FUTURA NB



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

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.

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

ADVANTAGES

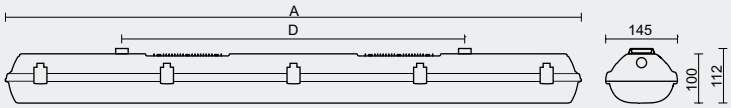
- Light fitting protection **IP66**
- Maximum ambient temperature up to t_a = **40 °C**
- Lifetime: 50,000 hours / L90B10
- Lifetime: 100,000 hours / L80B10
- Diffuser: transparent polycarbonate (PC) = high mechanical resistance
- Body: grey polycarbonate with Al coolers (PC Al) = high mechanical resistance
- Up to 45 % lower electricity consumption when compared to tubes T5
- In DALI version possibility of constant luminous flux for whole lifetime (CLO)
- **MultiLumen (ML)** function enables simple switching between up to four luminous fluxes via driver's DIP switch
- 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
- 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

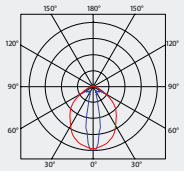


TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: t_a = 40 °C, Maximum ambient temperature: t_a = 0-40 °C (version with emergency back-up M3hAt)
- Maximum system efficacy: 153 lm/W
- 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
- **MultiLumen (ML):** luminous flux variable in up to 4 steps. In the standard version preset maximum luminous flux.
- 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]	Preselected Step 1 of MultiLumen function: 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 = 40 °C - body: grey polycarbonate with Al coolers - diffuser: transparent polycarbonate								
FUTURA 2.4ft NB PC Al 8800/840 *	40	9080	7630	52,7	145	3,3	1172	700
FUTURA 2.4ft NB PC Al 12800/840	30	13100	11000	74,8	147	3,3	1172	700
FUTURA 2.5ft NB PC Al 11000/840 *	40	11160	9370	65,1	144	3,9	1452	940
FUTURA 2.5ft NB PC Al 16000/840	30	16090	13520	93,0	145	3,9	1452	940

*) Also available with MultiLumen function:

Type	MultiLumen function: Step 2 Luminous flux of light fitting [lm]	Step 2 Power consumption [W]	Step 2 System efficacy [lm/W]	Step 3 Luminous flux of light fitting [lm]	Step 3 Power consumption [W]	Step 3 System efficacy [lm/W]	Step 4 Luminous flux of light fitting [lm]	Step 4 Power consumption [W]	Step 4 System efficacy [lm/W]
FUTURA 2.4ft NB PC Al 8800/840 ML	6640	44,8	148	5590	37,1	151	4520	29,6	153
FUTURA 2.5ft NB PC Al 11000/840 ML	8130	55,6	146	6870	46,4	148	5570	37,3	149

FUTURA NB PC Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M3hAt	3F M3hAt
78060	FUTURA 2.4ft NB PC Al 8800/840 ML	78160	78360	109434	109436
78070	FUTURA 2.4ft NB PC Al 12800/840	78170	78370	x	x
78090	FUTURA 2.5ft NB PC Al 11000/840 ML	78190	78390	109435	109437
78080	FUTURA 2.5ft NB PC Al 16000/840	78180	78380	x	x

FUTURA NB PCc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M3hAt	3F M3hAt
78260	FUTURA 2.4ft NB PCc Al 8800/840 ML	78560	78660	109442	109444
78270	FUTURA 2.4ft NB PCc Al 12800/840	78570	78670	x	x
78290	FUTURA 2.5ft NB PCc Al 11000/840 ML	78590	78690	109443	109445
78280	FUTURA 2.5ft NB PCc Al 16000/840	78580	78680	x	x

FUTURA NB PC Al DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M3hAt	3F M3hAt
78063	FUTURA 2.4ft NB PC Al 8800/840 DALI	78163	78363	109438	109440
78073	FUTURA 2.4ft NB PC Al 12800/840 DALI	78173	78373	x	x
78093	FUTURA 2.5ft NB PC Al 11000/840 DALI	78193	78393	109439	109441
78083	FUTURA 2.5ft NB PC Al 16000/840 DALI	78183	78383	x	x

FUTURA NB PCc Al DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M3hAt	3F M3hAt
78263	FUTURA 2.4ft NB PCc Al 8800/840 DALI	78563	78663	109446	109448
78273	FUTURA 2.4ft NB PCc Al 12800/840 DALI	78573	78673	x	x
78293	FUTURA 2.5ft NB PCc Al 11000/840 DALI	78593	78693	109447	109449
78283	FUTURA 2.5ft NB PCc Al 16000/840 DALI	78583	78683	x	x

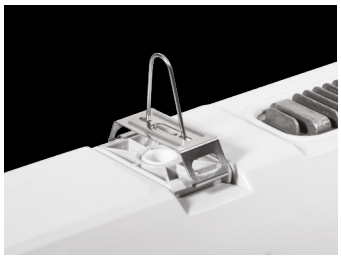
LEGEND

1F - 1-phase 3 core through-wiring in the luminaire
3F - 3-phase 5 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 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 M3hAt - 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

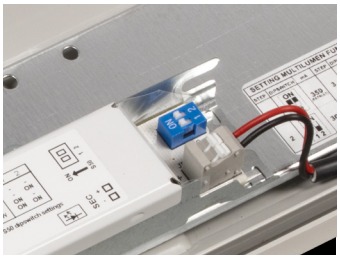
LIGHT FITTING DETAILED VIEW

FUTURA NB



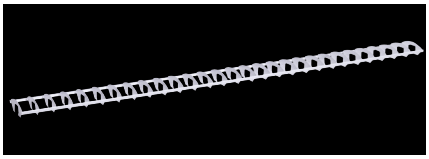




Grid FUTURA NB

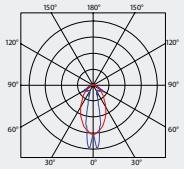
Additional grid for reducing the longitudinal UGR for FUTURA NB lamps.
The grid reduces the glare value in the longitudinal direction (see the luminance curve below).



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]	Preselected Step 1 of MultiLumen function			Net weight [kg]	A [mm]	D [mm]
			Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]			
Change of the values for lamp variants with grid								
FUTURA 2.4ft NB PC Al 8800/840 *	40	9080	5900	52,7	112	3,3	1172	700
FUTURA 2.4ft NB PC Al 12800/840	30	13100	8520	74,8	114	3,3	1172	700
FUTURA 2.5ft NB PC Al 11000/840 *	40	11160	7250	65,1	111	3,9	1452	940
FUTURA 2.5ft NB PC Al 16000/840	30	16090	10460	93,0	112	3,9	1452	940

*) Also available with MultiLumen function:

Type	MultiLumen function								
	Step 2			Step 3			Step 4		
	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]	Luminous flux of light fitting [lm]	Power consumption [W]	System efficacy [lm/W]
FUTURA 2.4ft NB PC Al 8800/840 ML	5140	44,8	115	4330	37,1	117	3500	29,6	118
FUTURA 2.5ft NB PC Al 11000/840 ML	6290	55,6	113	5320	46,4	115	4310	37,3	116