Space-saving, thin style contact blocks
Separable operator part makes handling easy

- Small & light-weight
- Finger-safe screw terminals of IP20 (IEC 60529) enhance safety.
- Separate contact block makes installing and removing easy.
- Pilot lights feature a large lens to ensure a wide viewing angle for increased safety.
- Non-glare matte surfaces on the button, lens, and bezel reduce reflection of ambient light.
- UL, c-UL listed, EN compliant, and CCC approved.

Contact Ratings (Contact Block)

Rated Insulation Voltage	600V			
Rated Thermal Current	10A			
Operating Voltage	24V	120V	240V	380V
AC 50/60 Hz — Resistive Load (AC-12)	10A	10A	6A	2A
AC 50/60 Hz — Inductive Load (AC-15)	10A	6A	3A	1.9A
DC — Resistive Load (DC-12)	8A	2.2A	1.1A	–
DC — Inductive Load (DC-13)	4A	1.1A	0.55A	–

LED Lamp Ratings

Type No.	Rated Voltage	Rated Current	Color Code
LSED-6∗	6V AC/DC	10 mA (A, R, Y) 7 mA (G, PW, S)	A (amber) G (green) PW (pure white) R (red) S (blue) Y (yellow)
LSED-1∗	12V AC/DC	13 mA (A, R, Y) 11 mA (G, PW, S)	
LSED-2∗	24V AC/DC	15 mA (A, R,Y) 14 mA (G, PW, S)	
LSED-H∗	110V AC/DC	5.5 mA	
LSED-M3∗	230/240V AC/DC	2.7 mA	

Note: Specify a color code in place of ∗ in the Type No.
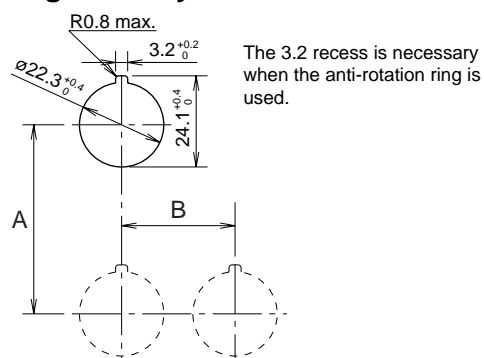Yellow LED lamps are used for white illumination of pilot lights and illuminated pushbuttons.

Incandescent Lamp Ratings

Type No.	Rated Voltage	Ratings
LS-T6	6V AC/DC	6.3V 1W
LS-T8	12V AC/DC	18V 1W
LS-T3	24V AC/DC	30V 1W

Specifications

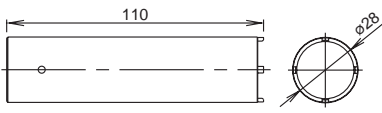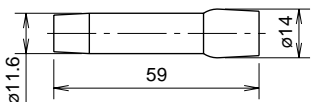| Operating Conditions	Operating temperature:	-20 to +55°C (no freezing)
	Operating humidity:	45 to 85% RH (no condensation)
	Storage temperature:	-45 to +80°C
	Storage humidity:	95% RH maximum
Degree of Protection	From panel front:	IP65 (IEC 60529)
	Terminal:	IP20 (IEC 60529)
Insulation Resistance	100 MΩ	
Dielectric Strength	Contact block:	3500V, 1 minute
	Pilot light:	2100V, 1 minute
Vibration Resistance	Operating extremes:	5 to 55 Hz, amplitude 0.5 mm
	Damage limits:	30 Hz, amplitude 1.5 mm
Shock Resistance	Operating extremes:	100 m/s^2
	Damage limits:	1000 m/s^2
Mechanical Life	<Pushbutton and illuminated pushbutton> Momentary: 5,000,000 operations minimum Maintained: 250,000 operations minimum <Selector switch> 250,000 operations minimum	
Electrical Life	Pushbutton: 100,000 operations minimum Selector switch: 100,000 operations minimum	

Mounting Hole Layout

R0.8 max.

$3.2^{+0.2}_{0}$

ø22.3$^{+0.4}_{0}$

24.1$^{+0.4}_{0}$

The 3.2 recess is necessary when the anti-rotation ring is used.

A   B
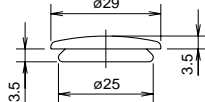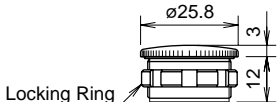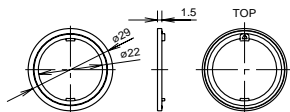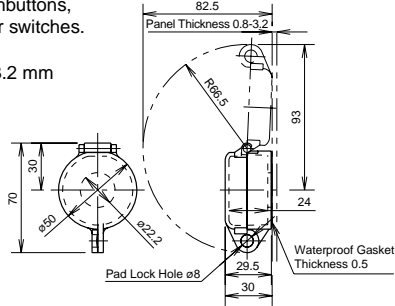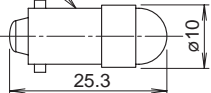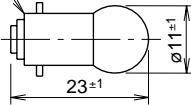
Unit	A (mm)	B (mm)
Pushbutton Selector Switch	50 min.	30 min.
Mushroom Pushbutton	50 min.	40 min.
Pilot Light	30 min.*	30 min.
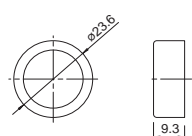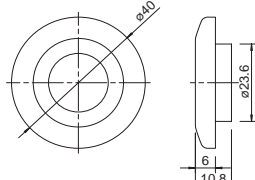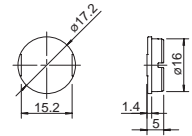
* Keep a minimum spacing of 50 mm when using a lamp of over 1W.
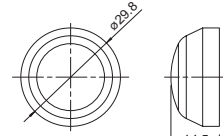
Accessories

Name & Shape	Type No.	Description & Dimensions (mm)	Package Quantity
Locking Ring Wrench	MW9Z-T1	Metallic tool used to tighten the plastic locking ring when installing the YW series control unit on a panel. 110 · ⌀28	1
Lamp Holder Tool	OR-55	Made of rubber. Used for replacing lamps easily. ⌀14 · ⌀11.6 · 59	1
Rubber Mounting Hole Plug	OB-31PN05	Used for plugging unused mounting holes in the panel. Color: Black ⌀29 · 3.5 · ⌀25 · 3.5	5
Metallic Mounting Hole Plug	LW9Z-BM	Used for plugging unused mounting holes in the panel. Weight: Approx. 18g ⌀25.8 · 3 · 12 Locking Ring	1
Anti-Rotation Ring	HW9Z-RLPN10	Prevents rotation of switches in panel. Mainly used with selector switches when no nameplate is used. With waterproof gasket (IP65). Made of plastic (black). Applicable panel thickness: 1.2 to 4.5 mm ⌀29 · ⌀22 · 1.5 · TOP	10
Padlock Cover	HW9Z-KL1	Plastic hinged cover to protect pushbuttons, illuminated pushbuttons, or selector switches. Degree of protection: IP65. Applicable panel thickness: 0.8 to 3.2 mm 82.5 · Panel Thickness 0.8-3.2 · R66.5 · 93 · 30 · 70 · ⌀50 · ⌀22.2 · 24 · 29.5 · 30 · Pad Lock Hole ⌀8 · Waterproof Gasket Thickness 0.5	1
LED Lamp Base BA9S/14 ⌀10 · 25.3	LSED-6∗	6V AC/DC	Specify a color code in place of ∗ in the Type No. A (amber), G (green), PW (pure white), R (red), S (blue), Y (yellow) Applicable units: • LED illuminated pilot lights • LED illuminated pushbuttons For the rated current, see page 4. Note: Yellow LED lamps are used for white illumination of pilot lights and illuminated pushbuttons.	1
	LSED-1∗	12V AC/DC		
	LSED-2∗	24V AC/DC		
	LSED-H∗	110V AC/DC		
	LSED-M3∗	230/240V AC/DC		
Incandescent Lamp Base BA9S/13 ⌀11±1 · 23±1	LS-T6P	6.3V, 1W	One pack contains 100 incandescent lamps.	100
	LS-T8P	18V, 1W		
	LS-T3P	30V, 1W		
Single Contact Block	YW-E10P	Contact: 1NO		10
	YW-E01P	Contact: 1NC		

Name	Style	Type No.	Color Code	Dimensions (mm)	Package Quantity
Button (for pushbuttons)	Extended	**YW9Z-B12∗PN10**	B (black) G (green) R (red) S (blue) W (white) Y (yellow)	Extended ⌀23.6 / 9.3	10
	Mushroom ⌀40mm	**YW9Z-B14∗PN10**			
Lens (for illuminated pushbuttons)	Extended	**YW9Z-L12∗PN10**	A (amber) C (clear) G (green) R (red) S (blue) Y (yellow)	Mushroom ⌀40mm ⌀40 / ⌀23.6 / 6 / 10.8	10
	Mushroom ⌀40mm	**YW9Z-L14∗PN10**			
Marking Plate (for illuminated pushbuttons)	—	**YW9Z-P12PN10**	—	⌀17.2 / ⌀16 / 15.2 / 1.4 / 5	10
Lens (for pilot lights)	Dome	**YW9Z-PL12∗PN10**	A (amber) C (clear) G (green) R (red) S (blue) W (white) Y (yellow)	⌀29.8 / 14.5	10

Separate DIN Rail Mounting Type Transformer
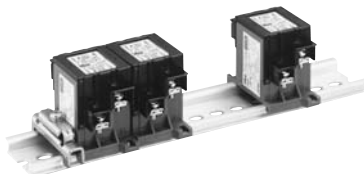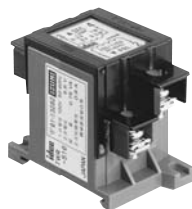
• **Type No.**

Primary Voltage (50/60 Hz)	Type No.	Applicable Lamp Rating
110V AC	TWR-516	One full voltage type illuminated unit containing LED lamp LSED-6 (6V AC/DC) or incandescent lamp LS-T6 (6.3V)
115V AC	TWR-5116	
120V AC	TWR-5126	
220V AC	TWR-526	
230V AC	TWR-5236	
240V AC	TWR-5246	
380V AC	TWR-5386	
440V AC	TWR-546	
480V AC	TWR-5486	

Note: A finger-safe terminal cover is supplied with the transformer.

• **Dimensions (mm)**

Secondary Terminal Screws M3.5

Primary Terminal Screws M3.5

2-⌀3.5 Mounting Holes

22 30 40 48 52 40 41