


vizULO



Micro Martin

TOOL-LESS SMOOTH



Architectural & Landscape

Sports Lighting

Large Outdoor Industrial Area

Agricultural Area

Ventilation cable gland

Combines pressure equalization and cable gland in a single unit. It ensures high air flow rates as well as high water protection capacity

Glass

Flat glass. Glass is fixed to die-cast aluminium frame with screws

LED module

High quality LED's with optimal thermal resistance and energy consumption characteristic, for high lumen output and long expected life time. Color temperature available: 3000K, 4000K

(5000K, 5700K available on customer request)

Intelligent light control system

Power line or radio frequency

Protection

IP66 for the complete luminaire

Module temperature control

The LED driver will start reducing the light output when the LED's approach critical temperature. The temperature is measured via a sensor placed on the PCB

(function available on customer request)

Body

Die-cast aluminium

Lighting protection

Built-in surge protection starting from 6 kV till 10 kV

Light regulation

MICRO MARTIN drivers offer integrated midnight dimming and network-controlled 1-10V and DALI protocols

Impact resistance

IK08 (Vandal protected) for the complete luminaire



Traffic roads

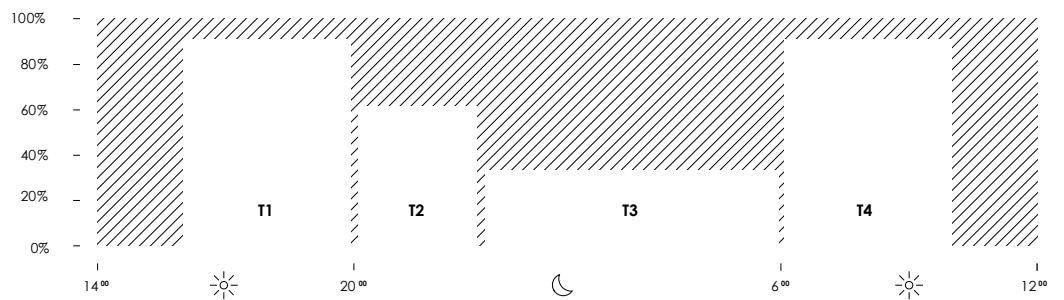
Pedestrian Roads

Residential Street/Area

City Centre

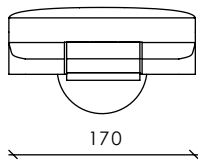
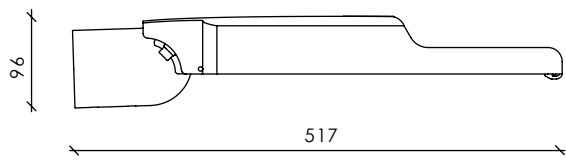
Midnight dimming

Midnight dimming provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on / off times.

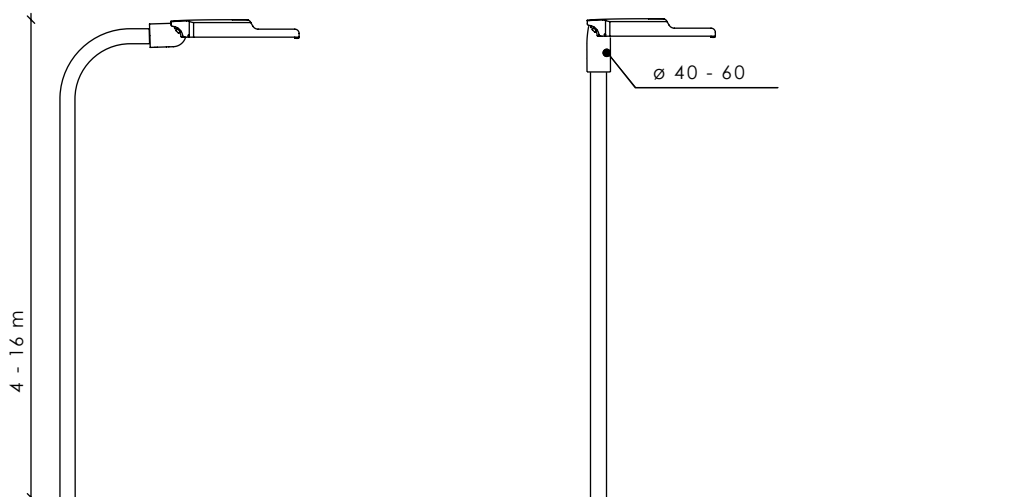


Micro martin tool-less smooth





Other colors
available on request



Technical information



V	220 - 240	1-10V; DALI; Midnight dimming
Hz	50 - 60	Chromaticity tolerance (initial MacAdam): 5
W	5 - 50	Radio frequency
lm	470 - 6447	Warranty 5 years
lm/W	90 - 132	100 000 h (L95B10) at ta = 25°C
K	3000 / 4000	100 000h (L80B10C10) ⁽²⁾
°C	-40 to +50	
CRI	>70 / >80 ⁽¹⁾	
		<i>Surge protection:</i> 6 kV / separate built-in 10 kV
		<i>Spigot:</i> ø 40 - 60 mm
		<i>Body:</i> Die-cast aluminum

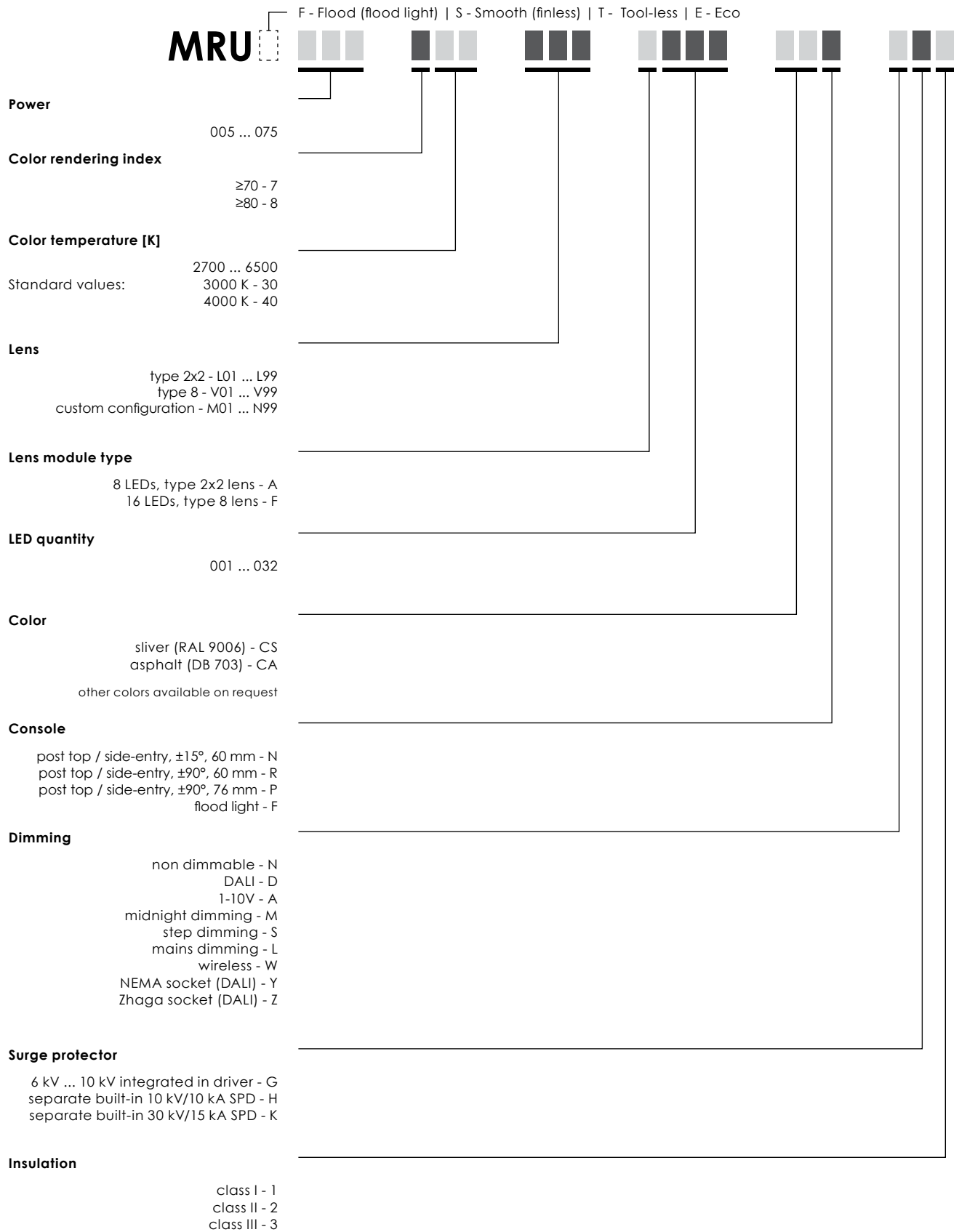
⁽¹⁾ Luminaires with color rendering index (CRI): Ra >90 on request

⁽²⁾ Average lifetime value for ECO model at Ta = 25C is 100 000h L80/B10*

*This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models with lower power, lower current (and lower junction temperature) will have higher lifetime than standard models and will reach 100 000h L90/B10. And high power and high current luminaire models may have negative lifetime deviation comparing to standard models. To receive precise value please contact VIZULO export representatives.

Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

Model name principles



Standard modules

4000K

Number of LED's	8			16		
Nominal current, mA	350	520	700	350	520	700
Power, W	10	15	19	19	27	37
Luminous Flux, lm	1162	1687	2137	2360	3333	4450
Efficacy, lm/W	116	113	113	124	124	120
Power factor, PF	0,81	0,85	0,9	0,9	0,95	0,97

Luminaire efficacy	3000 K	8 - 37 W	884 - 4313 lm	102 - 124 lm/W
	4000 K	8 - 37 W	914 - 4450 lm	119 - 137 lm/W
	5000 K	8 - 37 W	914 - 4450 lm	119 - 137 lm/W

High density modules

4000K

Number of LED's	16			32		
Nominal current, mA	350	500	740	350	500	760
Power, W	19	26	37	35	50	75
Luminous Flux, lm	2434	3283	4462	4654	6458	9130
Efficacy, lm/W	128	126	120	133	129	122
Power factor, PF	0,88	0,94	0,97	0,83	0,93	0,98

Luminaire efficacy	3000 K	10 - 75 W	1182 - 8835 lm	107 - 128 lm/W
	4000 K	10 - 75 W	1221 - 9130 lm	124 - 140 lm/W
	5000 K	10 - 75 W	1221 - 9130 lm	134 - 140 lm/W

ECO

4000K

Number of LED's	4			8			16		
Nominal current, mA	140	520	700	250	500	700	250	500	700
Power, W	5	15	20	14	27	38	27	52	75
Luminous Flux, lm	559	1801	2307	1934	3483	4558	3842	6775	8832
Efficacy, lm/W	110	120	115	139	129	120	142	130	118
Power factor, PF	0,69	0,9	0,95	0,91	0,94	0,98	0,71	0,94	0,97

MCB / Inrush current table

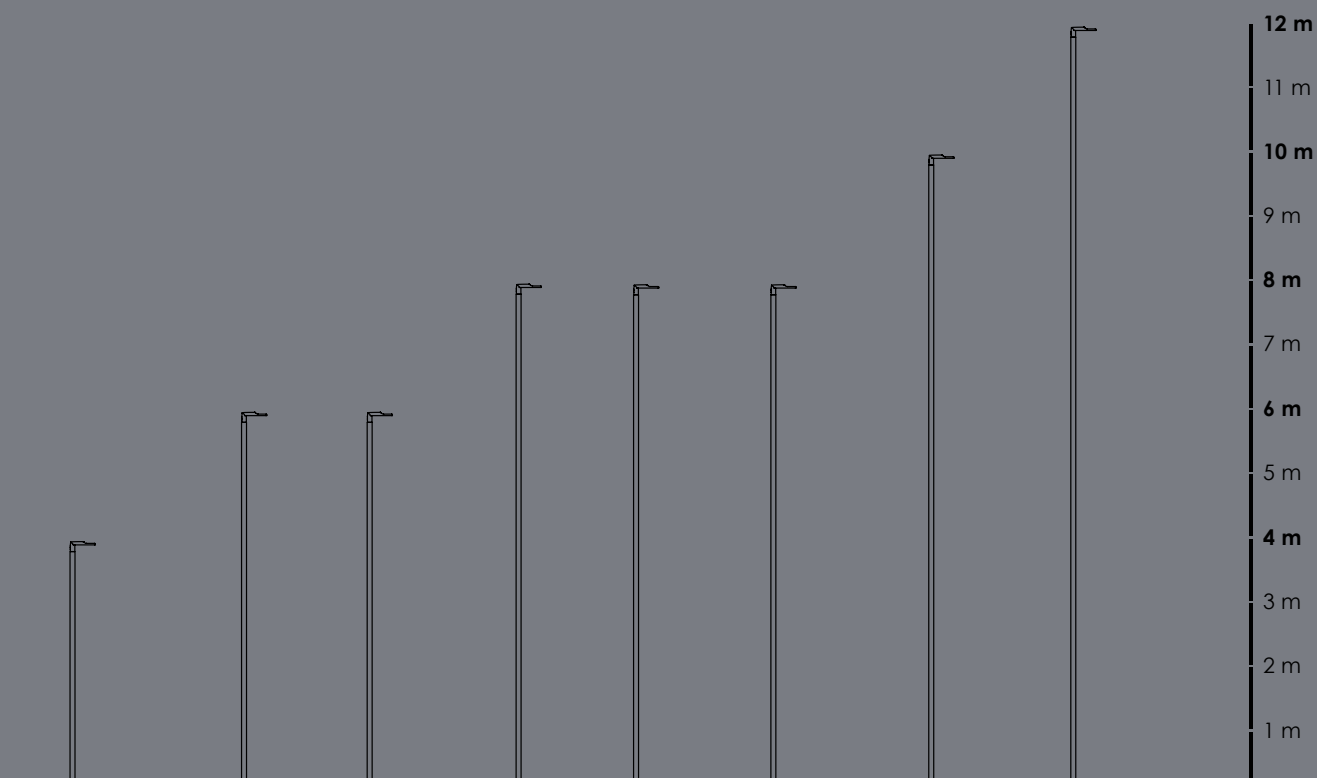
Tridonic LED driver

Standard/High density	In-rush current (peak/duration)	B10A	B16A	B20A	B25A	C10A	C16A	C20A	C25A
MRU 8-16 LED, 8-33 W	36 A (195 µs)	10	16	21	28	16	21	35	44
MRU 16-28 LED, 19-60 W	32 A (267 µs)	7	12	15	19	11	20	25	30
MRU 32 LED, 28-75 W	32 A (267 µs)	7	12	15	19	11	20	25	30
Eco		B10A	B16A	B20A	B25A	C10A	C16A	C20A	C25A
MRUE 4-12 LED, 8-33 W	36 A (195 µs)	10	16	21	28	16	21	35	44
MRUE 6-12 LED, 17-60 W	32 A (267 µs)	7	12	15	19	11	20	25	30
MRUE 12-16 LED, 22-75 W	37 A (287 µs)	7	12	15	19	11	20	25	30

Osram LED driver

Standard/High density	In-rush current (peak/duration)	B10A	B16A	B20A	B25A	C10A	C16A	C20A	C25A
MRU 8-16 LED, 8-40 W	45 A (180 µs)	10	17	21	28	16	27	33	44
MRU 20-32 LED, 18-66 W	53 A (200 µs)	7	12	15	20	11	19	24	32
MRU 32 LED, 67-75 W	57 A (210 µs)	7	12	15	20	11	19	24	32
Eco		B10A	B16A	B20A	B25A	C10A	C16A	C20A	C25A
MRUE 4-8 LED, 11-41 W	45 A (180 µs)	10	17	21	28	16	27	33	44
MRUE 6-16 LED, 16-66 W	53 A (200 µs)	7	12	15	20	11	19	24	32
MRUE 16 LED, 67-75 W	57 A (210 µs)	7	12	15	20	11	19	24	32

Pole height proposition



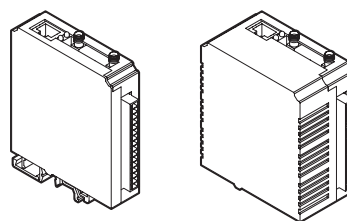
Pole height	4m	6 - 8 m	8 - 12 m
Standard modules	18 W	37 W	
High-density modules		37 W	75 W
ECO	18 W	37 W	75 W

Accessories

Citintelly Segment controller

Art. 70010004

Segment Controller receives commands from Citintelly server via GSM and transmits tasks to Luminaire Controller via radio frequency communication.

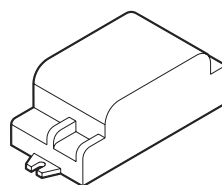


Citintelly Luminaire controller

Luminaire Controller is wireless mesh-networking device that uses 868 MHz for communication with Segment Controller and other Luminaire Controllers. It is delivered in various configurations to meet the needs of your applications.

Art. 70010001 /
LC2M-23-05-R Luminaire
Controller - 2 relays

Art. 70010002 /
LC2M-12-05-R Luminaire
Controller - 1 relay



Citintelly Surge Protection device

Art. 70020001

Surge Protection device offers protection against lighting surges;

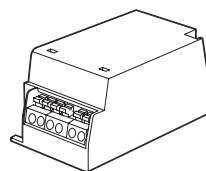
Voltage Protection level up (L-N) $\leq 1,5$ kV

Voltage Protection level up (L/N-PE) $\leq 2,0$ kV

$U_{oc} = 10$ kV

$I_{max} = 10$ kA

$I_{nom} = 5$ kA



Radio Frequency Antenna

Art. 70000108

Heavy duty IP67 enclosure
Mounted in cabinet or luminaire body
with 14 mm screw
SMA connector



NEMA Socket

2213362-3, 5 pin NEMA socket 105°C wires

Art. 70000362

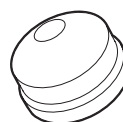
2213362-4, 7 pin NEMA socket 105°C wires

Art. 70000333



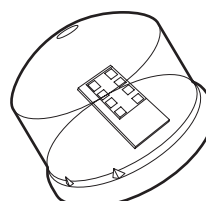
Dummy Link for NEMA Socket

Art. 70000113



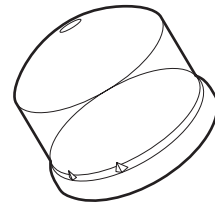
MSLC205RG Luminaire controller + radar, Zhaga, 80mm

Art. 70010027



**MSLC205RGL Luminaire controller,
Zhaga, 80mm**

Art. 70010029



Zhaga socket no cap

Art. 70000612



Zhaga socket with cap

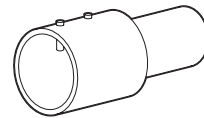
Art. 70000613



Console adapter

Spigot size 60 - 76mm

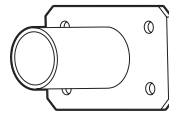
Art. 70044002



Wall mounting bracket

Spigot size 40 - 60 mm

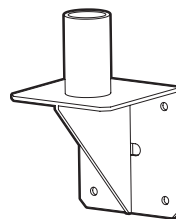
Art. 70044001



Wall mounting bracket

Vertical

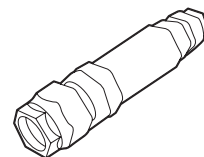
Art. 70044004



Connector

IP66 rated connector offers easy installation of
the street luminaires.
3 wire cable connector

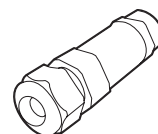
Art. 70000313



Connector

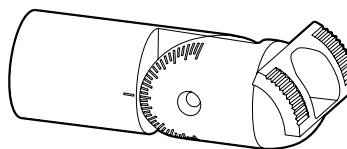
IP66 rated connector offers easy installation of
the street luminaires.
5 wire cable connector

Art. 70000304



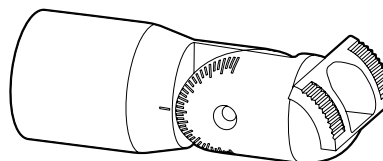
Adjustable Console ±90°
60 mm - Mini Martin / Micro Martin

Art. 70055005



Adjustable Console ±90°
76 mm - Mini Martin / Micro Martin

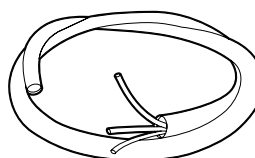
Art. 70055006



Pre-installed cable sets

For internal power supply:

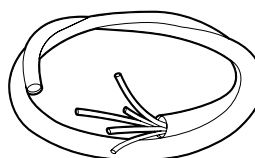
3 x 1,5 mm - 0,5 m long cable.....	Art. 70000319
3 x 1,5 mm - 5 m long cable.....	Art. 70000320
3 x 1,5 mm - 6 m long cable.....	Art. 70000321
3 x 1,5 mm - 8 m long cable.....	Art. 70000322
3 x 1,5 mm - 10 m long cable.....	Art. 70000323
3 x 1,5 mm - 12 m long cable.....	Art. 70000324
3 x 1,5 mm - 18 m long cable.....	Art. 70000325
3 x 1,5 mm - 20 m long cable.....	Art. 70000425
3 x 1,5 mm - 22 m long cable.....	Art. 70000426
3 x 1,5 mm - 25 m long cable.....	Art. 70000427
3 x 1,5 mm - 32 m long cable.....	Art. 70000430
3 x 1,5 mm - 42 m long cable.....	Art. 70000431
3 x 1,5 mm - 50 m long cable.....	Art. 70000432



Pre-installed cable sets

For internal power supply:

5 x 1,5 mm - 0,5 m long cable.....	Art. 70000305
5 x 1,5 mm - 5 m long cable.....	Art. 70000316
5 x 1,5 mm - 6 m long cable.....	Art. 70000317
5 x 1,5 mm - 8 m long cable.....	Art. 70000318
5 x 1,5 mm - 10 m long cable.....	Art. 70000306
5 x 1,5 mm - 12 m long cable.....	Art. 70000307
5 x 1,5 mm - 18 m long cable.....	Art. 70000308
5 x 1,5 mm - 20 m long cable.....	Art. 70000428
5 x 1,5 mm - 22 m long cable.....	Art. 70000429
5 x 1,5 mm - 25 m long cable.....	Art. 70000429
5 x 1,5 mm - 32 m long cable.....	Art. 70000433
5 x 1,5 mm - 42 m long cable.....	Art. 70000434
5 x 1,5 mm - 50 m long cable.....	Art. 70000435



VIZULO

Starta street 1
Riga, LV – 1026, Latvia

Sales: + 371 67 383 023
Production: + 371 67 383 024

office@vizulo.com
www.vizulo.com



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