

EVFD

- Constant lighting performance
- Long range light diffusion



EVFD series Lighting fixtures for fluorescent tubes

As their high mechanical resistance, EVFD fluorescent lighting fixtures are recommended for use in all those hazardous areas where the atmosphere is constantly contaminated with fumes, gases and dusts. These units have been designed to provide the even distribution of light without taking up the limited vertical space available. The specially curved reflector and the transparency of the tempered glass tube combine to allow light to diffuse over a wide range and provide more pleasant, less tiring working conditions. All the electrical components are housed in an aluminium "enclosure" that can be easily removed from the fixture for maintenance work. Simply cleaning the glass tube ensures constant excellent illumination over time. As specified in the appropriate installation standard (EN/IEC 60079-14), the only "entry" to the fixture must be through an Ex "barrier" cable gland (sealed) or, in the case of a conduit system, with an EYS, EZS series sealing fitting. EVFD series lighting fixtures come in single or twin lamp versions. The twin lamp versions and connecting kits are only supplied following a specific request from the customer.

Application sectors



CERTIFICATION DATA

Classification:

Group II

Category 2GD

Installation:

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2GD Ex d IIC T5/T6 - Ex tD A21 IP 66

Certification:

ATEX

CESI 03 ATEX 098

Standards:

CENELEC EN 60079-0: 2006, EN 60079-1: 2004, EN 61241-0: 2006, EN 61241-1: 2004, EN 60598-1:2008+A11:2009, EN 60598-2-1_1989, EN 61547: 2009
and EUROPEAN DIRECTIVE 2014/34/UE
IEC 60079-0: 2004, IEC 60079-1: 2007, IEC 61241-0: 2004, IEC 61241-1: 2004
European Directive 2006/95 Low voltage
European Directive 2004/108 Electromagnetic compatibility
European Directive 2003/108 WEEE Waste electrical and electronic equipment
European Directive 2011/64 RoHS

Class temperature:



100°C (T5)

Ambient temperature:



-20°C +55°C

Degree of protection:

IP66

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ORIGINAL PRODUCT

MECHANICAL FEATURES

Body:	Low copper content aluminium alloy
External tube:	Shock and high temperature resistant borosilicate glass
Seal:	Silicone resin between the aluminium heads and the glass tubes
Gaskets:	Acid/hydrocarbon resistant NBR
External reflector:	White painted galvanised steel
Bolts and screws:	Stainless steel
Mounting:	2 x galvanised steel brackets with Ø9 slots
Entries:	3 x 3/4" threaded NPT. Fixture complete with 2 x PLG2NA aluminium plugs
Coating:	Polyester coating Ral 7035 (Light grey)
Corrosion Resistance:	The STANDARD of the aluminium alloy used by Cortem has passed the tests required by standards EN60068-2-30 (hot/humid cycles) and EN60068-2-11 (salt mist tests)


ELECTRICAL FEATURES

Lamp holder:	Bi-pin G13
Ballast:	Electronic
Rated voltage:	230 V AC
Rated frequency:	50/60 Hz
Connection:	Direct to the terminal board L, N, Pe section 4 mm ² terminal board with jumpers for input/output (only for 18 W and 36 W)
Power factor:	0.98
Wiring:	Silicone rubber cables with glass braid insulation for high temperatures

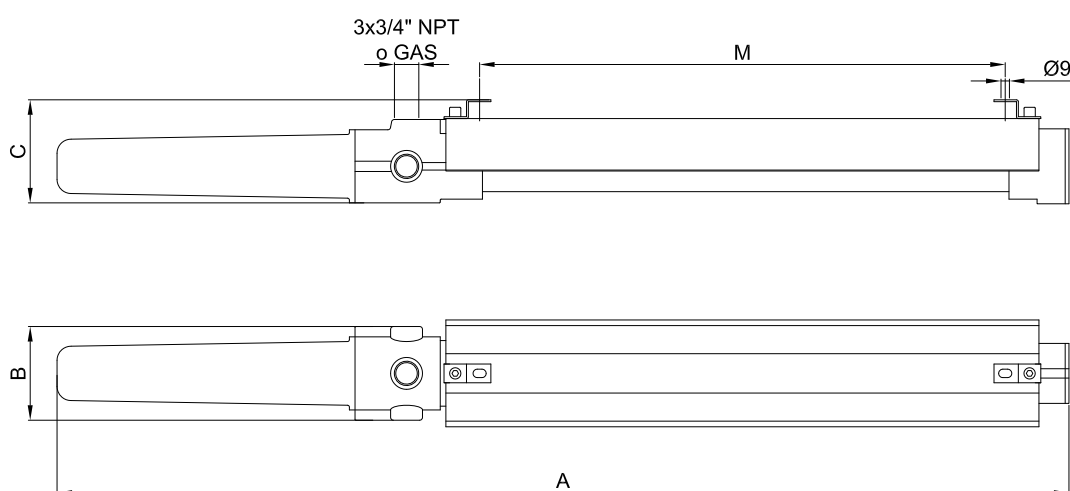
ACCESSORIES AVAILABLE / SPECIAL REQUESTS

2 pin Ø26 fluorescent tubes model T8
 Installation mounting brackets
 Stainless steel external reflector
 Stainless steel guard
 Re-lamping bracket for use on in-line lighting fixtures
 Cable gland: FB2NBK for armoured cable or FGAB2NBK for non-armoured cable
 GAS UNI ISO 7/1 thread

EVFD series selection chart

Code	Dimensions mm				Type of ballast N	N° of lamps	Power supply	Watt	Weight kg	 mm
	A	B	C	M						
EVFD-118EB	1080	114	110	561	single channel electronic	1	230 V 50/60 Hz	18	3,7	1175x120x155
EVFD-136EB	1690	114	110	1173	single channel electronic	1	230 V 50/60 Hz	36	5,2	1790x120x155
EVFD-158EB	1990	114	110	1473	single channel electronic	1	230 V 50/60 Hz	58	6,3	2090x120x155

DIMENSIONAL DRAWING



Dimensions in mm

DON'T FORGET TO ORDER THE ACCESSORIES

e.g. Type of lighting fixture +
EVFD-118EB

Fluorescent tubes
LAMP-L18W233

+

Installation bracket
G-258







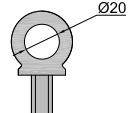


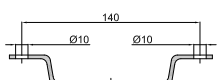
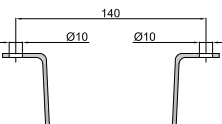
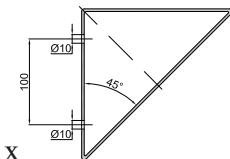
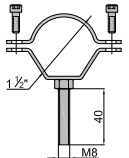











+

Cable gland
FL2BK

+ other... see key



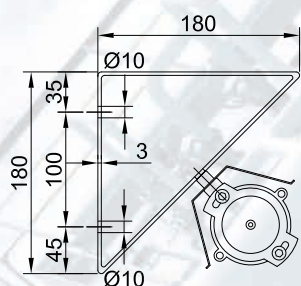
EVFD series Accessories and spare parts available on request

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Tri-phosphor fluorescent tubes G13 fitting 3.000K	18 W (FD18W)	1350 lm	LAMPL18W21	 
		36 W (FD36W)	3350 lm	LAMPL36W21	
		58 W (FD58W)	5200 lm	LAMP L58W21	
	Tige	Lunghezza: 250 mm	Material: stainless steel	BRF8MIN/250	 
	Type O eyebolt		Material: galvanised steel	G0F-8	 
	Type U bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0609	
	Type V bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0610	
	Type D bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0611	
	Type P bracket		Material: galvanised steel	G-0480	
	Cable gland		For models and codes, visit www.cortemgroup.com	FB2NBK FGAB2NBK	 
	Guard	EVFD-118EB	AISI 316L stainless steel Electro-polished	G118-0418S	 
		EVFD-136EB		G136-0418S	
		EVFD-158EB		G158-0418S	
	Stainless steel reflector	EVFD-118EB	Stainless steel plate	G118-455IN	 
		EVFD-136EB		G136-455IN	
		EVFD-158EB		G158-455IN	
	Standard reflector	EVFD-118EB	White painted galvanised steel	G118-455	
		EVFD-136EB		G136-455	
		EVFD-158EB		G158-455	

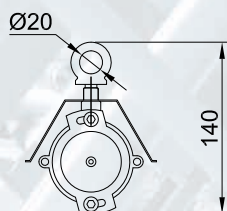
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ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Assembly for glass tubes for normal lamps	EVFD-118EB	Completely assembled glass tubes with head, tensioners, lamp holder and bushes	G118-0411CM	
		EVFD-136EB		G136-0411/1	
		EVFD-158EB		G158-0411/1	
	Reduction bush for fluorescent tube insertion		Material: Black polypropylene	G-276	
	Lamp holder	G13	250V - 4A cable kit	G-0392...	
	Re-lamping bracket with clip system for use on in-line lighting installation		Material: galvanised steel	G-0318 + G-0318/1	 
	Electronic ballast	EVFD-118EB	230V	RV-136	
		EVFD-136EB		RV-136	
		EVFD-158EB		RV-158	

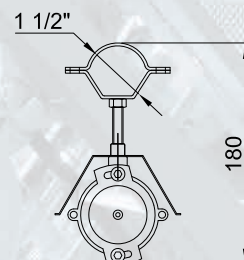
Installation and mounting methods EVFD series



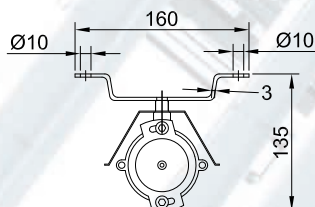
**45° angle mounting
TYPE "D"**



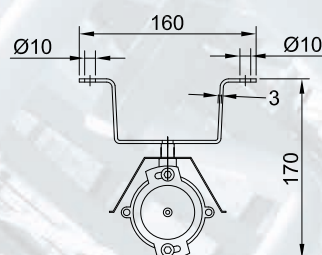
**Pendant mounting
with eyebolt TYPE "O"**



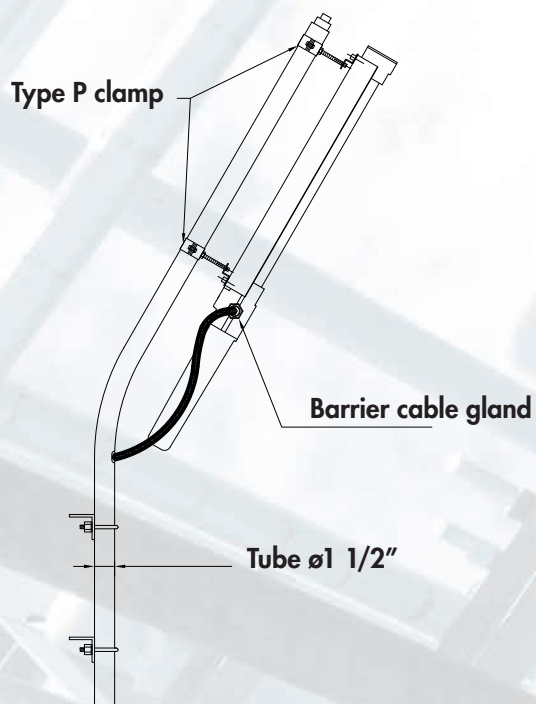
Mounting using 1.1/2" metal clamps TYPE "P"



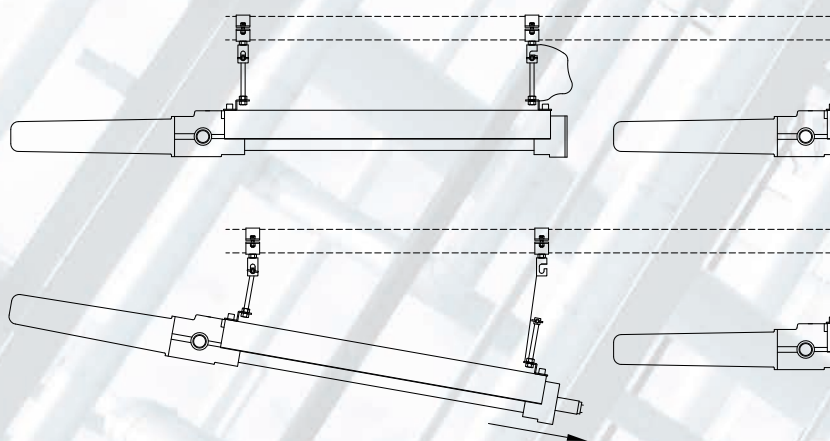
**Low ceiling mounting with
clamp TYPE "U"**



**High ceiling mounting with
clamp TYPE "V"**



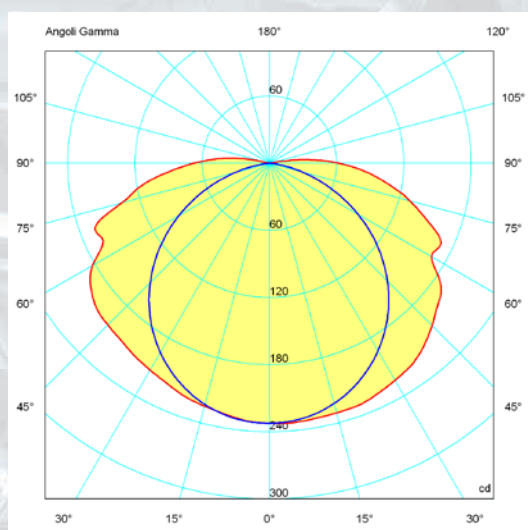
**Pole mounting for EVFD...
with cable gland**



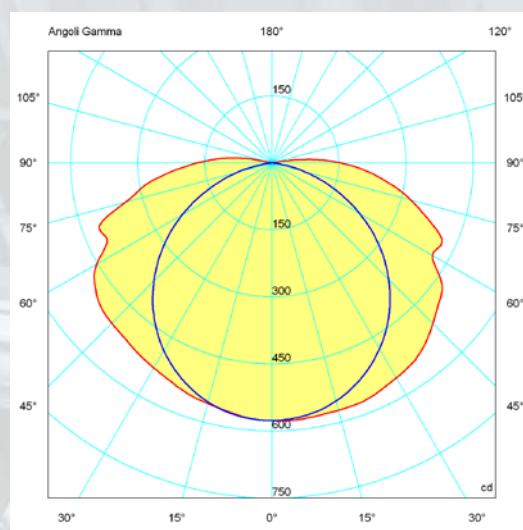
**Mounting system with quick release clip for easy
fluorescent tube replacement. System adopted for
installing in-line lighting fixtures.**

Dimensions in mm

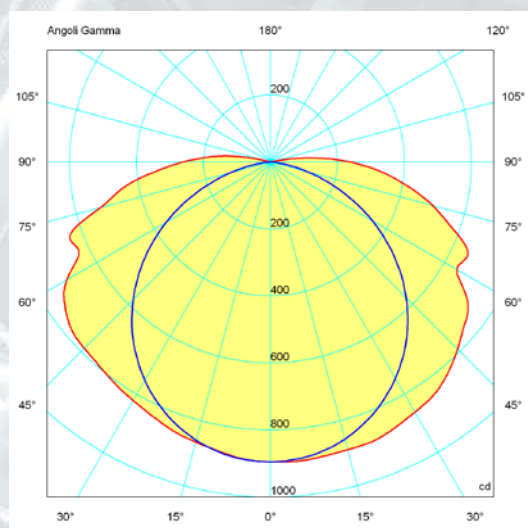
Photometric diagrams



EVFD-118EB



EVFD-136EB



EVFD-158EB

On Cortem Group web site you can download .LDT and .IES lighting data files for the design and simulation of lighting levels in 2D and 3D, rendering and ray tracing

— = plane 90270
— = plane 0180