

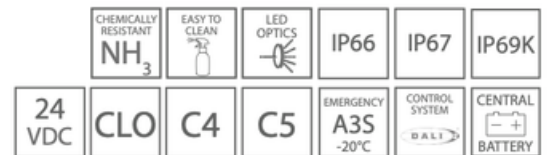
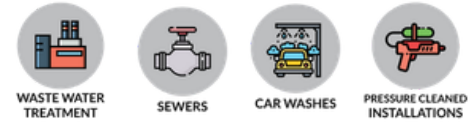


Hazardous
Lighting Solutions LTD



INS240LED

*Tubular waterproof light fitting
with LED modules.*



MECHANICAL FEATURES

Tube:

Polycarbonate (PC)
Polymethyl methacrylate (PM)
Polycarbonate OPAL (PCO)
Polymethyl methacrylate OPAL (PMO)

End-cap: Powder coated anodized aluminum (ALU) / Stainless steel (316)

Ingress protection: IP66, IP67, IP69K

Impact resistance: PC: IK11 / PM: IK08

Protection class: I, III

ELECTRICAL FEATURES

Connection terminals: 2.5 mm²

Power supply: 220-240V, 0/50-60Hz (I)
24V, 0Hz (III)

Source of light: ENEC certified LED modules

Power factor: 0.95

Cable inlets: Ø20 (wire Ø6-13mm)
Ø25 (wire Ø9-17mm)
RST (wire Ø7-13mm)

Overvoltage protection:

L/N-PE: 4kV (IEC 61000-4-5)
L-N: 4kV (IEC 61000-4-5)
EFT: 4kV (IEC 61000-4-4)

WORK PARAMETERS

Ambient Temperatures: -40°C to +60°C

Lifetime: >70.000h L80 B10
>100.000h L70B10

PHOTOMETRICAL PARAMETERS

CRI: >80

Colour temperature:

3000K - option
4000K
4500K - for C4
5000K - option
6500K - option

TYPES COMPARISON

WIDE BEAM OPTICS (WB)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)	PC Diffuser	PM Diffuser
INS240LED-0600-J2-1	2,677	18.7	143	-40°C ÷ +55°C	-35°C ÷ +50°C
INS240LED-0600-J2-3	3,711	26.3	141	-40°C ÷ +50°C	-35°C ÷ +50°C
INS240LED-0600-B2-1	5,179	34.3	151	-40°C ÷ +45°C	-35°C ÷ +45°C
INS240LED-1200-J2-1	2,714	18.8	144	-40°C ÷ +60°C	-35°C ÷ +55°C
INS240LED-1200-J2-3	3,783	26.6	142	-40°C ÷ +55°C	-35°C ÷ +50°C
INS240LED-1200-B2-1	5,137	34.3	150	-40°C ÷ +55°C	-35°C ÷ +50°C
INS240LED-1200-B2-3	7,111	48.8	146	-40°C ÷ +45°C	-35°C ÷ +45°C
INS240LED-1200-J4-1	5,371	34.7	155	-40°C ÷ +55°C	-35°C ÷ +50°C
INS240LED-1200-J4-3	7,453	51	146	-40°C ÷ +45°C	-35°C ÷ +45°C
INS240LED-1200-B4-0	9,583	60.2	159	-40°C ÷ +40°C	-35°C ÷ +40°C

NARROW BEAM OPTICS (NB)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)
INS240LED-0600-J2-1	2,691	18.7	144
INS240LED-0600-J2-3	3,730	26.3	142
INS240LED-0600-B2-1	5,205	34.3	152
INS240LED-1200-J2-1	2,728	18.8	145
INS240LED-1200-J2-3	3,802	26.6	143
INS240LED-1200-B2-1	5,163	34.3	151
INS240LED-1200-B2-3	7,147	48.8	146
INS240LED-1200-J4-1	5,398	34.7	156
INS240LED-1200-J4-3	7,491	51	147
INS240LED-1200-B4-0	9,632	60.2	160

OPAL TUBE (PCO/PMO)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)
INS240LED-0600-J2-1	2,533	18.7	135
INS240LED-0600-J2-3	3,511	26.3	133
INS240LED-0600-B2-1	4,890	34.3	143
INS240LED-1200-J2-1	2,570	18.8	137
INS240LED-1200-J2-3	3,583	26.6	135
INS240LED-1200-B2-1	4,848	34.3	141
INS240LED-1200-B2-3	6,709	48.8	137
INS240LED-1200-J4-1	5,083	34.7	146
INS240LED-1200-J4-3	7,053	51	138
INS240LED-1200-B4-0	9,053	60.2	150
INS240LED-0600-D1-0	1,256	12.3	102
INS240LED-0600-D2-0	2,513	23.5	107
INS240LED-1200-D4-0	5,025	45	112

ENCAPSULATED LED MODULES (C4)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)
INS240LED-0600-J2-1	2,744	18.7	147
INS240LED-0600-J2-3	3,804	26.3	145
INS240LED-0600-B2-1	5,104	34.3	149
INS240LED-1200-J2-1	2,782	18.8	148
INS240LED-1200-J2-3	3,878	26.6	146
INS240LED-1200-B2-1	5,266	34.3	154
INS240LED-1200-B2-3	7,289	48.8	149
INS240LED-1200-J4-1	5,506	34.7	159
INS240LED-1200-J4-3	7,640	51	150
INS240LED-1200-B4-0	9,824	60.2	163

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VOLTAGE 24VDC (III) - WIDE BEAM (WB)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)	Ambient Temperature
INS240LED-0600-D1	1,330	12.3	108	-25°C ÷ +55°C
INS240LED-0600-D2	2,660	23.5	117	-25°C ÷ +50°C
INS240LED-1200-D4	5,319	45	118	-25°C ÷ +50°C

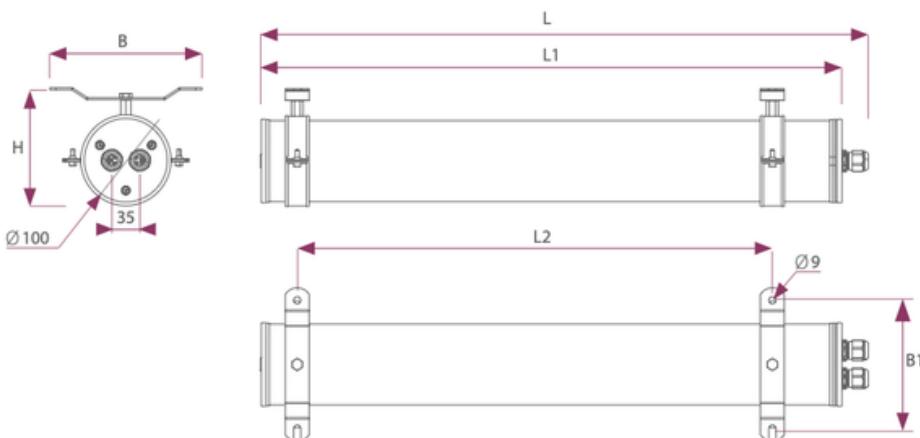
VOLTAGE 24VDC (III) - NARROW BEAM (NB)

The Light Fitting	Luminous Flux (lm)	Power Consump. (W)	Efficiency (lm/W)	Ambient Temperature
INS240LED-0600-D1	1,337	12.3	109	-25°C ÷ +55°C
INS240LED-0600-D2	2,674	23.5	114	-25°C ÷ +50°C
INS240LED-1200-D4	5,346	45	119	-25°C ÷ +50°C

MAX. QUANTITY OF LINE CONNECTED LIGHT FITTINGS

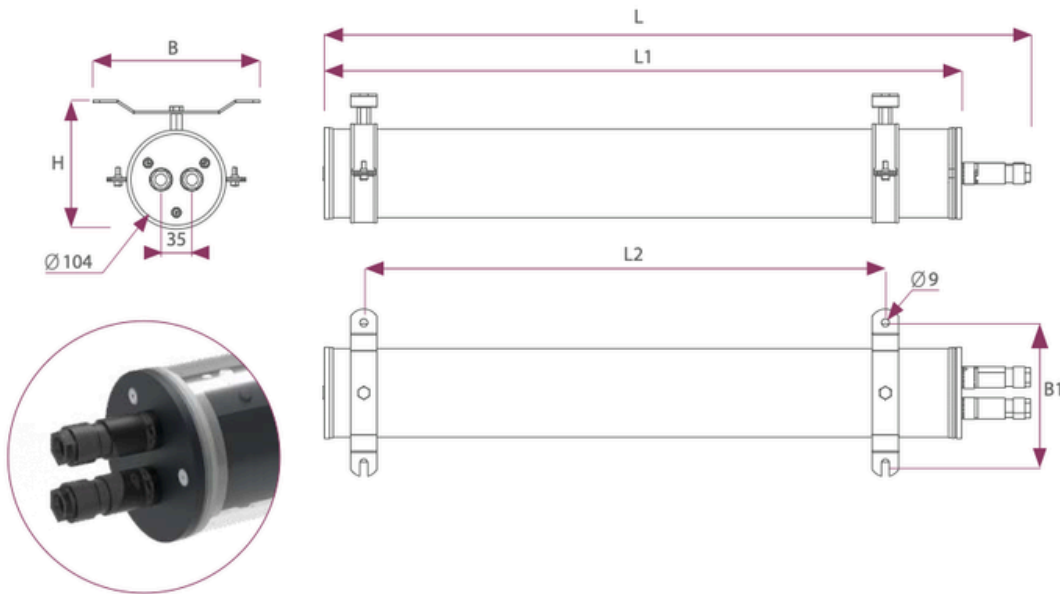
The Light Fitting	C16	B16	Max. inrush current	Start-up time
INS240LED	45	27	4A	1.3ms (1300µs)

DIMENSIONS- STANDARD VERSION WITH CABLE INLETS



The Light Fitting	L [mm]	L1 [mm]	L2 [mm]	B [mm]	B1 [mm]	H [mm]	Weight [kg]
INS240LED-0600	760	727	min. 595 – max. 650	190	160	147	~6.0
INS240LED-1200	1320	1287	min. 1155 – max. 1210	190	160	147	~11.5

DIMENSIONS- OPTIONAL VERSION WITH RST CONNECTORS



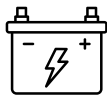
The Light Fitting	L [mm]	L1 [mm]	L2 [mm]	B [mm]	B1 [mm]	H [mm]	Weight [kg]
INS240LED-0600	806	727	min. 595 – max. 650	190	160	147	~6.0
INS240LED-1200	1366	1287	min. 1155 – max. 1210	190	160	147	~11.5

OPTIONAL VERSIONS



3H

EMERGENCY POWER MODULE: Version with emergency 3h power module 3h. Works in temp. range -20°C to +45°C



CENTRAL BATTERY: Version designed to work with a central battery. Power supply 176-280VDC.



DALI-2 DRIVER: Version equipped with an integrated power supply with DALI-2 interface.

C5

ANTI-CORROSION PROTECTION: Version with anti-corrosion protection in category C5.

CLO

CONSTANT LUMEN OUTPUT: An additional function that allows for maintaining a constant luminous flux throughout the life of the fixture.

MEAN EMERGENCY LUMINOUS FLUX (FOR WB OPTICS)

The Light Fixture	Version A3S [lm]	Version ZB** [lm]
INS240LED-0600-J2-1	774	1,339
INS240LED-0600-J2-3	737	1,856
INS240LED-0600-B2-1	838	2,590
INS240LED-1200-B2-1	831	2,569
INS240LED-1200-B2-3	789	3,556
INS240LED-1200-B4-0	852	4,792
INS240LED-1200-J2-1	785	1,357
INS240LED-1200-J2-3	751	1,892
INS240LED-1200-J4-1	853	2,686
INS240LED-1200-J4-3	811	3,727

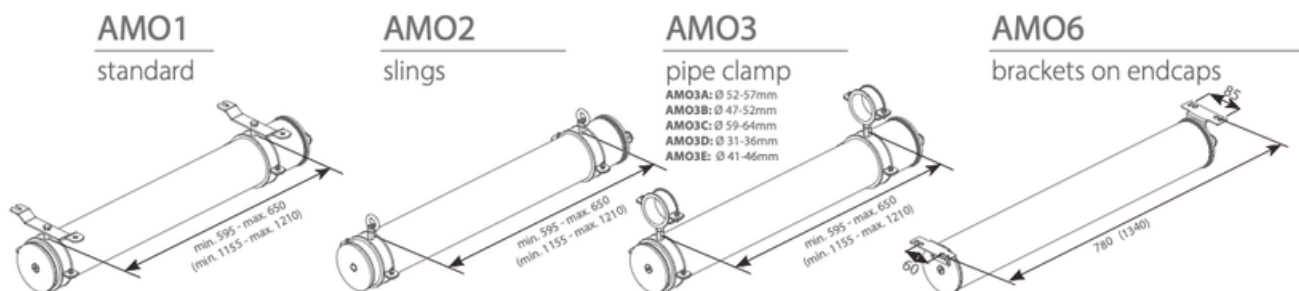
** - luminaires in ZB mode consume half of the nominal power.

WORK TEMPERATURE

Emergency Version	Work Temp. (°C)
A3S – work	-20°C to +45°C
A3S – battery charging*	0°C to +45°C
ZB	check: types comparison
DA	check: types comparison

* - The battery must be charged in the temperature range of 0°C to +45°C when non-maintained. When maintained, in the temperature range of -10°C to +45°C.

MOUNTING



PHOTOMETRY

