

FEATURES

- 4 different sharp beam angles
- Wide variety of TM30 optimized LEDs
- ENEC approved drivers
- IEEE P1789 Flickerfree driver to 1%



LV 18° / 37° / 60°



SPRINGS

Standard with CS springs (concrete/gyproc).
On request also available as above with
WS springs (gypro/metal).



LV 80° (on request)

COLOURS

Available colours:



Matt white RAL 9016 (XX=MW)
Matt black RAL 9005 (XX=BL)

Linea DS-FS 120 LV

Fixed

SPECIFICATIONS

Beam angle (FWHM)	18° / 37° / 60° (80° on request)
Fixture material	Die cast aluminium
Environment	Indoor
IP rate	IP20 / IP44
IK rate	IK03
Operating temperature (Ta)	-20°C / +45°C
Safety marks	EN60598 / EN62031 / EN62471
EMC compliance	EN55015
Colour consistency (SDCM)	MacAdam step 3
Warranty	7 years * (within the European Union and the countries of the Free Trade Association for products delivered after 1 May 2015)
Energy class	A+

This luminaire contains built-in LED lamps. The lamps cannot be changed in the luminaire. EU 874/2012



Ask our sales department about the possibilities for:
- Tunable white 2700-6500K.
- Extra LED options from the LUXEON Stylist Series

Only when the product is installed in a closed ceiling it may be exposed to water splashes, and only on its front side.



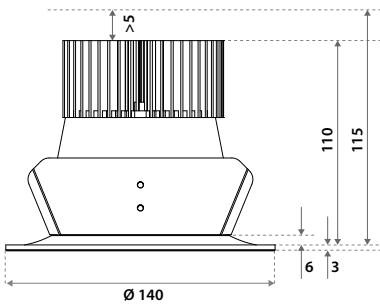
LINEA DS-FS 120 VARIATIONS

LINEA DS-FS 120	CRI80	3000/4000K	3000/3400Lm	incl. power supply	page 3
LINEA DS-FS 120	CRI80	3000/4000K	5000/5700Lm	incl. power supply	page 4
LINEA DS-FS 120	CRI97	3000K	2500Lm	incl. power supply	page 5
LINEA DS-FS 120	CRI97	3000K	3750Lm	incl. power supply	page 6

CRI80/97 CHOOSE YOUR LV LUMEN OUTPUT

	mA	W	Lumen Output			Lumen / Watt			Driver types				
			CRI80	CRI80	CRI97	CRI80	CRI80	CRI97	No dim	Triac	1-10V&Push	Dali	Casambi
			3000K	4000K	3000K	3000K	4000K	3000K					
<i>Special request</i>	250	9,4	1200	1400	800	127	149	85	127570	x	127021	127576	x
<i>Special request</i>	350	13,2	1650	1900	1100	125	144	83	127570	x	127021	127576	127630
<i>Special request</i>	500	17,9	2250	2500	1450	125	139	81	127570	127032	127021	127576	127630
Standard	700	27,0	3000	3400	2150	111	126	80	127484N	122260	127021	127576	127630
<i>Special request</i>	800	32,1	3400	3750	2500	106	117	78	127484N	on request	127021	127490	127630
<i>Special request</i>	900	35,5	3700	4100	2700	104	115	76	127484N	on request	127021	127490	127630
<i>Special request</i>	1050	41,7	4200	4700	3000	101	113	72	127484N	on request	127021	127490	127630
Standard	1200	50,5	5000	5700	3250	99	113	64	127690	on request	123170	123170	On request
Special request	1400	57,2	5600	6300	3750	98	110	66	127310	on request	123170	123170	On request

DIMENSIONS



HOLE SIZE



Using CS (concrete) springs (concrete/gyproc)

For 10-115 mm ceiling thickness.
Recess depth 115 mm (incl. 5mm space for air ventilation).
For plasterboard ceilings or similar harder materials.

120 mm



Using WS (wire) springs (gyproc/metal)

For 1-40 mm ceiling thickness.
Recess depth 115 mm (incl. 5mm space for air ventilation).
For soft ceiling tiles. We recommend using a ceiling ring on the reverse side of the tile.

120-130 mm

LINEA DS-FS 120 LV

CRI80 3000/3400LM

ITEM SPECIFICATIONS (PART A)

Description	18°		37°		60°		Type	mA	Vf
	Item code	UGR	Item code	UGR	Item code	UGR			
Linea DS-FS LV 3000 Lm 3000K CRI80 No dim	282003XXCA02	18.0	282003XXCB02	17.4	282003XXCC02	20.5	Incl. PSU	700	35,3
Linea DS-FS LV 3000 Lm 3000K CRI80 1-10V & Push	282003XXNA02	18.0	282003XXNB02	17.4	282003XXNC02	20.5	Incl. PSU	700	35,3
Linea DS-FS LV 3000 Lm 3000K CRI80 Dali	282003XXPA02	18.0	282003XXPB02	17.4	282003XXPC02	20.5	Incl. PSU	700	35,3
Linea DS-FS LV 3400 Lm 4000K CRI80 No dim	282003XXCD02	18.4	282003XXCE02	17.9	282003XXCF02	20.9	Incl. PSU	700	35,3
Linea DS-FS LV 3400 Lm 4000K CRI80 1-10V & Push	282003XXND02	18.4	282003XXNE02	17.9	282003XXNF02	20.9	Incl. PSU	700	35,3
Linea DS-FS LV 3400 Lm 4000K CRI80 Dali	282003XXPD02	18.4	282003XXPE02	17.9	282003XXPF02	20.9	Incl. PSU	700	35,3

ITEM SPECIFICATIONS (PART B)

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-FS LV 3000 Lm 3000K CRI80 No dim	27,0	3000	111	82	0,95	<3%	5A 50µS	50 pcs	I	A+
Linea DS-FS LV 3000 Lm 3000K CRI80 1-10V & Push	27,0	3000	111	82	0,95	<3%	5A 50µS	50 pcs	II	A+
Linea DS-FS LV 3000 Lm 3000K CRI80 Dali	27,0	3000	111	82	0,95	<3%	5A 50µS	50 pcs	II	A+
Linea DS-FS LV 3400 Lm 4000K CRI80 No dim	27,0	3400	126	82	0,95	<3%	5A 50µS	50 pcs	I	A+
Linea DS-FS LV 3400 Lm 4000K CRI80 1-10V & Push	27,0	3400	126	82	0,95	<3%	5A 50µS	50 pcs	II	A+
Linea DS-FS LV 3400 Lm 4000K CRI80 Dali	27,0	3400	126	82	0,95	<3%	5A 50µS	50 pcs	II	A+

ITEM SPECIFICATIONS (PART C)

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan (25°C)		
				L70B50	L80B50	L90B50
Linea DS-FS LV CRI80	622 gr	190x150x120 mm	32 pcs	165.000 hrs	105.000 hrs	51.000 hrs

All values are measured at 230V (+/- 7%)

LINEA DS-FS 120 LV

CRI80 5000/5700LM

ITEM SPECIFICATIONS (PART A)

Description	18°		37°		60°		Type	mA	Vf
	Item code	UGR	Item code	UGR	Item code	UGR			
Linea DS-FS LV 5000 Lm 3000K CRI80 No dim	282003XXCR02	19.7	282003XXCS02	19.2	282003XXCT02	22.2	Incl. PSU	1200	37,5
Linea DS-FS LV 5000 Lm 3000K CRI80 1-10V & Push	282003XXNK02	19.7	282003XXNL02	19.2	282003XXNM02	22.2	Incl. PSU	1200	37,5
Linea DS-FS LV 5000 Lm 3000K CRI80 Dali	282003XXPK02	19.7	282003XXPL02	19.2	282003XXPM02	22.2	Incl. PSU	1200	37,5
Linea DS-FS LV 5700 Lm 4000K CRI80 No dim	282003XXCU02	20.2	282003XXCV02	19.7	282003XXCW02	22.7	Incl. PSU	1200	37,5
Linea DS-FS LV 5700 Lm 4000K CRI80 1-10V & Push	282003XXNN02	20.2	282003XXNP02	19.7	282003XXNQ02	22.7	Incl. PSU	1200	37,5
Linea DS-FS LV 5700 Lm 4000K CRI80 Dali	282003XXPN02	20.2	282003XXPP02	19.7	282003XXPQ02	22.7	Incl. PSU	1200	37,5

ITEM SPECIFICATIONS (PART B)

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-FS LV 5000 Lm 3000K CRI80 No dim	50,5	5000	99	82	0.95	<3%	10A 200µS	30 pcs	II	A+
Linea DS-FS LV 5000 Lm 3000K CRI80 1-10V & Push	50,5	5000	99	82	0.95	<3%	10A 200µS	30 pcs	I	A+
Linea DS-FS LV 5000 Lm 3000K CRI80 Dali	50,5	5000	99	82	0.95	<3%	10A 200µS	30 pcs	I	A+
Linea DS-FS LV 5700 Lm 4000K CRI80 No dim	50,5	5700	113	82	0.95	<3%	10A 200µS	30 pcs	II	A+
Linea DS-FS LV 5700 Lm 4000K CRI80 1-10V & Push	50,5	5700	113	82	0.95	<3%	10A 200µS	30 pcs	I	A+
Linea DS-FS LV 5700 Lm 4000K CRI80 Dali	50,5	5700	113	82	0.95	<3%	10A 200µS	30 pcs	I	A+

ITEM SPECIFICATIONS (PART C)

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan (25°C)		
				L70B50	L80B50	L90B50
Linea DS-FS LV CRI80	622 gr	190x150x120 mm	32 pcs	165.000 hrs	105.000 hrs	51.000 hrs

All values are measured at 230V (+/- 7%)

LINEA DS-FS 120 LV

CRI97 2500LM

ITEM SPECIFICATIONS (PART A)

Description	18°		37°		60°		Type	mA	Vf
	Item code	UGR	Item code	UGR	Item code	UGR			
Linea DS-FS LV 2500 Lm 3000K CRI97 No dim	282003XXCG02	17.3	282003XXCH02	16.8	282003XXCJ02	19.8	Incl. PSU	800	35,3
Linea DS-FS LV 2500 Lm 3000K CRI97 1-10V & Push	282003XXNG02	17.3	282003XXNH02	16.8	282003XXNJ02	19.8	Incl. PSU	800	35,3
Linea DS-FS LV 2500 Lm 3000K CRI97 Dali	282003XXPG02	17.3	282003XXPH02	16.8	282003XXPJ02	19.8	Incl. PSU	800	35,3

ITEM SPECIFICATIONS (PART B)

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-FS LV 2500 Lm 3000K CRI97 No dim	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	I	A+
Linea DS-FS LV 2500 Lm 3000K CRI97 1-10V & Push	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	II	A+
Linea DS-FS LV 2500 Lm 3000K CRI97 Dali	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	II	A+

ITEM SPECIFICATIONS (PART C)

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan (25°C)		
				L70B50	L80B50	L90B50
Linea DS-FS LV 2500 Lm 3000K CRI97	622 gr	190x150x120 mm	32 pcs	165.000 hrs	105.000 hrs	51.000 hrs

All values are measured at 230V (+/- 7%)

LINEA DS-FS 120 LV

CRI97 3750LM

ITEM SPECIFICATIONS (PART A)

Description	18°		37°		60°		Type	mA	Vf
	Item code	UGR	Item code	UGR	Item code	UGR			
Linea DS-FS LV 3750 Lm 3000K CRI97 No dim	282003XXFD02	18.7	282003XXFE02	18.2	282003XXFF02	21.2	Incl. PSU	1400	37,5
Linea DS-FS LV 3750 Lm 3000K CRI97 1-10V & Push	282003XXNR02	18.7	282003XXNS02	18.2	282003XXNT02	21.2	Incl. PSU	1400	37,5
Linea DS-FS LV 3750 Lm 3000K CRI97 Dali	282003XXPR02	18.7	282003XXPS02	18.2	282003XXPT02	21.2	Incl. PSU	1400	37,5

ITEM SPECIFICATIONS (PART B)

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-FS LV 3750 Lm 3000K CRI97 No dim	57,2	3750	66	97	0.95	<3%	10A 200µS	30 pcs	II	A+
Linea DS-FS LV 3750 Lm 3000K CRI97 1-10V & Push	57,2	3750	66	97	0.95	<3%	10A 200µS	30 pcs	I	A+
Linea DS-FS LV 3750 Lm 3000K CRI97 Dali	57,2	3750	66	97	0.95	<3%	10A 200µS	30 pcs	I	A+

ITEM SPECIFICATIONS (PART C)

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan (25°C)		
				L70B50	L80B50	L90B50
Linea DS-FS LV 3750 Lm 3000K CRI97	622 gr	190x150x120 mm	32 pcs	165.000 hrs	105.000 hrs	51.000 hrs

All values are measured at 230V (+/- 7%)

NEW STANDARDS REQUIRE NEW LEDS

TM-30 (new color norm): The Illuminating Engineering Society (IES) has published a new Technical Memorandum – TM-30-15 entitled “IES Method for Evaluating Light Source Color Rendition” – that promises to supplant CRI as a color metric. TM-30 relies on separate fidelity and gamut metrics, as well as a set of color samples that is more representative of real-world objects, as opposed to the pastel samples that were primarily used for the baseline CRI metric that was sometimes called Ra. The new color metric is intended to fairly and accurately characterize both LED-based solid-state lighting (SSL) and legacy sources.



Desaturated

CRI = 80 / R_g = 92



Red-Enhanced

CRI = 98 / R_g = 103

SPECIAL LEDS AVAILABLE

	CCT	CRI	R9	RF	RG	R15	TLCI	DOWNLIGHTS SMALL		DOWNLIGHTS LARGE		DOWNLIGHTS LARGE		ITEM CODE
								MA	LM	MA	LM	MA	LM	
CRI80	2700K	82	5	82	92	75	69	350 mA	1550	700 mA	2900	1200 mA	4800	51-4028-27-1
CRI80	3000K	82	5	81	93	75	66	350 mA	1625	700 mA	3000	1200 mA	5000	51-4028-30-1
CRI80	4000K	82	5	81	93	74	66	350 mA	1700	700 mA	3400	1200 mA	5700	51-4028-40-1
CRI97	2700K	97	93	96	103	99	97	350 mA	1150	800 mA	x	1400 mA	x	50-3031-27
CRI97	3000K	97	96	95	103	100	97	350 mA	1250	800 mA	2500	1400 mA	3750	50-3031-30
CRI97	4000K	97	96	95	103	100	97	350 mA	1350	800 mA	x	1400 mA	x	50-3031-40
CrispWhite	3000K	90	61	87	102	89	83	350 mA	780	900 mA	2300	1400 mA	3550	51-4029-30
CrispColor	2700K	94	96	93	106	95	93	350 mA	780	900 mA	2350	1400 mA	3550	51-4047-27
CrispColor	3000K	91	93	91	103	96	96	350 mA	825	900 mA	2500	1400 mA	3750	51-4048-30
CrispColor	3250K	93	95	90	101	96	97	350 mA	870	900 mA	2600	1400 mA	3950	51-4049-FN
CrispColor	3500K	95	96	91	102	95	96	350 mA	880	900 mA	2600	1400 mA	4000	51-4050-35
CrispColor	4000K	95	96	90	101	95	96	350 mA	1050	900 mA	2700	1400 mA	4700	51-4051-40
CrispColor	5000K	95	96	88	99	94	95	350 mA	850	900 mA	2800	1400 mA	3800	51-4052-00
Produce	3000K	91	93	91	103	96	96	350 mA	725	900 mA	2500	1400 mA	3300	51-4041-00
Red Meat	1800K	82	81	77	119	95	60	350 mA	515	900 mA	1750	1400 mA	2350	51-4042-00
Marbled Meat	3000K	63	32	78	115	46	72	350 mA	475	900 mA	1600	1400 mA	2150	51-4043-00
Fish	6500K	96	96	89	98	94	96	350 mA	825	900 mA	2800	1400 mA	3750	51-4044-00
Bread & Pastries	2700K	92	54	89	96	86	91	350 mA	770	900 mA	2600	1400 mA	3500	51-4045-00
AtmoSphere	2200K	92	55	90	99	87	88	350 mA	780	900 mA	2350	1400 mA	3550	51-4065-00