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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **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











#### **Specifications**

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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	$100 M\Omega$ 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**

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Model	Transformer	DC-DC Converter				
Applicable Units	AP2 & AP6 (wi	ith 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	$10M\Omega$ 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				



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

**2** Color Codes

# **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	Code		
Amber	А		
Green	G		
Red	R		
Blue	S*		
Warm White	W		
Cool White	PW		
Yellow	Υ		



<sup>\*</sup> Available in only the AP8 and AP1 series.

#### 1. In place of ②, specify the color code. 2. For dimensions, see page 489.

For accessories, see page 488.

#### 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-@

#### **2** Color Codes

Color	Code
Amber	А
Green	G
Red	R
Warm White	W
Yellow	Υ

- 1. In place of ②, specify the color code.

  - For dimensions, see page 489.
     For accessories, see page 488.

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

Ctulo	Voltage	Part Numbers		
Style		voitage	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 489.

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# Accessories — AP Series

Item	Appearance	Description	Used With	Part Number
			Ø 16mm units	MT-001
Locking Ring		Made of metal. Used for tightening plastic locking ring	Ø 12mm units	MT-002
Wrench		during installation. Tightening torque should not exceed 3kgf-cm	Ø 10mm units	MT-003
			Ø 8mm units	MT-004
			Unused 8mm panel cutouts	AL-B8
Mounting		Made of rubber. Fills unused mounting holes to provide IP65	Unused 10mm panel cutouts	AL-B1
Hole Plug		protection	Unused 12mm panel cutouts	AL-B2
			Unused 16mm panel cutouts	AL-B6
Transformer Removal Tool	5	A Series Blank/Lens Removal Tool	AP2 and AP6 snap on transformer and DC-DC converter	MT-100
			AP1M Flat	AP1M-L1-@
			AP1M Dome	AP1M-L2-@
Replacement Lenses		Langua (included with all units)	AP2M Flat	AP2M-L1-@
		Lenses (included with all units).	AP2M Dome	AP2M-L2-@
			AP6M Flat	AP6M-L1-@
			AP6M Dome	AP6M-L2-@



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

#### **2 Lens Color Codes**

Color	Code
Amber	А
Green	G
Red	R
Blue	S*
White	W
Yellow	Υ



<sup>\*</sup>Blue available in AP8/AP1 series only.

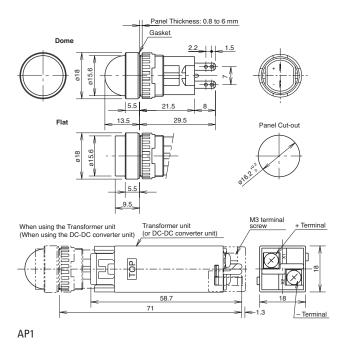
# **Dimensions — AP Series**

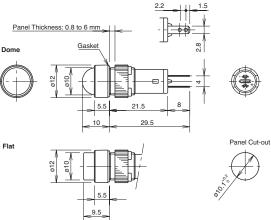
**Switches & Pilot Devices** 

#### **Pilot Lights (AP Series)**

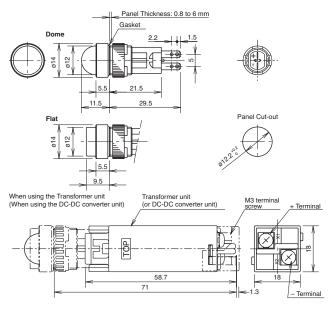
	AP8 AP1		AP2		AP6					
Style	Flat	Dome	Flat	Dome	Flat	Flat Dome W		Flat	Dome	w/ Adaptor or Converter
Panel Cut-out	Ø 0.319" (+0.0118, -0)		Ø 0.480"	Ø 0.480" (+0.0118, -0) 12.2mm (+0.3, -0)		Ø 0.638" (+0.0118, -0) 16.2mm (+0.3, -0)		6.2mm (+0.3, -0)		
Outside Dimension	Ø 0.386"	(9.8mm)	Ø 0.472" (12mm)		Ø 0.551′	Ø 0.551" (14mm) 🔲 0.709" (18mm)		Ø 0.709" (18mm) 🗆 0.709" (18		□ 0.709" (18mm)







#### AP2



#### AP8

