

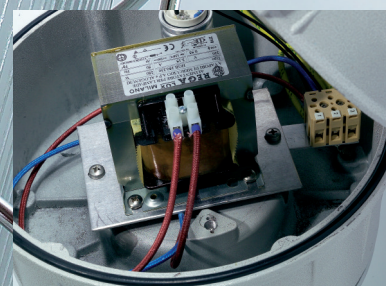
EWN

- Optimal performance at high (+60°C) and low (-50°C) temperatures
- Simplified re-lamping
- High resistance to corrosion and extreme weather conditions
- Ideal for installation at low and medium heights
- Zone 2, Zone 21, 22

Silicone gasket

Borosilicate glass

Electrical component housing



Hinged electrical component compartment

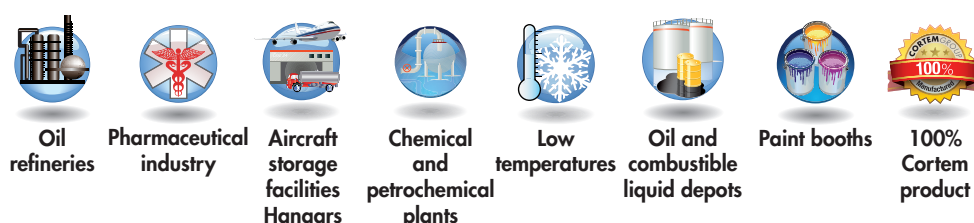


Protective guard

EWN series Lighting fixtures for discharge lamps in zone 2/22

EWN series lighting fixtures have been specially designed for both indoor and outdoor lighting in industrial processes, especially in the chemical and petrochemical sector, as their mechanical and lighting properties outperform “Ex d” type fixtures. EWN series fixtures have aluminium alloy bodies and borosilicate glass prismatic compartment. They combine structural strength and resistance in chemically aggressive environments with illumination of the process areas where they have to provide light at ground level (horizontal lux) as well as show up potential obstacles (vertical lux). “Ex nR” protection (restricted breathing) is obtained through the use of special wear and tear resistant silicone gaskets that make EWN lighting fixtures category 3 items of equipment. They are therefore suitable for use in hazardous areas classified as Zone 2 (Gases) and Zone 21, 22 (Dusts). These units come in three sizes 60, 80 and 100 with suitable electrical fitting to use discharge lamps ranging in power from 20W to 400W. They feature a large compartment to house electrical components separated from the optical compartment and excellent dissipation of heat generated by the ballast and lamp. The large dispersion area reduces the surface temperature and keeps it below the class T3/T4/T6 limits even when the units are installed in ambient temperatures of up to +60°C. Installation and maintenance are greatly facilitated by the ease of access offered by these lighting fixtures. Opening the compartment housing the electrical components is facilitated by the fact that just one bolt is used to fasten the hinge that makes the compartment an integral part of the whole unit. This allows maintenance staff to work hands-free without having to replace any part of the lighting fixture.

Application sectors:



CERTIFICATION DATA

Classification:

Group II

Category 3GD

Intallation: EN 60079.14

zona 2 (Gas)

zone 22 (Dust)

zone 21
(for IECEx, TR CU and INMETRO)

Marking:

CE 0722 Ex II 3GD Ex nR IIC T... Gc - Ex tc IIIC T... Dc IP66

Certification:

ATEX CESI 05 ATEX 018X

IEC Ex CES 11.0017X

TR CU AVAILABLE

INMETRO DNV 12.0160X

All IEC Ex, TR CU and INMETRO certification data can be downloaded at www.cortemgroup.com

Standards:

CENELEC EN 60079-0: 2012, EN 60079-15: 2010, EN 60079-31: 2009, EN 60529: 1991, EN 60598-1 ed alla DIRETTIVA EUROPEA 2014/34/UE
IEC 60079-0: 2011, IEC 60079-15: 2010, IEC 60079-31: 2008, IEC 60529: 2001

Class temperature:

200°C (T3)

135°C (T4)

Ambient temperature:

Standard
-25°C +60°C

Special
-50°C +60°C

Degree of protection:

IP66

EWN series Lighting fixtures for discharge lamps in zone 2/22



ORIGINAL PRODUCT

MECHANICAL FEATURES

Body:	Low copper content aluminium alloy
Globe:	Shock and high temperature resistant borosilicate glass
Protected opening system:	Easy access opening/closing system supplied as standard on the EWN-100 model only
Hinge:	Cast aluminium
Gaskets:	Acid, hydrocarbon and high temperature resistant silicone.
Guard:	Electro-polished stainless steel
Mounting:	Installation and mounting methods EWN series
Bolts and screws:	Stainless steel
Entries:	3/4" NPT threads. (With 2 plugs type PLG2NA for EWNGC, EWNX and EWNIX)
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:	E27 or E40 ceramic
Rated voltage:	230 V AC
Rated frequency:	50 Hz
Connection:	Direct connection to terminal board L, N, Pe. Section 4 mm ² , suitable for entry/exit
Power factor:	0.96
Wiring:	Silicone rubber cables with glass braid protection against high temperatures

ACCESSORIES AVAILABLE / SPECIAL REQUESTS

Discharge lamp
External reflector
Cable gland: NEV2NB for armoured cable or NAV2NB for non-armoured cable
Suspension wire for optical unit
Different voltages: multitap ballast 120 V 208 V 240 V 277 V (example code EWNT-100N6**MT**)
Rated voltage: 480 V 50 Hz (code EWNT-100N6/**480**)
Rated voltage: 277 V 60 Hz (code EWNT-100N6/**277**)
Rated voltage: 120 V 60 Hz (code EWNT-100N6/**120**)
Rated frequency: 60 Hz at 230 V (code EWNT-100N6/**60**)
GAS UNI ISO 7/1 or ISO M25 threads

DON'T FORGET TO ORDER THE ACCESSORIES

Example: Type of lighting fixture +
EWNT-60N1

Lamp
LAMPNAV70W

+

External reflector
G60-527

+

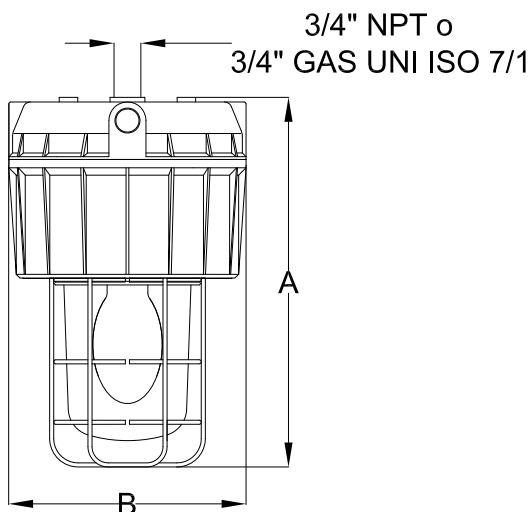
other...see key



EWNT series selection chart Pendant mounting

Code	Dimension mm		Type Lampada	lamp holder	Watt	Class Ta=+60°C	Max surface temp. °C	Weight kg	
	A	B							
EWNT-60IM1	370	260	Metal halide	E 27	70	T5	100	7	327x327x540
EWNT-60IM2	370	260	Metal halide	E 27	100	T4	122	7	327x327x540
EWNT-60IM4	370	260	Metal halide	E 27	150	T4	130	7	327x327x540
EWNT-60N1	370	260	Sodium vapour	E 27	70	T4	102	7	327x327x540
EWNT-60	370	260	Electronic	E 27	20	T6	77	5,6	327x327x540
EWNT-60	370	260	Electronic	E 27	23	T6	77	5,6	327x327x540
EWNT-80N4	455	260	Sodium vapour	E40	150	T4	124	8,7	327x327x540
EWNT-80N5	455	260	Sodium vapour	E40	250	T3	187	8,8	327x327x540
EWNT-80	455	260	Mixed light	E40	160	T4	124	8,9	327x327x540
EWNT-80	455	260	Mixed light	E40	250	T3	187	8,7	327x327x540
EWNT-80IM5	455	260	Metal halide	E40	250	T3	187	8,9	327x327x540
EWNT-100N6	550	350	Sodium vapour	E40	400	T3	151	20	410x410x700
EWNT-100IM6	550	350	Metal halide	E40	400	T3	151	20	410x410x700

EWNT Pendant mounting

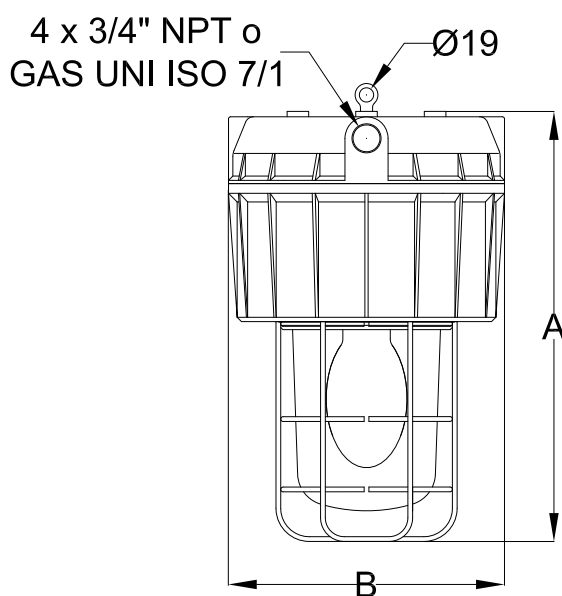


Dimension in mm

EWNGC series selection chart Pendant mounting with eyebolt

Code	Dimension mm		Type Lampada	lamp holder	Watt	Class Ta=+60°C	Max surface temp. °C	Weight kg	 mm
	A	B							
EWNGC-60IM1	370	260	Metal halide	E 27	70	T5	100	7	327x327x540
EWNGC-60IM2	370	260	Metal halide	E 27	100	T4	122	7	327x327x540
EWNGC-60IM4	370	260	Metal halide	E 27	150	T4	130	7	327x327x540
EWNGC-60N1	370	260	Sodium vapour	E 27	70	T4	102	7	327x327x540
EWNGC-60	370	260	Electronic	E 27	20	T6	77	5,6	327x327x540
EWNGC-60	370	260	Electronic	E 27	23	T6	77	5,6	327x327x540
EWNGC-80N4	455	260	Sodium vapour	E40	150	T4	124	8,7	327x327x540
EWNGC-80N5	455	260	Sodium vapour	E40	250	T3	187	8,8	327x327x540
EWNGC-80	455	260	Mixed light	E40	160	T4	124	8,9	327x327x540
EWNGC-80	455	260	Mixed light	E40	250	T3	187	8,7	327x327x540
EWNGC-80IM5	455	260	Metal halide	E40	250	T3	187	8,9	327x327x540
EWNGC-100N6	550	350	Sodium vapour	E40	400	T3	151	20	410x410x700
EWNGC-100IM6	550	350	Metal halide	E40	400	T3	151	20	410x410x700

EWNGC Mounting with eyebolt

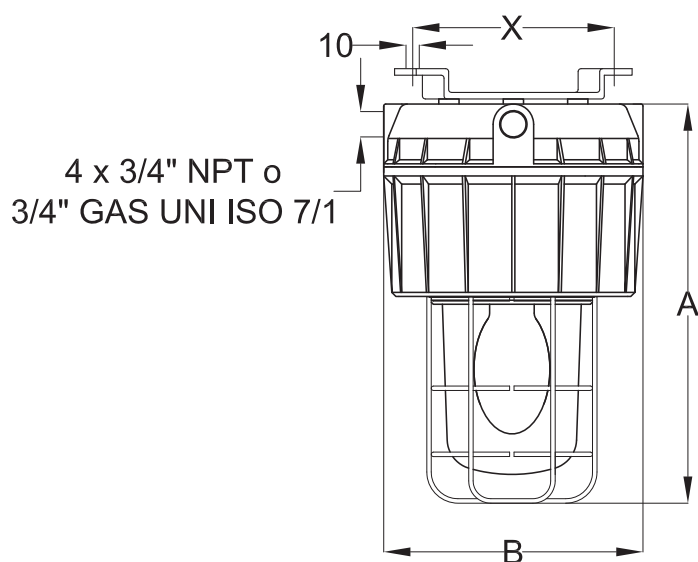


Dimension in mm

EWNX series selection chart Ceiling mounting with bracket

Code	Dimension mm			Type Lampada	lamp holder	Watt	Class Ta=+60°C	Max surface temp. °C	Weight kg	
	A	B	X							
EWNX-60IM1	370	260	290	Metal halide	E 27	70	T5	100	7	327x327x540
EWNX-60IM2	370	260	290	Metal halide	E 27	100	T4	122	7	327x327x540
EWNX-60IM4	370	260	290	Metal halide	E 27	150	T4	130	7	327x327x540
EWNX-60N1	370	260	290	Sodium vapour	E 27	70	T4	102	7	327x327x540
EWNX-60	370	260	290	Electronic	E 27	20	T6	77	5,6	327x327x540
EWNX-60	370	260	290	Electronic	E 27	23	T6	77	5,6	327x327x540
EWNX-80N4	455	260	290	Sodium vapour	E40	150	T4	124	8,7	327x327x540
EWNX-80N5	455	260	290	Sodium vapour	E40	250	T3	187	8,8	327x327x540
EWNX-80	455	260	290	Mixed light	E40	160	T4	124	8,9	327x327x540
EWNX-80	455	260	290	Mixed light	E40	250	T3	187	8,7	327x327x540
EWNX-80IM5	455	260	290	Metal halide	E40	250	T3	187	8,9	327x327x540
EWNX-100N6	550	350	370	Sodium vapour	E40	400	T3	151	20	410x410x700
EWNX-100IM6	550	350	370	Metal halide	E40	400	T3	151	20	410x410x700

EWNX Ceiling mounting with bracket

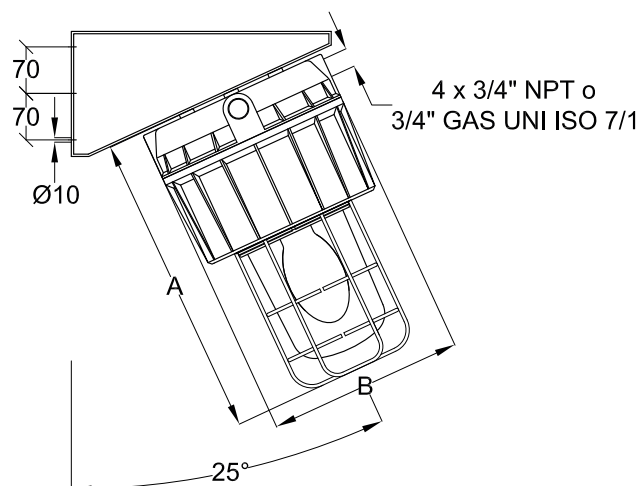
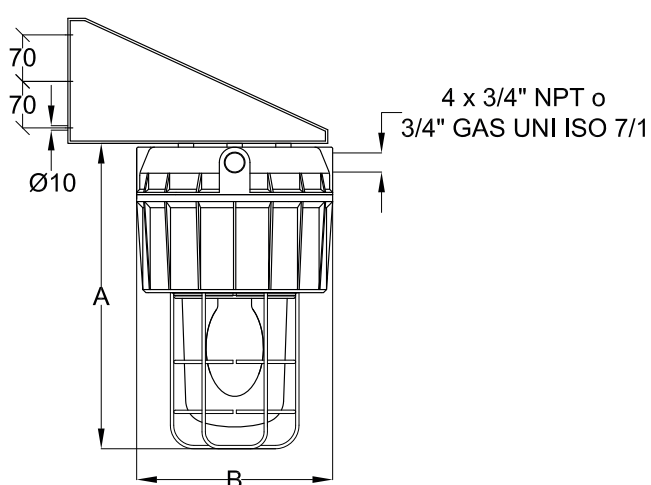


Dimension in mm

EWNIX series selection chart Wall mounting with bracket

Code	Dimension mm		Type Lampada	lamp holder	Watt	Class Ta=+60°C	Max surface temp. °C	Weight kg	 mm
	A	B							
EWNIX-60IM1	370	260	Metal halide	E 27	70	T5	100	7	327x327x540
EWNIX-60IM2	370	260	Metal halide	E 27	100	T4	122	7	327x327x540
EWNIX-60IM4	370	260	Metal halide	E 27	150	T4	130	7	327x327x540
EWNIX-60N1	370	260	Sodium vapour	E 27	70	T4	102	7	327x327x540
EWNIX-60	370	260	Electronic	E 27	20	T6	77	5,6	327x327x540
EWNIX-60	370	260	Electronic	E 27	23	T6	77	5,6	327x327x540
EWNIX-80N4	455	260	Sodium vapour	E40	150	T4	124	8,7	327x327x540
EWNIX-80N5	455	260	Sodium vapour	E40	250	T3	187	8,8	327x327x540
EWNIX-80	455	260	Mixed light	E40	160	T4	124	8,9	327x327x540
EWNIX-80	455	260	Mixed light	E40	250	T3	187	8,7	327x327x540
EWNIX-80IM5	455	260	Metal halide	E40	250	T3	187	8,9	327x327x540
EWNIX-100N6	550	350	Sodium vapour	E40	400	T3	151	20	410x410x700
EWNIX-100IM6	550	350	Metal halide	E40	400	T3	151	20	410x410x700

EWNIX Wall mounting with bracket



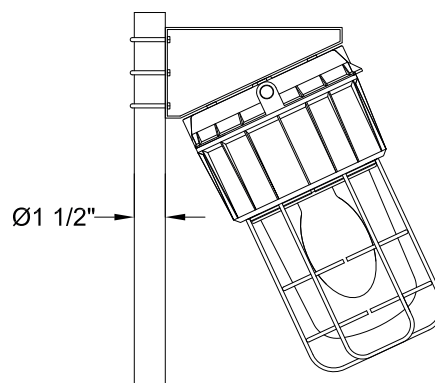
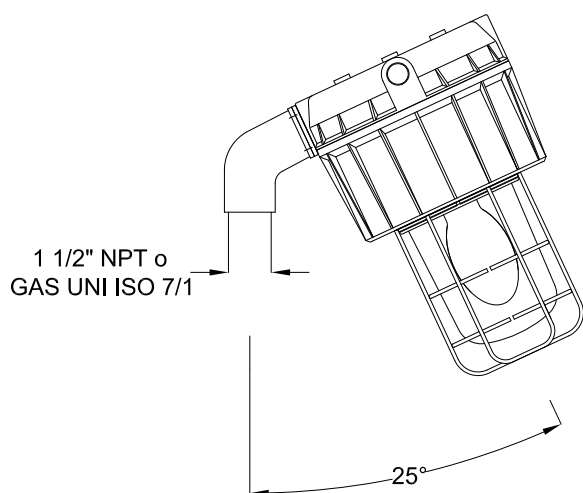
Dimension in mm

EWNP series selection chart Pole mounting

Code	Dimension mm		Type Lampada	lamp holder	Watt	Class Ta=+60°C	Max surface temp. °C	Weight kg	
	A	B							
EWNP-60IM1	370	260	Metal halide	E 27	70	T5	100	7	327x327x540
EWNP-60IM2	370	260	Metal halide	E 27	100	T4	122	7	327x327x540
EWNP-60IM4	370	260	Metal halide	E 27	150	T4	130	7	327x327x540
EWNP-60N1	370	260	Sodium vapour	E 27	70	T4	102	7	327x327x540
EWNP-60	370	260	Electronic	E 27	20	T6	77	5,6	327x327x540
EWNP-60	370	260	Electronic	E 27	23	T6	77	5,6	327x327x540
EWNP-80N4	455	260	Sodium vapour	E40	150	T4	124	8,7	327x327x540
EWNP-80N5	455	260	Sodium vapour	E40	250	T3	187	8,8	327x327x540
EWNP-80	455	260	Mixed light	E40	160	T4	124	8,9	327x327x540
EWNP-80	455	260	Mixed light	E40	250	T3	187	8,7	327x327x540
EWNP-80IM5	455	260	Metal halide	E40	250	T3	187	8,9	327x327x540
EWNP-100N6	550	350	Sodium vapour	E40	400	T3	151	20	410x410x700
EWNP-100IM6	550	350	Metal halide	E40	400	T3	151	20	410x410x700

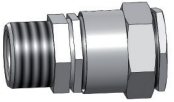
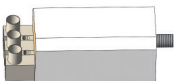
EWNP Pole mounting

* for EWNP size 100, a mounting bracket and 3 galvanised steel U bolts are supplied to fit 1.1/2" poles

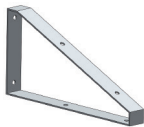
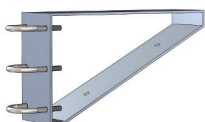
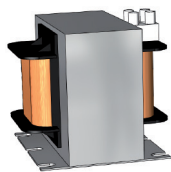


Dimension in mm

EWN series Accessories and spare parts available on request

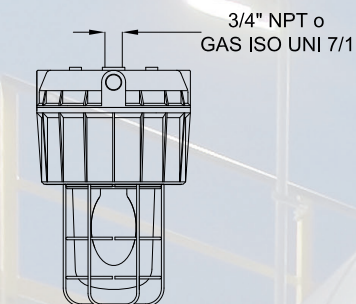
ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	High pressure sodium vapour lamp	E27	70 W (FE70W)	LAMPNAV70WPLUS	 
		E40	100 W (FE100W)	LAMPNAV100WPLUS	
		E40	150 W (FE150W)	LAMPNAV150WPLUS	
		E40	250 W (FE250)	LAMPNAV250WPLUS	
		E40	400 W (FE400W)	LAMPNAV400WPLUS	
	Metal halide lamp	E27	70 W (ME70W)	LAMP70WJM	 
		E27	100 W (ME70W)	LAMP100WJM	
		E27	150 W (ME70W)	LAMP150WJM	
		E40	230 W (ME250W)	LAMP230WJM	
		E40	360 W (ME400W)	LAMP360WJM	
	Cable gland		For models and codes, visit www.cortemgroup.com	NAV2NB NEV2NB	 
	Metallic capacitor	EWN-60 EWN-80 EWN-100	7 μ	F-70	
			8 μ	F-80	
			10 μ	F-125	
			12 μ	F-12.5	
			18 μ	F-18	
			20 μ	F-20	
			35 μ	F-35	
	Igniter		50-400 W	R100	
	Ceramic lamp holder	E27	250V 4A	PORT E-27	
		E40	750V 16A	PORT E-40	

EWN series Accessories and spare parts available on request

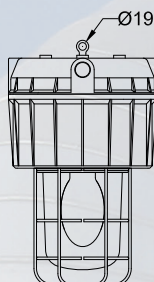
ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Reflector	60	Material: white painted aluminium	G60-527	 
		80		G80-527	
		100		G100-527	
	Angled dome reflector	60	Material: white painted aluminium	G60-527DI	 
		80		G80-527DI	
		100	Contact our Sales Office for availability		
	Suspension wire for optical unit (see installation and mounting methods)		Material: steel wire length 500mm	G-0590	 
	Ring with globe including gasket and guard	60	Material: Aluminium ring Borosilicate glass globe Stainless steel guard	G60-0460	
		80		G80-0460	
		100		G100-0460	
	Bracket for ceiling mounting	60-80	Material: galvanised steel	G-532	
		100		G-532/1	
	Bracket for wall mounting	60-80	Material: galvanised steel	G-539	
		100		G-539/1	
	Pendant eyebolt	60-80	Material: galvanised steel	GOF-8	
	Cable gland mounting for pole mounting	For 1 1/2" pole	Material: aluminium Complete with cable gland for type NAV25IB non armoured cable standard cable range 11÷20	G-0462	
		For 2 1/2" pole		G-0462/1	
	Bracket for pole mounting complete with 3 x UBD5G	100	Material: galvanised steel	G-0550	
	Ballast for sodium vapour and metal halide lamp	60	70 W	R-70NAAP	
		80	150 W	R-150NA	
		80	250 W	R-250NA	
		100	400 W (ioduri)	R-400NA	
		100	400 W (ioduri)	R-400	

Installation and mounting methods EWN series...

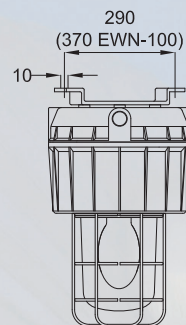
Standard installation of EWN series lighting fixtures



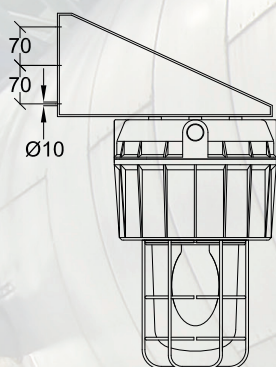
EWNT
Pendant mounting



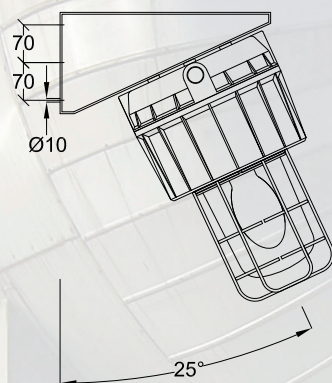
EWNCG
Pendant mounting
with eyebolt



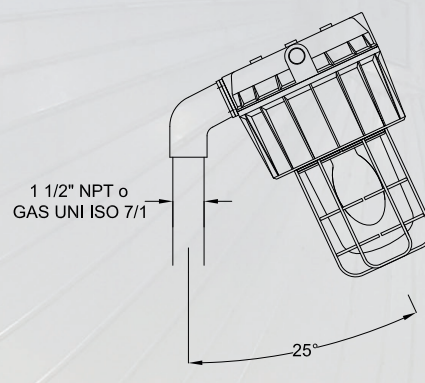
EEWNX
Ceiling mounting



EWNIX
Wall mounting with bracket

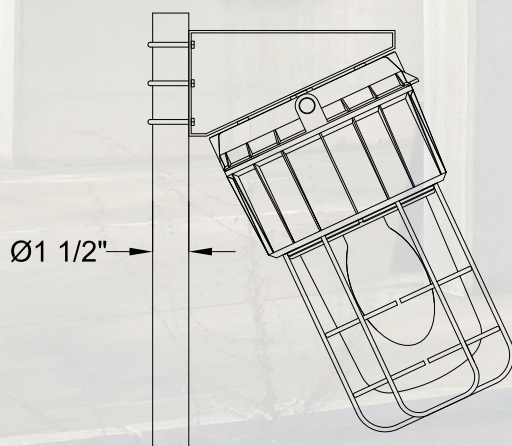


EWNIX
Wall mounting with 25° bracket

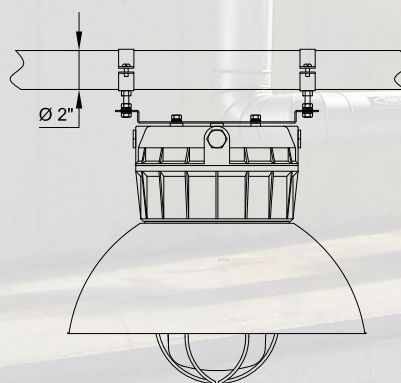


EWNP
pole mounting

For EWNP size 100, a mounting bracket and 3 galvanised steel lugs are supplied for 1 1/2" poles



Example of installation with G-532 bracket and OTER type G-0480/2



Easy access opening/closing system Supplied as standard on EWN-100 model only



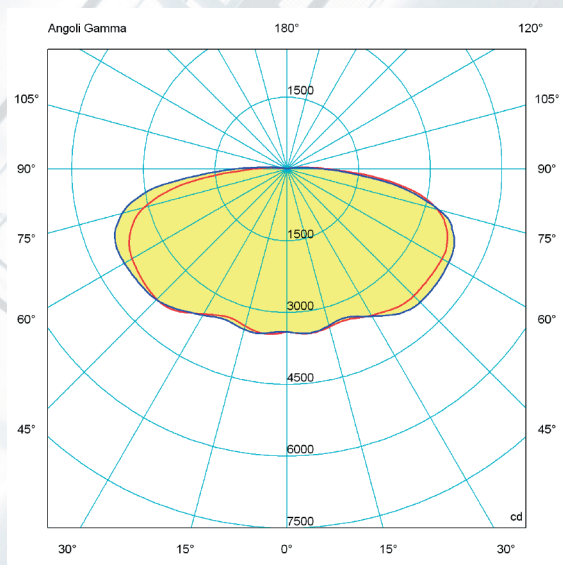
This system was specially designed to offer a easy access to the lamp body during maintenance work while increasing safety. The locking system keeps both hinged parts of the lamp body in position thus providing complete safety, even at heights, as the maintenance worker can use the socket with one hand only while the other can be used to grasp the ladder/raised platform. The advantages are clear in terms of installation times and the prevention of accidents

Suspension wire for optical unit - Available on request -

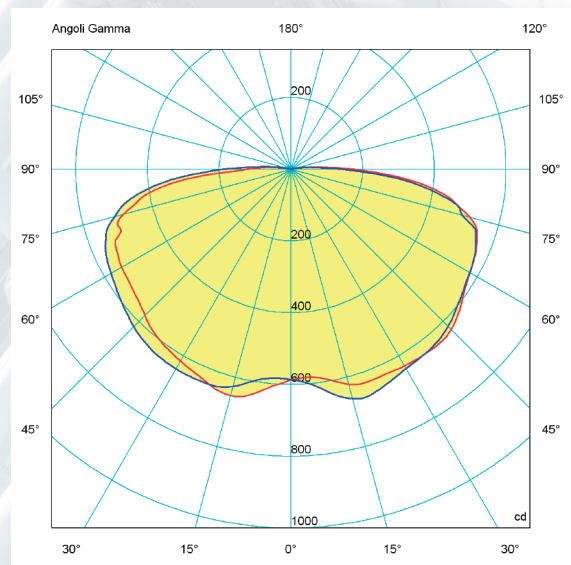


The suspension wire for the optical unit has been specially designed to further increase safety during installation and maintenance work and to decrease the risk of accidents. The wire, that acts as a "third hand" allows the installer to carry out all the necessary procedures without having to support the weight of the globe which remains suspended from the lamp body.

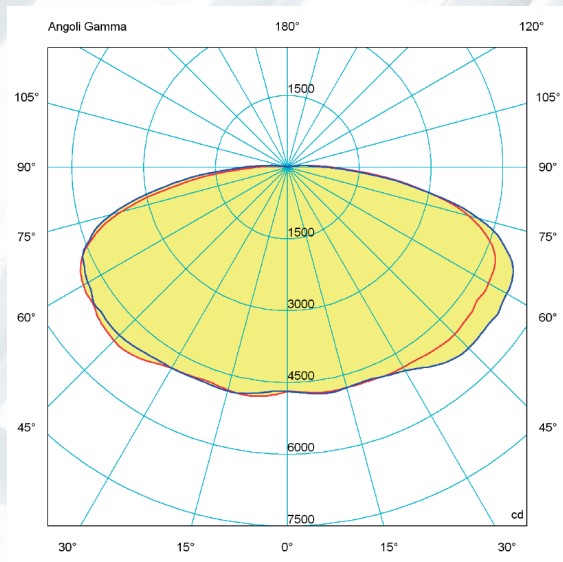
Photometric diagrams



EWN 100 400W HALIDE



EWN 60 70W SODIUM



EWN 100 400W SODIUM

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

