# FUTURA CLASS II



## ... with Class II insulation.

### USE

It is suitable for **industrial, warehouse and agricultural buildings, sports premises, transport terminals, railway vehicle repair shops, platforms, traction substations, depots, parking lots and garages, workshops and laboratories** without explosion hazard.

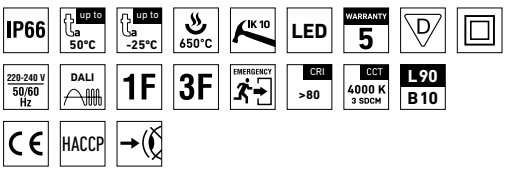
The light fitting resists dust, humidity and spouting water. The body and the diffuser made of PC material have high mechanical resistance against impact and deformation.

Easy, fast and maximally **efficient mounting is achieved when using the cables with connectors delivered by us**.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 421.

### ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to **$t_a$ = 50 °C**
- Lifetime: 50,000 hours / L90B10
- Lifetime: 100,000 hours / L80B10
- Diffuser: translucent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate (PC) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- Constant luminous flux even in ambient temperature of -25 °C
- Standard model - CRI > 80: 4000 K
- At request CRI > 80: 3000 K, 5000 K, 6500 K, CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- It can be delivered in dimmable or emergency version
- Available in ABS chemical resistant version
- Through-wiring of up to 6 wires at body (2.4ft and 2.5ft)

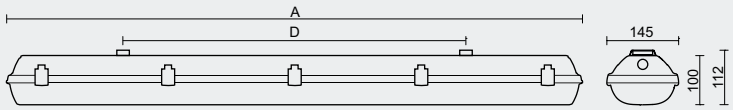


# FUTURA CLASS II PC, PCc

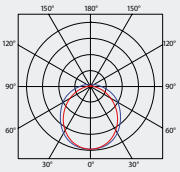


## TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a$ = 50 °C, Maximum ambient temperature: $t_a$ = 0-40 °C (version with emergency back-up M3hAt)
- Maximum system efficacy: 164 lm/W
- Emergency light module generates a luminous flux of 445 lm
- The watt and lumen values can vary by ± 7,5 %
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Lifetime: 100,000 hours / L80B10
- Diffuser: translucent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate (PC), UV stable, impact-resistant
- Reflector: steel sheet, white colour (RAL 9003)
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Distance part: polyamide + 10 % glass fibre
- **External terminal block** 2 or 4-pole, conductor cross-sectional area: 1.5 or 2.5 mm$^2$, or 6-pole Wieland connector (DALI 3F)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI




FUTURA CLASS II 2.4ft




| Type | Max. ambient temperature [°C] | Luminous flux of LED modules [lm] | Luminous flux of light fitting [lm] | Power consumption [W] | System efficacy [lm/W] | Net weight [kg] | A [mm] | D [mm] |
|---|---|---|---|---|---|---|---|---|
| For ambient temperature $t_a$ = 50 °C - body: grey polycarbonate with Al coolers - diffuser: translucent polycarbonate | | | | | | | | |
| FUTURA 2.2ft CLASS II PC 3200/840 | 50 | 3250 | 3060 | 20,1 | 152 | 1,35 | 612 | 475 |
| FUTURA 2.2ft CLASS II PC 4400/840 | 45 | 4680 | 4400 | 28,3 | 155 | 1,35 | 612 | 475 |
| FUTURA 2.4ft CLASS II PC 6400/840 | 50 | 6520 | 6130 | 38,4 | 160 | 2,35 | 1172 | 700 |
| FUTURA 2.4ft CLASS II PC 8800/840 | 45 | 8980 | 8440 | 52,8 | 160 | 2,35 | 1172 | 700 |
| FUTURA 2.5ft CLASS II PC 8000/840 | 50 | 8330 | 7830 | 48,3 | 162 | 2,85 | 1452 | 940 |
| FUTURA 2.5ft CLASS II PC 11000/840 | 45 | 11260 | 10580 | 64,7 | 164 | 2,85 | 1452 | 940 |

47560 FUTURA 2.2ft CLASS II PC 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 – 2×18 W
47590 FUTURA 2.4ft CLASS II PC 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 – 2×36 W
47630 FUTURA 2.5ft CLASS II PC 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 – 2×58 W

## FUTURA CLASS II PC

Non-dimmable driver - plastic clips

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 47560 | FUTURA 2.2ft CLASS II PC 3200/840 | x | x | 109499 | x |
| 47570 | FUTURA 2.2ft CLASS II PC 4400/840 | x | x | 109500 | x |
| 47590 | FUTURA 2.4ft CLASS II PC 6400/840 | 47591 | 47593 | 109502 | 109508 |
| 47600 | FUTURA 2.4ft CLASS II PC 8800/840 | 47601 | 47603 | 109503 | 109509 |
| 47630 | FUTURA 2.5ft CLASS II PC 8000/840 | 47631 | 47633 | 109505 | 109511 |
| 47640 | FUTURA 2.5ft CLASS II PC 11000/840 | 47641 | 47643 | 109506 | 109512 |

## FUTURA CLASS II PCc

Non-dimmable driver - stainless clips (c)

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 47670 | FUTURA 2.2ft CLASS II PCc 3200/840 | x | x | 109514 | x |
| 47680 | FUTURA 2.2ft CLASS II PCc 4400/840 | x | x | 109515 | x |
| 47700 | FUTURA 2.4ft CLASS II PCc 6400/840 | 47701 | 47703 | 109517 | 109523 |
| 47710 | FUTURA 2.4ft CLASS II PCc 8800/840 | 47711 | 47713 | 109518 | 109524 |
| 47740 | FUTURA 2.5ft CLASS II PCc 8000/840 | 47741 | 47743 | 109520 | 109526 |
| 47750 | FUTURA 2.5ft CLASS II PCc 11000/840 | 47751 | 47753 | 109521 | 109527 |

## FUTURA CLASS II PC DALI

Digital dimmable driver DALI - plastic clips

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 47780 | FUTURA 2.2ft CLASS II PC 3200/840 DALI | x | x | 109529 | x |
| 47790 | FUTURA 2.2ft CLASS II PC 4400/840 DALI | x | x | 109530 | x |
| 47810 | FUTURA 2.4ft CLASS II PC 6400/840 DALI | 47811 | 47813 | 109532 | 109538 |
| 47820 | FUTURA 2.4ft CLASS II PC 8800/840 DALI | 47821 | 47823 | 109533 | 109539 |
| 47850 | FUTURA 2.5ft CLASS II PC 8000/840 DALI | 47851 | 47853 | 109535 | 109541 |
| 47860 | FUTURA 2.5ft CLASS II PC 11000/840 DALI | 47861 | 47863 | 109536 | 109542 |

## FUTURA CLASS II PCc DALI

Digital dimmable driver DALI - stainless clips (c)

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 47890 | FUTURA 2.2ft CLASS II PCc 3200/840 DALI | x | x | 109544 | x |
| 47900 | FUTURA 2.2ft CLASS II PCc 4400/840 DALI | x | x | 109545 | x |
| 47920 | FUTURA 2.4ft CLASS II PCc 6400/840 DALI | 47921 | 47923 | 109547 | 109553 |
| 47930 | FUTURA 2.4ft CLASS II PCc 8800/840 DALI | 47931 | 47933 | 109548 | 109554 |
| 47960 | FUTURA 2.5ft CLASS II PCc 8000/840 DALI | 47961 | 47963 | 109550 | 109556 |
| 47970 | FUTURA 2.5ft CLASS II PCc 11000/840 DALI | 47971 | 47973 | 109551 | 109557 |

### LEGEND

**1F** - 1-phase 2 core through-wiring in the luminaire
**3F** - 3-phase 4 core through-wiring in the luminaire
**M3hAt** - emergency back-up source with 3 hour operating time for maintained emergency illumination with battery autotest
**3F M3hAt** - 3-phase 4 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
**DALI** - version with digital dimmable driver DALI
**DALI 1F** - 1-phase 4 core through-wiring in the luminaire
**DALI 3F** - 3-phase 6 core through-wiring in the luminaire
**DALI 3F M3hAt** - 3-phase 6 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

### LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories





### LIGHT FITTING DETAILED VIEW

FUTURA CLASS II





