

7 표시등류 LAMPS

■  For use on a flat surface of a type 1 enclosure
File No. E242380

■ 

- | | |
|---------------------------------------|--|
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| 7-2 정사각 표시등 (SL-25) | 7-2 Square Lamp (SL-25) |
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7-1

원형 표시등 Pilot Lamp

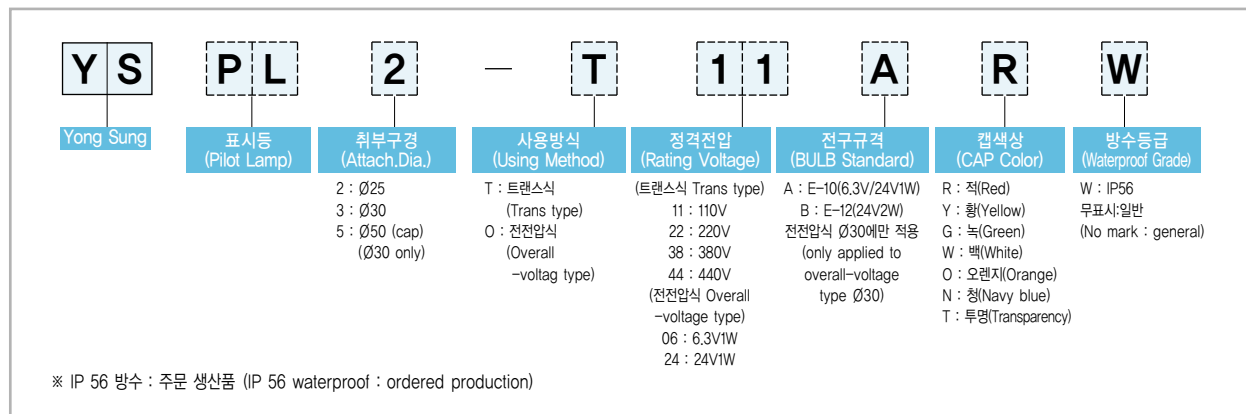
■ 

■ 
File No. E242380

■ 한국전기연구원개발시험합격
DE6372, 6371
(Certified by KERI's R&D Test)

■ IP56 주문생산 (Ordered production)
EX 99 IP 536
SEK 80125-E001

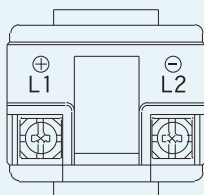
형식 구분도 | Type Classification Diagram - BULB Type |



부품 재질 | Part Materials |

부 품 (Part)	재 질 (Materials)
몸 체 (Body)	ABS내열 (Heat resistance ABS) Resin
홀 다 (Holder)	ABS내열 (Heat resistance ABS) Resin
단 자 (Terminal)	황 동 (Brass)
볼 트 (Bolt)	탄소강 (Carbon Steel)
캡 (CAP)	AS 수지 (AS Resin)
링 (Ring)	ABS 수지 (ABS Resin)

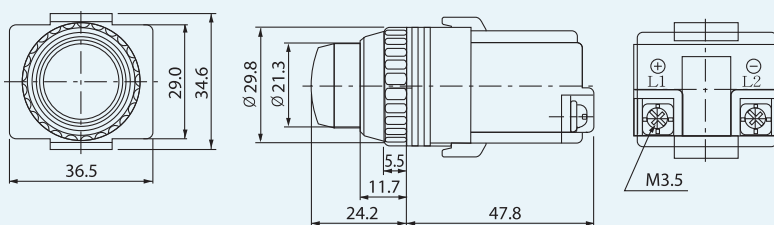
단자 극성 | Terminal Polarity |



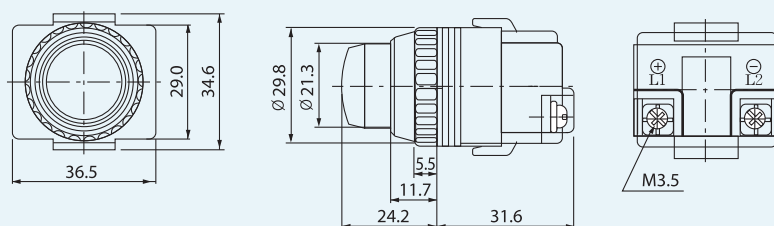
외형 / 치수도 | Shape / Dimension Drawing |

(unit : mm)

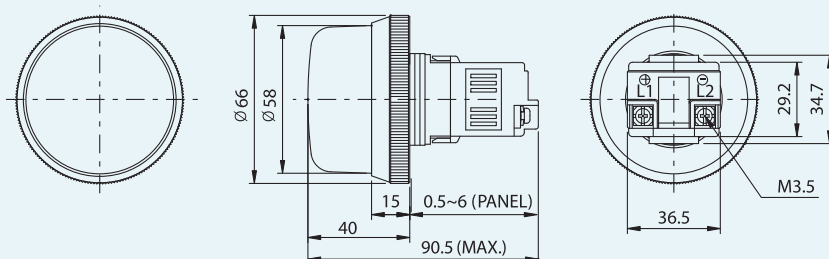
Ø25 (Trans Type)



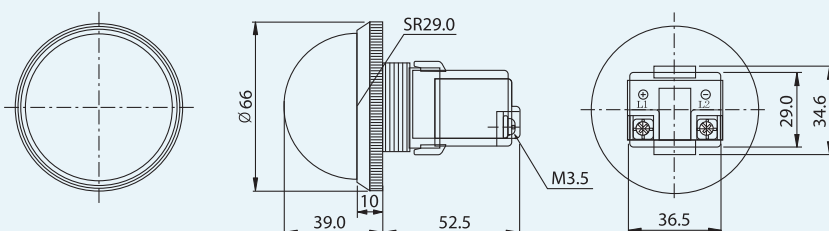
Ø25 (Overall-voltage Type)



Ø50 (CAP)



Ø50 (CAP)



형식 구분도 | Type Classification Diagram - LED Type |

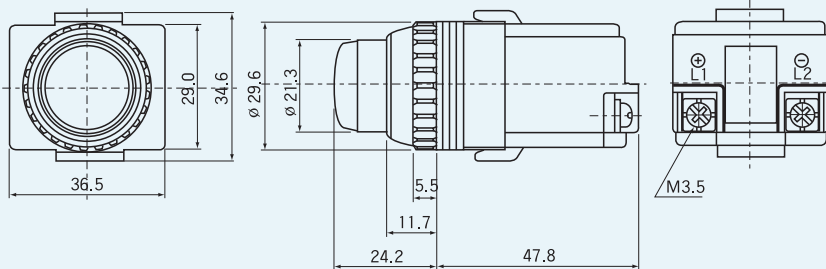
Y S	P L	2	—	A L	1 1	R	W
Yong Sung	표시등 (Pilot Lamp)	취부구경 (Attach. Dia.)		사용방식 (Using Method)	정격전압 (Rating Voltage)	LED색상 (LED Color)	방수등급 (Waterproof Grade)
		2 : Ø25 3 : Ø30 5 : Ø50 (CAP) (Ø30 Only) (방수등급 IP44) (Waterproof grade IP44)		AL : AC LED DL : DC LED	24 : 24V 48 : 48V 64 : 64V 11 : 110V 12 : 120V/125V (AC 120V / DC 125V) 22 : 220V (AC/DC 220V) 38 : 380V 44 : 440V	R : 적 (Red) Y : 황 (Yellow) G : 녹 (Green) W : 백 (White) O : 오렌지 (Orange) N : 청 (Navy blue)	W : IP 56 (25Ø,30Ø) 무표시 : 일반 (no mark : general)

- ※ DC용은 surge 전압발생우려가 있는 곳에 사용시 사전대책이 필요합니다. (기술자료참조)
As use for DC can exist to surge voltage, protective action is necessary before use. (Refer to technical data.)
- ※ IP 56 방수 : 주문 생상품
IP 56 waterproof : Ordered production.
- ※ 반불 전압 제어상태 표기
Mark of situation of controlling half illumination voltage.

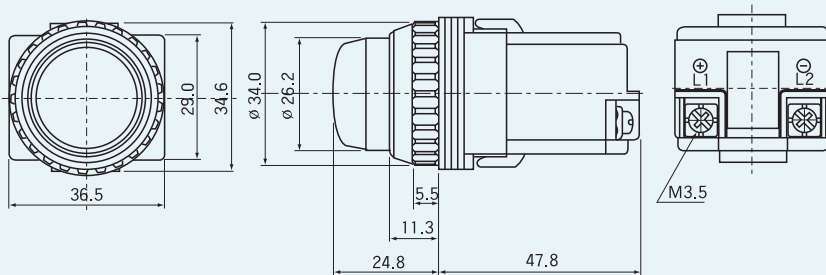
외형 / 치수도 | Shape / Dimension Drawing |

(unit : mm)

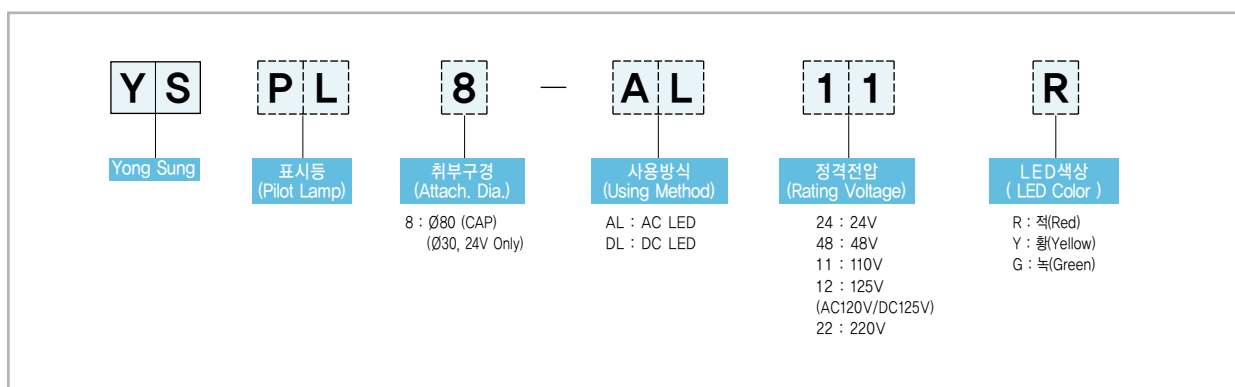
Ø25



Ø30

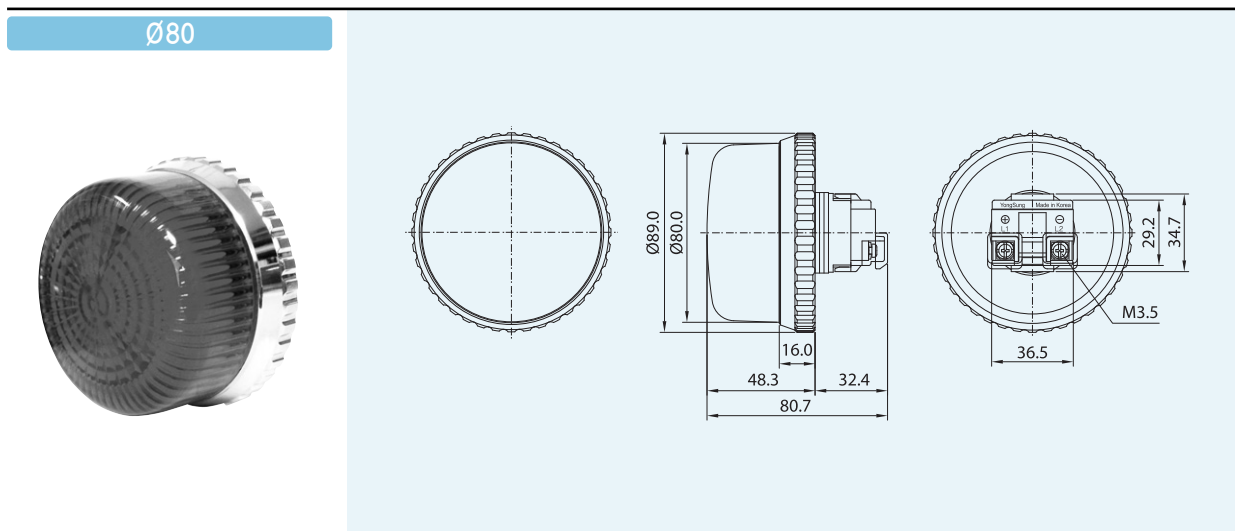


형식 구분도 | Type Classification Diagram - LED Type |



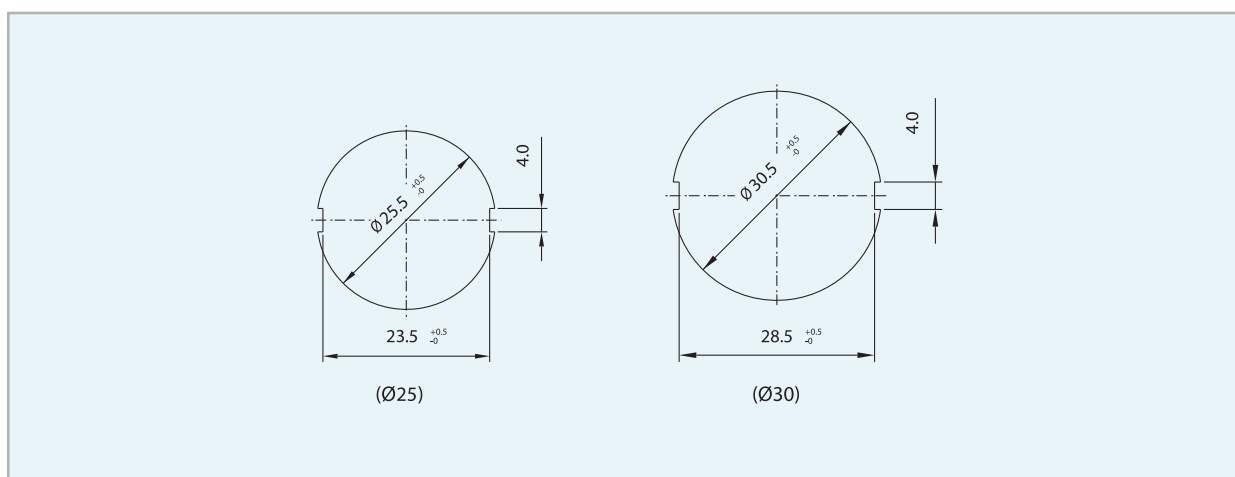
외형 / 치수도 | Shape / Dimension Drawing |

(unit : mm)



판넬 가공 치수 | Cut-out Dimension |

(unit : mm)



Square Lamp (SL - 25)(SL - 33)(BSL - 33) Bulletin Rectangle Lamp (NRL - 34)(BRL - 34)

■  File No. E242380



■ IP40



특징 | Features |

- 정사각형과 직사각형으로 구분되어 있어 용도에 따라 사용하기에 편리하게 되어있습니다.
- 특히 LED 램프는 전력소모도 크게 절감되고 조도도 보다 밝고 고휘도 LED를 적용하였습니다.
- DC LED Type은 CHECK 단자를 적용하여 전면부의 점등유무를 확인할 수 있습니다. (33, 34 Type)
- Since divided into square and rectangle type, it is convenient to use according to application purposes.
- Especially, LED lamp is made up of LED which has high brightness and largely reduced consumption of electric power.
- DC LED Type can be verified whether front part light-up or not by applying CHECK terminal. (33, 34 Type)

사용시의 주의사항 | Attachment (using) Note |

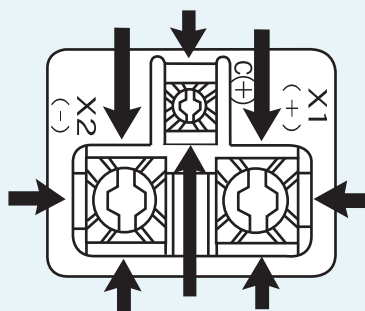
- 창수가 10창 이상에 있어서 연속점등수가 창수의 40% 이상일 경우는 전구발열량을 고려, 창수의 제한에 유의하여야 합니다.
- 트랜식, 저항식의 경우 발열량등에 있어 100% 점등시는 10창구 이하로 사용하여 주십시오.
- 패널 취급시 집합표시등 제품본체의 중량, 배선의 전선중량 등을 고려하여 패널 두께를 선정하여 주십시오.
- 저항식은 발열을 고려, 쿨링 장치를 하여 주십시오.
- 전점등시험은 40분 이하로 하여 주십시오.
- 몸체로부터 LED Unit를 분리할 때 필히 전원을 끄고 분리하여 주십시오.
- If successive illuminating number is above 40 % display number in above 10 displays, care for limiting the number of display considering lightbulb generating amount.
- When illuminating 100%, in heat generating amount etc. of trans & resistance type use below 10 displays.
- In panel attachment, choose panel thickness considering weight of multi pilot lamps, product body, and electric wire of wiring.
- Apply cooling device considering heating in resistance type.
- Do over all illuminating test within below 40min.
- When separating LED Unit from body, be sure to turn off power source.

LED Unit의 정격 전압상의 주의사항 | Rating Voltage Note of LED Unit |

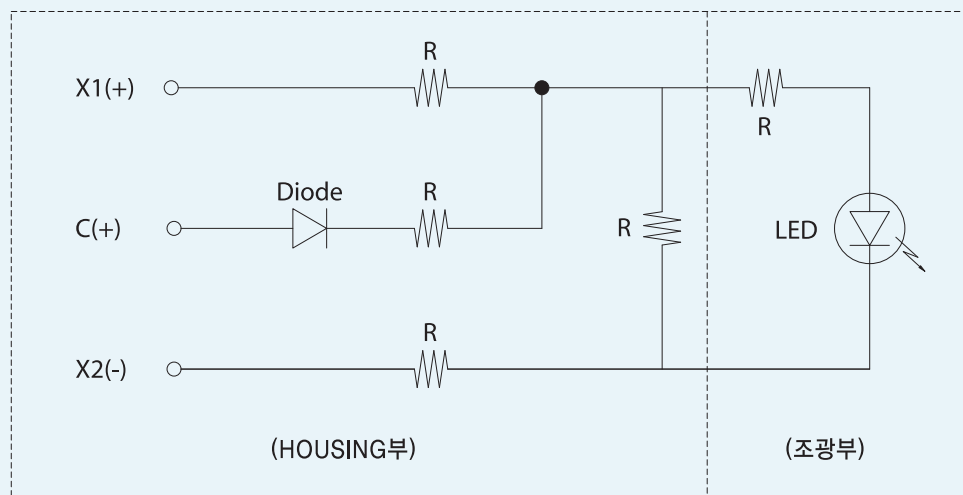
- LED Unit DC 정격전압은 완전직류치를 표시한 것입니다.
사용전압범위 : DC24V±10%
- LED Unit DC rating voltage indicates perfect DC value.
Applying voltage range : DC 24V ±10%

CHECK 단자부의 단자 배선 | Terminal Wiring of CHECK Terminal Part |

- 단자 C(CHECK 단자) 및 단자 X1은 $\oplus$ 극성, 단자 X2(COMMON 단자)는 $\ominus$ 극성으로 되어 있는 것에 주의하여 주십시오.
- It is consist of terminal C(check terminal) and terminal X1 is $\oplus$ polarity, terminal X2(common terminal) is $\ominus$ polarity.

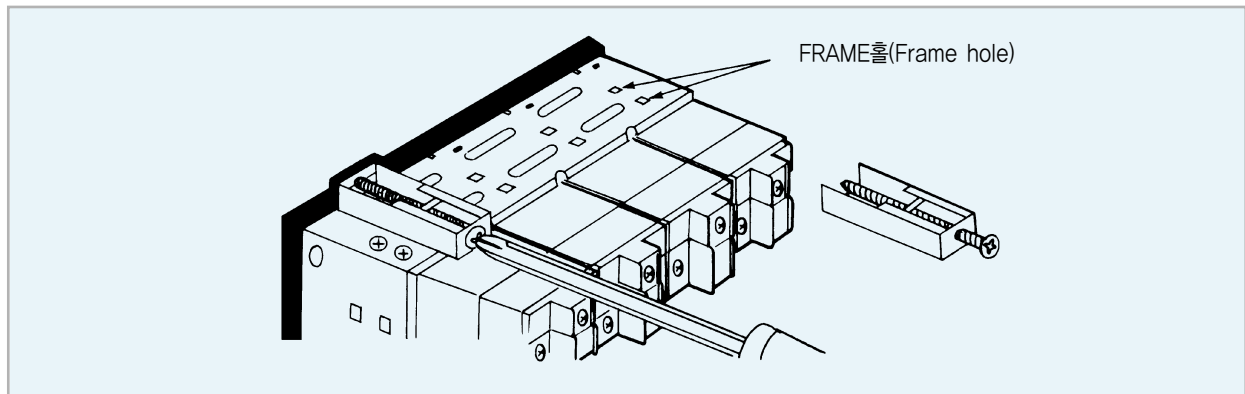


※화살표는 단자배선 방향을 표시하는 것입니다.
(Arrow is terminal wiring direction.)



판넬의 취부 방법 | Attachment Method of Panel |

- 집합의 경우 판넬에 취부시는 본체를 판넬 전면에 삽입후 양면에 있는 부속의 취부금구를 FRAME 홀에 아래의 그림처럼 집어넣고 나사를 조여주십시오. 또한 취부금구의 부속수는 창수에 따라 다음과 같이 사용하시면 좋습니다.
- When attaching multi illuminating display into panel, insert body into the front panel, then push accessory jointing part into The FRAME hole as following figure and tighten screws. The number of jointing part is as following according to the number of display.



취부 금구수 | The Number of Jointing Part |

(unit : ea)

열(Row) 단(Grade)	1 - 2	3 - 8	9 - 15	16 - 20
1 - 2	2	4	6	8
3 - 6	4	6	8	10
7 - 10	6	8	10	12

취부의 예 | Example of Attachment |

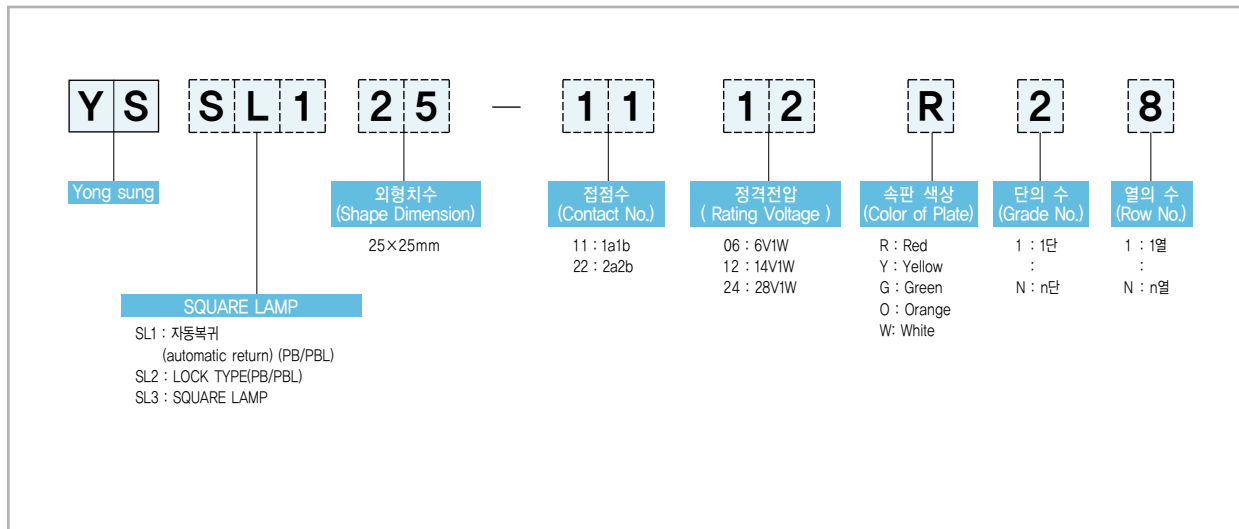
(■는 취부금구임) (■ is jointing part.)

열(Row) 단(Grade)	1 - 2	3 - 8	9 - 15	16 - 20
1 - 2				
3 - 6				
7 - 10				

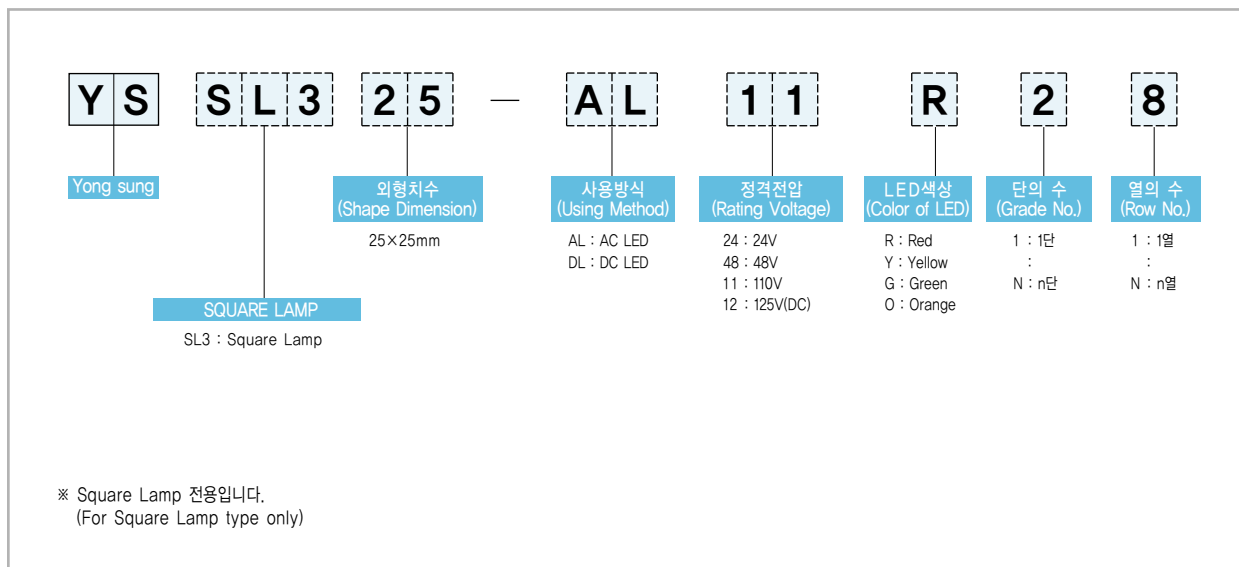
7-2

정사각 표시등 (SL-25)
Square Lamp (SL-25)

형식 구분도 | Type Classification Diagram - BULB Type |



형식 구분도 | Type Classification Diagram - LED Type |



사양 Specification

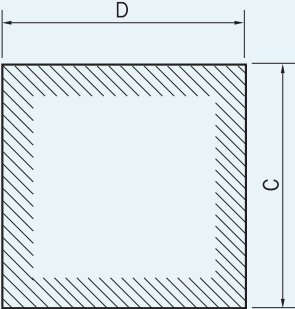
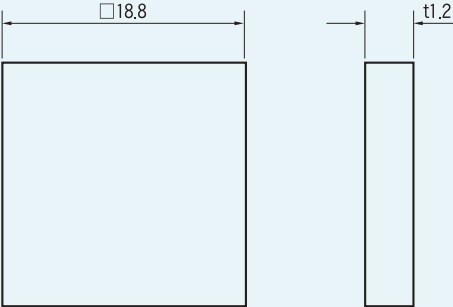
백열구식 | BULB Type |

전원입력방식 (Power Source)		전전압식 (Overall voltage Type)		
종별 (Type)		전면조광 (Overall illumination)		
정격전압 (1차전압) Rating voltage (Primary voltage)		AC 6V	AC 12V	AC 24V
내장전구 (built-in lightbulb)	정격전압 (Rating voltage)	6V1W	14V1W	28V1W
	사용전압 (Using voltage)	5~6V	10~12V	18~24V
	BASE	S5.7S		
절연저항 (Insulation resistance)		above 100MΩ		
내전압 (Withstand voltage)		1,500V/min		
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃		
상대습도 (Relative humidity)		45 ~ 85%		
접점정격(Contact Rating)		AC250V 3A		

LED식 | LED Type |

종별 (Type)		단색전면조광 (Single color overall illuminating)			
정격전압 (1차전압) Rating voltage (Primary voltage)		AC/DC24V	AC/DC48V	AC/DC110V	DC125V
내장 LED (built-in LED)	정격전압 (Rating voltage)	DC24V			
	정격전류 (Rating current)	below 20mA			
	발광색 (Illuminating color)	Red, Green, Yellow, Orange			
절연저항 (Insulation resistance)		above 100MΩ (DC 500V. Meg)			
내전압 (Withstand voltage)		1,500V/min			
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃			
상대습도 (Relative humidity)		45 ~ 85%			

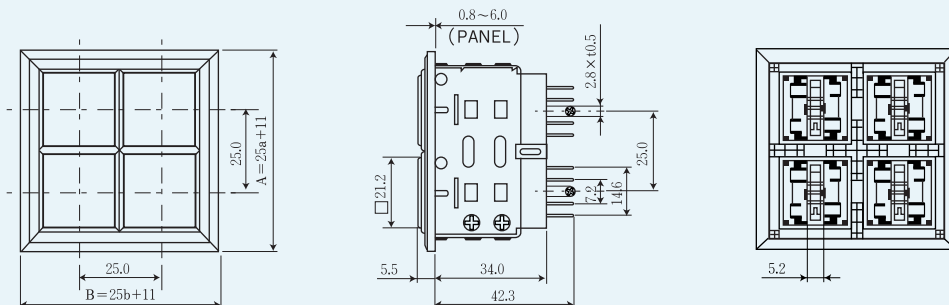
외형 치수도 및 패널 취부 치수도 | Shape / Panel Dimension Drawing | (unit : mm)

단의 수 (Grade number)	열의 수(Row number)		b	01	02	03	04	05	06	07	08	09	10
	외형치수 (Shape dimension)		B	36	61	86	111	136	161	186	211	236	261
	PANEL 가공치수 (Panel dimension)		(D)	$29^{0}_{-0.5}$	$54^{0}_{-0.5}$	$79^{0}_{-0.5}$	$104^{0}_{-0.5}$	$129^{0}_{-0.5}$	$154^{0}_{-0.5}$	$179^{0}_{-0.5}$	$204^{0}_{-0.5}$	$229^{0}_{-0.5}$	$254^{0}_{-0.5}$
a	A	(C)	▶ PANEL 부착치수 (Panel attachment dimension) : 열(row), 단(grade) : $25n+4$ (n:number)  ▶ 조각면 SIZE (Size of marking plate) 										
01	36	$29^{0}_{-0.5}$											
02	61	$54^{0}_{-0.5}$											
03	86	$79^{0}_{-0.5}$											
04	111	$104^{0}_{-0.5}$											
05	136	$129^{0}_{-0.5}$											
06	161	$154^{0}_{-0.5}$											
07	186	$179^{0}_{-0.5}$											
08	211	$204^{0}_{-0.5}$											
09	236	$229^{0}_{-0.5}$											
10	261	$254^{0}_{-0.5}$											

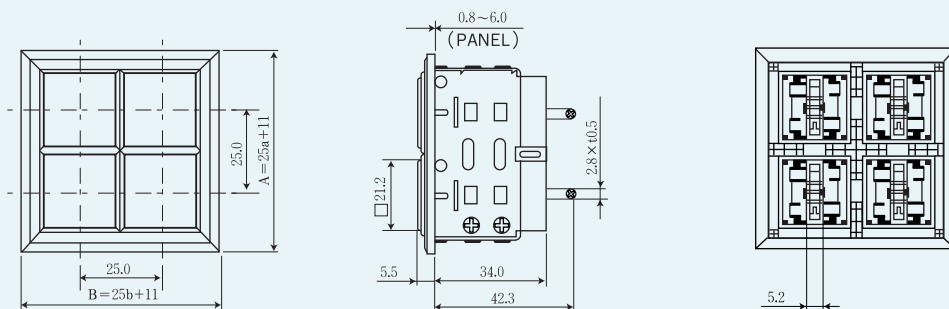
외형 / 치수도 | Shape / Dimension Drawing |

(unit : mm)

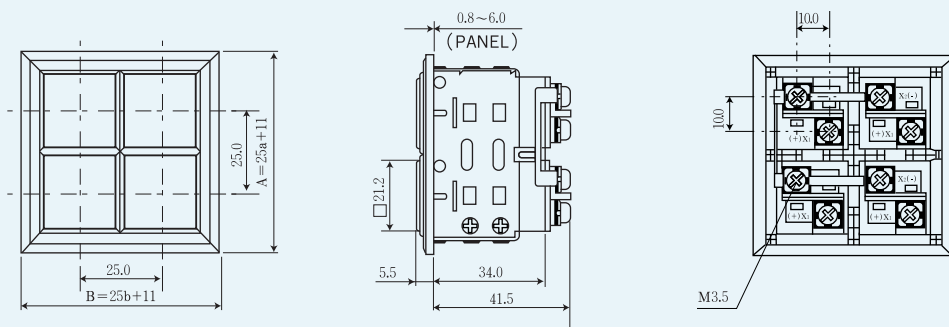
YS SL125-1124R22 (누름버튼)



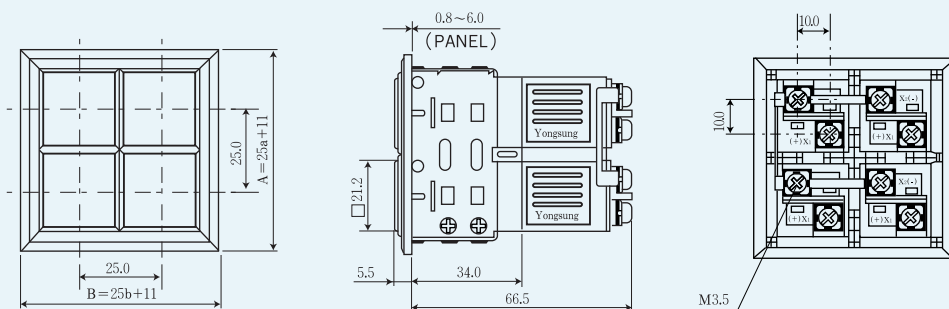
YS SL325-24R22 (전전압 BULB표시등)



YS SL325-DL24R22 (전전압 LED표시등)



YS SL325-DL11R22 (저항식 LED표시등)



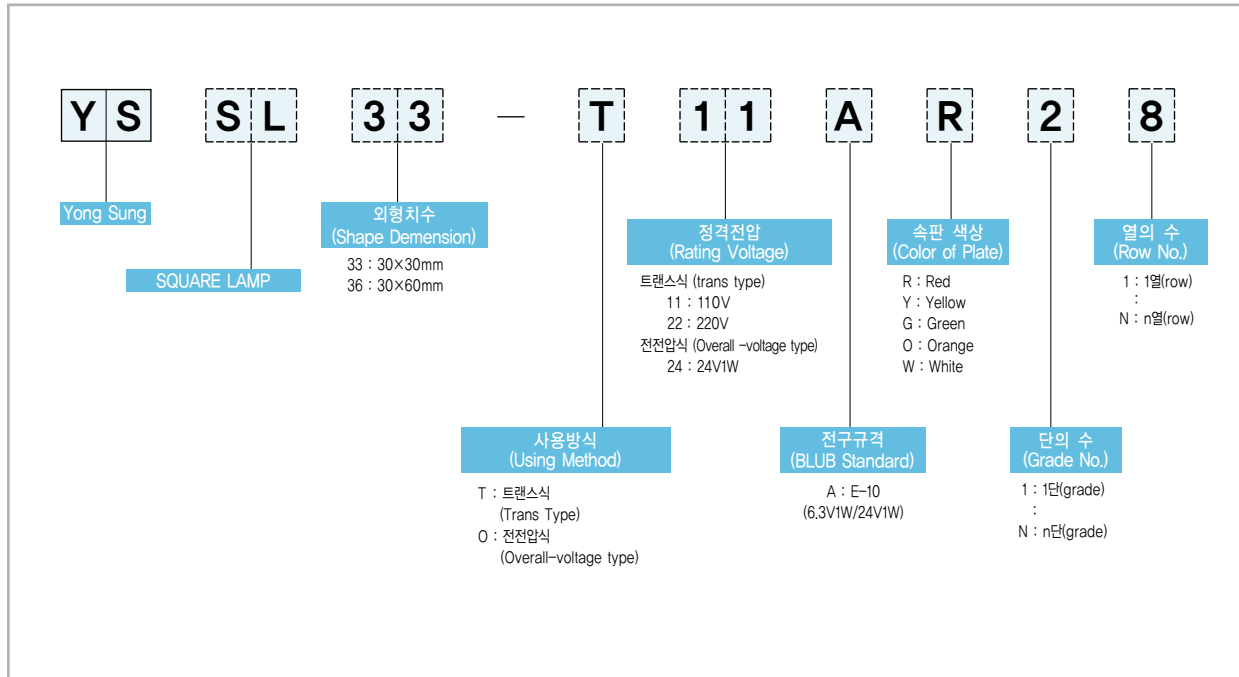
7-3

정사각 표시등 (SL-33, BSL-33)
Square Lamp (SL-33, BSL-33)■  File No. E242380■ 

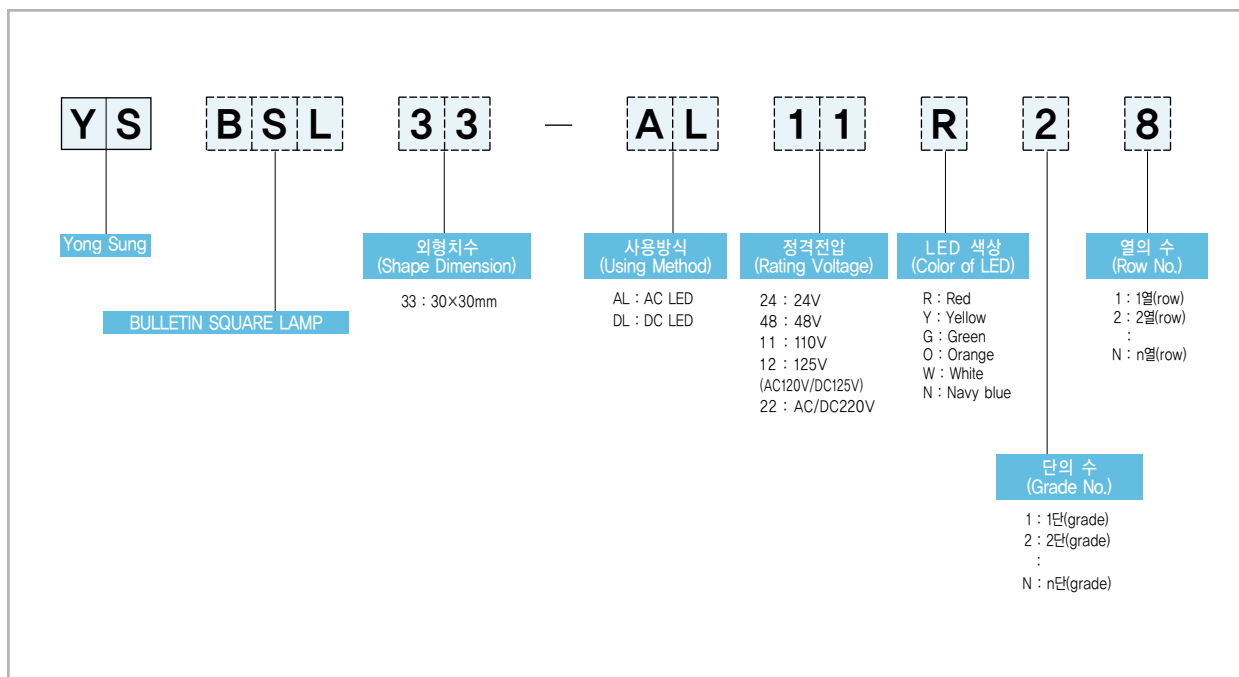
■ IP40

■ 

형식 구분도 | Type Classification Diagram - BULB Type |

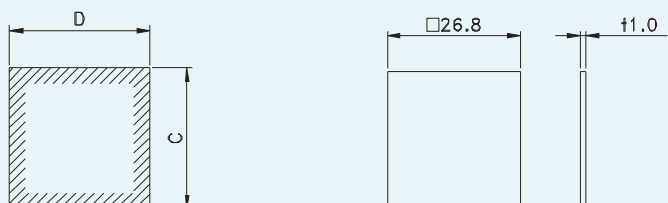
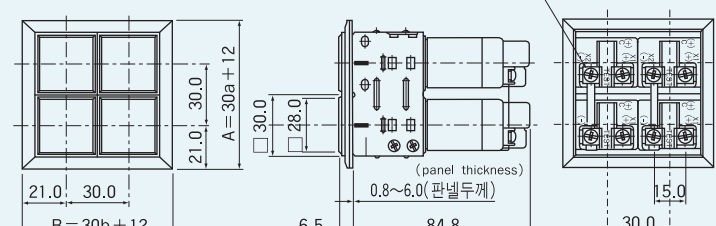
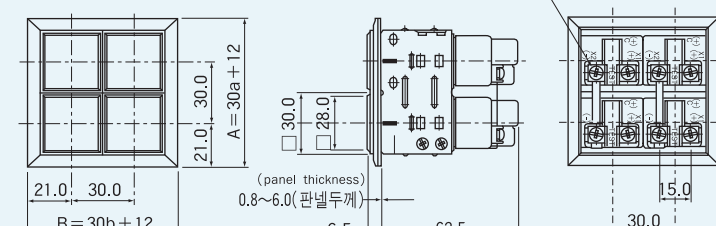
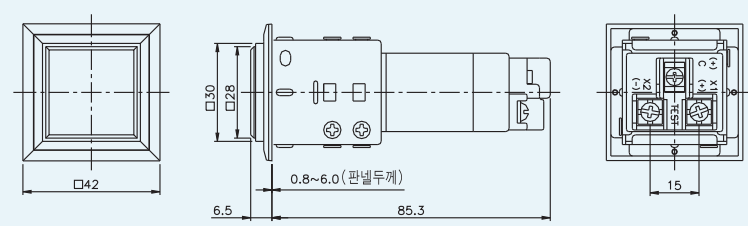


형식 구분도 | Type Classification Diagram - LED Type BSL-33 |



외형 치수도 및 패널 취부 치수도

Shape / Panel Dimension Drawing | (unit : mm)

단의 수 (Grade number)	열의 수(Row number)		b	01	02	03	04	05	06	07	08	09	10
	외형치수 (Shape dimension)		B	42	72	102	132	162	192	222	252	282	312
	PANEL 가공치수 (Panel dimension)		(D)	$35^{0}_{-0.5}$	$65^{0}_{-0.5}$	$95^{0}_{-0.5}$	$125^{0}_{-0.5}$	$155^{0}_{-0.5}$	$185^{0}_{-0.5}$	$215^{0}_{-0.5}$	$245^{0}_{-0.5}$	$275^{0}_{-0.5}$	$305^{0}_{-0.5}$
a	A	(C)	▶ PANEL 부착치수 (Panel attachment dimension) : ▶ 조각면 SIZE 열(row) : $30n+5$ (n : number) (Size of marking plate) 단(grade) : $30n+5$ 										
01	42	$35^{0}_{-0.5}$	▶ 외형/치수도 (Shape/dimension drawing) 트랜스식 (Trans Type) 										
02	72	$65^{0}_{-0.5}$											
03	102	$95^{0}_{-0.5}$											
04	132	$125^{0}_{-0.5}$	전전압식 (Overall-voltage Type) / LED식 (DL 24V) 										
05	162	$155^{0}_{-0.5}$											
06	192	$185^{0}_{-0.5}$											
07	222	$215^{0}_{-0.5}$	LED식 (LED Type) / (AL 11, 22 · DL 48, 11, 12, 22) 										
08	252	$245^{0}_{-0.5}$											
09	282	$275^{0}_{-0.5}$											
10	312	$305^{0}_{-0.5}$											

사양 Specification

※ 본 카탈로그 기술자료 17-3 참조 (Refer to Technical data 17-3 of this catalog.)

백열구식 | BULB Type |

전원입력방식 (Power Source)		전전압식 (Overall Voltage type)	트랜스식 (Trans Type)
종별 (Type)		전면조광 (Overall Illuminating)	전면조광 (Overall Illuminating)
정격전압 (1차전압) Rating voltage (Primary Voltage)		AC/DC 24V	AC 110V, 220V
내장전구 (Built-in Lightbulb)	정격전압 (Rating Voltage)	24V1W	6.3V1W
	2차전압 (Secondary Voltage)	24V	5.5V
	BASE	E-10 (BASE Type)	
절연저항 (Insulation Resistance)		above 100MΩ	
내전압 (Withstand Voltage)		AC 2,500V/min	
사용주위온도 (Ambient Temperature)		-25℃ ~ +40℃	
상대습도 (Relative Humidity)		45 ~ 85%	

LED식 | LED Type |

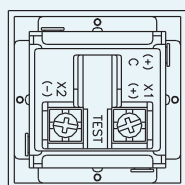
종별 (Type)		단색전면조광 (CHECK단자삽입) (Single color overall illuminating (Inserting CHECK terminal))				
정격전압 (1차전압) Rating voltage (Primary voltage)		AC/DC24V	AC110V	DC110V	DC125V	AC/DC220V
내장 LED	정격전압 (Rating voltage)	DC24V				
	정격전류 (Rating current)	below 20mA				
	발광색 (Illuminating color)	Red, Green, Yellow, Orange				
절연저항 (Insulation resistance)		above 100MΩ (DC 500V. Meg)				
내전압 (Withstand voltage)		AC 2,500V/min				
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃				
상대습도 (Relative humidity)		45 ~ 85%				

※AC110V, 220V용은 Check 단자가 없습니다. (Check terminal is not apply for AC110V, 220V.)

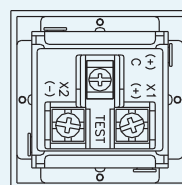
※DC Check 단자 사용시는 X1 단자에 부가회로를 사용할 수 없습니다. (램프 체크시 역전압 발생)

(Additional circuit can not be used at X1 terminal when using DC terminal.) (Reverse voltage occurrence when checking lamp.)

단자 극성 | Terminal Polarity |



(AC TYPE)



(DC TYPE)

7-4

직사각 기명 표시등 (NRL-34, BRL-34)

Bulletin Rectangle Lamp (NRL-34, BRL-34)

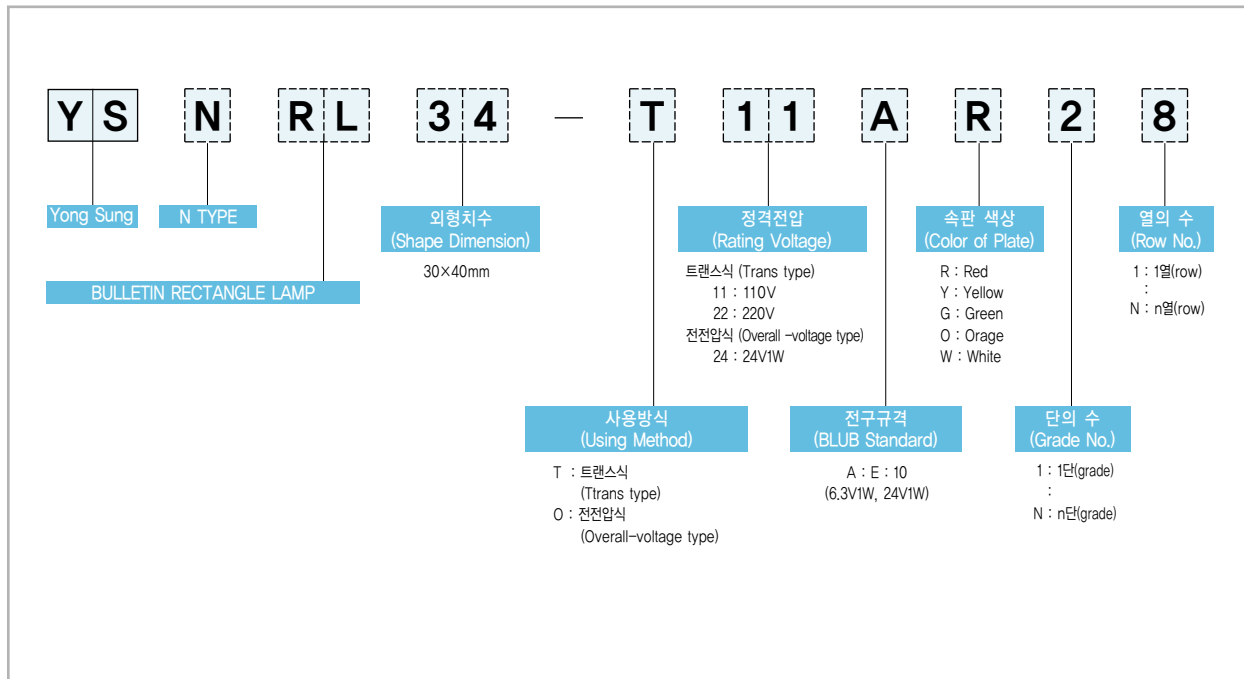
■ **Y S** File No. E242380



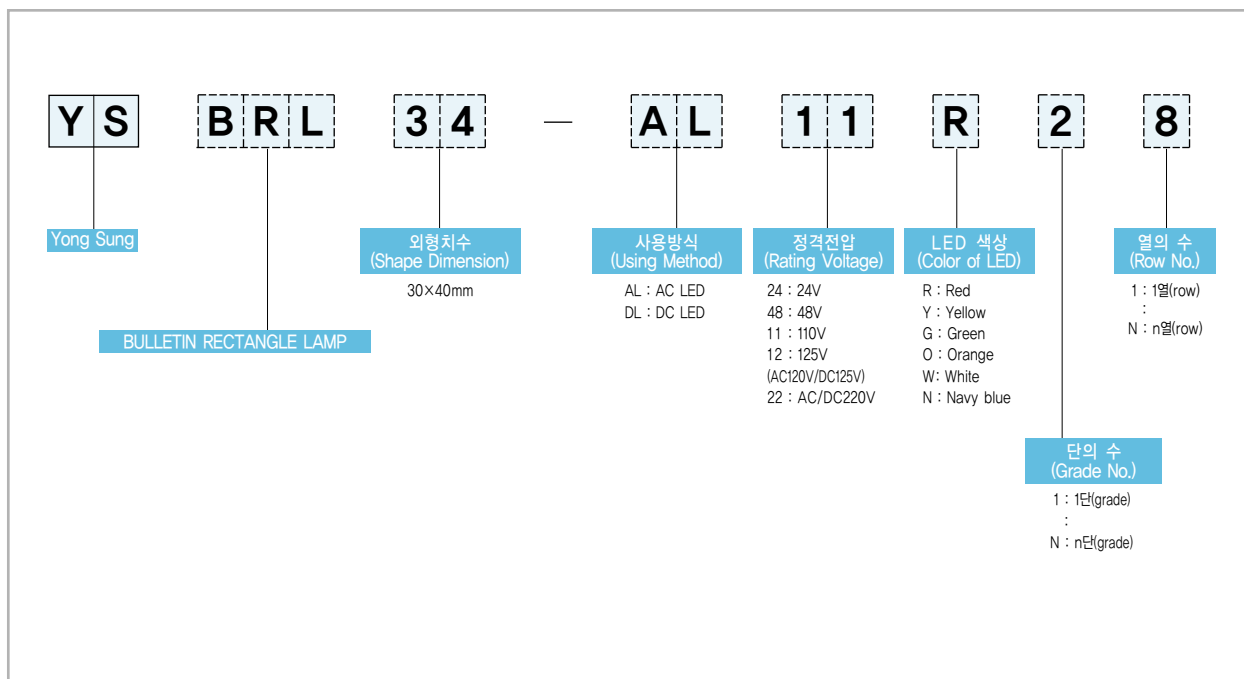
■ IP40



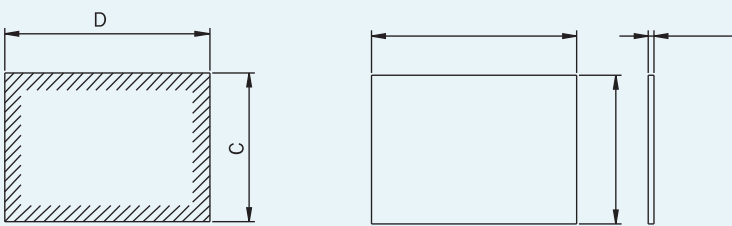
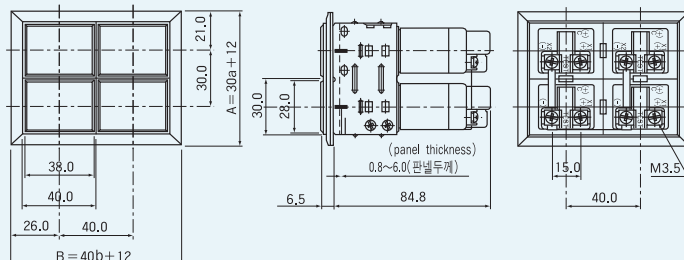
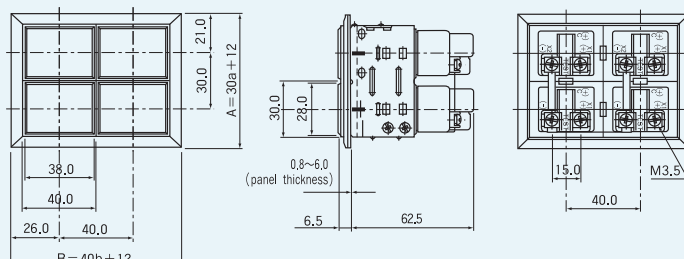
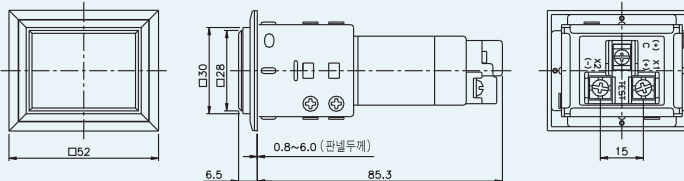
형식 구분도 | Type Classification Diagram - BULB Type |



형식 구분도 | Type Classification Diagram - LED Type BRL-34 |



외형 치수도 및 패널 취부 치수도 | Shape / Panel Dimension Drawing | (unit : mm)

단의 수 (Grade number)	열의 수(Row number)		b	01	02	03	04	05	06	07	08	09	10
	외형치수 (Shape dimension)		B	52	92	132	172	212	252	292	332	372	412
	PANEL 가공치수 (Panel dimension)		(D)	45 ⁰ _{-0.5}	85 ⁰ _{-0.5}	125 ⁰ _{-0.5}	165 ⁰ _{-0.5}	205 ⁰ _{-0.5}	245 ⁰ _{-0.5}	285 ⁰ _{-0.5}	325 ⁰ _{-0.5}	365 ⁰ _{-0.5}	405 ⁰ _{-0.5}
a	A	(C)	▶ PANEL 부착치수 (Panel attachment dimension) : 열(row) : 40n+5 (n : number) 단(grade) : 30n+5 (n : number) ▶ 조각면 SIZE (Size of marking plate) 										
01	42	35 ⁰ _{-0.5}	▶ 외형/치수도 (Shape/dimension drawing) 트랜스식 (Trans Type) 										
02	72	65 ⁰ _{-0.5}											
03	102	95 ⁰ _{-0.5}											
04	132	125 ⁰ _{-0.5}	전전압식 (Overall-voltage Type) / LED식 (DL 24V) 										
05	162	155 ⁰ _{-0.5}											
06	192	185 ⁰ _{-0.5}											
07	222	215 ⁰ _{-0.5}											
08	252	245 ⁰ _{-0.5}	LED식 (LED Type) / (AL 11, 22 · DL 48, 11, 12, 22) 										
09	282	275 ⁰ _{-0.5}											
10	312	305 ⁰ _{-0.5}											

사양 Specification

백열구식 | BULB Type |

전원입력방식 (Power source)		전전압식 (Overall voltage type)	트랜스식 (Trans type)
종별 (Type)		전면조광 (Overall illuminating)	전면조광 (Overall illuminating)
정격전압 (1차전압) Rating voltage (Primary voltage)		AC/DC 24V	AC 110V, 220V
내장전구 (Built-in lightbulb)	정격전압 (Rating voltage)	24V1W	6.3V1W
	2차전압 (Secondary voltage)	24V	5.5V
	BASE	E-10 (BASE Type)	
절연저항 (Insulation resistance)		above 100MΩ	
내전압 (Withstand voltage)		AC 2,500V/min	
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃	
상대습도 (Relative humidity)		45 ~ 85%	

LED식 | LED Type |

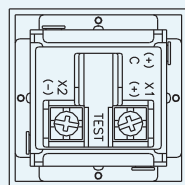
종별 (Type)		단색전면조광 (CHECK단자삽입) (Single color overall illuminating(inserting CHECK terminal))				
정격전압 (1차전압) Rating voltage (Primary voltage)		AC/DC24V	AC110V	DC110V	DC125V	AC/DC220V
내장 LED	정격전압 (Rating voltage)	DC24V				
	정격전류 (Rating current)	below 20mA				
	발광색 (Illuminating color)	Red, Green, Yellow, Orange				
절연저항 (Insulation resistance)		above 100MΩ (DC 500V. Meg)				
내전압 (Withstand voltage)		AC 2,500V/min				
사용주위온도 (Ambient temperature)		-25℃ ~ +40℃				
상대습도 (Relative humidity)		45 ~ 85%				

※AC110V, 220V용은 Check 단자가 없습니다. (Check terminal is not apply for AC110V, 220V.)

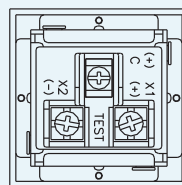
※DC Check 단자 사용시는 X1 단자에 부가회로를 사용할 수 없습니다. (램프 체크시 역전압 발생)

(Additional curcuit can not be used at X1 terminal when using DC terminal.) (Reverse voltage occurance when checking lamp.)

단자 극성 | Terminal Polarity |



(AC TYPE)



(DC TYPE)

7-5

사각 LED 표시등 (SL-48, SL-72, ASL-48)
Square LED Lamp (SL-48, SL-72, ASL-48)

특징 | Features |

- 3색 LED 방식 (적색, 녹색, 황색)
- 매우 쉬운 스냅인 방식
- LED 램프는 전력소모도 절감되고 조도도 보다 밝은 고휘도 LED 적용
- 3 Color LED (Red, Green, Yellow)
- Ultra simple snap-in mounting
- LED Lamp is made up of LED which has high brightness and large reduced consumption of electric power.

사용시의 주의사항 | Using Note |

- 단자의 극성에 주의 하십시오. (공통단자는 음극임)
- DC 정격전압은 완전직류치를 표시한 것입니다.
- Note polarity of terminal in wiring. (Common terminal is negative polarity.)
- DC rating voltage indicates perfect DC value.

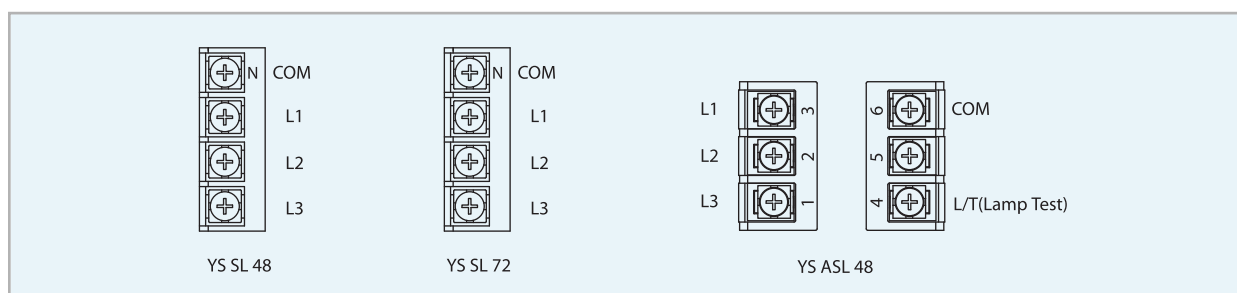
부품 재질 | Part Materials |

부 품 (Part)	재 질 (Materials)
홀 다 (Holder)	아세탈 수지 (Acetal Resin), 나일론 수지 (Nylon 6 Resin)
케이스 (Case)	아세탈 수지 (Acetal Resin), ABS 수지 (ABS Resin)
단 자 (Terminal)	황 동 (Brass)
볼 트 (Bolt)	탄소강 (Carbon steel)

성능 개요 | Performance Summary |

정격전압 (1차전압) Rating voltage (Primary voltage)	AC 110V	AC 220V	DC 24V	DC 110V	DC 125V	DC 100V~130V
발광색 (Illuminating color)	적색, 녹색, 황색, 오렌지색 (Red, Green, Yellow, Orange)					
정격전류 (Rating current)	20mA 이하 (below 20mA)					
절연저항 (Insulation resistance)	100MΩ 이상 (above 100MΩ (DC 500V. Meg))					
내전압 (Withstand voltage)	AC 2,000V/min					
사용주위온도 (Ambient temperature)	-25℃ ~ +40℃					
상대습도 (Relative humidity)	45 ~ 85%					

결선 방법 | Connection Method |



형식 구분도 | Type Classification Diagram

Y S

Yong sung

S L

SQUARE LAMP

4 8

외형치수
(Shape dimension)48 : 48×48
72 : 72×72

A L

사용방식
(Using method)AL : AC LED
DL : DC LED

1 1

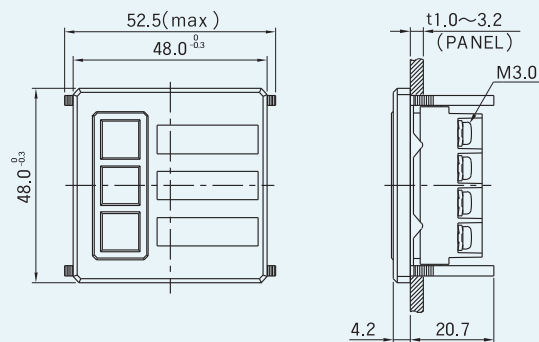
정격전압
(Rating voltage)AC LED
11 : 110V
22 : 220V
DC LED
24 : 24V
11 : 110V
12 : 125V

※48V DC, 120V AC 240V AC는 주문사양임.
(Order specification type for 48V DC, 120V AC, 240V AC)

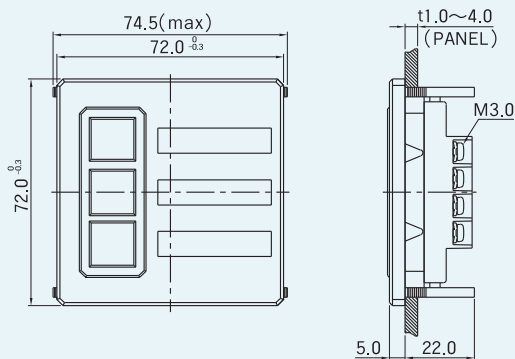
외형 / 치수도 | Shape / Dimension Drawing

(unit : mm)

YS SL 48

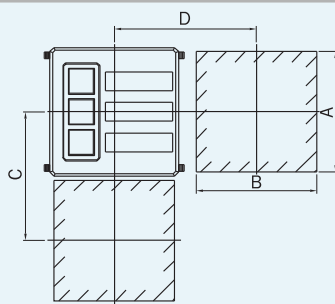


YS SL 72



판넬 가공 치수 | Cut-out Dimension

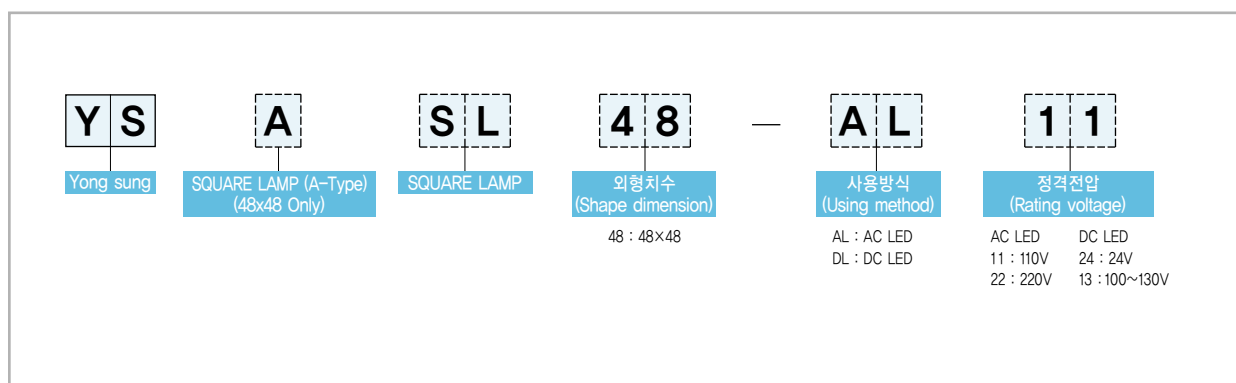
(unit : mm)



▶ 치수구분표

	A	B	C	D
SL 48	45 ⁰ _{-0.5}	45 ⁰ _{-0.5}	48.0(Min)	53.0(Min)
SL 72	67 ⁰ _{-0.5}	67 ⁰ _{-0.5}	72.0(Min)	76.0(Min)

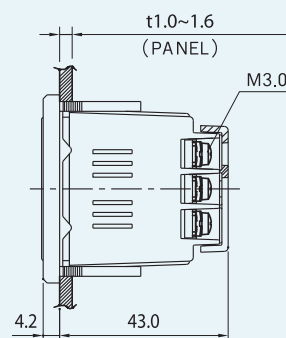
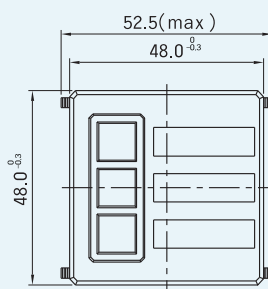
형식 구분도 | Type Classification Diagram



외형 / 치수도 | Shape / Dimension Drawing

(unit : mm)

YS ASL 48



판넬 가공 치수 | Cut-out Dimension

(unit : mm)

