

Opaline M 100

IP67-rated LED luminaire



Opaline M is a waterproof, LED luminaire that offers homogenous direct lighting with no visible dots, perfect for parking lots or architectural lighting.

Fully encapsulated inside an aluminium housing, the Opaline M is both waterproof and UV resistant. This ensures that the high-quality NICHIA LEDs, and the internal current stabilization system, are fully protected.

The Opaline M is ruggedized and ready for a wide range of outdoor direct lighting uses.

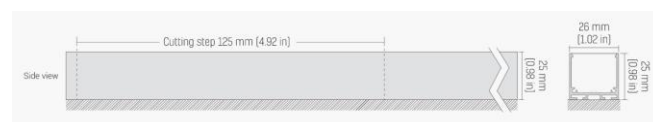
Key features

- Waterproof IP67 LED line for outdoor linear lighting applications
- Aluminium housing with opal encapsulation for homogenous illumination
- UV resistant
- 24V DC voltage input
- 3-step MacAdam or Single Bin LEDs
- Dimmable
- Highest quality Nichia LED ICs
- High CRI80+ (TW), CRI90+ (White, RGBW)
- Stabilized current design with reverse voltage protection
- Available in lengths up to 3 m in 62.5 mm steps

Applications

- Parking lots
- Outdoor direct lighting
- Outdoor architectural lighting

Dimensions



Specification

Product	Power	Voltage	CRI	CCT	Lumens / m	Efficacy
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W 918 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	1800K	148 Lm/m	31 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W 920 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	2000K	157 Lm/m	33 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W 922 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	2200K	172 Lm/m	36 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W 925 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	2500K	185 Lm/m	39 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T927 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	2700K	259 Lm/m	54 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T930 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	3000K	273 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T935 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	3500K	279 Lm/m	58 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T940 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	4000K	283 Lm/m	59 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T950 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	5000K	284 Lm/m	59 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T957 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	5700K	374 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 04W T965 L1000 / HR.P1X.L200/	4.8 W/m	24 V	CRI 90+	6500K	274 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W 918 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	1800K	295 Lm/m	31 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W 920 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	2000K	311 Lm/m	32 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W 922 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	2200K	336 Lm/m	35 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W 925 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	2500K	365 Lm/m	38 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T927 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	2700K	514 Lm/m	54 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T930 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	3000K	318 Lm/m	33 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T935 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	3500K	326 Lm/m	34 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T940 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	4000K	329 Lm/m	34 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T950 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	5000K	349 Lm/m	36 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T957 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	5700K	346 Lm/m	36 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 09W T965 L1000 / HR.P1X.L200/	9.6 W/m	24 V	CRI 90+	6500K	344 Lm/m	36 Lm/W

Specifications are for a Luminaire (I) with End Connection (E), in Anodized Grey (AGY), that is 1000 mm long (L1000).

Specification

Product	Power	Voltage	CRI	CCT	Lumens / m	Efficacy
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W 918 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	1800K	439 Lm/m	30 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W 920 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	2000K	460 Lm/m	32 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W 922 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	2200K	498 Lm/m	35 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W 925 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	2500K	540 Lm/m	38 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T927 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	2700K	764 Lm/m	53 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T930 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	3000K	803 Lm/m	56 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T935 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	3500K	824 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T940 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	4000K	835 Lm/m	58 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T950 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	5000K	839 Lm/m	58 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T957 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	5700K	810 Lm/m	56 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 14W T965 L1000 / HR.P1X.L200/	14.4 W/m	24 V	CRI 90+	6500K	810 Lm/m	56 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W 918 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	1800K	579 Lm/m	30 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W 920 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	2000K	606 Lm/m	32 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W 922 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	2200K	655 Lm/m	34 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W 925 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	2500K	711 Lm/m	37 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T927 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	2700K	1010 Lm/m	53 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T930 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	3000K	1061 Lm/m	55 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T935 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	3500K	1088 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T940 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	4000K	1103 Lm/m	57 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T950 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	5000K	1110 Lm/m	58 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T957 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	5700K	1070 Lm/m	56 Lm/W
FXO.A005M IE_ AGY EOP / FL112/Nx G5 19W T965 L1000 / HR.P1X.L200/	19.2 W/m	24 V	CRI 90+	6500K	1070 Lm/m	56 Lm/W

Specifications are for a Luminaire (I) with End Connection (E), in Anodized Grey (AGY), that is 1000 mm long (L1000).

Specification – Tuneable White

Product	LEDs/m	Power	Voltage	CRI	CCT	Lumens / m	Efficacy
FXO.A005M IE_ AGY EOP / TWd112/Nx G4 09W 827-65 L1000 / HR.P1X.L200/	112 LEDs/m	9.6 W/m	24 V	CRI 80+	2700K - 6500K	497 Lm/m	52 Lm/W
FXO.A005M IE_ AGY EOP / TWd112/Nx G4 19W 827-65 L1000 / HR.P1X.L200/	112 LEDs/m	19.2 W/m	24 V	CRI 80+	1800K - 6500K	986 Lm/m	51 Lm/W

Specifications are for a Luminaire (I) with End Connection (E) in Anodized Grey (AGY), that is 1000 mm long (L1000).

Specification – RGB

Product	LEDs/m	Power	Voltage	Lumens / m	Efficacy
FXO.A005M IE_ AGY EOP / RGB96/Nx G5 11W L1000 / HR.P1X.L200/	96 LEDs/m	11.5 W/m	24 V	177 Lm/m (R: 38, G: 113, B: 26)	52 Lm/W
FXO.A005M IE_ AGY EOP / RGB96/Nx G5 14W L1000 / HR.P1X.L200/	96 LEDs/m	14.4 W/m	24 V	222 Lm/m (R: 48, G: 142, B: 32)	51 Lm/W

Specifications are for a Luminaire (I) with End Connection (E) in Anodized Grey (AGY), that is 1000 mm long (L1000).

Specification – RGBW

Product	LEDs/m	Wattage	CRI	CCT	Lumen/m	Efficacy
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09W918 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	1800K	212 Lm/m	22 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09W920 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	2000K	184 Lm/m	19 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09W922 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	2200K	190 Lm/m	20 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09W925 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	2500K	196 Lm/m	20 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT927 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	2700K	228 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT930 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	3000K	233 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT935 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	3500K	236 Lm/m	25 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT940 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	4000K	238 Lm/m	25 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT950 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	5000K	239 Lm/m	25 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT957 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	5700K	234 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 09WT965 L1000 / HR.P1X.L200/	48 RGB + 48 White	9.6 W/m	CRI90	6500K	234 Lm/m	24 Lm/W

Specification – RGBW continued

Product	LEDs/m	Wattage	CRI	CCT	Lumen/m	Efficacy
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14W918 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	1800K	230 Lm/m	16 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14W920 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	2000K	267 Lm/m	19 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14W922 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	2200K	275 Lm/m	19 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14W925 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	2500K	284 Lm/m	20 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT927 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	2700K	332 Lm/m	23 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT930 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	3000K	341 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT935 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	3500K	345 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT940 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	4000K	348 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT950 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	5000K	326 Lm/m	23 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT957 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	5700K	342 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 14WT965 L1000 / HR.P1X.L200/	48 RGB + 48 White	14.4 W/m	CRI90	6500K	342 Lm/m	24 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19W918 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	1800K	378 Lm/m	20 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19W920 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	2000K	387 Lm/m	20 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19W922 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	2200K	404 Lm/m	21 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19W925 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	2500K	424 Lm/m	22 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT927 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	2700K	526 Lm/m	27 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT930 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	3000K	544 Lm/m	28 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT935 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	3500K	553 Lm/m	29 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT940 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	4000K	558 Lm/m	29 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT950 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	5000K	561 Lm/m	29 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT957 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	5700K	547 Lm/m	28 Lm/W
FXO.A005M IE_ AGY EOP / RGBW48/NN G5 19WT965 L1000 / HR.P1X.L200/	48 RGB + 48 White	19.2 W/m	CRI90	6500K	547 Lm/m	28 Lm/W

Fitting options

Housing colour (FXO.A005M IE_ **AGY** EOP / FL112/Nx G5 04W 918 L1000 / HR.P1X.L200/)

Anodized grey (AGY)

Powder coated white (PWH)*

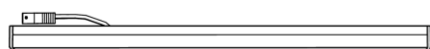
Powder coated black (PBK)*

* Powder coated options only available on request.

Segment layout (FXO.A005M IE_ **AGY** EOP / FL112/Nx G5 04W 918 L1000 / HR.P1X.L200/)

Individual Luminaire

A standalone luminaire (I) with a power connector and endcaps on both ends.

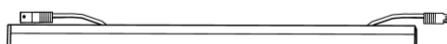


Continuous line

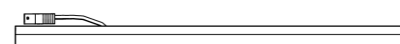
Used to create a continuous line of light with a start module (S), one or more middle modules (M) and an end module (E).



Start module (S) with two connectors and endcap at the start



Middle module (M) with two connectors and no endcaps



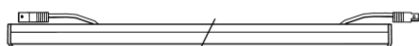
End module (E) with one connector and an endcap at the end

Full module

A full module (F) with two connectors and two endcaps. Creates non-continuous lengths of light as the endcaps are visible.



Full module (F)



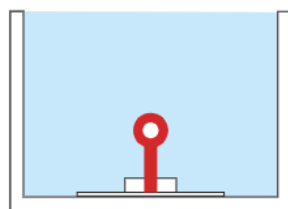
Full module (F)



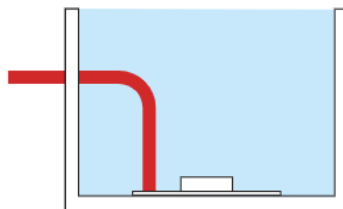
Luminaire (L)
or full module (F)

Connection type (FXO.A005M IE_ **AGY** EOP / FL112/Nx G5 04W 918 L1000 / HR.P1X.L200/)

End exit wire (E)



Side exit wire (S)



Back exit wire (B)

