

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

















Oil refineries

Chemical and petrochemical handrails plants

Stairs

Offshore plants

Emergency exits

Oil loading/ depots unloading **jetties**

100% Cortem product

CERTIFICATION DATA

Classification:	Group II Category 2GD							
Installation:	zone 1 - zone 2 (Gas) zone 21 - zone 22 (Dust)							
Marking:	C€ 0722 € 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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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 G13Ballast:ElectronicRated voltage:230 V ACRated frequency:50/60 Hz

Connection: Direct to the terminal board L, N, Pe section 4 mm² 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

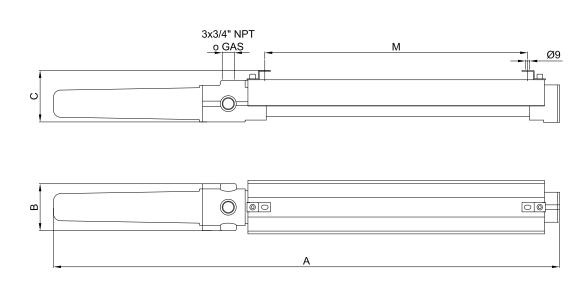
Cable gland: FB2NBK for armoured cable or FGAB2NBK for non-armoured cable

GAS UNI ISO 7/1 thread

EVFD series selection chart

Code		Dimensions mm			Tune of holloot N	N° of	Power supply	Watt	Weight	
	Α	В	C	M	Type of ballast N	lamps	rower suppry	Wall	kg	mm
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



 $\label{eq:definition} \mbox{Dimensions in } \mbox{mm}$

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



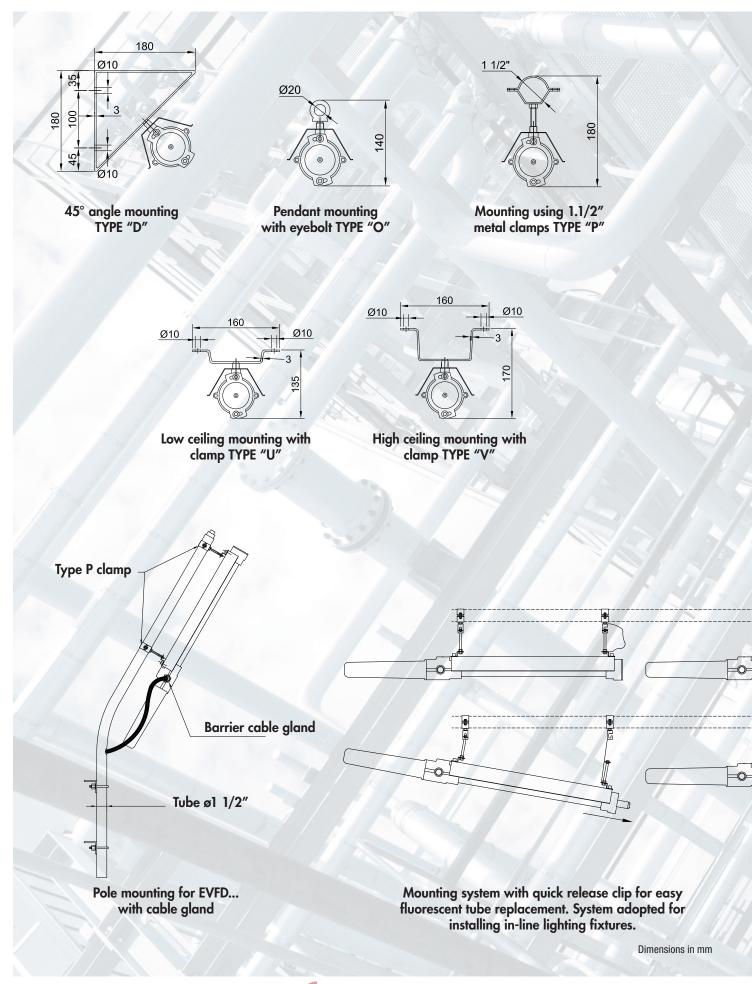
EVFD series Accessories and spare parts available on request

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY	
	Tri-phosphor fluorescent tubes G13 fitting	18 W (FD18W)	1350 lm	LAMPL18W21		
		36 W (FD36W)	3350 lm	LAMPL36W21	SPARE PART	
	3.000K	58 W (FD58W)	5200 lm	LAMP L58W21		
М8	Tige	Lunghezza: 250 mm	Material: stainless steel	BRF8MIN/250	SPARE PART	
<u>Ø20</u>	Type O eyebolt		Material: galvanised steel	GOF-8		
Ø10 Ø10	Type U bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0609		
Ø10 Ø10	Type V bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0610	ACCESSORY STARE PART	
§ 210 X	Type D bracket complete with screws		Material: bracket: galvanised steel screws: stainless steel	G-0611		
1½: 4	Type P bracket		Material: galvanised steel	G-0480	Eccasion Space Part	
	Cable gland		For models and codes, visit www.cortemgroup.com	FB2NBK FGAB2NBK	ACCESSORY) SPARE PART	
	Guard	EVFD-118EB	AISI 316L stainless	G118-0418S	•	
		EVFD-136EB	steel Electro-polished	G136-0418S	ACCESSORY SPARE PART	
		EVFD-158EB	Liceno ponsileu	G158-0418S		
	Stainless steel reflector	EVFD-118EB		G118-455IN	SPARE PART	
		EVFD-136EB	Stainless steel plate	G136-455IN		
		EVFD-158EB		G158-455IN		
		EVFD-118EB		G118-455	SPARE POUT	
	Standard reflector	EVFD-136EB	White painted galvanised steel	G136-455		
		EVFD-158EB		G158-455		

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

Installation and mounting methods EVFD series



Photometric diagrams

