





The NORMA range of waterproof fluorescent fittings, for indoor ceiling installation, is particularly suitable for lighting indoor areas such as industrial buildings, warehouses with low and medium height, corridors, dusty rooms etc. They are also suitable for outdoor installation, but only in zones protected against the severity of the weather such as carports, roof areas, subways, covered car parks etc.

Norma Luminaria hermética para fluorescentes para instalación en el techo interior, para locales industriales, almacenes de media y gran altura, pasillos, salas polvorientas, etc. Permite la instalación en exterior pero en zonas protegidas de cielo abierto, como aparcamientos de coches, zonas de descargas, cubiertas de tráfico, etc.

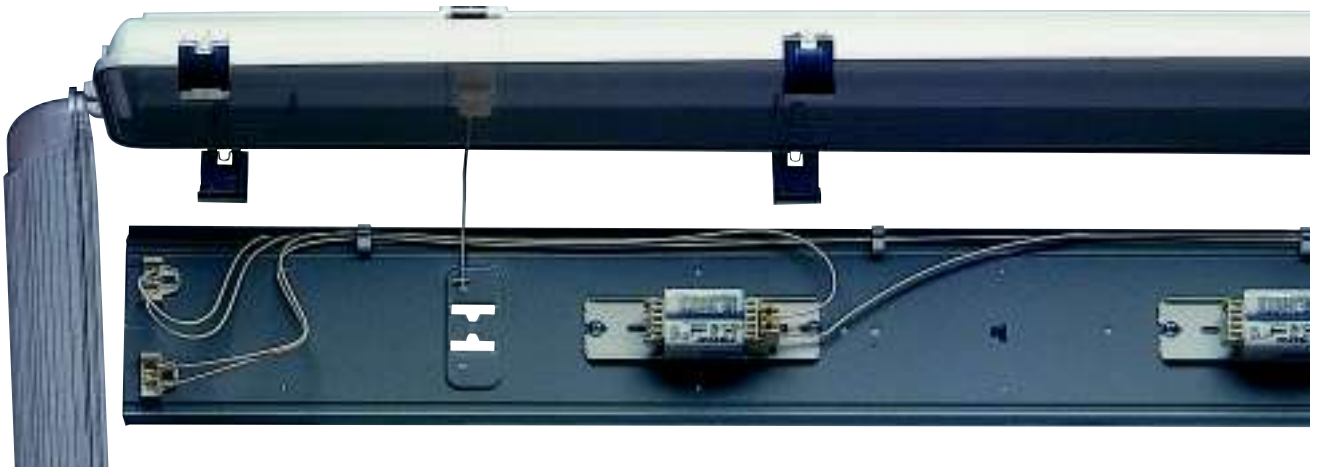
NORMA



SBP

design Arch. Silvia Paola Pennacchio





The stainless steel clip, functioning as a spring, maintains constant pressure on the joint.

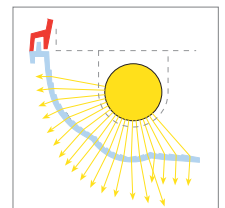
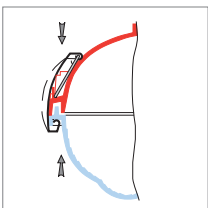
Clips de acero inox. mantienen la presión en el cierre con la junta.

Supply access from top through premoulded knockout.

Alimentación parte superior mediante huella moldeada en la envoltente.

The innovative diffuser design gives programme prismatic control allowing optimum performance light output, and also helps to create an aesthetically pleasing effect.

El difusor con prismas permite un alto rendimiento de distribución luminica.



The fitting is supplied with two strong stainless steel AISI 304 springs for fast and secure ceiling fixing and/or suspension.

La luminaria se suministra con dos soportes de acero inoxidable AISI 304, para una fácil y segura sujeción o suspensión.



STRUCTURAL CONSTRUCTION

- Light grey (RAL 7035) dustproof polycarbonate body with frosted external surface and polyurethane double gasket.
- Externally smooth, clear prismatic UV stabilized polycarbonate diffuser.
- Body and diffuser are manufactured in polycarbonate auto-extinguishing V2 UL94, 850°C glow wire test resistant.
- Brackets for ceiling fixing and diffuser fixing clips in stainless steel.
- White anti oxidising prepainted steel reflector.
- Standard wiring 230V 50Hz, with capacitor in parallel $\cos\phi \geq 0.9$.

Possibility of in series connection through premoulded end knockouts using accessory A0117.

Dimmable electronic ballast fuses etc. with special voltage and frequency available on request.

CHEMICAL COMPATIBILITY

Because NORMA fittings are made in polycarbonate, it is important to advise that this range must be installed in areas where conditions or atmospheres do not attack or corrode the polycarbonate. (Sulphuric acid, acetone, ammonia, Ethyl alcohol, mineral and vegetable oil, animal fat, etc., see page 429).

CARACTERISTICAS DE FABRICACION

- Cuerpo de policarbonato gris (RAL 7035) con superficie lisa y doble junta de poliuretano.
- Difusor externo liso, con prismas internos, de policarbonato estabilizado U.V.
- Cuerpo y difusor están fabricados en policarbonato autoextinguible V2 UL94, test de llama 850°C.
- Soporte de fijación y cierres de difusor en acero inox.
- Reflector de chapa acero pintada antioxidante.
- Conexiones estandar 230V 50Hz condensador $\cos\phi \geq 0.9$.

Posibilidad de instalaciones serie mediante huellas en envoltorio para pasa y prensa cables, utilizar caserío A0117.

Balastos electrónico regulable, fusible, tensión y frecuencia distintas, etc. bajo demanda.

COMPATIBILIDAD QUIMICA

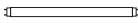
Como la luminaria NORMA se fabrica en policarbonato, es importante advertir que permite la instalación en ambientes sin posibilidad de ataque químico, atmósferas con ácido sulfúrico, acetona, amoníaco, alcohol etílico, aceites minerales o naturales, grasas animales, etc véase pag 429.

SBP

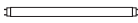
TECHNICAL AND UTILIZATION DATA DATOS TECNICOS Y DE MONTAJE

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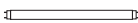


90	NORMA - CR			
05019302	118	CR		G13 1x18W LUMILUX/TL-D
05019402	136	CR		G13 1x36W LUMILUX/TL-D
05019502	158	CR		G13 1x58W LUMILUX/TL-D

Completely wired with capacitor in parallel. *Cableado con condensador paralelo.*
 Temperature class T4 (CEI-EN 50014:5.1.2). *Clase temperatura T4 (CEI EN 50014:5.1.2).*

90	NORMA - ETRC			
05013102	118	ETRC		G13 1x18W LUMILUX/TL-D
05013202	136	ETRC		G13 1x36W LUMILUX/TL-D
05013302	158	ETRC		G13 1x58W LUMILUX/TL-D

With electronic non dimmable ballast, for operating in ambient temperatures from -0° to +50° according to models. *Con balasto electrónico regulable, para temperatura ambiente -0° Hasta +50°C, según modelos.*
 Temperature class T6 (CEI-EN 50014:5.1.2). *Clase temperatura T6 (CEI EN 50014:5.1.2).*

90	NORMA - II			
05025202	II 118	CR		G13 1x18W LUMILUX/TL-D
05025302	II 136	CR		G13 1x36W LUMILUX/TL-D
05025402	II 158	CR		G13 1x58W LUMILUX/TL-D

CLASSE II 

Completely wired in **CLASS II** with capacitor in parallel. Temperature class T4 (CEI-EN 50014:5.1.2). *Cableado completo en **Clase II** con condensador en paralelo. Clase temperatura T4 (CEI EN 50014:5.1.2).*





90	NORMA - EM			
05024802	EM 136	ETRC		G13 1x36W LUMILUX/TL-D
05024902	EM 158	ETRC		G13 1x58W LUMILUX/TL-D

With **emergency group** (inverter + nickel/cadmium battery) x one lamp-one hour. *Con **kit de emergencia** (Inversor+ Acumulador Níquel Cadmio) una lámpara / una hora. Circuito permanente.*

Permanent circuit.

Con balasto electrónico.



90	  	NORMA - CR			
05019602	218	CR			G13 2x18W LUMILUX/TL-D
05019702	236	CR			G13 2x36W LUMILUX/TL-D
05019802	258	CR			G13 2x58W LUMILUX/TL-D

Completely wired with capacitor in parallel. *Cableado con condensador paralelo.*
 Temperature class T4 (CEI-EN 50014:5.1.2). *Clase temperatura T4 (CEI EN 50014:5.1.2).*

90	NORMA - ETRC			
05013402	218	ETRC		G13 2x18W LUMILUX/TL-D
05013502	236	ETRC		G13 2x36W LUMILUX/TL-D
05013602	258	ETRC		G13 2x58W LUMILUX/TL-D

With electronic non dimmable ballast, for operating in ambient temperatures from -0° to +45° according to models. *Con balasto electrónico regulable, para temperatura ambiente -0° Hasta +50°C, según modelos.*
 Temperature class T6. (CEI-EN 50014:5.1.2). *Clase temperatura T6 (CEI EN 50014:5.1.2).*

90	NORMA - II			
05025502	II 218	CR		G13 2x18W LUMILUX/TL-D
05025602	II 236	CR		G13 2x36W LUMILUX/TL-D
05025702	II 258	CR		G13 2x58W LUMILUX/TL-D

CLASSE II 

Completely wired in **CLASS II** with capacitor in parallel. Temperature class T4 (CEI-EN 50014:5.1.2). *Cableado completo en **Clase II** con condensador en paralelo. Clase temperatura T4 (CEI EN 50014:5.1.2).*

90	NORMA - EM			
05025002	EM 236	ETRC		G13 2x36W LUMILUX/TL-D
05025102	EM 258	ETRC		G13 2x58W LUMILUX/TL-D

With **emergency group** (inverter + nickel/cadmium battery) x one lamp-one hour. *Con **kit de emergencia** (Inversor+ Acumulador Níquel Cadmio) una lámpara / una hora. Circuito permanente.*
 Permanent circuit. *Con balasto electrónico.*



14433995 - A0117/18 - 5x1,5mm²
 14434995 - A0117/36 - 5x1,5mm²
 14435995 - A0117/58 - 5x1,5mm²

Wiring for connection in series.
 The accessory is factory installed
 on demand.

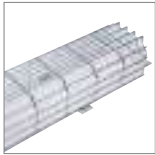
Cableado para conexiones en serie. Este accesorio se instala en fábrica bajo demanda.



14003620 - A0172

Terminal with fuse (to be ordered with fitting).

Bornas con fusible (demanda a la vez que luminaria).

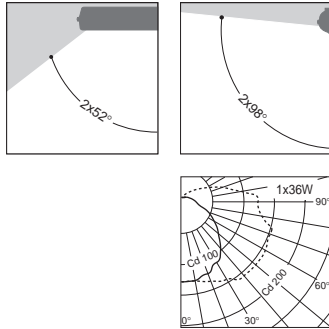


14430995 - A0116/36
 14431995 - A0116/58

Galvanized steel protection grill, to be fixed on ceiling. Suitable for single and double lamp models.

Malla de protección de acero galvanizado montada en techo. Para modelos de una o dos lámparas.

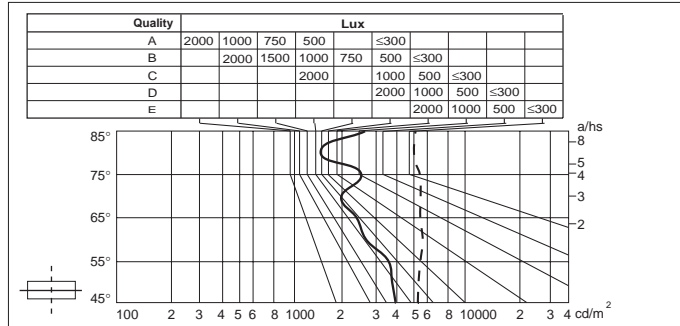
NORMA 136
1x3350 Lumen



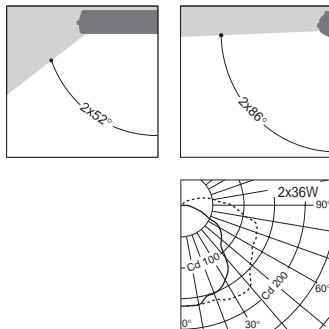
cod. C.I.E.: 33-62-83-84-75 UTE C71-121: 0,63 J + 0,12 T BZ: 6 **REND. 75.2 %**

A	80	70	70	70	70	50	50	50	30	30	30	0	
B	70	70	50	30	10	50	30	10	50	30	10	0	
C	10	10	10	10	10	10	10	10	10	10	10	0	
K	0.60	0.38	0.36	0.27	0.21	0.17	0.25	0.20	0.16	0.23	0.18	0.15	0.13
	0.80	0.44	0.42	0.33	0.27	0.22	0.31	0.25	0.21	0.29	0.24	0.20	0.18
	1.00	0.49	0.47	0.38	0.32	0.27	0.35	0.30	0.26	0.33	0.28	0.25	0.21
	1.25	0.53	0.51	0.43	0.37	0.32	0.40	0.35	0.31	0.37	0.33	0.29	0.26
	1.50	0.56	0.54	0.47	0.41	0.36	0.43	0.39	0.34	0.40	0.36	0.33	0.29
	2.00	0.61	0.59	0.52	0.47	0.43	0.49	0.44	0.40	0.45	0.42	0.38	0.34
	2.50	0.64	0.61	0.56	0.51	0.47	0.52	0.48	0.45	0.49	0.45	0.42	0.38
3.00	0.66	0.63	0.59	0.54	0.50	0.55	0.51	0.48	0.51	0.48	0.45	0.41	
4.00	0.69	0.66	0.62	0.58	0.55	0.58	0.55	0.52	0.54	0.52	0.49	0.45	
5.00	0.70	0.68	0.64	0.61	0.58	0.60	0.58	0.55	0.56	0.54	0.52	0.47	

A: Ceiling *Plafón techo*
B: Wall *Pared*
C: Floor *Suelo*
K: Room index *Indice del local*



NORMA 236
2x3350 Lumen



cod. C.I.E.: 38-66-87-90-72 UTE C71-121: 0,64 H + 0,08 T BZ: 6 **REND. 71.8 %**

A	80	70	70	70	70	50	50	50	30	30	30	0	
B	70	70	50	30	10	50	30	10	50	30	10	0	
C	10	10	10	10	10	10	10	10	10	10	10	0	
K	0.60	0.38	0.37	0.28	0.22	0.19	0.27	0.22	0.18	0.25	0.21	0.18	0.16
	0.80	0.44	0.42	0.34	0.28	0.24	0.32	0.27	0.23	0.31	0.26	0.23	0.20
	1.00	0.49	0.47	0.39	0.33	0.29	0.37	0.32	0.28	0.35	0.31	0.27	0.25
	1.25	0.53	0.51	0.44	0.38	0.34	0.41	0.37	0.33	0.39	0.35	0.32	0.29
	1.50	0.56	0.54	0.47	0.42	0.38	0.45	0.40	0.36	0.42	0.38	0.35	0.32
	2.00	0.60	0.58	0.53	0.48	0.44	0.50	0.46	0.42	0.47	0.44	0.41	0.38
	2.50	0.63	0.61	0.56	0.52	0.48	0.53	0.50	0.47	0.51	0.48	0.45	0.42
3.00	0.65	0.63	0.59	0.55	0.51	0.56	0.53	0.50	0.53	0.50	0.48	0.44	
4.00	0.67	0.66	0.62	0.59	0.56	0.59	0.56	0.54	0.56	0.54	0.52	0.48	
5.00	0.69	0.67	0.64	0.61	0.59	0.61	0.59	0.56	0.58	0.56	0.54	0.51	

A: Ceiling *Plafón techo*
B: Wall *Pared*
C: Floor *Suelo*
K: Room index *Indice del local*

