

FUTURA ES ABS



162
lm/W

... Energy Saver, 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 50 % 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
- It can be delivered in dimmable or emergency version
- Through-wiring of up to 10 wires at body
- Certification: EPD, ENEC, CB, HACCP

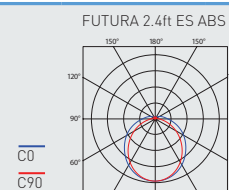
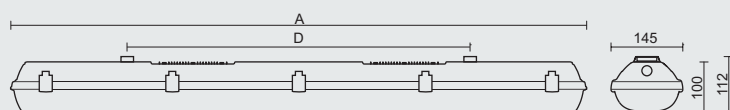


FUTURA ES ABS Al, ABSc Al



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: 162 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 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



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 $t_a = 50^\circ\text{C}$ - body: dark grey ABS with Al coolers - diffuser: translucent acrylate									
FUTURA 2.2ft ES ABS Al 2600/840	50	2690	2370	15,3	155	23.2 / 21.0	1,45	612	475
FUTURA 2.2ft ES ABS Al 3200/840	50	3190	2810	18,2	154	23.8 / 21.6	1,45	612	475
FUTURA 2.2ft ES ABS Al 4400/840	45	4380	3850	24,6	157	24.9 / 22.7	1,45	612	475
FUTURA 2.4ft ES ABS Al 5200/840	50	5300	4660	28,9	161	23.4 / 21.4	2,45	1172	700
FUTURA 2.4ft ES ABS Al 6400/840	50	6410	5640	35,2	160	24.0 / 22.0	2,45	1172	700
FUTURA 2.4ft ES ABS Al 8800/840	45	9110	8020	50,4	159	25.3 / 23.2	2,45	1172	700
FUTURA 2.4ft ES ABS Al 12800/840	35	14490	12750	80,1	159	26.6 / 24.8	2,65	1172	700
FUTURA 2.5ft ES ABS Al 6500/840	50	6920	6090	37,7	162	23.6 / 21.6	2,95	1452	940
FUTURA 2.5ft ES ABS Al 8000/840	50	8150	7170	45,1	159	24.1 / 22.2	2,95	1452	940
FUTURA 2.5ft ES ABS Al 11000/840	45	12560	11050	68,9	160	25.6 / 23.7	2,95	1452	940
FUTURA 2.5ft ES ABS Al 16000/840	35	17980	15820	99,3	159	26.6 / 24.8	3,25	1452	940

77020 FUTURA 2.2ft ES ABS Al 3200/840 = suitable replacement for T8 fl. tube light fitting PRIMA 218 - 2x18W

77050 FUTURA 2.4ft ES ABS Al 6400/840 = suitable replacement for T8 fl. tube light fitting PRIMA 236 - 2x36W

77080 FUTURA 2.5ft ES ABS Al 8000/840 = suitable replacement for T8 fl. tube light fitting PRIMA 258 - 2x58W

FUTURA ES ABS Al

Non-dimmable driver - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10510	FUTURA 2.2ft ES ABS Al 2600/840	x	x	10514	10515	x	x
10520	FUTURA 2.2ft ES ABS Al 3200/840	x	x	10524	10525	x	x
10530	FUTURA 2.2ft ES ABS Al 4400/840	x	x	10534	10535	x	x
10540	FUTURA 2.4ft ES ABS Al 5200/840	10541	10543	10544	10545	10546	10547
10550	FUTURA 2.4ft ES ABS Al 6400/840	10551	10553	10554	10555	10556	10557
10560	FUTURA 2.4ft ES ABS Al 8800/840	10561	10563	10564	10565	10566	10567
10570	FUTURA 2.4ft ES ABS Al 12800/840	10571	10573	x	x	x	x
10580	FUTURA 2.5ft ES ABS Al 6500/840	10581	10583	10584	10585	10586	10587
10590	FUTURA 2.5ft ES ABS Al 8000/840	10591	10593	10594	10595	10596	10597
10600	FUTURA 2.5ft ES ABS Al 11000/840	10601	10603	10604	10605	10606	10607
10610	FUTURA 2.5ft ES ABS Al 16000/840	10611	10613	x	x	x	x

FUTURA ES ABSc Al

Non-dimmable driver - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10620	FUTURA 2.2ft ES ABSc Al 2600/840	x	x	10624	10625	x	x
10630	FUTURA 2.2ft ES ABSc Al 3200/840	x	x	10634	10635	x	x
10640	FUTURA 2.2ft ES ABSc Al 4400/840	x	x	10644	10645	x	x
10650	FUTURA 2.4ft ES ABSc Al 5200/840	10651	10653	10654	10655	10656	10657
10660	FUTURA 2.4ft ES ABSc Al 6400/840	10661	10663	10664	10665	10666	10667
10670	FUTURA 2.4ft ES ABSc Al 8800/840	10671	10673	10674	10675	10676	10677
10680	FUTURA 2.4ft ES ABSc Al 12800/840	10681	10683	x	x	x	x
10690	FUTURA 2.5ft ES ABSc Al 6500/840	10691	10693	10694	10695	10696	10697
10700	FUTURA 2.5ft ES ABSc Al 8000/840	10701	10703	10704	10705	10706	10707
10710	FUTURA 2.5ft ES ABSc Al 11000/840	10711	10713	10714	10715	10716	10717
10720	FUTURA 2.5ft ES ABSc Al 16000/840	10721	10723	x	x	x	x

Example of type marking: 10706 = FUTURA 2.4ft ES ABSc Al 8800/840 3F M1h

FUTURA ES ABS AI DALI

Digital dimmable driver DALI - plastic clips

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10730	FUTURA 2.2ft ES ABS AI 2600/840 DALI	x	x	10734	10735	x	x
10740	FUTURA 2.2ft ES ABS AI 3200/840 DALI	x	x	10744	10745	x	x
10750	FUTURA 2.2ft ES ABS AI 4400/840 DALI	x	x	10754	10755	x	x
10760	FUTURA 2.4ft ES ABS AI 5200/840 DALI	10761	10763	10764	10765	10766	10767
10770	FUTURA 2.4ft ES ABS AI 6400/840 DALI	10771	10773	10774	10775	10776	10777
10780	FUTURA 2.4ft ES ABS AI 8800/840 DALI	10781	10783	10784	10785	10786	10787
10790	FUTURA 2.4ft ES ABS AI 12800/840 DALI	10791	10793	x	x	x	x
10800	FUTURA 2.5ft ES ABS AI 6500/840 DALI	10801	10803	10804	10805	10806	10807
10810	FUTURA 2.5ft ES ABS AI 8000/840 DALI	10811	10813	10814	10815	10816	10817
10820	FUTURA 2.5ft ES ABS AI 11000/840 DALI	10821	10823	10824	10825	10826	10827
10830	FUTURA 2.5ft ES ABS AI 16000/840 DALI	10831	10833	x	x	x	x

FUTURA ES ABSc AI DALI

Digital dimmable driver DALI - stainless clips (c)

Code	Type	1F	3F	M1h	M3h	3F M1h	3F M3h
10840	FUTURA 2.2ft ES ABSc AI 2600/840 DALI	x	x	10844	10845	x	x
10850	FUTURA 2.2ft ES ABSc AI 3200/840 DALI	x	x	10854	10855	x	x
10860	FUTURA 2.2ft ES ABSc AI 4400/840 DALI	x	x	10864	10865	x	x
10870	FUTURA 2.4ft ES ABSc AI 5200/840 DALI	10871	10873	10874	10875	10876	10877
10880	FUTURA 2.4ft ES ABSc AI 6400/840 DALI	10881	10883	10884	10885	10886	10887
10890	FUTURA 2.4ft ES ABSc AI 8800/840 DALI	10891	10893	10894	10895	10896	10897
10900	FUTURA 2.4ft ES ABSc AI 12800/840 DALI	10901	10903	x	x	x	x
10910	FUTURA 2.5ft ES ABSc AI 6500/840 DALI	10911	10913	10914	10915	10916	10917
10920	FUTURA 2.5ft ES ABSc AI 8000/840 DALI	10921	10923	10924	10925	10926	10927
10930	FUTURA 2.5ft ES ABSc AI 11000/840 DALI	10931	10933	10934	10935	10936	10937
10940	FUTURA 2.5ft ES ABSc AI 16000/840 DALI	10941	10943	x	x	x	x

Example of type marking: 10896 = FUTURA 2.4ft ES ABSc AI 8800/840 DALI **3F M1h**

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 ES ABS

