

Floodlight Series 6121



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09458E00

- > For use in
 - gas group IIC (-20°C ... +60°C)
 - gas group IIB + H₂ (-60°C ... +60°C)
- > Material
 - Enclosure in seawater resistant cast aluminium
 - Mounting components in stainless steel
- > Lamp options
 - halogen lamps (QT) 500 W
 - halogen metal halide lamps (HIT) up to 400 W
 - sodium vapour high pressure lamps (HST) up to 400 W



E2

	ATEX / IECEx					
Zone	0	1	2	20	21	22
For use in		x	x		x	x

Explosion Protection

Global (IECEx)

Gas and dust

IECEx BVS 14.0071X
 Ex de IIB + H₂ T* Gb
 Ex de IIC T* Gb
 Ex tb IIIC T* °C Db
 * temperature classes and surface temperatures see technical data

Europe (ATEX)

Gas and dust

BVS 14 ATEX E 110 X
 Ⓢ II 2 G Ex de IIB + H₂ T* Gb
 Ⓢ II 2 G Ex de IIC T* Gb
 Ⓢ II 2 D Ex tb IIIC T* °C Db
 * temperature classes and surface temperatures see technical data

Certifications and certificates

Certificates

IECEx, ATEX, PESO

WebCode 6121B

Floodlight Series 6121

Selection Table

Version	Connection cable between enclosure and connection box				Order number	Art. no.	Weight
	Light aperture	Lamps ¹⁾	Lamp wattage				kg
220...240 V AC/DC 0, 50, 60 Hz	without	broad beam	QT	500 W	6121 / 1312-1500-0101-102-511-1	239025	27.000
	without	narrow beam	QT	500 W	6121 / 1322-1500-0101-102-511-1	239026	27.000
230 V AC 50 Hz	standard	broad beam	HIT / HST	150 W	6121 / 1312-2151-1111-111-511-1	229888	33.500
	standard	broad beam	HIT / HST	250 W	6121 / 1312-2251-1111-111-511-1	229889	34.500
	standard	broad beam	HIT / HST	400 W	6121 / 1312-2401-1111-111-511-1	229890	36.900
	standard	narrow beam	HIT / HST	150 W	6121 / 1322-2151-1111-111-511-1	229891	33.500
	standard	narrow beam	HIT / HST	250 W	6121 / 1322-2251-1111-111-511-1	229892	34.500
	standard	narrow beam	HIT / HST	400 W	6121 / 1322-2401-1111-111-511-1	229893	36.900
	armoured	broad beam	HIT / HST	150 W	6121 / 1312-2151-1111-311-511-1	229894	38.250
	armoured	broad beam	HIT / HST	250 W	6121 / 1312-2251-1111-311-511-1	229895	39.250
	armoured	broad beam	HIT / HST	400 W	6121 / 1312-2401-1111-311-511-1	229896	41.250
	armoured	narrow beam	HIT / HST	150 W	6121 / 1322-2151-1111-311-511-1	229897	38.250
	armoured	narrow beam	HIT / HST	250 W	6121 / 1322-2251-1111-311-511-1	229898	39.250
	armoured	narrow beam	HIT / HST	400 W	6121 / 1322-2401-1111-311-511-1	229899	41.250
240 V AC 50 Hz	standard	broad beam	HIT / HST	150 W	6121 / 1312-2151-1111-111-611-1	229900	33.500
	standard	broad beam	HIT / HST	250 W	6121 / 1312-2251-1111-111-611-1	229901	34.500
	standard	broad beam	HIT / HST	400 W	6121 / 1312-2401-1111-111-611-1	229902	36.900
	standard	narrow beam	HIT / HST	150 W	6121 / 1322-2151-1111-111-611-1	229903	33.500
	standard	narrow beam	HIT / HST	250 W	6121 / 1322-2251-1111-111-611-1	229904	34.500
	standard	narrow beam	HIT / HST	400 W	6121 / 1322-2401-1111-111-611-1	229905	36.900
	armoured	broad beam	HIT / HST	150 W	6121 / 1312-2151-1111-311-611-1	229906	38.250
	armoured	broad beam	HIT / HST	250 W	6121 / 1312-2251-1111-311-611-1	229907	39.250
	armoured	broad beam	HIT / HST	400 W	6121 / 1312-2401-1111-311-611-1	229908	41.250
	armoured	narrow beam	HIT / HST	150 W	6121 / 1322-2151-1111-311-611-1	229909	38.250
	armoured	narrow beam	HIT / HST	250 W	6121 / 1322-2251-1111-311-611-1	229910	39.250
	armoured	narrow beam	HIT / HST	400 W	6121 / 1322-2401-1111-311-611-1	229911	41.250

Order Number Supplement

Connection terminal	Terminal 3x 4 mm ²	6121/1.....1-.....	
	Terminal 3x 6 mm ²	6121/1.....2-.....	
Cable glands	3x M20 with 1 cable gland and 2 stopping plugs (HIT / HST)	6121/1.....1-.....	
	2x M20 with 1 cable gland and 1 stopping plug (QT)	6121/1.....2-.....	
	3x M25 with 1 cable gland and 2 stopping plugs (HIT / HST)	6121/1.....3-.....	
	2x M25 with 1 cable gland and 1 stopping plug (QT)	6121/1.....4-.....	

Note

The luminaires are supplied without lamps. Please order them as accessories.

- ¹⁾ QT → Halogen lamps
 HIT → Metal halide lamps
 HST → High-pressure sodium lamps

Floodlight Series 6121



Technical Data

Electrical data

Lamps

QT	IEC 60357
HIT	IEC 61167
HST	IEC 60662

Ballast

QT	without
HIT / HST	magnetical ballast

Rated operational voltage U_e

	Lamps						
	QT	HIT			HST		
	500 W	150 W	250 W	400 W	150 W	250 W	400 W
230 (+/- 6%) V AC, 50 Hz	x	x	x	x	x	x	x
240 (+/- 6%) V AC, 50 Hz		x	x	x	x	x	x
208 (+/- 6%) V AC, 60 Hz		x		x	x		x
220 (+/- 6%) V AC, 60 Hz	x	x	x	x	x	x	x
240 (+/- 6%) V AC, 60 Hz		x	x	x	x	x	x

Current consumption

Lamp	Lamp power	Supply current in A						
220 ... 230 V AC/DC 0, 50, 60Hz								
QT	500 W	2.17						
		Compensated			Uncompensated			
Lamp	Lamp power	Power factor cos ϕ	Supply current in A	Inrush current in A	Power factor cos ϕ	Supply current in A	Inrush current in A	
230 V AC, 50 Hz								
HIT / HST	150 W	0.95	0.79	1.50	0.40	1.80	2.70	
HIT / HST	250 W	0.92	1.30	2.00	0.40	3.00	4.20	
HIT	400 W	0.93	2.00	2.40	0.43	4.20	5.80	
HST	400 W	0.91	2.10	2.50	0.43	4.45	6.00	
240 V AC, 50 Hz								
HIT / HST	150 W	0.96	0.76	1.50	0.40	1.80	2.70	
HIT / HST	250 W	0.94	1.23	2.00	0.40	3.00	4.20	
HIT	400 W	0.96	1.90	2.40	0.43	4.20	5.80	
HST	400 W	0.92	2.00	2.50	0.43	4.45	6.00	
208 V AC, 60 Hz								
HIT / HST	150 W	0.94	0,80	1.50	0.42	1.80	2.70	
HIT	400 W	0.97	1,90	2.50	0.44	4.20	5.80	
HST	400 W	0.96	2,30	2.80	0.44	4.45	6.00	
220 V AC, 60 Hz								
HIT / HST	150 W	0.96	0.75	1.50	0.42	1.80	2.70	
HIT / HST	250 W	0.90	1.50	2.00	0.40	3.00	4.20	
HIT	400 W	0.98	1.80	2.40	0.44	4.20	5.80	
HST	400 W	0.98	2.20	2.70	0.44	4.45	6.00	
240 V AC, 60 Hz								
HIT / HST	150 W	0.97	0.68	1.50	0.42	1.80	2.70	
HIT / HST	250 W	0.91	1.35	2.00	0.40	3.00	4.20	
HIT	400 W	0.97	1.60	2.30	0.44	4.20	5.80	
HST	400 W	0.98	2.00	2.60	0.44	4.45	6.00	

E2

Floodlight

Series 6121

Technical Data

Inrush current	max. light fittings per circuit breaker with the maximum network impedance of 1 Ohm:							
		compensated				uncompensated		
	QT	HIT/HST			HIT/HST			
	500 W	150 W	250 W	400 W	150 W	250 W	400 W	
B10A	4	5	3	2	2	1	1	
B16A	7	8	5	3	4	2	1	
B20A	9	10	6	4	5	3	2	
B25A	11	12	8	5	6	4	2	
C10A	4	7	5	3	4	2	1	
C16A	7	11	7	4	6	3	2	
C20A	9	14	9	5	7	4	3	
C25A	11	17	11	7	9	5	4	
Energy efficiency class	EEI A2							
Connection cable between enclosure and connection box	prewired with special ignition silicone cable - armoured or unarmoured							

Ambient conditions

Temperature class, max. surface temperature	Lamp	Lamp power	Temperature class		max. surface temperature	
			$T_a \leq +50^\circ \text{C}$	$T_a \leq +60^\circ \text{C}$	$T_a = +40^\circ \text{C}$	$T_a = +60^\circ \text{C}$
	QT	500 W	T3	T3	+158° C	+178° C
	HIT / HST	150 W	T4	T4	+86° C	+106° C
	HIT / HST	250 W	T4	T3	+120° C	+140° C
	HIT / HST	400 W	T3	T3	+152° C	+172° C
Ambient temperature, gas group	Lamp	Lamp power	Ambient temperature		Gas group	Note
	QT	500 W	$T_a = -20 \dots +60^\circ \text{C}$		IIC	
			$T_a = -60 \dots +60^\circ \text{C}$		IIB + H ₂	
	HIT / HST	150 W, 250 W	$T_a = -20 \dots +60^\circ \text{C}$		IIC	
			$T_a = -60 \dots +60^\circ \text{C}$		IIB + H ₂	lamp start at $T_a \geq -35^\circ \text{C}$
		400 W	$T_a = -20 \dots +50^\circ \text{C}$		IIC	
$T_a = -60 \dots +50^\circ \text{C}$			IIB + H ₂	lamp start at $T_a \geq -35^\circ \text{C}$		

Mechanical data

Degree of protection	IP66 (IEC 60529)
Protection class	I
Enclosure material	seawater-resistant cast aluminium (AlSiMg) (LM25)
Material cover lamp enclosure	Brass powder-coated
Colour	Standard RAL 7032, other on request
Mounting bracket	stainless steel V2A (1.4301; X5Cr-Ni18-10; S 30400)

Mounting / Installation

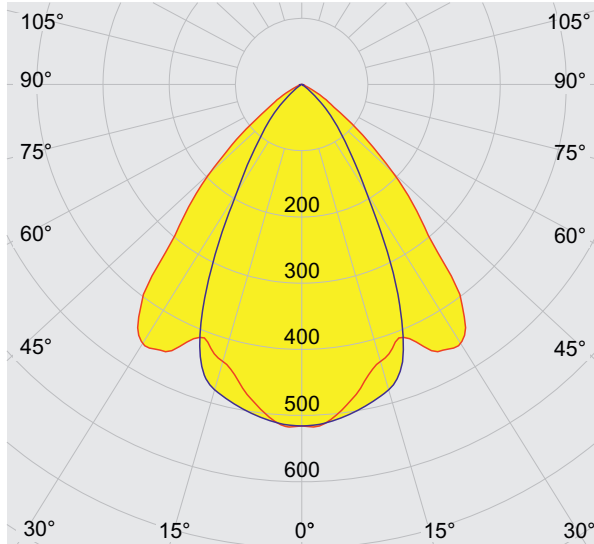
Operating position	Horizontal mounting
Cable entry	HIT / HST 3x M20x1.5 with 1 cable gland and 2 stopping plugs or 3x M25x1.5 with 1 cable gland and 2 stopping plugs QT 2x M20x1.5 with 1 cable gland and 1 stopping plug or 2x M25x1.5 with 1 cable gland and 1 stopping plug
Connection	L + N + PE, max. 4 mm ² or max. 6 mm ²

Floodlight Series 6121



Light distribution curve

typical broad beam



cd/klm

— C0 - C180

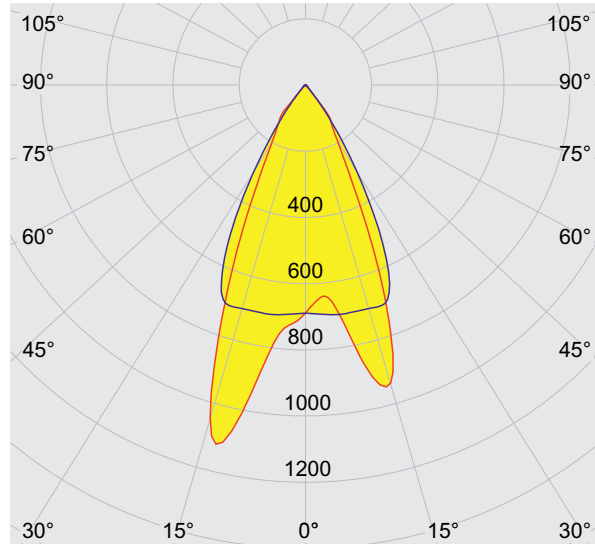
— C90 - C270

< 72%

16637E00

250 W HST broad beam

typical spot beam



cd/klm

— C0 - C180

— C90 - C270

77%

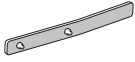




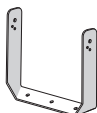
16638E00

250 W HST spot beam

E2

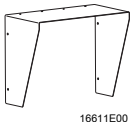


for further light distribution curves, see www.stahl-ex.com

Accessories and Spare Parts

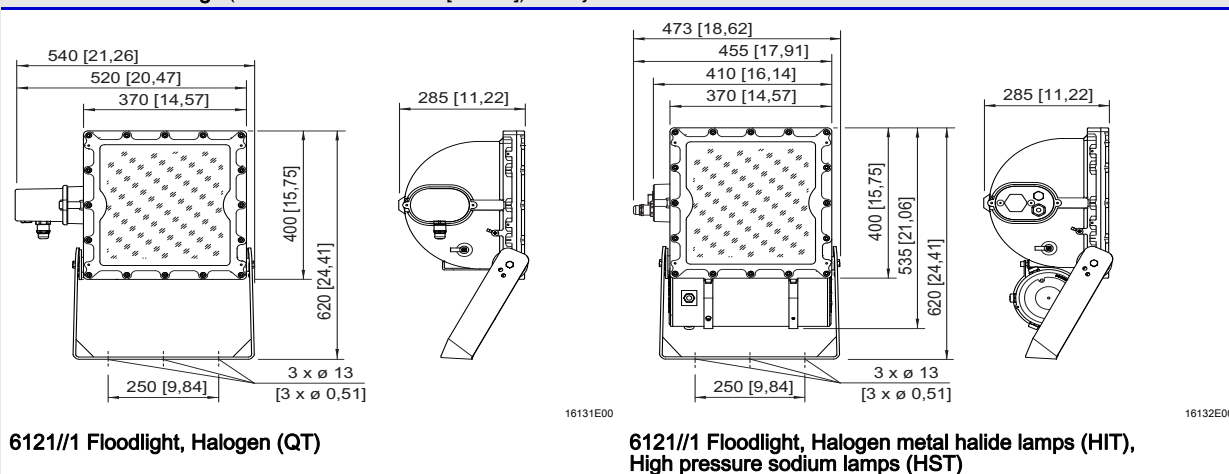
Designation	Figure	Description	Art. no.	Weight kg			
Socket key	 16690E00	Socket key for opening and closing of lamp enclosure and connection enclosure	223778	0.350			
Halogen lamps QT	 05355E00	Power	Lamp holder	Voltage	Lighting current		
		500 W	E40	230 V	10250 lm	108874	0.120
		Halogen metal halide lamps HIT	 05355E00	150 W	E40	230 V	14500 lm
250 W	E40	230 V		20000 lm	109132	0.200	
400 W	E40	230 V		42000 lm	109134	0.235	
High pressure sodium lamps HST	 05355E00	150 W	E40	230 V	17500 lm	109129	0.170
		250 W	E40	230 V	33200 lm	109131	0.149
		400 W	E40	230 V	56500 lm	109133	0.210
Ring bolt	 05378E00	M10, direct mounting in insert nuts, 1 pair	118560	0.208			
Mounting bracket	 16610E00	Mounting bracket with accessories Material: stainless steel V2A (1.4301; X5Cr-Ni18-10; S 30400)	224997	3.800			

Floodlight Series 6121

Accessories and Spare Parts

Designation	Figure	Description	Art. no.	Weight kg
Light visor	 16611E00	Anti-glare grid with accessories Material: stainless steel V2A (1.4301; X5Cr-Ni18-10; S 30400)	230041	2.300
Impact protection grid	 16612E00	Impact protection grid with accessories Material: stainless steel V2A (1.4301; X5Cr-Ni18-10; S 30400)	230045	0.500
Grease	 16974E00	Special grease BLASOLUBE 300; 1 tin	105077	1.070

Dimensional Drawings (All Dimensions in mm [inches]) - Subject to Alterations



We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.