

### AP Series – Miniature Pilot Lights

**Key features:**

- Long service life, low maintenance
- Space saving miniature style
- Dome or flat lens models
- Built-in current-limiting resistor
- Five illumination colors: red, green, amber, yellow, and white
- Transformer (120V AC and 240V AC) and DC-DC Converter (110V DC) options on 12mm and 16mm units



\*AP8/AP1 series only.

**Specifications**

Lamp	Built-in LED with current limiting resistor
Operational Voltage	5, 6, 12, 24VDC (full voltage), 110/120, 220/240VAC, (with transformer) 110VDC (with converter)
Current Ratings	AP8: 5V DC/9mA, 12V DC/9mA, 24V DC/9mA, 12V AC/15mA, 24V AC/15mA AP1: 5V DC/9mA, 12V DC/9mA, 24V DC/9mA, 12V AC/15mA, 24V AC/15mA AP2: 6V DC/33mA, 12V DC/22mA, 24V DC/11mA AP6: 6V DC/33mA, 12V DC/22mA, 24V DC/11mA
Operating Temp.	-20°C to +55°C
Operating Humidity	45 to 85% RH
Insul. Resistance	100MΩ min. (500V DC megger) Between live and dead parts
Rev. Withstand Voltage	AP2/AP6: 100V AP1/AP8: 200V
Solder Terminal	Soldering 260°C maximum (5 sec.)
Degree of Protection	AP8: IP40 (dustproof) Other Series: IP65 (oiltight)

**Optional Adaptors/Converters**

Model	Transformer	DC-DC Converter
Applicable Units	AP2 & AP6 (with 6V LED only)	
Operating Voltage	110/120VAC 50/60 Hz 220/240VAC 50/60 Hz	110V DC (90 to 140V DC)
Power Consumption	1.6 VA maximum	1W maximum
Insulation Voltage	250 V AC	140V DC
Insulation Resistance	10MΩ min. (500V DC megger) Between live and dead parts	
Dielectric Strength	2,000V AC, 1 minute Between live/dead parts 2,000V AC, 1 minute Between terminals	2,000V AC, 1 minute Between live/dead parts 1,500V AC, 1 minute Between terminals

Available as one piece only (replacement LEDs are not available).

### Miniature Pilot Lights

#### AP Miniature Pilot Lights - ø8 & ø10mm

Style	Lens Style	Operating Voltage	Part Numbers
AP8 Series - ø8mm	Dome	5V DC +/- 5% 12V AC/DC +/- 10% 24V AC/DC +/- 10%	AP8M255-Ⓢ AP8M211-Ⓢ AP8M222-Ⓢ
	Flat	5V DC +/- 5% 12V AC/DC +/- 10% 24V AC/DC +/- 10%	AP8M155-Ⓢ AP8M111-Ⓢ AP8M122-Ⓢ
AP1 Series - ø10mm	Dome	5V DC +/- 5% 12V AC/DC +/- 10% 24V AC/DC +/- 10%	AP1M255-Ⓢ AP1M211-Ⓢ AP1M222-Ⓢ
	Flat	5V DC +/- 5% 12V AC/DC +/- 10% 24V AC/DC +/- 10%	AP1M155-Ⓢ AP1M111-Ⓢ AP1M122-Ⓢ

#### Ⓢ Color Codes

Color	Code
Amber	A
Green	G
Red	R
Blue	S*
Warm White	W
Cool White	PW
Yellow	Y

\* Available in only the AP8 and AP1 series.

- 1. In place of Ⓢ, specify the color code.
- 2. For dimensions, see page 455.
- 3. For accessories, see page 454.

#### AP Miniature Pilot Lights - ø12 & ø16mm


Style	Lens Style	Operating Voltage	Part Numbers
AP2 Series - ø12mm	Dome	6V DC +/- 5% 12V DC +/- 10% 24V DC +/- 10%	AP2M266-Ⓢ AP2M211-Ⓢ AP2M222-Ⓢ
	Flat	6V DC +/- 5% 12V DC +/- 10% 24V DC +/- 10%	AP2M166-Ⓢ AP2M111-Ⓢ AP2M122-Ⓢ
AP6 Series - ø16mm	Dome	6V DC +/- 5% 12V DC +/- 10% 24V DC +/- 10%	AP6M266-Ⓢ AP6M211-Ⓢ AP6M222-Ⓢ
	Flat	6V DC +/- 5% 12V DC +/- 10% 24V DC +/- 10%	AP6M166-Ⓢ AP6M111-Ⓢ AP6M122-Ⓢ

#### Ⓢ Color Codes

Color	Code
Amber	A
Green	G
Red	R
Warm White	W
Yellow	Y

- 1. In place of Ⓢ, specify the color code.
- 2. For dimensions, see page 455.
- 3. For accessories, see page 454.





#### Optional Transformers and DC-DC Converters (for AP2 and AP6 only)

Style	Voltage	Part Numbers		
		Used with AP2 Series	Used with AP6 Series	
	Transformer	110/120V AC 220/240V AC	AP2-0126D AP2-0246D	AP6-0126D AP6-0246D
	DC-DC Converter	110V DC (90-140V DC)	AP2-016DD	AP6-016DD

- 1. Optional Transformers and DC-DC converters snap onto the back of AP2 or AP6 pilot lights.
- 2. Transformers and DC-DC Converters step down to 6V.
- 3. For dimensions, see page 455.


Switches & Pilot Devices

Accessories – AP Series

Item	Appearance	Description	Used With	Part Number
Locking Ring Wrench		Made of metal. Used for tightening plastic locking ring during installation. Tightening torque should not exceed 3kgf-cm	Ø 16mm units	MT-001
			Ø 12mm units	MT-002
			Ø 10mm units	MT-003
			Ø 8mm units	MT-004
Mounting Hole Plug		Made of rubber. Fills unused mounting holes to provide IP65 protection	Unused 8mm panel cutouts	AL-B8
			Unused 10mm panel cutouts	AL-B1
			Unused 12mm panel cutouts	AL-B2
			Unused 16mm panel cutouts	AL-B6
Transformer Removal Tool			AP2 and AP6 snap on transformer and DC-DC converter	MT-100
Replacement Lenses		Lenses (included with all units).	AP1M Flat	AP1M-L1-Ⓢ
			AP1M Dome	AP1M-L2-Ⓢ
			AP2M Flat	AP2M-L1-Ⓢ
			AP2M Dome	AP2M-L2-Ⓢ
			AP6M Flat	AP6M-L1-Ⓢ
			AP6M Dome	AP6M-L2-Ⓢ

Signaling Lights


Relays & Sockets

-  1. In place of Ⓢ, specify the Lens Color Code.
- 2. Internal LED is fixed and cannot be removed or replaced.

Ⓢ Lens Color Codes

Color	Code
Amber	A
Green	G
Red	R
Blue	S*
White	W
Yellow	Y

Timers

 \*Blue available in AP8/AP1 series only.

Contactors

Terminal Blocks

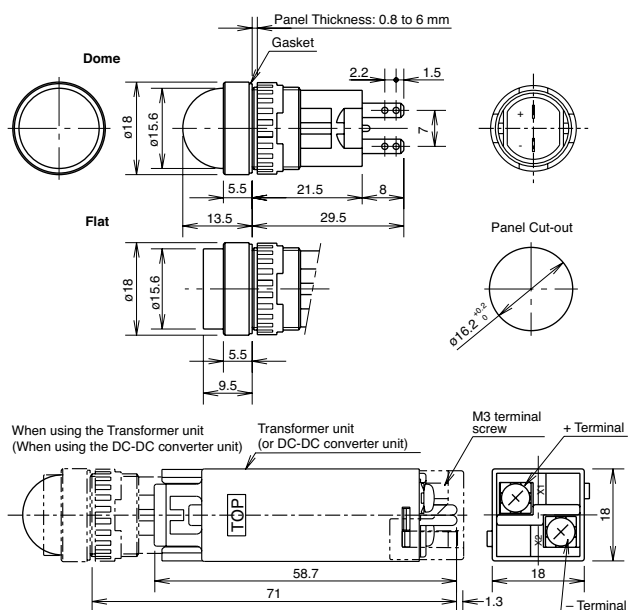
Circuit Breakers

Dimensions – AP Series

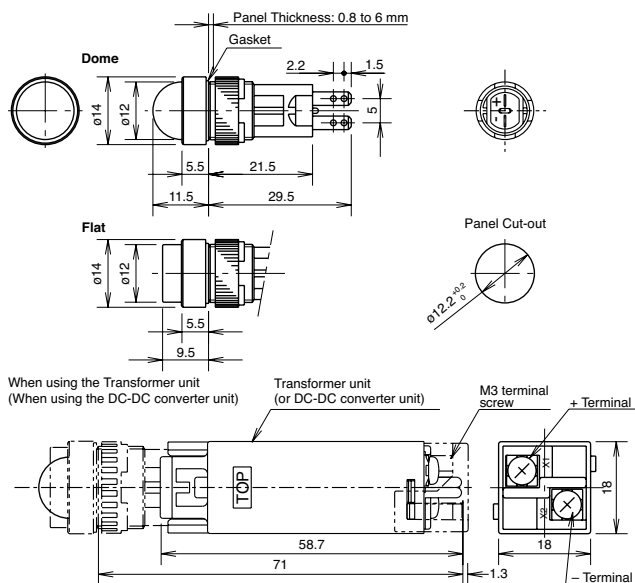
Pilot Lights (AP Series)

Style	AP8		AP1		AP2			AP6		
	Flat	Dome	Flat	Dome	Flat	Dome	w/ Adaptor or Converter	Flat	Dome	w/ Adaptor or Converter
Panel Cut-out	Ø 0.319" (+0.0118, -0) 8.1mm (+0.3, -0)		Ø 0.398" (+0.0118, -0) 10.1mm (+0.3, -0)		Ø 0.480" (+0.0118, -0) 12.2mm (+0.3, -0)			Ø 0.638" (+0.0118, -0) 16.2mm (+0.3, -0)		
Outside Dimension	Ø 0.386" (9.8mm)		Ø 0.472" (12mm)		Ø 0.551" (14mm)		□ 0.709" (18mm)	Ø 0.709" (18mm)		□ 0.709" (18mm)

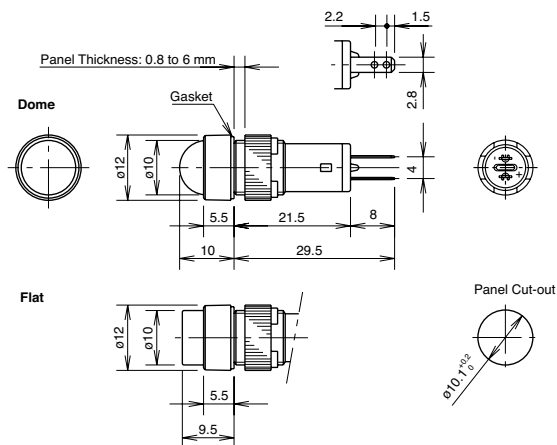
AP6



AP2



AP1



AP8

