




















Signal Tower Lights

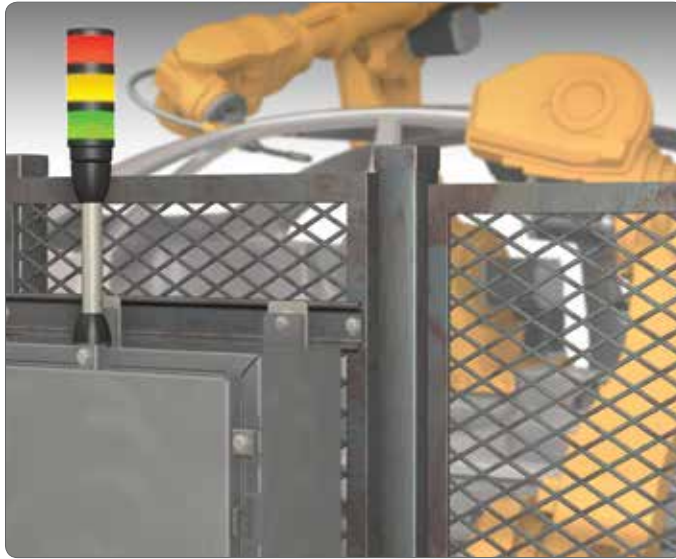
Multi-segment LED tower lights give machines a voice, conveying critical information in a clear, visual manner. AC and DC voltage, fourteen color options, six audible alarm styles, multiple intensity levels, three connection types and optional wireless or IO-Link communication give almost limitless possibilities in both preassembled and field configured units.

Selection Guide



Tower Lights

Page	48	52	54	56	58
Family Name	TL70	TL50	TL50C	TL50BL	CL50
DC or AC Power	AC or DC	AC or DC	AC or DC	AC or DC	AC or DC
Audible Options					
Daylight Visible					
Segment Diameter (mm)	70	50	50	50	50
Mounting Hole Diameter (mm)	30	30	30	30	30
Multiple Colors per Light Segment					
IP Rating	IP65	IP67	IP67	IP67	IP67
IO-Link		 IO-Link®	 IO-Link®	 IO-Link®	
Wireless					
Modular Construction					



TL50



TL70 Wireless



CL50

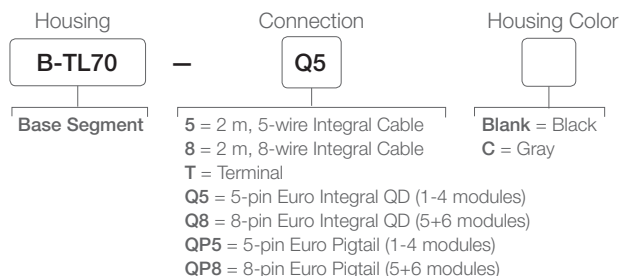


TL70 Tower Lights

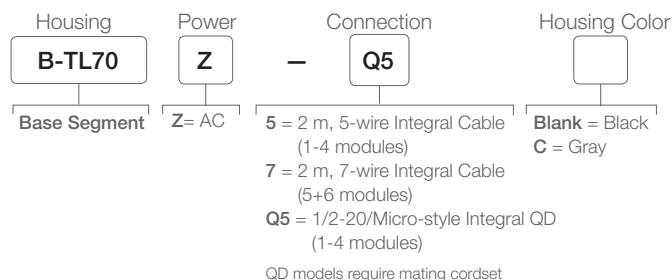
- 70 mm diameter with bright, colored LEDs for long range visibility
- Light segments appear gray when off to eliminate false indication from ambient light
- Modular design and simple wiring for fast field configuration; preassembled models also available
- Rugged, water-resistant IP65 housing with UV stabilized material
- Top-mounted audible modules from 75 to 101 dB, including multi-tone and programmable audible models allow for custom alerts or announcements; all work with the same standard bases
- Wireless base and segment models quickly enable remote monitoring and control of status lights; unleash IIOT capability
- Match your machine with a choice of black or gray housing

Build Your Own Tower Light

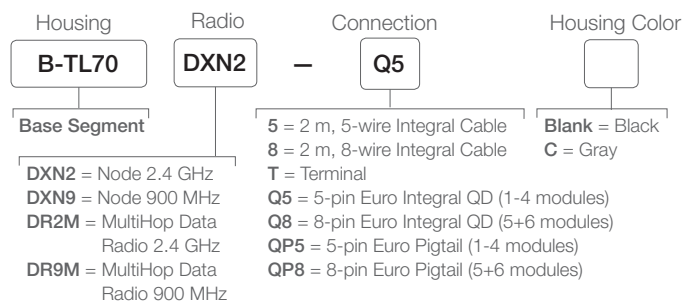
Standard Base



AC Base



Wireless Base

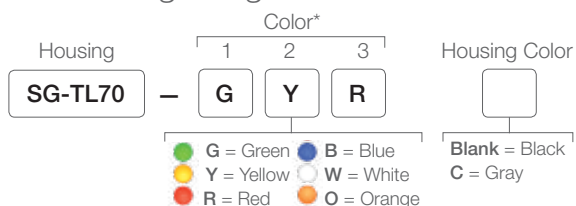


* To have color name etched on a segment, add -L to the end of the model number

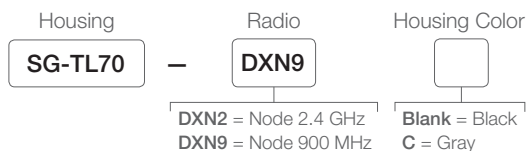
Single-Color Light Segments



Multicolor Light Segments



Wireless Communication Segment



** Green, Yellow, Red, Blue, White, Cyan, Magenta, Orange, Amber, Lime Green, Spring Green, Sky Blue, Violet and Rose



The wireless communication segment quickly twists onto any TL70 base, enabling remote monitoring and control without requiring constant power or expensive wiring.

Order a Preassemble Tower Light

Preassembled TL70

Housing	Color**/Position						Audible*	Housing Color	Connection
TL70	1 G	2 Y	3 R	4 B	5 W	6 O			Q

G = Green **B** = Blue
Y = Yellow **W** = White
R = Red **O** = Orange

Blank = None
A = Audible (92 dB)
AL = Louder Audible (85 - 101 dB)
ALM = Multi-tone Audible** (75 - 101 dB)
AP = Programmable Audible

* For audible only, leave colors blank
 ** Not available with 6 light models

Blank = Black
C = Gray

Blank = 2 m Integral Cable
T = Terminal Wired
Q = Euro Integral QD
QP = Euro Pigtail QD
 QD models require mating cordset

Preassembled TL70 AC

Housing	Color**/Position						Audible*	Housing Color	Connection
TL70Z	1 G	2 Y	3 R	4 B	5 W	6 O			Q

G = Green **B** = Blue
Y = Yellow **W** = White
R = Red **O** = Orange

Blank = None
A = Audible (92 dB)
AL = Louder Audible (85 - 101 dB)
ALM = Multi-tone Audible** (75 - 101 dB)
AP = Programmable Audible

* For audible only, leave colors blank
 ** Not available with 6 light models

Blank = Black
C = Gray

Blank = 2 m Integral Cable
Q = 1/2-20/Micro-style Integral QD
 QD models require mating cordset

Preassembled TL70 Wireless

Housing	Radio	Color**/Position						Audible*	Housing Color	Connection
TL70	DXN2	1 G	2 Y	3 R	4 B	5 W	6 O			Q

DXN2 = Node 2.4 GHz
DXN9 = Node 900 MHz
DR2M = MultiHop Data Radio 2.4 GHz
DR9M = MultiHop Data Radio 900 MHz

G = Green **W** = White
Y = Yellow **O** = Orange
R = Red **B** = Blue
Blank = None

Blank = None
A = Audible (92 dB)
AL = Louder Audible (85 - 101 dB)
ALM = Multi-tone Audible** (75 - 101 dB)
AP = Programmable Audible

* For audible only, leave colors blank
 ** Not available with 6 light models

Blank = Black
C = Gray

Blank = 2 m Integral Cable
Q = Euro Integral QD
QP = Euro Pigtail QD
 QD models require mating cordset



Laser
Marking
Available

Color Count	AC Tower Height (H)	AC Tower Height with Audible (H)	DC Tower Height (H)	DC Tower Height with Audible (H)
1	155.6 mm	212.3 mm	87.6 mm	144.3 mm
2	205.3 mm	262.0 mm	137.3 mm	194.0 mm
3	255.0 mm	311.7 mm	187.0 mm	243.7 mm
4	304.7 mm	361.4 mm	236.7 mm	293.4 mm
5	354.4 mm	411.1 mm	286.4 mm	343.1 mm
6	404.1 mm	NA	336.1 mm	NA

Supply Voltage

12 to 30 V dc
100 to 240 V ac

Construction

Bases and Covers: Polycarbonate
Light Segment: Polycarbonate

Environmental Rating

IP65

Operating Temperature

−40 to +50 °C (−40 to +122 °F)

Certifications



Accessories are listed on pages 61



TL50 Tower Lights

- Available in models featuring IO-Link communication for easy integration into most industrial networks and remote control and monitoring of light and audible segments in the fixture
- Built-to-order configure your model today using our online tool
- Installs directly on machine quickly and easily with pre-wired or quick-disconnect options no assembly required
- Features a completely self-contained design no controller needed
- Displays up to 7 colors in a single tower choice of 10 colors in standard brightness and 5 colors in high brightness tower lights
- Allows multiple lights to be on simultaneously
- Eliminates false indication from ambient light; indicators appear gray when off
- Available in Universal AC Voltage models



Standard and High-Brightness

Housing TL50
Brightness H
Supply Voltage [Blank]
Color Position
1: G (Green), 2: Y (Yellow), 3: R (Red), 4: [Blank], 5: [Blank], 6*: [Blank], 7*: [Blank]
W = White, B = Blue, Blank = Audible Only
Audible Alarm [Blank]
Housing Color [Blank]
Connection Q
Blank = Standard, H = High Brightness
Blank (1 to 5 colors) = 18 to 30 V dc or 21 to 27 V ac
Blank (6 or 7 colors) = 12 to 30 V dc or 21 to 26 V ac
Z = 100 to 240 V ac
Blank = None (IP67), A = Audible (IP50)
ALS = Sealed Audible Continuous Tone, ALS3 = Sealed Audible Pulsed Tone, ALS4 = Sealed Audible Staccato Tone
AOS = Omni-Directional Sealed Audible Continuous Tone, AOSI = Omni-Directional Sealed Audible Continuous Tone with Intensity Adjust
AOS3 = Omni-Directional Sealed Audible Pulsed Tone, AOS3I = Omni-Directional Sealed Audible Pulsed Tone with Intensity Adjust
AOS4 = Omni-Directional Sealed Audible Staccato Tone, AOS4I = Omni-Directional Sealed Audible Staccato Tone with Intensity Adjust
Blank = 2 m Integral Cable, Q = Euro Integral QD (dc only), QP = Euro Pigtail QD (Available with Micro Pigtail QD for ac models if 4 segments or less)
QD models require mating cordset
* Positions 6 and 7 not available in high brightness or AC models
Position 7 not available with audible

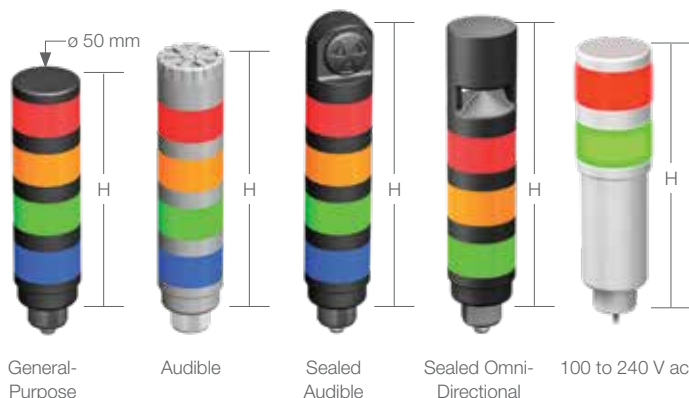
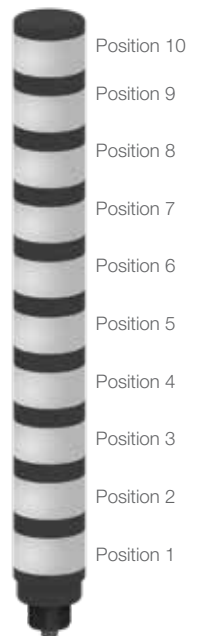
Standard with IO-Link

Housing TL50
Number of Segments 3
Audible Alarm A
Control K
Housing Color [Blank]
Connection Q
1 = 1 Segment, 2 = 2 Segments, 3 = 3 Segments, 4 = 4 Segments, 5 = 5 Segments
6 = 6 Segments, 7 = 7 Segments, 8 = 8 Segments, 9 = 9 Segments, 10 = 10 Segments
Blank = None (IP67), A = Audible (IP50), ALS = Sealed Audible Continuous Tone
AOS = Omni-Directional Sealed Audible Continuous Tone, AOSI = Omni-Directional Sealed Audible Continuous Tone with Intensity Adjust
K = IO-Link
Blank = Black, C = Gray
Q = Euro Integral QD, QP = Euro Pigtail QD
QD models require mating cordset

Supply Voltage	18 to 30 V dc or 21-27 V ac; 100 to 240 V ac >5 segments: 12-30 V dc or 21-26 V ac
Construction	Bases and Covers: ABS Light Segment: Polycarbonate
Environmental Rating	General-Purpose and Sealed Audible: IEC IP67 Standard Audible: IEC IP50
Operating Temperature	General-Purpose: -40 to +50 °C (-40 to +122 °F) Standard and Sealed Audible: -20 to +50 °C (-4 to +122 °F)
Certifications	CE, UL LISTED



Laser Marking Available



	Tower Height (H)				
	General-Purpose IP67	Audible IP50	Sealed Audible IP67	Sealed Omni-Directional	100 to 240 V AC
0	—	92.0 mm	74.4 mm	88.4 mm	
1	61.2 mm	92.0 mm	115.1 mm	129.1 mm	Add 69 mm to any of these heights to get total height
2	101.9 mm	132.7 mm	155.8 mm	169.8 mm	
3	142.6 mm	173.4 mm	196.5 mm	210.5 mm	
4	183.3 mm	214.1 mm	237.2 mm	251.2 mm	
5	224.0 mm	254.8 mm	277.9 mm	291.1 mm	
6	264.7 mm	298.5 mm	318.6 mm	332.6 mm	
7	305.4 mm	339.2 mm	359.3 mm	373.3 mm	
8	346.1 mm	379.9 mm	400.0 mm	414.0 mm	Area in gray are IO-Link models only. Not available in AC.
9	386.8 mm	420.6 mm	440.7 mm	454.7 mm	
10	427.5 mm	461.3 mm	481.4 mm	495.4 mm	

Accessories are listed on pages 61

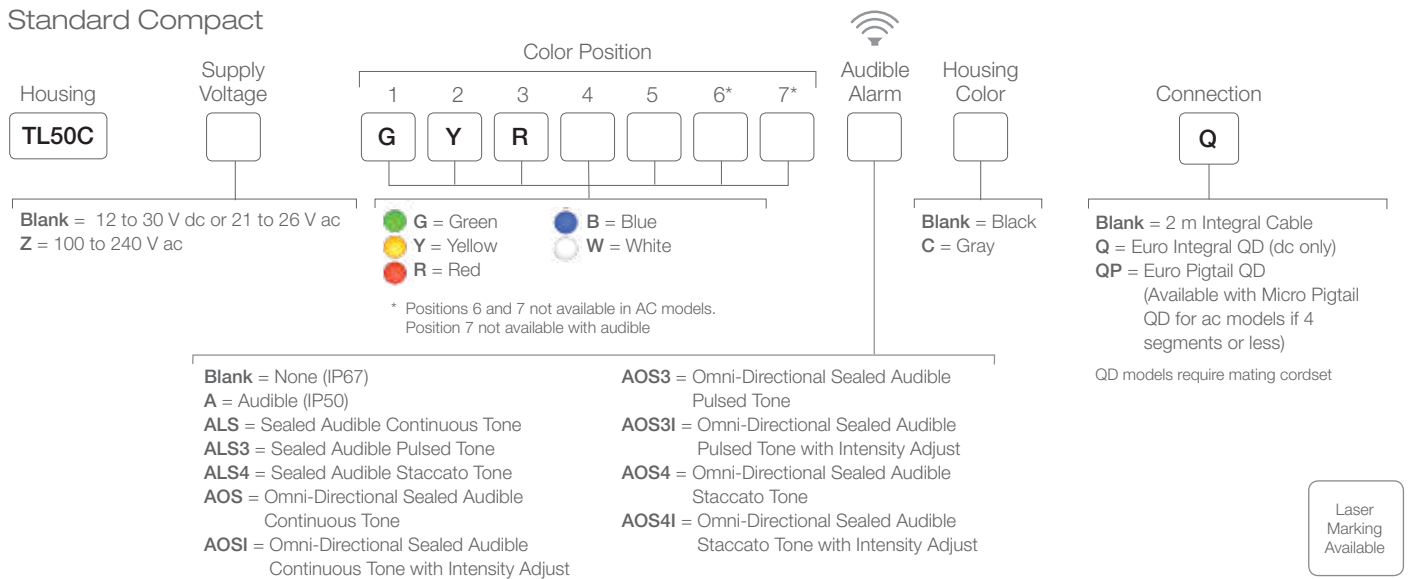


TL50C Compact Tower Lights

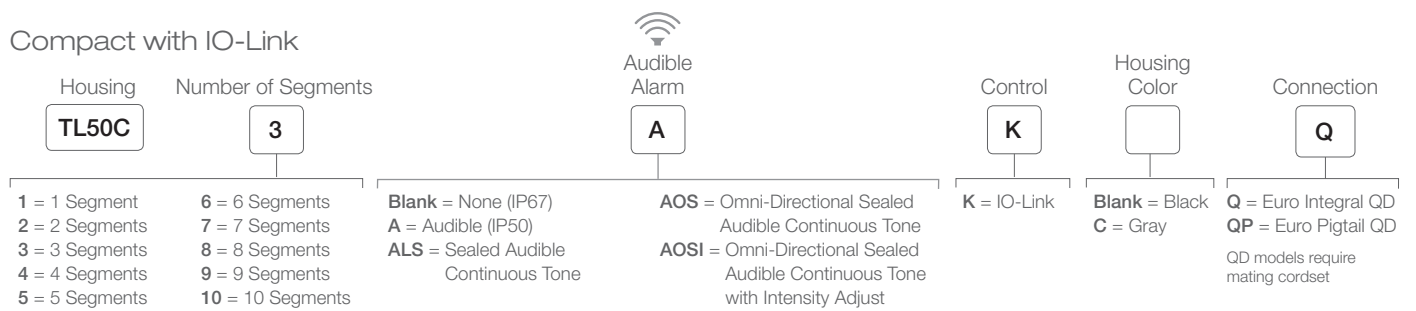
- Ideal for status indication on small to mid-size pieces of equipment
- Displays up to five stacked colors in one tower with universal ac voltage and up to seven stacked colors in one tower with standard dc voltage
- Half the height of standard TL50 models
- Bright, uniform lighted segments with 10 color choices available
- Available with standard, sealed or Omni-Directional audible
- Compact, sleek, rugged design with IP67 models available
- DC models work down to 12 volts, allowing for use in battery-powered mobile equipment



Standard Compact



Compact with IO-Link



Supply Voltage

12 to 30 V dc or 21-27 V ac; 100 to 240 V ac

Construction

Bases and Covers: ABS
Light Segment: Polycarbonate

Environmental Rating

General-Purpose and Sealed Audible:
IEC IP67
Standard Audible:
IEC IP50

Operating Temperature

General-Purpose:
-40 to +50 °C (-40 to +122 °F)
Standard and Sealed Audible:
-20 to +50 °C (-4 to +122 °F)

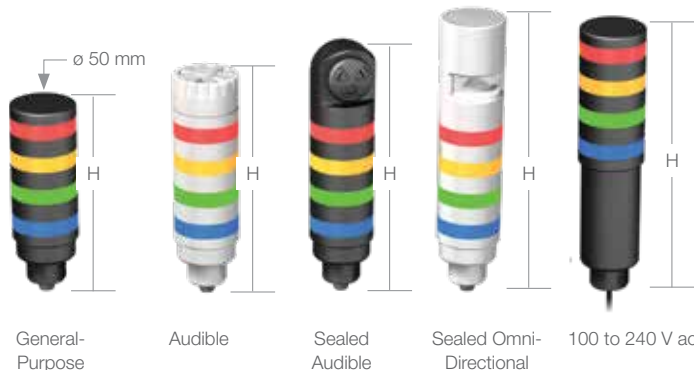
Certifications



Audible
max. intensity 92 db @ 1 meter (typical)

Sealed Audible
max. intensity 94 db @ 1 meter (typical)

Sealed Omni-Directional Audible
Standard: max. intensity 99 db @ 1 meter (typical)
Intensity Adjust: max. intensity 95 db @ 1 meter (typical)



	General-Purpose IP67	Tower Height (H)			100 to 240 V AC
		Audible IP50	Sealed Audible IP67	Sealed Omni-Directional	
1	46.2 mm	77.1 mm	100.2 mm	114.2 mm	Add 69 mm to any of these heights to get total height
2	72.0 mm	102.9 mm	126.0 mm	140.0 mm	
3	97.8 mm	128.7 mm	151.8 mm	165.8 mm	
4	123.6 mm	154.5 mm	177.6 mm	191.6 mm	
5	149.4 mm	180.3 mm	203.4 mm	217.4 mm	
6	175.2 mm	206.1 mm	229.2 mm	243.4 mm	Area in gray are IO-Link models only. Not available in AC.
7	201.0 mm	231.9 mm	255.0 mm	269.2 mm	
8	226.8 mm	257.7 mm	280.8 mm	295.0 mm	
9	252.6 mm	283.5 mm	306.6 mm	320.8 mm	
10	278.4 mm	309.3 mm	332.4 mm	346.6 mm	

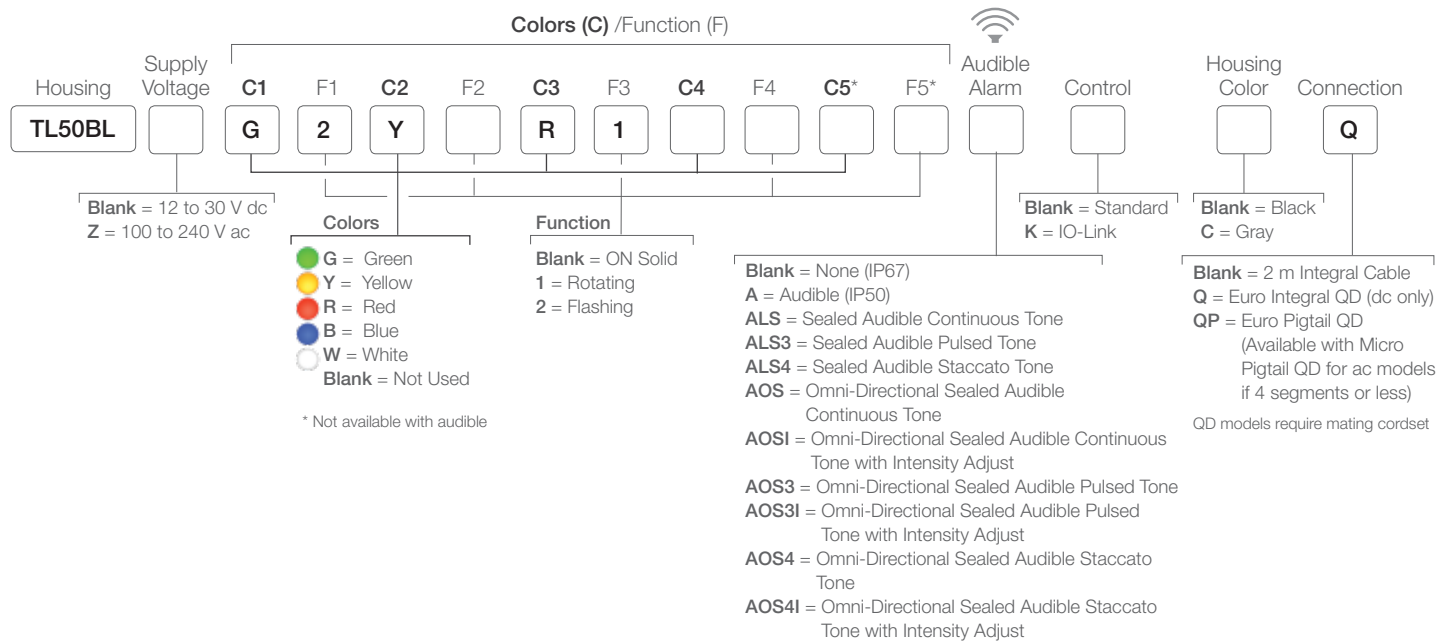
Accessories are listed on pages 61



TL50BL Beacon Tower Lights

- Housing is UV stabilized, making it suitable for use in outdoor environments
- Highly visible indication for indoor or outdoor applications
- Compact, stylish design with rotating and flashing options
- Audible alert: continuous, pulsed and staccato models available
- Omni-Directional audible models provide clear annunciation in the noisiest environments
- Models available with rugged, water-resistant IP67 housing





Supply Voltage	12 to 30 V dc or 21-27 V ac 100 to 240 V ac		Audible max. intensity 92 db @ 1 meter (typical)	
Construction	Bases and Covers: ABS Light Segment: Polycarbonate		Sealed Audible max. intensity 94 db @ 1 meter (typical)	
Environmental Rating	General-Purpose and Sealed Audible: IEC IP67 Standard Audible: IEC IP50		Sealed Omni-Directional Audible Standard: max. intensity 99 db @ 1 meter (typical) Intensity Adjust: max. intensity 95 db @ 1 meter (typical)	
Operating Temperature	General-Purpose: -40° to +50° C (-40° to +122° F) Standard and Sealed Audible: -20° to +50° C (-4° to +122° F)			
Certifications	 			



Color Count	Tower Height (H)				100 to 240 V AC
	General-Purpose IP67	Audible [†] IP50	Sealed Audible IP67	Sealed Omni-Directional	
1	46.2 mm	77.1 mm	100.2 mm	114.2 mm	Add 69 mm to any of these heights to get total height
2	72.0 mm	102.9 mm	126.0 mm	140.0 mm	
3	97.8 mm	128.7 mm	151.8 mm	165.8 mm	
4	123.6 mm	154.5 mm	177.6 mm	191.6 mm	
5	149.4 mm	—	—	—	

[†] Tower Height (H) with top unscrewed approximately 3.5 mm to allow sound to escape

Accessories are listed on pages 61



CL50 Column Lights

- Rugged, cost-effective, and easy-to-install multicolor indicators
- Illumination provides easy-to-see operator guidance and equipment status indication at long distances
- One-, two-, or three-color models available
- The LED light sources provide long life with low power consumption
- 100 to 240 V ac operation or 18 to 30 V dc operation
- Compact devices are completely self-contained—no controller needed—and IEC IP67 rated
- Immune to EMI and RFI interference
- No assembly required



Supply Voltage 12 to 30 V dc or 21 to 27 V ac
100 to 240 V ac

Construction Bases and Covers: ABS
Light Segment: Polycarbonate

Environmental Rating General-Purpose and Sealed Audible: IEC IP67
Standard Audible: IEC IP50

Operating Temperature General-Purpose:
–40° to +50° C (–40° to +122° F)
Standard and Sealed Audible:
–20° to +50° C (–4° to +122° F)

Certifications  



Audible
max. intensity 92 db @ 1 meter
(typical)



Sealed Audible
max. intensity 94 db @ 1 meter
(typical)



Sealed Omni-Directional Audible
Standard: max. intensity 99 db @
1 meter (typical)
Intensity Adjust: max. intensity 95 db
@ 1 meter (typical)

Laser
Marking
Available



General-Purpose



Audible



Sealed Audible



Sealed Omni-Directional
Audible



100 to 240 V ac

Accessories are listed on pages 61

Cordsets for DC Models

4-Pin M12/Euro-Style

use with 3-color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

5-Pin M12/Euro-Style

use with 4-color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

8-Pin M12/Euro-Style

use with 5+ -color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)



MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

MQDC2S-806
2 m (6.5')
MQDC2S-815
5 m (15')
MQDC2S-830
9 m (30')

Mounting Brackets



SMB30MM



SMB30A



SMBAMS30P



SMB30RAVK

Cordsets for AC Models

4-Pin Micro-Style

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQAC2-406RA)

5-Pin Micro-Style

Straight connector models



MQAC2-406
2 m (6.5')
MQAC2-415
5 m (15')
MQAC2-430
9 m (30')

MQAC2-506
2 m (6.5')
MQAC2-515
5 m (15')
MQAC2-530
9 m (30')

Sealed Right-Angle Brackets



LMBE12RA



LMBE12RAC



LMB30RA



LMB30RAC



Controller

LC80T
5 Toggle switches
ON-OFF-FLASH function

LC80R
12-Position rotary
switches ON-OFF-FLASH
function

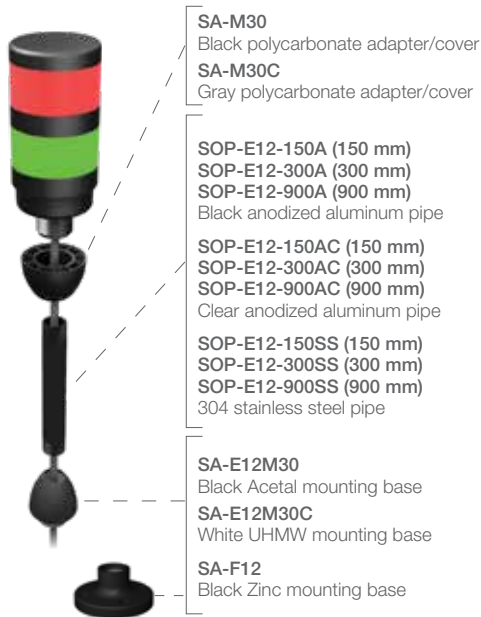


Laser Marking

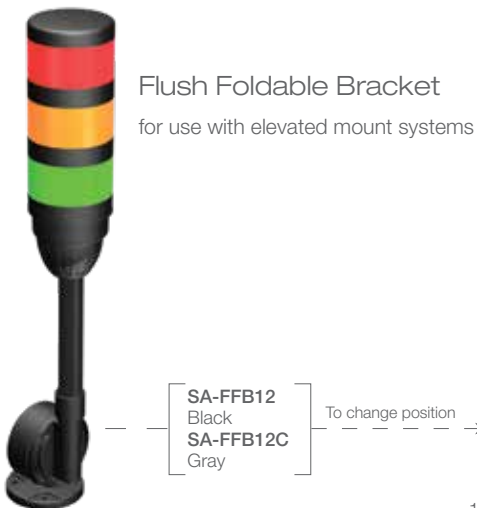
Light sections can be permanently marked with custom text or images

Accessories

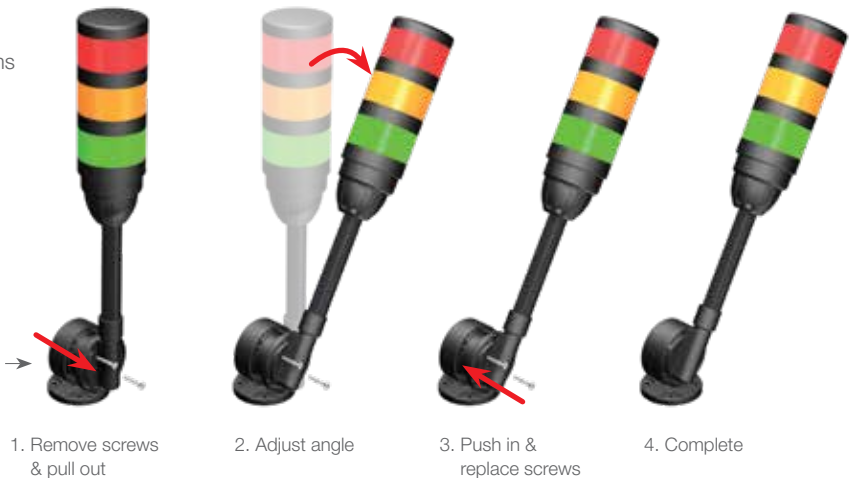
Elevated Mount System (for TL70)



Elevated Mount System (for other models)



Flush Foldable Bracket
for use with elevated mount systems



Additional accessories are available at bannerengineering.com



Banner Engineering Corp.

9714 Tenth Avenue North • Minneapolis, Minnesota 55441

763-544-3164 • 1-888-373-6767

www.bannerengineering.com