

Pendant Light Fitting LED

Series 6470/5



www.stahl.de



- > Pendant light fitting Zones 2, 21 and 22 with highly efficient LEDs
- > Wide voltage range from 100 ... 277 V AC
- > Optionally, with or without internal reflector for adjusting to the illumination task
- > Low-maintenance due to long service life of up to 100,000 operating hours

E2



17556E00

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

Explosion Protection

Global (IECEx)	
Gas and dust	IECEx PTB 15.0029 Ex nR IIC T6 Gc Ex tc IIIC T80°C Dc Ex tb IIIC T80°C Db
Europe (ATEX)	
Gas and dust	PTB 15 ATEX 2008 (Zonen 2, 22) PTB 15 ATEX 2007 (Zone 21) ⊕ II 3 G Ex nR IIC T6 Gc ⊕ II 2 D Ex tb IIIC T80°C Db ⊕ II 3 D Ex tc IIIC T80°C Dc
Certifications and certificates	
Certificates	IECEx, ATEX, PESO

WebCode 6470B

Pendant Light Fitting LED

Series 6470/5

Selection Table

Version	Assembly	Lamp wattage	Rated voltage	Internal reflector	Order number	Art. no.	Weight kg
6470/5 pendant light fitting LED	Wall - Ceiling	70 W	100 ... 277 V AC	without	6470/5121-5073-1010-0	247482	6.550
				with	6470/5121-5073-1110-0	247483	6.550
		80 W	220 ... 240 V AC	without	6470/5121-5081-1010-0	247346	6.150
				with	6470/5121-5081-1110-0	247347	6.150
	Wall	70 W	100 ... 277 V AC	without	6470/5141-5073-1010-0	247484	7.450
				with	6470/5141-5073-1110-0	247485	7.450
		80 W	220 ... 240 V AC	without	6470/5141-5081-1010-0	247348	7.050
				with	6470/5141-5081-1110-0	247349	7.050
	Pole 25°	70 W	100 ... 277 V AC	without	6470/5153-5073-1010-0	247486	6.690
				with	6470/5153-5073-1110-0	247487	6.690
		80 W	220 ... 240 V AC	without	6470/5153-5081-1010-0	247350	6.290
				with	6470/5153-5081-1110-0	247481	6.290

Technical Data

Electrical data

Control gear

	6470/51...-5.81-....-	6470/51...-5.73-....-	
Rated voltage	AC: 220 ... 240 V	AC: 100 ... 277 V	
Voltage range	AC: 170 ... 264 V	AC: 90 ... 305 V	
Frequency	50 ... 60 Hz	50 ... 60 Hz	
Power consumption [W]	80	70	
Voltage [V]	230	277	100
Frequency [Hz]	50	50	60
Power factor	> 0.95	> 0.90	> 0.93
THD [%]	< 10	< 12	< 11

Inrush current

$I_{peak} = 57 \text{ A}$; $\Delta t = 210 \mu\text{s}$
 maximum number of luminaires per miniature circuit breaker at 230 V:

Type	10 A	16 A	20 A	25 A
B	7	12	15	21
C	12	20	25	31
K	24	40	50	62

Pendant Light Fitting LED

Series 6470/5



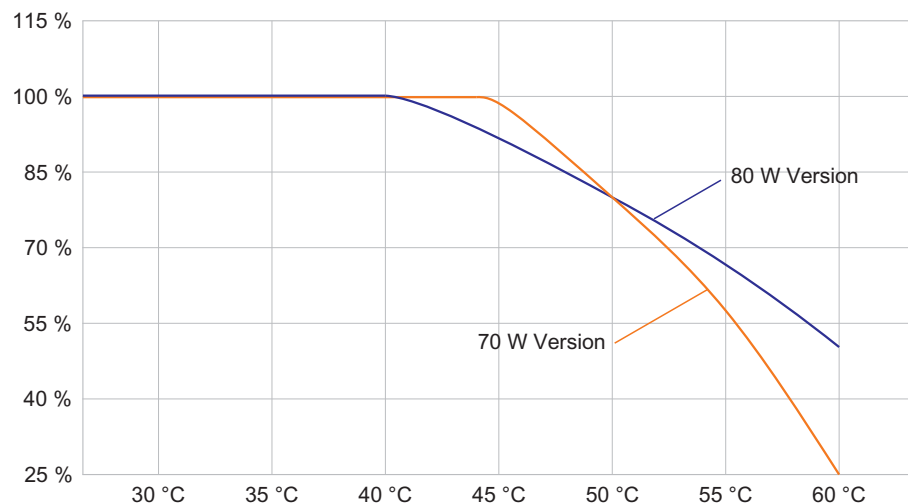
Technical Data

Luminous characteristics

	6470/51..-5...-10... without internal reflector	6470/51..-5...-11... with internal reflector
Colour rendering [CRI]	≥ 70	≥ 70
Colour temperature [K]	5,700	5,700
without external reflector		
Luminous flux [lm]	8,000	7,845
Luminaire efficacy [lm/W]	100	99
without external reflector		
Luminous flux [lm]	7,315	7,148
Luminaire efficacy [lm/W]	92	90

Values apply to $T_a = +25\text{ °C}$.

Luminous flux decrease
• at ambient temperature



19912E00

Ambient conditions

Operating temperature range	-40 ... +60 °C*		
Storage temperature	-30 ... +75 °C		
Service life	$T_a \leq 40\text{ °C}$	$T_a \text{ at } 50\text{ °C}$	$T_a \text{ at } 60\text{ °C}$
$L_{70}B_{10}C_{10}$	100,000 h	80,000 h	50,000 h
$L_xB_yC_z$	At the end of the service life:		
	- Luminous flux decreases by „x“ percent. - up to „y“ percent of all luminaires fall below „x“ - up to „z“ percent of all luminaires break down completely		

Mechanical data

Degree of protection	IP66
Protection class	I (with internal PE connection)
Impact strength (IK code)	IK10 (IEC 62262)

E2

Pendant Light Fitting LED

Series 6470/5

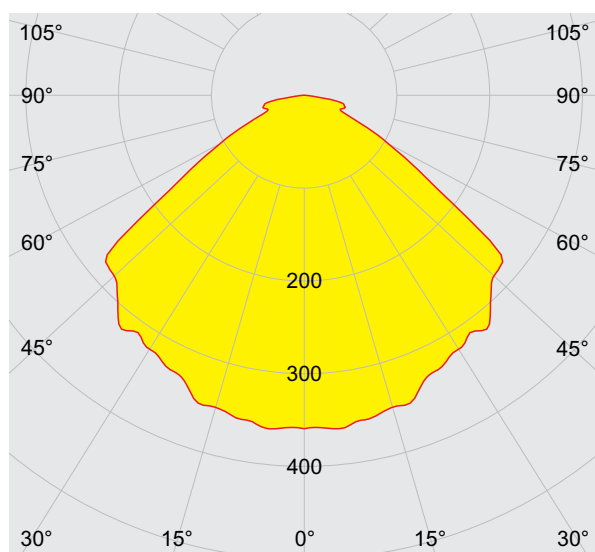
Technical Data

Material	
Enclosure material	saltwater-resistant aluminium
Colour	similar to RAL 7032, other on request
Glass cover	thermal shock resistant borosilicate glass
Cover seal	silicone rubber
Glass seal	silicone rubber
Mounting bracket	Stainless steel
External reflector	glass fibre reinforced polyester
Wire guard	Stainless steel SS316L (V4A 1.4404)
Luminaire locking	Mounting screw M8 (stainless steel)

Mounting / Installation

Mounting	Cover	Mounting	Description
	Universal Cover	Wall Pendant Ceiling	with help of mounting bracket as accessory with help of ring bolts as accessory direct on a ceiling
	Wall cover	Wall	direct on a wall
	Pole 25° cover	Pole	direct on a pole
Cable glands	Specially certified cable entries (according to Directive 94/9/EC) - risk of mechanical hazard "high" - with a minimum type of protection of IP66 must be used. The number of cable entries depends on the mounting version. Standard: 2x M25 and 2x M20 (closed with stopping plugs) Special entry: others on request		
Connection option	Spring clamp terminal 0.5 ... 4 mm ² Strip length 10 ... 11 mm 3-pole (2x L1, 2x N, 2x PE)		
Loop in/loop out	max. 12 A		
Screw-in thread for pole mounting	1 1/4" BSP, 1 1/2" BSP		
Wire guard and external reflector	can easily be mounted later using a mounting screw M6		

Light distribution curve



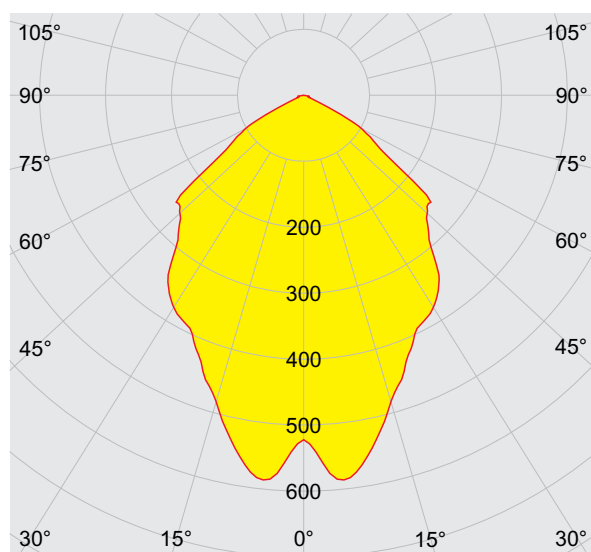
cd/klm

— C0 - C180

$\eta = 100\%$

1990E00

Without reflector



cd/klm

— C0 - C180

$\eta = 100\%$

1990E00

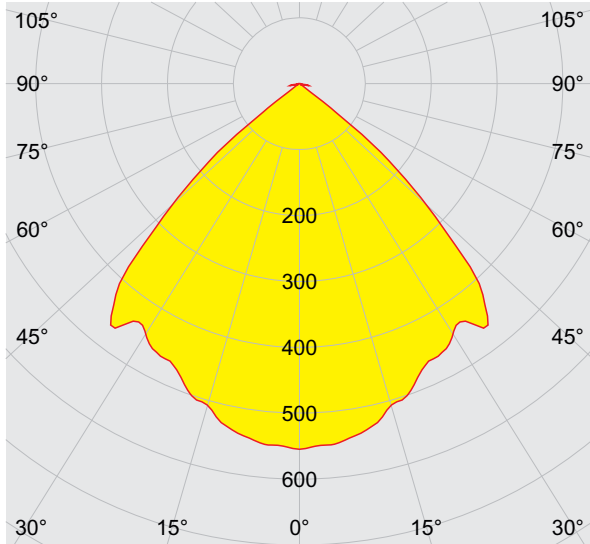
With internal reflector

Pendant Light Fitting LED

Series 6470/5



Light distribution curve

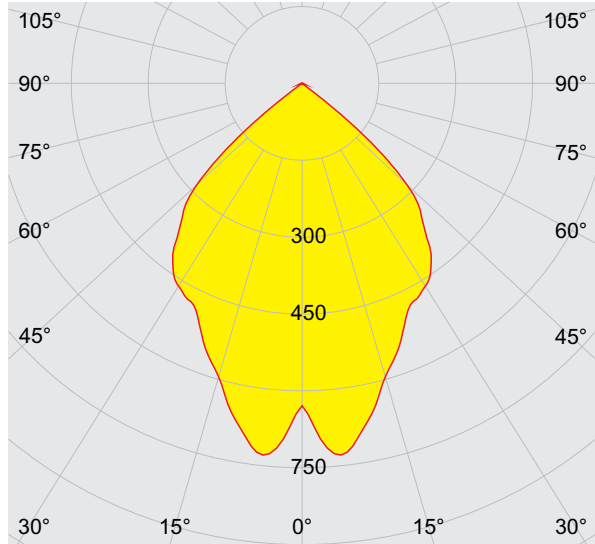


cd/klm
— C0 - C180

$\eta = 100\%$

19908E00

With external reflector



cd/klm
— C0 - C180

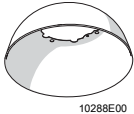
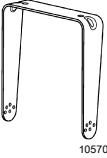



$\eta = 100\%$

19909E00

With internal and external reflector

E2

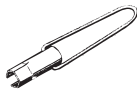
Accessories and Spare Parts

Designation	Illustration	Description	Art. no.	Weight kg
Standard reflector	 10288E00	made of glass fibre reinforced polyester, with mounting parts for 6470/.1 and 6470/.2	123048	1.900
Mounting bracket	 10570E00	made of stainless steel, with mounting parts for 6470/.1 and 6470/.2	122757	1.200
Ring bolts	 05378E00	M8, direct mounting in insert nuts, 1 pair	115736	0.112
Cable entries	 02055E00	of moulded material, Series 8161		
		8161/7-M20-1304 4 ... 13 mm ²	50 pieces (delivery lot*)	239156 0.600
		8161/7-M25-1707 7 ... 17 mm ²	50 pieces (delivery lot*)	239157 1.000
Stopping plug	 04840E00	of moulded material, Series 8290		
		8290/3-M20	1 piece	143522 0.005
		8290/3-M20	100 pieces	143543 0.500
		8290/3-M25 x 1,5	1 pieces	143524 0.007
		8290/3-M25	100 pieces	143544 0.700

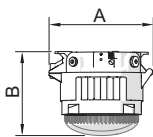
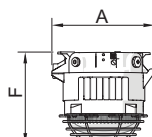
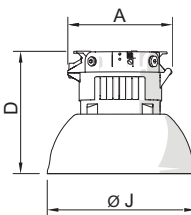
Pendant Light Fitting LED

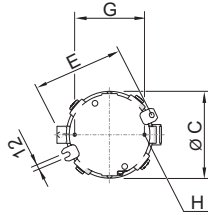
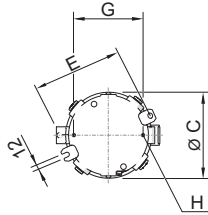
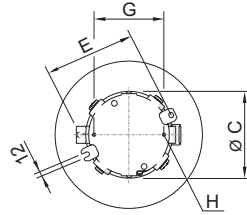
Series 6470/5

Accessories and Spare Parts

Designation	Illustration	Description	Art. no.	Weight kg
Special key		for tightening cable glands respectively cap nuts for cable glands		
	05263E00	thread size packing unit		
		M20 x 1.5 1	114208	0.132
		M25 x 1.5 1	114205	0.163

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

Dimensions
6470/5

A	277	[10.91]
B	223	[8.78]
C	230	[9.06]
D	346	[13.62]
E	240	[9.45]
F	234	[9.21]
G	180	[7.09]
H	M8	
J	444	[17.48]

17555E00

**Ceiling mounting
without wire guard**

17626E00

**Ceiling mounting
with wire guard**

17621E00

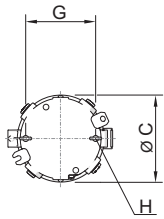
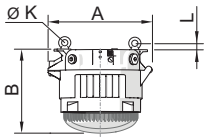
**Ceiling mounting
with reflector**

Pendant Light Fitting LED

Series 6470/5

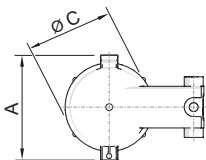
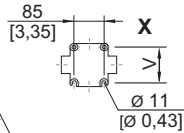
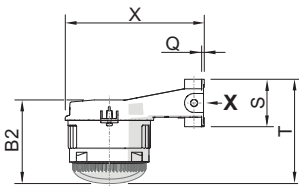


Dimensional Drawings (All Dimensions in mm [inches]) - Subject to Alterations



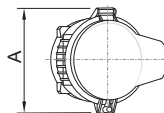
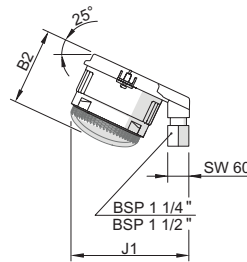
17622E00

Pendant mounting by means of ring bolts



17623E00

Wall mounting



17624E00

Pole mounting

Dimensions in mm 6470/5

A	277	[10.91]
B	223	[8.78]
C	230	[9.06]
G	180	[7.09]
H	M8	
K	M8	
L	20	[0.79]

Dimensions in mm 6470/5

A	277	[10.91]
B2	202	[7.95]
C	230	[9.06]
J1	240	[9.45]
Q	7	[0.28]
S	105	[4.13]
T	275	[10.83]
V	103,5	[4.07]
X	277	[10.91]

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