

FX OUTDOOR LIGHTING CABLE

Extra Low Voltage F8 Outdoor Lighting Cable

Not For Mains Connection

HC-OLC02XXXXX

INSULATION: PVC V90 to AS/NZS 3808:2000 UV Stabilised

INSULATION COLOUR: Dark Brown (PMS Black 5C)

SIZE: 2.5-10.0mm² – Parallel Webbed 2 Core

SCOPE:

This specification covers requirements for a figure 8 (F8) 2 core outdoor lighting cable designed to provide extra low voltage (11-15v) power between a Hunter Industries FX Luminaire EX or Luxor Controller and Hunter Industries FX Luminaire LED Light Fixtures.

PHYSICAL SPECIFICATIONS:

Class 5 plain copper conductor to AS1125, 2 cores, insulated with V90 PVC. This cable is suitable for direct burial, rated 30V (DC or AC) supply. Insulation is UV stabilised.

MANUFACTURER'S IDENTIFICATION:

Surface marked on the plain leg of cable with HYDRO CONNECT DIRECT BURIAL FX OUTDOOR LIGHTING CABLE, HC-OLC02xxxx 2x xx.x MMSQ, 30V, batch number, sequential meterage every 1 meter 001M >1<, RoHS.

Printed on insulation, low number on bottom of spool, high number on top.

SPLICING RECOMMENDATIONS

Wire splices are the weak link of any electrical circuit. It is especially important to make proper joints in outdoor lighting systems because the joints are exposed to wet and damp environments that can cause corrosion of the copper conductor and premature failure. General splicing recommendations:

- For direct burial, above ground, in mulch or in Hunter Industries multibox installations: Silicone-filled wire nuts as manufactured by IDEAL® Model HC-WC60 or HC-WC64 or Model HC-WCDBRY6 as manufactured by the 3M Company, or Heat Shrink Splice Kits HC-WCLSXXX as manufactured by LightingShrink.
- For installation above ground, in mulch, or in Hunter Industries multibox installations: Silicone-filled wire nuts as manufactured by IDEAL® Model HC-WC61, HC-WC62 or HC-WC63, or Heat Shrink Splice Kits HC-WCLSXXX as manufactured by LightingShrink.

CONSTRUCTION:

•Pack Size:

2.5mm² 20, 50 and 100 metres.

4.0mm² 50 and 100 metres.

6.0mm² 100 metres.

10.0mm² 100 metres.

Other custom pack sizes and sheath colours available upon request.

HYDRO CONNECT

FX OUTDOOR LIGHTING CABLE

• Conductors:

Multi strand plain annealed Copper to AS/NZS 1125 drawn from class 5 copper.

• Insulation:

Dark Brown PVC V90 to AS/NZS 3808:2000, sunlight and moisture resistant.

One leg of cable has raised ridges.

• Cable Assembly:

The 2 cores are laid parallel and insulated. A continuous web keeps the conductors together.

Cores must be able to be separated without showing copper.

Code	Number of Cores	Number of Strands x Wire (mm)	Nominal Area (mm ²)	Max D.C. Resistance at 20°C (mΩ/m)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Nominal O.D. (mm)
F8 2 Core							
HC-OLC0225xxx	2	50/0.25	2.5	7.98	1.0	4.2 x 9.5	7.7
HC-OLC0240xxx	2	56/0.30	4.0	4.95	1.0	4.7 x 10.5	10.8
HC-OLC0260xxx	2	84/0.30	6.0	3.30	1.0	5.5 x 12.1	14.8
HC-OLC02100xxx	2	135/0.30	10.0	1.91	1.0	6.3 x 13.4	22.5

CABLE SIZING FOR FX LUMINAIRE TRANSFORMERS AND FIXTURES:

FX Luminaire lamps are higher technology and the most efficient lamps on the market, which typically allows you to run additional fixtures on a given size FX Outdoor Lighting Cable with an FX Luminaire transformer.

FX Outdoor Lighting Cable sizing per run can be calculated on the FX Luminaire website:

<https://www.fxl.com/voltage-drop-calculator>

The below table is a quick reference guide to FX Outdoor Lighting Cable selection per cable run:

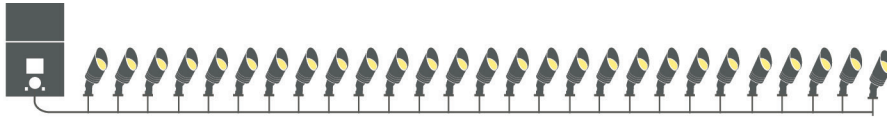
FX Luminaire Lamps									
Small			Medium			Large			
Model	Watts	VA	Model	Watts	VA	Model	Watts	VA	
MR16	4.0	4.3	MR16	5.0	5.4	6 LED	10.1	9.3	
			MR16	6.0	6.5				
			ZD-MR16	5.0	5.3				
			ZD-MR16	6.0	6.5				
1 LED	2.0	2.2				9 LED	11.2	12.2	
3 LED	4.2	4.5	ZDC Medium	9.1	7.2	ZDC Large	11.0	11.0	
HC - OLC 02xxxxx FX Cable Size - Maximum Number of FX Luminaire Lamps									
Cable Run Length m	2.5mm2	4.0mm2	6.0mm2	2.5mm2	4.0mm2	6.0mm2	2.5mm2	4.0mm2	6.0mm2
30	15			9			6		
40	11			7	15		4	10	
50	9	21		5	12			8	13
60	7	16		4	10	16		6	11
80	5	12	20		7	12		5	8
100	4	10	16		6	10		4	6
FX Luminaire Transformer - Maximum Number FX Luminaire Lamps									
EX Transformer	28			18			11		
Luxor Controller	56			38			25		

HYDRO CONNECT FX OUTDOOR LIGHTING CABLE

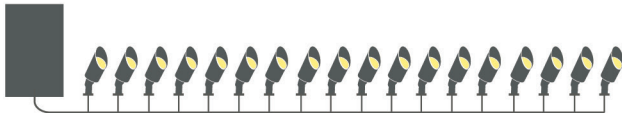
VA RATING

The most efficient lamps on the market, which means more lamps per system.

4W = 4.3VA 5 W=5.4 VA 6W=6.5VA



FX Luminaire: 150 W transformer/ 5 W lamps = **27 LAMPS**



Other brands: 150 W transformer /5W lamps = **18 LAMPS**

Multiple FX Outdoor Lighting Cable runs can be used from one transformer to split the load when large numbers of fixtures are being installed.

Multiple FX Luminaire transformers can also be used to split the load into areas if the load is too great for one cable and multiple cables are not practical. Multiple transformers may be a more economical alternative to long cable runs of large size cable.

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