LED White Light Floodlights
FL700DMX, FL1200DMX, FL2200DMX

User Manual (US-Optimized Export Version)

Revision date: 2023-03-01

Introduction

Thank you for choosing our DMX512 luminaire. Before putting the unit into operation, please read this manual carefully to avoid damage during installation and commissioning.

I. Safety Instructions and Precautions

DANGER — RISK OF ELECTRIC SHOCK

Disconnect the fixture from mains power before opening the housing or performing any service work. Failure to follow this instruction may result in severe injury or death due to high-voltage components.

WARNING — QUALIFIED PERSONNEL ONLY

Installation, electrical connection and commissioning must be performed by qualified personnel in accordance with applicable electrical safety regulations. Improper handling may lead to fire, electric shock, or equipment damage.

CAUTION — GENERAL SAFETY

• Read these safety instructions carefully before operating the device.

• Protect the device from moisture.

• Ensure proper branch-circuit overcurrent protection (breaker or fuse).

• Use only with a correctly installed GFCI (Ground-Fault Circuit Interrupter).

• Commissioning only by qualified personnel and per applicable standards.

• Check the device for proper function before initial operation.

• Operate only by trained or instructed persons.

• Observe all labels and markings on the device.

• Disconnect power before opening the housing. DANGER: Lethal voltages inside.

• Never look directly into the LED during operation.

• Repairs must be performed by authorized service technicians or your certified dealer.

II. Mounting Instructions

WARNING — RISK OF OVERHEATING

Ensure that the fixture is mounted only in locations where sufficient airflow is available. The cooling fins must not be covered under any circumstances. Obstructed ventilation may lead to overheating and equipment damage.

The mounting bracket of the fixture can be installed directly onto the mounting surface (e.g., a beam or truss). The distance between the bracket and the luminaire provides adequate safety clearance for normal operation.

Maximum rear-surface temperature: 38 °C (100.4 °F) at 25 °C (77 °F) ambient. Required minimum clearance: 10 cm (3.94 in). Maintain these clearances to avoid thermal buildup.

WARNING — DO NOT INSTALL NEAR HEAT SOURCES

Mounting the fixture near heating units or halogen lamps is not permitted. Excessive ambient heat may impair performance or damage the fixture.

Ventilation Requirements

Ensure that the cooling fins remain completely unobstructed. Blocking the fins can cause overheating and lead to premature LED or driver failure.

Correct Orientation of the Fixture

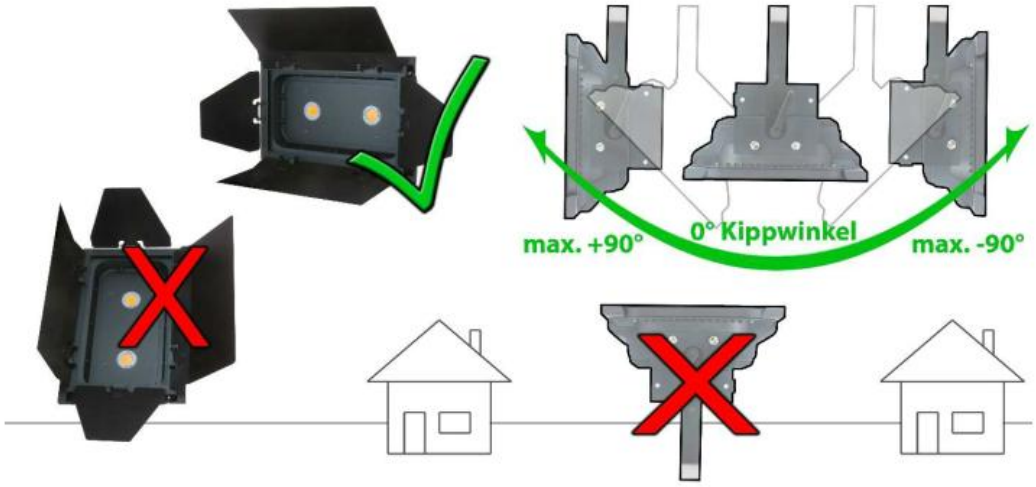
Align the fixture so that the LED modules form a horizontal line. Do not position the LEDs vertically (one above another) to avoid heat accumulation on the upper LED.

Tilt Adjustment Range

The tilt angle of the correctly positioned fixture can be adjusted freely between +90° (up) and –90° (down). Use this range only when the cooling fins remain above the LED modules.

DANGER — INCORRECT INSTALLATION CAN DAMAGE LED MODULES

Do not adjust the fixture so that the cooling fins are located below the LED modules. This traps rising heat and may lead to LED overheating and permanent damage.



III. Technical Specifications

FL700

AC connection: Neutrik TRUE1 (in & out), 90–300 VAC, 50/60 Hz

Power supply: Integrated MeanWell driver, fanless

Power consumption: 70 W

LED type: 1 × Bridgelux Gen 7 Vero29

CCT options: 2,700 K to 5,000 K (see table) and Tunable White

Luminous output: See table

Beam angle: 120°, symmetric

Dimming control: DMX512, 5-pin XLR Neutrik (in & out)

Dimming quality: Flicker-free, suitable for HDTV

Housing: Die-cast aluminum and steel, powder-coated

Size & weight: 280 × 230 × 237 mm (11.02 × 9.06 × 9.33 in) / 4.0 kg (8.82 lb)

Front pane: Shatter-resistant polycarbonate, B1 flame-retardant

Protection class: IP20

FL1200

AC connection: Neutrik TRUE1 (in & out), 90–300 VAC, 50/60 Hz

Power supply: Integrated MeanWell driver, fanless

Power consumption: 120 W

LED type: 2 × Bridgelux Gen 7 Vero29

CCT options: 2,700 K to 5,000 K (see table) and Tunable White

Luminous output: See table

Beam angle: 120°, symmetric

Dimming control: DMX512, 5-pin XLR Neutrik (in & out)

Dimming quality: Flicker-free, suitable for HDTV

Housing: Die-cast aluminum and steel, powder-coated

Size & weight: 455 × 319 × 307 mm (17.91 × 12.56 × 12.09 in) / 9.7 kg (21.38 lb)

Front pane: Shatter-resistant polycarbonate, B1 flame-retardant

Protection class: IP20

FL2200

AC connection: Neutrik TRUE1 (in & out), 90–300 VAC, 50/60 Hz

Power supply: Integrated MeanWell driver, fanless

Power consumption: 220 W

LED type: 4 × Bridgelux Gen 7 Vero29

CCT options: 2,700 K to 5,000 K (see table) and Tunable White

Luminous output: See table

Beam angle: 120°, symmetric

Dimming control: DMX512, 5-pin XLR Neutrik (in & out)

Dimming quality: Flicker-free, suitable for HDTV

Housing: Die-cast aluminum and steel, powder-coated

Size & weight: 526 × 365 × 303 mm (20.71 × 14.37 × 11.93 in) / 12.9 kg (28.44 lb)

Front pane: Shatter-resistant polycarbonate, B1 flame-retardant

Protection class: IP20

IV. Light Colors (CCT and Photometric Performance)

FL700 — Monochromatic Light Colors (Bridgelux Vero29 Gen 8)

LED Type	CCT (K)	Luminous Flux (lm)	CRI	Energy Class
Vero29 Gen 8 – 927	2,700	8,094	>90	D
Vero29 Gen 8 – 827	2,700	9,811	>80	C
Vero29 Gen 8 – 930	3,000	8,462	>90	D
Vero29 Gen 8 – 830	3,000	10,424	>80	C
Vero29 Gen 8 – 935	3,500	8,769	>90	D
Vero29 Gen 8 – 835	3,500	10,668	>80	C
Vero29 Gen 8 – 940	4,000	8,953	>90	D
Vero29 Gen 8 – 840	4,000	10,731	>80	C
Vero29 Gen 8 – 950	5,000	9,382	>90	D
Vero29 Gen 8 – 850	5,000	10,853	>80	C
Vero29 Gen 8 – 750	5,000	11,283	>70	B

FL700 — Tunable White (Bridgelux Vesta Gen2 DS355)

CCT Range	CRI	Luminous Flux @ 2,700 K	Luminous Flux @ 6,500 K	Energy Class
2,700–6,500 K	92	6,745	7,522	E

FL1200 — Monochromatic Light Colors (Bridgelux Vero29 Gen 8)

LED Type	CCT (K)	Luminous Flux (lm)	CRI	Energy Class
Vero29 Gen 8 – 927	2,700	12,222	>90	E
Vero29 Gen 8 – 827	2,700	14,666	>80	D
Vero29 Gen 8 – 930	3,000	12,679	>90	E
Vero29 Gen 8 – 830	3,000	15,736	>80	D
Vero29 Gen 8 – 935	3,500	13,138	>90	E

Vero29 Gen 8 – 835	3,500	15,735	>80	D
Vero29 Gen 8 – 940	4,000	13,596	>90	E
Vero29 Gen 8 – 840	4,000	15,889	>80	D
Vero29 Gen 8 – 950	5,000	13,932	>90	D
Vero29 Gen 8 – 850	5,000	16,371	>80	C
Vero29 Gen 8 – 750	5,000	17,416	>70	C

FL1200 — Tunable White (Bridgelux Vesta Gen2 DS355)

CCT Range	CRI	Luminous Flux @ 2,700 K	Luminous Flux @ 6,500 K	Energy Class
2,700–6,500 K	92	10,578	12,052	E

FL2200 — Monochromatic Light Colors (Bridgelux Vero29 Gen 8)

LED Type	CCT (K)	Luminous Flux (lm)	CRI	Energy Class
Vero29 Gen 8 – 927	2,700	23,810	>90	E
Vero29 Gen 8 – 827	2,700	28,571	>80	D
Vero29 Gen 8 – 930	3,000	24,704	>90	E
Vero29 Gen 8 – 830	3,000	29,762	>80	D
Vero29 Gen 8 – 935	3,500	25,595	>90	D
Vero29 Gen 8 – 835	3,500	30,656	>80	C
Vero29 Gen 8 – 940	4,000	26,489	>90	D
Vero29 Gen 8 – 840	4,000	30,952	>80	C
Vero29 Gen 8 – 950	5,000	27,143	>90	D
Vero29 Gen 8 – 850	5,000	31,894	>80	C
Vero29 Gen 8 – 750	5,000	33,929	>70	C

FL2200 — Tunable White (Bridgelux Vesta Gen2 DS355)

CCT Range	CRI	Luminous Flux @ 2,700 K	Luminous Flux @ 6,500 K	Energy Class
2,700–6,500 K	92	19,463	22,175	E

Parameter	Explanation
Initial Flux	Luminous flux at startup, ambient 25 °C (77 °F)
Continuous Flux	Luminous flux at operating temperature, ambient 25 °C (77 °F)
Energy Class	EU energy efficiency class per 2019/2015/EU & 2019/2020/EU

V. Overview of the Connections

DMX-512 Data Connections

DMX 512 Input: Neutrik 5-pin XLR male; DMX 512 Output: Neutrik 5-pin XLR female. Used for daisy-chain wiring.

DMX-512 Pin Assignment (5-pin XLR): Pin 1 = GND; Pin 2 = Data –; Pin 3 = Data +; Pin 4 = not connected; Pin 5 = not connected.

Power Connections (AC Mains)

230 VAC Input: Neutrik TRUE1; 230 VAC Output: Neutrik TRUE1 (through). Supply range 90–300 VAC, 50/60 Hz (see Chapter III).

Rotary Code Switches (DMX Addressing / Mode Selection)

Three rotary selectors set the DMX start address and change device modes (see Chapter VII).

Status LED (Operating Indicator)

LED Color	Slow Blinking	Fast Blinking
Red	No DMX received	DMX present, start address invalid
Yellow	—	Mode-change write confirmation
Green	—	DMX received, valid start address

VI. Commissioning (Initial Operation)

1) Connect cables only when the device is powered OFF.

2) Mount the fixture securely; use the side clamping levers to set orientation.

3) Connect the DMX data line (5-pin XLR) to “DMX In”.

4) Set the desired DMX start address using the rotary code switches.

5) Connect power using a TRUE1 mains cable; operating range 90–300 VAC, 50/60 Hz. The unit auto-starts.

6) Status LED feedback: green (fast) = DMX with valid start address; red (blinking) = no DMX.

VII. Functions of the Rotary Code Switches

DMX Operation — Address Range

Code	Function
000	Blackout (no output)
001–512	Valid DMX start address

How to Change a Device Setting (Mode Programming Procedure)

• Put the device into operation on any address that is not the target code.

• Power OFF, wait at least 20 seconds, then set the desired code.

• Power ON; status LED blinks red-yellow-green (4 cycles) ≈5 s as write confirmation; front LEDs may blink alternately (model dependent).

• Now set the normal start address, or repeat the process for additional settings. If re-applying the same code immediately, change one digit first, then repeat.

Code	Function	Notes
555	Reset to factory defaults	100% at start without DMX; normal DMX; one address per channel; gamma enabled; 8-bit mode
666	Start-up brightness (no DMX)	Select 0% or 100% (default 100%)
696	DMX inversion	Normal (0=off/255=full) or inverted (0=full/255=off); default normal
777	Gamma curve (8-bit only)	If off: linear dimming; 16-bit is always linear
888	8-bit / 16-bit mode	8-bit uses 1 address; 16-bit uses 2 addresses

8-bit vs 16-bit Dimming — Examples

• Step 10/65,535: Addr1 = 0, Addr2 = 10

• Step 255/65,535: Addr1 = 0, Addr2 = 255

• Step 256/65,535: Addr1 = 1, Addr2 = 0

• Step 260/65,535: Addr1 = 1, Addr2 = 4

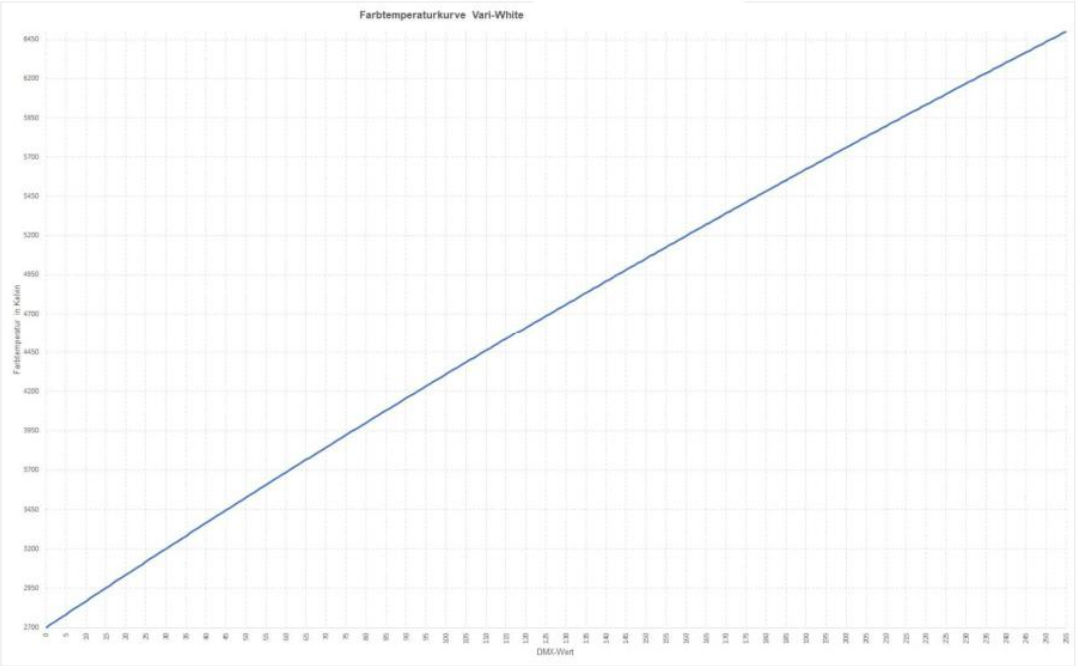
• Step 65,535/65,535: Addr1 = 255, Addr2 = 255

Test Mode Code	Output
900	Brightness 0%
... up to 999	Brightness up to 100%

VIII. Models with Tunable White

Tunable White — Functional Overview

DMX Channel	Function	Description	Value Range
1	Intensity	Overall brightness	0–255 → 0–100%
2	Color Temperature	Warm to cool white	0 → 2,700 K; 255 → 6,500 K



Additional Notes

• Flicker-free PWM suitable for HDTV applications.

• High color rendering (typically >90 CRI, LED-dependent).

• Smooth transitions for both intensity and CCT.

Optional: Fixed Color Temperature Preset Mode

Code	Stored Color Temperature
820	Disable presets (return to Tunable White)
827	2,700 K
828	2,800 K
…	…
865	6,500 K

Dim-to-Warm (Sub-mode)

Simulates incandescent behavior: as intensity is reduced on Channel 1, CCT shifts automatically toward 2,700 K from the base CCT set on Channel 2.

Code	Function
600	Dim-to-Warm disabled; Tunable White enabled (factory)
601–610	Warm-shift threshold ≈5% to 50%

Performance: CRI remains above 90; flicker-free, HDTV-suitable; smooth transitions.

IX. EU Regulation 2019/2015/EU (Energy Labeling) and Ecodesign 2019/2020/EU

These luminaires contain a light source with the following EU energy efficiency classes:

Light Color	FL700	FL1200	FL2200
927	D	E	E
827	C	D	D
930	D	E	E
830	C	D	D
935	D	E	D
835	C	D	C
940	D	E	D
840	C	D	C
950	D	D	D
850	C	C	C
750	B	C	C
927–965	E	E	E

For detailed technical data, refer to the separate luminaire data sheet for each model and light color.

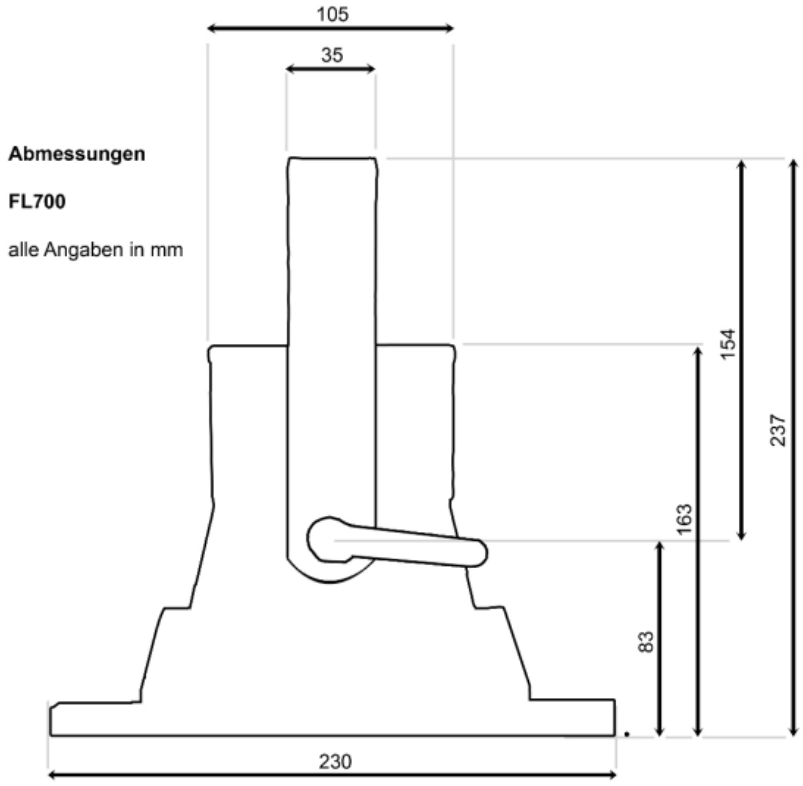
Per Ecodesign 2019/2020/EU, these fixtures are MLS (90–300 VAC, 50/60 Hz), CLS (networked LED source via ≥250 kbit/s DMX512), and DLS (≥80% of luminous flux within 120°), intended for scene lighting (film/TV studios and locations), photography, and stage lighting (theatres, discotheques, concerts, other entertainment).

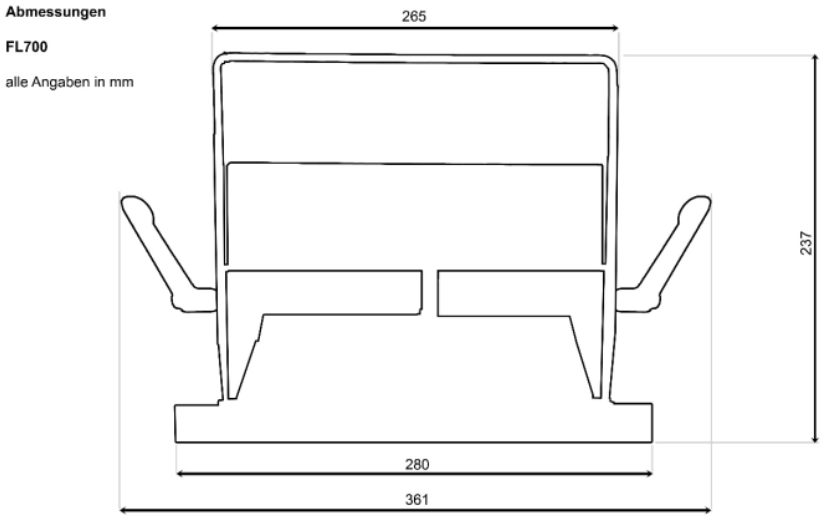
Regarding standby power requirements: networked light sources (CLS) designed for scene lighting and for connection to high-speed control networks (≥250,000 bit/s) are exempt from Annex II point 1 (a) and (b) limits for standby (Psb) and networked standby (Pnet).

LED light sources and control gear can be removed at end of life with commonly available tools.

X. Dimensional Drawings

FL700





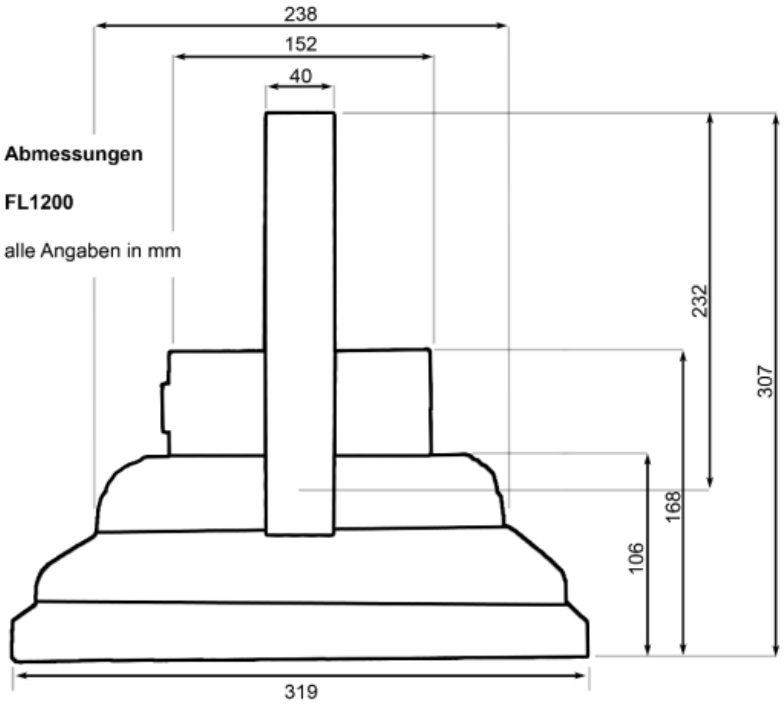
Width: 280 mm (11.02 in), Height: 230 mm (9.06 in), Depth: 237 mm (9.33 in)

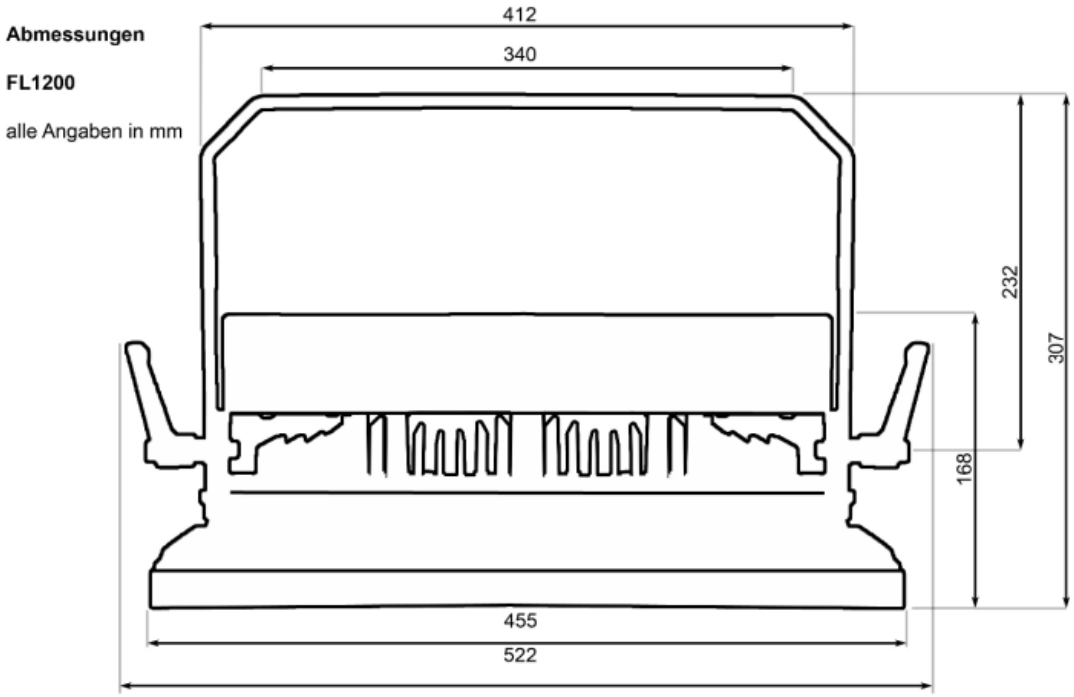
Weight: 4.0 kg (8.82 lb)

FL1200

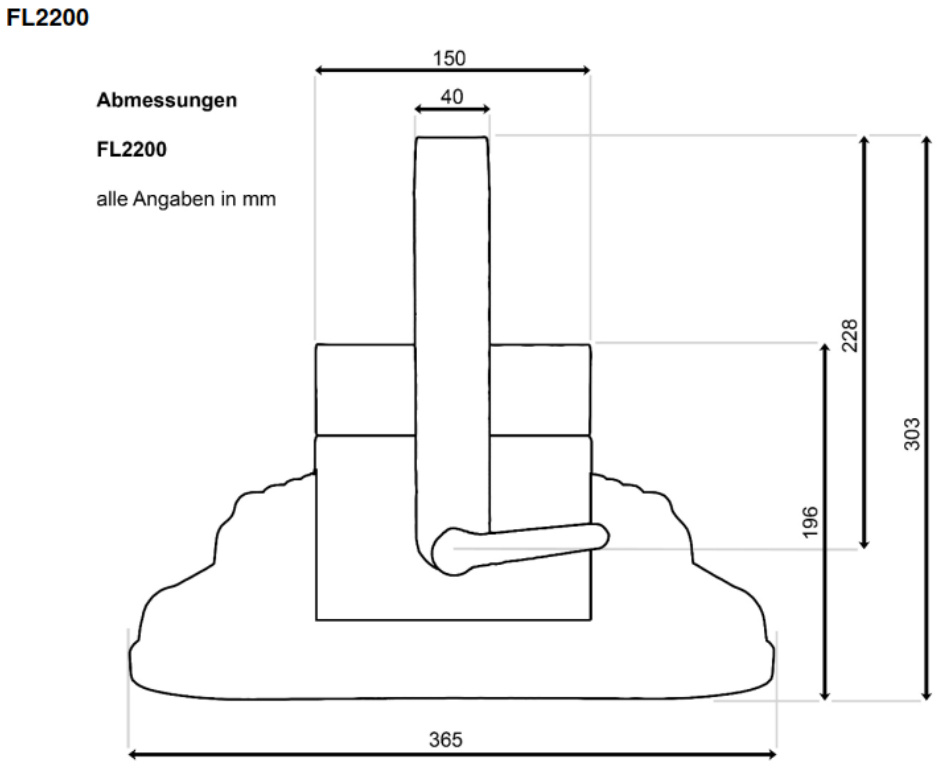
Width: 455 mm (17.91 in), Height: 319 mm (12.56 in), Depth: 307 mm (12.09 in)

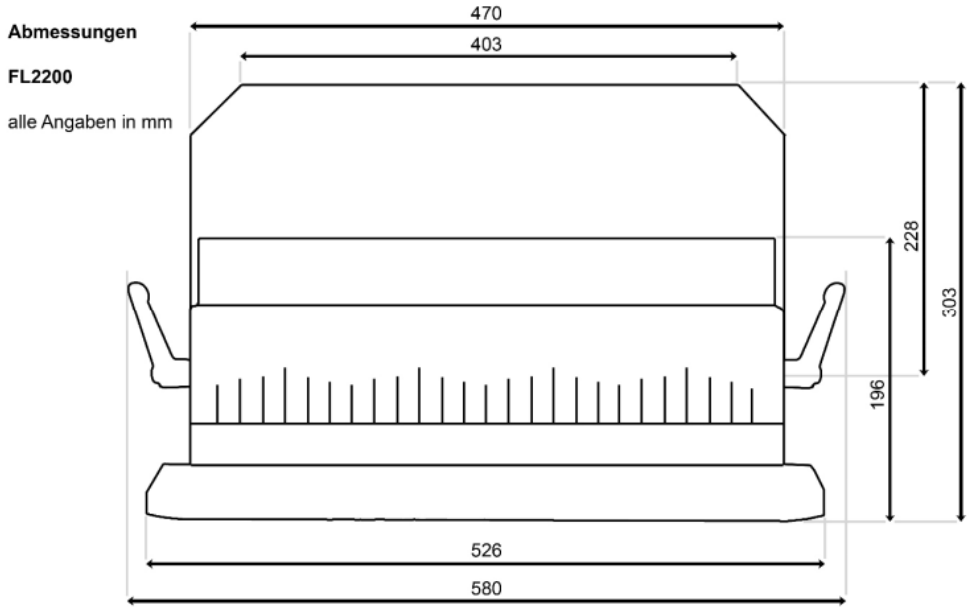
Weight: 9.7 kg (21.38 lb)





FL2200





Width: 526 mm (20.71 in), Height: 365 mm (14.37 in), Depth: 303 mm (11.93 in)

Weight: 12.9 kg (28.44 lb)

XI. Optional Accessories

FL700

Accessory	Part Number
Reflector 30° (1 pc)	LE.FL1200.RFL30
Reflector 60° (1 pc)	LE.FL1200.RFL60
Barndoor Holder	LE.FL700.BDRL
Insert Plate	LE.FL700.ACR178
Barndoor	LE.FL700.BD

FL1200

Accessory	Part Number / Note
Reflector 30° (1 pc)	LE.FL1200.RFL30
Reflector 60° (1 pc)	LE.FL1200.RFL60
Barndoor Holder	LE.FL1200.BDRL
Insert Plate 428×304×4 mm (FL1200/2200)	LE.FL1200.ACR178
Louver Grid (FL1200/2200)	LE.FL1200.RA
Barndoor (FL1200/2200)	LE.FL1200.BD

FL2200

Accessory	Part Number / Note
Reflector 30° (FL1200/2200, 1 pc)	LE.FL1200.RFL30
Reflector 60° (FL1200/2200, 1 pc)	LE.FL1200.RFL60
Barndoor Holder	LE.FL2200.BDRL
Insert Plate 428×304×4 mm (FL1200/2200)	LE.FL1200.ACR178
Louver Grid (FL1200/2200)	LE.FL1200.RA
Barndoor (FL1200/2200)	LE.FL1200.BD

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