

FUTURA ABS



**BIM
ready**

... dustproof, waterproof and chemically resistant, MultiLumen.

USE

The light fitting is suitable for the environment where ammoniac fumes, lixivants, alkaline compounds and hot water (hydrolyses) can be present. We recommend this light fitting for agricultural operations, stables, car washing lines, warehouses, mechanical workshops and laboratories without a danger of explosion of gas, dust and combustible fumes..

Thanks to the MultiLumen function, the luminaire can be adjusted for changing lighting requirements without much effort.

The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

Emissions in the environment of use may reduce the usability of the plastics; for more information see page 407.

Always open the cover of the light fitting out of an environment with aggressive volatile substances.

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 acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical 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

- **MultiLumen (ML)** function enables simple switching between up to four luminous fluxes via driver's DIP switch.
- 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
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, (except RED), HACCP

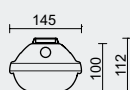
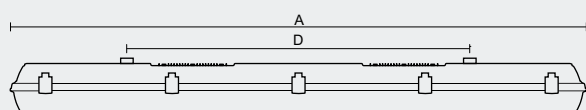


FUTURA ABS Al, ABS Al



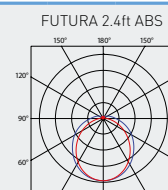
TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, Maximum ambient temperature: $t_a = 0-40^\circ\text{C}$ (version with emergency back-up M3hAt)
- Maximum system efficacy: 156 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
- Lifetime: 100,000 hours / L80B10
- **MultiLumen (ML):** luminous flux variable in up to 4 steps. In the standard version preset maximum luminous flux.
- Diffuser: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS Al), UV stable, chemically 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
- 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



UGR EVALUATED FOR

X = 4 H, Y = 8 H S = 0.25 H
Reflectivity 70/50/20



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]	UGR Longitudinal/transverse			
For ambient temperature $t_a = 50^{\circ}\text{C}$ - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft ABS Al 3200/840 *	50	3250	2860	20,1	142	24.2 / 21.8	1,45	612	475
FUTURA 2.2ft ABS Al 4400/840 *	45	4680	4120	28,3	146	25.4 / 23.1	1,45	612	475
FUTURA 2.4ft ABS Al 6400/840 *	50	6520	5740	38,4	149	24.4 / 22.2	2,45	1172	700
FUTURA 2.4ft ABS Al 8800/840 *	45	8980	7900	52,8	150	25.5 / 23.3	2,45	1172	700
FUTURA 2.4ft ABS Al 12800/840	35	12920	11370	74,8	152	26.5 / 24.7	2,65	1172	700
FUTURA 2.5ft ABS Al 8000/840 *	50	8330	7330	48,3	152	24.5 / 22.4	2,95	1452	940
FUTURA 2.5ft ABS Al 11000/840	45	11260	9910	64,7	153	25.5 / 23.4	2,95	1452	940
FUTURA 2.5ft ABS Al 16000/840	35	16100	14170	92,7	153	26.5 / 24.7	3,25	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 2.2ft ABS Al 3200/840 ML	2480	17,3	143	2090	14,5	144	1700	12,3	138
FUTURA 2.2ft ABS Al 4400/840 ML	3580	24,2	148	3040	20,3	150	2450	16,4	149
FUTURA 2.4ft ABS Al 6400/840 ML	4970	32,9	151	4190	27,4	153	3400	22,0	155
FUTURA 2.4ft ABS Al 8800/840 ML	6860	44,9	153	5800	37,4	155	4700	30,1	156
FUTURA 2.5ft ABS Al 8000/840 ML	6350	41,5	153	5380	34,6	155	4350	27,9	156

FUTURA ABS Al

Code	Type
77020	FUTURA 2.2ft ABS Al 3200/840 ML
77030	FUTURA 2.2ft ABS Al 4400/840 ML
77050	FUTURA 2.4ft ABS Al 6400/840 ML
77060	FUTURA 2.4ft ABS Al 8800/840 ML
77410	FUTURA 2.4ft ABS Al 12800/840
77080	FUTURA 2.5ft ABS Al 8000/840 ML
77090	FUTURA 2.5ft ABS Al 11000/840
77420	FUTURA 2.5ft ABS Al 16000/840

Non-dimmable driver - plastic clips

1F	3F	M3hAt	3F M3hAt
x	x	109223	x
x	x	109224	x
77150	77350	109226	109232
77160	77360	109227	109233
77411	77412	x	x
77180	77380	109229	109235
77190	77390	109230	109236
77421	77422	x	x

FUTURA ABSc AI

Code	Type	Non-dimmable driver - stainless clips (c)			
		1F	3F	M3hAt	3F M3hAt
77220	FUTURA 2.2ft ABSc AI 3200/840 ML	x	x	109253	x
77230	FUTURA 2.2ft ABSc AI 4400/840 ML	x	x	109254	x
77250	FUTURA 2.4ft ABSc AI 6400/840 ML	77550	77650	109256	109262
77260	FUTURA 2.4ft ABSc AI 8800/840 ML	77560	77660	109257	109263
77430	FUTURA 2.4ft ABSc AI 12800/840	77431	77432	x	x
77280	FUTURA 2.5ft ABSc AI 8000/840 ML	77580	77680	109259	109265
77290	FUTURA 2.5ft ABSc AI 11000/840	77590	77690	109260	109266
77440	FUTURA 2.5ft ABSc AI 16000/840	77441	77442	x	x

FUTURA ABS AI DALI

Code	Type	Digital dimmable driver DALI - plastic clips			
		1F	3F	M3hAt	3F M3hAt
77023	FUTURA 2.2ft ABS AI 3200/840 DALI	x	x	109238	x
77033	FUTURA 2.2ft ABS AI 4400/840 DALI	x	x	109239	x
77053	FUTURA 2.4ft ABS AI 6400/840 DALI	77153	77353	109241	109247
77063	FUTURA 2.4ft ABS AI 8800/840 DALI	77163	77363	109242	109248
77450	FUTURA 2.4ft ABS AI 12800/840 DALI	77451	77452	x	x
77083	FUTURA 2.5ft ABS AI 8000/840 DALI	77183	77383	109244	109250
77093	FUTURA 2.5ft ABS AI 11000/840 DALI	77193	77393	109245	109251
77460	FUTURA 2.5ft ABS AI 16000/840 DALI	77461	77462	x	x

FUTURA ABSc AI DALI

Code	Type	Digital dimmable driver DALI - stainless clips (c)			
		1F	3F	M3hAt	3F M3hAt
77223	FUTURA 2.2ft ABSc AI 3200/840 DALI	x	x	109268	x
77233	FUTURA 2.2ft ABSc AI 4400/840 DALI	x	x	109269	x
77253	FUTURA 2.4ft ABSc AI 6400/840 DALI	77553	77653	109271	109277
77263	FUTURA 2.4ft ABSc AI 8800/840 DALI	77563	77663	109272	109278
77470	FUTURA 2.4ft ABSc AI 12800/840 DALI	77471	77472	x	x
77283	FUTURA 2.5ft ABSc AI 8000/840 DALI	77583	77683	109274	109280
77293	FUTURA 2.5ft ABSc AI 11000/840 DALI	77593	77693	109275	109281
77480	FUTURA 2.5ft ABSc AI 16000/840 DALI	77481	77482	x	x

LEGEND

1F	- 1-phase 3 core through-wiring in the luminaire	DALI	- version with digital dimmable driver DALI
3F	- 3-phase 5 core through-wiring in the luminaire	DALI 1F	- 1-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	DALI 3F	- 3-phase 7 core through-wiring in the luminaire
3F M3hAt	- 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)	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 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 ABS

