QTR Series

Soft and Comfortable Signal Light Emitted through the Translucent Lens

PRODUCT SPECIFICATION

QTR Series

Materials 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
- Soft and comfortable signal light emitted through the translucent lens
- When the product is turned off the translucent color filter provides comfortable viewing at close proximity for the operator
- 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
- QTRA type offers a nifty integrated lens and cover for a simple aesthetically pleasing product
- A variety of Mounting brackets 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



QTR 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(QTRA50 / QTRA60 / QTRA70)**
   QTRA50 / QTRA60 / QTRA70 The sleek lens cover model is made of one piece for a simple unified look.

3. **QTR Series special lens**
   QTR Series provides soft and comfortable signal light emitted through the translucent lens.

4. **Buzzer volume is adjusted via the volume control lever**
   QTR 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.

QTR60ML / QTR60L



QTR60ML Series

QTR60ML Ø60mm Direct mount, LED Steady/Flashing

Model number	Layers	Voltage	Certificates	Weight	Color
QTR60ML Steady QTR60ML-BZ Steady w/built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.26kg 0.26kg 0.36kg	R-Red
QTR60MLF Steady/Flashing QTR60MLF-BZ Steady/Flashing w/ built-in buzzer	2	DC12V DC24V AC110V-220V		0.34kg 0.34kg 0.44kg	R-Red G-Green
QTRA60ML Steady QTRA60ML-BZ Steady w/built-in buzzer	3	DC12V DC24V AC110V-220V		0.43kg 0.43kg 0.53kg	R-Red A-Amber G-Green
QTRA60MLF Steady/Flashing QTRA60MLF-BZ Steady/Flashing w/ built-in buzzer	4	DC12V DC24V AC110V-220V		0.51kg 0.51kg 0.61kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.59kg 0.59kg 0.69kg	R-Red A-Amber G-Green B-Blue W-White

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

※ UL Listed: DC24V



QTRA60ML Series

Light source/buzzer current(based on 1 layer)

Voltage	DC12V	DC24V	AC110V-220V
Light source current(1 layer)	105mA	70mA	Max.60mA
Buzzer current	40mA	75mA	Max.55mA

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 layers or less)



Wall mount bracket TWS45



Wall mount bracket TWA45



High-volume buzzer module

Ordering Specification

QTR60ML	-	3	-	110/220	-	RAG

[Model number]	[Layers]	[Voltage]	[Color]
QTR60ML QTR60ML-BZ QTR60MLF QTR60MLF-BZ QTRA60ML QTRA60ML-BZ QTRA60MLF QTRA60MLF-BZ	1-1 Layer 2-2 Layers 3-3 Layers 4-4 Layers 5-5 Layers	12-DC12V 24-DC24V 110/220-AC110V-220V	R-Red A-Amber G-Green B-Blue W-White

IP54 IP65 +50℃ -30℃ BUZZER 85dB NPN PNP RoHS

QTR60L Ø60mm Pole mount, LED Steady/Flashing

Model number	Layers	Voltage	Certificates	Weight	Color
QTR60L Steady QTR60L-BZ Steady w/built-in buzzer	1	DC12V DC24V AC110V-220V	CE UL	0.41kg 0.41kg 0.51kg	R-Red
QTR60LF Steady/Flashing QTR60LF-BZ Steady/Flashing w/ built-in buzzer	2	DC12V DC24V AC110V-220V		0.50kg 0.50kg 0.60kg	R-Red G-Green
QTRA60L Steady QTRA60L-BZ Steady w/built-in buzzer	3	DC12V DC24V AC110V-220V		0.58kg 0.58kg 0.68kg	R-Red A-Amber G-Green
QTRA60LF Steady/Flashing QTRA60LF-BZ Steady/Flashing w/ built-in buzzer	4	DC12V DC24V AC110V-220V		0.67kg 0.67kg 0.77kg	R-Red A-Amber G-Green B-Blue
	5	DC12V DC24V AC110V-220V		0.75kg 0.75kg 0.85kg	R-Red A-Amber G-Green B-Blue W-White

※ AC type model has a free-voltage range of 100V-240V.
※ UL Listed: DC24V



QTR60L Series



QTRA60L Series

Light source/buzzer current(based on 1 layer)

Voltage	DC12V	DC24V	AC110V-220V
Light source current(1 layer)	105mA	70mA	Max.60mA
Buzzer current	40mA	75mA	Max.55mA

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	LB18	LW18	QZ18	SZ18	QL18	SL18	SLB370
							
Steel	Steel	ABS	ABS	Al	ABS	Al	PC, Steel

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

Ordering Specification

QTR60L	-	3	-	110/220	-	RAG	-	LW18

[Model number]	[Layers]	[Voltage]	[Color]	[Bracket]
QTR60L QTR60L-BZ QTR60LF QTR60LF-BZ QTRA60L QTRA60L-BZ QTRA60LF QTRA60LF-BZ	1-1 Layer 2-2 Layers 3-3 Layers 4-4 Layers 5-5 Layers	12-DC12V 24-DC24V 110/220-AC110V-220V	R-Red A-Amber G-Green B-Blue W-White	· None-Standard · Bracket -LB18 -LW18 -QZ18 -SZ18 -QL18 -SL18 -SLB370

Customization

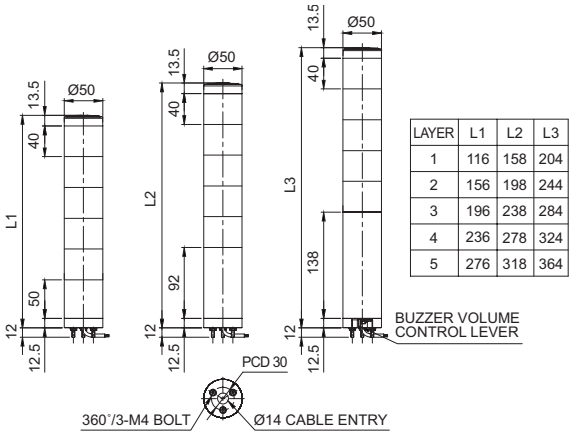
- 2 buzzer sound types :
  Both prolonged(beep, beep) and staccato(beep, beep, beep) buzzer output available
- DC24V voltage UL listed product
- M12 connector attached type
- Customized pole length available
- Top high-volume buzzer module mounted (lens limited to 4 layers or less)

QTR Series

Technical Diagram

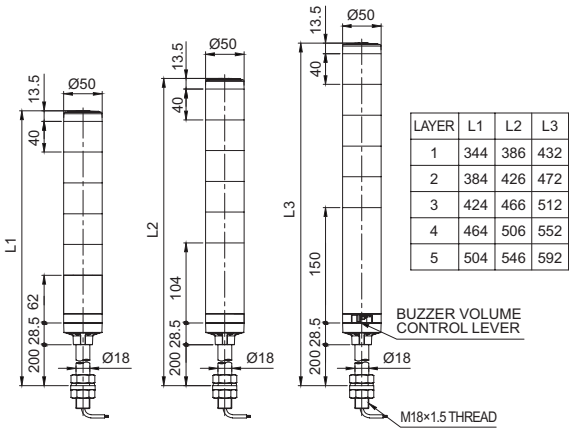
Units : mm

·QTR50ML-DC ·QTR50ML-AC ·QTR50MLF-AC
·QTR50MLF-DC ·QTR50MLF-BZ-DC ·QTR50ML-BZ-AC
·QTR50ML-BZ-DC ·QTR50MLF-BZ-AC



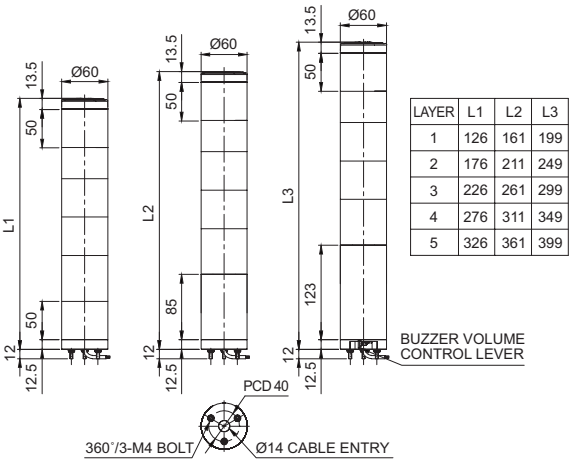
LAYER	L1	L2	L3
1	116	158	204
2	156	198	244
3	196	238	284
4	236	278	324
5	276	318	364

·QTR50L-DC ·QTR50L-AC ·QTR50LF-AC
·QTR50LF-DC ·QTR50LF-BZ-DC ·QTR50L-BZ-AC
·QTR50L-BZ-DC ·QTR50LF-BZ-AC



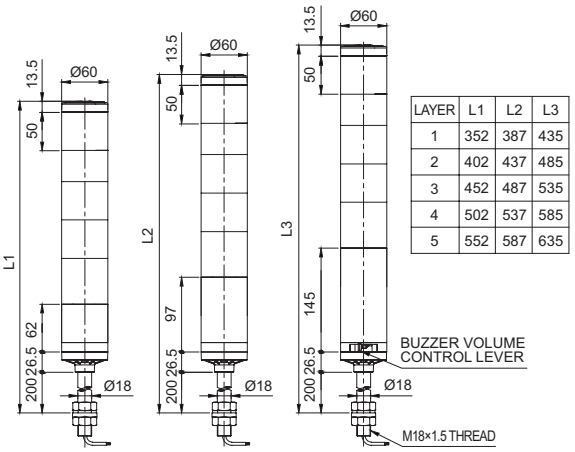
LAYER	L1	L2	L3
1	344	386	432
2	384	426	472
3	424	466	512
4	464	506	552
5	504	546	592

·QTR60ML-DC ·QTR60ML-AC ·QTR60MLF-AC
·QTR60MLF-DC ·QTR60MLF-BZ-DC ·QTR60ML-BZ-AC
·QTR60ML-BZ-DC ·QTR60MLF-BZ-AC



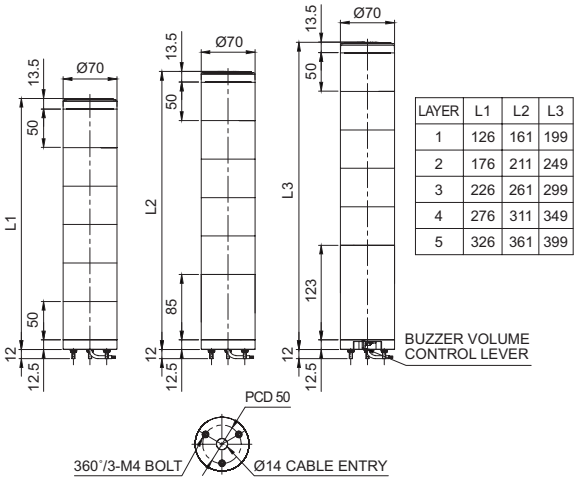
LAYER	L1	L2	L3
1	126	161	199
2	176	211	249
3	226	261	299
4	276	311	349
5	326	361	399

·QTR60L-DC ·QTR60L-AC ·QTR60LF-AC
·QTR60LF-DC ·QTR60LF-BZ-DC ·QTR60L-BZ-AC
·QTR60L-BZ-DC ·QTR60LF-BZ-AC



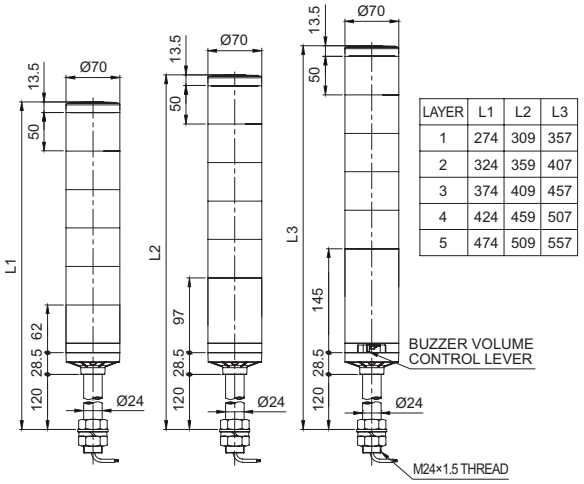
LAYER	L1	L2	L3
1	352	387	435
2	402	437	485
3	452	487	535
4	502	537	585
5	552	587	635

·QTR70ML-DC ·QTR70ML-AC ·QTR70MLF-BZ-AC
·QTR70MLF-DC ·QTR70MLF-AC
·QTR70ML-BZ-DC ·QTR70ML-BZ-AC
·QTR70MLF-BZ-DC



LAYER	L1	L2	L3
1	126	161	199
2	176	211	249
3	226	261	299
4	276	311	349
5	326	361	399

·QTR70L-DC ·QTR70L-AC ·QTR70LF-BZ-AC
·QTR70LF-DC ·QTR70LF-AC
·QTR70L-BZ-DC ·QTR70L-BZ-AC
·QTR70LF-BZ-DC



LAYER	L1	L2	L3
1	274	309	357
2	324	359	407
3	374	409	457
4	424	459	507
5	474	509	557

QTG / QTC / QTR Series

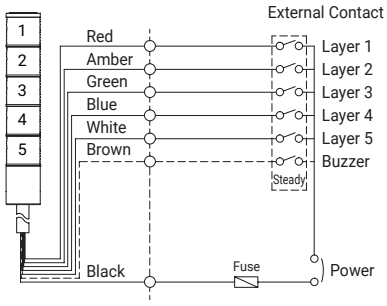
Wiring Instructions(using External Contact)

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

DC Steady

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

Wiring Instructions

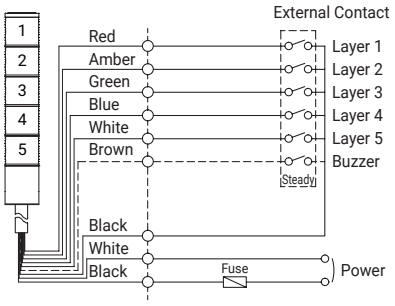


· QTG(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTC(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTR(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTG ☐☐ L
QTC ☐☐ L
QTR ☐☐ L
└ Lens diameter 50(50mm): QTR50(M)L
60(60mm): QTR60(M)L
70(70mm): QTR70(M)L

AC Steady

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

Wiring Instructions

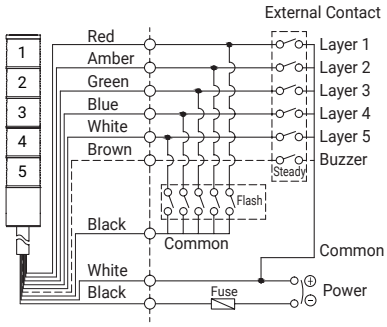


· QTG(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTC(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTR(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTG ☐☐ L
QTC ☐☐ L
QTR ☐☐ L
└ Lens diameter 50(50mm): QTR50(M)L
60(60mm): QTR60(M)L
70(70mm): QTR70(M)L

DC Steady/ Flashing

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

Wiring Instructions

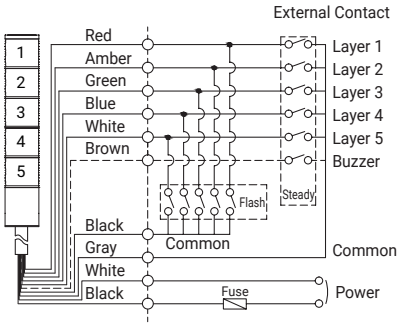


· QTG(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTC(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTR(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTG ☐☐ LF
QTC ☐☐ LF
QTR ☐☐ LF
└ Lens diameter 50(50mm): QTR50(M)LF
60(60mm): QTR60(M)LF
70(70mm): QTR70(M)LF

AC Steady/ Flashing

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

Wiring Instructions



· 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

QTG / QTC / QTR Series

Wiring Instructions(using transistor)

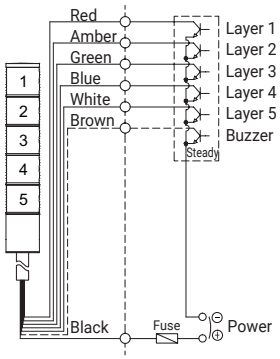
· In case of wiring with transistors, please select the proper transistor type : either NPN or PNP based on the source voltage setting.

Wiring Instructions

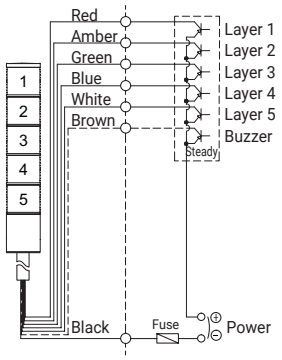
DC Steady

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

External Transistor



External Transistor

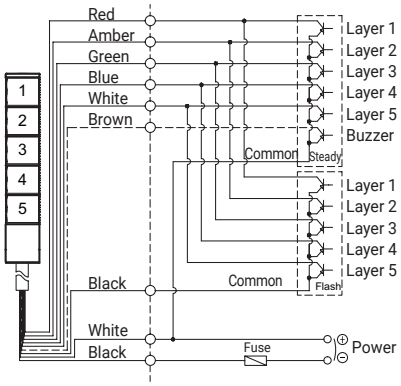


· QTG(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTC(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTR(A) ☐☐ (M)L - Buzzer same wiring instruction
· QTG ☐☐ L
QTC ☐☐ L
QTR ☐☐ L
└ Lens diameter 50(50mm): QTR50(M)L
60(60mm): QTR60(M)L
70(70mm): QTR70(M)L

DC Steady/ Flashing

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

External Transistor

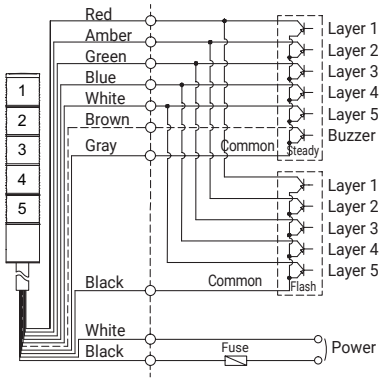


· QTG(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTC(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTR(A) ☐☐ (M)LF - Buzzer same wiring instruction
· QTG ☐☐ LF
QTC ☐☐ LF
QTR ☐☐ LF
└ Lens diameter 50(50mm): QTR50(M)LF
60(60mm): QTR60(M)LF
70(70mm): QTR70(M)LF

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