

Separate Color Filter Lens Inside the Outer Lens Helps to Provide a Clear Signal

### PRODUCT SPECIFICATION

QTC Series

**Materials** Lens-PC, Filter lens-PC, Housing-ABS, Pole-Al

**Ambient operating temperature** -30°C to +50°C

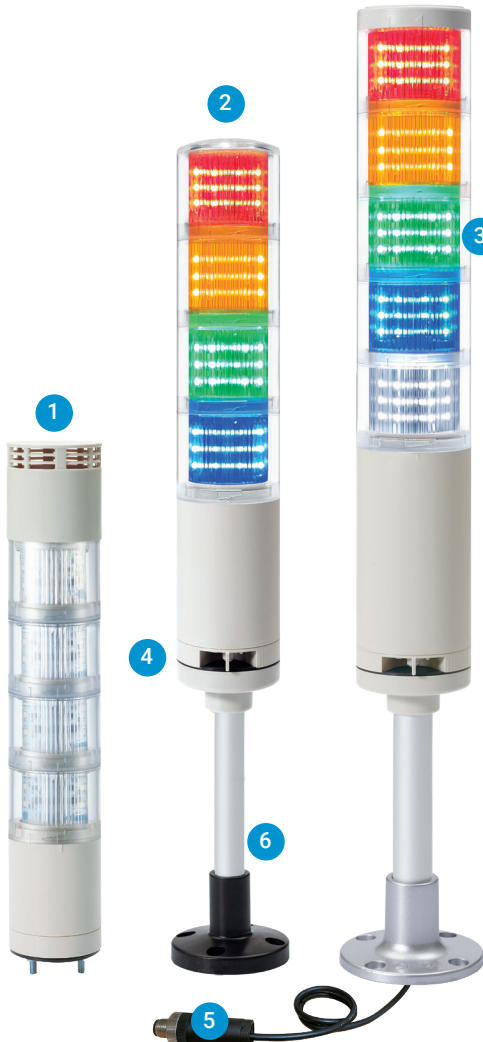
**Volume** Max.85dB at 1m

**Protection rating** Standard type-IP65, Built-in buzzer type-IP54

**Flashing rate** 60-80/min

**Compliant with RoHS directive**

- Modular LED steady/flashing signal tower lights
- Added a separate color filter lens inside the outer lens to help provide a clear signal
- Can select from size selections of Ø50mm, Ø60mm and Ø70mm to fit your sophisticated application needs
- The addition of modules and change in color arrangement can be achieved without the use of tools by using the Lock-type structure
- QTCA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- When it is turned off the milky color filter provides comfortable viewing at close proximity for the operator
- A variety of Mounting bracket selections for the pole mount type to fit your location and mounting needs
- Standard model and built-in buzzer model can be used by selecting the specifications suitable for the operating environment.
- Available in customized 2 sound buzzer type and high volume(100dB) buzzer type
- Wired type and M12 connector type allow for a customized model that M12 connector can be attached at the end of wires.
- Transistors can be connected and can be operated on PLC directly



### Each modular color lens can be added without additional tools



QTC model uses a special contact structure for stable operation, the lens modules lock into place by rotating the modular structures together. This allows for easy changes to the color arrangement without any tools. Additional modules can be added.

#### 1 High volume buzzer(100dB) option can be fitted to the top of the product. (Customization)

High volume 100dB volume buzzer module fastened to the top of the product provides 360 degree buzzer signal output which cannot be achieved with the single directional buzzer.(Buzzer volume cannot be adjusted)

#### 2 Integrated cover and lens model(QTCA50 / QTCA60 / QTCA70)

The sleek body cover and lens model is made of one piece for a simple unified look.

#### 3 QTC Series Special Lens

QTC Series added a separate color filter lens inside the outer lens to help provide a clear signal.

#### 4 Buzzer volume is adjusted via the volume control lever

QTC type volume can be adjusted for each specific working condition with the equipped buzzer volume control lever at the bottom of the product.(-BZ type)

#### 5 M12 connector attached type

M12 connector is standard(Female M12 connector is not provided).

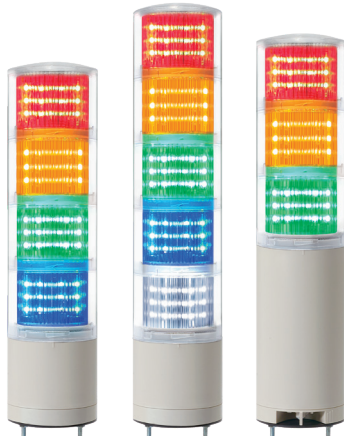
#### 6 Can select from a variety of Mounting brackets option to fit your application needs and build environment

There are a variety of Mounting bracket options available depending on cost and installation requirements.

# QTC70ML / QTC70L



QTC70ML Series



QTCA70ML Series



High-volume buzzer module



## QTC70ML Ø70mm Direct mount, LED Steady/Flashing

Model number	Layers	Voltage	Certificates	Weight	Color
QTC70ML Steady	1	DC12V		0.44kg	● R-Red
QTC70ML-BZ Steady w/built-in buzzer		DC24V		0.44kg	
		AC110V-220V		0.54kg	
QTC70MLF Steady/Flashing	2	DC12V		0.58kg	● R-Red ● G-Green
QTC70MLF-BZ Steady/Flashing w/ built-in buzzer		DC24V		0.58kg	
		AC110V-220V		0.68kg	
QTC70MLF-BZ Steady/Flashing w/ built-in buzzer	3	DC12V	CE UL	0.79kg	● R-Red ● A-Amber ● G-Green
QTC70MLF-BZ Steady/Flashing w/ built-in buzzer		DC24V		0.79kg	
		AC110V-220V		0.89kg	
QTCA70ML Steady	4	DC12V		0.94kg	● R-Red ● A-Amber ● G-Green ● B-Blue
QTCA70ML-BZ Steady w/built-in buzzer		DC24V		0.94kg	
		AC110V-220V		1.04kg	
QTCA70MLF Steady/Flashing	5	DC12V		1.09kg	● R-Red ● A-Amber ● G-Green ● B-Blue ○ W-White
QTCA70MLF-BZ Steady/Flashing w/ built-in buzzer		DC24V		1.09kg	
		AC110V-220V		1.19kg	

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V

### Light source/buzzer current(based on 1 layer)

Voltage	DC12V	DC24V	AC110V~220V
Light source current(1 layer)	0.105A	0.070A	Max.0.060A
Buzzer current	0.040A	0.075A	Max.0.055A

### Wiring Instructions

- External power line UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Customization

- DC24V voltage UL listed product
- M12 connector attached type
- 2 buzzer sound types : Both prolonged (beep, beep) and staccato (beep, beep, beep) buzzer output available
- Wall mount bracket options : Bracket structure allows for threading through the bracket hole or into the wall
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)



Wall mount bracket  
TWS80



Wall mount bracket  
TWA80

### Ordering Specifications

QTC70ML	-	3	-	110/220	-	RAG
[Model number]		[Layers]		[Voltage]		[Color]
QTC70ML		1-1 Layers		12-DC12V		● R-Red
QTC70ML-BZ		2-2 Layers		24-DC24V		● A-Amber
QTC70MLF		3-3 Layers		110/220-AC110V-220V		● G-Green
QTC70MLF-BZ		4-4 Layers				● B-Blue
QTCA70ML		5-5 Layers				○ W-White
QTCA70ML-BZ						
QTCA70MLF						
QTCA70MLF-BZ						

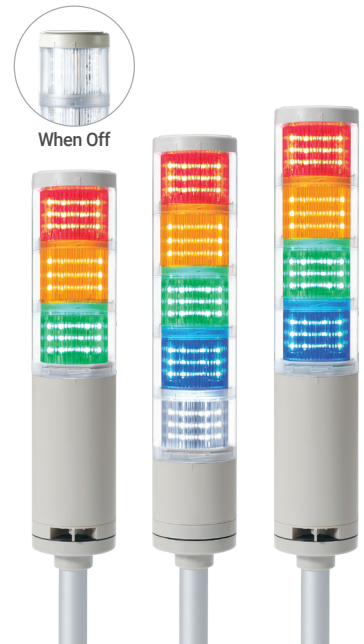


## QTC70L Ø70mm Pole mount, LED Steady/Flashing

Model number	Layers	Voltage	Certificates	Weight	Color
QTC70L Steady	1	DC12V	CE UL	0.56kg	R-Red
QTC70L Steady		DC24V		0.56kg	
QTC70L-BZ Steady w/built-in buzzer		AC110V-220V		0.66kg	
QTC70LF Steady/Flashing	2	DC12V		0.68kg	R-Red
QTC70LF Steady/Flashing		DC24V		0.68kg	G-Green
QTC70LF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V		0.78kg	
QTC70L Steady	3	DC12V		0.83kg	R-Red
QTC70L Steady		DC24V		0.83kg	A-Amber
QTC70L Steady		AC110V-220V		0.92kg	G-Green
QTC70L Steady	4	DC12V		0.98kg	R-Red
QTC70L Steady		DC24V		0.98kg	A-Amber
QTC70L Steady		AC110V-220V		1.08kg	G-Green
QTC70LF Steady/Flashing	5	DC12V		1.22kg	R-Red
QTC70LF Steady/Flashing		DC24V		1.22kg	G-Green
QTC70LF-BZ Steady/Flashing w/ built-in buzzer		AC110V-220V		1.31kg	B-Blue

※ AC type model has a free-voltage range of 100V-240V.

※ UL Listed: DC24V



QTC70L Series

### Light source/buzzer current(based on 1 layer)

Voltage	DC12V	DC24V	AC110V~220V
Light source current(1 layer)	0.105A	0.070A	Max.0.060A
Buzzer current	0.040A	0.075A	Max.0.055A

### Wiring Instructions

- External power line UL1015 AWG18(0.75sq) x 2C 400mm
- External signal line UL1007 AWG22(0.3sq) 400mm
- LED tower light can be wired by using transistor and External Contact

### Mounting bracket

Standard	LB24	LW24	QZ24	SZ24	QL24	SL24
Steel	Steel	ABS	ABS	Al	ABS	Al

※ Please refer to [Tower Light Mounting bracket] on this catalogue for detailed dimensions



QTC70L Series

### Ordering Specifications

QTC70L	-	3	-	110/220	-	RAG	-	LW24
[Model number]		[Layers]		[Voltage]		[Color]		[Bracket]
QTC70L		1-1 Layers		12-DC12V		R-Red		· None-Standard
QTC70L-BZ		2-2 Layers		24-DC24V		A-Amber		· Bracket
QTC70LF		3-3 Layers		110/220-AC110V-220V		G-Green		· LB24-LW24
QTC70LF-BZ		4-4 Layers				B-Blue		· QZ24-SZ24
QTC70L		5-5 Layers				W-White		· QL24-SL24
QTC70L-BZ								
QTC70LF								
QTC70LF-BZ								

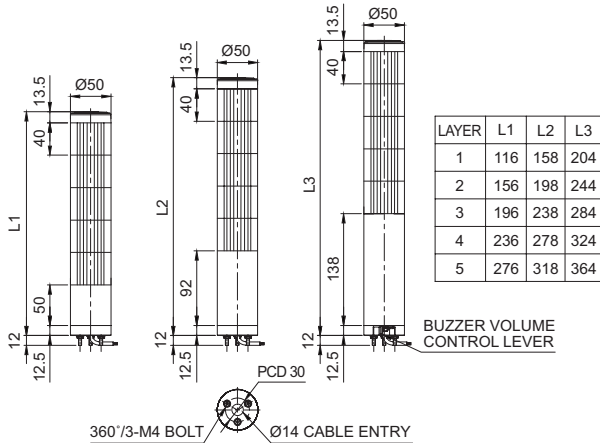
### Customization

- 2 buzzer sound types : Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 stages or less)

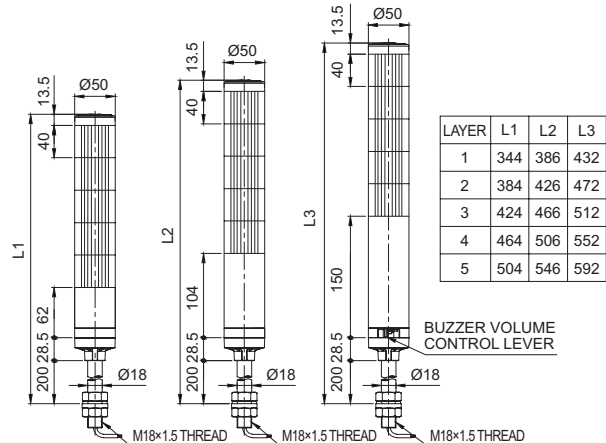
## Technical Diagram

Units : mm

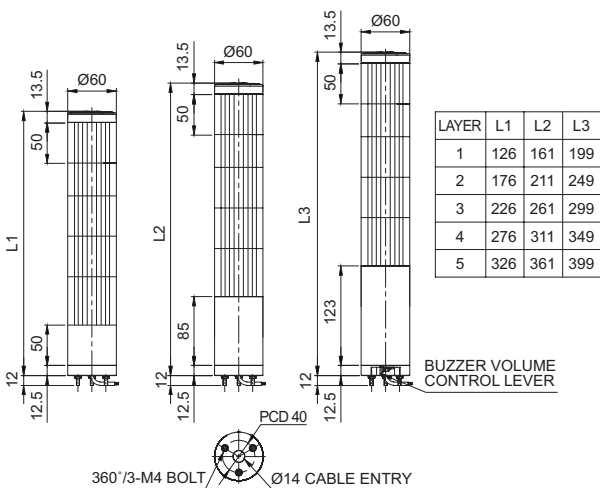
- QTC50ML-DC
- QTC50MLF-DC
- QTC50ML-BZ-DC
- QTC50ML-AC
- QTC50MLF-BZ-DC
- QTC50MLF-AC
- QTC50ML-BZ-AC
- QTC50MLF-BZ-AC



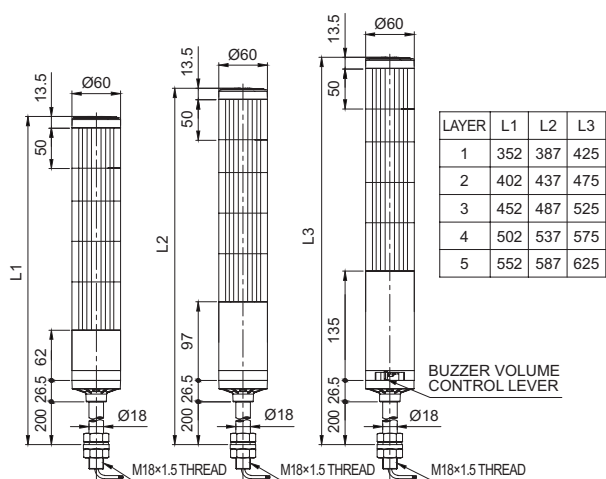
- QTC50L-DC
- QTC50LF-DC
- QTC50L-BZ-DC
- QTC50L-AC
- QTC50LF-BZ-DC
- QTC50LF-AC
- QTC50L-BZ-AC
- QTC50LF-BZ-AC



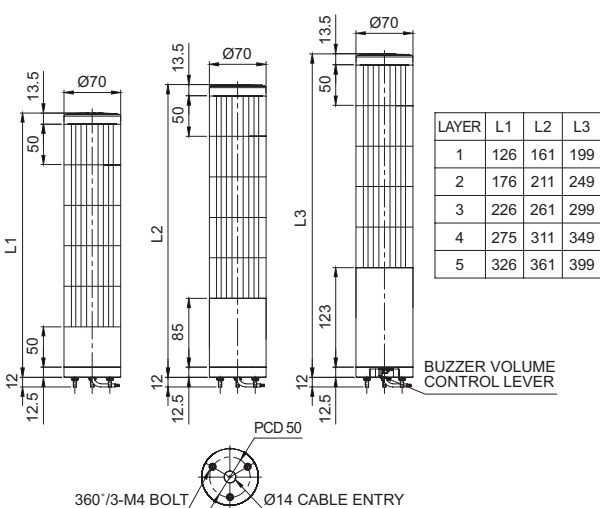
- QTC60ML-DC
- QTC60MLF-DC
- QTC60ML-BZ-DC
- QTC60ML-AC
- QTC60MLF-BZ-DC
- QTC60MLF-AC
- QTC60ML-BZ-AC
- QTC60MLF-BZ-AC



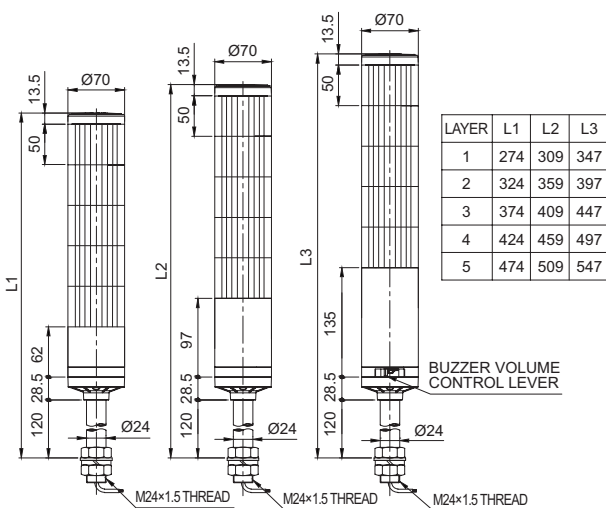
- QTC60L-DC
- QTC60LF-DC
- QTC60L-BZ-DC
- QTC60L-AC
- QTC60LF-BZ-DC
- QTC60LF-AC
- QTC60L-BZ-AC
- QTC60LF-BZ-AC



- QTC70ML-DC
- QTC70MLF-DC
- QTC70ML-BZ-DC
- QTC70ML-AC
- QTC70MLF-AC
- QTC70ML-BZ-AC
- QTC70MLF-BZ-AC
- QTC70MLF-BZ-DC



- QTC70L-DC
- QTC70LF-DC
- QTC70L-BZ-DC
- QTC70L-AC
- QTC70LF-AC
- QTC70L-BZ-AC
- QTC70LF-BZ-AC
- QTC70LF-BZ-DC

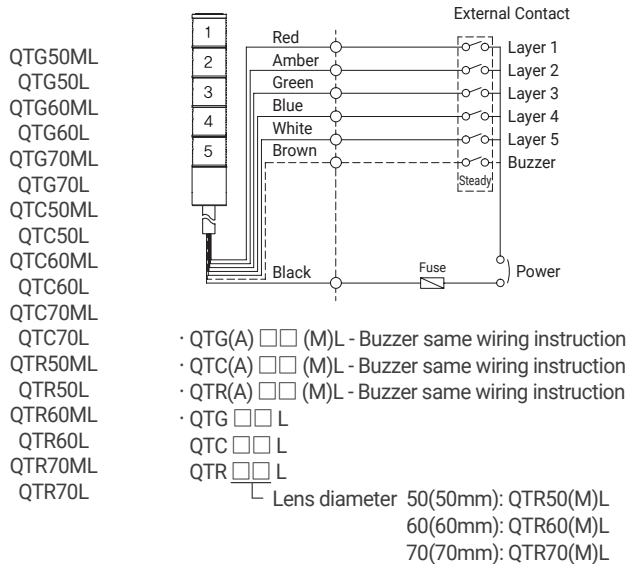


### Wiring Instructions(using External Contact)

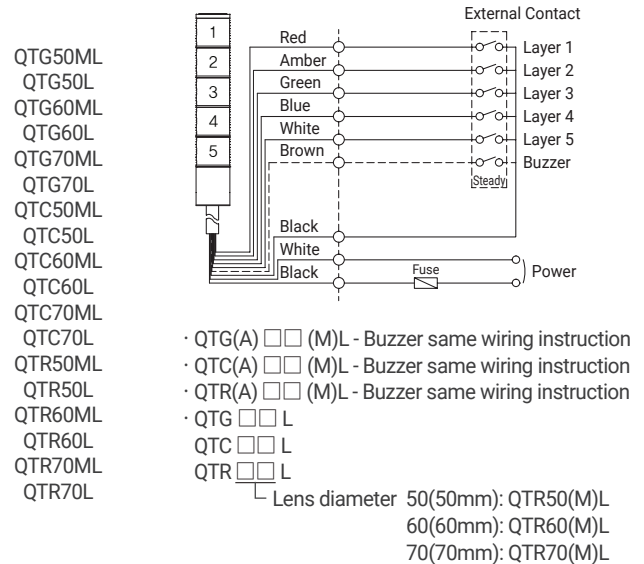
· In case of wiring with External Contacts, refer to the wiring diagrams below according to your product's type and voltage setting.

#### Wiring Instructions

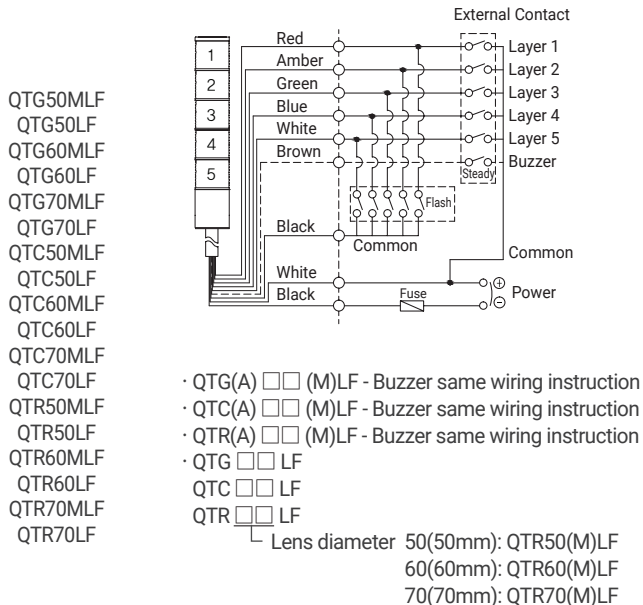
##### DC Steady



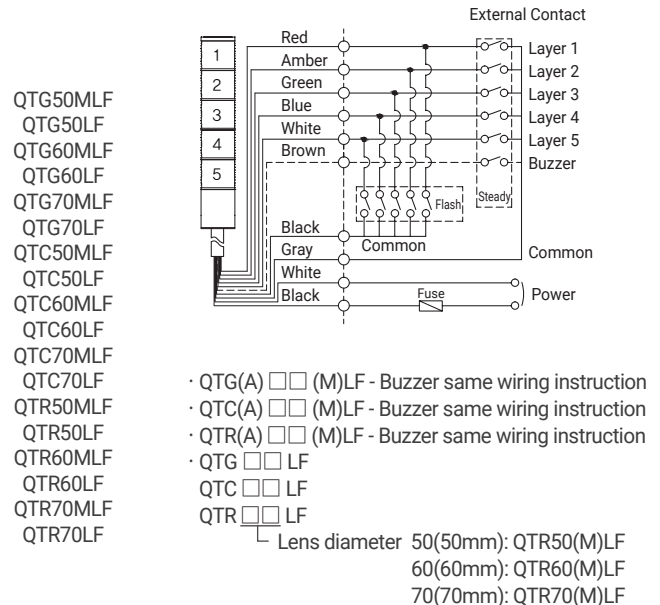
##### AC Steady



##### DC Steady/ Flashing



##### AC Steady/ Flashing



- DC steady type cable specification: External power line/External signal line UL1007 AWG22(0.3sq) 400mm
- AC steady, AC/DC steady/flashing type cable specification: External power line UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line UL1007 AWG22(0.3sq) 400mm

## Wiring Instructions(using transistor)

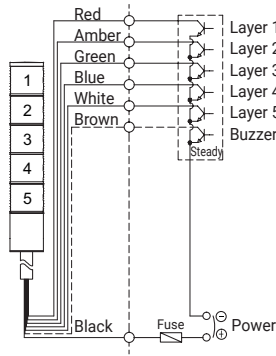
· In case of wiring with transistors, please select the proper transistor type : either NPN or PNP based on the source voltage setting.

### Wiring Instructions

#### DC Steady

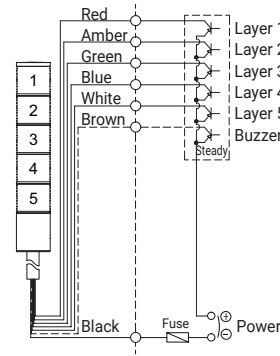
QTG50ML  
QTG50L  
QTG60ML  
QTG60L  
QTG70ML  
QTG70L  
QTC50ML  
QTC50L  
QTC60ML  
QTC60L  
QTC70ML  
QTC70L  
QTR50ML  
QTR50L  
QTR60ML  
QTR60L  
QTR70ML  
QTR70L

External Transistor



- QTG(A) □□ (M)L - Buzzer same wiring instruction
- QTC(A) □□ (M)L - Buzzer same wiring instruction
- QTR(A) □□ (M)L - Buzzer same wiring instruction
- QTG □□ L
- QTC □□ L
- QTR □□ L
- └ Lens diameter 50(50mm): QTR50(M)L  
60(60mm): QTR60(M)L  
70(70mm): QTR70(M)L

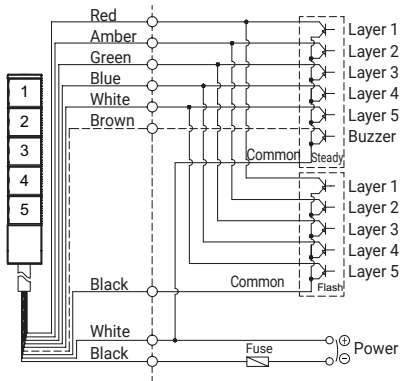
External Transistor



#### DC Steady/ Flashing

QTG50MLF  
QTG50LF  
QTG60MLF  
QTG60LF  
QTG70MLF  
QTG70LF  
QTC50MLF  
QTC50LF  
QTC60MLF  
QTC60LF  
QTC70MLF  
QTC70LF  
QTR50MLF  
QTR50LF  
QTR60MLF  
QTR60LF  
QTR70MLF  
QTR70LF

External Transistor

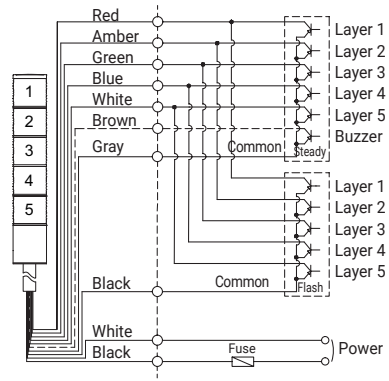


- QTG(A) □□ (M)LF - Buzzer same wiring instruction
- QTC(A) □□ (M)LF - Buzzer same wiring instruction
- QTR(A) □□ (M)LF - Buzzer same wiring instruction
- QTG □□ LF
- QTC □□ LF
- QTR □□ LF
- └ Lens diameter 50(50mm): QTR50(M)LF  
60(60mm): QTR60(M)LF  
70(70mm): QTR70(M)LF

#### AC Steady/ Flashing

QTG50MLF  
QTG50LF  
QTG60MLF  
QTG60LF  
QTG70MLF  
QTG70LF  
QTC50MLF  
QTC50LF  
QTC60MLF  
QTC60LF  
QTC70MLF  
QTC70LF  
QTR50MLF  
QTR50LF  
QTR60MLF  
QTR60LF  
QTR70MLF  
QTR70LF

External Transistor



- QTG(A) □□ (M)LF - Buzzer same wiring instruction
- QTC(A) □□ (M)LF - Buzzer same wiring instruction
- QTR(A) □□ (M)LF - Buzzer same wiring instruction
- QTG □□ LF
- QTC □□ LF
- QTR □□ LF
- └ Lens diameter 50(50mm): QTR50(M)LF  
60(60mm): QTR60(M)LF  
70(70mm): QTR70(M)LF

· DC steady type cable specification: External power line/External signal line UL1007 AWG22(0.3sq) 400mm

· AC steady, AC/DC steady/flashing type cable specification: External power line UL1015 AWG18(0.75sq) x 2C 400mm  
External signal line UL1007 AWG22(0.3sq) 400mm