

FUTURA HE ABS



... high efficiency, with sulphur-resistant LED chips, chemically resistant.

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.

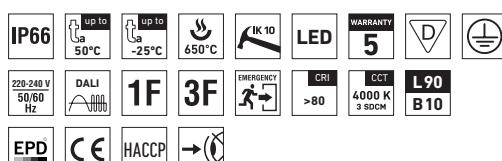
The light fitting is resistant to dust, moisture and spouting water. The body made of ABS and the diffuser made of AC have increased chemical resistance.

[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].

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
- Diffuser: translucent acrylate (AC) = high chemical resistance
- Body: dark grey ABS with Al coolers (ABS Al) = high chemical resistance
- Up to 55 % 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
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- **Chips with high sulphur resistance**
- Long lifetime due to low thermal resistance



FUTURA HE ABS AI, ABSc AI



TECHNICAL DESCRIPTION

- Light fitting protection: IP66
- Maximum ambient temperature: $t_a = 50^\circ\text{C}$, 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: 169 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: translucent acrylate (AC), UV stable, chemically resistant
- Body: dark grey ABS with Al coolers (ABS AI), 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 sulphur-resistant modules, current driver or current driver DALI

Type	Max. ambient temperature $[^\circ\text{C}]$	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]
								CO	C90
For ambient temperature $t_a = 50^\circ\text{C}$ - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft HE ABS AI 3200/840	50	3335	2930	18,6	158	23,8 / 21,8	1,45	612	475
FUTURA 2.2ft HE ABS AI 4400/840	45	4520	3980	25,2	158	24,8 / 23,0	1,45	612	475
FUTURA 2.2ft HE ABS AI 6400/840	35	6650	5850	35,9	163	26,2 / 24,2	1,45	612	475
FUTURA 2.4ft HE ABS AI 6400/840	50	6690	5890	36,0	164	24,1 / 22,2	2,45	1172	700
FUTURA 2.4ft HE ABS AI 8800/840	45	9140	8040	48,6	165	25,1 / 23,3	2,45	1172	700
FUTURA 2.4ft HE ABS AI 12800/840	35	15610	13740	81,7	168	26,9 / 25,2	2,65	1172	700
FUTURA 2.5ft HE ABS AI 8000/840	50	8330	7330	44,1	166	24,0 / 22,2	2,95	1452	940
FUTURA 2.5ft HE ABS AI 11000/840	45	13200	11620	69,8	166	25,6 / 23,9	2,95	1452	940
FUTURA 2.5ft HE ABS AI 16000/840	35	19400	17070	101,2	169	26,9 / 25,2	3,25	1452	940
FUTURA 2.5ft HE ABS AI 22000/840	35	23220	20430	127,2	161	27,6 / 25,8	3,25	1452	940

FUTURA HE ABS AI

Code	Type
11200	FUTURA 2.2ft HE ABS AI 3200/840
11210	FUTURA 2.2ft HE ABS AI 4400/840
11203	FUTURA 2.2ft HE ABS AI 6400/840
11206	FUTURA 2.4ft HE ABS AI 6400/840
11220	FUTURA 2.4ft HE ABS AI 8800/840
11216	FUTURA 2.4ft HE ABS AI 12800/840
11219	FUTURA 2.5ft HE ABS AI 8000/840
11230	FUTURA 2.5ft HE ABS AI 11000/840
11241	FUTURA 2.5ft HE ABS AI 16000/840
103423	FUTURA 2.5ft HE ABS AI 22000/840

Non-dimmable driver - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
x	x	11201	11202	x	x
x	x	11214	11215	x	x
x	x	11204	11205	x	x
11207	11208	11209	11211	11212	11213
11221	11223	11224	11225	11226	11227
11217	11218	x	x	x	x
11222	11228	11229	11232	11238	11239
11231	11233	11234	11235	11236	11237
11242	11243	x	x	x	x
103426	103427	x	x	x	x

FUTURA HE ABSc AI

Code	Type
11246	FUTURA 2.2ft HE ABSc AI 3200/840
11240	FUTURA 2.2ft HE ABSc AI 4400/840
11249	FUTURA 2.2ft HE ABSc AI 6400/840
11259	FUTURA 2.4ft HE ABSc AI 6400/840
11250	FUTURA 2.4ft HE ABSc AI 8800/840
11276	FUTURA 2.4ft HE ABSc AI 12800/840
11279	FUTURA 2.5ft HE ABSc AI 8000/840
11260	FUTURA 2.5ft HE ABSc AI 11000/840
11301	FUTURA 2.5ft HE ABSc AI 16000/840
103430	FUTURA 2.5ft HE ABSc AI 22000/840

Non-dimmable driver - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
x	x	11247	11248	x	x
x	x	11244	11245	x	x
x	x	11252	11258	x	x
11262	11268	11269	11271	11272	11273
11251	11253	11254	11255	11256	11257
11277	11278	x	x	x	x
11282	11288	11289	11292	11298	11299
11261	11263	11264	11265	11266	11267
11302	11303	x	x	x	x
103431	103425	x	x	x	x

Example of type marking: 11256 = FUTURA 2.4ft HE ABSc AI 8800/840 3F M1h

FUTURA HE ABS AL DALI

Code	Type
11306	FUTURA 2.2ft HE ABS AL 3200/840 DALI
11270	FUTURA 2.2ft HE ABS AL 4400/840 DALI
11309	FUTURA 2.2ft HE ABS AL 6400/840 DALI
11319	FUTURA 2.4ft HE ABS AL 6400/840 DALI
11280	FUTURA 2.4ft HE ABS AL 8800/840 DALI
11333	FUTURA 2.4ft HE ABS AL 12800/840 DALI
11336	FUTURA 2.5ft HE ABS AL 8000/840 DALI
11290	FUTURA 2.5ft HE ABS AL 11000/840 DALI
11343	FUTURA 2.5ft HE ABS AL 16000/840 DALI
103430	FUTURA 2.5ft HE ABSc AL 22000/840

Digital dimmable driver DALI - plastic clips

1F	3F	M1h	M3h	3F M1h	3F M3h
x	x	11307	11308	x	x
x	x	11274	11275	x	x
x	x	11312	11318	x	x
11322	11328	11329	11330	11331	11332
11281	11283	11284	11285	11286	11287
11334	11335	x	x	x	x
11337	11338	11339	11340	11341	11342
11291	11293	11294	11295	11296	11297
11344	11345	x	x	x	x
103431	103425	x	x	x	x

FUTURA HE ABSc AL DALI

Code	Type
11346	FUTURA 2.2ft HE ABSc AL 3200/840 DALI
11300	FUTURA 2.2ft HE ABSc AL 4400/840 DALI
11349	FUTURA 2.2ft HE ABSc AL 6400/840 DALI
11352	FUTURA 2.4ft HE ABSc AL 6400/840 DALI
11310	FUTURA 2.4ft HE ABSc AL 8800/840 DALI
11359	FUTURA 2.4ft HE ABSc AL 12800/840 DALI
11362	FUTURA 2.5ft HE ABSc AL 8000/840 DALI
11320	FUTURA 2.5ft HE ABSc AL 11000/840 DALI
11369	FUTURA 2.5ft HE ABSc AL 16000/840 DALI
103432	FUTURA 2.5ft HE ABSc AL 22000/840 DALI

Digital dimmable driver DALI - stainless clips (c)

1F	3F	M1h	M3h	3F M1h	3F M3h
x	x	11347	11348	x	x
x	x	11304	11305	x	x
x	x	11350	11351	x	x
11353	11354	11355	11356	11357	11358
11311	11313	11314	11315	11316	11317
11360	11361	x	x	x	x
11363	11364	11365	11366	11367	11368
11321	11323	11324	11325	11326	11327
11370	11371	x	x	x	x
103433	103434	x	x	x	x

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 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 HE ABS**