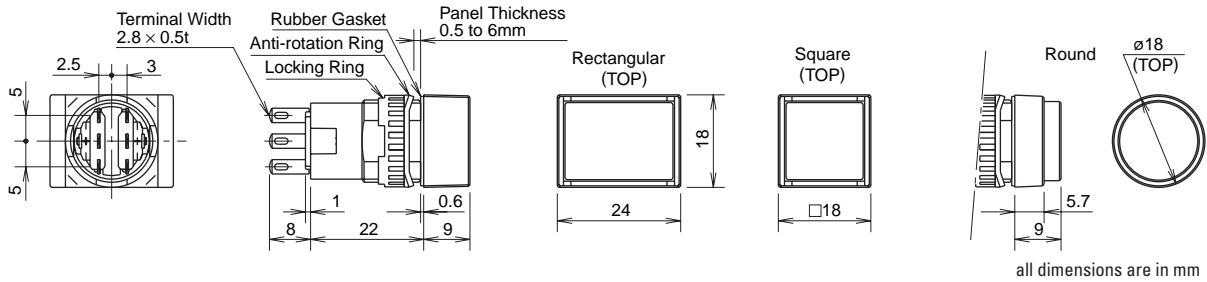


LATD-5 (GS)

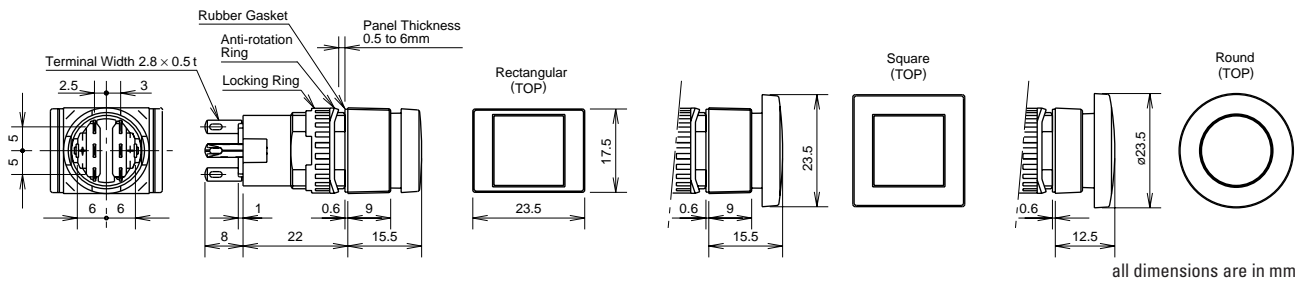


## Dimensions — A Series: 5/8" (16mm)

### Pushbuttons, Ø 5/8" (16mm)



### Large Size Lens



### Selector Switches, Ø 5/8" (16mm)

