

# FUTURA NB



**BIM**  
ready

... for storage rack lanes with high ceilings 10-15 m.

## USE

The light fitting with narrow emitting characteristics is suitable to illuminate storage rack lanes and narrow spaces with high ceilings. Its assembly height is 10-15 m.

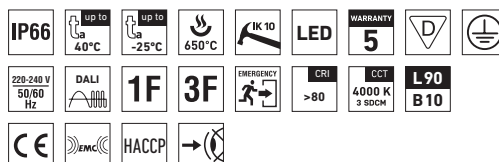
The light fitting is resistant to dust, moisture and spouting water. The body and the diffuser made of polycarbonate (PC) have the increased resistance against deformation and impact.

(It is necessary to consider exhalation in the air which can reduce the usability of the plastic and aluminium at installations in an aggressive environment, see also page 367).

## ADVANTAGES

- Light fitting protection **IP66**
- Maximum ambient temperature up to  **$t_a = 40^\circ\text{C}$**
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = 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  $-25^\circ\text{C}$
- 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
- It can be delivered with a grille to reduce the longitudinal UGR
- Through-wiring of up to 10 wires at body
- Certification: HACCP



# FUTURA NB PC AL, PCc AL



## TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature:  $t_a = 40^\circ\text{C}$ , Maximum ambient temperature:  $t_a = 0-25^\circ\text{C}$  (version with emergency back-up source for 1 or 3 hours; M1h, M3h)
- Maximum system efficacy: 147 lm/W
- The watt and lumen values can vary by  $\pm 7,5\%$
- Standard model - CRI > 80: 4000 K
- MacAdam = 3 SDCM
- Lifetime: 50,000 hours / L90B10
- Diffuser: transparent polycarbonate (PC), UV stable, impact-resistant
- Body: grey polycarbonate with Al coolers (PC AL), UV stable, impact-resistant
- Reflector: parabolic polished aluminium with narrow emitting characteristics (NB - narrow beam)
- 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
- Terminal block: screwless, three-pole (basic version)
- Installation: package contains stainless hooks and stainless brackets
- Electric equipment: LED modules, current driver or current driver DALI

FUTURA NB 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]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
For ambient temperature $t_a = 40^\circ\text{C}$ - body: grey polycarbonate with Al coolers - diffuser: transparent polycarbonate									
FUTURA 2.4ft NB PC AL 8800/840	40	8690	7300	49,7	147	20.8 / 23.8	3,3	1172	700
FUTURA 2.4ft NB PC AL 12800/840	30	13920	11690	82,5	142	22.4 / 25.3	3,3	1172	700
FUTURA 2.5ft NB PC AL 11000/840	40	12310	10340	71,1	145	21.3 / 24.3	3,9	1452	940
FUTURA 2.5ft NB PC AL 16000/840	30	17440	14650	102,2	143	22.5 / 25.4	3,9	1452	940

### FUTURA NB PC AL

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78060	FUTURA 2.4ft NB PC AL 8800/840	78160	78360	78064	78065	78364	78365
78070	FUTURA 2.4ft NB PC AL 12800/840	78170	78370	x	x	x	x
78090	FUTURA 2.5ft NB PC AL 11000/840	78190	78390	78094	78095	78394	78395
78080	FUTURA 2.5ft NB PC AL 16000/840	78180	78380	x	x	x	x

### FUTURA NB PCc AL

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78260	FUTURA 2.4ft NB PCc AL 8800/840	78560	78660	78264	78265	78664	78665
78270	FUTURA 2.4ft NB PCc AL 12800/840	78570	78670	x	x	x	x
78290	FUTURA 2.5ft NB PCc AL 11000/840	78590	78690	78294	78295	78694	78695
78280	FUTURA 2.5ft NB PCc AL 16000/840	78580	78680	x	x	x	x

### FUTURA NB PC AL DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78063	FUTURA 2.4ft NB PC AL 8800/840 DALI	78163	78363	78067	78069	78367	78369
78073	FUTURA 2.4ft NB PC AL 12800/840 DALI	78173	78373	x	x	x	x
78093	FUTURA 2.5ft NB PC AL 11000/840 DALI	78193	78393	78097	78099	78397	78399
78083	FUTURA 2.5ft NB PC AL 16000/840 DALI	78183	78383	x	x	x	x

### FUTURA NB PCc AL DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
78263	FUTURA 2.4ft NB PCc AL 8800/840 DALI	78563	78663	78267	78269	78667	78669
78273	FUTURA 2.4ft NB PCc AL 12800/840 DALI	78573	78673	x	x	x	x
78293	FUTURA 2.5ft NB PCc AL 11000/840 DALI	78593	78693	78297	78299	78697	78699
78283	FUTURA 2.5ft NB PCc AL 16000/840 DALI	78583	78683	x	x	x	x

Example of type marking: 78669 = FUTURA 2.4ft NB PCc AL 8800/840 DALI 3F M3h

## LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 3-phase 5 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 5 core through-wiring in the luminaire
- DALI 3F** 3-phase 7 core through-wiring in the luminaire
- DALI 3F Mxh** 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

### LIGHT FITTING ATTACHMENT

- a) Directly to a ceiling with the use of screws and stainless brackets
- b) Suspension with the use of stainless hooks



### LIGHT FITTING DETAILED VIEW

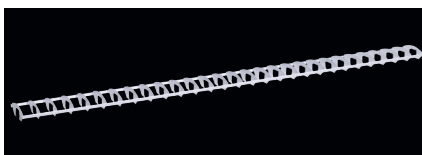
FUTURA NB



### ACCESSORIES

#### Grid FUTURA NB

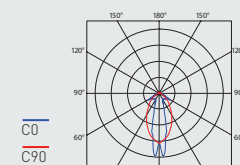
Additional grid for reducing the longitudinal UGR for FUTURA NB lamps.  
The grid reduces the glare value in the longitudinal direction to below 19 (see the luminance curve below).



Code	Type	Description	Weight [kg]
11989	MNB 2.4	grid FUTURA 2.4ft NB	0,36
11990	MNB 2.5	grid FUTURA 2.5ft NB	0,45



FUTURA NB 2.4ft (with grid)



Type	Max. ambient temperature [°C]	Luminous flux of LED modules [lm]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	UGR Longitudinal/transverse	Net weight [kg]	A [mm]	D [mm]
<b>Change of the values for lamp variants with grid</b>									
FUTURA 2.4ft NB PC Al 8800/840	40	8690	5650	49,7	114	20.8 / 19.5	3,3	1172	700
FUTURA 2.4ft NB PC Al 12800/840	30	13920	9050	82,5	110	22.3 / 21.0	3,3	1172	700
FUTURA 2.5ft NB PC Al 11000/840	40	12310	8000	71,1	113	21.2 / 20.0	3,9	1452	940
FUTURA 2.5ft NB PC Al 16000/840	30	17440	11340	102,2	111	22.4 / 21.1	3,9	1452	940