Line Lights
LND2 Series

Provides diffused light from an emitting surface equipped with LEDs in straight lines

LED color
Custom orders accepted

Size
Custom orders accepted

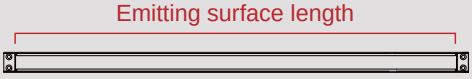
Applications Inspection for damage or dents in metal cylindrical parts, inspection for damage or dents in motor shafts, inspection for foreign material on clear film, etc.

Suitable for All Types of Line Sensor Inspections

This Line Light achieves brightness equivalent to a fluorescent lamp while keeping the price down.

Emitting surface length

You can select from 101 mm, 201 mm, 301 mm, 401 mm, 501 mm, 603 mm, 703 mm, 803 mm, 903 mm, 1003 mm, 1103 mm and 1,203 mm.



For a custom order, we can create an emitting surface with a length with a 100 mm pitch.

LED color

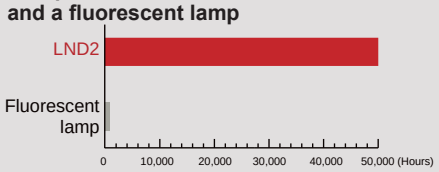
For emitted LED color, we have a lineup consisting of:
Red and White
Select your Light Unit based on the details of your inspections.

For a custom order, we can create LEDs that emit blue, green, IR, or UV.

Also Perfect for Replacing Fluorescent Lamps

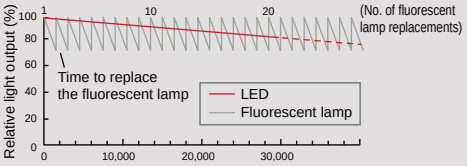
LEDs have a long service life, so the bulbs don't burn out like fluorescent lamps, thus reducing costs for lamp replacement and work hours.

Comparison of service life between the LND2 (red) and a fluorescent lamp



Calculated values with an intensity of 100%, ambient temperature of 25ºC and a light output drop of up to 50%.
Actual values may vary.
Assuming the service life of a fluorescent lamp is 1,500 hours.

Change in the amount of light from the LEDs and work hours for replacing fluorescent lamps



Imaging comparing the change in LED light and a fluorescent lamp that is replaced every 1,500 hours.

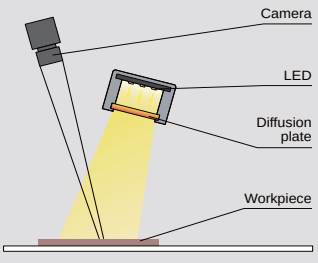
Applications

Inspection for foreign material on clear films

Example Configuration

Provides diffused light with a high degree of uniformity by mounting LEDs with high density.

LND2 series

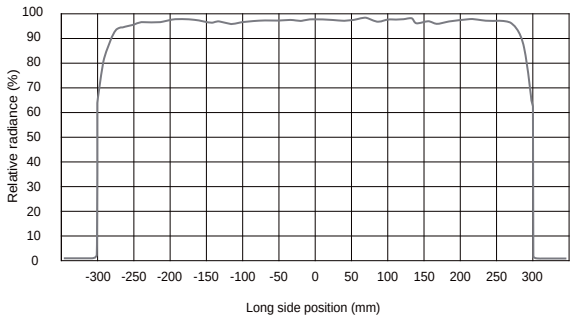


Data (Representative Example)

The graph included is for reference only. Actual values may vary.

LND2-600SW

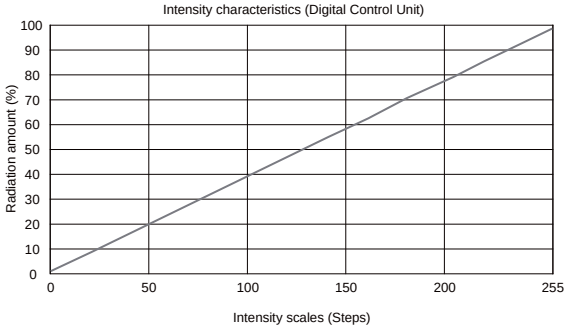
Relative radiance distribution



The graph included is for reference only. Actual values may vary.

LND2-300SW

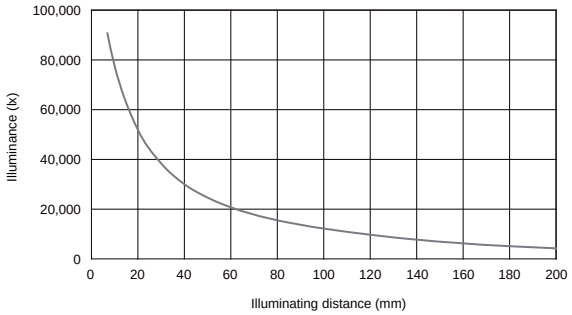
Output characteristics



Actual measurement values using the Digital Control Unit PD3 series.
Results for individual products may vary.

LND2-300SW

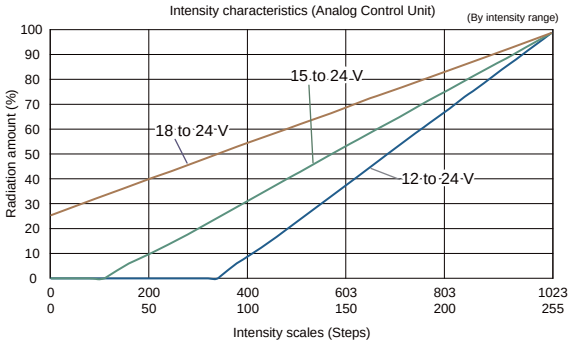
Change in illuminance



Actual measurement values at 100% intensity in each illuminating distance.
Results for individual products may vary.

LND2-900SW

Output characteristics



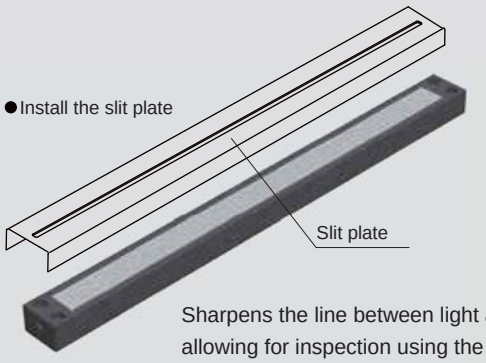
Actual measurement values using the Analog Control Unit PSB4-30024-PEI.
Results for individual products may vary.
Measured in each voltage range because the Analog Control Unit PSB4-30024-PEI has a switching function for the lower limit of output voltage.

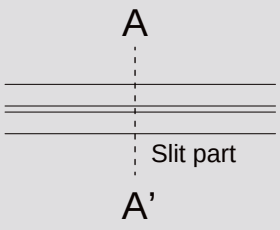
Custom Order

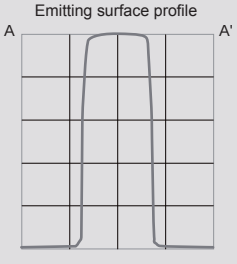
Please contact your sales representative.

E.g.: Slit specifications (Install a slit plate on the emitting surface)

Result: Uses the edge of the emitting surface, effective for inspections for dents and fish eyes where the change in the surface shape is slight.







(Conceptual image)

Sharpens the line between light and dark for the Light Unit, allowing for inspection using the emitting surface's edge.

LND2 Series

Lineup

Model name	LED color	Power consumption	Peak wavelength / correlated color temperature	Extension cables	Recommended Control Units	Weight
LND2-100SW	White	24 V / 5.8 W	5,500 K	FCB*3 Straight Cable	PD3*2 POD*1	140 g
LND2-200SW		24 V / 12 W				170 g
LND2-300SW		24 V / 18 W				200 g
LND2-400SW		24 V / 24 W				250 g
LND2-500SW		24 V / 29 W				300 g
LND2-600SW		24 V / 35 W				360 g
LND2-700SW		24 V / 41 W		FCB-EL2 Straight Cable	PD3-10024-8*2 POD-22024-4-PEI*1 PSB4-30024-PEI	405 g
LND2-800SW		24 V / 47 W				455 g
LND2-900SW		24 V / 53 W				505 g
LND2-1000SW		24 V / 58 W				560 g
LND2-1100SW		24 V / 64 W				615 g
LND2-1200SW		24 V / 70 W				670 g
LND2-100RD	Red	24 V / 7.6 W	630 nm	FCB*3 Straight Cable	PD3*2 POD*1	140 g
LND2-200RD		24 V / 16 W				170 g
LND2-300RD		24 V / 23 W				200 g
LND2-400RD		24 V / 31 W				250 g
LND2-500RD		24 V / 38 W				300 g
LND2-600RD		24 V / 46 W				360 g
LND2-700RD		24 V / 53 W		FCB-EL2 Straight Cable	PD3-10024-8*2 POD-22024-4-PEI*1 PSB4-30024-PEI	405 g
LND2-800RD		24 V / 61 W				455 g
LND2-900RD		24 V / 69 W				505 g
LND2-1000RD		24 V / 76 W				560 g
LND2-1100RD		24 V / 84 W				615 g
LND2-1200RD		24 V / 91 W				670 g

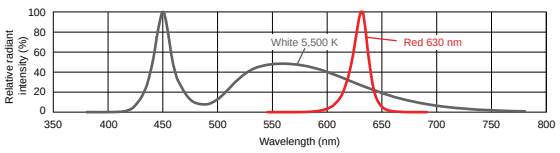
Extension Cables ▶ P.308 List of Control Unit Specifications ▶ P.253

*1 Custom products with a PWM frequency of 500 kHz are available for Digital Control Unit PD3 series. Please contact your sales representative for details.
*2 The cables with a model name that ends with "-ME7", "-EL2", "-PF", or "-PF-EL9" are not included.

The emitting surface is available in sizes of 100 mm units. For details about other sizes, inquire with your sales representative.
In addition, we accept custom orders, such as changes to the LED color (blue/green/IR, etc.) and size changes. Inquire at your sales representative for details.

LED Properties

Spectral distribution



Offers you the most suitable lens filter for each wavelength. For details about the lens filter, refer to P.299.

Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use.
The data included is for reference only. Actual values may vary.

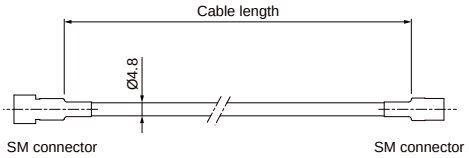
Extension Cables

FCB

Model name	Cable length
FCB-1	1 m
FCB-2	2 m
FCB-3	3 m
FCB-5	5 m

Extension Cables Page ▶ P.308

(mm)

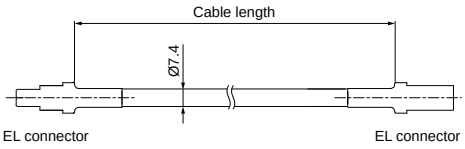


Cable permitted bending radius: 28.8 mm

FCB-EL2

Model name	Cable length
FCB-1-EL2	1 m
FCB-2-EL2	2 m
FCB-3-EL2	3 m
FCB-5-EL2	5 m
FCB-10-EL2	10 m
FCB-15-EL2	15 m

Extension Cables Page ▶ P.308

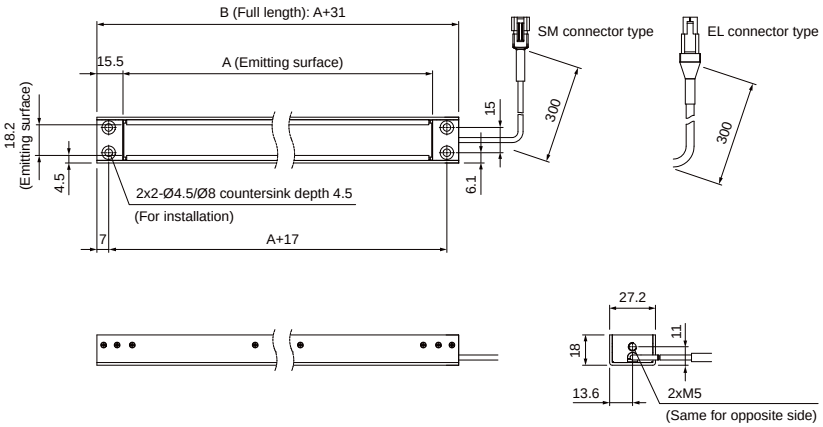


Cable permitted bending radius: 29.6 mm

The above cable permitted bending radii are reference values. Actual values may vary.

Dimensions (mm)

Model name	
SM connector type	LND2-100
	LND2-200
	LND2-300
	LND2-400
	LND2-500
	LND2-600
EL connector type	LND2-700
	LND2-800
	LND2-900
	LND2-1000
	LND2-1100
	LND2-1200



	Model name	A (Emitting surface)	B (Full length)		Model name	A (Emitting surface)	B (Full length)
White	LND2-100SW	101	132	Red	LND2-100RD	101	132
	LND2-200SW	201	232		LND2-200RD	201	232
	LND2-300SW	301	332		LND2-300RD	301	332
	LND2-400SW	401	432		LND2-400RD	401	432
	LND2-500SW	503	534		LND2-500RD	503	534
	LND2-600SW	603	634		LND2-600RD	603	634
	LND2-700SW	703	734		LND2-700RD	703	734
	LND2-800SW	803	834		LND2-800RD	803	834
	LND2-900SW	903	934		LND2-900RD	903	934
	LND2-1000SW	1,003	1,034		LND2-1000RD	1,003	1,034
	LND2-1100SW	1,103	1,134		LND2-1100RD	1,103	1,134
	LND2-1200SW	1,203	1,234		LND2-1200RD	1,203	1,234

You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.5 for details.