

Dark field flash light DFL100FL - Technical data



- LED Dark field light for continuous and flash operation
- light field diameter 100 mm
- 162 high performance 5 SMD LEDs
- integrated diffusor
- integrated illumination controller
- brightness can be regulated internally (potentiometer) or externally with a VC analogue input
- adjustable flash times up to 220 µs
- different trigger modes
- robust industrial model, Aluminium casing, IP40
- drag chain cable

630

x=0,30
y=0,31


CONTINUOUS


PULSE


FLASH

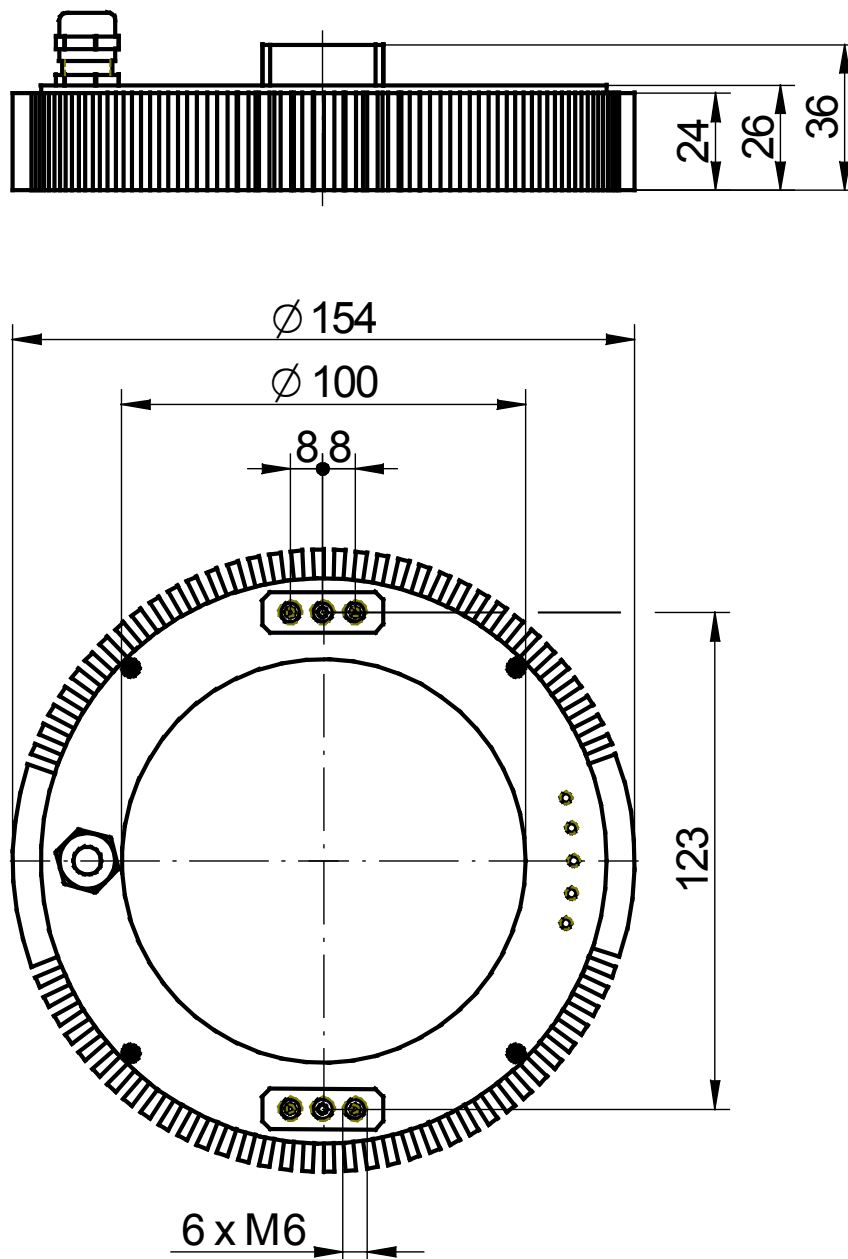

**CONTROLLER
INSIDE**

Model	Colour / Wavelength (nm)	Operating voltage UB (V)	Operating current I (A) / 24 V
DFL100FL-R	red / 630	10 - 30	0,9
DLF100FL-W	white / x=0,30 y=0,31	10 - 30	0,7

Operation mode	continuous + flash	Switching between the modes works over a 24 V switch input
Trigger modes	TTL / PLC	TTL: rising slope at trigger input, min. 2,8 V DC, max. 30 V DC PLC: rising slope at trigger input, min. 15 V DC, max. 30 V DC
Flash times	10 - 100 µs / 20 - 220 µs	adjustable with the potentiometer, max. flash frequency 100 Hz or 35 Hz
Brightness regulation	Potentiometer / VC	Potentiometer 0 - 100 % (deactivated on VC - models) VC brightness regulation 0 - 10 % when connected to a voltage of 1 - 10 V DC on the VC analogue input (only the VC - model >>> observe the order data)
Operation temperature	0 - 45 °C / 32 - 113 °F	
Weight	0,55 kg	
Protection class	IP 40	
Connection cable	1,5 m	drag chain cable, bending radius at least 72 mm

Wiring		
brown	+10...30 V DC	+ Operating voltage (max. 30 V)
white	GND	GND Operating voltage
yellow	+1...10 V DC	VC analogue input brightness regulation
green (green/yellow)	earth	earth connection
pink	+ Trigger	TTL / PLC, rising slope
blue	- Trigger	GND Trigger
grey	+10...30 V DC	Operation mode flash

Dark field flash light DFL100FL - Technical drawing



Dark field flash light DFL100FL - Order data

Composition of the product name

Model	Diffusor	Illumination colour	Brightness regulation	Trigger	Flash time
SQ / CRC/...	ALK - incident light, clear screen ALD - incident light, diffused, satin screen ALF - incident light fresnel lens (f=100 mm) DL - transmitted light, highly diffused, white screen POL - polarisation filter	R - red IR - infrared W - white B - blue G - green UV - ultraviolet	VC - VC analogue input active free - Potentiometer active	PLC TTL	10...100 µs 20...220 µs

DFL100FL - integrated diffusor	
Product number	Product name
11.41.001	DFL100FL-R/SPS-100
11.41.002	DFL100FL-R/TTL-100
11.41.003	DFL100FL-R/VC/SPS-100
11.41.004	DFL100FL-R/VC/TTL-100
11.41.005	DFL100FL-R/SPS-220
11.41.006	DFL100FL-R/SPS-220
11.41.007	DFL100FL-R/VC/SPS-220
11.41.008	DFL100FL-R/VC/SPS-220
11.41.009	DFL100FL-W/SPS-100
11.41.010	DFL100FL-W/TTL-100
11.41.011	DFL100FL-W/VC/SPS-100
11.41.012	DFL100FL-W/VC/TTL-100
11.41.013	DFL100FL-W/SPS-220
11.41.014	DFL100FL-W/SPS-220
11.41.015	DFL100FL-W/VC/SPS-220
11.41.016	DFL100FL-W/VC/SPS-220