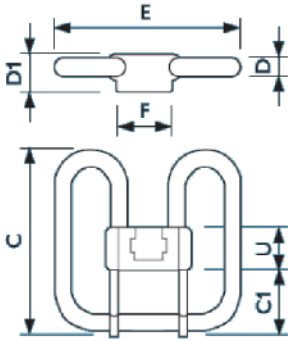


ABMESSUNGEN/DIMENSIONS (mm) :



| C max. | C1 max. | D max. | D1 max. | E max. | F max. | U max. |
|--------|---------|--------|---------|--------|--------|--------|
| 207 | 77 | 24 | 33,0 | 205 | 41 | 49 |

Base: 2 pin GR8 (IEC 61-1 sheet 7004-68-3)
 Base: 4 pin GR10q (IEC 61-1 sheet 7004-77-2)

| ELEKTRISCHE WERTE/ELECTRICAL DATA | | NENNWERT/ NOMINAL VALUE | MIN. | MAX. |
|--|----|----------------------------|------|------|
| Frequenz/Frequency | Hz | 50 | | |
| Lampen-Nennleistung/Lamp nominal wattage | W | 38 | | |
| Lampen-Bemessungsleistung/Lamp rated wattage | W | 38,5 | 36,6 | 40,4 |
| Lampen-Brennspannung/Lamp operating voltage | V | 110 | 100 | 120 |
| Lampenstrom/Lamp current | mA | 430 | | |
| Vorheizstrom/Preheat current | mA | 580 | | |

| BETRIEBSBEDINGUNGEN/OPERATING CONDITIONS | | NENNWERT/ NOMINAL VALUE | MIN. | MAX. |
|--|-------|----------------------------|--------------|------|
| Vorschaltgerät-Impedanz/Ballast | (Ω/V) | 890/220 | | |
| Starter/Starter | | FS-22 | | |
| Sockelrandtemperatur/Cap rim temperature | °C | | | 110 |
| Umgebungstemperatur für Anwendungen/Lamp ambient temperature | °C | | + 15 | + 50 |
| Starttemperatur/Start temperature | °C | | 0 | + 50 |
| Brennstellung/Burning position | | | beliebig/any | |

| ZÜNDEIGENSCHAFTEN BEI NETZFREQUENZ | | | | |
|---|----|-----|--------|----|
| Frequenz/Frequency | Hz | 50 | | |
| Vorschaltgerät Nennspannung/Ballast rated voltage | V | 220 | | |
| Prüfspannung/Test voltage | V | 198 | | |
| Zündzeit/Starting time | s | | | 10 |
| LEBENSDAUER/LAMP LIFE * | | | | |
| LUXLINE plus FARBEN/LUXLINE plus COLOURS | | | | |
| Mittlere Lebensdauer (50% Ausfallrate)/Average life (50% failure) | h | | 10 000 | |

Herausgeber/Issued by : Havells Sylvania
 Datum/Date : 17.04.2009
 Änderung/Revision Date :

**Product Technical
 Specification**

Specification-No : 51PPTS-005
 Ersetzt/Supersedes :
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| ELEKTRISCHE WERTE/ELECTRICAL DATA | | NENNWERT/ NOMINAL VALUE | MIN. | MAX. |
|--|-----|------------------------------------|-------------|-------------|
| Frequenz/Frequency | kHz | | 20 | |
| Lampen-Nennleistung/Lamp nominal wattage | W | | | |
| Lampen-Bemessungsleistung/Lamp rated wattage | W | 34,5 | | |
| Lampen-Brennspannung/Lamp operating wattage | V | 97 | | |
| Lampenstrom/Lamp current | mA | 355 | 340 | 590 |
| ELEKTRODENEIGENSCHAFTEN/CATHODE CHARACTERISTICS | | | | |
| Prüfstrom/Test current | mA | 560 | | |
| Widerstand jeder Elektrode/Resistance of each cathode | Ω | 9 | 6,75 | 11,25 |

| BETRIEBSBEDINGUNGEN/OPERATING CONDITIONS | | NENNWERT/ NOMINAL VALUE | MIN. | MAX. |
|---|----|--|-------------|-------------|
| Vorschaltgerät Typ/Ballast type | | elektronisch/electronic | | |
| Sockelrandtemperatur/Cap rim temperature | °C | | | 110 |
| Umgebungstemperatur für Anwendungen/Lamp ambient temperature | °C | | + 15 | + 50 |
| Starttemperatur/Start temperature | °C | | - 15 | + 50 |
| Brennstellung/Burning position | | waagrecht oder senkrecht, Stempelseite unten/ horizontal or vertical, stamped side down | | |
| LEBENSDAUER/LAMP LIFE * | | | | |
| LUXLINE plus FARBEN/LUXLINE plus COLOURS | | | | |
| Mittlere Lebensdauer (50% Ausfallrate)/Average life (50% failure) | h | 11 000 | | |

| ZÜNDEIGENSCHAFTEN/STARTING CHARACTERISTICS | | NENNWERT/ NOMINAL VALUE | MIN. | MAX. |
|---|-----|------------------------------------|-------------|-------------|
| Leerlaufspannung/Open circuit voltage (r.m.s.) | V | 560 | | |
| Vorheizstrom/Preheat current | mA | 410 | | |
| Vorheizzeit/Preheat time | sec | 2 | | |
| Frequenz/Frequency | kHz | 25 | | |
| Abstand Zündhilfe/Starting aid distance | mm | without | | |
| Zündzeit/Starting time | s | | | 0,1 |



LICHTTECHNISCHE WERTE/PHOTOMETRIC DATA:

| Lichtfarbe Color | Nr. No. | Lichtstrom* Nennwert Luminous Flux* Nominal value (lm) | Farb- wiedergabe CRI (Stufe/Group) | Farbtemp. Colour temp. (K) | Energy Effizienz Klasse Energy Efficiency Class | ILCOS-Code | Bestell-Nr. Order-No. |
|---------------------|------------|--|---|--------------------------------------|--|---------------------|--------------------------|
| LUXLINE PLUS | | | | | | | |
| COOLWHITE DELUXE | 840 | 2850 | 82 | 4000 | B | FSS38/40/1B-E-GR10q | |
| WHITE DELUXE | 835 | 2850 | 82 | 3500 | B | FSS38/35/1B-E-GR10q | |
| WARM WHITE DELUXE | 830 | 2850 | 82 | 3000 | B | FSS38/30/1B-E-GR10q | |
| HOMELIGHT DELUXE | 827 | 2850 | 82 | 2700 | B | FSS38/27/1B-E-GR10q | |

| Lumen maintenance min. | 2000 h | 5000 h | 8000 h |
|------------------------|--------------------|--------------------|--------------------|
| magnetic ballast | 0,90 | 0,85 | 0,80 |
| electronic ballast | under consultation | under consultation | under consultation |

| Survival factor | 2000 h | 4000 h | 8000 h |
|--------------------|--------------------|--------------------|--------------------|
| magnetic ballast | 0,95 | 0,92 | 0,87 |
| electronic ballast | under consultation | under consultation | under consultation |

| Rated lamp lumen at 25° | |
|-------------------------|--|
| Nominal wattage | Rated luminous efficacy (lm/W), 100 h initial value |
| 38 | 75 |

| | |
|---------------------------|--------|
| Mercury content per lamp: | 4,0 mg |
|---------------------------|--------|

ANMERKUNG:

Die Lampen entsprechen den Anforderungen der IEC/EN 60901 und IEC/EN 61199.
 Starter und Vorschaltgeräte müssen die Anforderungen der IEC/EN 60155, IEC/EN 60921 und der IEC/EN 60929 erfüllen.
 * Prüfung nach IEC/EN 60901, Anhang C (50 Hz Betrieb und 100h Alterung).
 Lichtstrom bei HF-Betrieb abhängig vom verwendeten EVG.
 ** Für erhöhte Lampenlebensdauer und Dimmbetrieb die Angaben der EVG-Hersteller beachten.

REMARK:

Lamps comply with the requirements of IEC/EN 60901 and IEC/EN 61199, respectively.
 Starter and ballast must comply with IEC/EN 60155, IEC/EN 60921 and IEC/EN 60929, respectively.
 * Life test according to IEC/EN 60901, Annex C (50 Hz operation, lamp aged for 100h).
 If lamps are operated at high frequency, the luminous flux depends on the type of ballast used.
 ** For increased lamp life at HF operation and dimming operation refer to published data of ballast manufacturer.
Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (ROHS):
 European directive 2002/95/EC
 Commission Regulation (EC) No. 245/2009

| | | |
|--|--|-------------------------------|
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