

LUMIFA EF1A

Hazardous Locations • Oil & Gas • Waste Water Treatment • Painting & Chemical Plants



PRODUCT DESCRIPTION

Thanks to its rugged construction and Type 4X enclosure rating, the EF1A series is ideal for demanding applications in oil and gas, water treatment, chemical plants—and more. Units integrate heavy-duty aluminum housing with a reinforced glass lens, as well as UL-rated LED floodlights (Class 1, Zones 1 and 2). With their variety of mounting options, including adjustable, fixed angle or no mounting brackets, the EF1A can be installed virtually anywhere.

KEY FEATURES

- Heavy-duty aluminum housing with reinforced glass lens
- Optional clear or diffused lenses
- Fixed or angle adjustable bracket options
- Long-lasting, maintenance-free LEDs
- ON/OFF switch option
- Wide or narrow optical dispersion

GENERAL SPECIFICATIONS

Model	EF1A-11	EF1A-12
Rated Voltage	24V DC	100 to 240V AC
Voltage Range	21.6 to 26.4V DC	90 to 264V AC
Rated Power (typ.), W	17 (at rated voltage)	19 (at rated voltage)
Dielectric Strength	500V AC, 1 minute, input - FG	2000V AC, 1 minute, input - FG
Insulation Resistance	100M Ω minimum (500V DC megger) input - FG	
Vibration Resistance	Frequency 5 to 55Hz, amplitude 0.5mm	
Shock Resistance	1000m/s ²	
Operating Temperature	-20 to +50°C (no freezing)	
Operating Humidity	45 to 85% RH (no condensation)	
Storage Temperature	-35 to +70°C (no freezing)	
Life ¹	Over 50,000 hours (The illumination duration in which the brightness maintains a minimum of 70% of initial value at 25°C.)	
Degree of Protection	Type 4X (IP67), Type 3S (IP65) with ON/OFF switch	
Material	Housing: Aluminum, Front Panel: Stainless Steel, Mounting Bracket: Stainless Steel, Lens: Reinforced Glass	
Weight (approx.), kg	2.9 (without mounting bracket), 3.1 (with mounting bracket)	

1. LED life depends on the operating environment.



LED OPTICAL SPECIFICATIONS

Lens Type	Clear		Diffused	
Collecting Lens (Optical Dispersion)	Narrow	Wide	Narrow	Wide
Number of LEDs	16			
Illumination Color	Cool White			
Color Temperature (typ.), K	5700			
Luminous Flux (typ.), lm	960			
Reference Illuminance (typ.) at 1.0m directly below, lx	1100	450	205	175

CERTIFICATIONS & COMPLIANCES

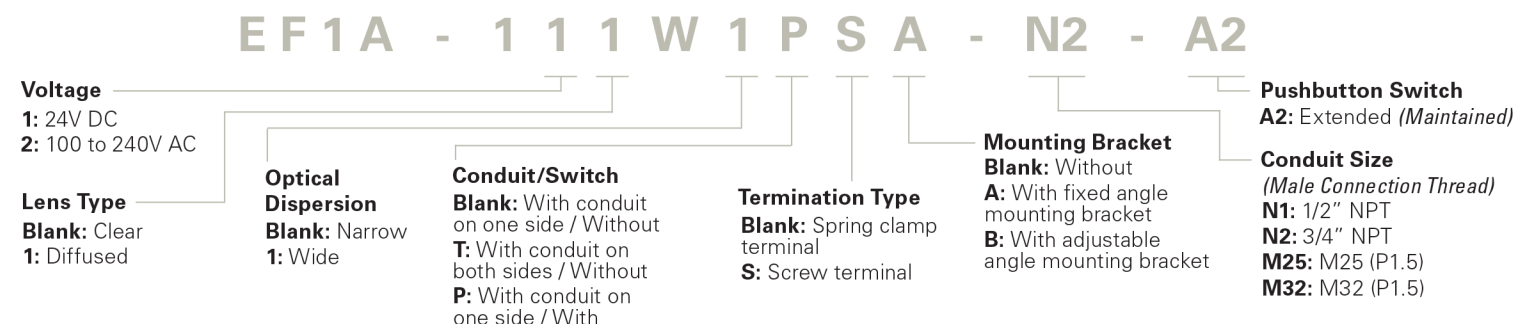
NEC and CEC	IEC and ATEX (94/9/EC)
Cl. I, Zone 1, Groups IIB	Zones 1 & 21 and 2 & 22
UL: Class I, Zone 1, AEx d IIB T4 Gb	ATEX: II 2G Ex d IIB T4 Gb, II 2D Ex tb IIIC T 130°C Db IP67 (or IP65)
c-UL: Ex d IIB T4 Gb X	IECEx: Ex d IIB T4 Gb Ex tb IIIC T 130°C Db IP67 (or IP65)
Certificate/file number: UL/c-UL E353024	Certificate numbers: DEMKO 14 ATEX 1208667X IECEx UL 14.0048X

PART NUMBERS

Rated Voltage	100 to 240V AC		24V DC	
Optical Dispersion	Narrow	Wide	Narrow	Wide
Lens Type ①	Blank: Clear Glass, 1: Diffused Glass			
Conduit Entry ②	Blank: One Side, T: Both Sides, P: One Side, (Another Side Switch)*			
Termination Type ③	Blank: Spring Clamp Terminal, S: Screw Terminal			
Conduit Size ④	N1: 1/2"NPT, N2: 3/4"NPT, M25: M25 (P1.5), M32: M32 (P1.5) (Male connection thread)			
Pushbutton Switch ⑤	Empty: Without pushbutton switch—type 4x (IP67), A2: With pushbutton switch—type 3S (IP65)			
Mounting Bracket	Blank: Without, A: With fixed angle mounting bracket, B: With adjustable mounting bracket			
Part Number	EF1A-12①W②③-④-⑤	EF1A-12①W1②③-④-⑤	EF1A-11①W②③-④-⑤	EF1A-11①W1②③-④-⑤
	EF1A-12①W②③A-④-⑤	EF1A-12①W1②③A-④-⑤	EF1A-11①W②③A-④-⑤	EF1A-11①W1②③A-④-⑤
	EF1A-12①W②③B-④-⑤	EF1A-12①W1②③B-④-⑤	EF1A-11①W②③B-④-⑤	EF1A-11①W1②③B-④-⑤

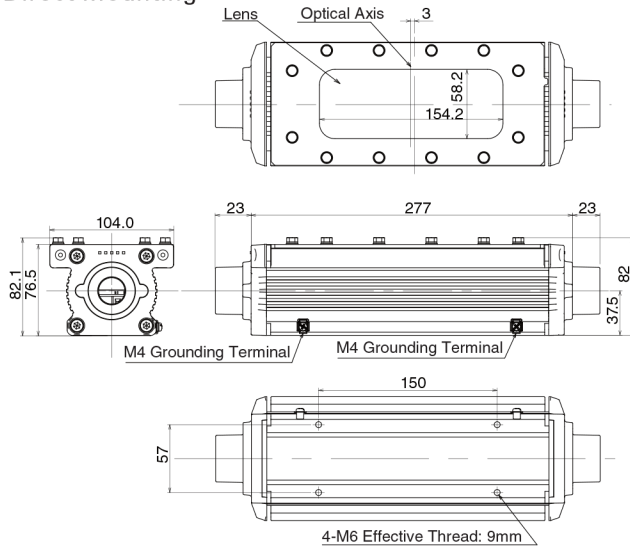
*End of Part Number is marked A2 (On/Off Pushbutton Switch)

PART NUMBER STRUCTURE (USE FOR INTERPRETING PART NUMBERS ONLY)

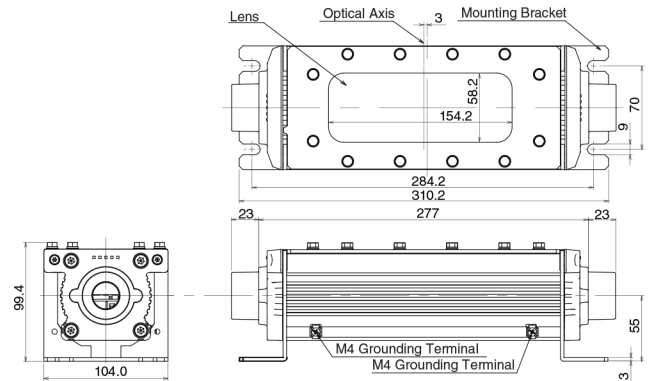


DIMENSIONS (mm)

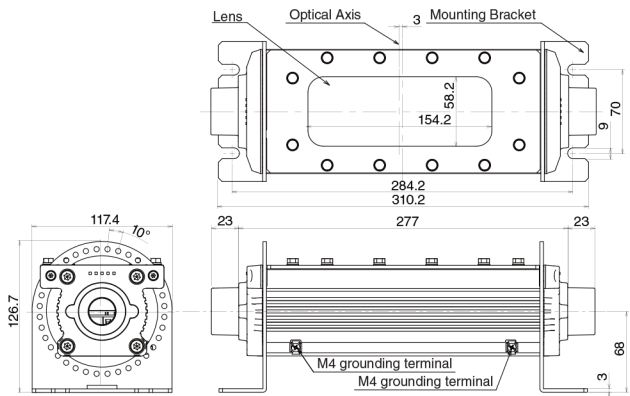
Direct Mounting



With Fixed Mounting Bracket

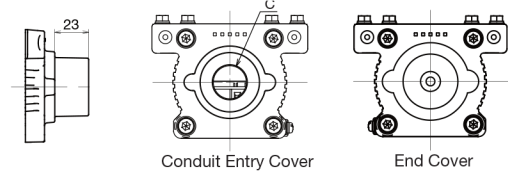


With Angle Adjustable Bracket



Dimension of Conduit Entry, ON/OFF Switch, and End Cover

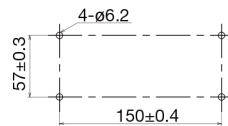
Conduit Entry or End Cover



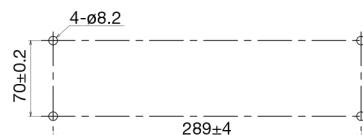
Conduit Entry Size	C
N1	1/2" NPT
N2	3/4" NPT
M25	M25 ^{P1.5}
M32	M32 ^{P1.5}

Mounting Hole Layout

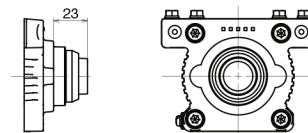
Direct Mounting



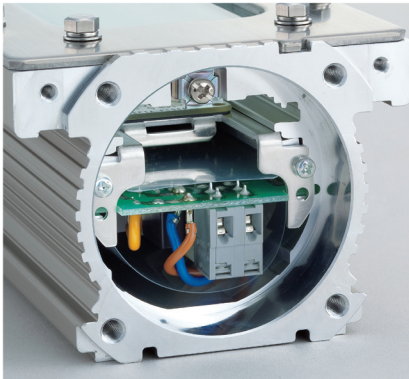
With Mounting Bracket/Angle Adjustable Bracket



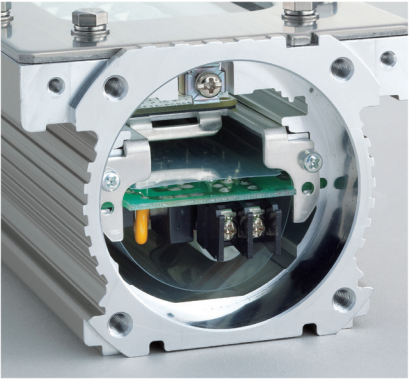
With ON/OFF Switch



TERMINATION TYPE



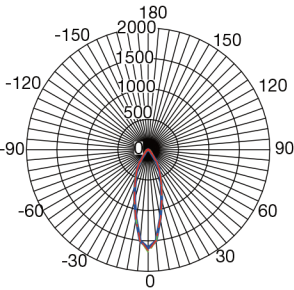
Spring Clamp Terminal



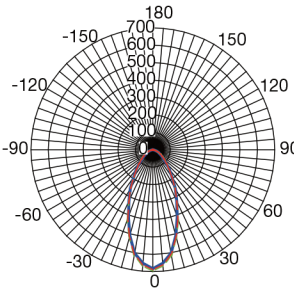
Screw Terminal

OPTICAL DISTRIBUTION (cd/1000lm)

Narrow

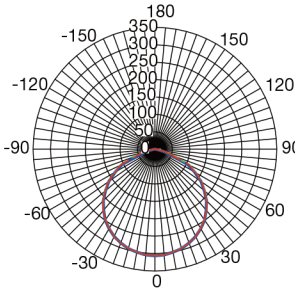


Lens Type:
Clear Glass

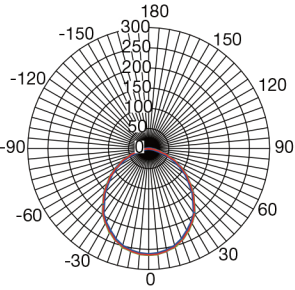


Lens Type:
Diffused Glass

Wide



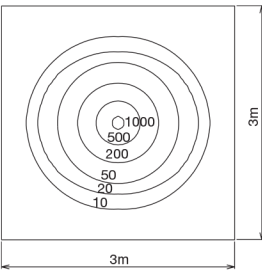
Lens Type:
Clear Glass



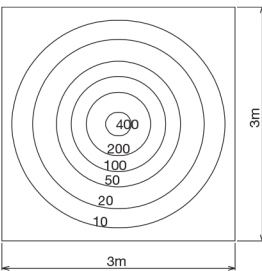
Lens Type:
Diffused Glass

ILLUMINANCE CHART at 1m (lx)

Narrow

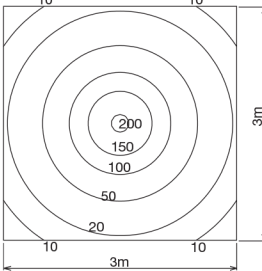


Lens Type:
Clear Glass

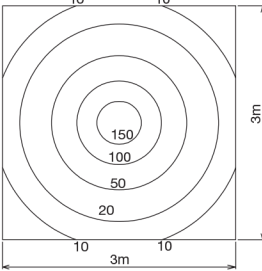


Lens Type:
Diffused Glass

Wide



Lens Type:
Clear Glass



Lens Type:
Diffused Glass