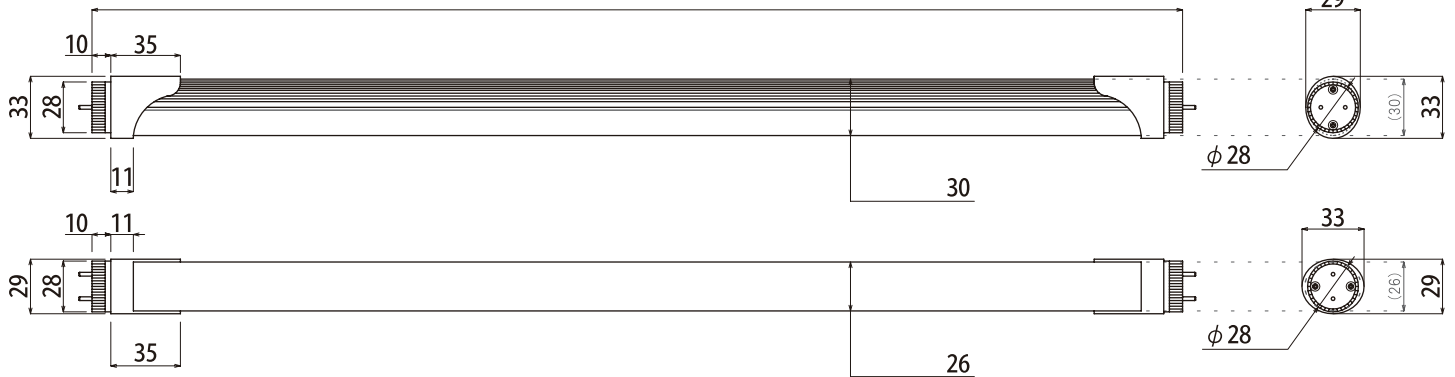


OVAL TUBE STRAIGHT LED LAMP - NFL SERIES

20W TYPE / 40W TYPE (G13 BASE)

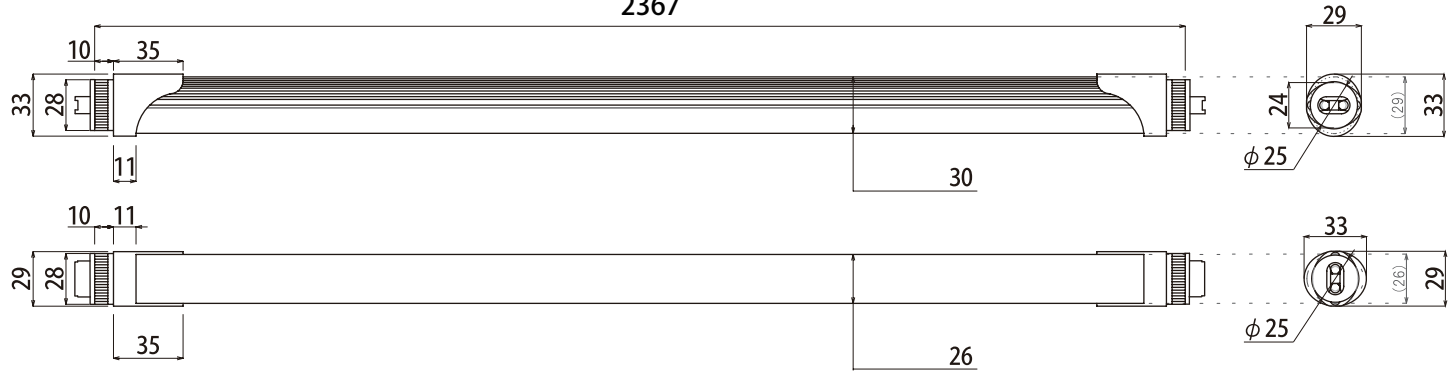
(DIMENSIONS UNIT: mm)

20W TYPE: 580 mm / 40W TYPE: 1198 mm



110W TYPE (R17D BASE)

2367



SPECIFICATIONS TABLE

PRODUCT CODE	20W		40W ENERGY-SAVING FLUORESCENT LAMP				HIGH-BRIGHTNESS 40W TYPE		110W	
LIGHT COLOR	NFL20-5K	NFL20-6K	NFL40-5K	NFL40-6K	NFL40H-5K	NFL40H-6K	NFL110-5K	NFL110-6K		
LAMP BASE	NATURAL WHITE LIGHT 5,000K	DAYLIGHT WHITE LIGHT 6,000K	NATURAL WHITE LIGHT 5,000K	DAYLIGHT WHITE LIGHT 6,000K	NATURAL WHITE LIGHT 5,000K	DAYLIGHT WHITE LIGHT 6,000K	NATURAL WHITE LIGHT 5,000K	DAYLIGHT WHITE LIGHT 6,000K		
POWER CONSUMPTION	G13 ROTARY (ROTATING TYPE)								R17D ROTARY (ROTATING TYPE)	
CURRENT	7.5W		15W				22W		38W	
LUMINOUS FLUX	100V : 0.09A		100V : 0.17A		100V : 0.25A		100V : 0.42A		100V : 0.21A	
WEIGHT	1,140lm		2,260lm				3,330lm		5,740lm	
BEAM ANGLE	198g		318g				318g		635g	
COMPATIBLE FREQUENCY	140°									
POWER FACTOR	AC100V-240V (±10%)									
POWER SUPPLY METHOD AT LAMP BASE	50HZ / 60HZ									
PROTECTION RATING (IP)	≥0.9									
COLOR RENDERING INDEX (CRI)	TWO-END POWER SUPPLY, BUILT-IN DRIVER									
OPERATING ENVIRONMENT TEMPERATURE	INDOOR USE ONLY									
COLOR RENDERING INDEX (CRI)	83RA (CRI 83)									
OPERATING TEMPERATURE	-20°C ~ 50°C (HUMIDITY ≤ 90%)									
DESIGN LIFESPAN	AVERAGE 40,000 HOURS (AT 25°C)									
MATERIAL	LIGHT-EMITTING PART & BOTH ENDS: POLYCARBONATE ELECTRICAL CONTACTS: COPPER (NICKEL-PLATED) HEATSINK: ALUMINUM									
CERTIFICATIONS OBTAINED	STABILITY OF BUILT-IN BALLAST LAMPS		EN60968 (1990) +A1 (1993) +A2 (1999)							
	LIMIT VALUES FOR RADIO INTERFERENCE CHARACTERISTICS		EN55015 (2006) +A1 (2007) +A2 (2009)							
	EMC IMMUNITY (NOISE RESISTANCE)		EN61547							
	EMC EMISSIONS (NOISE RADIATION)		EN61000-3-2							
	LIMITS FOR VOLTAGE FLUCTUATIONS AND FLICKER		EN61000-3-3							
	SPECIFIC SAFETY AGENCIES SUCH AS AVIATION AND MARITIME AUTHORITIES		FCC part15							
			ROHS							
WARRANTY PERIOD	3 YEARS FROM THE SHIPPING DATE									

ACCESSORIES

- THE 110W TYPE INCLUDES AN ANTI-DROP SAFETY ACCESSORY. FOR SAFETY, ALWAYS USE THIS ACCESSORY.

IMPORTANT NOTES

- ACTUAL BRIGHTNESS MAY VARY DEPENDING ON THE USAGE ENVIRONMENT AND OPERATING TIME. THE VALUES IN THIS DOCUMENT ARE FOR REFERENCE ONLY.
- COLOR TEMPERATURE MAY VARY BETWEEN LED COMPONENTS OR PRODUCTION BATCHES.
- PRODUCT COLOR MAY DIFFER FROM THE ACTUAL ITEM.
- SPECIFICATIONS AND APPEARANCE MAY BE CHANGED WITHOUT PRIOR NOTICE.
- DO NOT USE CONTINUOUSLY FOR 24 HOURS TO AVOID SIGNIFICANT REDUCTION IN LIFESPAN.
- ◆ NOTES ON INSULATION RESISTANCE MEASUREMENT
MEASURE UNDER 250V AND WITHIN 5 SECONDS. EXCEEDING THESE LIMITS MAY CAUSE DAMAGE AND WILL NOT BE COVERED BY WARRANTY.
- WARRANTY
3-YEAR WARRANTY FROM THE COMPANY'S SHIPPING DATE.

SIZE
A4

PRODUCT
NAME

OVAL TUBE STRAIGHT LED LAMP - NFL SERIES

NFL-001

NIKKEN HARDWARE

SAFETY PRECAUTIONS

⚠ WARNING / CAUTION

- Installation must be carried out securely in accordance with the instructions in this document. Improper installation may cause fire, electric shock, or falling.
- Do not modify the device. This may cause fire, electric shock, or falling.
- Do not use in locations with strong vibration, impact, corrosive gas, or areas affected by salt. This may cause fire, electric shock, or falling.
- This product is for indoor use only.
- Do not cover with thermal insulation, soundproofing materials, or similar materials during use. This may cause fire.
- Do not use a power supply outside the rated voltage (rated voltage $\pm 10\%$) indicated on the device. This may cause electric shock or fire.
- Keep a minimum distance of 0.15 m between the device and the illuminated surface. A shorter distance may cause discoloration of the surface or fire.
- Do not use in direct sunlight, humid places, areas exposed to rain, or dusty locations. This may cause fire, electric shock, or falling.
- The ambient temperature must be between -20°C and 50°C . Do not use outside this range to avoid fire risk.
- Do not install this LED fluorescent lamp into a fixture whose ballast wiring has been cut. This may cause electric shock or fire.
- Do not adjust brightness. Do not connect to a dimmer circuit.

INSTALLATION METHOD FOR LED FLUORESCENT LAMP

※ This method applies to all types: glow starter, rapid start, and inverter.

(Before starting work, be sure to turn off the power.)

Read the instruction manual carefully before performing the work.

Remove the product from the packaging and check for any external abnormalities.

According to the wiring instructions below, disconnect and remove both the glow starter and the ballast.

Rewire so that the power supply connects directly to the LED fluorescent lamp.

After completing the wiring, install the LED lamp into the socket to finish.

《NOTES》 □

Electrical wiring work must be carried out by a qualified electrician.

For safety, be sure to turn off the power before starting any work.

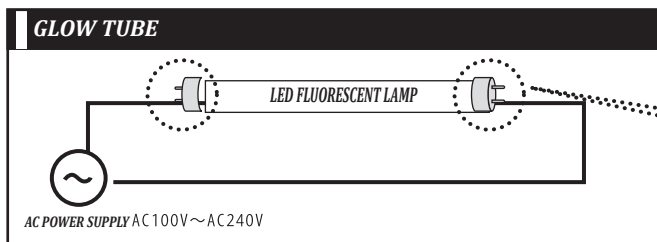
If you want to restore the fixture to its original condition, reconnect any wires that were previously disconnected before returning it to normal.

Do not install a standard fluorescent lamp into a fixture whose ballast has been disconnected.

For glow-starter types, the lamp may light when the glow starter is removed, but this can cause unstable illumination or damage to the LED. For all types (glow, rapid start, inverter), perform wiring according to the instructions below.

If the fixture's socket uses a rotating "clamp" type to secure the lamp, the ratchet base may rotate together when installing this product. In this case, insert the product while holding the tube steady, then rotate the ratchet parts at both ends to secure it.

When installing the 110W replacement type, be sure to use fall-prevention accessories.



THE LAMP ENDS ON BOTH SIDES OF THE LED FLUORESCENT TUBE ARE INTERNALLY CONNECTED, SO CONNECTING ON EITHER SIDE WILL NOT CAUSE ANY PROBLEM.

