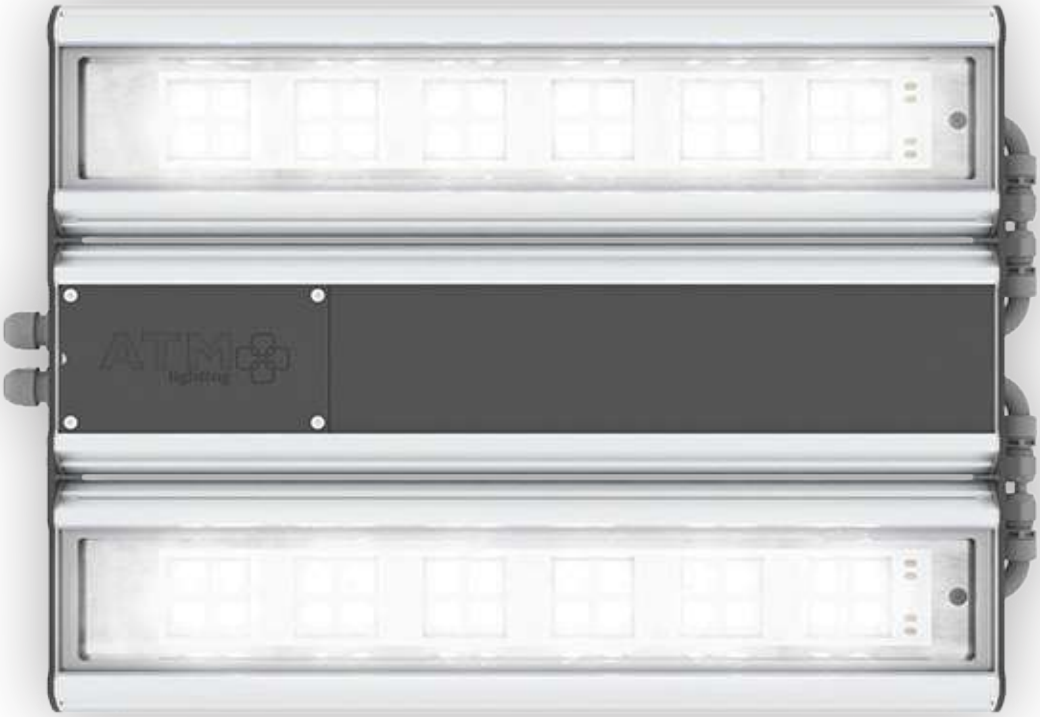


MADE IN POLAND

HPL450LED

EXEMPLARY APPLICATIONS

INDUSTRY BUILDINGS

WAREHOUSES

PRODUCTION LINES

PASSAGEWAYS

Industrial floodlight with LED modules with very high output. Equipped with focusing lens.

As a standard the light fixture is equipped with driver with DALI-2 and D4i interface **DA**, and adapted to work with central battery **ZB.**

Optionally the floodlight can be equipped with wireless connection module operating in the Thread® network **WDA**, or can be adapted to work in 3-phase network **3F.**

FEATURES

MECHANICAL PARAMETERS

housing	anodized aluminum (ALU)
diffuser	tempered glass (GL) polycarbonate (PC)
ingress protection	IP66, IP67
protection class	I
shock resistance	**GL:** IK09 **PC:** IK10
mounting	on the bracket or suspended
mounting accessories	check: *mountings*
suspended mounting	adapted for suspended mounting
wires between the fitting modules	halogen-free high temperature resistant silicone wires

WORK PARAMETERS

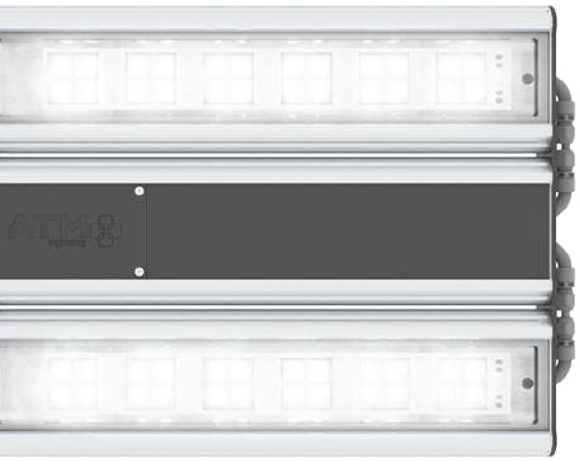
ambient temperature	-40°C up to +65°C *check: types comparison*
lifetime	>50.000h L_{80} B_{10} >70.000h L_{70} B_{10} >100.000h L_{70} B_{50}

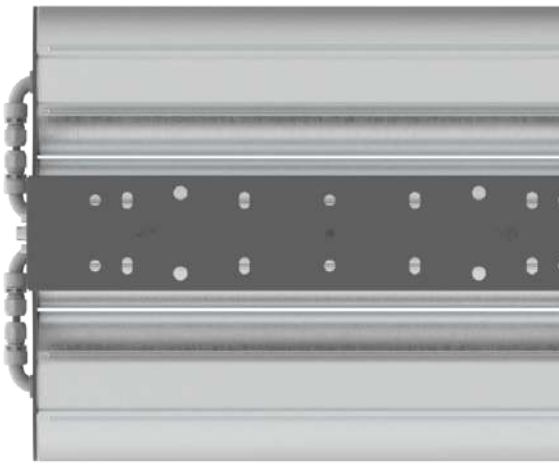
ELECTRICAL PARAMETERS

0,5÷4,0 mm² 2,5÷6,0 mm² - *optionally*	connection terminals
200-277V, 50-60Hz 127-300V, 0Hz voltage ± 10%	input voltage **35E**
100-199V, 50-60Hz 127-300V, 0Hz voltage ± 10%	input voltage **25E**
heavy-duty industrial LED modules	light source
>0,98	power factor
Ø20 (wire 6-13mm) Ø25 - option (wire 9-17mm)	cable inlets
L-N: 6kV, L-PE: 10kV	overvoltage protection

PHOTOMETRICAL PARAMETERS

>70 >80 - *optionally*	CRI
4000K 3000K - *optionally* 5000K - *optionally* 6500K - *optionally*	colour temperature
≤3 SDCM	color temperature tolerance (MacAdam)
SVM < 0,4 *acc. with IEC TR 61547-1:2020*	light pulsation
PstLM < 1 *acc. with IEC TR 61547-1:2020*	flicker indicator





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TYPES COMPARISON

VERSION 35E (200-277 V, 50-60 Hz | 127-300V, 0 Hz)

TYPE	LUMINOUS FLUX* [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	AMBIENT TEMP. [°C] GL diffuser	AMBIENT TEMP. [°C] PC diffuser
HPL450LED-HE2-1	15500	103	150	- 40°C ÷ +65	- 40°C ÷ +55
HPL450LED-HE2-2	19000	132	144	- 40°C ÷ +55	- 40°C ÷ +50
HPL450LED-HE2-3	22000	155	142	- 40°C ÷ +50	- 40°C ÷ +45
HPL450LED-HE3-1	24000	152	158	- 40°C ÷ +65	- 40°C ÷ +55
HPL450LED-HE3-2	28500	197	145	- 40°C ÷ +55	- 40°C ÷ +50
HPL450LED-HE3-3	34000	240	142	- 40°C ÷ +50	- 40°C ÷ +45
HPL450LED-HE4-1	31500	205	154	- 40°C ÷ +65	- 40°C ÷ +55
HPL450LED-HE4-2	37500	260	144	- 40°C ÷ +55	- 40°C ÷ +50
HPL450LED-HE4-3	43000	307	140	- 40°C ÷ +50	- 40°C ÷ +45

* - Luminous flux is indicated for LED modules CRI 70 and optics MB.

VERSION 25E (100-199 V, 50-60 Hz | 127-300V, 0 Hz)

TYPE	LUMINOUS FLUX* [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	AMBIENT TEMP. [°C] GL diffuser	AMBIENT TEMP. [°C] PC diffuser
HPL450LED-HE2-1	15500	103	150	- 40°C ÷ +60	- 40°C ÷ +55
HPL450LED-HE2-2	19000	132	144	- 40°C ÷ +55	- 40°C ÷ +50
HPL450LED-HE2-3	22000	155	142	- 40°C ÷ +50	- 40°C ÷ +45
HPL450LED-HE3-1	24000	152	158	- 40°C ÷ +55	- 40°C ÷ +55
HPL450LED-HE3-2	28500	197	145	- 40°C ÷ +50	- 40°C ÷ +50
HPL450LED-HE3-3	34000	240	142	- 40°C ÷ +50	- 40°C ÷ +45
HPL450LED-HE4-1	31500	205	154	- 40°C ÷ +50	- 40°C ÷ +50
HPL450LED-HE4-2	37500	260	144	- 40°C ÷ +55	- 40°C ÷ +50
HPL450LED-HE4-3	43000	307	140	- 40°C ÷ +50	- 40°C ÷ +45

* - Luminous flux is indicated for LED modules CRI 70 and optics MB.

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**

MAXIMAL QUANTITY OF FITTINGS THAT MAY BE CONNECTED ACCORDING TO THE USED CIRCUIT BRAKER

Power supply 35E

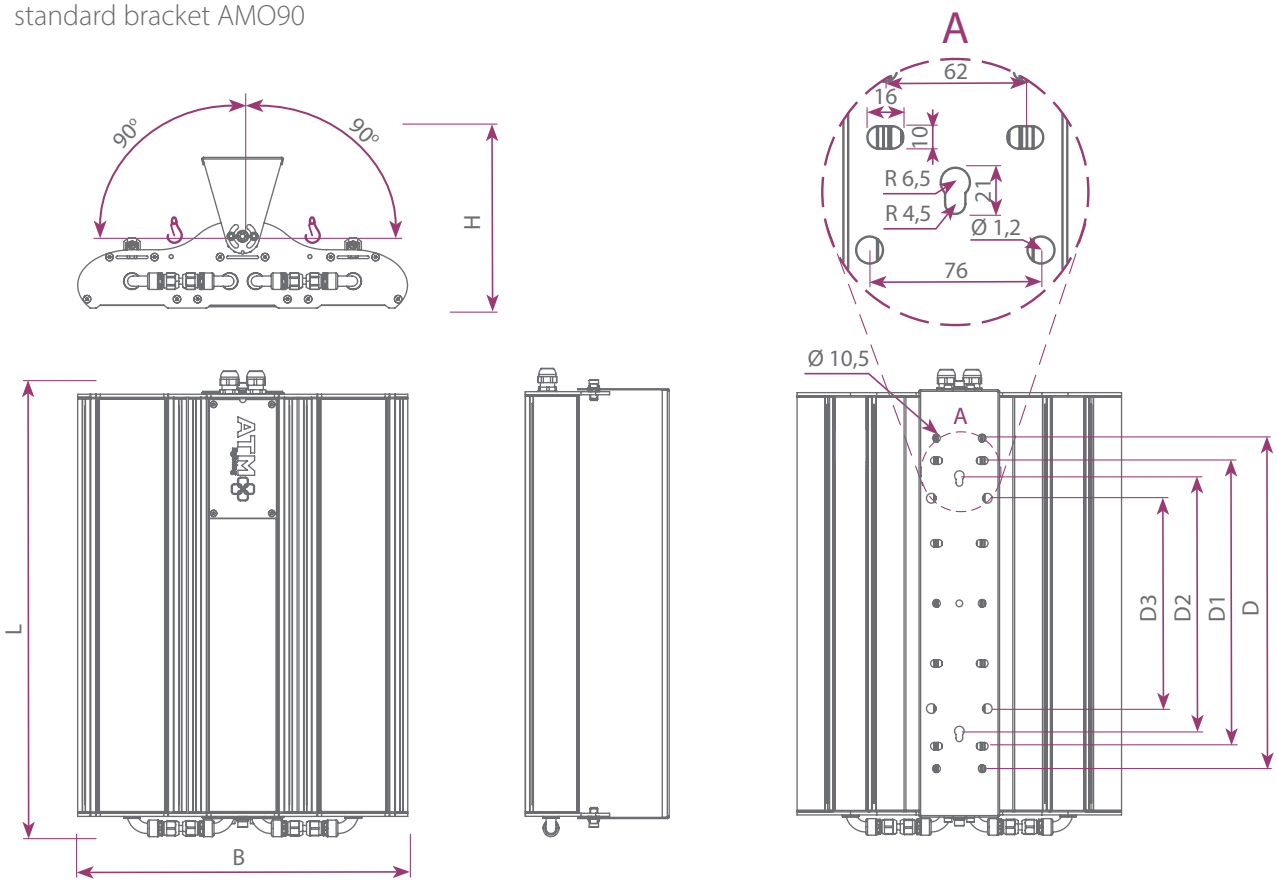
TYPE	B16	C16	Max. starting current	Starting time
HPL450LED-HE2-1	8	14	123A	< 132µs
HPL450LED-HE2-2	9	15	120A	< 122µs
HPL450LED-HE2-3	9	15	120A	< 122µs
HPL450LED-HE3-1	9	15	120A	< 122µs
HPL450LED-HE3-2	5	8	89A	< 188µs
HPL450LED-HE3-3	4	7	58A	< 500µs
HPL450LED-HE4-1	5	8	89A	< 288µs
HPL450LED-HE4-2	4	7	12,4A	< 2400µs
HPL450LED-HE4-3	4	7	12,4A	< 2400µs

Power supply 25E

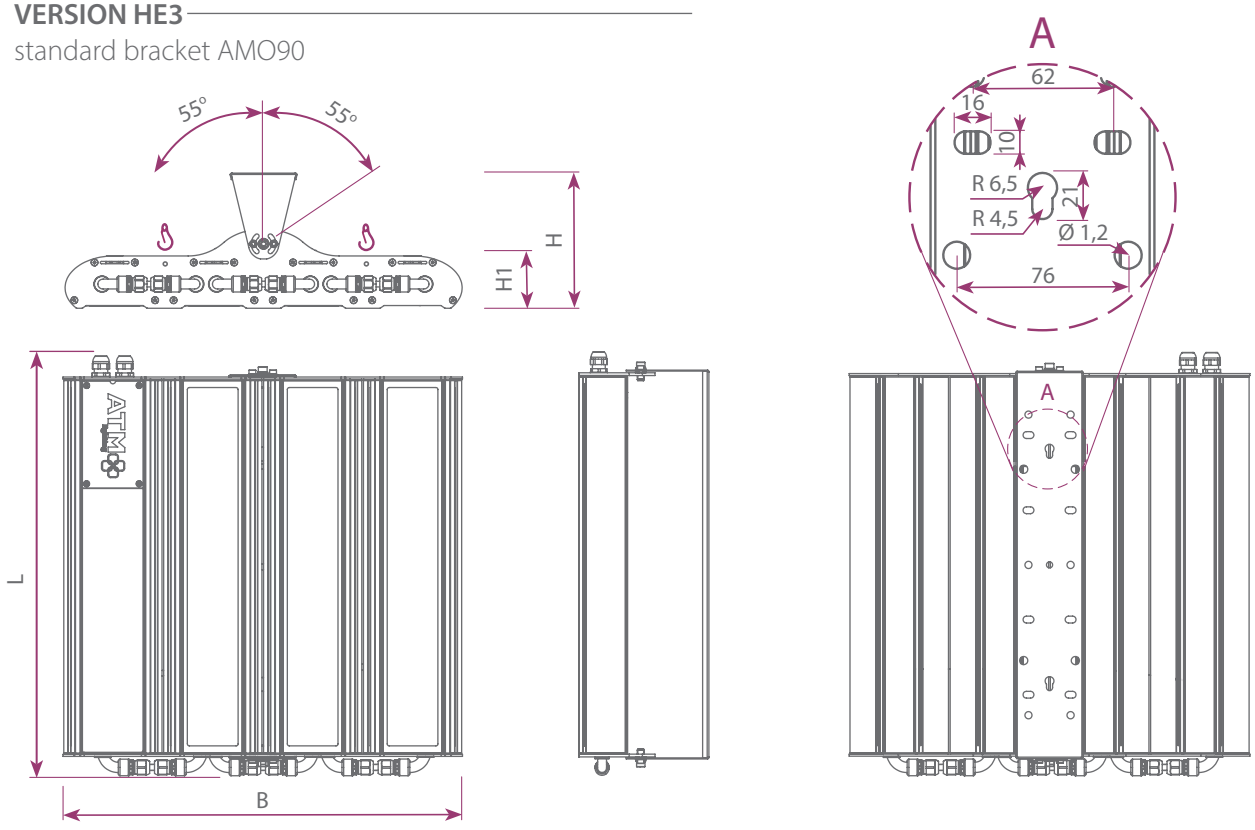
TYPE	B16	C16	Max. starting current	Starting time
HPL450LED-HE2-1	10	12	66,9A	< 134µs
HPL450LED-HE2-2	7	8	62A	< 136µs
HPL450LED-HE2-3	7	8	62A	< 136µs
HPL450LED-HE3-1	7	8	62A	< 136µs
HPL450LED-HE3-2	5	6	47,4A	< 296µs
HPL450LED-HE3-3	4	4	32A	< 440µs
HPL450LED-HE4-1	5	6	47,4A	< 296µs
HPL450LED-HE4-2	3	3	7,1A	< 2240µs
HPL450LED-HE4-3	3	3	7,1A	< 2240µs

WYMIARY

VERSION HE2
standard bracket AMO90

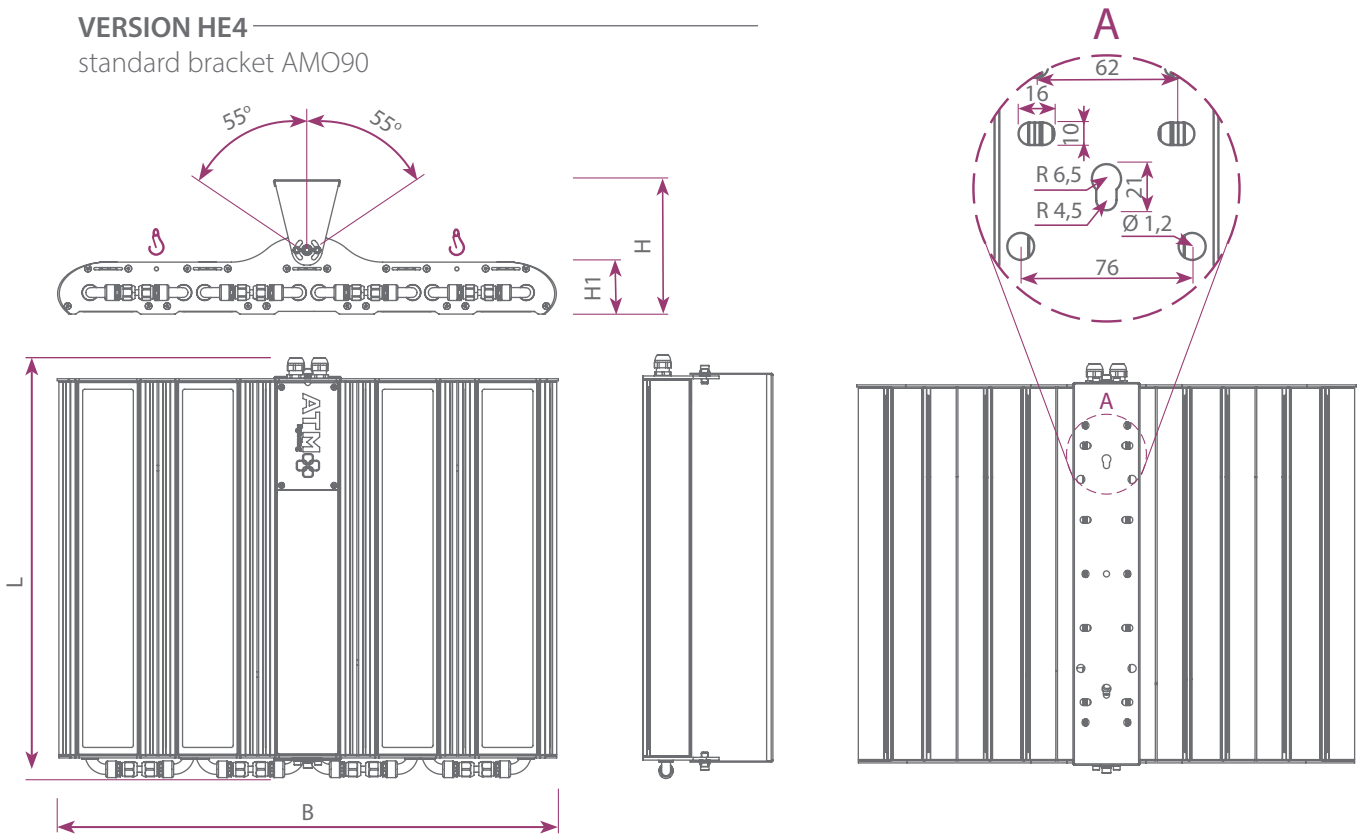


VERSION HE3
standard bracket AMO90



VERSION HE4

standard bracket AMO90



DIMENSIONS

TYPE	L	B	H	H1	D	D1	D2	D3	Weight [kg]
HPL450LED-HE2	620	435	202	78	440	380	340	280	10
HPL450LED-HE3	620	585	202	78	440	380	340	280	13
HPL450LED-HE4	620	735	202	78	440	380	340	280	16

STANDARD VERSIONS

ZB — Central battery: Standard version adapted to work with central battery — **ZB**

Luminous flux for version the with central battery equals nominal value (100%).

DALI driver: Standard version equipped with integrated driver with DALI-2 and D4i protocol — **DA**

As a standard the light fitting is equipped with an integrated power supply with a DALI-2 interface, which allows to monitor the operation of light fixtures and control lighting using data directly from motion sensors or from the Building Management System (BMS). A properly configured lighting control system can significantly reduce electricity costs and improve the ergonomics of users' work.

Extendinded feature of the DALI-2 driver with D4i (DALI for internet of things), used to collect and store data of the lighting fixture, and defining an improved resource management and efficiency monitoring system.

OPTIONAL EQUIPPMENT

3F — 3-phase power supply: Optional version adapted to 3-phase power supply (max. voltage 277V) — **3F**

Wireless connection: Optional version equipped with a wireless module operating in the Thread® network — **WDA**

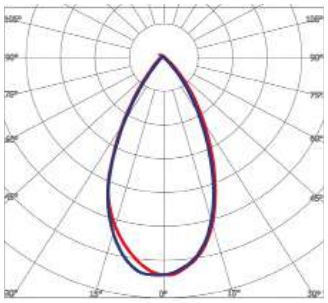
Window made of non-transparent polycarbonate

NOTE! Luminaires equipped with the WDA module, regardless of the choice of lampshade material, should not operate in an environment exposed to oil, acetone, chlorine, ethyl, ether and solvents.

DISTRIBUTION CURVES

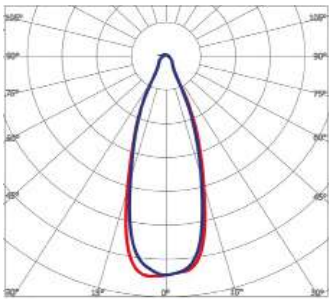
STANDARD

MB (Medium Beam)
FWHM/FWTM: 57.0°/91.0°

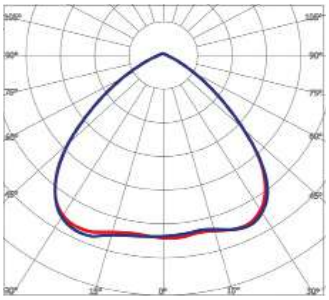


OPTIONAL

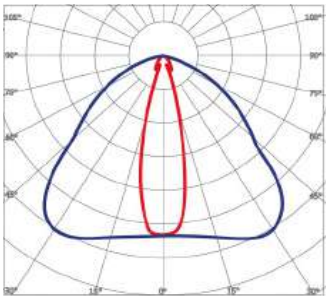
NB (Narrow Beam)
FWHM/FWTM 38.0°/ 68.0°



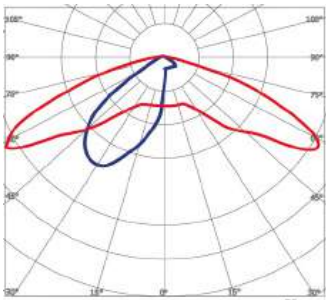
WB (Wide Beam)
FWHM/FWTM: 100.0°/125.0°



OB (Oval Beam)
FWHM/FWTM: 25.0°/95.0°

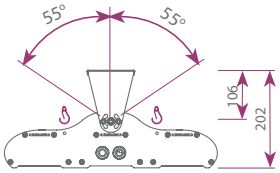


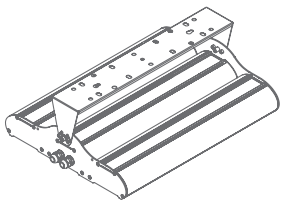
ASY (Asymetric Beam)
FWHM: Asymmetric



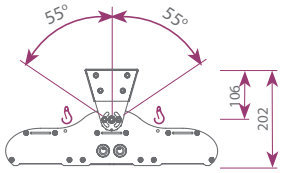
MOUNTINGS

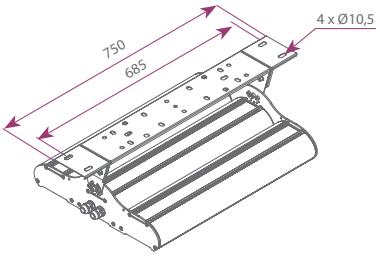
AMO90
standard



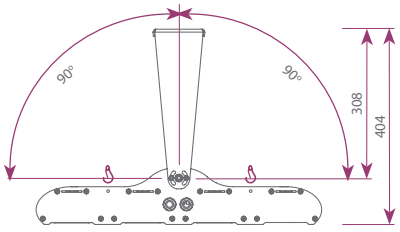


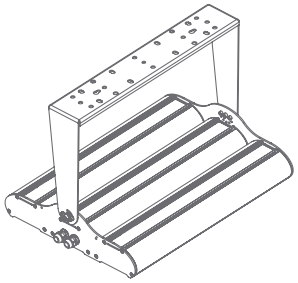
AMO90S
optional



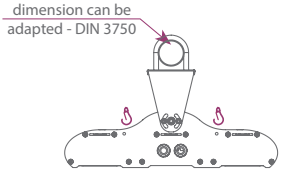


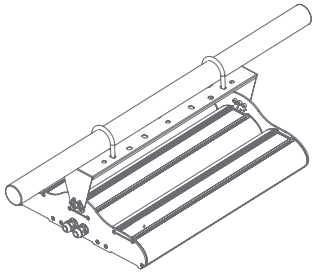
AMO180
optional





AMO360
optional





Suspended mounting:
As a standard the fixture has been adapted to be mounted in suspension - 4 holes Ø5mm

CONFIGURATIONS

HPL450LED-HE	LED modules type	LED modules quantity	power supply	wiring	cable inlets - quantity	cable inlets - material	cable inlets - size	housing material	diffuser material	optics	version ZB	optional equipment	version 3F	mountings
HPL450LED-HE			35E	50	20	P	20	ALU		MB	ZB	DA		AMO90
	2	1	25E	70	10	M	25		GL	NB		WDA	3F	AMO90S
	3	2							PC	WB				AMO180
	4	3								OB				AMO360
										ASY				

LED modules type

LED modules quantity

driving current

power supply
35E - 200-277V, 50-60Hz; 127-300V 0Hz,
25E - 100-199V, 50-60Hz; 127-300V 0Hz

wiring
50 - single 5-pole terminal → 5
70 - single 7-pole terminal → 7

cable inlets - quantity
10 - one cable inlet on the side of the housing → 1 0
20 - two cable inlets on the side of the housing → 2 0

cable inlets - material
M - metal
P - plastic

cable inlets - size
20 - Ø20
25 - Ø25

housing material
ALU - anodized aluminum

diffuser material
GL - tempered glass
PC - UV stabilised polycarbonate

optics
check: *distribution curves*

version ZB
version adapted to work with central battery

optional equippment
DA - version equipped with integrated driver with DALI-2 and D4i interface
WDA - version equipped with wireless Thread® network connection

version 3F
version adapted to work in a three-phase network, equipped with connectors 5x2,5mm² (L1, L2, L3, PE, N). Wiring 70.

mountings
check: *mountings*

DOWNLOADS

LDT