Allen-Bradley

Signaling Specifications

Catalog Numbers 854J, 854K, 855B, 855BS/BM/BL, 855D, 855E, 855F, 855H, 855L, 855P, 855T, 855W, and 855X

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at http://www.rockwellautomation.com/literature/. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

Bulletin 855P — Panel Mount Signaling Alarms

Bulletin 855P — Panel Mount Sounder

855P – B (a) 10 (b) ME (c) 22 (d)

30 mm Panel Mount Sounder

45 mm Panel Mount Sounder

65 mm Panel Mount Sounder

a

Housing Color	
Code	Description
B	Black

b

Voltage	
Code	Description
30	12…24V AC/DC
10	120V AC
20	240V AC

c

Size	
Code	Description
SE	30 mm, fully-enclosed, smooth front, 72 dB
SH	30 mm, high output, 80 dB
ME	45 mm
LE	65 mm

d

Mounting Hole	
Code	Description
22	22.5 mm

Bulletin 855PC — Panel Mount Combined Sounder with LED Beacon

855PC – B (a) 10 (b) ME (c) 3 (d) 22 (e)

45 mm Panel Mount Combined Sounder with LED Beacon

65 mm Panel Mount Combined Sounder with LED Beacon

a

Housing Color	
Code	Description
B	Black

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Diameter	
Code	Description
ME	45 mm
LE	65 mm

d

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

e

Mounting Hole	
Code	Description
22	22.5 mm

Bulletin 855PS — Panel Mount Strobe §♣

855PS – B (a) 10 (b) ME (c) 3 (d) 22 (e)

30 mm Panel Mount Strobe

45 mm Panel Mount Strobe

65 mm Panel Mount Strobe

a

Housing Color	
Code	Description
B	Black

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC
30	12…24V AC/DC

c

Diameter	
Code	Description
SE	30 mm★
ME	45 mm‡
LE	65 mm‡

★ Only available in 12V AC/DC, 24V AC/DC, 120V AC, or 240V AC.
‡ Only available in 12…24V AC/DC, 120V, or 240V AC.

d

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

e

Mounting Hole	
Code	Description
22	22.5 mm

Bulletin 855PB — Panel Mount Selectable Steady or Flashing LED Beacon

855PB – B (a) 10 (b) ME (c) 3 (d) 22 (e)

30 mm Panel Mount LED Beacon

45 mm Panel Mount LED Beacon

65 mm Panel Mount LED Beacon

a

Housing Color	
Code	Description
B	Black

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Diameter	
Code	Description
SE	30 mm
ME	45 mm
LE	65 mm

d

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

e

Mounting Hole	
Code	Description
22	22.5 mm

Bulletin 855PD — Panel Mount Dual Circuit Alarms

855PD –	B	24	ME	F	3	4	22
	a	*b*	*c*	*d*	*e*	*f*	*g*

Half-Lens Illumination

Full-Lens Illumination

Combined Sounder with LED Beacon

a

Housing Color	
Code	Description
B	Black

b

Voltage	
Code	Description
12★	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Diameter	
Code	Description
SE	30 mm ‡ Δ
ME	45 mm
LE	65 mm

d

Function	
Code	Description
F	2-color, full-lens illumination
H	2-color, half-lens illumination wtih barrier
C	Combined sounder with LED beaconΔ

e

LED Color★/Sound	
Code	Description
1	Sound
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

f

LED Color♣	
Code	Description
3	Green
4	Red
5	Amber§
6	Blue
7	Clear
8	Yellow§

g

Mounting Hole	
Code	Description
22	22.5 mm

‡ 30 mm available in 24V AC/DC only, for 2-color versions.
Δ The sounder with LED is not available in the 30 mm size.
★ Voltage code **12** is only valid for sounder with LED devices.
§ The color combination of **Yellow** and **Amber** is not allowed because of their similarity.
♣ For two-color devices, the first color code listed in the cat. no. corresponds to the same side as the panel tab found on the housing. For example:
Cat. No. 855PD-B24MEH**43**22 indicates that the **Red** color is on the same side as the panel tab and the **Green** color is on the opposite side as the panel tab.

Specifications

Panel Sounder and Single/Dual Circuit Panel Sounder with LED

Technical						
Housing:	Base Material	Polycarbonate, black				
	Lens	Polycarbonate, red, amber, yellow, green, blue, and clear				
Protection class		UL Type 4/4X/13, IP65				
Terminals		Plug-in terminal block, up to 2.5 mm^2 (14 AWG), IP2X				
Operation temperature range		-25…+60 °C (-13…+140 °F)				
Storage temperature range		-25…+85 °C (-13…+185 °F)				
Mounting		Central mounting for bore holes 22 mm or 30.5 mm with hole adapter kit (Cat. No. 855P-AHA1)				
Mounting nut torque		1.7 N•m (15 lb•in)				
Electrical						
		Sounder			**Sounder with Warning Light**	
		65 mm	**45 mm**	**30 mm**	**65 mm**	**45 mm**
Supply voltage range	12V AC/DC - 50/60 Hz	—	—	—	+/–10%	+/–10%
	24V AC/DC - 50/60 Hz	—	—	—	+/–10%	+/–10%
	12…24V AC/DC - 50/60 Hz	8…26V AC/DC	8…26V AC/DC	10…26V AC/DC	—	—
	120V AC - 50/60 Hz	50…140V AC	50…140V AC	80…140V AC	+/–10%	+/–10%
	230/240V AC - 50/60 Hz	150…260V AC	150…260V AC	180…260V AC	+/–10%	+/–10%
Nominal current — single circuit (dual circuit)	12V AC/DC - 50/60 Hz	—	—	—	50 mA (62 mA)	35 mA (48 mA)
	24V AC/DC - 50/60 Hz	57 mA	20 mA	20 mA	73 mA (95 mA)	58 mA (73 mA)
	120V AC - 50/60 Hz	40 mA	40 mA	20 mA	60 mA (52 mA)	40 mA (51 mA)
	230/240V AC - 50/60 Hz	42 mA	42 mA	20 mA	63 mA (52 mA)	42 mA (51 mA)
Turn-on leakage current		≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA
Maximum sound level (average)		105 dBA @ 1 m	100 dBA @ 1 m	SE: 72 dBA @ 1 m SH: 80 dBA @ 1 m	103 dBA @ 1 m	98 dBA @ 1 m
Minimum sound level		<85 dB	<85 dB	—	<85 dB	<85 dB
Sound level adjustment		Stepless	Stepless	—	Stepless	Stepless
Sound main frequency		3300 Hz	3300 Hz	3500 Hz	3300 Hz	3300 Hz
Sound types	Continuous	Yes	Yes	Yes	Yes	Yes
	Pulsing★	Yes	Yes	Yes	Yes	Yes
	Alternating frequency★	Yes	No	No	Yes	No
Sound selection		Externally by terminal connection				
Weight		65 g	35 g	25 g	85 g	55 g

★ Single Circuit only.

Standards Compliance

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

Certifications

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

Panel Strobe and Single/Two Color LED Lights

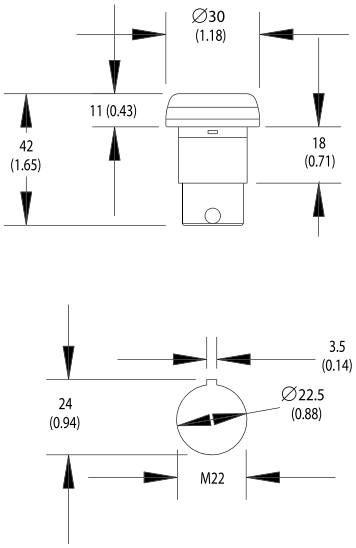
Technical							
Housing:	Base Material	Polycarbonate, black					
	Lens	Polycarbonate, red, amber, yellow, green, blue, and clear					
Protection class		UL Type 4/4X/13, IP2X, IP65					
Terminals		Plug-in terminal block, up to 2.5 mm^2 (14 AWG), IP2X finger-safe					
Operation temperature range		-25…+60 °C (-13…+140 °F)					
Storage temperature range		-25…+85 °C (-13…+185 °F)					
Mounting		Central mounting for bore holes 22 mm or 30.5 mm with hole adapter kit (Cat. No. 855P-AHA1)					
Mounting nut torque		1.7 N•m (15 ib•in)					

Electrical							
		LED Beacon — Steady/Flashing			Strobe Light		
		65 mm	45 mm	30 mm	65 mm	45 mm	30 mm
Supply voltage range	12V AC/DC - 50/60 Hz	+/–10%	+/–10%	+/–10%	—	—	+/–10%
	24V AC/DC - 50/60 Hz	+/–10%	+/–10%	+/–10%	—	—	+/–10%
	12…24V AC/DC 50/60 Hz	—	—	—	8…26V AC/DC	8…26V AC/DC	—
	120V AC - 50/60 Hz	+/–10%	+/–10%	+/–10%	+/–10%	+/–10%	+/–10%
	230/240V AC - 50/60 Hz	+/–10%	+/–10%	+/–10%	+/–10%	+/–10%	+/–10%
Nominal current — single color (two color w/ full or half illumination)	12V AC/DC - 50/60 Hz	75 mA	60 mA	30 mA	—	—	15 mA
	24V AC/DC - 50/60 Hz	54 mA (full: 71 mA half: 44 mA)	35 mA (full: 46 mA half: 39 mA)	25 mA (full: 28 mA half: 30 mA)	—	—	10 mA
	12…24V AC/DC 50/60 Hz @ 12V	—	—	—	150 mA	110 mA	—
	12…24V AC/DC 50/60 Hz @ 24V	—	—	—	140 mA	100 mA	—
	120V AC - 50/60 Hz	25 mA (full: 61 mA half: 41 mA)	25 mA (full: 35 mA half: 35 mA)	20 mA	30 mA	20 mA	10 mA
	230/240V AC - 50/60 Hz	25 mA (full: 61 mA half: 41 mA)	25 mA (full: 35 mA half: 34 mA)	20 mA	20 mA	12 mA	10 mA
Turn-on leakage current		≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA	≥3 mA
Steady/Flashing light		Externally by terminal connection			—	—	—
Flashing frequency		2 Hz	2 Hz	2 Hz	min. 1.4 Hz	min. 1.4 Hz	min. 1.4 Hz
Light source		LED			Xenon tube		LED
Flash energy		—	—	—	1 J	0.5 J	—
Weight		60 g	40 g	40 g	80 g	60 g	40 g

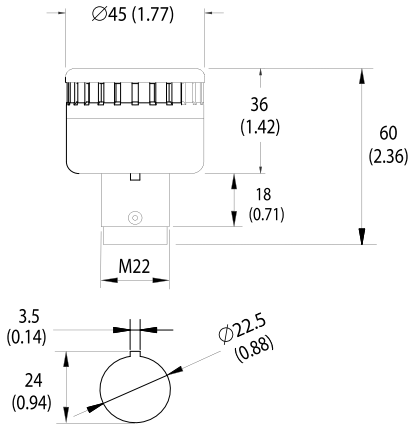
Approximate Dimensions

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

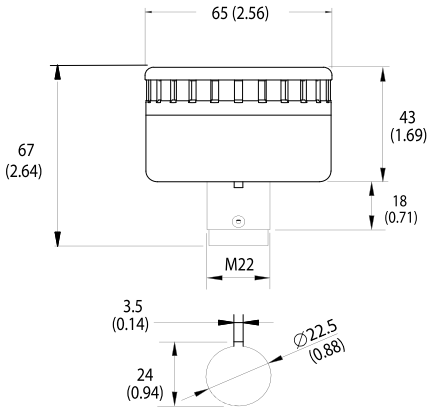
30 mm Sounder★



45 mm Sounder‡

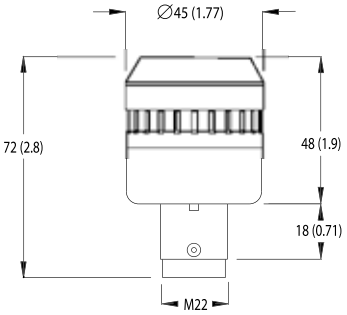


65 mm Sounder‡

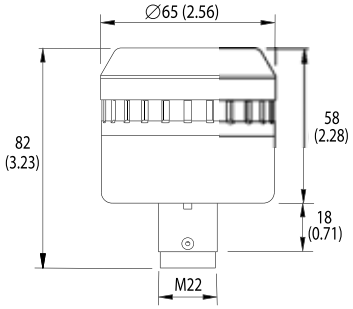


★ Terminal connector adds 14 mm (0.55 in.) to back of panel depth.
‡ Terminal connector adds 9 mm (0.35 in.) to back of panel depth.

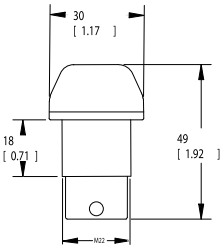
45 mm Combined Sounder with LED Beacon‡



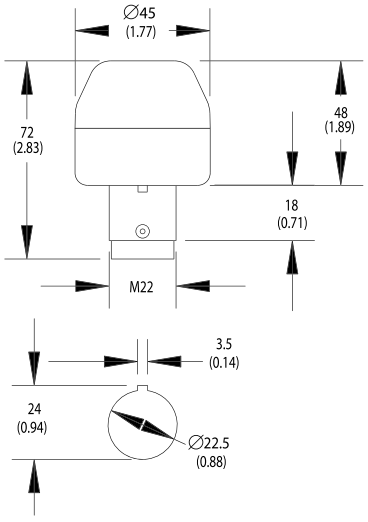
65 mm Combined Sounder with LED Beacon‡



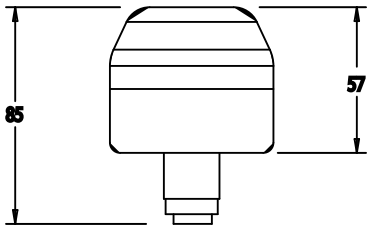
30 mm LED★
30 mm Strobe★



45 mm LED‡
45 mm Strobe‡



65 mm LED‡
65 mm Strobe‡



★ Terminal connector adds 14 mm (0.55 in.) to back of panel depth.
‡ Terminal connector adds 9 mm (0.35 in.) to back of panel depth.

Bulletin 855L — Panel Light Bars

Cat. No. 855L-NX1

Cat. No. 855L-NX2

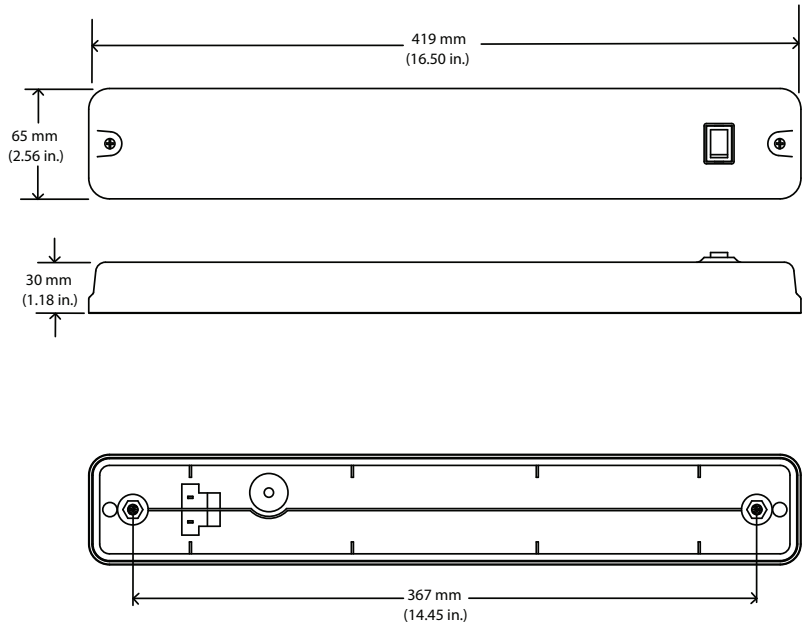
Specifications

	855L-NX1 (24…48V with ON/OFF switch) 855L-NX2 (24…48V - no switch)	855L-NX3 (110…240V with ON/OFF switch) 855L-NX4 (110…240V - no switch)
Nominal Input Voltage	24…48V AC/DC 50/60 Hz	855L-NX3: 110…240V AC 50/60 Hz 855L-NX4: 110…240V AC/DC 50/60 Hz
Input Voltage Limits	17…63V DC 17…53V AC 50/60 Hz	90…320V DC (855L-NX4 only) 90…250V AC 50/60 Hz
Nominal Current	~300 mA @ 24V DC/ ~150 mA @ 48V DC	<70 mA @ 120V AC/ <55 mA @ 240V AC
Inrush Current	1 A @ 24V DC, ~2 A @ 48V DC, +25 °C	~3.5 A @ 120V AC/ ~7 A @ 240V AC
Leakage Current Immunity	>8 mA DC	>3 mA AC/~1 mA DC
Ingress Protection	855L-NX1: NEMA 1, IP40 855L-NX2: NEMA 1, IP44	855L-NX3: NEMA 1, IP40 855L-NX4: NEMA 1, IP44
Operating Temperature Range	-31…+140 °F (-35…+60 °C)	
Storage Temperature Range	-31…+185 °F (-35…+85 °C)	
Wire Size	22…14 AWG (0.5…2.5 mm^2)	
Light Beam Angle	~70°	
LED Color	White	
Light Output	470 lumens, minimum	
Lens Material	Polycarbonate (clear)	
Base Material	Polycarbonate (light grey)	
Mounting Orientation	No restrictions	
Mounting Screws★	2 X 1/4 in. (M5/ M6)	
Weight	<1 lb (380 g)	
Standards Compliance	EN61000-6-2, EN61000-6-3, EN60947-5-1	
Certifications	CE Marked, cULus File No. E14840	
LED MTFB	50,000 hr	

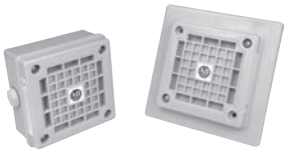
★ Not provided.

Approximate Dimensions

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



Bulletin 855H — General Purpose Electronic Horns



General Purpose Electronic Horns

Single- or dual-circuit, selectable tone horns, with volume control, for use in general signaling applications.

855H – SG 10 GPA
a b c

a

Mounting Type	
Code	Description
FG	Semi-flush wall plate, grey housing
SG	Surface base with two conduit entrances, grey housing

b

Voltage	
Code	Description
24	24V AC/DC
10	120V AC
20	240V AC
30	10…30V DC
45	40…260V AC/DC 50/60 Hz

c

Horn Type	
Code	Description
GPA	General purpose, 108 dB(A) max., single stage/circuit, three tones
GPE	Enhanced version, 113 dB(A) max. @ 1 m, two stage, three tones, volume control

Note: Horn type **GPE** (Table c) not valid with mounting type **FG** (Table a) or with voltage codes **24**, **10**, and **20** (Table b).
Horn type **GPA** (Table c) not valid with voltage codes **30** and **45** (Table b).

Specifications

General Purpose Electronic Horns

Environmental Ratings					
Ingress Ratings	Semi-flush Mount	UL Type 3R/13, IP54			
	Surface Mount	UL Type 4/4X/13/3R, IP66			
		Operating		Storage	
Temperature Ranges		-25…+55 °C (-13 …+131 °F)		-40…+70 °C (-40 …+158 °F)	
Materials					
Housings including horn cover and base		Polycarbonate			
O-ring		NBR			
Gasket (mounting type FG)		EPDM/SBR closed cell foam			
Performance Ratings					
Sound Output		105±3 dB(A) @ 1 m (standard), 110±3 dB(A) @ 1 m (enhanced)			
Operating Voltages and Currents					
		DC Voltage	**AC Voltage**		
Input Voltage Ranges	Standard (GPA)	24V DC (+/-25%)	24V AC 50/60 Hz (+/-10%)	120V AC 50/60 Hz (+/-10%)	240V AC 50/60 Hz (+/-10%)
	Enhanced (GPE)	10…30V DC	40…260V AC/DC		
Input Currents @ Nominal Voltage	Standard (GPA)	62 mA	220 mA	40 mA	50 mA
	Enhanced (GPE)	105 mA	—	36 mA	18 mA

Standards Compliance

UL 464
CSA C22.2 No. 205
EN/IEC 60947-1
EN/IEC 60947-5-1
EN 6100-6-2
EN 6100-6-3

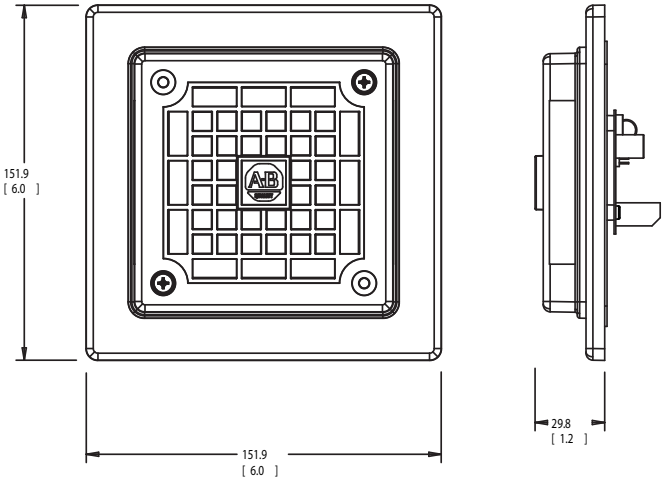
Certifications

cULus Listed (File No. S6583, Guides UCST, UCST7)
CE Marked

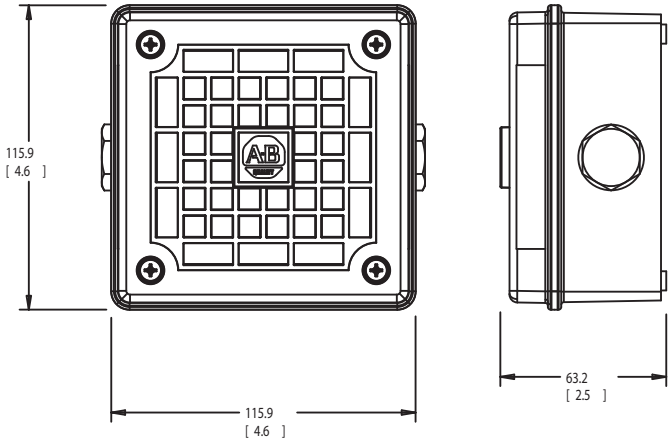
Approximate Dimensions

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

Semi-flush Mount



Surface Mount



Bulletin 855H — High-Performance Electronic Horns

High-Performance Electronic Horns

855H – B D30 B D

a b c d

Range “A” Industrial Horn

Range “C” Industrial Horn

Range “E” Industrial Horn

a

Product Type	
Code	Description
B	Industrial horn, grey housing

b

Voltage	
Code	Description
D30	10...30V DC
A24	24V AC 50/60 Hz
A10	115V AC 50/60 Hz
A20	230V AC 50/60 Hz

c

Horn Type	
Code	Description
A	100 dB, 10 tone, 2-stage (DC)
	100 dB, 10 tone, 1-stage (AC)
B	104 dB, 32 tone, 3-stage (DC)
	104 dB, 32 tone, 3-stage (AC)
C	112 dB, 32 tone, 3-stage (DC)
	112 dB, 32 tone, 3-stage (AC)
D	119 dB, 45 tone, 3-stage (DC)
	119 dB, 45 tone, 3-stage (AC)
E	126 dB, 45 tone, 3-stage (DC)
	126 dB, 45 tone, 3-stage (AC)

d

Mount Option	
Code	Description
D	Standard base for surface or on-the-wall mounting with conduit openings and hole plugs

High-Performance Electronic Horns with Attached Strobe Beacons

855H – BC D12 E D R 3

a b c d e f

Range “A” Horn with Beacon

Range “C” Horn with Beacon

Range “E” Horn with Beacon

a

Product Type	
Code	Description
BC	Electronic horn with Xenon strobe beacon, grey housing

b

Voltage	
Code	Description
D12	12V DC
D24	24V DC
A24	24V AC 50/60 Hz
A10	115V AC 50/60 Hz
A20	230V AC 50/60 Hz

c

Horn Type	
Code	Description
A	100 dB, 10 tone, 2-stage (DC)
	100 dB, 10 tone, 1-stage (AC)
B	104 dB, 32 tone, 3-stage (DC)
	104 dB, 32 tone, 3-stage (AC)
C	112 dB, 32 tone, 3-stage (DC)
	112 dB, 32 tone, 3-stage (AC)
D	119 dB, 45 tone, 3-stage (DC)
	119 dB, 45 tone, 3-stage (AC)
E	126 dB, 45 tone, 3-stage (DC)
	126 dB, 45 tone, 3-stage (AC)

d

Mount Option	
Code	Description
D	Standard base for surface or on-the-wall mounting with conduit openings and hole plugs

e

Illuminated Function	
Code	Description
R	5J strobe

f

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

Specifications

Industrial Electronic Horns and Horns with Strobe Beacons

Mechanical Ratings					
Shock and Vibration		Listed below are reference guidelines for maximum shock and vibration standards for the 855H.			
		Shock	Vibration		
Range A Horn		15 G Peak	3 G Peak		
Range B Horn		15 G Peak	3 G Peak		
Range C Horn		15 G Peak	3 G Peak		
Range D Horn		15 G Peak	3 G Peak		
Range E Horn		15 G Peak	1 G Peak		
Range A Horn with Strobe Beacon		15 G Peak	3 G Peak		
Range B Horn with Strobe Beacon		15 G Peak	3 G Peak		
Range C Horn with Strobe Beacon		15 G Peak	3 G Peak		
Range D Horn with Strobe Beacon		15 G Peak	3 G Peak		
Range E Horn with Strobe Beacon		15 G Peak	1 G Peak		
Environmental Ratings					
Ingress Ratings	Electronic Horns	UL Type 13/3R, IP56			
	Horn with Beacon	UL Type 13, IP56			
		Operating	Storage		
Temperature Ranges	Electronic Horns	–13…+131 °F (–25…+55 °C)	–40…+167 °F (–40…+75 °C)		
	Horns with Beacons	–13…+131 °F (–25…+55 °C)	–40…+167 °F (–40…+75 °C)		
Materials					
Horn Cover and Base		ABS			
Beacon Housing		Polycarbonate			
Beacon Lens		Polycarbonate			
Gasket (Cover to Base)		Nitrile 70			
Gasket (Enclosure back to wall)		Nitrile 70			
Gasket (Horn to Beacon)		Nitrile 70			
Gasket (Screw Mounting Hole)		Fiber			
Performance Ratings					
		Sound Output			
Range A Horn		100 dB max. @ 1 meter			
Range B Horn		104 dB max. @ 1 meter			
Range C Horn		112 dB max @ 1 meter			
Range D Horn		119 dB max @ 1 meter			
Range E Horn		126 dB max @ 1 meter			
		Xenon Lamp Rating			
Strobe Beacon		5 Joule Output			
Operating Voltage					
		DC Voltage		**AC Voltage**	
All Horns		10...30V DC		24V AC 50/60 Hz (+/-10%)	115V AC 50/60 Hz (+/-10%)	230V AC 50/60 Hz (+/-10%)
All Horns with Strobe Beacon		12V DC (+/-10%)	24V DC (+/-10%)	24V AC 50/60 Hz (+/-10%)	115V AC 50/60 Hz (+/-10%)	230V AC 50/60 Hz (+/-10%)
Current Consumption						
Horns		**Range A**	**Range B**	**Range C**	**RangeD**	**Range E**
10...30V DC		25 mA	25 mA	25 mA	200 mA	950 mA
24V AC 50/60 Hz		40 mA	40 mA	40 mA	500 mA	1000mA
115V AC 50/60 Hz		13 mA	20 mA	20 mA	100 mA	240 mA
240V AC 50/60 Hz		13 mA	15 mA	15 mA	60 mA	120 mA
Horns with Strobe Beacon						
12V DC		525 mA	525 mA	525 mA	700 mA	1450 mA
24V DC		275 mA	275 mA	275 mA	450 mA	1200 mA
24V AC		405 mA	405 mA	405 mA	865 mA	1200 mA
115V AC		113 mA	120 mA	120 mA	200 mA	340 mA
240V AC		63 mA	65 mA	65 mA	110 mA	170 mA
Flashing Frequency						
Strobe Beacon		1 Hz				

Standards Compliance

UL 464
CSA C22.2 No. 205
EN/IEC 60947-1
EN/IEC 60947-5-1
EN 6100-6-2
EN 6100-6-4

Certifications

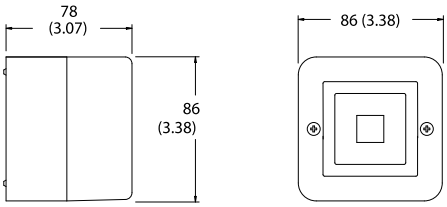
cULus Listed (File No. S6583, Guides UCST, UCST7)
CE Marked

Approximate Dimensions

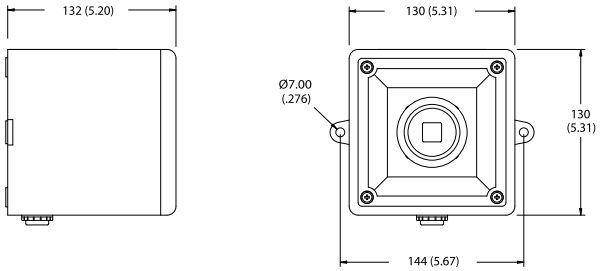
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Horns

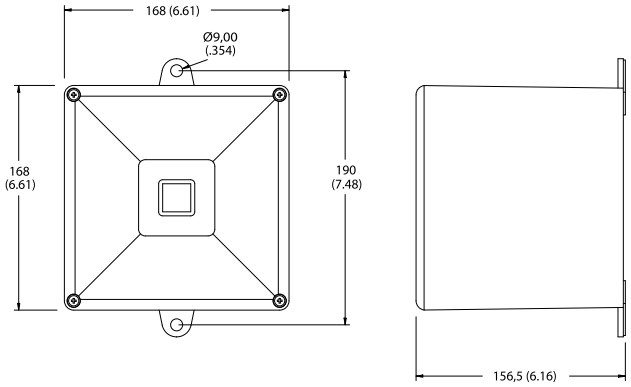
Range A&B



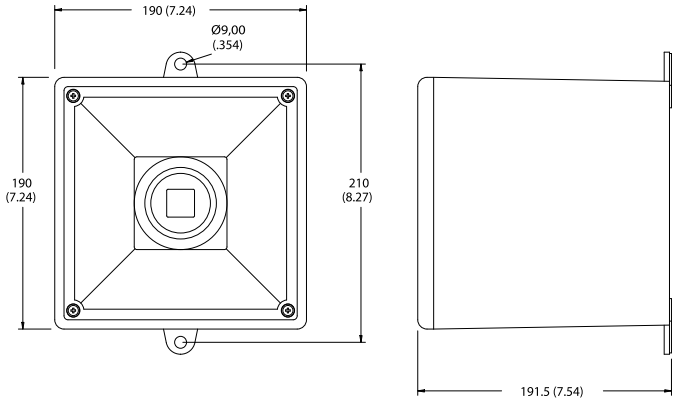
Range C



Range D

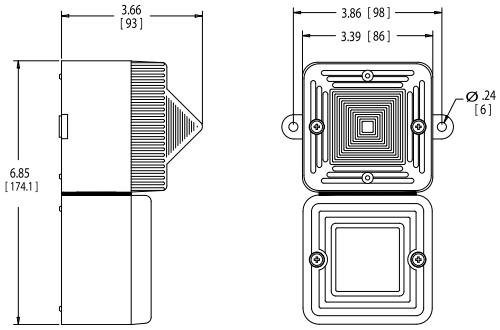


Range E

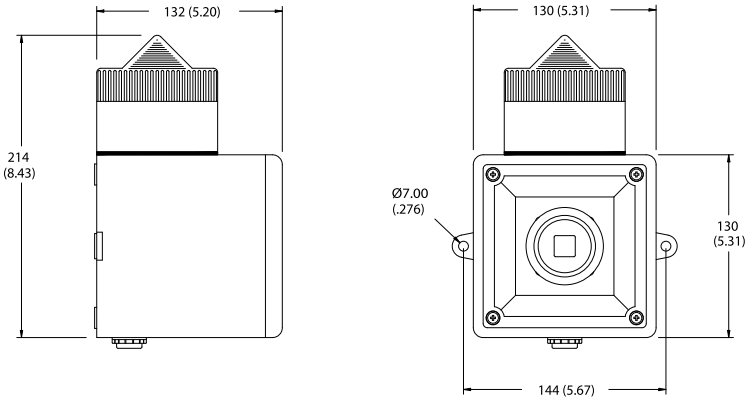


Horns with Beacons

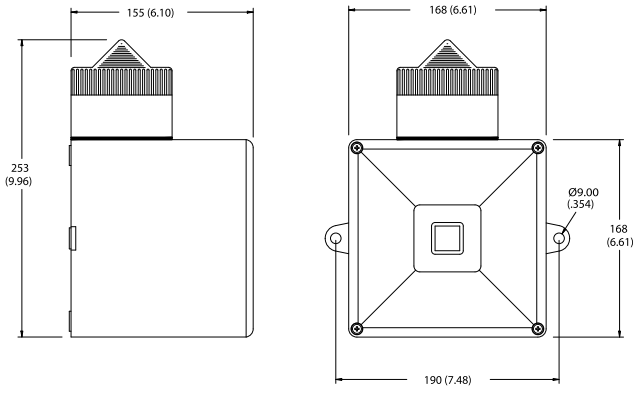
Range A&B



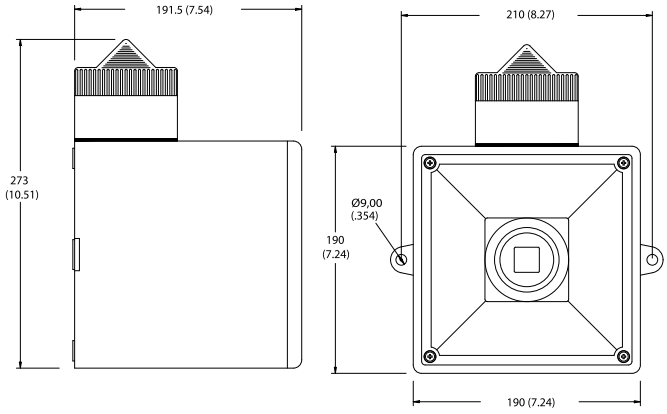
Range C



Range D



Range E



Bulletin 855B — Mini Square Beacons

Mini square 5 Joule strobe beacons for general signaling applications. Bases accept conduit connections in side and back of enclosure.

Mini Square Strobe Beacon

855B – G MS 12 R 3

a b c d e

a

Housing/Color	
Code	Description
G	Grey

b

Beacon Type	
Code	Description
MS	Mini-square beacon

c

Voltage	
Code	Description
24	24V AC/DC
10	115V AC 50/60 Hz
20	230V AC 50/60 Hz

d

Illumination Type	
Code	Description
R	5 J strobe

e

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

Specifications

Mechanical Ratings			
Shock and Vibration	Listed below are reference guidelines for maximum shock and vibration standards for the Bul. 855B beacon lights.		
	Shock	Vibration	
All Strobe Beacons	50 G Peak	5 G Peak	
Environmental Ratings			
Ingress Ratings	UL Type 13/3R, IP66		
Operating Temperature Ratings — All Strobe Beacons	-12…+131 °F (-25…+55 °C)		
Materials			
Housing and Lens	Polycarbonate		
Gaskets	Nitrile 70		
Performance Ratings			
	Xenon Lamp Rating		
All Strobe Beacons	5 Joule		
Operating Voltage			
All Strobe Beacons	24V AC/DC 230V (+/-20%)	120V AC 50/60 Hz (+/-10%)	230V AC 50/60 Hz. (+/- 10%)
Current Consumption			
	24V AC/DC	120V AC	230V AC
All Strobe Beacons	365 mA/250 mA	100 mA	50 mA
Flashing Frequency			
All Strobe Beacons	1 Hz		

Standards Compliance

UL 464
UL 1638
CSA C22.2 No. 205
EN/IEC 60947-1
EN/IEC 60947-5-1
EN 6100-6-2
EN 6100-6-4
CAN/ULC-S526-M87

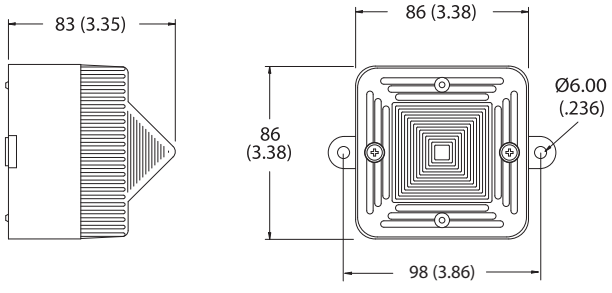
Certifications

cULus Listed (File No. E197159, Guides UEES, UEES7)
CE Marked

Approximate Dimensions

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

Mini Square Beacon



Bulletin 855BS, 855BM, 855BL — Industrial Round Beacons

Bulletin 855BS — 90 mm Beacons

855BS – S (a) 10 (b) RH (c) 3 (d)

a

Base Type	
Code	Description
S	Surface mount★
N	1/2 in. NPT conduit mount
T	25 mm tube mount♣

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC
35	24/48V AC/DC
45	120/240V AC/DC

c

Function	
Code	Description
DH	Steady halogen
FH	Flashing halogen
RH	Rotating halogen
BR	Xenon tube strobe§
SL	LED single color selectable steady/flash♦
ML	LED three color♠&
BL	LED strobe selectable single/double flash∇

d

LED/Lens Color	
Code	Description
345	Green, red, amber&
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

★ Surface mount base must be installed with rough wall plate for UL Type 4/4X/13 rating, otherwise UL Type 1 only.
§ Not available in 12V AC/DC.
♣ 25 mm tube mount is UL Recognized, other mounting types are UL Listed.
♦ SL function uses 35 (16…60V AC/16…80V DC) and 45 (90…250V AC/DC) voltage codes only.
♠ ML function uses 24, 10, and 20 voltage codes only.
∇ BL function uses 35 (19…52V AC/16…60V DC), 10, and 20 voltage codes only.
& Green, Red, Amber color combination is only valid for the three color LED selection (**ML**).

Bulletin 855BM — 120 mm Beacons

855BM – S (a) 10 (b) FH (c) 4 (d)

a

Base Type	
Code	Description
S	Surface mount★
N	1/2 in. NPT conduit mount
T	25 mm tube mount

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Function	
Code	Description
DH	Steady halogen
FH	Flashing halogen
RH	Rotating halogen
BR	Xenon strobe§

d

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

★ When used outdoors surface mount base must be installed with rough wall plate for UL Type 4/4X/13 rating, otherwise UL Type 1 only.
§ Not available in 12V AC/DC.

Bulletin 855BL — 160 mm Beacons

855BL – N (a) 24 (b) DH (c) 5 (d)

a

Base Type	
Code	Description
S	Surface mount★
N	1 in. NPT conduit mount
T	30 mm tube mount

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Function	
Code	Description
DH	Steady halogen
FH	Flashing halogen
RH	Rotating halogen
BR	Xenon strobe§

d

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

★ When used outdoors surface mount base must be installed with rough wall plate for UL Type 4/4X/13 rating, otherwise UL Type 1 only.
§ Not available in 12V AC/DC.

Specifications

Technical		
Housing	Base material	Polycarbonate
	Lenses (all)	Polycarbonate, red, amber, yellow, green, blue, and clear
	Pole mount base	90 mm: polycarbonate 120 mm and 160 mm: aluminum die cast, powder-coated
	Bracket	Powder-coated steel
Protection class		Type 4/4X/13 (surface mount base must be installed with rough wall plate for Type 4/4X/13 rating), IP65
Terminals (120 mm and 160 mm only)		up to 2.5 mm² (14 AWG)
Operation temperature range		-25…+60 °C (-13…+140 °F); -25…+50 °C (-13…+122 °F), 120 & 160 mm steady halogen, and 120/240V AC single-color LED
Storage temperature range		-25…+85 °C (-13…185 °F)
Mounting		Horizontal surfaces: indoor — direct to the surface, outdoor — with additional metal plate between surface and base part Vertical surfaces: with bracket, for indoor and outdoor Tube or NPT conduit mounting: for indoor and outdoor

Electrical and Mechanical		Steady Halogen			Flashing Halogen			Strobe			Rotating Light		
		160 mm	120 mm	90 mm	160 mm	120 mm	90 mm	160 mm	120 mm	90 mm	160 mm	120 mm	90 mm
Halogen bulb		50 W	35 W	20 W	50 W	35 W	20 W	—	—	—	50 W	35 W	20 W
Bulb socket		GY6.35	GY6.35	GY6.35	GY6.35	GY6.35	GY6.35	—	—	—	GY6.35	GY6.35	GY6.35
Strobe energy		—	—	—	—	—	—	31 J	15 J	7 J	—	—	—
Xenon strobe tube		—	—	—	—	—	—	Helical	Helical	Helical	—	—	—
Strobe tube socket		—	—	—	—	—	—	Terminals	Terminals	Terminals	—	—	—
Flashing/Strobe frequency		—	—	—	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	1 Hz	—	—	—
Rotating speed - selectable via jumper wire		—	—	—	—	—	—	—	—	—	90/180 rpm	90/180 rpm	90/180 rpm
Nominal Current	12V AC/DC	4 A	2.9 A	1.6 A	4.2 A	3 A	1.6 A	—	—	—	4.2 A	3.2 A	1.8 A
	24V AC/DC	2.1 A	1.5 A	0.8 A	2.1 A	1.5 A	0.8 A	1.9 A	1.3 A	0.48 A	2.3 A	1.7 A	0.95 A
	110/120V AC 50/60 Hz	0.42 A	0.29 A	0.2 A	0.42 A	0.3 A	0.2 A	0.7 A	0.32 A	0.21 A	0.58 A	0.32 A	0.30 A
	230/240V AC 50 Hz	0.21 A	0.15 A	0.09 A	0.21 A	0.15 A	0.09 A	0.35 A	0.15 A	0.12 A	0.39 A	0.17 A	0.27 A
Weight (Surface Mount)		900 g	500 g	251 g	900 g	500 g	251 g	900 g	500 g	296 g	900 g	500 g	378 g
Weight (Tube Mount)		900 g	500 g	424 g	900 g	500 g	424 g	900 g	500 g	469 g	900 g	500 g	551 g

Electrical and Mechanical		Single-Color LED	Three-Color LED	Strobe LED
		90 mm		
Nominal Current	24V AC/DC	—	155 mA	—
	110/120V AC 50/60 Hz	—	100 mA	70 mA
	230/240V AC 50 Hz	—	105 mA	70 mA
	24/48V AC/DC 50/60 Hz	230…270 mA (16…60V AC/ 16…80V DC)	—	300 mA (19…52V AC/ 16…60V DC)
	120/240V AC	38…43 mA (90…250V AC)	—	—
Weight (Surface Mount)		250 g		
Weight (Tube Mount)		450 g		

Standards Compliance

UL 508
EN/IEC 60947-1
EN/IEC 60947-5-1
CSA 22.2 No. 14

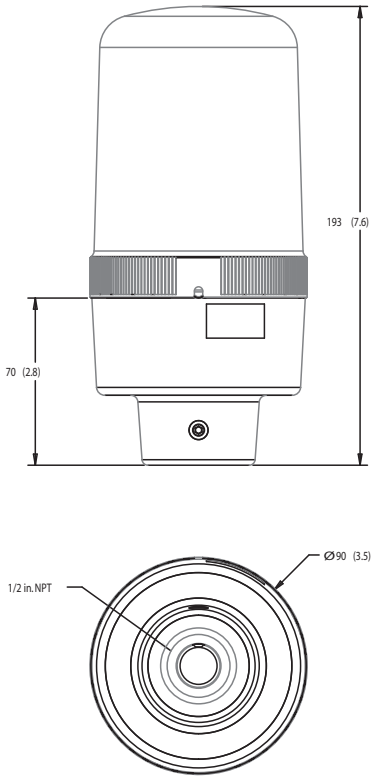
Certifications

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

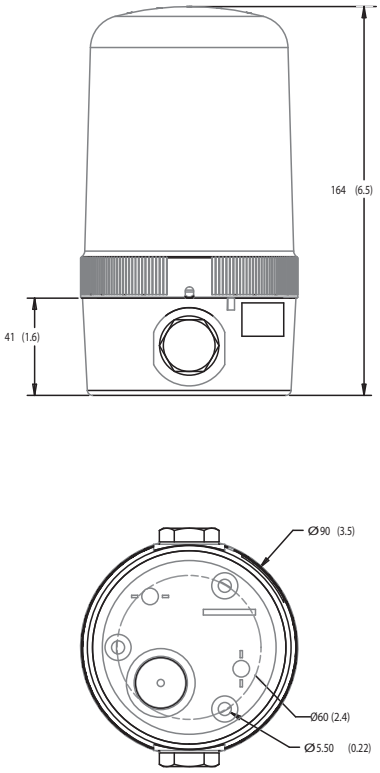
Approximate Dimensions

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

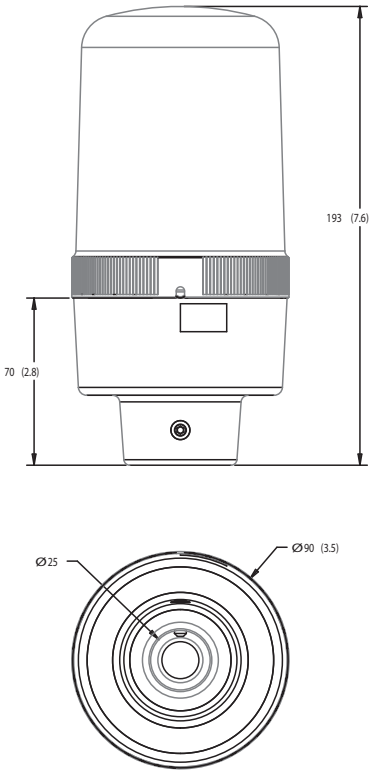
90 mm Beacon NPT Conduit Mount



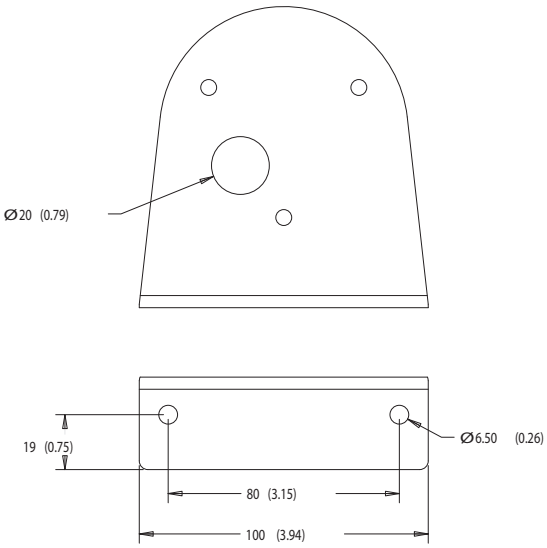
90 mm Beacon Surface Mount



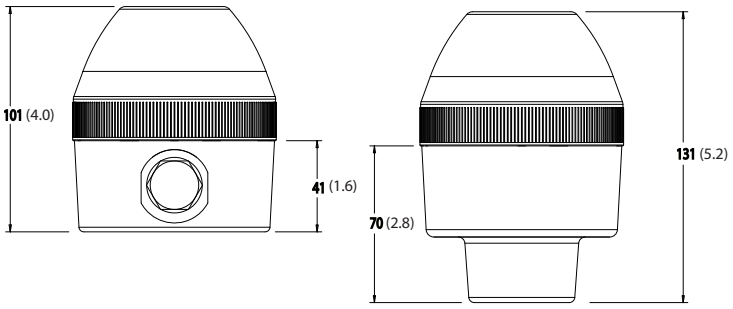
90 mm Beacon Tube Mount



90 mm Beacon Vertical Bracket

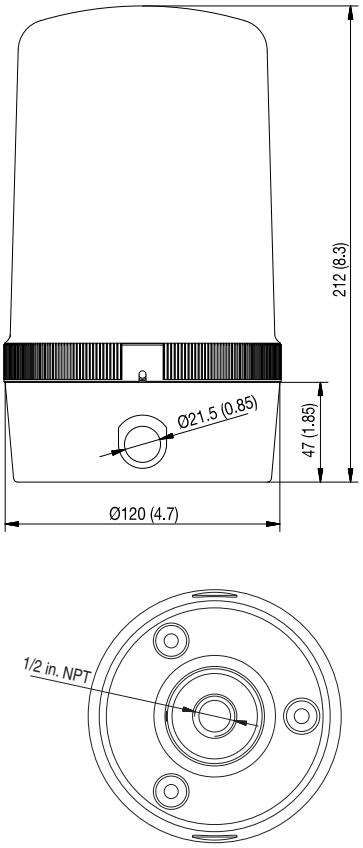


90 mm LED Beacon

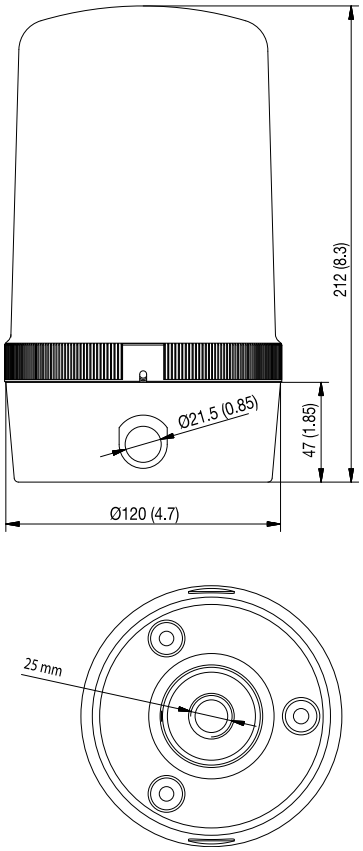


Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

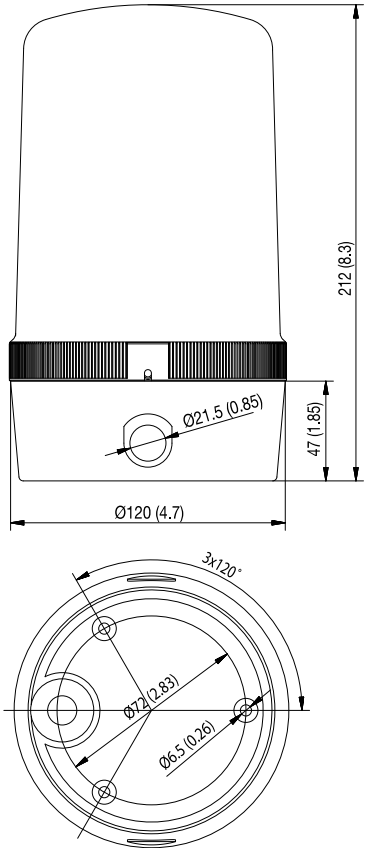
120 mm Beacon NPT Conduit Mount



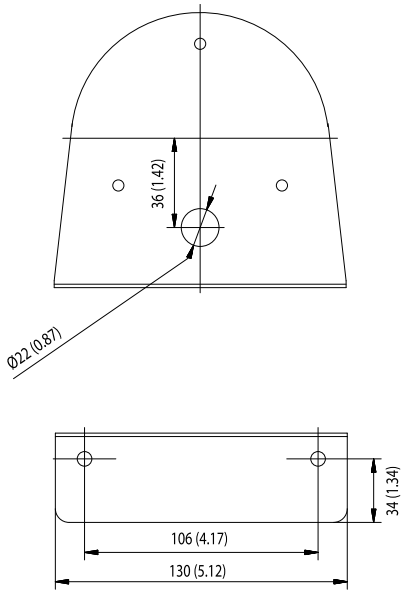
120 mm Beacon Tube Mount



120 mm Beacon Surface Mount

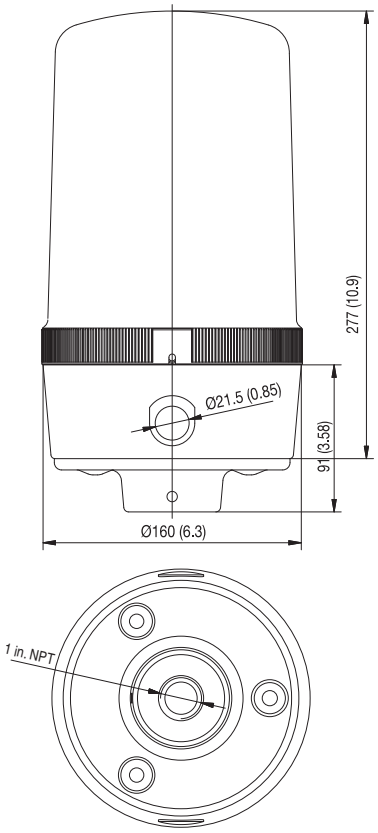


120 mm Beacon Vertical Bracket

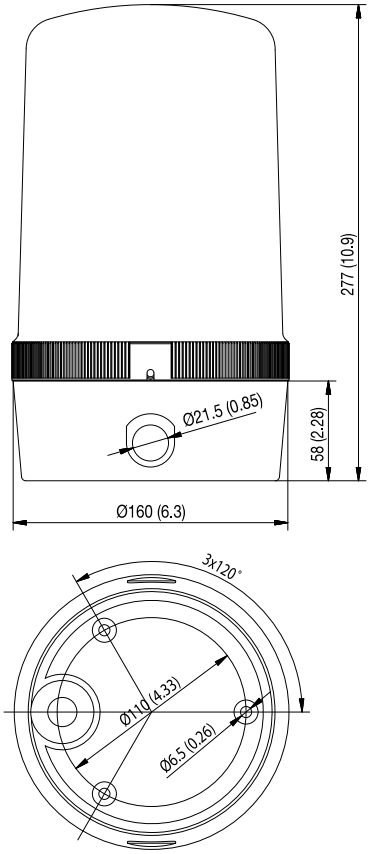


Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

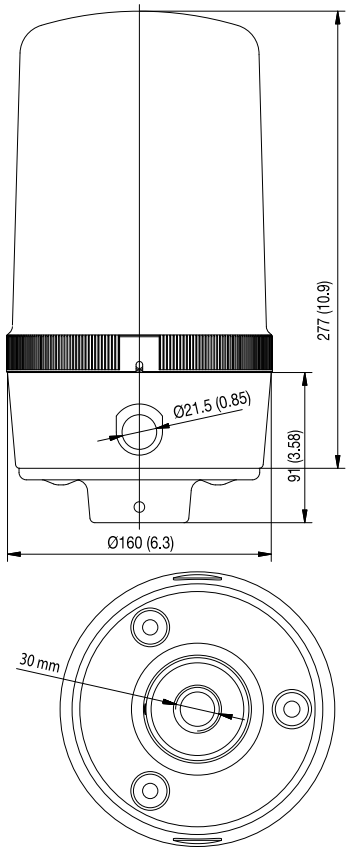
160 mm Beacon NPT Mount



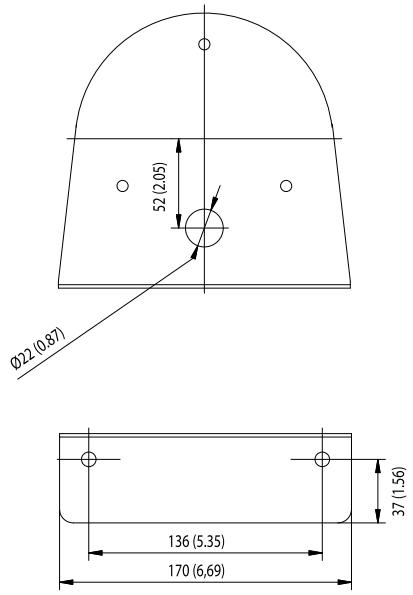
160 mm Beacon Surface Mount



160 mm Beacon Tube Mount

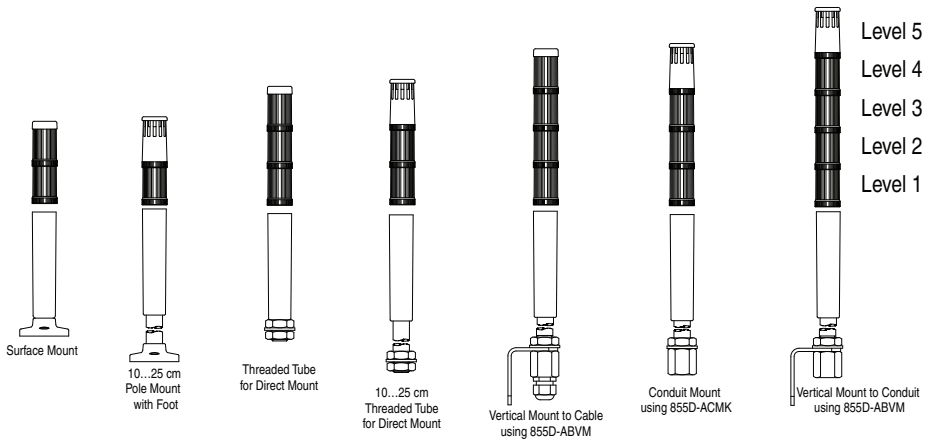


160 mm Beacon Vertical Bracket



Bulletin 855D — 30 mm Compact Control Tower™ Lights

Pre-Assembled and Pre-wired Tower Lights, One to Five Modules



855D	–	P00		SC20	B	24	Y	3	Y	4	Y	5	L	7	P	1
		a	*b*	*c*	*d*	*e*	*f*	*g*	*f*	*g*	*f*	*g*	*f*	*g*	*f*	*g*
							(Level 1, f+g)		*(Level 2, f+g)*		*(Level 3, f+g)*		*(Level 4, f+g)*		*(Level 5, f+g)*	

a

Base Type	
Code	**Description**
P00	Surface mount
P10	10 cm aluminum pole mount with foot
P25	25 cm aluminum pole mount with foot
T00	0 cm M20 metric threaded tube for direct mount
T10	10 cm M20 metric threaded tube for direct mount
T25	25 cm M20 metric threaded tube for direct mount
Q10	10 cm quick release mount pole
Q25	25 cm quick release mount pole

b

Network Option	
Code	**Description**
Blank	No network option

c

Cable Connector and Length♦	
Code	**Description**
SC20	Stranded cable, 2 m, yellow jacket
Blank	No cable (only for Q10 or Q25 base types)

d

Housing Color	
Code	**Description**
B	Black
G	Grey

e

Voltage	
Code	**Description**
24	24V AC/DC
10	120V AC
20	240V AC

f

Module Type §♣	
Code	**Description**
Y	Steady LED
L	Flashing LED
C	Piezo sound alarm, continuous tone
P	Piezo sound alarm, pulsing tone
Q	Dual-circuit Piezo sound alarm Δ

g

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

§ Sound module types (**C, P, Q**) must be on the top-most level, they must be configured with Lens Color/Sound Code **1**, and only one sound module is allowed per assembly.
♣ Light module types (**Y, L**) can only be configured with Lens Color/Sound Codes **3, 4, 5, 6, 7, or 8**.
Δ If the dual circuit sound module (**Q**) is selected, the maximum number of light modules allowed is three (two circuits are required for the dual circuit sound module).
♦ The SC20 cable must be ordered for all bases, except the Q10 and Q25 bases.

Specifications

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	3 Module Stack	5 Module Stack
Standard Bases	Surface Mount Base or 10/25 cm Aluminum Pole Base	150 G Shock 2.5 G Vibration	45 G Shock 2.5 G Vibration	35 G Shock 2.0 G Vibration
Environmental Ratings				
Ingress Ratings	Light Modules	IP65/UL Type 4/4X/13		
	Sound Modules	IP65/UL Type 4/4X/13		
	Surface, Pole, Vertical, Tube Mount Bases	IP65/UL Type 4/4X/13		
Temperature Ratings — All Products	Operating Temperature	-25…+50 °C (-13…+122 °F)		
	Storage Temperature	-25…+85 °C (-13…+185 °F)		
Materials				
Bases, Caps, Lens Covers, Sound Module Housings		Polycarbonate		
Rubber Seals and Gaskets		Nitrile Rubber		
Pole (for aluminum pole assembly)		Aluminum		
Pole Base Footing (for aluminum pole base)		Polycarbonate		
Insulation Sleeve (for pole insulation)		PVC		
Mounting Screw Washers		Polyamide		

Performance Ratings		
Estimated Light Output§	Steady, Flashing, Red	1000 mcd
	Steady, Flashing, Amber	800 mcd
	Steady, Flashing, Green	1500 mcd
	Steady, Flashing, Yellow	700 mcd
	Steady, Flashing, Blue	250 mcd
	Steady, Flashing, White	1000 mcd

Operating Voltage			
Description	24V AC/DC	120V AC	240V AC
Light Modules Sound Modules	24V AC/DC (± 10%)	110V AC 50 Hz (± 10%) 120V AC 60 Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)

Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions			
Description	24V AC/DC	120V AC	240V AC
LED Modules	100 000 hrs		
Sound Modules	20 000 hrs		

§ Light Output values are calculated from the LED datasheet and show typical values of luminous density. These values are not exact because the knurling in the lens affects the light distribution and because the viewing angle of the LED which directly relates to the Cd output value, is not identical for all LEDs.

Current Consumption				
Description		24V AC/DC	120V AC	240V AC
Light Modules	Steady or Flashing LED	20 mA	22 mA	21 mA
Piezo Style Sound Modules	Single and Dual Circuit	40 mA	22 mA	21 mA
Flashing Frequency (Light Only Modules)				
Flashing LED Modules		Flashing frequency approximately 2 Hz		
dB Rating (Sound Modules)				
All dB(A) ratings determined at a distance of 1 meter from sound module				
Piezo Sound Module		85 dB(A) (+2 dB/-5 dB)		
Leakage Current Impact				
All light and sound modules are capable of absorbing 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

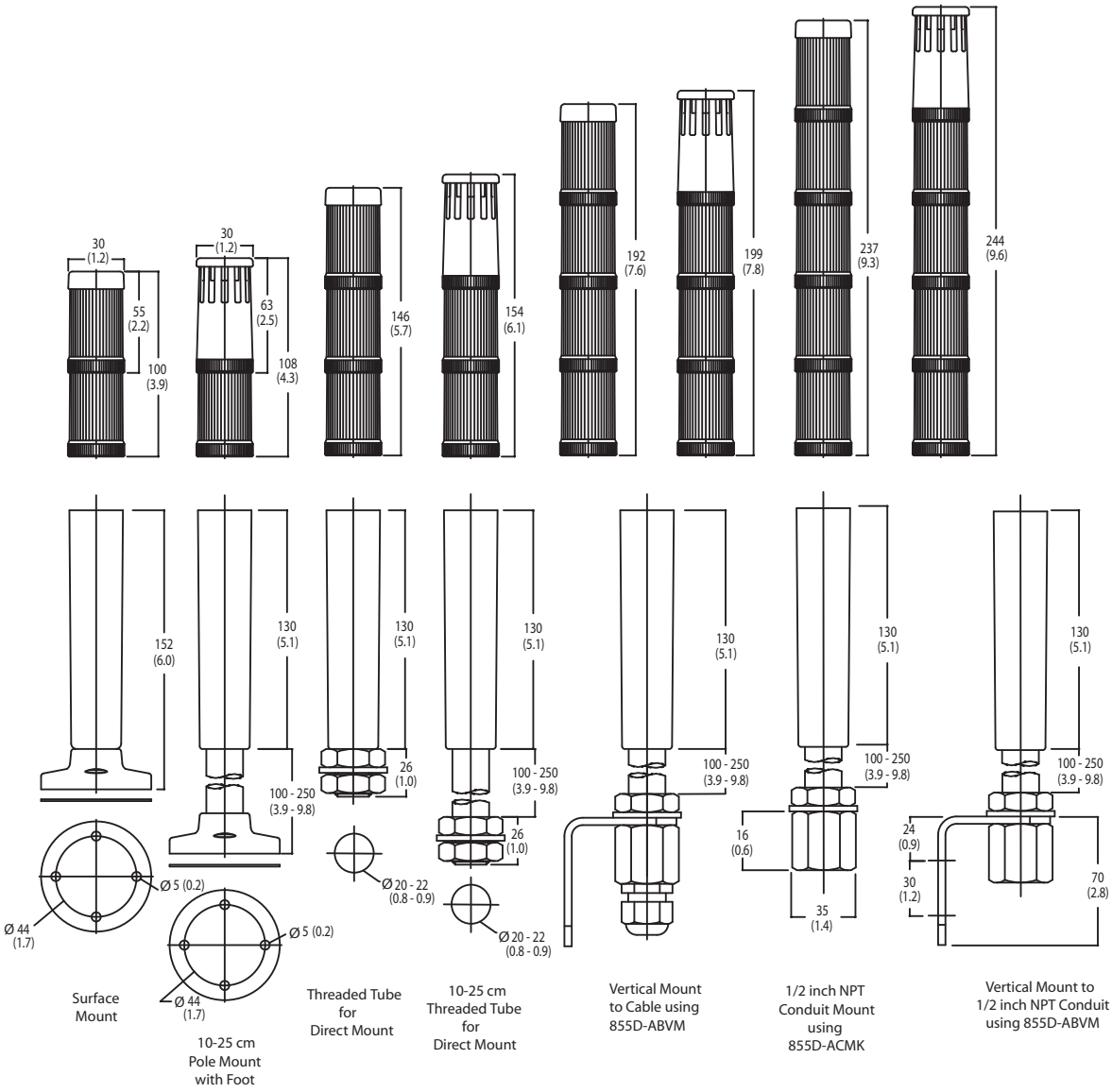
Certifications

cULus Listed (File No. E14840, Guides NKCR, NKCR7)

Approximate Dimensions

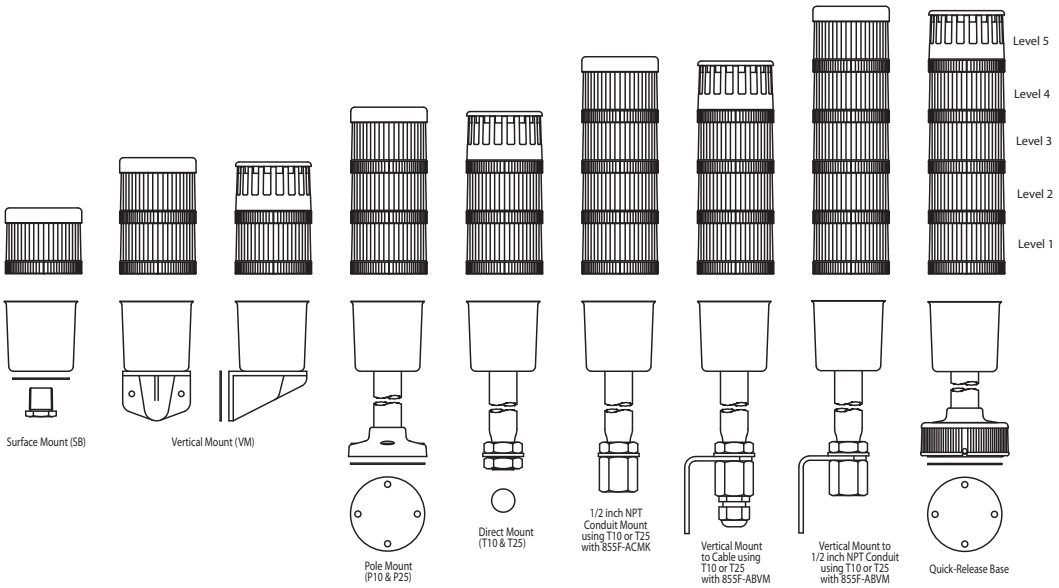
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Pre-assembled Tower Lights



Bulletin 855F — 70 mm Compact Control Tower™ Stack Lights

Pre-assembled and Pre-wired Tower Lights, One to Five Modules



855F –	P10	SC20	B	24	Y	3	Y	4	Y	5	L	7	P	1
	a	*b*	*c*	*d*	*e*	*f*	*e*	*f*	*e*	*f*	*e*	*f*	*e*	*f*
					(Level 1, e+f)		*(Level 2, e+f)*		*(Level 3, e+f)*		*(Level 4, e+f)*		*(Level 5, e+f)*	

a

Base Type	
Code	**Description**
SB	Surface mount with 1/2 in. NPT threaded connector and mounting nut
P10	10 cm aluminum pole mount with foot
P25	25 cm aluminum pole mount with foot
T10	10 cm threaded tube for direct mount
T25	25 cm threaded tube for direct mount
VM	Vertical mount
Q10	10 cm quick release mount pole
Q25	25 cm quick release mount pole

b

Cable Connector and Length♦	
Code	**Description**
SC20	Stranded cable, 2 m, yellow jacket
Blank	No cable (only for Q10 or Q25 base types)

c

Housing Color	
Code	**Description**
B	Black

d

Voltage	
Code	**Description**
24	24V AC/DC
10	120V AC
20	240V AC

e

Module Type §♣	
Code	**Description**
Y	Steady LED
L	Flashing LED
C	100 db Piezo sound alarm, continuous tone
P	100 db Piezo sound alarm, pulsing tone
Q	100 db dual-circuit Piezo sound alarm Δ

f

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

§ Sound Module types (**C, P, Q**) must be on the top-most level, they must be configured with Lens Color/Sound Code **1**, and only one sound module is allowed per assembly.
♣ Light Module types (**Y, L**) can only be configured with Lens Color/Sound Codes **3, 4, 5, 6, 7, or 8**.
Δ If the dual circuit sound module (**Q**) is selected, the maximum number of light modules allowed is three (two circuits are required for the dual-circuit sound module).
♦ The SC20 cable must be ordered for all bases, except the Q10 and Q25 bases.

Specifications

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	3 Module Stack	5 Module Stack
Standard Bases	Surface Mount Base or 10/25 cm Aluminum Pole Base	150 G Shock 2.5 G Vibration	45 G Shock 2.5 G Vibration	35 G Shock 2.0 G Vibration

Environmental Ratings		
Ingress Ratings	Light Modules	UL Type 4/4X/13, IP65
	Sound Modules	UL Type 4/4X/13, IP65
	Surface, Pole, Vertical, Tube Mount Bases	UL Type 4/4X/13, IP65
Temperature Ratings — All Products	Operating Temperature	-25…+60 °C (-13…+140 °F)
	Storage Temperature	-25…+85 °C (-13…+185 °F)

Materials	
Bases, Caps, Sound Module Housings, Lenses	Polycarbonate
Rubber Seals and Gaskets	Nitrile Rubber
Pole (for aluminum pole assembly)	Aluminum
Pole Base Footing (for aluminum pole base)	Polycarbonate
Insulation Sleeve (for pole insulation)	PVC
Mounting Screw Washers	Polyamide

Performance Ratings		
Estimated Light Output§	Steady, Flashing, Red	1000 mcd
	Steady, Flashing, Amber	800 mcd
	Steady, Flashing, Green	1500 mcd
	Steady, Flashing, Yellow	700 mcd
	Steady, Flashing, Blue	250 mcd
	Steady, Flashing, White	1000 mcd

Operating Voltage			
Description	24V AC/DC	120V AC	240V AC
Light Modules Sound Modules	24V AC/DC (± 10%)	110V AC 50 Hz (± 10%) 120V AC 60 Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)

Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions			
Description	24V AC/DC	120V AC	240V AC
LED Modules	100 000 hrs		
Sound Modules	20 000 hrs		

§ Light Output values are calculated from the LED datasheet and show typical values of luminous density. These values are not exact because the knurling in the lens affects the light distribution and because the viewing angle of the LED which directly relates to the Cd output value, is not identical for all LEDs.

Current Consumption				
Description		24V AC/DC	120V AC	240V AC
Light Modules	Steady or Flashing LED	20 mA	22 mA	21 mA
Piezo Style Sound Modules	Single and Dual Circuit	53 mA	22 mA	21 mA

Flashing Frequency (Light Only Modules)	
Flashing LED Modules	Flashing frequency approximately 2 Hz

dB Rating (Sound Modules)	
All dB(A) ratings determined at a distance of 1 meter from sound module	
Piezo Sound Module	100 dB(A) (+2 dB/-5 dB)

Leakage Current Impact
All light and sound modules are capable of absorbing 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

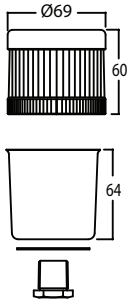
Certifications

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

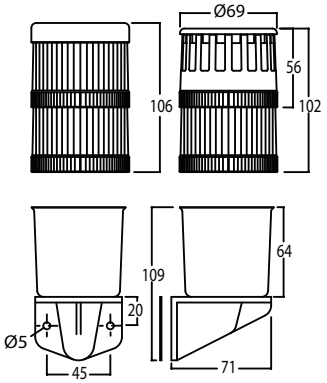
Approximate Dimensions

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

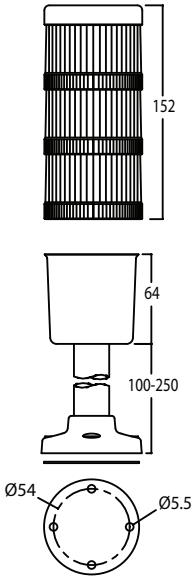
Assembled Stacks



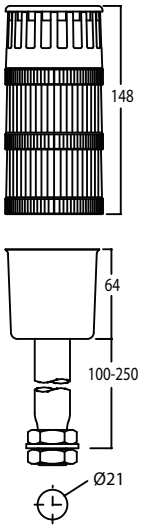
Surface Mount (SB)



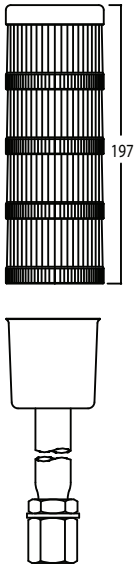
Vertical Mount (VM)



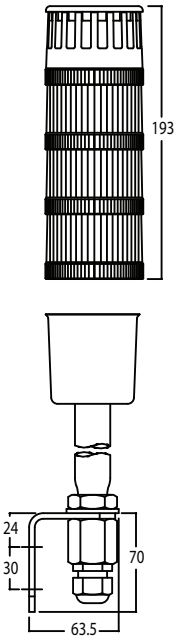
Pole Mount (P10 & P25)



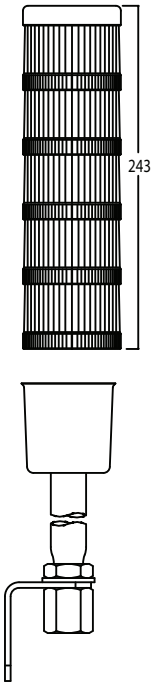
Direct Mount (T10 & T25)



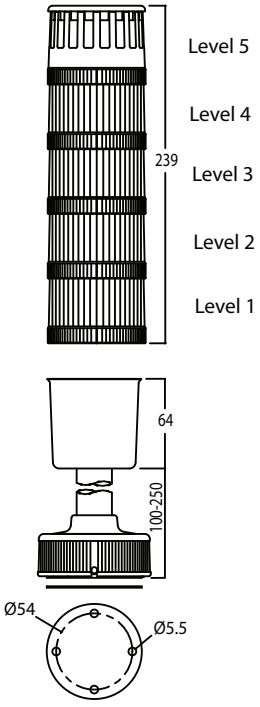
1/2 inch NPT Conduit Mount using T10 or T25 with 855F-ACMK



Vertical Mount to Cable using T10 or T25 with 855F-ABVM



Vertical Mount to 1/2 inch NPT Conduit using T10 or T25 with 855F-ABV



Quick-Release Base

Bulletin 854J 40 mm Control Tower™ Stack Lights
Light Modules


Steady LED Module

854J – 10 TL 4
a b c

a

Voltage	
Code	Description
00	0…250V AC/DC (no-lamp module★)
24	24V AC/DC‡
10	120V AC‡
20	240V AC‡

b

Light Module Type	
Code	Description
XN	Steady no lamp§
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

★ Can only be selected with module type **XN**, voltage code **00**. Accepts 4 W socket mount incandescent lamp types only.
‡ Not valid with module type **XN**.
§ Incandescent lamps (Cat. Nos. 854J-L24, 854J-L10, and 854J-L20) need to 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 – B 10 SA3
a b c

a

Housing Color	
Code	Description
B	Black

b

Voltage	
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


Surface-Mount Base with External Holes


Vertical-Mount Base


Pole-Mount Base


Double-Sided Base


1/2 in. NPT Base


Quick Release Base


Flange Style with M12 Micro Connector (Male)

854J – B VM C

a *b* *c*

a

Housing Color	
Code	Description
B	Black

b

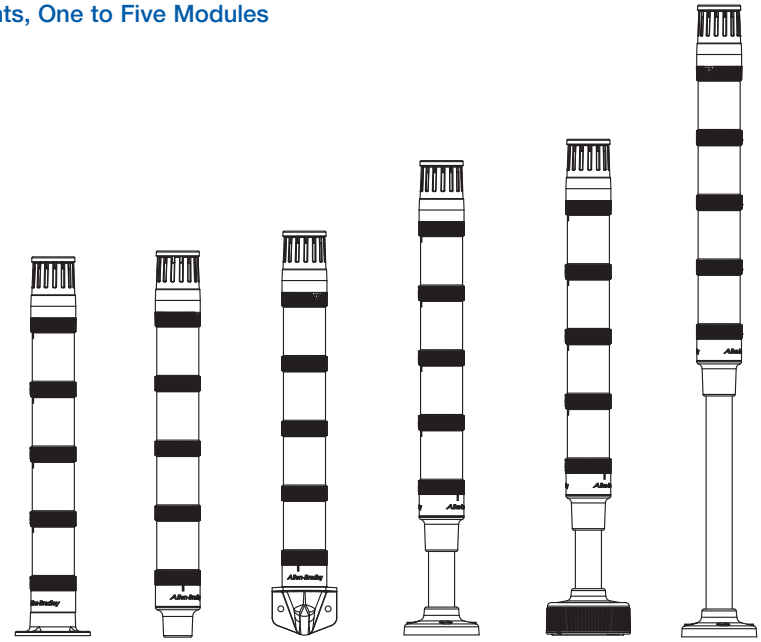
Base Type★	
Code	Description
NPT	1/2 in. NPT
VM	Vertical mount
SH	Surface mount, preinstalled mounting hardware
SF	Surface mount, external mounting holes
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
T10	10 cm threaded tube (M20)
T25	25 cm threaded tube (M20)
DS	Double-sided base ‡
Q10	10 cm quick release base
Q25	25 cm quick release base
SFQD5	Flange-style base with M12 (5-pin DC) micro connector ♣Δ♦♠∇

c

Cap Option	
Code	Description
C	Cap included

★ PM10, PM25, T10, T25, Q10, Q25 bases have powder-coated aluminum tubes.
‡ Double-sided base can accommodate up to ten modules per base divided in two groups up to five level each.
♣ For vertical mounting of the base use Cat. No. 855T-AVM.
Δ Maximum number of levels allowed in the stack is four.
♦ For use with Bul. 889D cordsets.
♠ Cannot be used with 10 cm plastic base extension (Cat. No. 854J-ABBE).
∇ Max. 250V AC/DC UL / 60V AC/DC IEC

Pre-Configured Tower Lights, One to Five Modules



Surface Mount | 1/2 in. NPT Thread | Vertical Mount | 10 cm Pole Mount | 10 cm Quick Release | 25 cm Pole Mount

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★	
Code	Description
NPT	1/2 in. NPT
VM	Vertical mount
SF	Surface mount — external mounting holes
P10	10 cm aluminum pole mount
P25	25 cm aluminum pole mount
Q10	10 cm quick release base
Q25	25 cm quick release base

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 alarm — continuous/pulsing

d

Lens Color	
Code	Description
1	Sound module‡
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

★ P10, P25, Q10, Q25 bases have powder-coated aluminum tubes.
‡ 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

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	**3 Module Stack**	**5 Module Stack**
Standard Bases	Surface Mount Base with External Holes or 10 cm Aluminum Pole Base	50 G Shock 5 G Vibration	50 G Shock 5 G Vibration	40 G Shock 5 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	55 G Shock 5 G Vibration	55 G Shock 5 G Vibration	35 G Shock 5 G Vibration
Recommended Wire Sizes		0.2…1.5 mm^2 (24…16 AWG)		
Recommended Terminal Torque		Screwless terminal blocks		
Environmental Ratings				
Ingress Ratings	Light Modules with Cap	UL Type 4/4X/13, IP66		
	Sound Modules			
	Surface, Vertical, Tube Mount Bases			
	Pole Mount Bases			
	Flange-style Base with M12 Micro Connector ★			
Temperature Ratings — All Products	Operating Temperature	-30…+60 °C (-22…+140 °F) For Cat. No. 854J-BSFQD5C only: -30...+45 °C (-22...+113 °F)		
	Storage Temperature	-30…+85 °C (-22…+185 °F)		
Materials				
Bases, Caps, Lens Covers, Sound Module Housings, Lenses		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		

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

Performance Ratings					
Description			**24V AC/DC**	**120V AC**	**240V AC**
Light Output	Strobe LED	Red	4430 mcd	3915 mcd	
		Green	4216 mcd	4080 mcd	
		Amber	4430 mcd	3915 mcd	
		Blue	1673 mcd	1619 mcd	
		White	4464 mcd	4320 mcd	
		Yellow	3715 mcd	3283 mcd	
	Steady/Flashing LED	Red	1793 mcd	2392 mcd	
		Green	1714 mcd	3400 mcd	
		Amber	1793 mcd	2392 mcd	
		Blue	680 mcd	1349 mcd	
		White	1814 mcd	3600 mcd	
		Yellow	1503 mcd	2006 mcd	
Operating Voltage					
Description			**24V AC/DC**	**120V AC**	**240V AC**
Light Modules and Sound Modules			24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions					
Description			**24V AC/DC**	**120V AC**	**240V AC**
LED			50 000 hr		
Sound Modules			20 000 hr		

Standards Compliance

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

Certifications

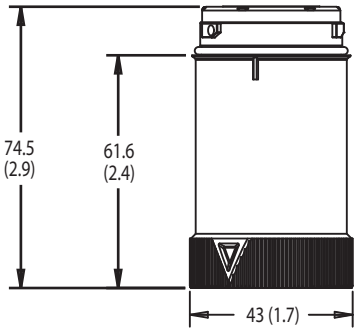
cULus Listed (File No. E14840, Guides NKCR, NKCR7)
CE Marked
RoHS Compliant

Current Consumption				
Description		24V AC/DC	120V AC	240V AC
Light Only Modules	Steady LED	22 mA (red, amber, and yellow) 33 mA (green, blue, and white)	30 mA (red, amber, and yellow) 29 mA (green, blue, and white)	
	Flashing LED	28 mA (red, amber, and yellow) 36 mA (green, blue, and white)	30 mA (red, amber, and yellow) 29 mA (green, blue, and white)	
	Strobe LED	35 mA (red, amber, and yellow) 65 mA (green, blue, and white)	10 mA	
Sound Modules	Single-Tone Sound Module	65 mA	31 mA	32 mA
Flashing Frequency (Light Only Modules)				
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)		
Tone Frequency				
Tone Frequency		Preset at 2500 Hz		
dB Rating (Sound Modules)				
All dB(A) ratings determined at a distance of 1 meter from sound module				
Single Tone Sound Module (SA3)		Maximum volume output is 80 dB (non-adjustable)		
Leakage Current Impact				
All light modules and sound modules are capable of absorbing up to 3 mA of leakage from solid-state outputs without module activation				

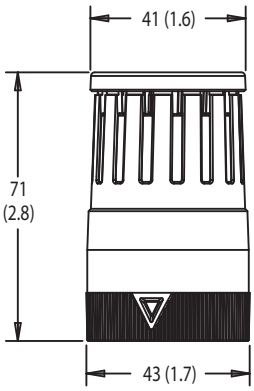
Approximate Dimensions

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

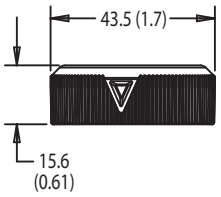
Light Module



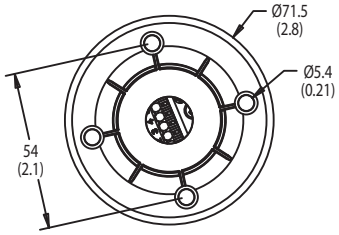
Sound Module



Cap

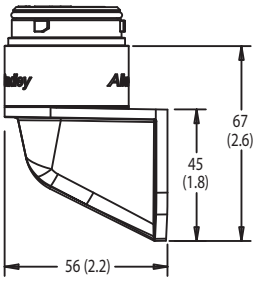


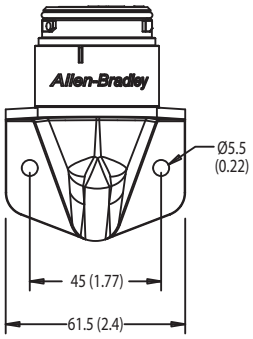
Surface Mount Base

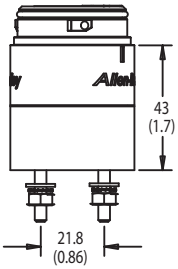


External Mounting Holes

Vertical Mount Base

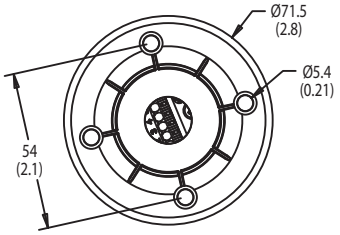




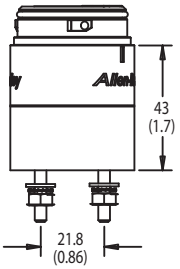


Pre-installed Hardware

Surface Mount Base

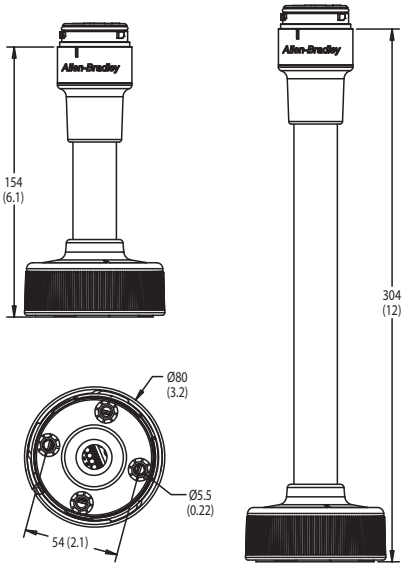


External Mounting Holes



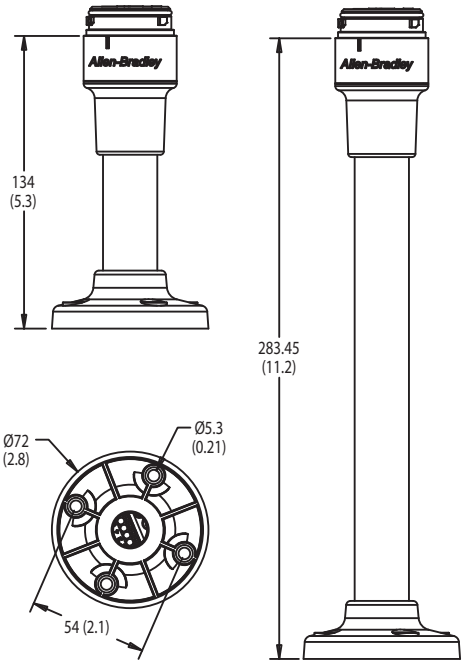
Pre-installed Hardware

Quick Release Base



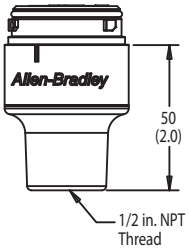
10 cm *25 cm*

Pole Mount Bases

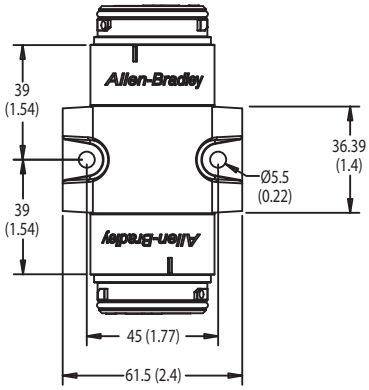


10 cm *25 cm*

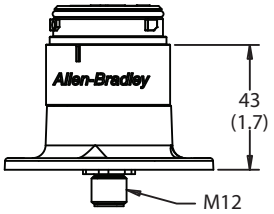
1/2 in. NPT Thread Base

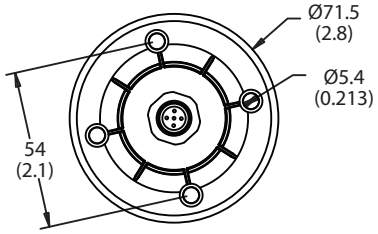


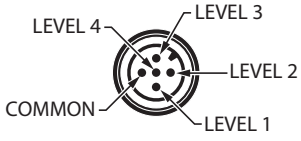
Double-sided Base



Flange-style Base with M12 Micro Connector (Male)







5-pin DC Micro Configuration

Bulletin 855E 50 mm Control Tower™ Lights

Light Modules

855E – 10 (a) FN (b) 4 (c)

Flashing Incandescent

a

Voltage	
Code	Description
00	0…250V AC/DC (no-lamp module★)
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

b

Light Module Type	
Code	Description
XN	Steady no lamp★
DN	Steady incandescent
FN	Flashing incandescent
TL	Steady socket - mount LED
GL	Flashing socket - mount LED
BR	Strobe

c

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

★Can only be selected with module type **XN**, voltage code **00**. Accepts socket mount LED and incandescent lamp types.

Sound Modules

Sound modules have continuous and pulsing tones. Maximum sound output is 103 dB @ 1 meter. A reduced volume setting is available by changing the position of the volume dipswitch, producing a sound output of 88 dB @ 1 meter.

855E – B (a) 10 (b) TA3 (c)

Black Two-Tone Sound Module

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
SA3	Single circuit/single tone piezo style (continuous or pulsing tones modified by dip switch)
TA3	Two circuit/two tone piezo style (continuous or pulsing tones modified by energizing one or two circuits of sound module)

Standard Stack Light Bases

Surface-Mount Base with Cap

Vertical-Mount Base with Cap

Pole-Mount Bases

Quick-Release Base

855E – B VM C

a b c

a

Housing Color	
Code	Description
B	Black
G	Grey

b

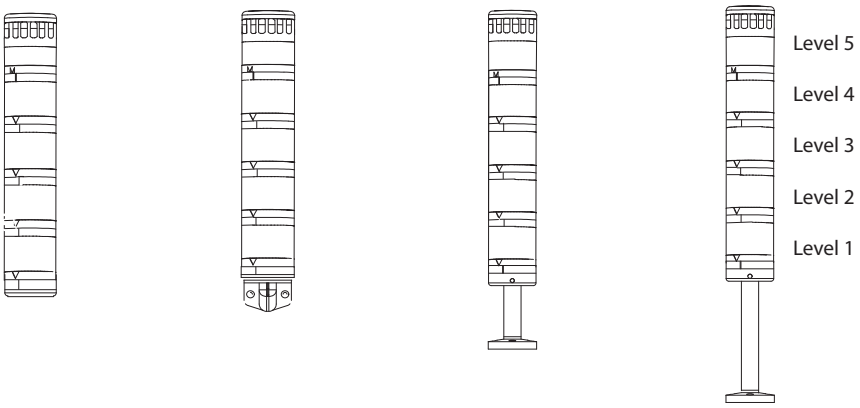
Base Type	
Code	Description
CB	Surface mount with 1/2 in. NPT threading
RB	Surface mount with M20 metric threading
SB	Surface mount with PG16 threading
TM	25 mm tube mount
VM	Vertical mount
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
PM40	40 cm aluminum pole mount base
PM60	60 cm aluminum pole mount base
PM80	80 cm aluminum pole mount base
MM10	10 cm quick release base
MM25	25 cm quick release base
MM40	40 cm quick release base

c

Cap Option§	
Code	Description
Blank	No cap
C	Cap included

§ Quick-release bases always include a cap.

Pre-configured Tower Lights, One to Five Modules



Surface Mount | Vertical Mount | 10 cm Pole Mount | 25 cm Pole Mount

855	EC –	B	10	Y	3	L	5	B	3	F	7	Y	6
	a	*b*	*c*	*d*	*e*	*d*	*e*	*d*	*e*	*d*	*e*	*d*	*e*
				(Level 1) d+e		*(Level 2) d+e*		*(Level 3) d+e*		*(Level 4) d+e*		*(Level 5) d+e*	

a

Base Type	
Code	Description
EC	Surface mount - 1/2 in. NPT threading
ES	Surface mount - PG16
EV	Vertical mount
EM	25 mm tube mount
EP	10 cm pole mount
EE	25 cm pole mount

b

Base & Cap Color	
Code	Description
B	Black
G	Grey

c

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

d

Module Type	
Code	Description
D	Steady incandescent
F	Flashing incandescent
Y	Steady LED
L	Flashing LED
B	Strobe
P	Single-circuit piezo sound module
Q	Two-circuit piezo sound module§

e

Lens Color	
Code	Description
1	Sound module‡
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

‡ Sound module option can only be selected with Module Type options P or Q in table e. They must be located in the top position of the stack.
§ If the two-circuit sound module (option Q in Table d) is selected, the maximum number of light modules allowed is three.

Specifications

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	**3 Module Stack**	**5 Module Stack**
Standard Bases	Surface Mount Base or 10 cm Aluminum Pole Base	150 G Shock 5 G Vibration	45 G Shock 1.5 G Vibration	35 G Shock 0.75 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	95 G Shock 3.5 G Vibration	30 G Shock 1.25 G Vibration	20 G Shock 0.5 G Vibration
Recommended Wire Sizes		0.5…1.5 mm^2 (22…16 AWG)		
Recommended Terminal Torque		0.87 N•m (7 lb•in)		
Environmental Ratings				
Ingress Ratings	Light Modules with Cap	UL Type 4/4X/13, IP65		
	Sound Modules	UL Type 4/4X/13, IP65		
	Surface, Vertical, Tube Mount Bases	UL Type 4/4X/13, IP65		
	Pole Mount Bases	UL Type 4/4X/13, IP65		
Temperature Ratings — All Products	Operating Temperature	-25…+50 °C (-13…+122 °F)		
	Storage Temperature	-40…+85 °C (-40…+185 °F)		
Materials				
Bases, Caps, Lens Covers, Sound Module Housings, Lenses		Polycarbonate		
Lamp Socket		Polycarbonate		
Rubber Seals and Gaskets		Nitrile Rubber		
Pole (for aluminum pole assembly)		Aluminum		
Pole Base Footing (for aluminum pole base)		Polycarbonate		
Insulation Sleeve (for pole insulation)		Polyolefin		
Mounting Screw Washers		Polypropylene		

Performance Ratings					
Description		**12V AC/DC**	**24V AC/DC**	**120V AC**	**240V AC**
Light Output	Steady Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Flashing Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Strobe	1 Joule per lamp			
	Steady, Flashing Socket Mount LED Red	900…2240 mcd			
	Steady, Flashing Socket Mount LED Green	900…1800 mcd			
	Steady, Flashing Socket Mount LED Amber	1400…3550 mcd			
	Steady, Flashing Socket Mount LED Blue	224…560 mcd			
	Steady, Flashing Socket Mount LED White and Yellow	900…1800 mcd			
Operating Voltage					
Description		**12V AC/DC**	**24V AC/DC**	**120V AC**	**240V AC**
Light Modules and Sound Modules		12V AC/DC (± 10%)	24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions					
Description		**12V AC/DC**	**24V AC/DC**	**120V AC**	**240V AC**
Incandescent Modules‡§		8 000 hrs	7 000 hrs	3 000 hrs	1 600 hrs
LED Modules		100 000 hrs			
Strobe Modules		15 000 hrs			
Sound Modules		20 000 hrs			

‡ First failures at about 35% of average life. Severe vibration may reduce life to 44% of average life.
§ Flashing applications may reduce life to 50% of average life.

Standards Compliance

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

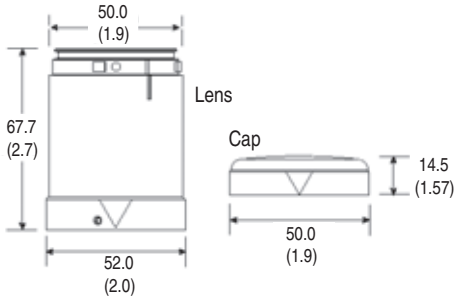
Certifications

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

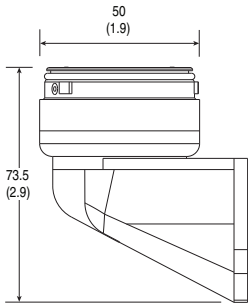
Current Consumption					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Only Modules	Steady Incandescent	208 mA	271 mA	58 mA	23 mA
	Flashing Incandescent	208 mA	271 mA	58 mA	23 mA
	Steady or Flashing LED	42 mA	29 mA	21 mA	20 mA
	Strobe	95 mA	60 mA	55 mA	30 mA
Sound Modules	Single-Tone Sound Module	12 mA	25 mA	33 mA	33 mA
	Two-Tone Sound Module				
Flashing Frequency (Light Only Modules)					
Flashing Incandescent Modules		12V module approximately 1.5 Hz 24V, 120V, and 240V modules approximately 2 Hz Time ON/Time OFF = 1:1			
Flashing LED Modules		Flashing frequency approximately 1.5 Hz Time On/Time OFF = 1:1			
Strobe Modules		Flashing frequency appoxrimately 2 Hz (flash duration 1/50,000 secound)			
Flashing and Tone frequency (Light Modules/with Sound Set at Continuous Tone)					
Tone Frequency		Tone frequency is preset at 2800 Hz			
Flashing and Tone Pulsing Frequencies (Light Modules/with Sound Set at Pulsing Tone)					
Tone Frequency		Tone Frequency is preset at 2800 Hz			
dB Rating (Sound Modules)					
All dB(A) ratings determined at a distance of 1 meter from sound module					
Single Tone Sound Module (SA3)		Maximum volume ranges from 88 or 103 dB(A) (volume adjustable by dipswitch)			
Two Tone Sound Module (TA3)					
Leakage Current Impact					
All light modules and sound modules are capable of absorbing up to 3 mA of leakage from solid-state outputs without module activation					

Approximate Dimensions

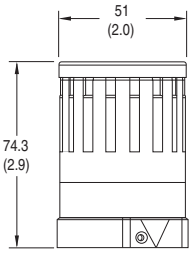
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



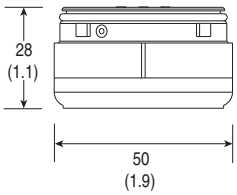
Light Modules



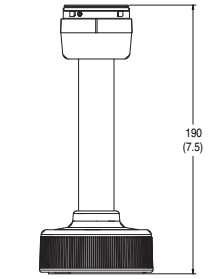
Vertical Mount Base



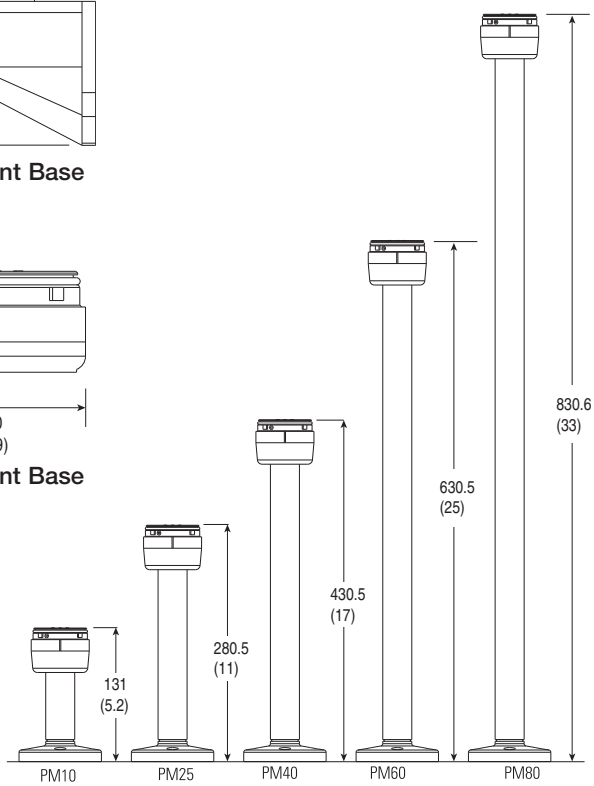
Sound Module



Surface Mount Base



Quick Release Base



Pole Mount Bases

Bulletin 854K 60 mm Control Tower™ Stack Lights

Steady LED Module

Light Modules

854K – 10 TL 4
a b c

a

Voltage	
Code	Description
00	0…250V AC/DC (no-lamp module★)
24	24V AC/DC‡
10	120V AC‡
20	240V AC‡

b

Light Module Type	
Code	Description
XN	Steady no lamp§
TL	Steady LED
GL	Flashing LED
BL	LED strobe, single flash
BF	LED strobe, multi-flash♣

c

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

★ Can only be selected with module type **XN**, voltage code **00**. Accepts socket mount incandescent lamp types only.
‡ Not valid with module type **XN**.
§ Incandescent lamps (Cat. Nos. 854J-L24, 854J-L10, and 854J-L20) need to be purchased separately.
♣ Light module type **BF** (Table b) only available with voltage code **24** (Table a).

Sound Module

Sound Modules

Sound modules have continuous and pulsing tones selectable via DIP switch. Maximum sound output is 90 dB @ 1 meter and the volume is adjustable.

854K – B 10 SA3
a b c

a

Housing Color	
Code	Description
B	Black

b

Voltage	
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


Surface-Mount Base with External Holes


Vertical-Mount Base


Pole-Mount Base


Double-Sided Base


1/2 in. NPT Base


Quick Release Base


Flange Style with M12 Micro Connector (Male)

854K – B VM C

a b c

a

Housing Color	
Code	Description
B	Black

b

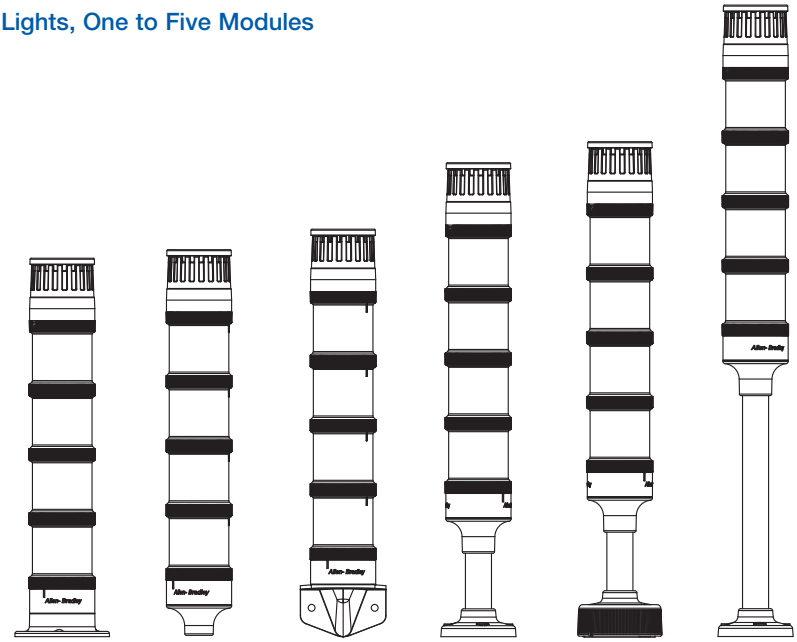
Base Type★	
Code	Description
NPT	1/2 in. NPT
VM	Vertical mount
SH	Surface mount, preinstalled mounting hardware
SF	Surface mount, external mounting holes
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
T10	10 cm threaded tube (M20)
T25	25 cm threaded tube (M20)
DS	Double-sided base‡
Q10	10 cm quick release base
Q25	25 cm quick release base
SFQD5	Flange-style base with M12 (5-pin DC) micro connector ♣Δ♦♠∇

c

Cap Option	
Code	Description
C	Cap included

★ PM10, PM25, T10, T25, Q10, Q25 bases have powder-coated aluminum tubes.
‡ Double-sided base can accommodate up to ten modules per base divided in two groups up to five level each.
♣ For vertical mounting of the base use Cat. No. 854K-AVM.
Δ Maximum number of levels allowed in the stack is four.
♦ For use with Bul. 889D cordsets.
♠ Cannot be used with 10 cm plastic base extension (Cat. No. 854K-ABBE).
∇ Max. 250V AC/DC UL / 60V AC/DC IEC

Pre-Configured Tower Lights, One to Five Modules



Surface Mount | 1/2 in. NPT Thread | Vertical Mount | 10 cm Pole Mount | 10 cm Quick Release | 25 cm Pole Mount

854KC –	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★	
Code	**Description**
NPT	1/2 in. NPT
VM	Vertical mount
SF	Surface mount — external mounting holes
P10	10 cm aluminum pole mount
P25	25 cm aluminum pole mount
Q10	10 cm quick release base
Q25	25 cm quick release base

b

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

c

Module Type	
Code	**Description**
Y	Steady LED
L	Flashing LED
B	Strobe
P	Piezo alarm — continuous/pulsing

d

Lens Color	
Code	**Description**
1	Sound module‡
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

★ P10, P25, Q10, Q25 bases have powder-coated aluminum tubes.
‡ 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

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	**3 Module Stack**	**5 Module Stack**
Standard Bases	Surface Mount Base with External Holes or 10 cm Aluminum Pole Base	50 G Shock 5 G Vibration	50 G Shock 5 G Vibration	40 G Shock 5 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	55 G Shock 5 G Vibration	55 G Shock 5 G Vibration	35 G Shock 5 G Vibration
Recommended Wire Sizes		0.2…1.5 mm^2 (24…16 AWG)		
Recommended Terminal Torque		Screwless terminal blocks		
Environmental Ratings				
Ingress Ratings	Light Modules with Cap	UL Type 4/4X/13, IP66		
	Sound Modules			
	Surface, Vertical, Tube Mount Bases			
	Pole Mount Bases			
	Flange-style Base with M12 Micro Connector ★			
Temperature Ratings — All Products	Operating Temperature	-30…+60 °C (-22…+140 °F) For Cat. No. 854J-BSFQD5C only: -30...+45 °C (-22...+113 °F)		
	Storage Temperature	-30…+85 °C (-22…+185 °F)		
Materials				
Bases, Caps, Lens Covers, Sound Module Housings, Lenses		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		

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

Performance Ratings					
Description			**24V AC/DC**	**120V AC**	**240V AC**
Light Output	Strobe LED	Red	4430 mcd	3915 mcd	
		Green	4216 mcd	4080 mcd	
		Amber	4430 mcd	3915 mcd	
		Blue	1673 mcd	1619 mcd	
		White	4464 mcd	4320 mcd	
		Yellow	3715 mcd	3283 mcd	
	Steady/Flashing LED	Red	1793 mcd	2392 mcd	
		Green	1714 mcd	3400 mcd	
		Amber	1793 mcd	2392 mcd	
		Blue	680 mcd	1349 mcd	
		White	1814 mcd	3600 mcd	
		Yellow	1503 mcd	2006 mcd	
Operating Voltage					
Description			**24V AC/DC**	**120V AC**	**240V AC**
Light Modules and Sound Modules			24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions					
Description			**24V AC/DC**	**120V AC**	**240V AC**
LED			50 000 hr		
Sound Modules			20 000 hr		

Current Consumption				
Description		24V AC/DC	120V AC	240V AC
Light Only Modules	Steady LED	22 mA (red, amber, and yellow) 33 mA (green, blue, and white)	30 mA (red, amber, and yellow) 29 mA (green, blue, and white)	
	Flashing LED	28 mA (red, amber, and yellow) 36 mA (green, blue, and white)	30 mA (red, amber, and yellow) 29 mA (green, blue, and white)	
	Strobe LED	35 mA (red, amber, and yellow) 65 mA (green, blue, and white)	10 mA	
Sound Modules	Single-Tone Sound Module	65 mA	31 mA	32 mA
Flashing Frequency (Light Only Modules)				
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)		
Tone Frequency				
Tone Frequency		Preset at 2500 Hz		
dB Rating (Sound Modules)				
All dB(A) ratings determined at a distance of 1 meter from sound module				
Single Tone Sound Module (SA3)		Maximum volume output is 80 dB (non-adjustable)		
Leakage Current Impact				
All light modules and sound modules are capable of absorbing up to 3 mA of leakage 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

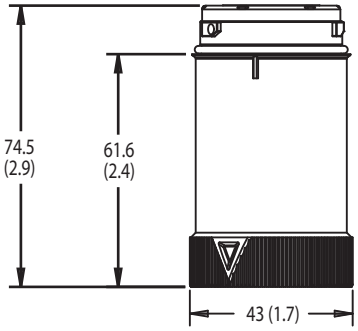
Certifications

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

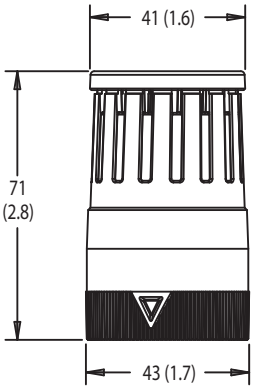
Approximate Dimensions

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

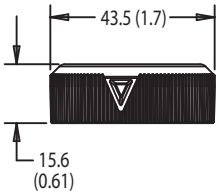
Light Module



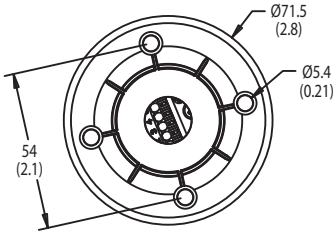
Sound Module



Cap

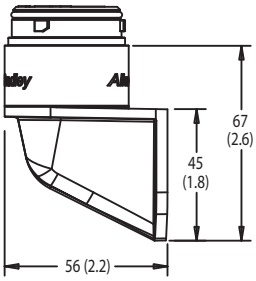


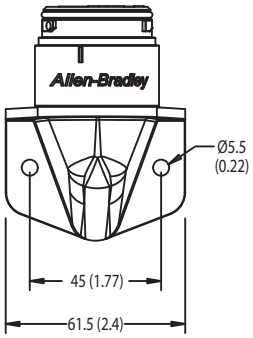
Surface Mount Base

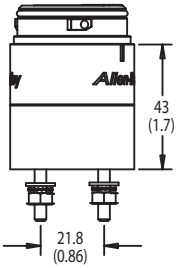


External Mounting Holes

Vertical Mount Base

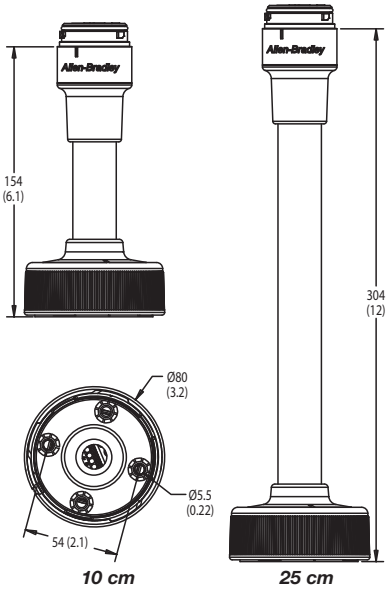




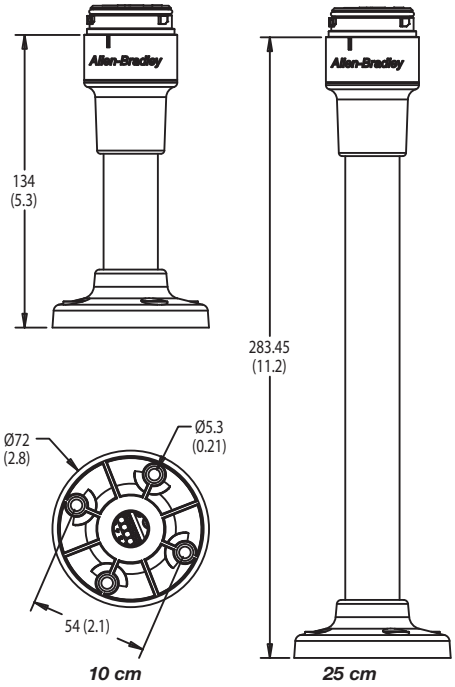


Pre-installed Hardware

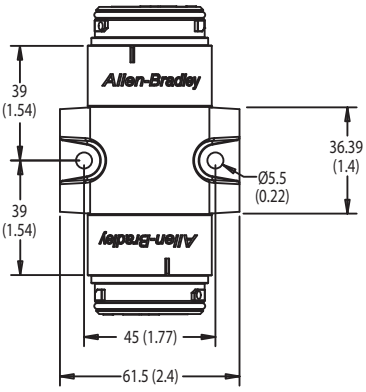
Quick Release Base



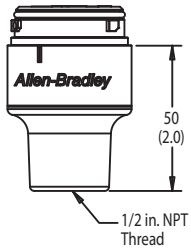
Pole Mount Bases



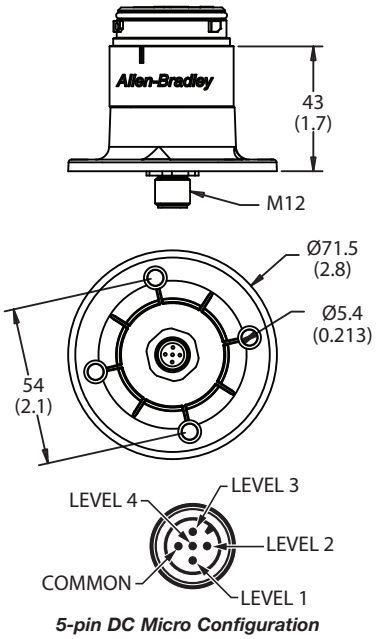
Double-sided Base



1/2 in. NPT Thread Base



Flange-style Base with M12 Micro Connector (Male)



5-pin DC Micro Configuration

Bulletin 855T — 70 mm Control Tower™ Stack Lights

Light Modules

855T – B (a) 10 (b) FN (c) 4 (d)

Red Flashing Incandescent (Black Housing)

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
00	0…250V AC/DC (Use only with Module Code XN)
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
XN	Steady no-lamp‡
DN	Steady incandescent
FN	Flashing incandescent
TL	Steady LED
GL	Flashing LED
RL	Rotating LED, simulated with fixed LEDs§
BR	Strobe

d

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

‡ Use only with Voltage Code **00**. Accepts LED module or incandescent lamp.
§ Only available with Voltage Codes **10** or **24**, and Color Codes **3**, **4**, or **5**.

Single-Circuit Combined Light Module with Piezo Sounder ★

All modules contain a selected light option with a sound device that operates simultaneously. The Piezo-style sound module can be switched to pulsing or continuous sound with a DIP switch. Additionally, the volume can be adjusted to either low: 92 dB(A) or high: 107 dB(A), via a DIP switch. UL Type 4/4X/13, IP65.

Two-Circuit Combined Light Module with Piezo Sounder ♣

All modules contain two circuits enabling separate operation of light or sound. The Piezo style sounder can be switched to pulsing or continuous, with a DIP switch. Additionally, the volume can be adjusted to either low: 92 dB(A) or high: 107 dB(A), via a DIP switch. UL Type 4/4X/13, IP65.

855T – B (a) 10 (b) DC (c) 3 (d)

Combination Module

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Combined Module Type	
Code	Description
DC	Steady incandescent with sound
DD	Two-circuit steady incandescent with sound
FC	Flashing incandescent with sound
TC	Steady LED with sound
GC	Flashing LED with sound
BC	Strobe with sound

d

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

★ The single-circuit combined light/with sound module uses one circuit in a stack. It can be used with a maximum of four light modules and must be placed in the top position of a stack.
♣ The two-circuit combined light/with sound module uses two circuits in a stack. It can be used with a maximum of three light modules and must be placed in the top position of a stack.

Transducer-Style Sound Modules

- UL Type 12, IP54
- Up to 15 tones
- Adjustable volume @ from 85…103 dB @ 1 meter
- Adjustable frequency and speed tone

855T – B (a) 10 (b) SA1 (c)

Sound Module

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
SA1	Single-tone sound module with 13 different tones★
TA1	Dual-tone sound module with 15 sets of dual-tone combinations‡

★ This module uses one circuit in a stack. It can be used with maximum of any four light modules and must be placed on top of stack.
‡ This module uses two circuits in a stack. It can be used with a maximum of any three light modules and must be placed on top of stack.

Piezo-Style Sound Modules

- Single or dual circuit versions
- High/low volume selectable via DIP switch

855T – G (a) 24 (b) TA2 (c)

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
SA2	• Single-tone/single-circuit piezo-style module with continuous or pulsing tones modified by a DIP switch • Type 12 • Volume 97 or 85 dB @ 1 m
TA2	• Dual-tone/dual-circuit piezo-style module with continuous or pulsing tone modified by energizing one or two circuits of sound modules • Type 12 • Volume 97 or 85 dB @ 1 m
SA3	• Single-circuit piezo-style module with continuous or pulsing tones modified by a DIP switch • Type 4/4X/13 • Volume 107 or 92 dB @ 1 m
TA3	• Dual-circuit piezo-style module with continuous or pulsing tone modified by energizing one or two circuits of sound modules • Type 4/4X/13 • Volume 107 or 92 dB @ 1 m

Standard and DeviceNet Stack Light Bases

Surface-Mount Base with Cap

Vertical-Mount Base with Cap

80 cm Powder-Coated Stainless Steel Pole-Mount Base with Cap

40 cm Powder-Coated Stainless Steel Pole-Mount Base

25 cm Quick Release Base

10 cm Aluminum Pole-Mount Base

Surface-Mount, Conduit-Mount Base with Stranded Wire Cable

10 cm Pole-Mount Base with Micro-Connect Cable and Cap

Vertical-Mount Base with Micro-Connect Cable and Cap

855T – DL1 B PM10 C

a b c d

a

Network Connection Type	
Code	Description
Blank	No network connection
DM1	DeviceNet micro-connect with 1 m cable★
DS2	DeviceNet stranded wire connect with 2 m cable★
DL1	DeviceNet mini-connect with 1 m cable★

b

Housing Color	
Code	Description
B	Black
G	Grey

c

Base Type	
Code	Description
CB	Surface mount — 1/2 in. NPT conduit mount
SB	Surface mount — PG16 conduit mount
RB	Surface mount — M20 x 1.5 conduit mount
VM	Vertical mount
TM	25 mm diameter tube mount
PM10	10 cm aluminum pole mount
PM25	25 cm aluminum pole mount
PM40	40 cm aluminum pole mount
SPM10	10 cm stainless steel pole mount‡
SPM25	25 cm stainless steel pole mount‡
SPM40	40 cm stainless steel pole mount‡
SPM60	60 cm stainless steel pole mount‡
SPM80	80 cm stainless steel pole mount‡
MM10	10 cm quick release base
MM25	25 cm quick release base
MM40	40 cm quick release base

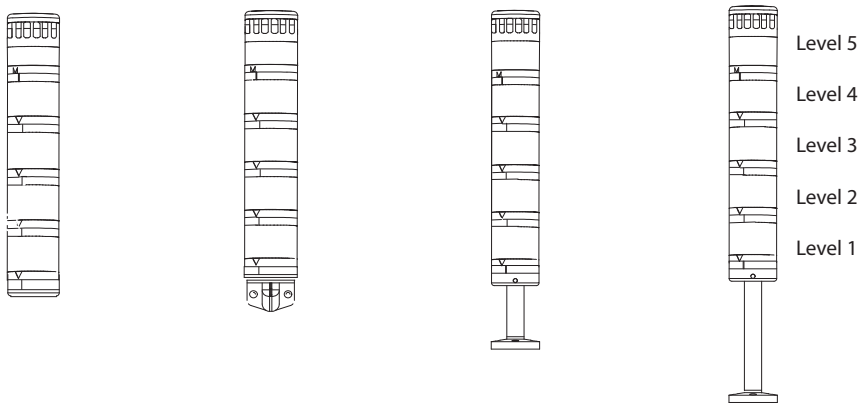
d

Cap Option	
Code	Description
Blank	No cap
C	Cap included

★ DeviceNet bases DL1, DM1, or DS2 can only be used with 24V AC/DC and they are only available with Base Types CB, SB, VM, TM, PM10, or PM25.

‡ Stainless Steel tube is powder-coated in black.

Pre-Configured Control Tower Lights, One to Five Modules



Surface Mount | Vertical Mount | 10 cm Pole Mount | 25 cm Pole Mount

855	TS – DL1	B	24	Y	4	L	5	B	3	F	7	Y	6
	a	*b*	*c*	*d*	*e*	*f*	*e*	*f*	*e*	*f*	*e*	*f*	*e*	*f*
					(Level 1) e+f		*(Level 2) e+f*		*(Level 3) e+f*		*(Level 4) e+f*		*(Level 5) e+f*	

a

Base Type	
Code	**Description**
TC	Surface mount 1/2 in. NPT conduit
TS	Surface mount PG16 conduit
TV	Vertical mount
TP	10 cm pole mount
TE	25 cm pole mount
TM	25 mm diameter tube mount

b

Network Options	
Code	**Description**
Blank	Standard
DL1	DeviceNet mini-connect with 1 m cable★
DM1	DeviceNet micro-connect with 1 m cable★
DS2	DeviceNet stranded wire connect with 2 m cable★

c

Housing Color	
Code	**Description**
B	Black
G	Grey

d

Voltage	
Code	**Description**
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

e

Module Type	
Code	**Description**
D	Steady incandescent
F	Flashing incandescent
Y	Steady LED
L	Flashing LED
B	Strobe
T	Steady incandescent with sound‡
H	Flashing incandescent with sound‡
J	Dual-circuit steady incandescent with sound
E	Steady LED with sound‡
G	Flashing LED with sound‡
Z	Strobe with sound‡
A	Transducer single-circuit sounder UL Type 12, IP54‡
W	Transducer dual-circuit sounder UL Type 12, IP54‡
P	Single-circuit piezo alarm
Q	Dual-circuit piezo alarm

f

Lens Color	
Code	**Description**
1	Sound module§
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

★ DeviceNet bases DL1, DM1, or DS2 can only be used with 24V AC/DC.
‡ Only one sound module or light module/with sound can be assembled per stack. These modules must always be placed in the top position.
§ Sound module from Table f can only be selected with single-tone or two-tone module types from Table e.

Mechanical Ratings				
Shock and Vibration		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.		
		1 Module Stack	3 Module Stack	5 Module Stack
Standard Bases	Surface Mount Base or 10 cm Aluminum Pole Base	150 G Shock 5 G Vibration	45 G Shock 1.5 G Vibration	35 G Shock 0.75 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	95 G Shock 3.5 G Vibration	30 G Shock 1.25 G Vibration	20 G Shock 0.5 G Vibration
DeviceNet Bases	Surface Mount Base or 10 cm Aluminum Pole Base	50 G Shock 5 G Vibration	45 G Shock 1.5 G Vibration	35 G Shock 0.75 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	50 G Shock 3.5 G Vibration	30 G Shock 1.25 G Vibration	20 G Shock 0.5 G Vibration
Recommended Wire Sizes		0.5…2.5 mm^2 (22…14 AWG)		
Recommended Terminal Torque		0.8 N•m (7 lb•in)		
Environmental Ratings				
Ingress Ratings	Light Modules with Cap and combined Light/Sound Modules	IP65/UL Type 4/4X/13		
	Sound Modules (SA1, SA2, TA1, TA2)	IP54/UL Type 12		
	Sound Modules (SA3, TA3)	IP65/UL Type 4/4X/13		
	Surface, Vertical, Tube Mount and On-Machine Bases	IP65/UL Type 4/4X/13		
	Pole Mount Bases (Aluminum)	IP65/UL Type 4/13		
	Pole Mount Bases (Stainless Steel)	IP65/UL Type 4/4X/13		
Temperature Ratings — All Products	Operating Temperature	-25…+70 °C (-13…+158 °F)		
	Storage Temperature	-40…+85 °C (-40…+185 °F)		
Materials				
Bases, Caps, Lens Covers, Sound Module Housings, Lenses, Lamp Sockets		Polycarbonate		
Rubber Seals and Gaskets		Nitrile Rubber		
Pole (for aluminum pole assembly)		Aluminum		
Pole Base Footing (for aluminum pole base)		Polycarbonate		
Pole (for stainless steel pole assembly)		Powder-coated Stainless Steel		
Pole Base Footing (for stainless steel pole base)		Zinc		
Insulation Sleeve (for pole insulation)		Polyolefin		
Surface and Vertical Mount Pole Connection Box and Magnetic Mount Housing		Polycarbonate		
Mounting Screw Washers		Polypropylene		
DeviceNet Base Grommet		Neoprene		
DeviceNet Cable Jackets		CPR Chlorinated Polyethylene		
DeviceNet Cable Connectors		Santoprene		

Performance Ratings					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Output	Steady Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Flashing Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Strobe	3 Joules per lamp			
	Steady, Flashing Socket Mount LED Red	900…2240 mcd			
	Steady, Flashing Socket Mount LED Green	900…1800 mcd			
	Steady, Flashing Socket Mount LED Amber	1400…3550 mcd			
	Steady, Flashing Socket Mount LED Blue	224…560 mcd			
	Steady, Flashing Socket Mount LED White and Yellow	900…1800 mcd			
Operating Voltage					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Modules and Sound Modules		12V AC/DC (± 10%)	24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Incandescent Modules‡§		8,000 hrs	7,000 hrs	3,000 hrs	1,600 hrs
LED Modules		100 000 hrs			
Strobe Modules		15 000 hrs			
Sound Modules		20 000 hrs			

‡ First failures at about 35% of average life. Severe vibration may reduce life to 44% of average life.
§ Flashing applications may reduce life to 50% of average life.

Current Consumption					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Only Modules	Steady Incandescent	208 mA	271 mA	58 mA	23 mA
	Steady or Flashing LED	42 mA	29 mA	21 mA	20 mA
	Strobe	240 mA	170 mA	50 mA	35 mA
Light Modules/with Sound	Steady Incandescent/with Sound	218 mA	281 mA	78 mA	43 mA
	Flashing Incandescent/with Sound	218 mA	281 mA	78 mA	43 mA
	Steady or Flashing LED/with Sound (Red, Amber, Yellow)	100 mA	62 mA	22.5 mA	20 mA
	Steady or Flashing LED/with Sound (Green, Blue, White)	250 mA	180 mA	70 mA	55 mA
	Strobe/with Sound	250 mA	180 mA	70 mA	55 mA
Transducer Style Sound Modules	Single and Two Circuit Modules	30 mA	65 mA	110V/50 Hz 120V/60 Hz 60 mA	230V/50 Hz 240V/60 Hz 60 mA
Piezo Style Sound Modules	Single and Two Circuit Modules	27 mA	45 mA	43 mA	40 mA
DeviceNet Bases		—	70 mA	—	—

Flashing Frequency (Light Only Modules)	
Flashing Incandescent Modules	12V module approximately 1.5 Hz 24V, 120V, and 240V modules approximately 2 Hz Time ON/Time OFF = 1:1
Flashing LED Modules	Flashing frequency approximately 1.5 Hz Time ON/Time OFF = 1:1
Strobe Modules	Flashing frequency approximately 2 Hz (flash duration 1/50,000 second)
Flashing and Tone Frequency (Light Modules/with Sound Set at Continuous Tone)	
Tone Frequency	Tone frequency is preset at 2400 Hz or 3300 Hz
Flashing Incandescent/with Sound	12V module approximately 1.5 Hz 24V, 120V, and 240V modules approximately 1.6 Hz
Flashing LED/with Sound	Flashing frequency approximately 1.5 Hz
Strobe/with Sound	Flashing frequency approximately 1.4 Hz
Flashing and Tone Pulsing Frequencies (Light Modules/with Sound Set at Pulsing Tone)	
Tone Frequency	Tone frequency is preset at 2400 Hz or 3300 Hz
Steady Incandescent/with Sound	Sound Pulsing Frequency — 1.5 Hz
Flashing Incandescent/with Sound	Flashing and Pulsing Frequency the same for 12V module approximately 1.5 Hz, for 24V, 120V, and 240V modules approximately 1.6 Hz
LED Steady/with Sound	Sound Pulsing Frequency — 1.5 Hz
LED Flashing/with Sound	Flashing and Pulsing Frequency the same at 1.5 Hz
Strobe/with Sound	Flashing and Pulsing Frequency the same at 1.4 Hz
dB Rating (Sound Modules)	
All dB(A) ratings determined at a distance of 1 meter from sound module	
Selectable Tone Sound Module (SA1, TA1)	Maximum volume ranges from 64…103 dB(A) (volume adjustable) Based on tone selected for all settings except signal horn which has a maximum of 80 dB(A)
Piezo Sound Module (SA2, TA2)	High 97 dB/Low 85 dB, selectable via DIP switch
Piezo Sound Module (SA3, TA3)	High 107 dB/Low 95 dB, selectable via DIP switch
Piezo Light Modules and Light Modules/with Sound (set at continuous or pulsing tone)	High 107 dB/Low 95 dB, selectable via DIP switch
Leakage Current Impact	
All light modules, sound modules, and light/sound modules are capable of absorbing up to 3 mA of leakage current from solid-state outputs without module activation. Some light and light modules with sound may not turn off completely when connected to solid-state outputs which emit leakage current. Listed below are modules that were affected by an output module emitting a maximum of 3 mA. A dry contact can be used to eliminate the effect of leakage current.	
12V AC/DC, 24V AC/DC, 120V AC, 240V AC	All light/sound combination modules
DeviceNet Bases	
Baud Rate Options	125 K, 250 K, 500 K, Autobaud

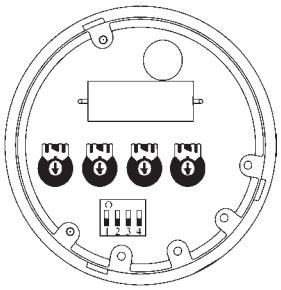
Standards Compliance

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

Transducer Style Single Circuit Sound Module (SA1)



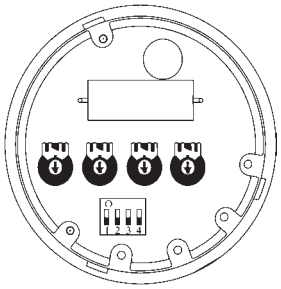
Adjustable Sound Settings

Rotated View of Sound Settings

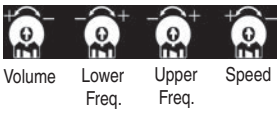
DIP Switch Position	Tone Description		Speed	Upper Frequency	Lower Frequency	Volume
	Triangle Tone		7…22 Hz	1500 Hz	500 Hz	80… 100 dB(A)
	Continuous Tone		—	★	500 Hz	83… 100 dB(A)
	Interrupted Tone		0.5… 1.5 Hz	★	500… 1500 Hz	83… 103 dB(A)
	Changing Tone		0.5… 1.5 Hz	500… 1500 Hz	500… 1500 Hz	83… 103 dB(A)
	Saw Tooth Tone Ascending		0.5… 1.5 Hz	500… 1500 Hz	500… 1500 Hz	83… 103 dB(A)
	Saw Tooth Tone Descending		0.5… 1.5 Hz	500… 1500 Hz	500… 1500 Hz	83… 103 dB(A)
	Sine Wave Tone		0.5… 1.5 Hz	500… 1500 Hz	500… 1500 Hz	82… 102 dB(A)
	DIN-Emergency Signal	DIN 33404	1 Hz	1200 Hz	500 Hz	82… 102 dB(A)
	Siren (Non-Repeating)		2…4 s	1500 Hz	500 Hz	83… 103 dB(A)
	Signal Horn Continuous Tone		—	★	100… 350 Hz	64… 80 dB(A)
	Three-Tone Gong		2…4 s	660 Hz 550 Hz 440 Hz		76… 95 dB(A)
	Two-Tone Gong		2…3 s	550 Hz 440 Hz		75… 93 dB(A)
	Gong		1…3 s	★	500… 1500 Hz	75… 93 dB(A)

★ Set to maximum (+).

Transducer Style Dual Circuit Sound Module (TA1)



Adjustable Sound Settings



Rotated View of Sound Settings

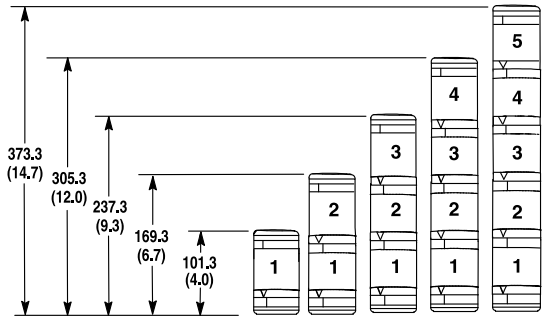
DIP Switch Position	Tone A		Tone B	
ON 1 2 3 4	Triangle Tone		Continuous Tone	
ON 1 2 3 4	Continuous Tone		Changing Tone	
ON 1 2 3 4	Continuous Tone		Interrupted Tone	
ON 1 2 3 4	Interrupted Tone		Three-Tone Gong	
ON 1 2 3 4	Interrupted Tone		Siren (Non-Repeating)	
ON 1 2 3 4	Changing Tone		DIN-Emergency Signal	DIN 33404
ON 1 2 3 4	Saw Tooth Tone Ascending		Continuous Tone	
ON 1 2 3 4	Saw Tooth Tone Descending		Interrupted Tone	
ON 1 2 3 4	Sine Wave Tone		DIN-Emergency Signal	DIN 33404
ON 1 2 3 4	DIN-Emergency Signal	DIN 33404	Three-Tone Gong	
ON 1 2 3 4	Siren (Non-Repeating)		Triangle Tone	
ON 1 2 3 4	Signal Horn (Continuous Tone)		Continuous Tone	
ON 1 2 3 4	Three-Tone Gong		Sine Wave Tone	
ON 1 2 3 4	Two-Tone Gong		Two-Tone Gong (Non-Repeating)	
ON 1 2 3 4	Gong		Continuous Tone	

Approximate Dimensions

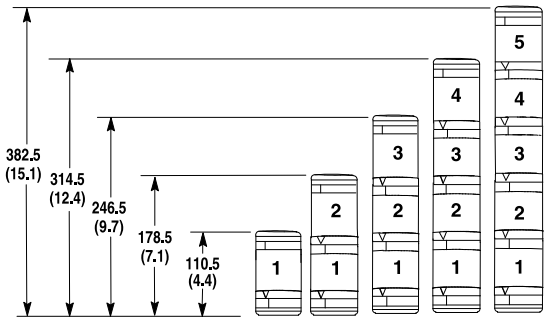
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Assembled Control Tower Lights — Light Modules Only or Light Modules with Sound Module located on top position★

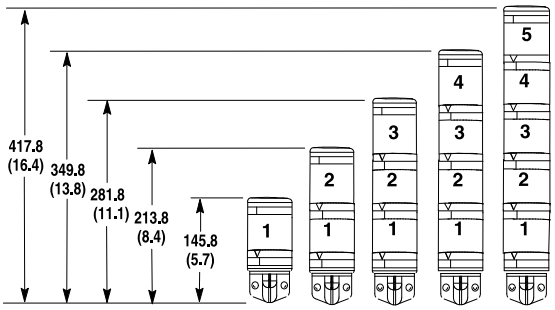
Surface Mount Base (SB and CB)



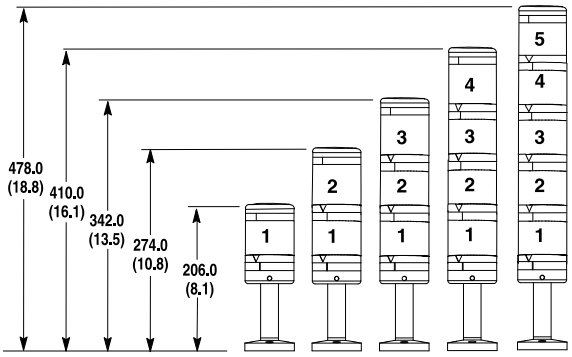
Tube Mount Base (TM)



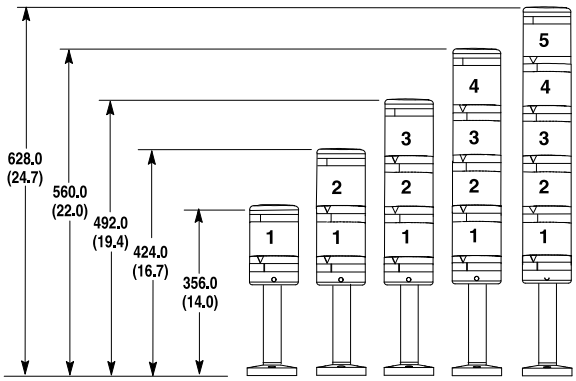
Vertical Mount Base (VM)



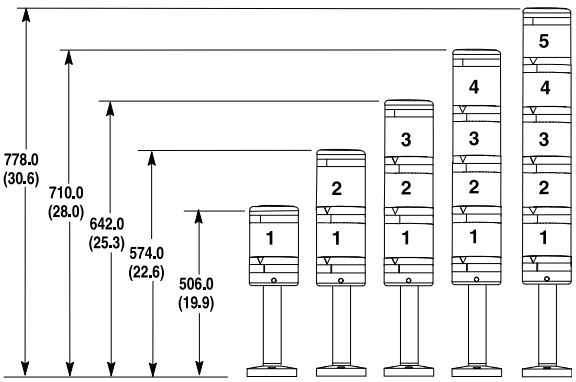
10 cm Pole Mount Base (PM10, SPM25)



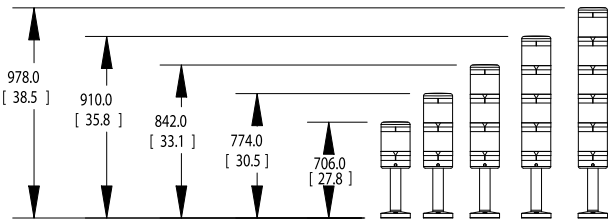
25 cm Pole Mount Base (PM25, SPM25)



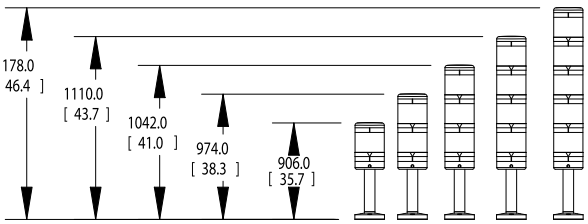
40 cm Pole Mount Base (PM40, SPM40)



60 cm Pole Mount Base (SPM60)



80 cm Pole Mount Base (SPM80)

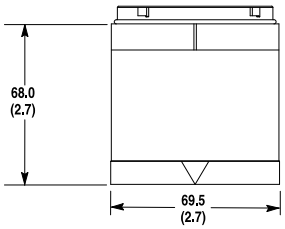


★ If a combined Light/Sound module is used, add 21.5 mm (0.8 in.) to vertical dimensions.

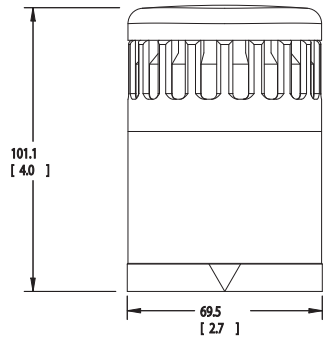
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Component and Accessory Dimensions

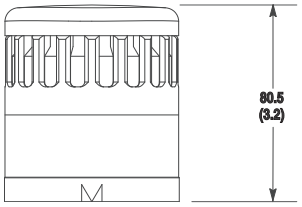
Light Module



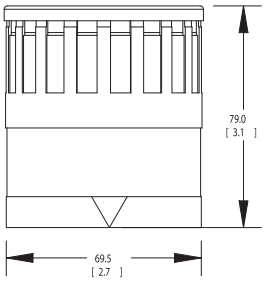
Combined Light/Sound Module



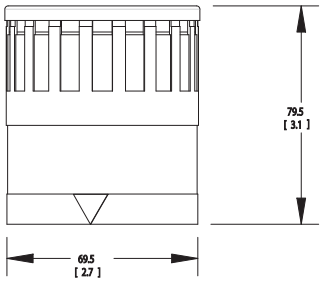
Transducer Style Sound Module



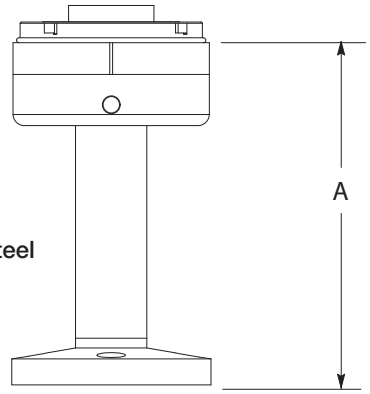
SA3 Sounder

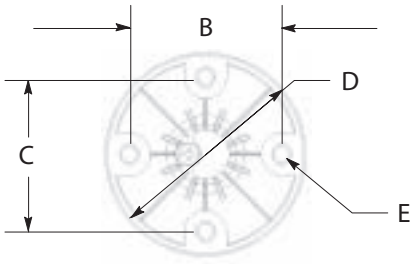


TA3 Sounder

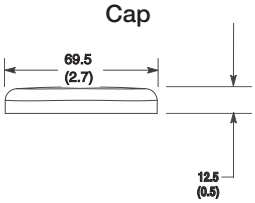


Pole Mount Base
Aluminum or Stainless Steel



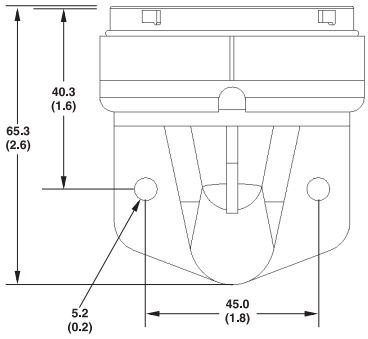


Cap

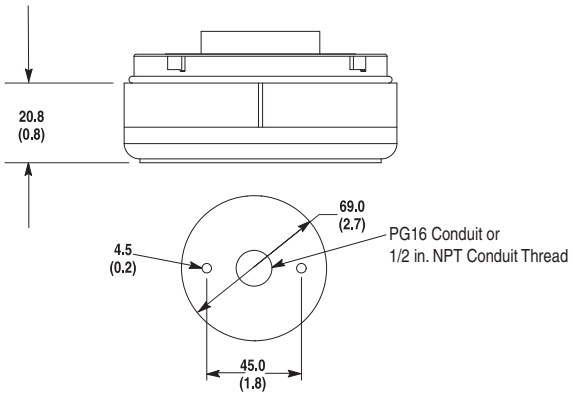


Pole Mount Base Size [cm] (aluminum or stainless steel)	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
10	124.5 (4.9)	54.0 (2.1)	54.0 (2.1)	70.0 (2.8)	5.0 (0.2)
25	274.5 (10.8)				
40	424.5 (16.7)				
60	624.5 (24.6)				
80	824.5 (32.5)				

Vertical Mount Base

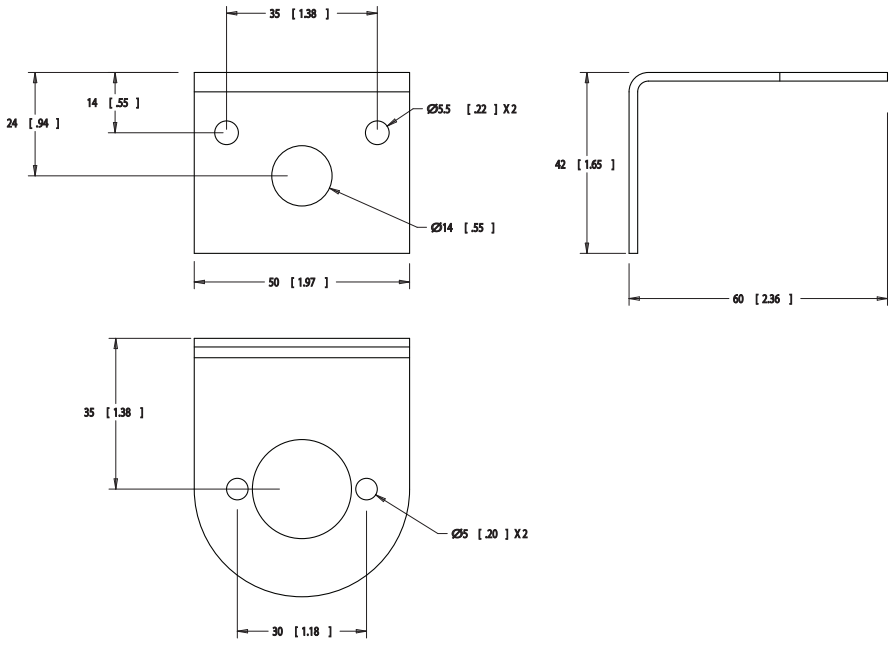


Surface Mount Base
855T-BSB or 855T-BCB

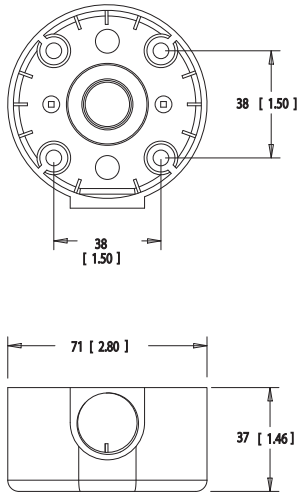


Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

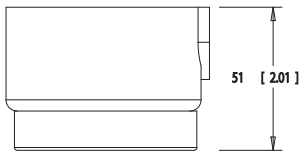
855E-AVM Vertical Mount Bracket



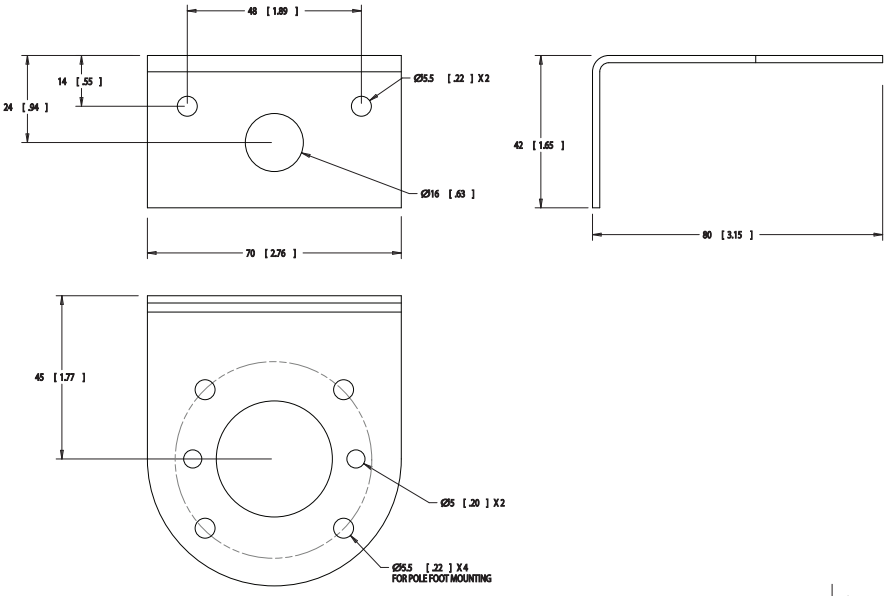
Standard Pole Connection Box



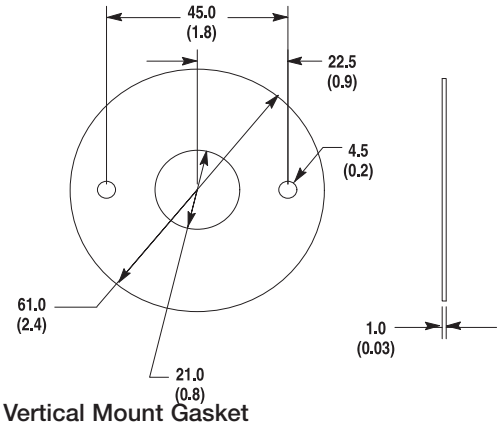
Magnetic Pole Connection Box



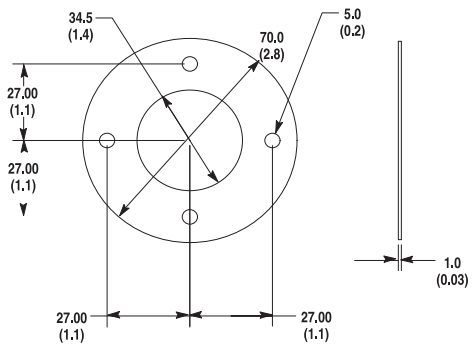
855T-AVM Vertical Mount Bracket



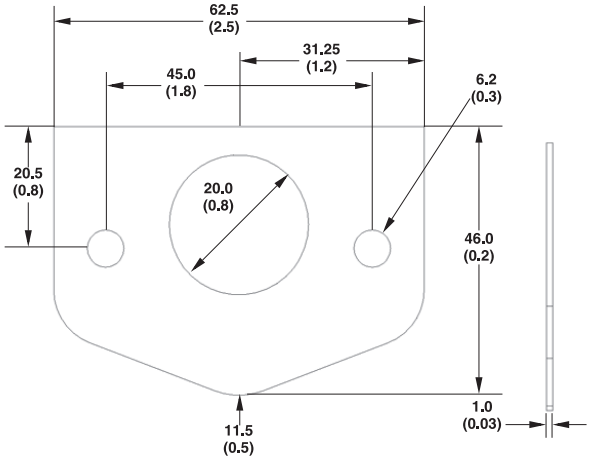
Surface Mount Gasket



Pole Mount Gasket

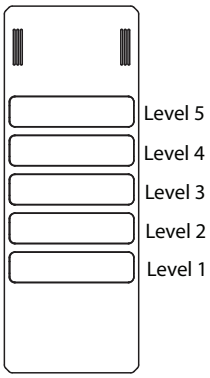


Vertical Mount Gasket



Bulletin 855W — Wall Mount Signal Light

Pre-Assembled Wall Mount Signal Lights, Two to Five Light Levels



855W	–	G	10	Y	7	Y	6	Y	3	Y	5	L	4	P1
	a	*b*	*c*	*d*	*e*	*d*	*e*	*d*	*e*	*d*	*e*	*d*	*e*	*f*
				(Level 1, d+e)		*(Level 2, d+e)*		*(Level 3, d+e)*		*(Level 4, d+e)*		*(Level 5, d+e)*		

a

Network Option	
Code	**Description**
Blank	No network option

b

Housing Color	
Code	**Description**
C	Chrome plated
G	Grey

c

Voltage	
Code	**Description**
24	24V AC/DC
10	120V AC
20	240V AC

d

Module Type	
Code	**Description**
Y	Steady LED
L	Flashing LED

e

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

f

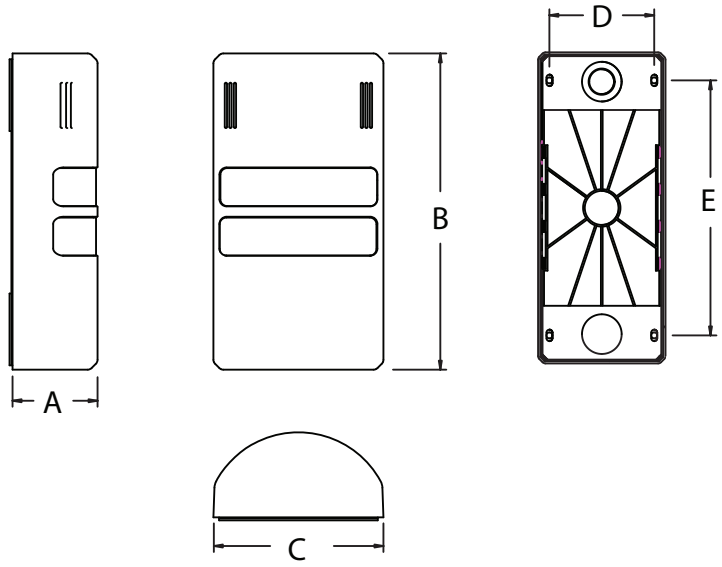
Sound	
Code	**Description**
Blank	No sound
P1	Piezo sounder (continuous/pulsing)

Specifications

Environmental Ratings				
Ingress Ratings	Light/Sound	IP65/UL Type 4/4X/13		
Temperature Ratings	Operating Temperature	-25…+50 °C (-13…+122 °F)		
	Storage Temperature	-25…+85 °C (-13…+185 °F)		
Materials				
Lenses and Base		Polycarbonate (94V-0)		
Cover		ABS		
Rubber Seals and Gaskets		NBR 70		
Electrical Ratings				
Description		**24V AC/DC**	**120V AC**	**240V AC**
Operating Voltage		24V AC/DC (± 10%)	110V AC 50 Hz (± 10%) 120V AC 60 Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)
Current Consumption	Steady or Flashing LED	43 mA per channel, max.	33 mA per channel, max.	30 mA per channel, max.
	Piezo Sounder	62 mA	24 mA	24 mA
Leakage Current Impact		≤ 3 mA		
Mechanical Ratings				
Design Life Rating (Average life under static, no vibration conditions)	Steady or Flashing LED	30 000…50 000 hrs		
	Piezo Sounder	> 10 000 hrs		
Frequency	Flashing LED	2 Hz		
dB Rating	Piezo Sounder	90 dBA (potentiometer adjustable down to 70 dB) All dB(A) ratings determined at a distance of 1 meter from sound module		

Approximate Dimensions

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



Number of Levels	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E
2	45 (1.77)	167.4 (6.59)	90 (3.54)	74 (2.91)	125 (4.92)
3		193.5 (7.62)			150 (5.91)
4		219.6 (8.65)			180 (7.09)
5		245.7 (9.67)			210 (8.27)

Bulletin 855X — Hazardous Location Horns, Beacons, and Loudspeakers

Alarm Horn Sounders

855XH – BN (a) D30 (b) B (c)

a

Product Type	
Code	Description
BN	1/2 in. NPT conduit entrance, black housing

b

Voltage	
Code	Description
D30	10...30V DC
D48	48V DC
A10	115...120V AC
A20	220...230V AC

c

Horn Type	
Code	Description
A	110 dB @ 1 m/45 tone/3 stage
B	117 dB @ 1 m/45 tone/3 stage

Xenon Strobe Beacons

855XB – BN (a) A10 (b) B (c) 4 (d)

a

Product Type	
Code	Description
BN	1/2 in. NPT conduit entrance, black housing

b

Voltage	
Code	Description
D12	12V DC★
D24	24V DC
D48	48V DC
A10	115...120V AC
A20	220...230V AC

c

Beacon Type	
Code	Description
A	Xenon strobe - 5 J, 1 Hz
B	Xenon strobe - 10 J, 1 Hz

d

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

★ The 12V DC voltage is only configurable with the Xenon, 5 J beacon type.

Combined Horn Sounder & Strobe Beacon

855XC – BN (a) A10 (b) A (c) 3 (d)

a

Product Type	
Code	Description
BN	1/2 in. NPT conduit entrance, black housing

b

Voltage	
Code	Description
D24	24V DC
D48	48V DC
A10	115...120V AC
A20	220...230V AC

c

Beacon Type	
Code	Description
A	Xenon strobe - 5 J, 110 dB @ 1 m, 45 tones, 3 stages

d

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

Public Address Loudspeakers

855XL – BN (a) 70 (b) A (c)

a

Product Type	
Code	Description
BN	1/2 in. NPT conduit entrance, black housing

b

Power Selection - Transformer	
Code	Description
70	70V line (tappings: 15 W, 7.5 W, 3 W, 1 W)
100	100V line (tappings: 15 W, 7.5 W, 3 W, 1 W)
8R	8 Ω
16R	16 Ω

c

Power Handling	
Code	Description
A	15 W RMS

Specifications

Device		855XH Horn	855XB Beacon	855XC Horn-Beacon Combination	855XL PA Loudspeaker
Mechanical Ratings					
Shock		30 G Peak			
Vibration		2 G Peak			
Environmental Ratings					
Ingress Ratings		IP66/67 and UL Type 4/4X13, IP 66/67			
Temperature Ranges	Operating	-4…+131 °F (-20…+55 °C)			
	Storage	-4…+167 °F (-20…+75 °C)			
Materials					
Covers		PPS glass-filled plastic			
Bases		PPS glass-filled plastic			
Mounting Bracket		Stainless Steel 304 (A2)			
Gaskets		Viton			
Beacon Lens		Glass			
Beacon Housing		PPS glass-filled plastic			
Performance Ratings					
Sound Output	dB @ 1 meter	110 or 117 dB	N/A	110 dB	N/A
Xenon Lamp Rating		N/A	5 or 10 Joules	5 Joules	N/A
Flashing Frequency		N/A	1 Hz	1 Hz	N/A

Operating Ratings (Voltage and Current Consumption)						
Device	Input Voltages	12V AC/DC	24V AC/DC	48V DC (Max. I/P Volts)	10V AC 50/60 Hz	230V AC 50/60 Hz
855XH Horn 110 dB @ 1 m	DC Units: 10…30V or 48V	—	284 mA (30V)	146 mA (58V)	—	—
	AC Units: 120V or 230V 50/60Hz	—	—	—	104 mA (132V)	54 mA (253V)
855XH Horn 117 dB @ 1 m	DC Units: 10…30V or 48V	—	280 mA (30V)	215 mA (58V)	—	—
	AC Units: 120V or 230V 50/60Hz	—	—	—	142 mA (132V)	76 mA (253V)
855XB Beacon 5 Joules	DC Units: 12 or 24V or 48V	520 mA (15V)	275 mA (30V)	145 mA (58V)	—	—
	AC Units: 120V or 230V 50/60Hz	—	—	—	80 mA (132V)	30 mA (253V)
855XB Beacon 10 Joules	DC Units: 24V or 48V	—	560 mA (30V)	260 mA (58V)	—	—
	AC Units: 120V or 230V 50/60Hz	—	—	—	185 mA (132V)	107 mA (253V)
855XC Combined Horn (110 dB @ 1 m) and Strobe Beacon (5 Joules)	**Horn Section** DC Units: 24V or 48V	—	284 mA (30V)	146 mA (58V)	—	—
	Horn Section AC Units: 120V or 230V 50/60Hz	—	—	—	104 mA (132V)	54 mA (253V)
	Beacon Section DC Units: 24V or 48V	—	275 mA (30V)	145 mA (58V)	—	—
	Beacon Section AC Units: 120V or 230V 50/60Hz	—	—	—	80 mA (132V)	30 mA (253V)

Operating Ratings				
Device	Impedance	Input	Wattage	Max. I/P Volts
855XL PA Loudspeaker ★	8 Ω	8 Ω	15 W	10.95V
	16 Ω	16 Ω	15 W	15.49V
	100V Line	100V Line	15 W	100V
	70V Line	70V Line	15 W	70V

★ **Power Amplifier Selection:** It is important that loudspeakers are connected to power amplifiers that have outputs compatible to the type of loudspeaker being used. Loudspeakers with a 70V or 100V line-matching transformer fitted must be connected to a power amplifier with a 70V or 100V line output. Low-impedance 8 Ω or 16 Ω loudspeakers must be connected to amplifiers with a suitable low-impedance output.

Certifications

CE Marked
cULus Listed (File No. E305538 for Beacons and File No. E305533 for Horns and Combination units) for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F & G, and Class III, Division 1 & 2

Standards Compliance

UL 508
UL 1604
CSA C22.2 No. 14
CSA C22.2 No. 213
EN/IEC 60947-1
EN/IEC 60947-5-1

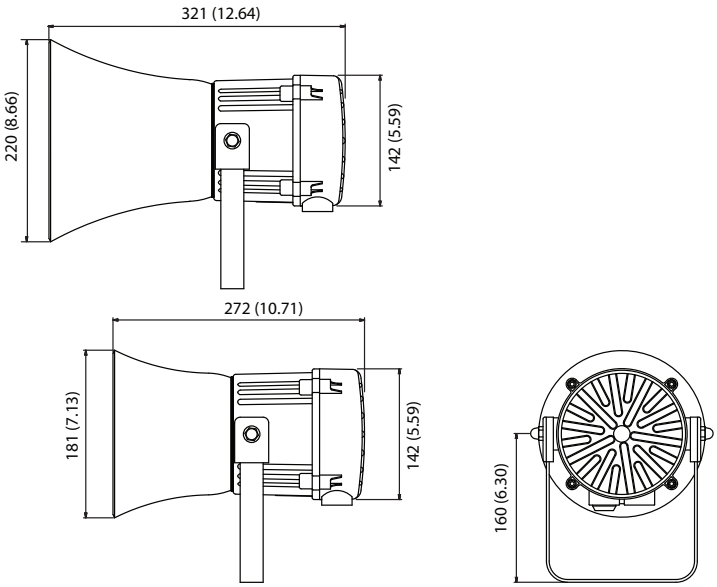
Temperature Ratings			
Device	Hazardous Location	Code (Max. Operating Temperature) @ 55 °C Ambient	Code (Max. Operating Temperature) @ 40 °C Ambient
855XB- 5 Joule Beacon	Class I, Division 2, Groups A, B, C, D	T2D (215 °C)	T3 (200 °C)
	Class II, Division 2, Groups F and G	T5 (100 °C)	T6 (85 °C)
	Class III, Divisions 1 and 2	T5 (100 °C)	T6 (85 °C)
855XB- 10 Joule Beacon	Class I, Division 2, Groups A, B, C, D	T2A (280 °C)	—
	Class II, Division 2, Groups F and G	T4A (120 °C)	T5 (100 °C)
	Class III, Divisions 1 and 2	T4A (120 °C)	T5 (100 °C)
855XH- 110 dB Sounder	Class I, Division 2, Groups A, B, C, D	T3C (160 °C)	T4 (135 °C)
	Class II, Division 2, Groups F and G	T6 (85 °C)	—
	Class III, Divisions 1 and 2	T6 (85 °C)	—
855XH- 117 dB Sounder	Class I, Division 2, Groups A, B, C, D	T3C (160 °C)	T4 (135 °C)
	Class II, Division 2, Groups F and G	T6 (85 °C)	—
	Class III, Divisions 1 and 2	T6 (85 °C)	—
855XC- Sound/Strobe Combination	Class I, Division 2, Groups A, B, C, D	T2D (215 °C)	T3 (200 °C)
	Class II, Division 2, Groups F and G	T5 (100 °C)	T6 (85 °C)
	Class III, Divisions 1 and 2	T5 (100 °C)	T6 (85 °C)
855XL- Loudspeaker	Class I, Division 2, Groups A, B, C, D	T4 (135 °C)	T4A (120 °C)
	Class II, Division 2, Groups F and G	T6 (85 °C)	—
	Class III, Divisions 1 and 2	T6 (85 °C)	—

Tone Selection Table for 855XH and 855XC units										
		Switch								
Stage 1	Frequency Description	1	2	3	4	5	6	Stage 2	Stage 3
1	340 Hz, Continuous	0	0	0	0	0	0	Tone 2	Tone 5
2	800/1000 Hz @ 0.25 s, Alternating	1	0	0	0	0	0	Tone 17	Tone 5
3	500/1200 Hz @ 0.3 Hz s, Slow Whoop	0	1	0	0	0	0	Tone 2	Tone 5
4	800/1000 Hz @ 1 Hz, Sweeping	1	1	0	0	0	0	Tone 6	Tone 5
5	2400 Hz, Continuous	0	0	1	0	0	0	Tone 3	Tone 20
6	2400/2900 Hz @ 7 Hz, Sweeping	1	0	1	0	0	0	Tone 7	Tone 5
7	2400/2900 Hz @ 1 Hz, Sweeping	0	1	1	0	0	0	Tone 10	Tone 5
8	500/1200/500 Hz @ 0.3 Hz, Sweeping	1	1	1	0	0	0	Tone 2	Tone 5
9	1200/500 Hz @ 1 Hz, - DIN *PFEER P.T.A.P.*	0	0	0	1	0	0	Tone 15	Tone 2
10	2400/2900 Hz @ 2 Hz, Alternating	1	0	0	1	0	0	Tone 7	Tone 5
11	1000 Hz @ 1 Hz, Intermittent	0	1	0	1	0	0	Tone 2	Tone 5
12	800/1000 Hz @ 0.875 Hz, Alternating	1	1	0	1	0	0	Tone 4	Tone 5
13	2400 Hz @ 1 Hz, Intermittent	0	0	1	1	0	0	Tone 15	Tone 5
14	800 Hz, 0.25 s ON, 1 s OFF, Intermittent	1	0	1	1	0	0	Tone 4	Tone 5
15	800 Hz, Continuous	0	1	1	1	0	0	Tone 18	Tone 5
16	660 Hz, 150 ms ON, 150 ms OFF, Intermittent	1	1	1	1	0	0	Tone 2	Tone 27
17	544 Hz (100 ms)/440 Hz (400 ms), - NF S 32-001	0	0	0	0	1	0	Tone 2	Tone 5
18	660 Hz, 1.8 s ON, 1.8 s OFF, Intermittent	1	0	0	0	1	0	Tone 2	Tone 5
19	1.4 kHz…1.6 kHz 1s, 1.6 kHz…1.4 kHz 0.5 s, - NFC48-265	0	1	0	0	1	0	Tone 2	Tone 5
20	660 Hz, Continuous	1	1	0	0	1	0	Tone 2	Tone 5
21	554 Hz/440 Hz @ 1 Hz, Alternating	0	0	1	0	1	0	Tone 2	Tone 5
22	544 Hz @ 0.875 s, Intermittent	1	0	1	0	1	0	Tone 2	Tone 5
23	800 Hz @ 2 Hz, Intermittent	0	1	1	0	1	0	Tone 6	Tone 5
24	800/1000 Hz @ 50 Hz, Sweeping	1	1	1	0	1	0	Tone 29	Tone 5
25	2400/2900 Hz @ 50 Hz, Sweeping	0	0	0	1	1	0	Tone 29	Tone 5
26	Bell	1	0	0	1	1	0	Tone 2	Tone 15
27	554 Hz, Continuous	0	1	0	1	1	0	Tone 26	Tone 5
28	440 Hz, Continuous	1	1	0	1	1	0	Tone 2	Tone 5
29	800/1000 Hz @ 7 Hz, Sweeping	0	0	1	1	1	0	Tone 7	Tone 5
30	300 Hz, Continuous	1	0	1	1	1	0	Tone 2	Tone 5
31	660/1200 Hz @ 1 Hz, Sweeping	0	1	1	1	1	0	Tone 26	Tone 5
32	Two-tone chime	1	1	1	1	1	0	Tone 26	Tone 15
33	745 Hz @ 1 Hz, Intermittent	0	0	0	0	0	1	Tone 2	Tone 5
34	1000 & 2000 Hz @ 0.5 s, Aletrnating - Signapore	1	0	0	0	0	1	Tone 38	Tone 45
35	420 Hz @ 0.625 s, Australian Alert	0	1	0	0	0	1	Tone 36	Tone 5
36	500-1200 Hz 3.75 s/0.25 s, Australian Evac.	1	1	0	0	0	1	Tone 35	Tone 5
37	1000 Hz, Continuous, - *PFEER Toxic Gas*	0	0	1	0	0	1	Tone 9	Tone 45
38	2000 Hz, Continuous	1	0	1	0	0	1	Tone 34	Tone 45
39	800 Hz 0.25 s ON, 1 sec OFF, Intermittent	0	1	1	0	0	1	Tone 23	Tone 17
40	544 Hz (100 ms)/440 Hz (400 ms), - NF S 32-001	1	1	1	0	0	1	Tone 31	Tone 27
41	Motor Siren - slow rise to 1200 Hz	0	0	0	1	0	1	Tone 2	Tone 5
42	Motor Siren - slow rise to 800 Hz	1	0	0	1	0	1	Tone 2	Tone 5
43	1200 Hz, Continuous	0	1	0	1	0	1	Tone 2	Tone 5
44	Motor Siren - slow rise to 2400 Hz	1	1	0	1	0	1	Tone 2	Tone 5
45	1 KHz 1 s ON, 1 s OFF, Intermittent, - *PFEER Gen. Alarm*	0	0	1	1	0	1	Tone 38	Tone 34

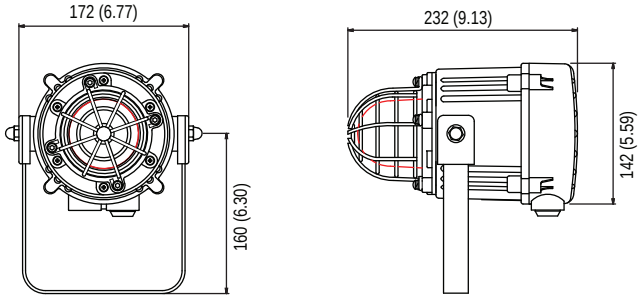
Approximate Dimensions

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

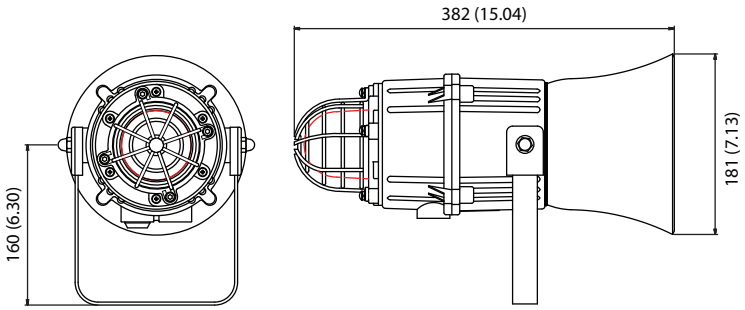
Horns



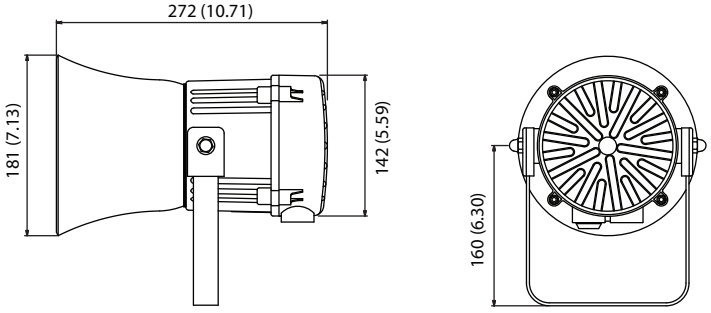
Beacons



Horn & Beacon Combinations



Public Address Loudspeakers



Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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