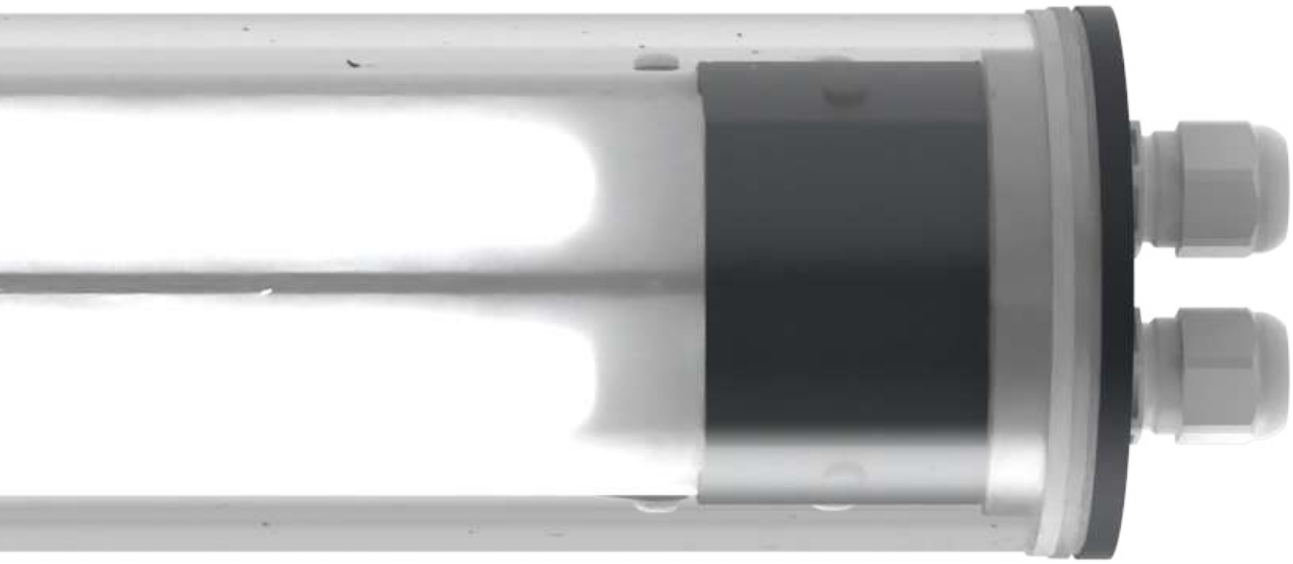


INS240LED

V.2025-1

ATM lighting

CHEMICALLY RESISTANT NH_3 | EASY TO CLEAN | LED OPTICS | IP66 | IP67 | IP69K

24 VDC | CLO | C4 | C5 | EMERGENCY A3S -20°C | CONTROL SYSTEM DALI | CENTRAL BATTERY

FEATURES: I[st] and III[rd] class of chemical resistance

EXEMPLARY APPLICATIONS

PRESSURE CLEANED INSTALLATIONS

SEWAGE TREATMENTS PLANTS

CARWASHES

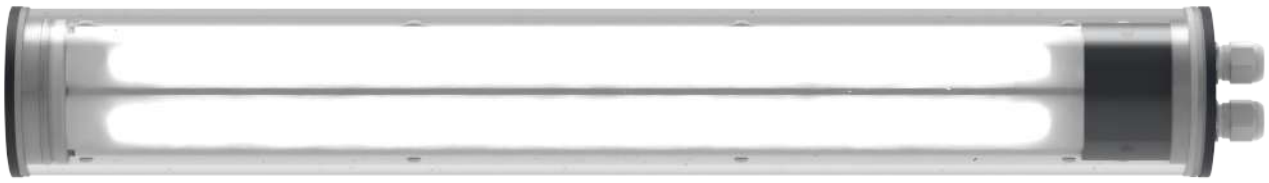
SEWERS

Tubular waterproof light fitting with LED modules. The light fitting has very high ingress protection class - IP69. The diffuser is made of polycarbonate or polymethyl methacrylate. The tubes are UV protected and can be used in indoor and outdoor applications. Additionaly the light fitting is equipped with special optics which provides the propagation of light.

Optionally, the light fitting can be equipped with 3h emergency power module **A3S**, adapted to be powered from central battery **ZB**, equipped with driver with DALI-2 interface **DA**, or with constant lumen output feature **CLO.**

ATM lighting

FEATURES



MECHANICAL PARAMETERS

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
mounting	different brackets *check: mountings*
accessories	mounting accessories

ELECTRICAL PARAMETERS

2,5 mm²	connection terminals
220-240V, 0/50-60Hz (I) 24V, 0Hz (III)	power supply
ENEC certified LED modules	source of light
>0,95	power factor
Ø20 (wire Ø6-13mm) Ø25 (wire Ø9-17mm) RST (wire Ø7-13mm)	cable inlets
L/N-PE: 4kV (IEC 61000-4-5) L-N: 4kV (IEC 61000-4-5) EFT: 4kV (IEC 61000-4-4)	overvoltage protection
THD <10%	harmonic distortion factor

WORK PARAMETERS

ambient temperature	-40°C to +60°C *check: types comparison*
lifetime	>70.000h L_{80} B_{10} >100.000h L_{70} B_{10}

PHOTOMETRICAL PARAMETERS

>80	CRI
3000K - option 4000K 4500K - for C4 *5000K - option* *6500K - option*	color temperature

TYPES COMPARISON

WIDE BEAM OPTICS (WB)

THE LIGHT FITTING	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]
INS240LED-0600-J2-1	2 677	18,7	143
INS240LED-0600-J2-3	3 711	26,3	141
INS240LED-0600-B2-1	5 179	34,3	151
INS240LED-1200-J2-1	2 714	18,8	144
INS240LED-1200-J2-3	3 783	26,6	142
INS240LED-1200-B2-1	5 137	34,3	150
INS240LED-1200-B2-3	7 111	48,8	146
INS240LED-1200-J4-1	5 371	34,7	155
INS240LED-1200-J4-3	7 453	51,0	146
INS240LED-1200-B4-0	9 583	60,2	159

WORK TEMPERATURES RANGE

THE LIGHT FITTING	PC DIFFUSER	PM DIFFUSER
INS240LED-0600-J2-1	-40°C ÷ +55 °C	-35°C ÷ +50 °C
INS240LED-0600-J2-3	-40°C ÷ +50 °C	-35°C ÷ +50 °C
INS240LED-0600-B2-1	-40°C ÷ +45 °C	-35°C ÷ +45 °C
INS240LED-1200-J2-1	-40°C ÷ +60 °C	-35°C ÷ +55 °C
INS240LED-1200-J2-3	-40°C ÷ +55 °C	-35°C ÷ +50 °C
INS240LED-1200-B2-1	-40°C ÷ +55 °C	-35°C ÷ +50 °C
INS240LED-1200-B2-3	-40°C ÷ +45 °C	-35°C ÷ +45 °C
INS240LED-1200-J4-1	-40°C ÷ +55 °C	-35°C ÷ +50 °C
INS240LED-1200-J4-3	-40°C ÷ +45 °C	-35°C ÷ +45 °C
INS240LED-1200-B4-0	-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	51,0	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	51,0	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	45,0	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	51,0	150
INS240LED-1200-B4-0	9 824	60,2	163

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	45,0	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	45,0	119	-25°C ÷ +50 °C

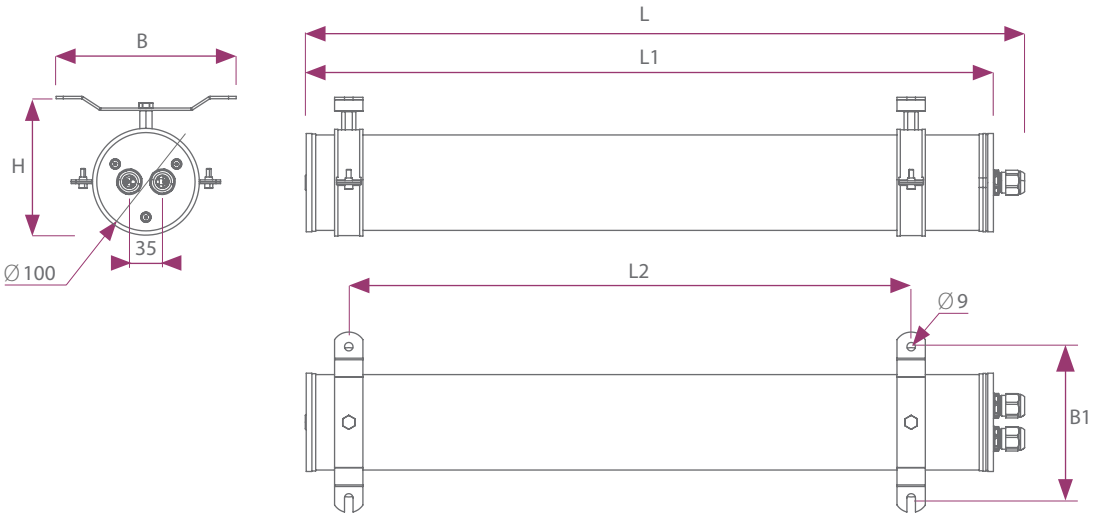
Luminous flux tolerance +/- 10%
Power tolerance +/- 10%
The parameters given in the following data sheet has been determined for the temperature Ta=25°C.
Luminous flux, light intensity distribution and efficiency has been tested on the basis of the standards EN ISO 17025:2005, norm series EN13032 and LM-79.
The actual data and General Warranty Conditions are available on our website **www.atmlighting.pl**

MAX. QUANTITY OF LINE CONNECTED LIGHT FITTINGS

	circuit braker			
THE LIGHT FITTING	C16	B16	Max. inrush current	Start-up time
INS240LED	45	27	4A	1,3ms (1300µs)

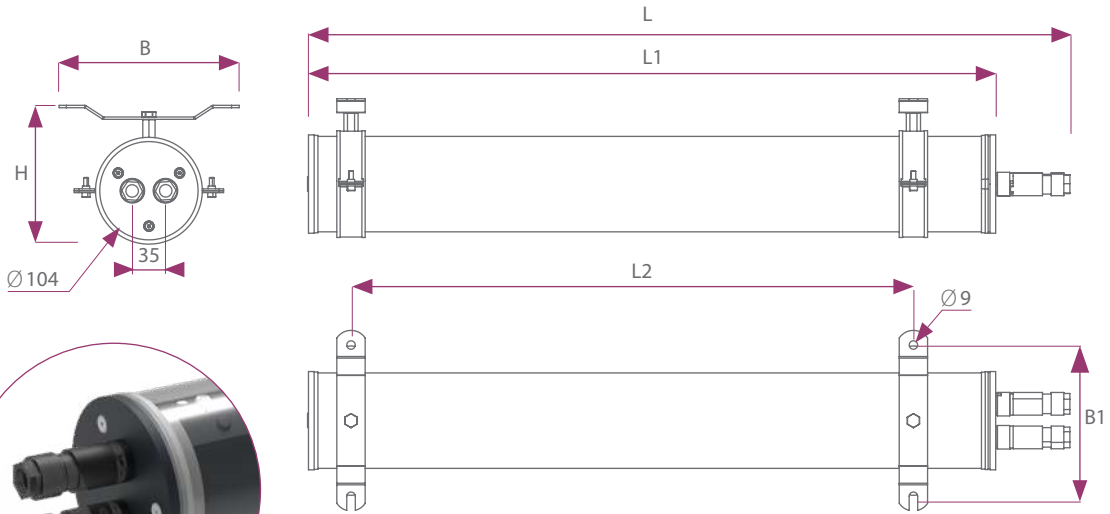
It is recommended to use MCB type C with LED lighting.
Variables may vary depending on the use case. Both starting and continuous current calculations are based on ABB S200 series circuit breakers for Ta = 30°C.
Data given for I protection class.

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

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 VERSION

A3S — Emergency power module: Version eith emergency 3h power module 3h. Works in temp. range -20°C* to +45°C.

Additional power consump. during charging of the battery - 3W. Version not available with RST connector.

ZB — Central battery: Version designed to work with a central battery. Power supply 176-280VDC.

For ZB version, below -35°C switching of the power supply is not allowed.

DA — DALI-2 driver: Version equipped with an integrated power supply with DALI-2 interface.

For temperatures below -30°C DALI functionality may be limited, the power supply at the terminal should be > 12V.

C5 — Anti-corrosion protection: Version with anti-corrosion protection in category C5.

Selection of encapsulated LED modules (C4) and stainless steel (316) endcaps required.

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	

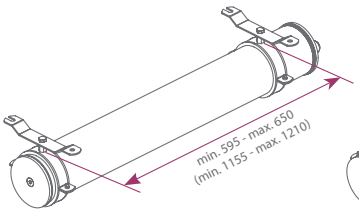
* - The battery must be charged in the temperature range of 0°C to +45°C when non-maintained. When maintained, in the temperature range of -10°C to +45°C.

The DA version is equipped with an integrated power supply with a DALI-2 interface, which allows monitoring the operation of the luminaires and controlling the lighting using data directly from motion sensors or from the building management system (BIM). A properly configured lighting control system can significantly reduce electricity costs and improve the ergonomics of users' work. The DA version of the luminaire is not equipped with an emergency power supply module.

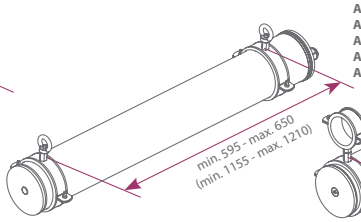
CLO — An additional function that allows for maintaining a constant luminous flux (Constant Lumen Output) throughout the life of the luminaire. Thanks to the constant luminous flux, the luminaire not only provides stable lighting, but also saves energy and extends the life of the LEDs.

MOUNTINGS

AMO1
standard

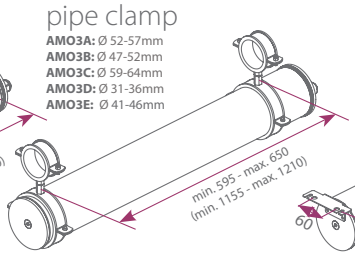


AMO2
slings

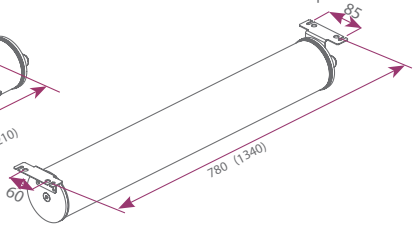


AMO3
pipe clamp

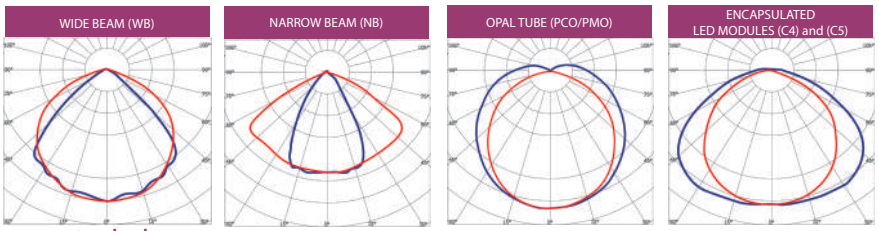
AMO3A: Ø 52-57mm
AMO3B: Ø 47-52mm
AMO3C: Ø 59-64mm
AMO3D: Ø 31-36mm
AMO3E: Ø 41-46mm



AMO6
brackets on endcaps



OPTICS



standard

CONFIGURATIONS

I	N	S	2	4	0	L	E	D	-				-			-	-		E	-	-			20	-	ALU	-		-	WB	-	-	-	AMO1
										0	6	0	0	J	1	0	34			20	10	P	25	316	PC	NB	A3S	CLO	AMO2
										1	2	0	0	B	2	1	35			30	20	M			PM	C4	ZB		AMO3
														D	4	3	11			40		RST			PCO	C5	DA		AMO6
																				50					PMO				

group
industrial light fittings

type
type 240

source of light
LED modules

approximate length
~ 600mm, 1200mm

LED modules type

LED modules quantity

power supply
34E - 220-240V, 50÷60Hz,
35E - 220-240V, 50÷60Hz +176-280V 0Hz,
11E - 24V 0Hz

wiring
20 - single 2-pole terminal → 2
30 - single 3-pole terminal → 3
40 - single 4-pole terminal → 4
50 - single 5-pole terminal → 5

cable inlets - quantity
10 - one cable inlet in one encap → 1 0
20 - two cable inlets in one endcap → 2 0

cable inlets - type
P - plastic cable gland
M - metal cable gland
RST - connector. Not available for A3S version.

cable inlets - size
20 - Ø20 (cable 6-13mm, for RST 7-13mm)
25 - Ø25 (cable 9-17mm)

endcap - material
ALU - powder coated anodized aluminum
316 - austenitic chrome-nickel stainless steel (grade 1.4404)

tube material
PC - polycarbonate. The tubes are UV protected and can be used in indoor and outdoor applications.
PM - poly(methyl methacrylate)
PCO - polycarbonate OAPL.
PMO - poly(methyl methacrylate) OPAL.

optics
WB - wide beam (standard)
NB - narrow beam
C4 - encapsulated LED modules

emergency and special versions
A3S - version with 3h emergency power supply. Available in version 34E. Working in amb. temp. -20°C up to +45°C. Required wiring 40.
ZB - version with driver for central battery - without switching module, required wiring 30.
DA - version equipped with integrated driver with DALI-2 interface. Required wiring 50.
C5 - corrosion protection in category C5. Hermetic LED modules (C4) and stainless steel (type 316) endcaps and clamps included.

optional features
CLO - version with Constant Lumen Output function, which adjusts the power supply during the life of the LED luminaire, ensuring a constant luminous flux throughout the entire period of use.

mountings
check: mountings
When choosing 316 grade stainless steel encaps, the brackets are made from the same grade of steel and remain unpainted.

DOWNLOAD

LDT

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