

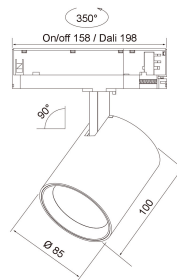


# Direct M

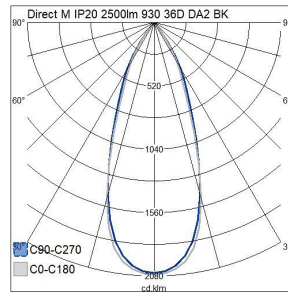
## IP20 2500lm 930 36D DA2 BK

Direct M is an energy-efficient and adjustable spotlight with a long lifespan. Its compact size, high-quality light, and excellent color rendering make it an excellent choice for public spaces. Applications include stores, shops, hotels and restaurants. Direct is installed on a track, making its installation easy and flexible. The luminaire has an almost invisible driver integrated directly into the track adapter. The Direct M model is particularly well-suited for store lighting. Its light output and adjustability offer numerous options for illuminating store spaces; the luminaire is easy to move and redirect as needed. Adjusting the direction of the light provides options for illuminating different spaces; the luminaire is easy to move and direct as needed.

Direct M Spotlight 20W 3000K 2500lm Beam angle Medium beam 20-40°; Dim DALI-2; Dim programmable; IP20; IK02; Protection cl. II; L70B50 100000h; LED not exchangeable; Lamp included; CRI>90; SDCM3; Ending; 5x0.75mm<sup>2</sup>; Housing al; Colour bk; Cover Glass transparent; C16 max. 128



IP20 2500lm 930 36D DA2 BK			
PRODUCT CODE	CODE	KG	PRODUCT FAMILY
4146992	A1DIRF-DALI	0.51	Direct M



Mounting	
Suitable for surface mounting	No
Suitable for recessed mounting	No
Suitable for wall mounting	No
Suitable for suspended mounting	No
Suitable for ceiling mounting	No
Suitable for traverse mounting	No
Suitable for pedestal/floor mounting	No
Suitable for light-track mounting	Yes
Suitable for clamp-mounting	No
Suitable for low voltage cable system	No
Degree of protection (IP)	IP20
Degree of protection (IP), rear side	IP20
Degree of protection (IP), front side	IP20
Impact strength	IK02
Emergency function monitoring system	None
Type of wiring	Ending
Number of poles	5
Conductor cross section (mm <sup>2</sup> )	0.75
Connectable conductor cross section (min) (mm <sup>2</sup> )	1.5
Connectable conductor cross section (max) (mm <sup>2</sup> )	2.5
Connection type	Busbar adapter
Luminaire with limited surface temperature, class "D" in acc. with EN 60598-2-24	No
Max. number of luminaires per miniature circuit breaker B16	80
Max. number of luminaires per miniature circuit breaker C16	128
Fit for workplace acc. EN 12464-1	No
Luminaire may be covered with thermally insulating material	-
Quantity of luminaires for MCB C16:	128
Quantity of luminaires for MCB C10:	80
Quantity of luminaires for MCB B16:	80
Quantity of luminaires for MCB B10:	50
Structure	
Adjustability	Rotating and swivelling
Lamp type	LED not exchangeable
Light source included	Yes
Suitable for number of lamps	1
Lamp holder	Other
Housing material	Aluminium
Surface protection	Powder coating
Housing colour	Black
Cover material	Glass transparent
Surface brushed	No
Control gear included	Yes
Exchangeable control gear	No
Reflector	Matt
Reflector colour	Silver
Energy efficiency class of light source according to EU regulation 2019/2015	D
Containing product according to 2019/2020/EU	Yes
Emergency power supply system	None
Emergency power supply integrated	No
Filament test according to IEC 60695-2-11	650 °C - 30 s

Dimming and control	
With movement sensor	No
With presence indicator	No
With light sensor	No
Dimmable	Yes
Dimming 0-10 V	No
Dimming 1-10 V	No
Dimming DALI-2	Yes
Dimming DALI	Yes
Dimming DMX	No
Dimming DSI	No
Dimming potentiometer (integrated)	No
Dimming LineSwitch	No
Dimming manufacturer's proprietary system	No
Dimming mains voltage modulation	No
Dimming trailing edge	No
Dimming leading edge	No
Dimming programmable	Yes
Dimming RF	No
Dimming Sine Wave Reduction	No
Dimming Touch and Dim	No
Dimming Zigbee	No
Dimming with push-button	No
No dimming function	No
Constant luminous flux control	No
IFTTT support available	No
Compatible with Apple HomeKit	No
Bluetooth operated	No
Compatible with Google Assistant	No
Compatible with Casambi	No
Compatible with Amazon Alexa	No

Photometric data	
Light distributor	Reflector
Light sharing	Symmetric
Beam angle	Medium beam 20-40°
Light outlet	Direct
Colour of light (alphanumeric)	White
Colour temperature (min) (K)	3000
Colour temperature (max) (K)	3000
Colour temperature switchable	No
Colour rendering index (CRI/Ra)	90-100
Luminous flux (min) (lm)	2500
Luminous flux (max) (lm)	2500
Effective luminous flux (lm)	2500
Rated luminous flux according to IEC 62722-2-1 (min) (lm)	2500
Rated luminous flux according to IEC 62722-2-1 (max) (lm)	2500
Lumen setting adjustable	No
Flickering value Pst LM	1
Beam angle adjustable	No
Stroboscope effect value SVM	0.4
Photobiological safety according to EN 62471	RG0
Colour consistency (McAdam ellipse)	SDCM3
Unified Glare Rating (UGR)	21

Lifetime and capacity	
Rated life time L70/B50 at 25 °C (h)	100000
Rated life time L80/B50 at 25 °C	100000
Lumen maintenance at median useful life of 35,000 hrs at 25 °C ambient (tq) (%)	95
Lumen maintenance at median useful life of 50,000 hrs at 25 °C ambient (tq) (%)	90
Lumen maintenance at median useful life of 100,000 hr at 25 °C ambient (tq)	80
Failure rate at median useful life of 35,000 hrs at 25 °C ambient (tq) (%)	5
Failure rate at median useful life of 50,000 hrs at 25 °C ambient (tq) (%)	5
Failure rate at median useful life of 100,000 hrs at 25 °C ambient (tq)	10
Rated ambient temperature acc. IEC62722-2-1 (min) (°C)	0
Rated ambient temperature acc. IEC62722-2-1 (max) (°C)	25

Measurements	
Length (mm)	85
Width (mm)	85
Height/depth (mm)	100
Outer diameter (mm)	85
Installation height (min) (mm)	3000
Installation height (max) (mm)	6000

Electrotechnical data	
Voltage type	AC/DC
Nominal voltage (min) (V)	220
Nominal voltage (max) (V)	240
Nominal current (min) (mA)	500
Nominal current (max) (mA)	500
Type of control gear	LED operating device current-controlled
Total harmonic distortion (THD) (%)	20
Total harmonic distortion	20
Protection class according to IEC 61140	II
Suitable for lamp power (min) (W)	20
Suitable for lamp power (max) (W)	20
Maximum system power (W)	20
Luminaire efficacy (min) (lm/W)	125
Luminaire efficacy (max) (lm/W)	125
Power factor	0.9
Luminaire efficacy (lm/W)	125