

# Pendant Light Fitting IEC

Series 6470/2

STAHL

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11435E

- > Available light sources
  - high-pressure sodium lamps (HSE)
  - metal halide lamps (HIE)
  - halogen lamps (QT)
- > Versatile mounting methods
- > Enclosure made of saltwater-resistant aluminium

E2



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

## Explosion Protection

### Global (IECEx)

Gas and dust

IECEx PTB 06.0007

Ex nR IIC T\* Gc

Ex tb IIIC T\* °C Db

Ex tc IIIC T\* °C Dc

\* temperature classes and surface temperatures see selection table

### Europe (ATEX)

Gas and dust

PTB 05 ATEX 2045 (Zones 2, 22)

PTB 05 ATEX 2043 (Zone 21)

⊕ II 3 G Ex nR IIC T\* Gc

⊕ II 2 D Ex tb IIIC T\* °C Db

⊕ II 3 D Ex tc IIIC T\* °C Dc

\* temperature classes and surface temperatures see selection table

### Certifications and certificates

Certificates

IECEx, ATEX, Kazakhstan (TR), Russia (TR), Ukraine (TR), Belarus (TR)

Ship approval

GL

WebCode 6470C

# Pendant Light Fitting IEC

## Series 6470/2

Selection Table

Version	Assembly	Cable glands	Lamps <sup>1)</sup>	Lamp holder	Lamp wattage	Temperature class at T <sub>a</sub> =			Order number	Art. no.	Weight kg	
						40 °C	55 °C	55 °C				
						Surface temperature at T <sub>a</sub> =						
Pendant light fitting Series 6470/2, size 1 with compensation, without wire guard	Wall - Ceiling	2 x M20 x 1.5, 2 x M25 x 1.5	HIE E27	E27	100 W	T4	T4	125 °C	6470/2121-2101-100-2	237869	8.400	
					150 W	T4	T3	147 °C	6470/2121-2151-100-2	237881	9.200	
			HSE E27	E27	70 W	T4	T4	112 °C	6470/2121-3071-100-2	237857	8.300	
					70 W	T4	T4	112 °C	6470/2153-3071-100-2	241134	8.600	
			1 1/2" BSP	HSE E27	E27	70 W	T4	T4	112 °C	6470/2152-2101-100-2	237871	8.600
						150 W	T4	T3	147 °C	6470/2152-2151-100-2	237883	9.400
	1 1/4" BSP	HIE E27	E27	100 W	T4	T4	125 °C	6470/2152-2101-100-2	237871	8.600		
				150 W	T4	T3	147 °C	6470/2152-2151-100-2	237883	9.400		
	Wall	2 x M20 x 1.5, 2 x M25 x 1.5	HIE E27	E27	100 W	T4	T4	125 °C	6470/2141-2101-100-2	237870	9.000	
					150 W	T4	T3	147 °C	6470/2141-2151-100-2	237882	9.900	
			HSE E27	E27	70 W	T4	T4	112 °C	6470/2141-3071-100-2	237858	9.000	
					70 W	T4	T4	112 °C	6470/2152-3071-100-2	237859	9.400	
2 x M20 x 1.5, 2 x M25 x 1.5			HSE E40	E40	100 W	T4	T4	117 °C	6470/2221-3102-100-2	237875	8.700	
					150 W	T4	T3	140 °C	6470/2221-3152-100-2	237887	9.600	
Pendant light fitting Series 6470/2, size 2 with compensation, without wire guard	Wall - Ceiling	2 x M20 x 1.5, 2 x M25 x 1.5	HSE E40	E40	100 W	T4	T4	117 °C	6470/2221-3102-100-2	237875	8.700	
					150 W	T4	T3	140 °C	6470/2221-3152-100-2	237887	9.600	
			HID E40	E40	250 W	T3	T3 (HSE) -- (HIE)	167 °C (HSE) 152 °C** (HIE)	6470/2221-6252-100-2	224250	9.700	
					100 W	T4	T4	117 °C	6470/2253-3102-100-2	224344	9.100	
			1 1/2" BSP	HSE E40	E40	150 W	T4	T3	140 °C	6470/2253-3152-100-2	224345	9.950
						100 W	T4	T4	117 °C	6470/2252-3102-100-2	237877	9.100
	1 1/4" BSP	HSE E40	E40	150 W	T4	T3	140 °C	6470/2252-3152-100-2	237889	9.100		
				250 W	T3	T3 (HSE) -- (HIE)	167 °C (HSE) 152 °C** (HIE)	6470/2252-6252-100-2	224252	9.960		
	Wall	2 x M20 x 1.5, 2 x M25 x 1.5	HSE E40	E40	100 W	T4	T4	117 °C	6470/2241-3102-100-2	237876	9.400	
					150 W	T4	T3	140 °C	6470/2241-3152-100-2	237888	10.300	
			HID E40	E40	250 W	T3	T3 (HSE) -- (HIE)	167 °C (HSE) 152 °C** (HIE)	6470/2241-6252-100-2	224251	10.400	
					100 W	T4	T4	117 °C	6470/2327-3102-100-2	224350	14.000	
2 x 1/2" NPT, 2 x 3/4" NPT			HID E40	E40	400 W	T3	T3	154 °C (HSE) 162 °C (HIE)	6470/2327-6402-100-2	224351	16.700	
					250 W	T4	T3	145 °C (HSE) 136 °C (HIE)	6470/2321-6252-100-2	224254	14.000	
Pendant light fitting Series 6470/2, size 3 with compensation, without wire guard	Wall - Ceiling	2 x M20 x 1.5, 2 x M25 x 1.5	HID E40	E40	250 W	T4	T3	145 °C (HSE) 136 °C (HIE)	6470/2321-6252-100-2	224254	14.000	
					400 W	T3	T3	154 °C (HSE) 162 °C (HIE)	6470/2321-6402-100-2	224255	16.700	
			2 x 1/2" NPT, 2 x 3/4" NPT	HID E40	E40	250 W	T4	T3	145 °C (HSE) 136 °C (HIE)	6470/2347-6252-100-2	224354	15.900
						400 W	T3	T3	154 °C (HSE) 162 °C (HIE)	6470/2347-6402-100-2	224355	18.600
			2 x M20 x 1.5, 2 x M25 x 1.5	HID E40	E40	250 W	T4	T3	145 °C (HSE) 136 °C (HIE)	6470/2341-6252-100-2	224257	15.900
						400 W	T3	T3	154 °C (HSE) 162 °C (HIE)	6470/2341-6402-100-2	224258	18.600
	<b>Notes:</b>		1)	HIE	→	Metal halide lamp						
				HSE	→	High-pressure sodium lamp						
				HID	→	(HIE + HSE)						
			**	at ambient temperature T <sub>a</sub> = 40 °C								
	<ul style="list-style-type: none"> <li>- The light fittings are supplied without lamps.</li> <li>- The light fittings are compensated.</li> </ul>											

# Pendant Light Fitting IEC

## Series 6470/2



### Technical Data

#### Electrical data

Lamps	QT	IEC 60357					
	HIE	IEC 61167					
	HSE	IEC 60662					
Ballast	QT	without					
	HIE / HSE	magnetical ballast					
Rated operational voltage $U_e$			Lamps				
			QT                      HIE/HSE				
		150 W    250 W    500 W	70 W    100 W    150 W    250 W    400 W				
230 (+/- 6%) V AC, 50 Hz		x	x    x    x    x    x    x    x    x				
240 (+/- 6%) V AC, 50 Hz							
208 (+/- 6%) V AC, 60 Hz							
220 (+/- 6%) V AC, 60 Hz		x	x    x    x    x    x    x    x    x				
240 (+/- 6%) V AC, 60 Hz							
Current consumption	Lamp	Lamp power	Supply current in A				
	220 ... 230 V AC/DC 0, 50, 60Hz						
	QT	150 W	0.65				
	QT	250 W	1.08				
	QT	500 W	2.17				
		Compensated			Uncompensated		
Lamp	Lamp power	Power factor cos $\phi$	Supply current in A	Inrush current in A	Power factor cos $\phi$	Supply current in A	Inrush current in A
230 V AC / 240 V AC, 50 Hz							
HIE / HSE	70 W	0.96	0.38	0.50	0.37	1.00	1.30
HIE / HSE	100 W	0.90	0.56	0.80	0.41	1.20	1.70
HIE / HSE	150 W	0.95	0.79	1.50	0.40	1.80	2.70
HIE / HSE	250 W	0.92	1.30	2.00	0.40	3.00	4.20
HIE	400 W	0.93	2.00	2.40	0.43	4.20	5.80
HSE	400 W	0.91	2.10	2.50	0.43	4.45	6.00
208 V AC, 60 Hz							
HIE / HSE	70 W	0.92	0.39	0.50	0.37	1.00	1.30
HIE / HSE	150 W	0.94	0.80	1.50	0.42	1.80	2.70
HIE	400 W	0.97	1,90	2.50	0.44	4.20	5.80
HSE	400 W	0.96	2,30	2.80	0.44	4.45	6.00
220 V AC / 240 V AC, 60 Hz							
HIE / HSE	70 W	0.95	0.36	0.50	0.37	1.00	1.30
HIE / HSE	100 W	0.91	0.62	0.80	0.44	1.20	1.70
HIE / HSE	150 W	0.96	0.75	1.50	0.42	1.80	2.70
HIE / HSE	250 W	0.90	1.50	2.00	0.40	3.00	4.20
HIE	400 W	0.98	1.80	2.40	0.44	4.20	5.80
HSE	400 W	0.98	2.20	2.70	0.44	4.45	6.00

E2

# Pendant Light Fitting IEC

## Series 6470/2

### Technical Data

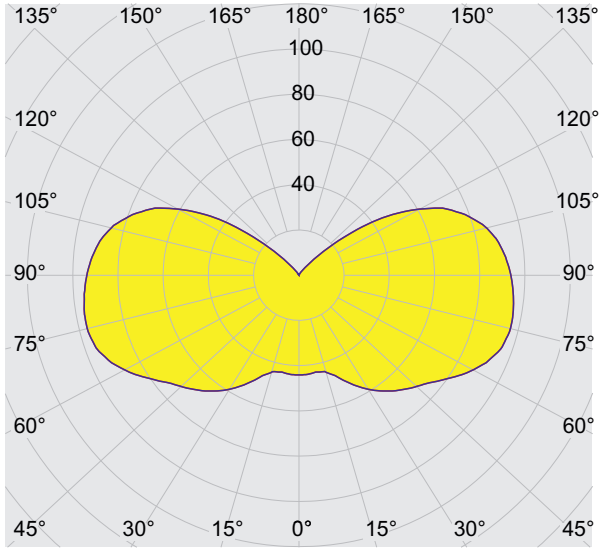
Inrush current	max. light fittings per circuit breaker with the maximum network impedance of 1 Ohm:											
						<b>compensated [uncompensated]</b>						
	<b>QT</b>			<b>HIE/HSE</b>								
		<b>150 W</b>	<b>250 W</b>	<b>500 W</b>	<b>70 W</b>	<b>100 W</b>	<b>150 W</b>	<b>250 W</b>	<b>400 W</b>			
	<b>B10A</b>	11	7	4	8 [5]	7 [4]	5 [2]	3 [1]	2 [1]			
	<b>B16A</b>	22	13	7	13 [8]	11 [6]	8 [4]	5 [2]	3 [1]			
	<b>B20A</b>	28	17	9	16 [9]	14 [8]	10 [5]	6 [3]	4 [2]			
	<b>B25A</b>	35	21	11	20 [12]	17 [10]	12 [6]	8 [4]	5 [2]			
	<b>C10A</b>	11	7	4	12 [7]	10 [6]	7 [4]	5 [2]	3 [1]			
	<b>C16A</b>	22	13	7	18 [11]	16 [9]	11 [6]	7 [3]	4 [2]			
				<b>C20A</b>	28	17	9	23 [14]	20 [11]	14 [7]	9 [4]	5 [3]
				<b>C25A</b>	35	21	11	29 [17]	25 [14]	17 [9]	11 [5]	7 [4]
Energy efficiency class	EEI A2											
<b>Ambient conditions</b>												
Ambient temperature	-30 ... +55 °C		HSE, HIE									
	-30 ... +40 °C		250 W HIE (Size 2)									
	-50 ... +55 °C		QT									
<b>Mechanical data</b>												
Degree of protection	IP66 (IEC 60598)											
Protection class	I (PE-connection)											
Material												
Enclosure material	saltwater-resistant aluminium											
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	saltwater-resistant aluminium											
Enclosure lock	Mounting screw M8 (stainless steel)											
<b>Mounting / Installation</b>												
Operating position	pendant mounting or slewing angle (30° and 45°)											
Mounting	<b>Cover</b>	<b>Mounting</b>		<b>Description</b>								
	Universal Cover	Wall Ceiling (pendant) Ceiling (fix)		with help of mounting bracket as accessory with help of ring bolts as accessory with help of mounting bracket as accessory								
	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 Special entry      others on request											
Connection option	Spring clamp terminal 0.5 ... 4 mm <sup>2</sup> Strip length 10 ... 11 mm 3-pole (2x L1, 2x N, 2x PE)											
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											

# Pendant Light Fitting IEC Series 6470/2



E2

## Light Distribution Curve (typical)



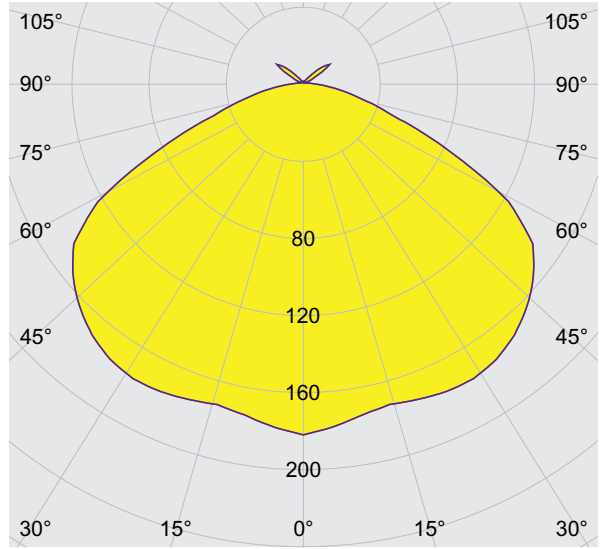
cd/klm

— C0 - C180

— C90 - C270

$\eta = 81\%$

18906E00



cd/klm

— C0 - C180

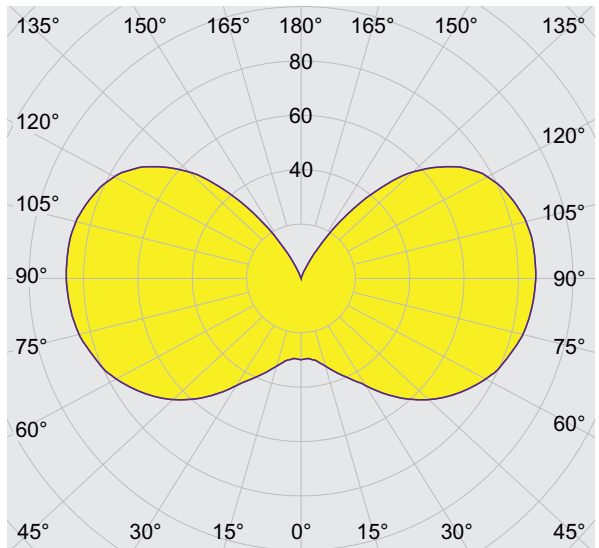
— C90 - C270

$\eta = 67\%$

18907E00

6470 Size 1 without reflector

6470 Size 1 with reflector



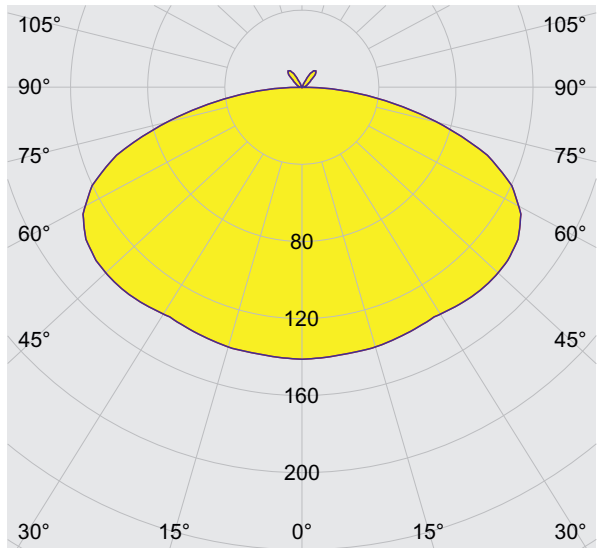
cd/klm

— C0 - C180

— C90 - C270

$\eta = 83\%$

18908E00



cd/klm

— C0 - C180

— C90 - C270

$\eta = 69\%$

18909E00

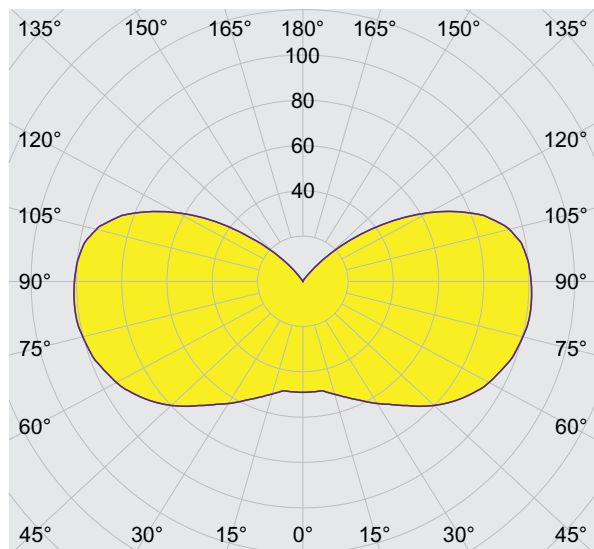
6470 Size 2 without reflector

6470 Size 2 with reflector

# Pendant Light Fitting IEC

## Series 6470/2

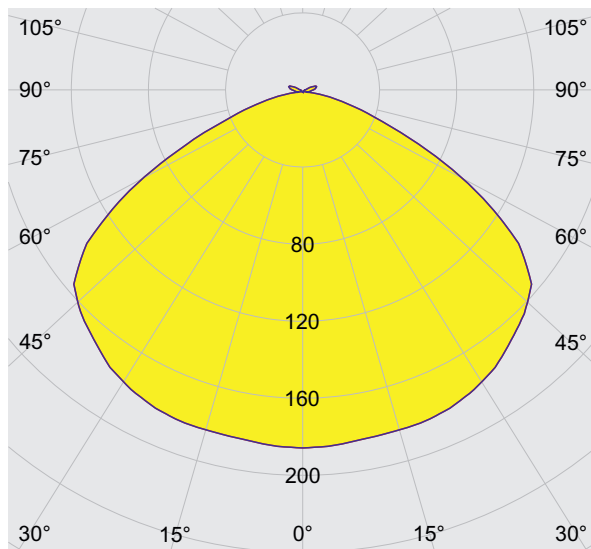
### Light Distribution Curve (typical)



cd/klm  $\eta = 87\%$   
 — C0 - C180 — C90 - C270

18910E00

6470 Size 3 without reflector






cd/klm  $\eta = 63\%$   
 — C0 - C180 — C90 - C270

18911E00

6470 Size 3 with reflector

### Accessories and Spare Parts




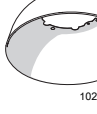

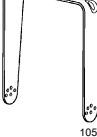
Designation	Illustration	Description				Art. no.	Weight kg
		Power	Lamp holder	Voltage	Light current		
Halogen lamps QT	 05355E00	205 W	E27	230 V	4200 lm	<b>203469</b>	0.100
		150 W	E27	230 V	2870 lm	<b>207458</b>	0.080
		500 W	E40	230 V	10250 lm	<b>108874</b>	0.120
Metal halide lamps HIE	 04963E00	70 W	E27	230 V	5100 lm	<b>109307</b>	0.073
		100 W	E27	230 V	7700 lm	<b>109308</b>	0.101
		150 W	E27	230 V	11500 lm	<b>109309</b>	0.110
		250 W	E40	230 V	20000 lm	<b>108883</b>	0.154
		400 W	E40	230 V	34000 lm	<b>108885</b>	0.242
High-pressure sodium lamps HSE	 04963E00	50 W	E27	230 V	3500 lm	<b>109350</b>	0.061
		70 W	E27	230 V	5600 lm	<b>109105</b>	0.054
		100 W	E40	230 V	9500 lm	<b>109504</b>	0.081
		150 W	E40	230 V	14500 lm	<b>108900</b>	0.285
		250 W	E40	230 V	27000 lm	<b>108901</b>	0.173
		400 W	E40	230 V	48000 lm	<b>108903</b>	0.235

# Pendant Light Fitting IEC

## Series 6470/2



### Accessories and Spare Parts


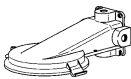


Designation	Illustration	Description	Art. no.	Weight kg
High-pressure sodium lamps HSE (TwinArc)	 04963E00	50 W E27 230 V 4000 lm	<b>109493</b>	0.070
		70 W E27 230 V 6500 lm	<b>109494</b>	0.059
		100 W E40 230 V 9500 lm	<b>109495</b>	0.090
		150 W E40 230 V 17000 lm	<b>109496</b>	0.160
		250 W E40 230 V 32000 lm	<b>109497</b>	0.195
		400 W E40 230 V 55000 lm	<b>109498</b>	0.237
Safety glass	 10572E00	temperature resistant borosilicate glass with screw-in thread		
		6470/21	<b>123041</b>	3.370
		6470/22	<b>123051</b>	4.400
		6470/23	<b>123052</b>	6.600
Wire guard	 10571E00	made of saltwater-resistant aluminium, with mounting parts		
		for 6470/21	<b>123038</b>	0.250
		for 6470/22	<b>123039</b>	0.300
		for 6470/23	<b>123040</b>	0.600
Standard reflector	 10288E00	made of glass fibre reinforced polyester, with mounting parts		
		for 6470/21 and 6470/22	<b>123048</b>	1.900
		for 6470/23	<b>123053</b>	5.500
Reflector 30°	 06249E00	made of glass fibre reinforced polyester, with mounting parts		
		for 6470/21 and 6470/22	<b>123043</b>	0.600
Mounting bracket	 10570E00	made of stainless steel, with mounting parts		
		for 6470/.1 and 6470/.2	<b>122757</b>	1.200
		for 6470/.3	<b>122758</b>	1.500

E2

## Pendant Light Fitting IEC

### Series 6470/2

#### Accessories and Spare Parts

Designation	Illustration	Description	Art. no.	Weight kg	
Cover for wall and ceiling mounting	 10580E00	Ceiling mounting via taps located on the cover. A mounting bracket or ring bolts can be attached to the cover later (must be ordered as accessory).			
		with thread 2 x M20 x 1.5 and 2 x M25 x 1.5	for 6470/21 and 6470/22	<b>248973</b>	1.364
		with thread 2 x M20 x 1.5 and 2 x M25 x 1.5	for 6470/23	<b>248974</b>	1,177
		with thread 2 x 1/2" NPT and 2 x 3/4" NPT	for 6470/21 and 6470/22	<b>248975</b>	1.575
Cover for wall mounting	 10573E00	with thread 2 x M20 x 1.5 and 2 x M25 x 1.5	for 6470/21 and 6470/22	<b>248977</b>	1.409
		with thread 2 x M20 x 1.5 and 2 x M25 x 1.5	for 6470/23	<b>248978</b>	1.700
		with thread 2 x 1/2" NPT and 2 x 3/4" NPT	for 6470/21 and 6470/22	<b>248979</b>	1.620
		with thread 2 x 1/2" NPT and 2 x 3/4" NPT	for 6470/23	<b>248980</b>	1.911
Cover for pole mounting 25°	 10577E00	with thread 1 1/2" BSP	for 6470/21 and 6470/22	<b>248981</b>	1.694
		with thread 1 1/2" BSP	for 6470/23	<b>248982</b>	3.076
		with thread 1 1/4" BSP	for 6470/21 and 6470/22	<b>248983</b>	1.340
		with thread 1 1/4" BSP	for 6470/23	<b>248984</b>	3.076
Ring bolts	 05378E00	M8, direct mounting in insert nuts, 1 pair		<b>115736</b>	0.112
		M10, direct mounting in insert nuts, 1 pair		<b>118560</b>	0.210
Cable entries	 02055E00	of moulded material, Series 8161			
		8161/7-M20-1304	50 pieces	<b>239156</b>	0.600
Stopping plug	 04840E00	of moulded material, Series 8290			
		8290/3-M20	1 piece	<b>143522</b>	0.005
		8290/3-M20	100 pieces	<b>143543</b>	0.500
		8290/3-M25 x 1,5	1 pieces	<b>143524</b>	0.007
		8290/3-M25	100 pieces	<b>143544</b>	0.700

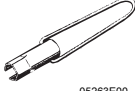



# Pendant Light Fitting IEC

## Series 6470/2

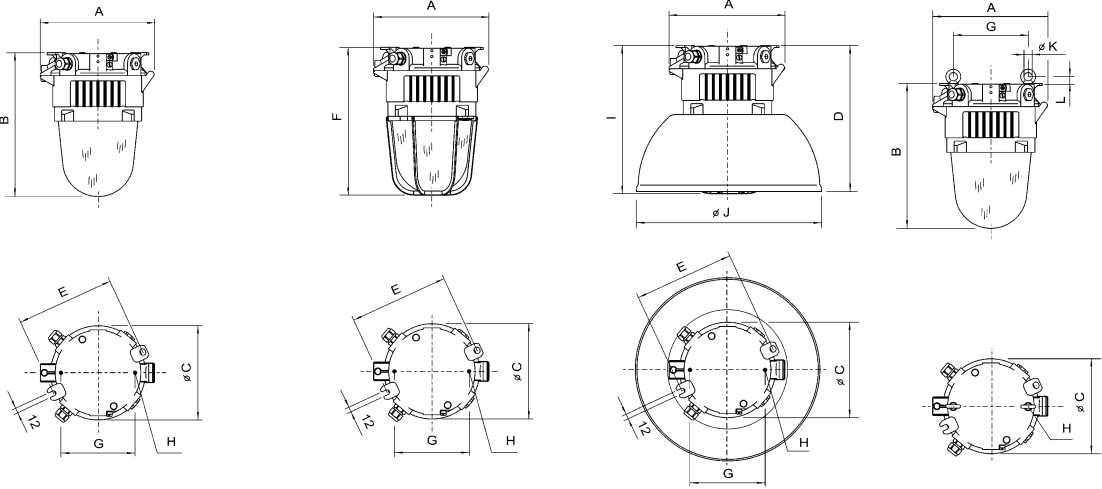


### Accessories and Spare Parts

Designation	Illustration	Description	Art. no.	Weight kg
Special key		for tightening cable glands respectively cap nuts for cable glands thread size                  packing unit M20 x 1.5                  1	<b>114208</b>	0.132
Handheld testing instrument for gastight enclosures		For testing of restricted breathing of gastight enclosures of type Ex nR	<b>230434</b>	1.334

E2

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



10574E00

**Ceiling mounting  
without wire guard**

10566E00

**Ceiling mounting  
with wire guard**

10564E00

**Ceiling mounting  
with reflector**

10568E00

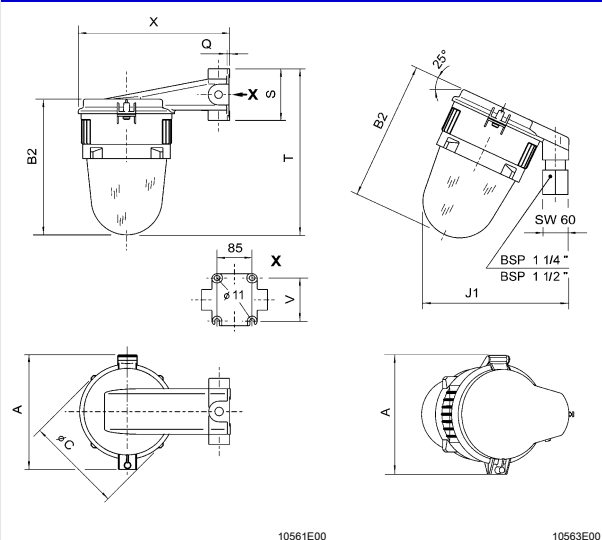
**Pendant mounting  
by means of ring bolts**

# Pendant Light Fitting IEC

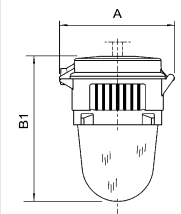
## Series 6470/2

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

	6470/21	6470/22	6470/23
A	277 [10.91]		372 [14.65]
B	352 [13.86]	414 [16.30]	514 [20.24]
B2	331	393	498
C	230 [9.06]		310 [12.20]
D	347 [13.66]		525 [20.67]
E	240 [9.45]		329 [12.95]
F	357 [14.06]	423 [16.65]	533 [20.98]
G	180 180		260
H	M 8 M 8		M 10
I	358	424	535
J	444 444		715
J1	340	367	511
K	20 20		25
L	18 18		22.5
Q	7 7		8
S	105	125	160
T	405	466	592
V	105 105		139
X	366.5 366.5		579



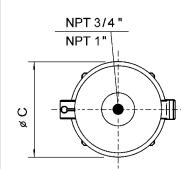
**Wall mounting**



**Pole mounting 25°**



**Tube mounting**



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.