

EW

- Suitable for installation with ambient temperature from -50°C to $+60^{\circ}\text{C}$
- Suitable for discharge lamps of up to 150W
- Zones 1, 2, 21, 22

Cooling fins

TESTED
OK

TESTED
OK

4 Joule shock resistant borosilicate glass globe

Internal connection terminal box



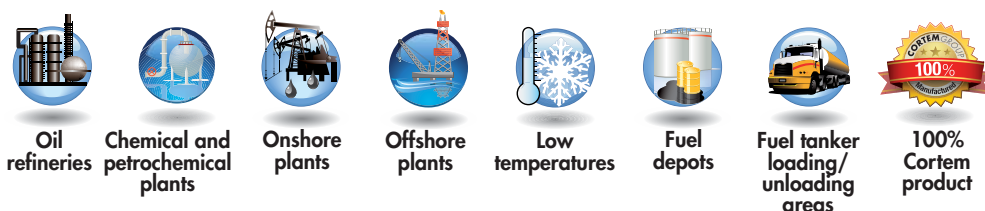
Stainless steel protective guard

EW series Lighting fixtures for discharge lamps up to 150W

EW series of lighting fixtures for discharge lamps has been designed in compliance with ATEX Directive 94/9/EC for all those areas defined as "hazardous" due to the presence of potentially explosive flammable gases and dusts where good local lighting is a necessity. The low copper content aluminium alloy lamp body has cooling fins for better heat dissipation that ensures a longer lifespan and more effective electrical consumption. The borosilicate glass globe has excellent thermal and mechanical properties. For this reason, the fixture can also be installed without a protective guard. The resistance of this lighting fixture to high (+60°C) and low (-50°C) temperatures makes it ideal for use in any type of climatic condition and it can be used in plants worldwide.

As EW series was designed with the "Ex d" protection method, the "entry" to the fixture, as specified in the installation standard (EN/IEC 60079-14), must be only through an Ex "barrier" cable gland (sealed) or, in the case of a conduit system, with an EYS, EZS sealing fittings.

Application sectors:



CERTIFICATION DATA

Classification: 94/9/EC

Group II

Category 2GD

Installation: EN 60079.14

zone 1 - zone 2 (Gas)

zone 21 - zone 22 (Dust)

Marking:

CE 0722 Ex II 2GD Ex d IIC T.. Gb - Ex tb IIIC T.. °C Db IP66

Certification:

ATEX CESI 12 ATEX 006

IEC Ex CES 07.0004

GOST R AVAILABLE

All IEC Ex and GOST R certification data can be downloaded at www.cortemgroup.com

Standards:

CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 94/9/EC: 1994
IEC 60079-0: 2012, IEC 60079-1: 2007, IEC 60079-7: 2007, IEC 60079-31: 2009
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:

See selection chart

Ambient temperature:

Standard -20°C +60°C Special -50°C +60°C

Degree of protection:

IP66



ORIGINAL PRODUCT

MECHANICAL FEATURES

Body:	Low copper content aluminium alloy
Globe:	Shock and temperature resistant borosilicate glass with aluminium shade ring
Gaskets:	Silicone acid/hydrocarbon resistant
Guard:	Electro-polished stainless steel. Can also be supplied on request without a guard as the lighting fixture has passed the glass breakage test (4 Joule EN60079-0 / IEC60079-0)
Mounting:	See "EW series dimensional drawings"
Bolts and screws:	Stainless steel
Entries:	3/4" NPT threads. See "EW series dimensional drawings"
Coating:	Epoxy 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:	E27 or E40 ceramic
Ballast:	Electromechanical
Rated voltage:	230 V AC
Rated frequency:	50 Hz
Connection:	Direct connection to the terminal box L, N, Pe. Section 4mm ²
Power factor:	0.96
Wiring:	Silicone rubber cables with glass braid insulation for high temperatures

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

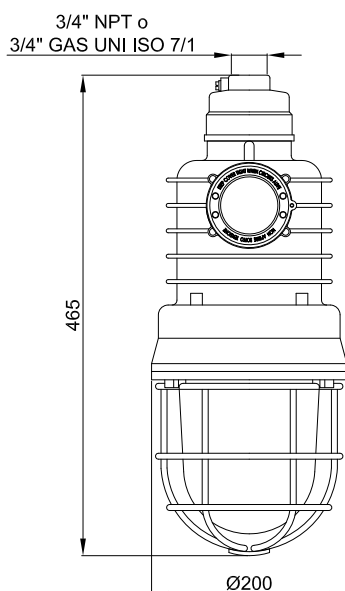
Discharge lamp
 Different rated voltages
 Rated frequency: 60 Hz at 230 V (code EW-5070N1/**60**)
 External reflector
 Cable gland: FGAB2NBK for armoured cable or FB2NBK for non-armoured cable
 GAS UNI ISO 7/1 thread

EW series selection chart

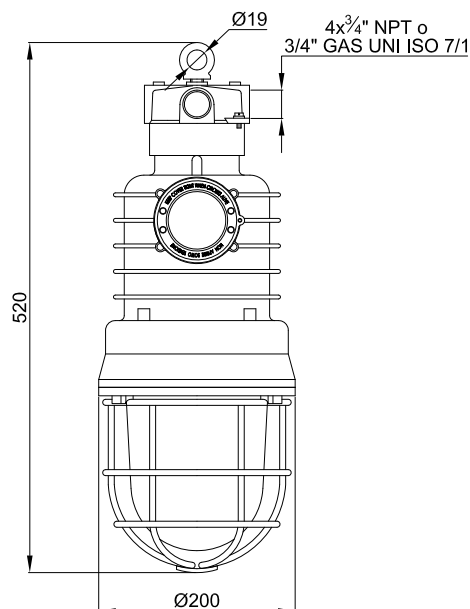
Code	Lamp type	Watt	Lamp holder	Class Ta =+60°C	Max surface temperature °C	Weight Kg	mm
EW-5070F1	Mercury vapour	80	E 27	T4	129	6,4	260x210x580
EW-5070F4	Mercury vapour	125	E 27	T3	145	7,0	260x210x580
EW-5070N1	Sodium vapour	70	E 27	T4	130	6,7	260x210x580
EW-5070N2	Sodium vapour	100	E 40	T4	126	7,0	260x210x580
EW-5070IM1	Metal halide	70	E 27	T4	128	6,7	260x210x580
EW-5070IM2	Metal halide	100	E 27	T4	128	6,8	260x210x580
EW-5070IM4	Metal halide	150	E 27	T3	161	7,6	260x210x580

Code	Lamp type	Watt	Lamp holder	Class Ta =+60°C	Max surface temperature °C	Weight Kg	mm
EWGC-5070F1	Mercury vapour	80	E 27	T4	129	6,4	260x210x580
EWGC-5070F4	Mercury vapour	125	E 27	T3	145	7,1	260x210x580
EWGC-5070N1	Sodium vapour	70	E 27	T4	130	7,3	260x210x580
EWGC-5070N2	Sodium vapour	100	E 40	T4	126	7,7	260x210x580
EWGC-5070IM1	Metal halide	70	E 27	T4	128	7,3	260x210x580
EWGC-5070IM2	Metal halide	100	E 27	T4	128	7,4	260x210x580
EWGC-5070IM4	Metal halide	150	E 27	T3	161	8,2	260x210x580

EW Pendant mounting



EWGC Pendant mounting with eyebolt



Dimensions in mm

DON'T FORGET TO ORDER THE ACCESSORIES

Example: Type of lighting fixture
EWX-5070N2

+

Lamp
LAMPNAV100W


+


Inclined dome reflector
G70-427DI

+ other...see key

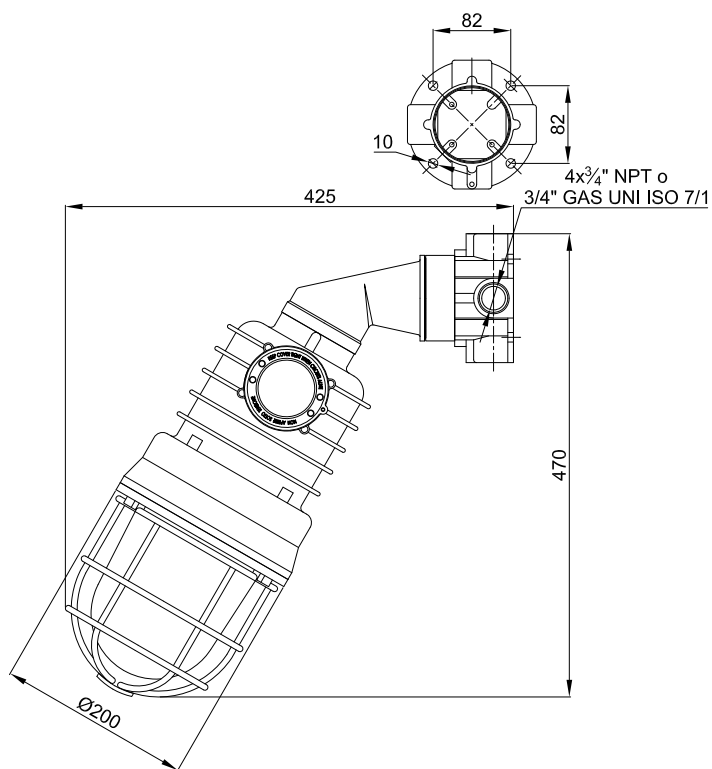


EW series selection chart

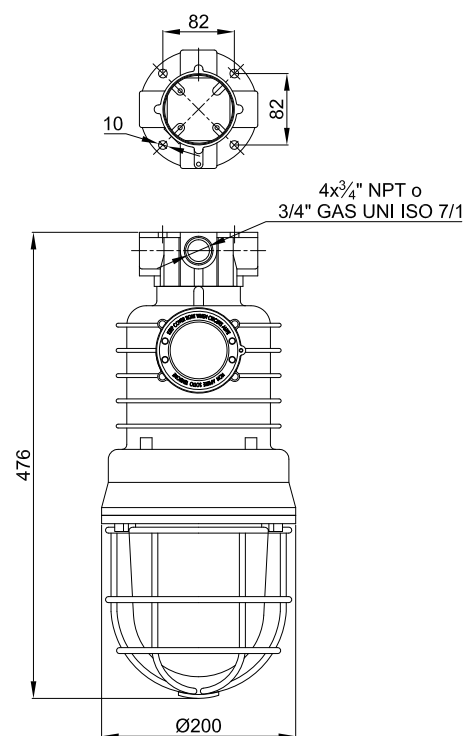
Code	Lamp type	Watt	Lamp holder	Class Ta =+60°C	Max surface temperature °C	Weight Kg	 mm
EWIX-5070F1	Mercury vapour	80	E 27	T4	129	7,2	240x240x660
EWIX-5070F4	Mercury vapour	125	E 27	T3	145	7,8	240x240x660
EWIX-5070N1	Sodium vapour	70	E 27	T4	130	7,5	240x240x660
EWIX-5070N2	Sodium vapour	100	E 40	T4	126	7,9	240x240x660
EWIX-5070IM1	Metal halide	70	E 27	T4	128	7,5	240x240x660
EWIX-5070IM2	Metal halide	100	E 27	T4	128	7,6	240x240x660
EWIX-5070IM4	Metal halide	150	E 27	T3	161	8,4	240x240x660

Code	Lamp type	Watt	Lamp holder	Class Ta =+60°C	Max surface temperature °C	Weight Kg	 mm
EWX-5070F1	Mercury vapour	80	E 27	T4	129	6,7	260x210x580
EWX-5070F4	Mercury vapour	125	E 27	T3	145	7,4	260x210x580
EWX-5070N1	Sodium vapour	70	E 27	T4	130	7,1	260x210x580
EWX-5070N2	Sodium vapour	100	E 40	T4	126	7,4	260x210x580
EWX-5070IM1	Metal halide	70	E 27	T4	128	7,1	260x210x580
EWX-5070IM2	Metal halide	100	E 27	T4	128	7,2	260x210x580
EWX-5070IM4	Metal halide	150	E 27	T3	161	8	260x210x580

EWIX Wall mounting with 30° bracket



EWX Ceiling mounting



Dimensions in mm

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	High pressure sodium vapour lamp	E27	70 W (SE70W)	LAMPNAV70WPLUS	 
		E40	100 W (SE100W)	LAMPNAV100WPLUS	
	Mercury vapour lamp	E27	80 W (QE80W)	LAMP80WHQL	 
			125 W (QE125W)	LAMP125WHQL	
	Metal halide lamp	E27	100 W (ME100W)	LAMP100WJM	 
			150 W (ME150W)	LAMP150WJM	
	Cable gland		For models and codes, visit www.cortemgroup.com	FB2NBK FGAB2NBK	 
	Reflector		White painted aluminium reflector Stainless steel	G70-427 G70-427IN	 
	Dome reflector		Contact our Sales Office for availability		 
	30° inclined dome reflector		Contact our Sales Office for availability		 

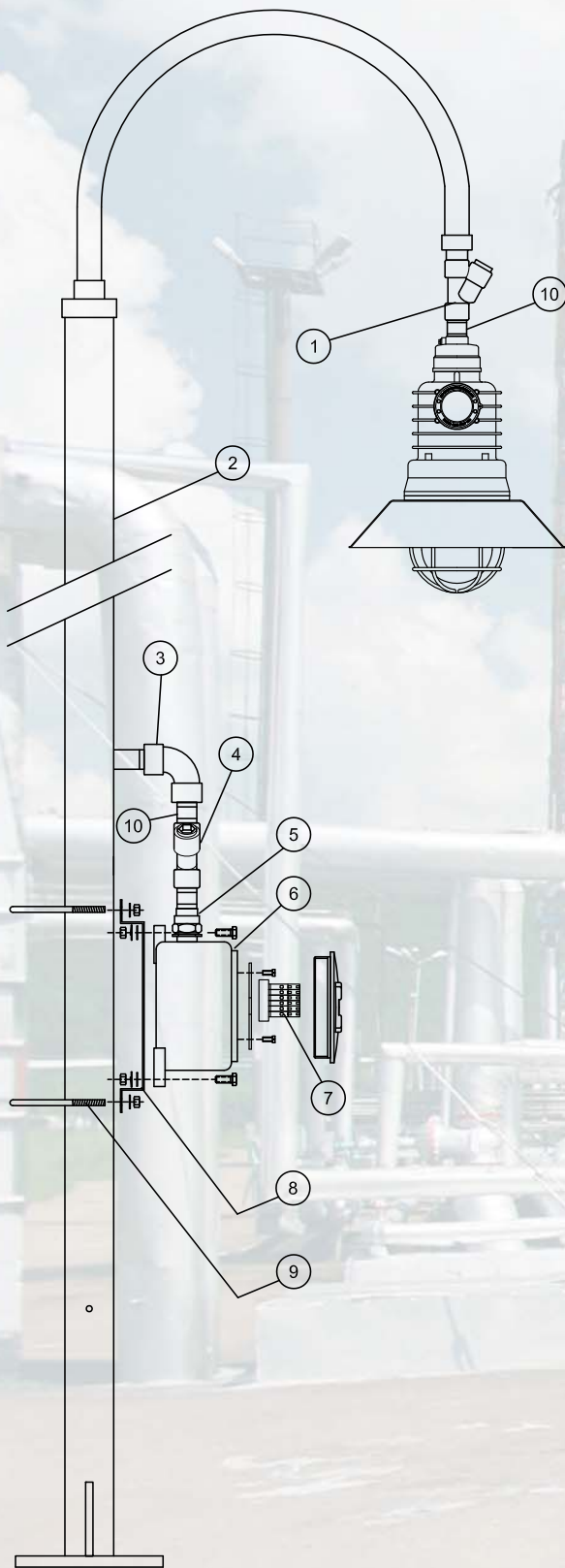
EW series Accessories and spare parts available on request

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Protective guard		Material: Electro-polished stainless steel	G70-0417	
	Pendant eyebolt		in galvanised steel	GOF-8	
	Pendant mounting EW		1 x 3/4" entry	G-0213	
	Pendant mounting with eyebolt EWGC		4 x 3/4" entries	G-0216	
	Ceiling mounting EWX		4 x 3/4" entries	G-0214	
	Wall mounting with bracket EWIX		4 x 3/4" entries	G-0215	

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	O-ring		Material: silicone	K33-131S	
	Ballast for mercury vapour lamp		80 W	R-80	
			125 W	R-125	
	Ballast for sodium vapour and metal halide lamp		70 W	R-70NAAP	
			100 W	R-100NA	
			150 W	R-150NA	
	Metal capacitor	5070F1	8µF 250V	F-80	
		5070F4	10µF 250V	F-125	
		5070N1	12,5µF 250V	F-12,5	
		5070N2	12,5µF 250V	F-12,5	
		5070IM2	12,5µF 250V	F-12,5	
		5070IM4	20µF 250V	F-20	
	Ceramic lamp holder	E27 E40	250V 4A 750V 16A	PORT E-27 PORT E-40	
	Igniter		50-400 W	R100	
	Globe with shade ring		Borosilicate glass globe Threaded aluminium shade ring	G70-0440CM	

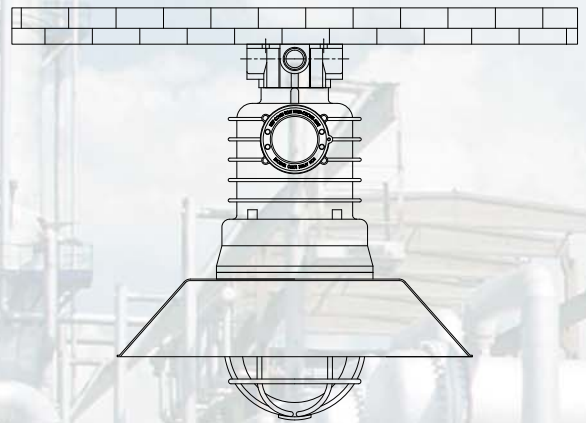
Installation and mounting methods

Example of pole mounting

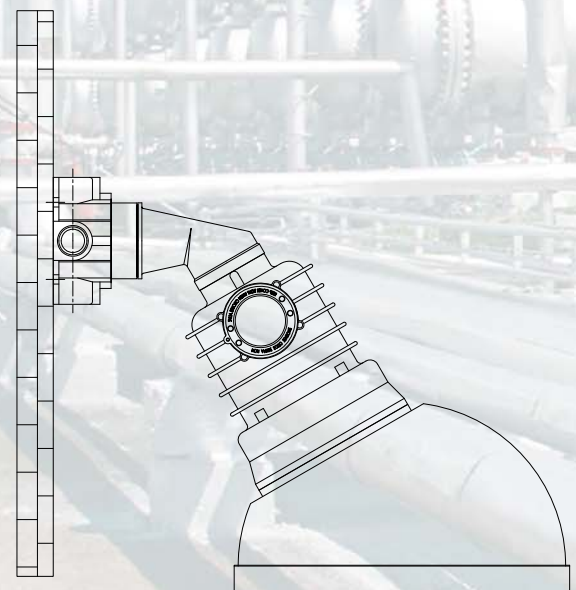


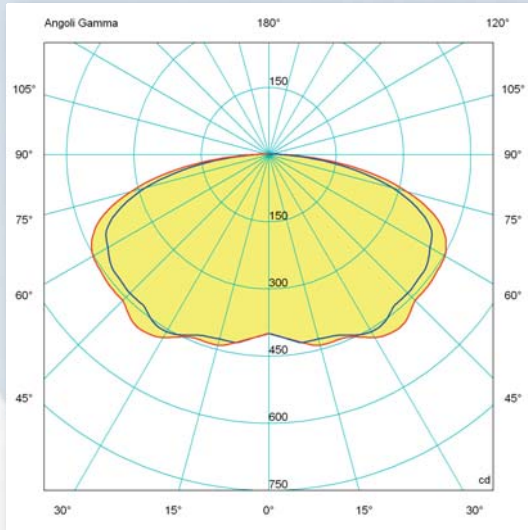
1. EYS sealing fittings
2. Hot dip galvanised steel pole
3. ELF curve
4. EYS sealed
5. RMM 3-piece union
6. GUB-01 Junction box
7. Terminal box
8. Support frame
9. UBD clevis
10. NP nipple

Example of ceiling mounting

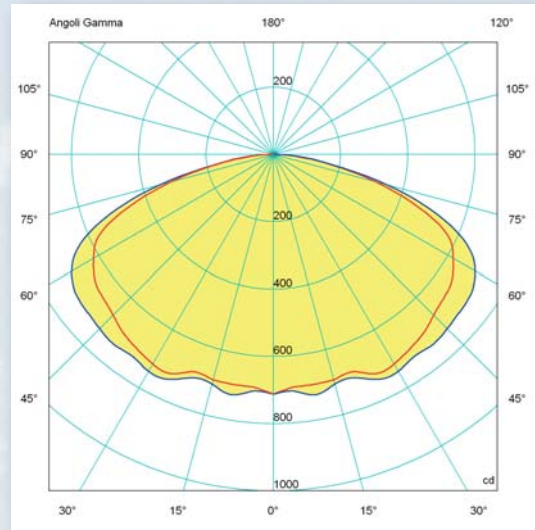


Example of wall mounting

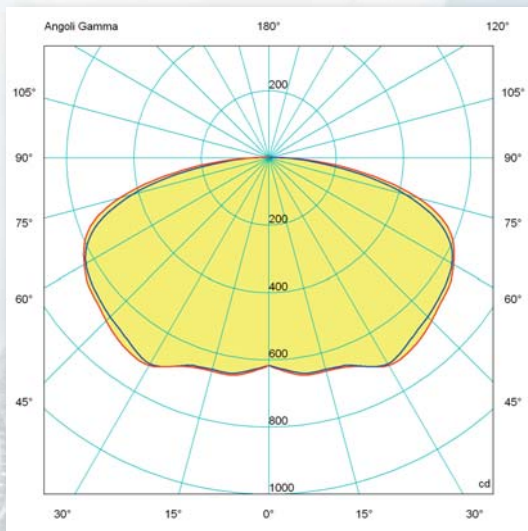




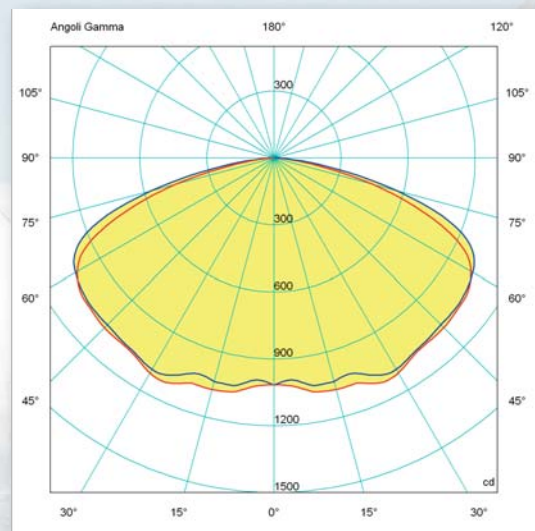
EW-5070 80W mercury



EW-5070 125W mercury



EW-5070 70W sodium



EW-5070 100W sodium

Cortem Group can supply photometric diagram files on request for use in special lighting design projects.
Contact the Sales Office for further information

— = plane 90270
— = plane C 0180