

Bulletin 854J — 40 mm Control Tower Stack Lights

Light Modules



Steady LED Module

854J — $\frac{10}{a} \quad \frac{TL}{b} \quad \frac{4}{c}$

a	
Voltage	
Code	Description
00	0...250V AC/DC (no-lamp module) ⁽¹⁾
24	24V AC/DC ⁽²⁾
10	120V AC ⁽²⁾
20	240V AC ⁽²⁾

b	
Light Module Type	
Code	Description
XN	Steady no lamp ⁽³⁾
TL	Steady LED
GL	Flashing LED
BL	LED strobe, single flash

c	
Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

- (1) Can only be selected with module type XN, voltage code 00. Accepts 4 W socket mount incandescent lamp types only.
 (2) Not valid with module type XN.
 (3) Incandescent lamps (catalog numbers 854J-L24, 854J-L10, and 854J-L20) must be purchased separately.

Sound Modules

Sound modules have continuous and pulsing tones selectable via DIP switch. Maximum sound output is 80 dB(A) @ 1 meter.



Sound Module

854J — $\frac{B}{a} \quad \frac{10}{b} \quad \frac{SA3}{c}$

a	
Housing Color	
Code	Description
B	Black

b	
Light Module Type	
Code	Description
24	24V AC/DC
10	120V AC
20	240V AC

c	
Module Type	
Code	Description
SA3	Single-circuit piezo-style steady/pulsing DIP switch selectable

Standard Stack Light Bases



854J –

B	VM	C
a	b	c

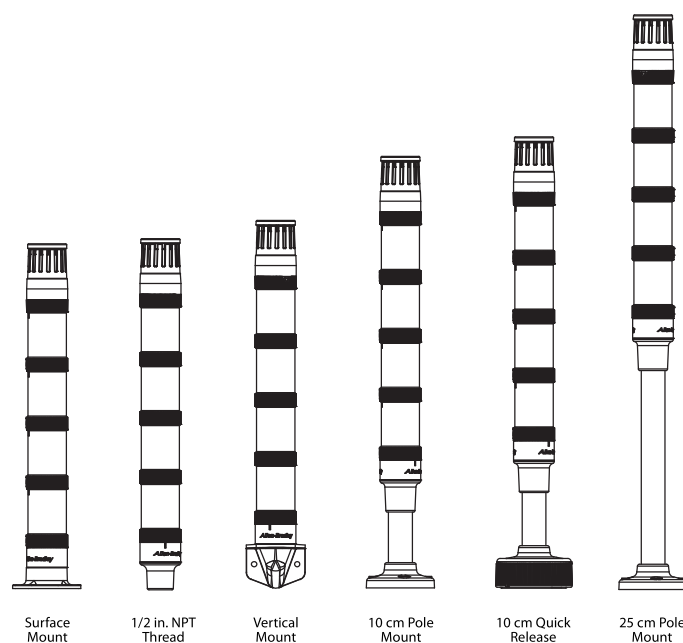
a	
Housing Color	
Code	Description
B	Black

b	
Base Type ⁽¹⁾	
Code	Description
NPT	1/2 in. NPT
VM	Vertical mount
SH	Surface mount, preinstalled mounting hardware
SF	Surface mount, external mounting holes
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
T10	10 cm threaded tube (M20)
T25	25 cm threaded tube (M20)
DS	Double-sided base ⁽²⁾
Q10	10 cm quick release base
Q25	25 cm quick release base
SFQD5	Flange-style base with M12 (5-pin DC) micro connector ^{(3) (4) (5) (6) (7)}

c	
Cap Option	
Code	Description
C	Cap included

(1) PM10, PM25, T10, T25, Q10, and Q25 bases have powder-coated aluminum tubes
(2) Double-sided base can accommodate up to ten modules per base divided in two groups up to five levels each.
(3) For vertical mounting of the base use catalog number 855T-AVM.
(4) Maximum number of levels that are allowed in the stack is four.
(5) For use with Bulletin 889D cordsets.
(6) Cannot be used with 10 cm plastic base extension (catalog number 854J-ABBE).
(7) Maximum 250V AC/DC UL / 60V AC/DC IEC.

Pre-configured Tower Lights, 1...5 Modules



854JC — SF B 10 Y 3 L 5 B 3 L 7 Y 6

a b c d c d c d c d c d

(Level 1, c+d) (Level 2, c+d) (Level 3, c+d) (Level 4, c+d) (Level 5, c+d)

a	
Base Type ⁽¹⁾	
Code	Description
NPT	1/2 in. NPT
VM	Vertical mount
SF	Surface mount —external mounting holes
P10	10 cm aluminum pole mount with foot
P25	25 cm aluminum pole mount with foot
Q10	10 cm quick release mount pole
Q25	25 cm quick release mount pole

b	
Voltage	
Code	Description
24	24V AC/DC
10	120V AC

c	
Module Type	
Code	Description
Y	Steady LED
L	Flashing LED
B	Strobe LED—single flash
P	Piezo sound alarm, continuous/pulsing tone

d	
Lens Color/Sound	
Code	Description
1	Sound module ⁽²⁾
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

(1) P10, P25, Q10, Q25 bases have powder-coated aluminum tubes.

(2) Sound module option can only be selected with Module Type option P in Table e. They must be located in the top position of the stack.

Specifications (Bulletin 854J)

Table 52 - Mechanical

Standard Bases		Based on the weight and style of mounting; tower lights are subject to damage from shock and vibration. Listed below are reference guidelines for maximum acceptable conditions.	
		Shock [G]	Vibration [G]
Surface Mount Base or 10 cm Aluminum Pole Base	1 Module Stack	50	5
	3 Module Stack	50	5
	5 Module Stack	40	5
Vertical Base or 25 cm Aluminum Pole Base	1 Module Stack	55	5
	3 Module Stack	55	5
	5 Module Stack	35	5
Recommended Wire Sizes		0.2...1.5 mm ² (24...16 AWG)	
Recommended Terminal Torque		Screwless terminal blocks	

Table 53 - Environmental

Attribute		Value
Ingress Ratings	Light Modules	IP66/UL Type 4/4X/13
	Sound Modules	
	Surface, Vertical, Tube Mount Bases	
	Pole Mount Bases	
	Flange-style Base with M12 Micro Connector ⁽¹⁾	
Temperature Ranges	Operating	-30...+60 °C (-22...+140 °F) For Cat. No. 854J-BSFQD5C only: -30...+45 °C (-22...+113 °F)
	Storage	-30...+85 °C (-22...+185 °F)

(1) UL Type 1 when used with Cat. No. 855T-AVM mounting bracket.

Table 54 - Materials

Part	Material
Bases, Caps, Lens Covers, Sound Module Housings	Polycarbonate
Lamp Socket	Polycarbonate
Rubber Seals and Gaskets	Nitrile rubber
Pole (for aluminum pole assembly)	Aluminum
Pole Base Footing (for aluminum pole base)	Polycarbonate
Mounting Screw Washers	Polypropylene

Table 55 - Estimated Light Output

Device		Estimated Light Output [mcd]	
		24V AC/DC	120V AC, 240V AC
Strobe LED	Red	4430	3915
	Green	4216	4080
	Amber	4430	3915
	Blue	1673	1619
	Clear	4464	4320
	Yellow	3715	3283
Steady/Flashing LED	Red	1793	2392
	Green	1714	3400
	Amber	1793	2391
	Blue	680	1349
	Clear	1814	3600
	Yellow	1503	2006

Table 56 - Operating Voltage

Device	Operating Voltage		
	24V AC/DC	120V AC	240V AC
Light modules and sound modules	24V AC/DC ($\pm 10\%$)	110V AC, 50 Hz ($\pm 10\%$) 120V AC, 60 Hz ($\pm 10\%$)	230V AC, 50 ($\pm 10\%$) 240V AC, 60 ($\pm 10\%$)

Table 57 - Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions

Device	Lamp Life Rating		
	24V AC/DC	120V AC	240V AC
LED modules	50,000 hr		
Sound modules	20,000 hr		

Table 58 - Current Consumption [mA]

Device		Current Consumption [mA]		
		24V AC/DC	120V AC	240V AC
Light only modules	Steady LED	22 (red, amber, and yellow) 33 (green, blue, and white)	30 (red, amber, and yellow) 29 (green, blue, and white)	
	Flashing LED	28 (red, amber, and yellow) 36 (green, blue, and white)	30 (red, amber, and yellow) 29 (green, blue, and white)	
	Strobe LED	35 (red, amber, and yellow) 65 (green, blue, and white)	10	
Sound modules	Single-tone	65	31	32

Table 59 - Flashing Frequency (Light Only Modules)

Device	Flashing Frequency
Flashing LED Modules	Approximately 1.5 Hz; Time On/Time OFF = 1:1
LED Strobe Modules	Approximately 2 Hz (flash duration 1/50,000 second)

 Table 60 - Decibel Rating (Sound Modules) ⁽¹⁾

Device	Decibel Rating
Single-tone Sound Module	80 dB(A) (non-adjustable)

(1) All dB(A) ratings are determined at a distance of 1 m (3.3 ft) from the sound module.

Table 61 - Leakage Current Impact

All light and sound modules can absorb up to 3 mA of leakage current from solid-state outputs without module activation.

Standards Compliance

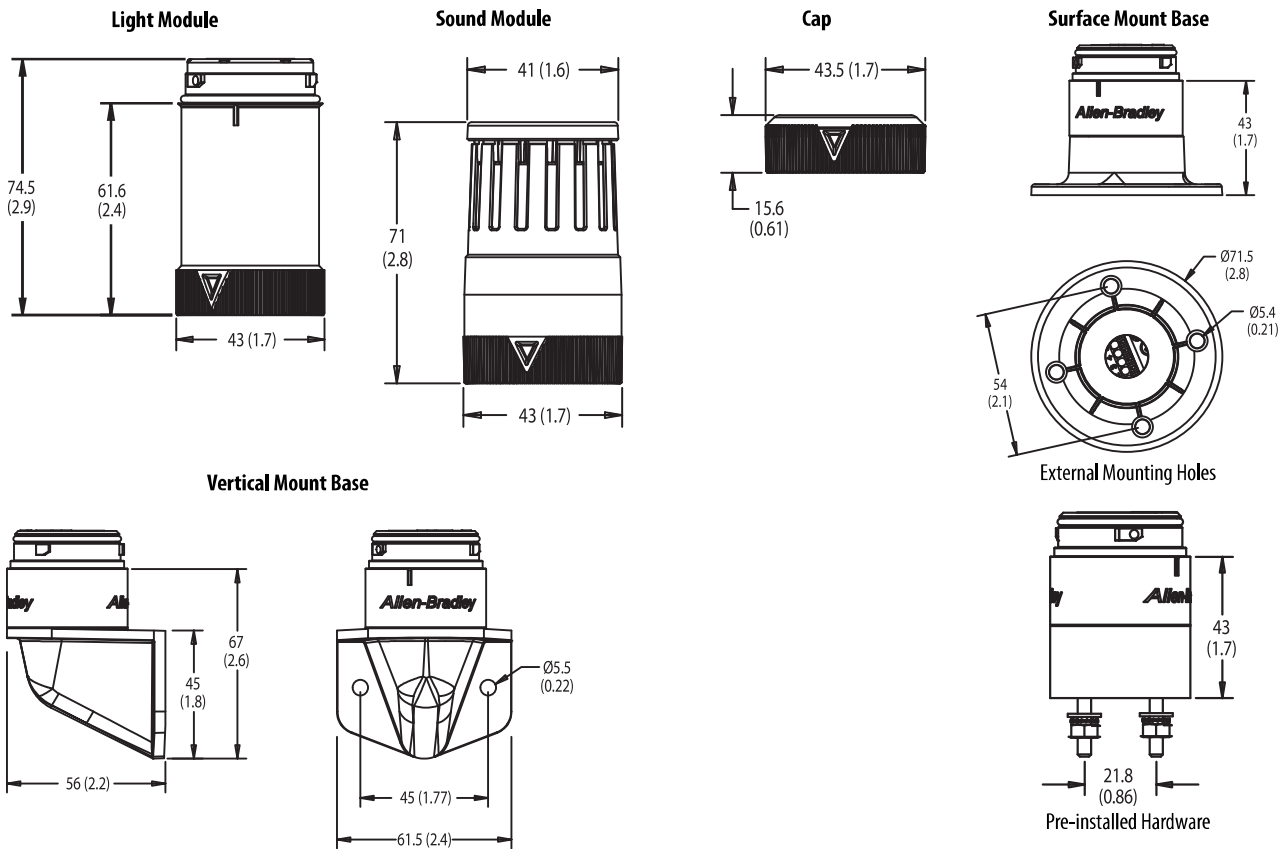
- UL 508
- CSA C22.2 No. 14
- EN/IEC 60947-1
- EN/IEC 60947-5-1

Certifications

- cULus Listed (File No. E14840, Guides NKCR, NKCR7)
- CE Marked
- RoHS Compliant

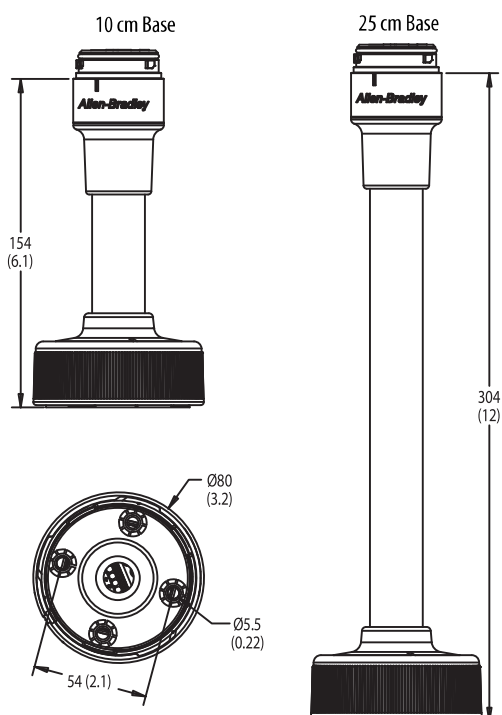
Approximate Dimensions (Bulletin 854J)

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

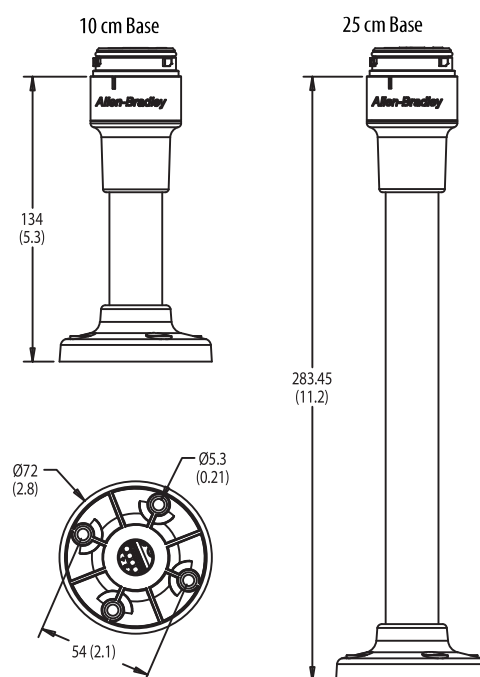


Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

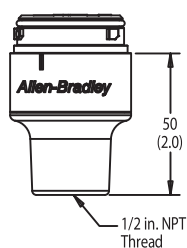
Quick-release Bases



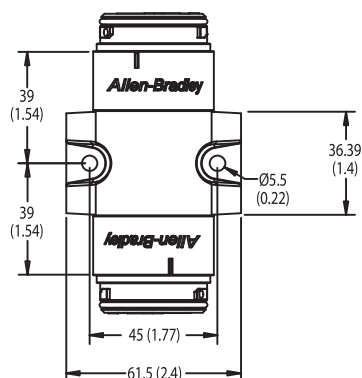
Pole-mount Bases



1/2 in. NPT Thread Base



Double-sided Base



Flange-style Base with M12 Micro Connector (Male)

