

LED Lighting Solutions



Vossloh-Schwabe

Vossloh-Schwabe is not merely a provider of top-quality system solutions for the lighting industry, but above all makes a competent and innovative contribution to setting market trends in the field of LED lighting.

Numerous VS project solutions implemented on the basis of entire LED systems are currently satisfying the high requirements placed on energy-efficient lighting all over the world.

Employing approximately 1000 people in more than 20 countries, Vossloh-Schwabe is represented all over the world. As a subsidiary of the Japanese Panasonic Group, VS can draw on extensive resources for R&D as well as for international expansion activities.

A highly motivated workforce, comprehensive market knowledge, profound industry expertise as well as eco-awareness and environmental responsibility show Vossloh-Schwabe to be a reliable partner for the provision of optimum and cost-effective LED lighting solutions.

But Vossloh-Schwabe naturally also continues to provide all components needed in the field of conventional lighting technology.

Vossloh-Schwabe's dedication to delivering superior quality is reflected in its ISO 9001 certification.

Vossloh-Schwabe is ready to embark on a collaborative journey into an economically illuminated LED future.

www.vossloh-schwabe.com

Some lighting applications continue to rely on conventional technologies.

Please see our separate Standard Technology Catalogue for product details.



Overview of Pictograms

The following overview of all used pictograms in this catalogue should support you to find the right meaning:

Operation



Indoor operation



Driver-on-Board technology



Constant-voltage operation, f. e. 24 V

Colour information



Colour rendering index



Lumen maintenance
(f. e. L70/B50 at lifetime 50,000 h)



Initially colour accuracy

Assembly information



LED built-in module



Cut-out in mm (f. e. 125 mm)



Swiveling luminaire head (f. e. 30°)

Safety information



IP protection (f.e. IP20)



SELV (Safety Extra Low Voltage)



SELV equivalent



Protection class I



Protection class II



Protection class III



Short-circuit protection



Temporary short-circuit protection



Overload protection



Overtemperature protection



Overvoltage protection
(up to f. e. 1 kV between L and N)



Protection against "no load" operation



RFI suppressed



Suitable for mounting and fitting in furnitures,
made of materials whose properties, especially
the flammability, are not known



European regulation governing all products that
are introduced to the market. Products must
comply with the respective EC directives.

Dimming and control information



Dimmable product



DALI dimmable



PUSH dimmable



Phase-cut dimmable C



Phase-cut dimmable



Programmable output current (3C function)



Controllable with LiCS Indoor components



Low noise



Rotary knob action



EnOcean

Service lifetime and product guarantee



Minimum service lifetime



Product guarantee based on min. service lifetime

Technical drawings and LDC



Page referring to technical drawings and LDC

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Prime K R – 4" / 6" / 8"

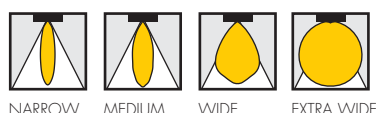
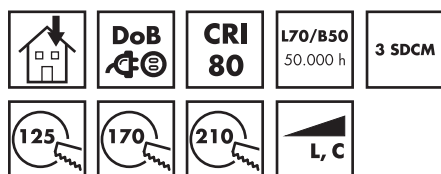
Indoor LED recessed mounted downlight with aluminium reflector

For direct connection to mains voltage

Mains voltage:	220–240 V, 50–60 Hz
Power factor:	> 0.95
THD:	< 20%
Material:	aluminium diecast
Powder coating:	epoxid
Flange colour:	white (RAL 9003)
Reflector material:	aluminium
Front glass:	transparent or frosted
Operating temperature:	0–30 °C



P. 80



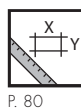
COMPARISON

	LED 30 W 8"	TC-D/T
Power consumption (W)	30	2x26
Typ. luminous flux (lamp/LED)	2835	3600
Typ. luminous flux (lamp/LED) after 2000 h	2835	2520
Optical losses (%)	16	35
Luminous flux	2480	2340
Luminous flux after 2000 h	2480	1638
Average service lifetime (h)	50000	8000



Ref. No.	Type	Glass	Reflector Ø mm	Kelvin	Beam angle °	Typ. lumen*	Power consumption* W	EEC
563107	DL-PRIME-K-R15-4-830-45-C	clear	118	3000	25	1175	15	A+
563109	DL-PRIME-K-R15-4-840-45-C	clear	118	4000	25	1240	15	A+
563111	DL-PRIME-K-R15-4-850-45-C	clear	118	5000	25	1305	15	A+
563108	DL-PRIME-K-R15-4-830-60-D	frost	118	3000	50	1110	15	A+
563110	DL-PRIME-K-R15-4-840-60-D	frost	118	4000	50	1170	15	A+
563112	DL-PRIME-K-R15-4-850-60-D	frost	118	5000	50	1230	15	A+
563113	DL-PRIME-K-R20-6-830-45-C	clear	165	3000	40	1565	20	A+
563115	DL-PRIME-K-R20-6-840-45-C	clear	165	4000	40	1655	20	A+
563117	DL-PRIME-K-R20-6-850-45-C	clear	165	5000	40	1740	20	A+
563114	DL-PRIME-K-R20-6-830-60-D	frost	165	3000	75	1440	20	A
563116	DL-PRIME-K-R20-6-840-60-D	frost	165	4000	75	1520	20	A
563118	DL-PRIME-K-R20-6-850-60-D	frost	165	5000	75	1600	20	A+
563119	DL-PRIME-K-R20-8-830-45-C	clear	206	3000	70	1585	20	A+
563121	DL-PRIME-K-R20-8-840-45-C	clear	206	4000	70	1675	20	A+
563123	DL-PRIME-K-R20-8-850-45-C	clear	206	5000	70	1760	20	A+
563120	DL-PRIME-K-R20-8-830-60-D	frost	206	3000	90	1475	20	A
563122	DL-PRIME-K-R20-8-840-60-D	frost	206	4000	90	1560	20	A+
563124	DL-PRIME-K-R20-8-850-60-D	frost	206	5000	90	1640	20	A+
563125	DL-PRIME-K-R30-8-830-45-C	clear	206	3000	70	2350	30	A+
563127	DL-PRIME-K-R30-8-840-45-C	clear	206	4000	70	2480	30	A+
563129	DL-PRIME-K-R30-8-850-45-C	clear	206	5000	70	2610	30	A+
563126	DL-PRIME-K-R30-8-830-60-D	frost	206	3000	90	2160	30	A
563128	DL-PRIME-K-R30-8-840-60-D	frost	206	4000	90	2280	30	A+
563130	DL-PRIME-K-R30-8-850-60-D	frost	206	5000	90	2400	30	A+

* Production tolerance of luminous flux, voltage and power consumption: ±10%



MEDIUM



DecoLED

**Complete LEDSpot equipped with optics,
heat sink, leads and metal frame
For direct connection to mains voltage**

Mains voltage: 220–240 V, 50–60 Hz
Power factor: > 0.9
Material: metal frame, round
Flange colour: white
For cut-out: 68 mm
Swiveling LED module: $\pm 30^\circ$
Operating temperature: 0 to 35 °C
Degree of protection: IP20 (front part: IP44)



**CRI
80**

3 SDCM

68

30°

IP44
(front)

L, C

COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

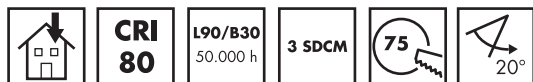
LED	35 W Halogen
7	35
620	600
620	390
12	25
546	450
546	293
35,000	4000

Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen	Power consumption W	Candela	EEC
563284	DecoLED-7-2700-38	2700	38	530	7	650	A+
562282	DecoLED-7-3000-38	3000	38	560	7	690	A+
563285	DecoLED-7-4000-38	4000	38	600	7	720	A+

LEDSpot Sets

On request, you will receive complete sets that contain the desired number of LEDSpots, a respective number of cable sets and the required LED drivers. Several examples of such sets can be seen below.

Contact us – we will gladly support you when it comes to dimensioning your lighting application.



36°

SET 1 ActiveLine Pro Kit

- 1 piece ActiveLine 9.1
3000 K, 36°
- 1 piece frame
round, silver brushed
- + driver 186349
- + lead set
- Ref. No. 561726

COMPARISON

Power consumption (W)	
Typ. luminous flux (lamp/LED)	
Typ. luminous flux (lamp/LED) after 1000 h	
Optical losses (%)	
Luminous flux	
Luminous flux after 1000 h	
Average service lifetime (h)	

LED 9.1 50 W Halogen

9.3	50
925	900
925	585
12	25
814	675
814	439
50000	4000



SET 2 ActiveLine Pro Kit

- 1 piece ActiveLine 6.1
3000 K, 36°
- 1 piece frame
round, silver brushed
- + driver 186341
- + lead set
- Ref. No. 561728

COMPARISON

Power consumption (W)	
Typ. luminous flux (lamp/LED)	
Typ. luminous flux (lamp/LED) after 1000 h	
Optical losses (%)	
Luminous flux	
Luminous flux after 1000 h	
Average service lifetime (h)	

LED 6.1 35 W Halogen

6.8	35
620	600
620	390
12	25
546	450
546	293
50000	4000





SET 3 ActiveLine Pro Kit

2 pieces ActiveLine 6.1
3000 K, 36°
2 pieces frame
round, silver brushed
+ driver 186431
+ lead set
Ref. No. 561729

COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

LED 6.1	35 W Halogen
6.8	35
620	600
620	390
12	25
546	450
546	293
50000	4000



SET 4 ActiveLine Pro Kit - dimmable

1 piece ActiveLine 9.1
3000 K, 36°
1 piece frame
round, silver brushed
+ driver 186448
+ lead set
Ref. No. 561734

COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

LED 6.1	35 W Halogen
6.8	35
620	600
620	390
12	25
546	450
546	293
50000	4000



SET 5 ActiveLine Pro Kit - dimmable

2 pieces ActiveLine 6.1
3000 K, 36°
2 pieces frame
round, silver brushed
+ driver 186415
+ lead set
Ref. No. 561731

COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

LED 9.1	50 W Halogen
9.3	50
925	900
925	585
12	25
814	675
814	439
50000	4000

LEDSpot Sets

On request, you will receive complete sets that contain the desired number of LEDSpots, a respective number of cable sets and the required LED drivers. Several examples of such sets can be seen below.

Contact us – we will gladly support you when it comes to dimensioning your lighting application.



40°

SET 6 StartLine



- 2 pieces StartLine
3000 K, 40°
- 2 pieces frame round,
white
- + driver 186348
- + lead set
- Ref. No. 554535

COMPARISON

Power consumption (W)	2.2
Typ. luminous flux (lamp/LED)	210
Typ. luminous flux (lamp/LED) after 1000 h	210
Optical losses (%)	15
Luminous flux	179
Luminous flux after 1000 h	179
Average service lifetime (h)	50000

LED	20 W Halogen
2.2	20
210	310
210	201.5
15	40
179	186
179	121
50000	4000

SET 7 FlatLine



- 2 pieces FlatLine
700 mA, 3000 K, 40°
- 2 pieces frame round, silver
- + driver 186348
- + lead set
- Ref. No. 561733

COMPARISON

Power consumption (W)	2.2
Typ. luminous flux (lamp/LED)	210
Typ. luminous flux (lamp/LED) after 1000 h	210
Optical losses (%)	15
Luminous flux	179
Luminous flux after 1000 h	179
Average service lifetime (h)	50000

LED	20 W Halogen
2.2	20
210	310
210	201.5
15	40
179	186
179	121
50000	4000

A surface mounting frame is available on request
Ref. No.: 554843 frame colour: silver
See page 38



123°/113°

LED RegaLine Professional

With integrated SELV driver

Equipped with LUGA Line LED COB modules

Rotating LED profile: 120°
 Slim profile design (Ø): 22.5 mm
 Lengths: 390 mm, 670 mm, 950 mm
 Material: aluminium, RAL 9016
 Beam angle: 123° / 113°
 Operating temperature: -20 to 35 °C



Ref. No.	Type	Kelvin	Length mm
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01: Magnetic attachment

560557	VS-L-0107-01-390-3000	3000	390
566089	VS-L-0107-01-390-4000	4000	390
566090	VS-L-0107-01-670-3000	3000	670
566091	VS-L-0107-01-670-4000	4000	670
566092	VS-L-0107-01-950-3000	3000	950
566093	VS-L-0107-01-950-4000	4000	950

Ref. No.	Type	Kelvin	Length mm
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02: Suspension

566094	VS-L-0107-02-390-3000	3000	390
566095	VS-L-0107-02-390-4000	4000	390
566096	VS-L-0107-02-670-3000	3000	670
566097	VS-L-0107-02-670-4000	4000	670
566098	VS-L-0107-02-950-3000	3000	950
566099	VS-L-0107-02-950-4000	4000	950



LED RegaLine Professional

With integrated SELV driver

Equipped with LUGA Line LED COB modules

Rotating LED profile: 120°
 Slim profile design (Ø): 22.5 mm
 Lengths: 390 mm, 670 mm, 950 mm
 Material: aluminium, RAL 9016
 Beam angle: 123° / 113°
 Operating temperature: -20 to 35 °C



**CRI
80**

**L90/B10
50.000 h**

3 SDCM

IP20



CE



P. 81



Ref. No.	Type	Kelvin	Length mm
03: Built-in			
566100	VS-L0107-03-390-3000	3000	390
566101	VS-L0107-03-390-4000	4000	390
566102	VS-L0107-03-670-3000	3000	670
566103	VS-L0107-03-670-4000	4000	670
566104	VS-L0107-03-950-3000	3000	950
566105	VS-L0107-03-950-4000	4000	950

Ref. No.	Type	Kelvin	Length mm
04: Surface mounting			
566106	VS-L0107-04-390-3000	3000	390
566107	VS-L0107-04-390-4000	4000	390
566108	VS-L0107-04-670-3000	3000	670
566109	VS-L0107-04-670-4000	4000	670
566110	VS-L0107-04-950-3000	3000	950
566111	VS-L0107-04-950-4000	4000	950





NEXT 111 R

**Built-in LEDSpot equipped with an interchangeable aluminium reflector, heat sink and leads
– Replacement for AR111**

For direct connection to mains voltage

With integrated cord grip

Mains voltage: 220–240 V, 50–60 Hz
Power factor: > 0.95
Reflector (Ø): 111 mm (with flange)
Heat sink material: aluminium
Cover material: plastic (opaque on request)



P. 81–84



NARROW



MEDIUM



WIDE



COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

LED	100 W Halogen
20	100
1800	2000
1800	1300
16	35
1520	1300
1520	845
50000	4000

Ref. No. black	Ref. No. white	Type	Kelvin	Beam angle °	Typ. lumen	Power consumption W	Candela	EEC
561713	561719	Next 111 R 20	3000	14	1440	20	8600	A
561714	561720	Next 111 R 20	4000	14	1520	20	8790	A+
561715	561721	Next 111 R 20	3000	24	1440	20	3450	A
561716	561722	Next 111 R 20	4000	24	1520	20	4100	A+
561717	561723	Next 111 R 20	3000	36	1455	20	2350	A
561718	561724	Next 111 R 20	4000	36	1540	20	2480	A+

EVO90 R / EVO75 R

**Built-in LEDSpot equipped with an interchangeable aluminium reflector, heat sink and leads
For direct connection to mains voltage**

With integrated cord grip

Mains voltage: 220-240 V, 50-60 Hz

Power factor: > 0.95

Reflector (Ø): 90 mm / 75 mm

Heat sink material: aluminium

Holder material: PC, inner ring: metallized



P. 81-85



NARROW



MEDIUM



WIDE

COMPARISON

Power consumption (W)

Typ. luminous flux (lamp/LED)

Typ. luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED 75 W Halogen

10	75
900	1400
900	910
14	35
774	910
774	592
50000	4000



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen	Power cons. W	Candela	EEC
561757	EVO90 R 20	3000	14	1515	20	9200	A
561758	EVO90 R 20	4000	14	1600	20	9900	A+
561759	EVO90 R 20	3000	24	1515	20	4400	A
561760	EVO90 R 20	4000	24	1600	20	4580	A+
561761	EVO90 R 20	3000	36	1495	20	2450	A
561762	EVO90 R 20	4000	36	1580	20	2690	A+
561751	EVO75 R 10	3000	14	760	10	5000	A+
561752	EVO75 R 10	4000	14	780	10	5180	A+
561753	EVO75 R 10	3000	24	760	10	3600	A+
561754	EVO75 R 10	4000	24	780	10	3700	A+
561755	EVO75 R 10	3000	32	760	10	1370	A+
561756	EVO75 R 10	4000	32	780	10	1430	A+

Reflectors for EVO and NEXT 111

Fixing: bayonet

Material: aluminium

Surface: anodised

Ref. No.	Type	Beam	Beam angle (°)	
			EVO 75 R 10	NEXT 111, EVO 90 R 20
557359	D90	narrow	14*	14
557360	D90	medium	24*	24
557361	D90	wide	36*	36
563446	D90	extra wide	48*	48
557152	D75	narrow	14	14**
557153	D75	medium	24	24**
557154	D75	wide	32	32**
562157	D75	extra wide	60	60**

* Reflector on request

** Reflector on request for EVO 90 only



LEDSpot ReadyLine IP

**Complete LEDSpot equipped with optics,
heat sink, leads and metal frame
For direct connection to mains voltage**

MOV – metal-oxide varistor, enclosed

Mains voltage: 220–240 V, 50–60 Hz

Max. power consumption: 4.3 W

Power factor: > 0.95

Frame material: metal, round

Heat sink material: thermoconductive resin



P. 86



50°



COMPARISON

Power consumption (W)

Typ. luminous flux (lamp/LED)

Typ. luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED	40 W Halogen
4.3	40
480	490
480	318.5
16	30
400	343
400	223
50000	4000



Ref. No.	Type	Kelvin	Beam angle °	Degree of protection	Typ. lumen	Candela	EEC
554956	554957	2900...3200	50	IP54	370	330	A++
554958	554959	3700...4200	50	IP54	400	350	A++
555016	555017	2900...3200	50	IP20	370	330	A++
555019	555020	3700...4200	50	IP20	400	350	A++

LED Modules ReadyLine MR16

**Complete LEDSpot equipped with optics,
heat sink and leads**

For direct connection to mains voltage

MOV – metal-oxide varistor, enclosed

Mains voltage: 220–240 V, 50–60 Hz

Max. power consumption: 8.7 W

Power factor: > 0.95

Lens (Ø): 50 mm

Heat sink material: aluminium



P. 86



42°

COMPARISON

Power consumption (W)

Typ. luminous flux (lamp/LED)

Typ. luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED	50 W Halogen
8.7	50
720	900
720	585
16	25
605	675
605	439
50000	4000



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen	Candela	EEC
554960	LR8VV	2900...3200	42	600	636	A+
554961	LR8VV	3700...4200	42	670	680	A+

LED Modules ReadyLine COB

Built-in LED modules with integrated For direct connection to mains voltage

On-board push-in terminals

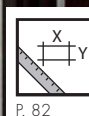
Mains voltage: 220–240 V, 50–60 Hz

Power factor: > 0.95

Dimensions (ØxH): 57x4.7 mm

LES (Ø): 14 mm

PCB material: aluminium



P. 82



120°



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen	Power consumption W	EEC
559772	EDC57C_10W830_230A	3000	120	900	10	A+
559774	EDC57C_10W840_230A	4000	120	950	10	A+
559782	EDC57C_20W830_230A	3000	120	1800	20	A+
559784	EDC57C_20W840_230A	4000	120	1900	20	A+

For other versions please visit our website: www.vossloh-schwabe.com



Holder

Dimensions (ØxH): 59.8x6.6 mm

Material: plastics, white

Ref. No.: 559786

Holder with cover for LES; for EVO reflector

Cover material: PC, transparent

Dimensions (ØxH): 60x14.65 mm

Holder material: PC

Ref. No.: 561847 black with metallized inner ring

Ref. No.: 563095 white

Thermal pad

Dimensions (ØxH): 63x0.5 mm

Thermal conductivity R_{th} : 2 W/mK

Ref. No.: 559883

LED Modules ReadyLine S

Built-in LED modules with integrated driver For direct connection to mains voltage

Mains voltage: 220–240 V, 50–60 Hz
Power factor: > 0.97
Dimensions (LxWxH): 155x41x32.8 mm
PCB material: aluminium
Heat sink material: thermoconductive resin
Protection cover: PC, rivetted



P. 82

COMPARISON

	LED	TC-D/T
Power consumption (W)	13	26
Typ. luminous flux (lamp/LED)	1300	1800
Typ. luminous flux (lamp/LED) after 2000 h	1300	1260
Optical losses (%)	8	35
Luminous flux	1196	1170
Luminous flux after 2000 h	1196	819
Average service lifetime (h)	50000	8000



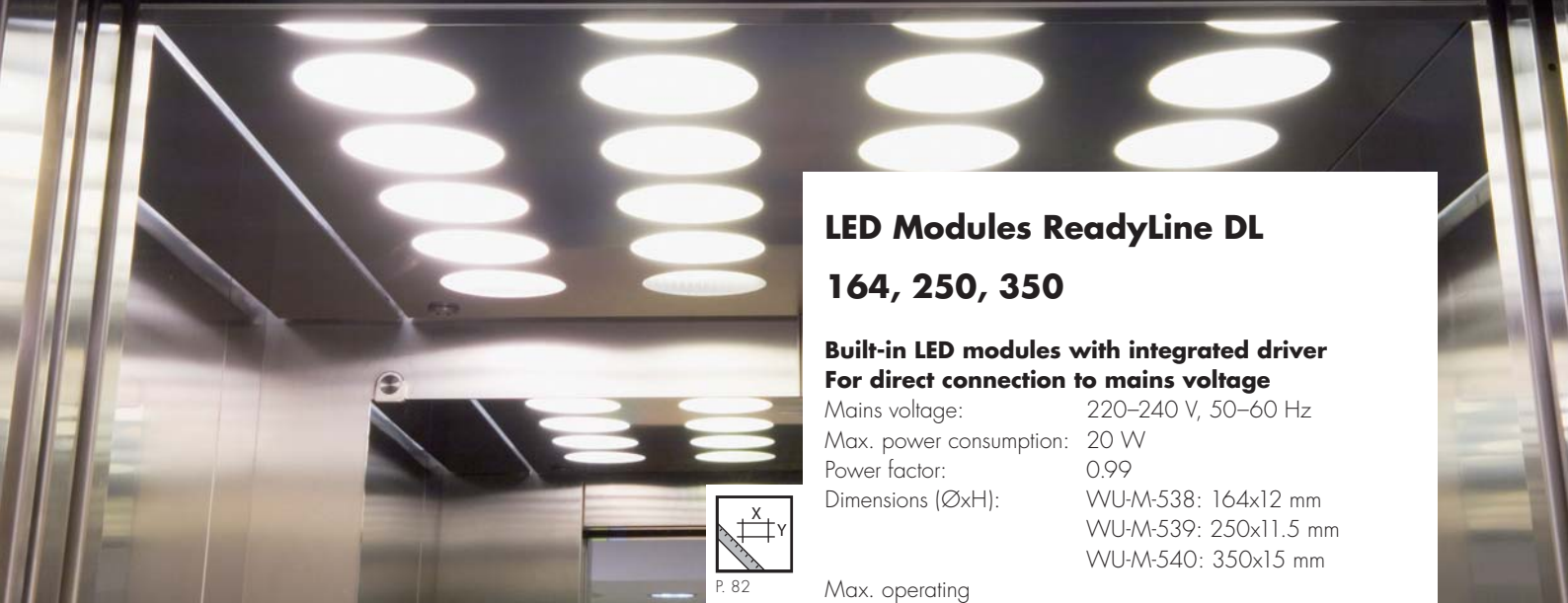
Ref. No.	Type	LEDs pcs.	Cover	Kelvin	Typ. lumen	Power consumption W	EEC
550439	LUT33	21	clear	2900...3200	780	8.7	A+
551983	LUT33	21	diffuse	2900...3200	660	8.7	A+
551984	LUT33	21	clear	3700...4200	800	8.7	A+
551985	LUT33	21	diffuse	3700...4200	680	8.7	A+
550438	LUT33	30	clear	2900...3200	1190	13	A+
551986	LUT33	30	diffuse	2900...3200	1010	13	A+
551987	LUT33	30	clear	3700...4200	1210	13	A+
551988	LUT33	30	diffuse	3700...4200	1030	13	A+

IP54 versions on request

Cord grip

With 2 screws

Ref. No.: 552039



LED Modules ReadyLine DL

164, 250, 350

Built-in LED modules with integrated driver For direct connection to mains voltage

Mains voltage:	220–240 V, 50–60 Hz
Max. power consumption:	20 W
Power factor:	0.99
Dimensions (ØxH):	WU-M-538: 164x12 mm WU-M-539: 250x11.5 mm WU-M-540: 350x15 mm

Max. operating
temperature at t_c point: 80 °C



fig.: ReadyLine DL 164



Additional cover for touch protection see below.

Further LED modules, also for emergency lighting, are available. Please see www.vossloh-schwabe.com

Ref. No.	Type	Number of LEDs	Kelvin	Beam angle °	Typ. lumen	Power consumption W	EEC
562159	WU-M-538-830	44	3000	120	2390	23	A+
562160	WU-M-538-840	44	4000	120	2500	23	A+
562163	WU-M-539-830	90	3000	120	3300	32	A+
562164	WU-M-539-840	90	4000	120	3430	32	A+
562167	WU-M-540-830	89	3000	120	4400	44	A+
562168	WU-M-540-840	89	4000	120	4600	44	A+

Products under development; preliminary technical datas

Cover

for DL 164, Ref. No.: 563858

for DL 250, Ref. No.: 563859

for DL 350, Ref. No.: 563860

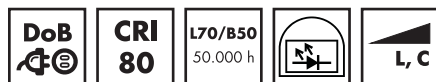
LEDspot ReadyLine C 10

Built-in LED modules with integrated driver
For direct connection to mains voltage

Mains voltage: 220–240 V, 50–60 Hz

Power factor: > 0.97

Dimensions (ØxH): 120xx30.1 mm



COMPARISON

	LED	TC-D/T
Power consumption (W)	17	32
Typ. luminous flux (lamp/LED)	1700	2400
Typ. luminous flux (lamp/LED) after 2000 h	1700	1680
Optical losses (%)	8	35
Luminous flux	1564	1560
Luminous flux after 2000 h	1564	1092
Average service lifetime (h)	50000	8000



P. 83



Ref. No.	Type	LEDs pcs.	Cover	Lead exit	Kelvin	Typ. lumen	Power consumption W	EEC
554951	LR54	54	clear	central	2900...3200	1200	10	A++
554952	LR54	54	diffuse	central	2900...3200	1020	10	A+
554953	LR54	54	clear	central	3700...4200	1250	10	A++
554954	LR54	54	diffuse	central	3700...4200	1060	10	A+
553828	LR42	42	clear	central	2900...3200	1440	17.5	A+
553829	LR42	42	diffuse	central	2900...3200	1230	17.5	A+
553830	LR42	42	clear	central	3700...4200	1590	17.5	A+
553831	LR42	42	diffuse	central	3700...4200	1370	17.5	A+

Cord grip

With 2 screws

Ref. No.: 552039



LEDSpot ReadyLine C 08

**Built-in LED modules with integrated driver
For direct connection to mains voltage**

Mains voltage: 220–240 V, 50–60 Hz
Power factor: > 0.97
Dimensions (ØxH): 120x28.25 mm



P. 83



120°



COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 2000 h
Optical losses (%)
Luminous flux
Luminous flux after 2000 h
Average service lifetime (h)

LED	TC-D/T
13	26
1300	1800
1300	1260
8	35
1196	1170
1196	819
50000	8000

Ref. No.	Type	LEDs pcs.	Cover	Lead exit	Kelvin	Typ. lumen	Power consumption W	EEC
557843	LR30W	30	clear	central	2900...3200	1190	13	A+
557844	LR30W	30	diffuse	central	2900...3200	1010	13	A+
557845	LR30W	30	clear	central	3700...4200	1210	13	A+
557846	LR30W	30	diffuse	central	3700...4200	1030	13	A+

LEDspot ReadyLine C 07

Built-in LED modules with integrated driver For direct connection to mains voltage

Mains voltage: 220–240 V, 50–60 Hz

Power factor: > 0.95

Dimensions (ØxH): 120x50.1 mm



COMPARISON

	LED	TC-D/T
Power consumption (W)	17	32
Typ. luminous flux (lamp/LED)	1700	2400
Typ. luminous flux (lamp/LED) after 2000 h	1700	1680
Optical losses (%)	8	35
Luminous flux	1564	1560
Luminous flux after 2000 h	1564	1092
Average service lifetime (h)	50000	8000



P. 83



Ref. No.	Type	LEDs pcs.	Cover	Lead exit	Kelvin	Typ. lumen	Power consumption W	EEC
552019	LR42	42	clear	central	2900...3200	1550	17.5	A+
552020	LR42	42	diffuse	central	2900...3200	1340	17.5	A+
552021	LR42	42	clear	central	3700...4200	1590	17.5	A+
552022	LR42	42	diffuse	central	3700...4200	1370	17.5	A+

Cord grip

With 2 screws for LED modules

Ref. No.: 552039



LEDSpot ReadyLine C 06

**Built-in LED modules with integrated driver
For direct connection to mains voltage**

Mains voltage: 220–240 V, 50–60 Hz

Power factor: > 0.95

Dimensions (Ø): 60 mm



P. 83



120°



COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 2000 h
Optical losses (%)
Luminous flux
Luminous flux after 2000 h
Average service lifetime (h)

LED	TC-D/T
8.7	18
850	1200
850	840
8	35
782	780
782	546
50000	8000

Ref. No.	Type	LEDs pcs.	Cover	Lead exit	Kelvin	Typ. lumen	Power consumption W	EEC
559567	LR12W	12	clear	lateral	2900...3200	780	8.7	A+
559568	LR12W	12	diffuse	lateral	2900...3200	660	8.7	A+
559569	LR12W	12	clear	lateral	3700...4200	800	8.7	A+
559570	LR12W	12	diffuse	lateral	3700...4200	680	8.7	A+

Thermally conductive transfer tape, non-adhesive

Dimensions (Ø): 59 mm
Tape thickness: 0.25 mm
Thermal conductivity: 2 W/mK
Breakdown voltage: 3 kV
Ref. No.: 559969

Thermally conductive adhesive transfer tape

Dimensions (Ø): 64 mm
Tape thickness: 0.25 mm
Thermal conductivity: 0.8 W/mK
Breakdown voltage: 5.5 kV
Ref. No.: 559968

Thermally conductive transfer tape, adhesive on both sides

Dimensions (Ø): 64 mm
Tape thickness: 0.19 mm
Thermal conductivity: 0.9 W/mK
Breakdown voltage: 10.3 kV
Ref. No.: 559970

LEDSpot ReadyLine C 03

Built-in LED modules with integrated driver For direct connection to mains voltage

MOV – metal-oxide varistor, enclosed unassembled
Mains voltage: 220–240 V, 50–60 Hz
Power factor: > 0.95
Dimensions (ØxH): 33x7.2 mm



P. 83

COMPARISON

	LED	40 W Halogen
Power consumption (W)	4.3	40
Typ. luminous flux (lamp/LED)	450	490
Typ. luminous flux (lamp/LED) after 1000 h	450	318.5
Optical losses (%)	12	30
Luminous flux	400	343
Luminous flux after 1000 h	400	223
Average service lifetime (h)	50000	4000



Ref. No.	Type	Cover	Lead exit	Kelvin	Typ. lumen	Power consumption W	EEC
563935	LR8VV	clear	central	2900...3200	370	4.3	A++
563936	LR8VV	diffuse	lateral	2900...3200	330	4.3	A+
563937	LR8VV	clear	central	3700...4200	400	4.3	A++
563938	LR8VV	diffuse	lateral	3700...4200	355	4.3	A++

Thermally conductive adhesive transfer tape

Dimensions (Ø): 37 mm
Tape thickness: 0.25 mm
Thermal conductivity: 0.8 W/mK
Breakdown voltage: 5.5 kV
Ref. No.: 559965

Thermally conductive transfer tape, adhesive on both sides

Dimensions (Ø): 37 mm
Tape thickness: 0.19 mm
Thermal conductivity: 0.9 W/mK
Breakdown voltage: 10.3 kV
Ref. No.: 559967



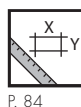
ShopLine 111

Built-in LEDSpot equipped with a reflector, heat sink and leads – Replacement for AR111

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø):	111 mm
Heat sink height:	40/60/80 mm
Heat sink material:	aluminium
Cover:	plastic (opaque on request)
Max. operating temperature at t _p point:	99 °C (C125/128) 80 °C (S150)



P. 84



10-18°



24°



36-38°



**CRI
85**

3 SDCM

**L90/B10
50.000 h**



DIMMABLE



COMPARISON

	LED	35 W HID
Power consumption (W)	24.3	35
Typ. luminous flux (lamp/LED)	3275	3700
Typ. luminous flux (lamp/LED) after 2000 h	3275	3145
Optical losses (%)	15	45
Luminous flux	2784	2035
Luminous flux after 2000 h	2784	1730
Average service lifetime (h)	50000	12000

Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 500 mA	Typ. lumen at 700 mA	Power cons. at max. current (W)	Typ. voltage at max. current (V)	Candela at max. current	EEC
561664	C125	3000	10	1930	—	17.6	35.1	28000	A+
561665	C125	4000	10	1985	—	17.6	35.1	29000	A+
561666	C125	3000	24	1930	—	17.6	35.1	5800	A+
566134	C125	4000	24	1985	—	17.6	35.1	6100	A+
566135	C125	3000	36	1885	—	17.6	35.1	3200	A+
566136	C125	4000	36	1940	—	17.6	35.1	3300	A
566137	C128	3000	12	2115	2810	24.3	34.7	27500	A++
566138	C128	4000	12	2175	2880	24.3	34.7	28300	A++
566139	C128	3000	24	2115	2810	24.3	34.7	7300	A++
566140	C128	4000	24	2175	2880	24.3	34.7	7550	A++
566141	C128	3000	38	2070	2730	24.3	34.7	4150	A+
566142	C128	4000	38	2125	2820	24.3	34.7	4350	A++
560835	S150	3000	18	2600	3500	29.9	42.7	21000	A++
560840	S150	4000	18	2700	3650	29.9	42.7	22000	A++
560836	S150	3000	24	2630	3540	29.9	42.7	8100	A++
560841	S150	4000	24	2735	3690	29.9	42.7	8500	A++
560771	S150	3000	36	2630	3540	29.9	42.7	6800	A++
560772	S150	4000	36	2735	3690	29.9	42.7	7200	A++

LEDSpot	LED driver	Current mA	ON/OFF	DALI	C/L	Page
C125 C128 S150						
• • •	186571	500		•		61
• • •	186531	500 / 700	•			62
• • •	186451	700			•	64
• • •	186572	700		•		61

Next 111

Built-in LEDSpot equipped with an interchangeable reflector, heat sink and leads – Replacement for AR111

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø): 111 mm

Heat sink height: 40/60/80 mm

Heat sink material: aluminium

Cover: plastic (opaque on request)

Max. operating temperature at t_p point: 99 °C (C125/128)
80 °C (S150)



CRI 85

3 SDCM

L90/B10
50.000 h



DIMMABLE

COMPARISON

	LED C128	35 W HID
Power consumption (W)	24.3	35
Typ. luminous flux (lamp/LED)	3275	3700
Typ. luminous flux (lamp/LED) after 2000 h	3275	3145
Optical losses (%)	15	45
Luminous flux	2784	2035
Luminous flux after 2000 h	2784	1730
Average service lifetime (h)	50000	12000



P. 81-84



10°-18°



24°



36°-38°



Ref. No. black	white	Type	Kelvin	Beam angle °	Typ. lumen at 500 mA	at 700 mA	Power consumption at max. current (W)	Typ. voltage at max. current (V)	Candela at max. current	EEC
561701	561707	C125	3000	10	1930	—	17.6	35.1	28000	A+
561702	561708	C125	4000	10	1985	—	17.6	35.1	29000	A+
561703	561709	C125	3000	24	1930	—	17.6	35.1	5800	A+
561704	561710	C125	4000	24	1985	—	17.6	35.1	6100	A+
561705	561711	C125	3000	36	1885	—	17.6	35.1	3200	A+
561706	561712	C125	4000	36	1940	—	17.6	35.1	3300	A+
561810	561816	C128	3000	12	2115	2810	24.3	24.3	27500	A++
561811	561817	C128	4000	12	2175	2880	24.3	34.7	28300	A++
561812	561818	C128	3000	24	2115	2810	24.3	34.7	7300	A++
561813	561819	C128	4000	24	2175	2880	24.3	34.7	7550	A++
561814	561820	C128	3000	38	2070	2730	24.3	34.7	4150	A+
561815	561821	C128	4000	38	2125	2820	24.3	34.7	4350	A++
560866	560887	S150	3000	18	2600	3500	29.9	42.7	21000	A++
560873	560892	S150	4000	18	2700	3650	29.9	42.7	22000	A++
560867	560888	S150	3000	24	2630	3540	29.9	42.7	8100	A++
560874	560893	S150	4000	24	2735	3690	29.9	42.7	8500	A++
560868	560889	S150	3000	36	2630	3540	29.9	42.7	6800	A++
560876	560894	S150	4000	36	2735	3690	29.9	42.7	7200	A++

LEDSpot	LED driver	Current	ON/OFF	DALI	C/L	Page
C125 C128 S150		mA				
• • •	186571	500		•		61
• • •	186531	500 / 700	•			62
• • •	186451	700			•	64
• • •	186572	700		•		61



EVO90/EVO75

Built-in LEDSpot equipped with an interchangeable aluminium reflector, heat sink and leads

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø): 90 mm (EVO90)
75 mm (EVO75)

Reflector material: aluminium

Fixing: bayonet

Holder material: PC, inner ring: metallized

Heat sink height: 60 mm

Heat sink material: aluminium

Max. operating temperature at t_p point: 99 °C



P. 81-85



12°-14°



24°



32°-35°



COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 2000 h
Optical losses (%)
Luminous flux
Luminous flux after 2000 h
Average service lifetime (h)

LED C128 35 W HID

24.3
3275
3275
15
2784
2784
50000
35
3700
3145
45
2035
1730
12000

Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 500 mA	Typ. lumen at 700 mA	Power cons. at max. current (W)	Typ. voltage at max. current (V)	Candela at max. current	EEC
561745	EVO90 C125	3000	12	1970	—	17.6	35.1	19200	A+
561746	EVO90 C125	4000	12	2030	—	17.6	35.1	20000	A++
561747	EVO90 C125	3000	24	1995	—	17.6	35.1	5900	A+
561748	EVO90 C125	4000	24	2050	—	17.6	35.1	6200	A++
561749	EVO90 C125	3000	35	1970	—	17.6	35.1	3300	A+
561750	EVO90 C125	4000	35	2030	—	17.6	35.1	3400	A++
561837	EVO90 C128	3000	14	2165	2860	24.3	34.7	21000	A++
561838	EVO90 C128	4000	14	2225	2945	24.3	34.7	21900	A++
561839	EVO90 C128	3000	24	2190	2890	24.3	34.7	8400	A++
561840	EVO90 C128	4000	24	2250	2980	24.3	34.7	8700	A++
561841	EVO90 C128	3000	35	2165	2860	24.3	34.7	4500	A+
561843	EVO90 C128	4000	35	2225	2945	24.3	34.7	4600	A++
561739	EVO75 C125	3000	14	1970	—	17.6	35.1	14100	A+
561740	EVO75 C125	4000	14	2030	—	17.6	35.1	15000	A++
561741	EVO75 C125	3000	25	1995	—	17.6	35.1	4800	A+
561742	EVO75 C125	4000	25	2055	—	17.6	35.1	5000	A++
561743	EVO75 C125	3000	32	1970	—	17.6	35.1	3400	A+
561744	EVO75 C125	4000	32	2030	—	17.6	35.1	3480	A++

LEDSpot	LED driver	Current mA	ON/OFF	DALI	C/L	Page
EVO90 C125	EVO90 C128	EVO75 C125				
•	•	•	186571	500	•	61
•	•	•	186531	500 / 700	•	62
•	•	•	186451	700	•	64
•	•	•	186572	700	•	61

Reflectors for EVO, ReadyLine COB and NEXT 111 R

Reflectors

Fixing: bayonet
Material: aluminium
Surface: anodised



P. 85



Ref. No.	Type	Beam characteristic	Beam angle (°)	
			EVO90, EVO75 DMC125	EVO90 DMC128
557359	D90	narrow	12	14
557360	D90	medium	24	24
557361	D90	wide	35	35
563446	D90	extra wide	48	48
557152	D75	narrow	14	16
557153	D75	medium	25	26
557154	D75	wide	32	34
562157	D75	extra wide	60	60





ActiveLine LUGA C

Built-in LEDSpot equipped with a reflector, heat sink and leads – replacement for MR16

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø):	50 mm
Reflector material:	aluminium
Cover:	plastic (opaque on request)
Heat sink height:	60 mm
Heat sink material:	aluminium
Max. operating temperature at t_p point:	85° C



P. 86



25°



34°



48°



COMPARISON

	LED	75 W Halogen	20 W HID
Power consumption (W)	10.2	75	20
Typ. luminous flux (lamp/LED)	1210	1400	1700
Typ. luminous flux (lamp/LED) after 1000 h	1210	910	1445
Optical losses (%)	11	25	25
Luminous flux	1077	1050	1275
Luminous flux after 1000 h	1077	683	1084
Average service lifetime (h)	50000	4000	12000

Ref. No.	Type	Kelvin	Beam angle °	CRI Ra	Typ. lumen at 350 mA	Power consumption at 350 mA (W)	Typ. voltage at 350 mA (V)	Candela	EEC
559379	Luga C 104 27K	2700	25	82	1020	10.2	29.2	2050	A+
559382	Luga C 104 30K	3000	25	85	1080	10.2	29.2	2170	A+
559385	Luga C 104 40K	4000	25	85	1160	10.2	29.2	2330	A++
559406	Luga C 104 30K	3000	25	95	914	10.2	29.2	1850	A+
559380	Luga C 104 27K	2700	34	82	1005	10.2	29.2	1410	A+
559383	Luga C 104 30K	3000	34	85	1065	10.2	29.2	1495	A+
559386	Luga C 104 40K	4000	34	85	1145	10.2	29.2	1610	A++
559407	Luga C 104 30K	3000	34	95	905	10.2	29.2	1270	A+
559381	Luga C 104 27K	2700	48	82	1045	10.2	29.2	955	A+
559384	Luga C 104 30K	3000	48	85	1105	10.2	29.2	1010	A+
559387	Luga C 104 40K	4000	48	85	1190	10.2	29.2	1090	A++
559408	Luga C 104 30K	3000	48	95	940	10.2	29.2	860	A+

LED driver	Current mA	ON/OFF	DALI	Page
186465	350	•	•	61
186463	350	•	•	62
186341	350	•	•	64

ActiveLine 9.1 / 7.1 / 6.1

Built-in LEDSpot equipped with a reflector, heat sink and leads – replacement for MR16

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø): 50 mm

Reflector material: aluminium

Cover: plastic (opaque on request)

Heat sink height: 60/40/40 mm (9.1/7.1/6.1)

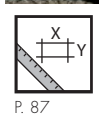
Heat sink material: aluminium

Max. operating temperature at t_p point: 85 °C

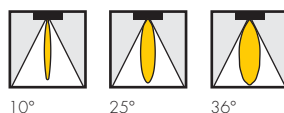


COMPARISON

	LED 6.1	35 W Halogen
Power consumption (W)	6.8	35
Typ. luminous flux (lamp/LED)	620	600
Typ. luminous flux (lamp/LED) after 1000 h	620	390
Optical losses (%)	12	25
Luminous flux	546	450
Luminous flux after 1000 h	546	293
Average service lifetime (h)	50000	4000



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Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 350 mA	Typ. lumen at 500 mA	Power consumption at max. current (W)	Typ. voltage at max. current (V)	Candela	EEC
559442	ActiveLine 9.1 27K	2700	25	580	780	9.3	18.5	1400	A+
559444	ActiveLine 9.1 30K	3000	25	615	825	9.3	18.5	1430	A+
559446	ActiveLine 9.1 40K	4000	25	645	865	9.3	18.5	1540	A++
559443	ActiveLine 9.1 27K	2700	36	580	780	9.3	18.5	1150	A+
559445	ActiveLine 9.1 30K	3000	36	615	825	9.3	18.5	1220	A+
559447	ActiveLine 9.1 40K	4000	36	645	865	9.3	18.5	1350	A++
559436	ActiveLine 7.1 27K	2700	25	580	—	6.2	17.8	1000	A+
559438	ActiveLine 7.1 30K	3000	25	615	—	6.2	17.8	1075	A+
559440	ActiveLine 7.1 40K	4000	25	645	—	6.2	17.8	1150	A++
559437	ActiveLine 7.1 27K	2700	36	580	—	6.2	17.8	685	A+
559439	ActiveLine 7.1 30K	3000	36	615	—	6.2	17.8	925	A+
559441	ActiveLine 7.1 40K	4000	36	645	—	6.2	17.8	1010	A++
559430	ActiveLine 6.1 27K	2700	24	520	—	6.8	19.4	950	A+
559432	ActiveLine 6.1 30K	3000	24	550	—	6.8	19.4	1010	A+
559434	ActiveLine 6.1 40K	4000	24	575	—	6.8	19.4	1050	A+
559431	ActiveLine 6.1 27K	2700	36	520	—	6.8	19.4	800	A+
559433	ActiveLine 6.1 30K	3000	36	550	—	6.8	19.4	870	A+
559435	ActiveLine 6.1 40K	4000	36	575	—	6.8	19.4	950	A+

ActiveLine 9.1/7.1 25°/36°	ActiveLine 6.1 24°/36°	LED driver	Current mA	ON/OFF	DALI	Page
•	•	186465	350	•	•	61
•	•	186424	350	•	•	63
•	•	186341	350	•	•	64
•	•	186431	350	•	•	64
	•	186463	350	•	•	62

ActiveLine 9.1/7.1 25°/36°	LED driver	Current mA	ON/OFF	DALI	C/L	Page
•	186573	500	•	•	•	61
•	186425	500	•	•	•	63
•	186349	500	•	•	•	64



ActiveLine HALO

Built-in LEDSpot equipped with a reflector, heat sink, leads and plug – replacement for MR16

With integrated cord grip

Use of external LED constant-current drivers

Reflector (Ø): 50 mm

Reflector material: aluminium

Cover: plastic (opaque on request)

Heat sink height: 60 mm

Heat sink material: aluminium

Max. operating temperature at t_p point: 85 °C



P. 87



25°



34°



48°



DIMMABLE



COMPARISON

Power consumption (W)

Typ. luminous flux (lamp/LED)

Typ. luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED	50 W Halogen
12.8	50
1000	900
1000	585
13	25
870	675
870	439
50000	4000

Ref. No.	Type	Beam angle °	Typ. luminous flux* (lm) and correlated colour temperature (K)		Candela	EEC
			50 mA	350 mA		
ActiveLine HALO 6.6 W			P _{el} = 0.7 W; V _f = 14.3 V	P _{el} = 6.6 W; V _f = 18.8 V		
561865	ActiveLine HALO 6.6 W	25	46lm/2000K	525lm/2800K	1000	A+
561866	ActiveLine HALO 6.6 W	34	45lm/2000K	515lm/2800K	775	A+
561867	ActiveLine HALO 6.6 W	48	47lm/2000K	530lm/2800K	480	A+
ActiveLine HALO 12.8 W			P _{el} = 1.6 W; V _f = 31 V	P _{el} = 12.8 W; V _f = 36.5 V		
559962	ActiveLine HALO 12.8 W	25	93lm/2000K	890lm/2800K	1800	A
559963	ActiveLine HALO 12.8 W	34	91lm/2000K	870lm/2800K	1300	A
559645	ActiveLine HALO 12.8 W	48	95lm/2000K	900lm/2800K	835	A

ActiveLine HALO	LED driver	Current mA	C/L	Page
12.8 W	186415	350	•	64

LEDSpot IPLine

Complete LEDSpot IP54 equipped with optics, heat sink, leads and metal frame

LEDSpot with one LED and with thermoplastic heat sink

Use of external LED constant-current drivers

Frame: metal, white, round

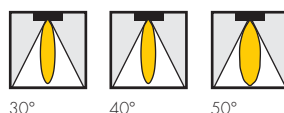
Front plate: clear glass (opaque on request)



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COMPARISON

	LED	20 W Halogen
Power consumption (W)	2.2	20
Typ. luminous flux (lamp/LED)	210	310
Typ. luminous flux (lamp/LED) after 1000 h	210	201.5
Optical losses (%)	15	40
Luminous flux	179	186
Luminous flux after 1000 h	179	121
Average service lifetime (h)	50000	4000



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 350 mA	Typ. lumen at 700 mA	Power consumption at max. current (W)	Typ. voltage at max. current (V)	Candela	EEC
561771	LCH-022	2870...3200	30	100	180	2.16	3.09	320	A++
561773	LCH-022	2870...3200	50	100	180	2.16	3.09	390	A++
561775	LCH-022	4250...4750	30	110	190	2.16	3.09	320	A++
561777	LCH-022	4250...4750	50	110	190	2.16	3.09	390	A++
552088	LCH-023	2920...3070	40	285	—	3.5	10	330	A+
552090	LCH-023	3850...4650	40	300	—	3.5	10	380	A++

LEDSpot		LED driver	Current	ON/OFF	Page
LCH-022	LCH-023		mA		
•	•	186424	350	•	63
•	•	186519	350	•	63
	•	186341	350	•	64
•		186426	700	•	63

Surface Kit with LEDSpot IPLine

Colour temperature: 4500 K

Beam angle: 30°

Type: IPLine SFK LCH022

Ref. No.: 559624 frame colour: white

Ref. No.: 559623 frame colour: silver



LEDSpot SmartLine COB

Complete LEDSpot equipped with optics, heat sink, leads and metal frame

LEDSpot with one LED and with thermoplastic heat sink

Use of external LED constant-current drivers

Frame: metal, round or square

Beam angle: 40°



P. 88

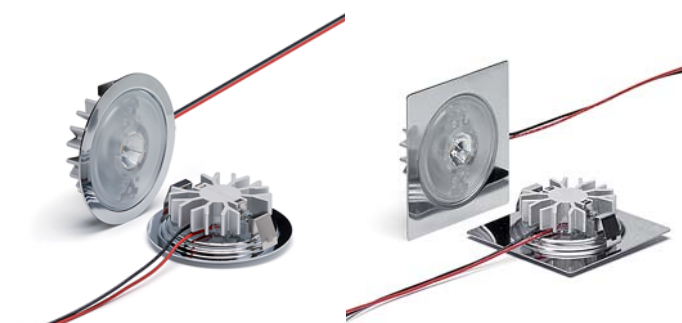


COMPARISON

	LED	35 W Halogen
Power consumption (W)	3.5	35
Typ. luminous flux (lamp/LED)	350	600
Typ. luminous flux (lamp/LED) after 1000 h	350	390
Optical losses (%)	1.5	40
Luminous flux	298	360
Luminous flux after 1000 h	298	234
Average service lifetime (h)	50000	4000



40°



Ref. No.	Type	Kelvin	Frame	Fixation with	Typ. lumen at 350 mA	Power consumption at 350 mA (W)	Typ. voltage at 350 mA (V)	Candela	EEC
548912	LCH-017	2920...3070	silver	round	clips	285	3.5	10	A+
548913	LCH-017	2920...3070	silver mat	round	clips	285	3.5	10	A+
548915	LCH-017	2920...3070	white	round	clips	285	3.5	10	A+
548916	LCH-017	3850...4650	silver	round	clips	300	3.5	10	A+
548917	LCH-017	3850...4650	silver mat	round	clips	300	3.5	10	A+
548919	LCH-017	3850...4650	white	round	clips	300	3.5	10	A+
548920	LCH-019	2920...3070	silver	round	springs	285	3.5	10	A+
548921	LCH-019	2920...3070	silver mat	round	springs	285	3.5	10	A+
548923	LCH-019	2920...3070	white	round	springs	285	3.5	10	A+
548924	LCH-019	3850...4650	silver	round	springs	300	3.5	10	A+
548925	LCH-019	3850...4650	silver mat	round	springs	300	3.5	10	A+
548927	LCH-019	3850...4650	white	round	springs	300	3.5	10	A+
548928	LCH-020	2920...3070	silver	square	clips	285	3.5	10	A+
548931	LCH-020	2920...3070	white	square	clips	285	3.5	10	A+
548932	LCH-020	3850...4650	silver	square	clips	300	3.5	10	A+
548935	LCH-020	3850...4650	white	square	clips	300	3.5	10	A+
548936	LCH-019	2920...3070	silver	square	springs	285	3.5	10	A+
548939	LCH-019	2920...3070	white	square	springs	285	3.5	10	A+
548940	LCH-021	3850...4650	silver	square	springs	300	3.5	10	A+
548943	LCH-021	3850...4650	white	square	springs	300	3.5	10	A+

LED driver	Current mA	ON/OFF	Page
186424	350	•	63
186519	350	•	63

LEDSpot SmartLine

Complete LEDSpot equipped with optics, heat sink, leads and metal frame

LEDSpot with one LED and with thermoplastic heat sink

Use of external LED constant-current drivers

Frame: metal, round or square

Beam angle: 50°



COMPARISON

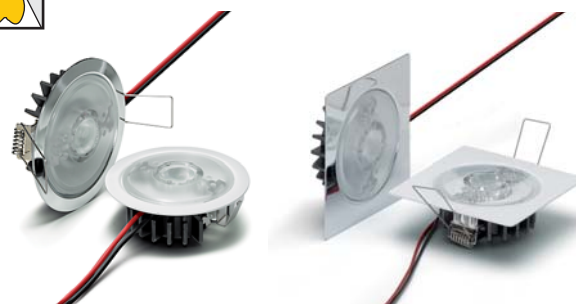
	LED	20 W Halogen
Power consumption (W)	2.2	20
Typ. luminous flux (lamp/LED)	210	310
Typ. luminous flux (lamp/LED) after 1000 h	210	201.5
Optical losses (%)	15	40
Luminous flux	179	186
Luminous flux after 1000 h	179	121
Average service lifetime (h)	50000	4000



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50°



Ref. No.	Type	Kelvin	Frame	Fixation with	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)	Candela	EEC
561778	LCH-002	2870...3200	silver round	clips	180	2.16	3.09	230	A++
561779	LCH-002	2870...3200	silver mat round	clips	180	2.16	3.09	230	A++
561780	LCH-002	2870...3200	white round	clips	180	2.16	3.09	230	A++
561783	LCH-002	4250...4750	silver round	clips	190	2.16	3.09	270	A++
561809	LCH-002	4250...4750	silver mat round	clips	190	2.16	3.09	270	A++
561785	LCH-002	4250...4750	white round	clips	190	2.16	3.09	270	A++
561788	LCH-004	2870...3200	silver round	springs	180	2.16	3.09	230	A++
561789	LCH-004	2870...3200	silver mat round	springs	180	2.16	3.09	230	A++
561790	LCH-004	2870...3200	white round	springs	180	2.16	3.09	230	A++
561794	LCH-009	4250...4750	silver round	springs	190	2.16	3.09	270	A++
561795	LCH-009	4250...4750	silver mat round	springs	190	2.16	3.09	270	A++
561796	LCH-009	4250...4750	white round	springs	190	2.16	3.09	270	A++
561781	LCH-002	2870...3200	silver square	clips	180	2.16	3.09	230	A++
561782	LCH-002	2870...3200	white square	clips	180	2.16	3.09	230	A++
561786	LCH-008	2870...3200	silver square	clips	190	2.16	3.09	270	A++
561787	LCH-008	2870...3200	white square	clips	190	2.16	3.09	270	A++
561791	LCH-004	4250...4750	silver square	springs	180	2.16	3.09	230	A++
561792	LCH-004	4250...4750	white square	springs	180	2.16	3.09	230	A++
561797	LCH-009	4250...4750	silver square	springs	190	2.16	3.09	270	A++
561798	LCH-009	4250...4750	white square	springs	190	2.16	3.09	270	A++

LED driver	Current mA	ON/OFF	Page
186426	700	•	63

Surface Kit with LEDSpot SmartLine

Colour temperature: 3000 K

Beam angle: 50°

Type: SmartLine SFK LCH002

Ref. No.: 557158 frame colour: white

Ref. No.: 559622 frame colour: silver



LEDSpot StartLine

Complete LEDSpot equipped with optics, heat sink, leads and frame

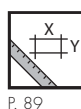
LEDSpot with one LED and with thermoplastic heat sink

Use of external LED constant-current drivers

Snap-in clips for easy installation

Frame: steel, round

Beam angle: 20° or 40°



CRI 80

3 SDCM

56

IP20

COMPARISON

Power consumption (W)

Typ. luminous flux (lamp/LED)

Typ. luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED

20 W Halogen

2.2

20

210

310

210

201.5

15

40

179

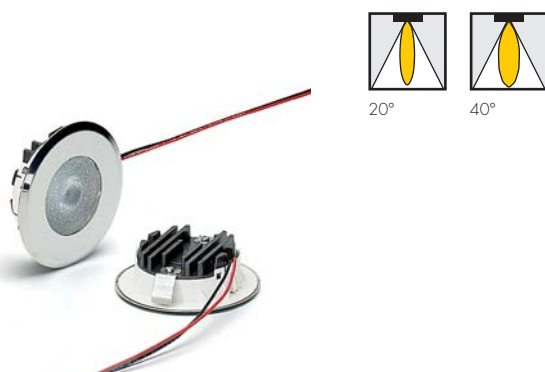
186

179

121

50000

4000



Ref. No.	Type	Kelvin	Frame	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)	Candela	EEC
561799	LCH-016	3000	silver round	180	2.16	3.09	550	A++
561800	LCH-016	3000	white round	180	2.16	3.09	550	A++
561801	LCH-016	3000	silver round	180	2.16	3.09	580	A++
561802	LCH-016	3000	white round	180	2.16	3.09	580	A++
561803	LCH-016	4000	silver round	190	2.16	3.09	550	A++
561804	LCH-016	4000	white round	190	2.16	3.09	550	A++
561805	LCH-016	4000	silver round	190	2.16	3.09	580	A++
561807	LCH-016	4000	white round	190	2.16	3.09	580	A++

LED driver	Current mA	ON/OFF	Page
186426	700	•	63



Surface Kit with LEDSpot StartLine

Colour temperature: 3000 K

Beam angle: 40°

Type: StartLine SFK LCH016

Ref. No.: 559621 frame colour: white

Ref. No.: 557157 frame colour: silver

LEDSpot SoftLine 24 V

Complete LEDSpot equipped with heat sink, leads and metal frame

Use of external LED constant-voltage converters

Snap-in clips for easy installation into wooden shelves

Constant-voltage: 24 V DC

Frame: metal, round

Beam angle: 65°

Degree of protection: IP20 (front: IP40)



24 V

CRI
80



IP20



COMPARISON

Power consumption

LED

Halogen

Typ. luminous flux (lamp/LED)

2.5

20

Typ. luminous flux (lamp/LED) after 1000 h

270

310

Optical losses (%)

270

201

Luminous flux

20

40

Luminous flux after 1000 h

225

186

Average service lifetime

225

121

50000

4000



P. 90



65°



Ref. No.	Type	Frame colour	Kelvin	LEDs pcs.	Typ. lumen	Max. power consumption (W)	Candela at 24 V	EEC
563861	LCH032	silver	2580...2870	6	225	2.5	80	A++
563863	LCH032	silver	2870...3220	6	225	2.5	80	A++
563865	LCH032	silver	3710...4260	6	225	2.5	80	A++
563862	LCH032	white	2580...2870	6	225	2.5	80	A++
563864	LCH032	white	2870...3220	6	225	2.5	80	A++
563866	LCH032	white	3710...4260	6	225	2.5	80	A++
563336	LCH032	silver brushed	2580...2870	6	225	2.5	80	A++
562742	LCH032	silver brushed	2870...3220	6	225	2.5	80	A++
562885	LCH032	silver brushed	3710...4260	6	225	2.5	80	A++

LED Constant-voltage Drivers

Suitable constant-voltage drivers please see page 66–67

LEDSpot FlatLine

Complete LEDSpot equipped with optics, leads and frame

LEDSpot with one LED and with thermoplastic heat sink

With connector

Snap-in clips for easy installation

Frame: metal, round

Beam angle: 40°

Degree of protection: IP20 (front: IP67)



P. 90



40°



COMPARISON

Power consumption (W)
Typ. luminous flux (lamp/LED)
Typ. luminous flux (lamp/LED) after 1000 h
Optical losses (%)
Luminous flux
Luminous flux after 1000 h
Average service lifetime (h)

LED	20 W Halogen
2.2	20
210	310
210	201.5
15	40
179	186
179	121
50000	4000



Ref. No.	Type	Kelvin	LEDs pcs.	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)	Candela	EEC
561580	LCH-027	2870...3200	5	190	2.2	3.1	160	A++
561582	LCH-027	3850...4250	5	195	2.2	3.1	220	A++

LED driver	Current mA	ON/OFF	Page
186426	700	•	63

Ref. No.	Type	Kelvin	LEDs pcs.	Typ. lumen	Power consumption W	Candela	EEC
561588	LCH-028	2870...3200	6	100	1.7	90	A+
561590	LCH-028	3850...4250	6	100	1.7	100	A+

LED converter	Voltage V	ON/OFF	Page
186412	12	•	67

Cable set

Length: 250 mm

Ref. No.: 561868

Surface Kit with LEDSpot FlatLine

Colour temperature: 3000 K

Beam angle: 40°

Type: Flatline SFK LCH027 (700 mA)

Ref. No.: 561870 frame colour: white

Ref. No.: 561871 frame colour: silver



Accessories for LEDSpots



P. 91

Metal frame to use IPLine, SmartLine, StartLine or FlatLine as surface mounting spots

Two single pole terminals for electrical connection inside

Frame colour: white/silver

Material: metal

Fixation: by self tapping screws

Ref. No.: 554845 frame colour: white

Ref. No.: 554843 frame colour: silver



Lead sets

Lead sets with connector and lead ends for easy and fast connection

Connector material: PA, natural, UL94V-0

Leads: H03VVH2-F

Ref. No.: 545029 1 connector

Ref. No.: 546388 2 connectors

Ref. No.: 545315 3 connectors

Ref. No.: 554929 4 connectors

Ref. No.: 545316 5 connectors





LEDSpot EffectLine

Complete LEDSpot equipped with optics, heat sink, leads and metal frame

LEDSpot with one LED and with thermoplastic heat sink

Snap-in clips for easy installation

Frame: metal, round or square

Beam angle: 8°, 16°, 26° or 45°



P. 90



8°



16-26°



45°

COMPARISON

Power consumption (W)

Typ Luminous flux (lamp/LED)

Typ Luminous flux (lamp/LED) after 1000 h

Optical losses (%)

Luminous flux

Luminous flux after 1000 h

Average service lifetime (h)

LED	20 W Halogen
2.2	20
210	310
210	201.5
15	40
179	186
179	121
50000	4000

Ref. No.	Type	Kelvin	Beam angle	Frame	Typ. lumen	Power consumption	Typ. voltage	Candela	EEC	
round	square		°		at 700 mA	at 700 mA (W)	at 700 mA (V)			
566143	566150	Effect 219 3000K	3000	8	silver	180	2.16	3.09	1200	A++
561808	566152	Effect 219 3000K	3000	16	silver	180	2.16	3.09	450	A++
566146	556154	Effect 219 3000K	3000	26	silver	180	2.16	3.09	500	A++
566148	566156	Effect 219 3000K	3000	45	silver	180	2.16	3.09	300	A++
566144	566151	Effect 219 3000K	3000	8	white	180	2.16	3.09	1200	A++
566145	566153	Effect 219 3000K	3000	16	white	180	2.16	3.09	450	A++
566147	566155	Effect 219 3000K	3000	26	white	180	2.16	3.09	500	A++
566149	566157	Effect 219 3000K	3000	45	white	180	2.16	3.09	300	A++
566158	566166	Effect 219 4500K	3000	8	silver	190	2.16	3.09	1250	A++
566160	566168	Effect 219 4500K	3000	16	silver	190	2.16	3.09	1100	A++
566162	566131	Effect 219 4500K	3000	26	silver	190	2.16	3.09	560	A++
566164	566134	Effect 219 4500K	3000	45	silver	190	2.16	3.09	330	A++
566159	566167	Effect 219 4500K	3000	8	white	190	2.16	3.09	1250	A++
566161	566169	Effect 219 4500K	3000	16	white	190	2.16	3.09	1100	A++
566163	566133	Effect 219 4500K	3000	26	white	190	2.16	3.09	560	A++
566165	566135	Effect 219 4500K	3000	45	white	190	2.16	3.09	330	A++

LED driver	Current mA	ON/OFF	Page
186424	350	•	63
186519	350	•	63
186425	500	•	63
186426	700	•	63

AluLED IP66/IP67

Voltage supply: 24 V DC
 Beam angle: 120°
 Ambient temperature: -30 to 85 °C
 Max. current load: 3 A
 Including mounting clips (brackets) and screws

24 V

L70/B20
50.000 h

3 SDCM

IP66

IP67



P. 91



120°



Ref. No.	Type	Kelvin	LEDs pcs.	Length mm	Lumen	Current mA	Power W
571125	AluLED-320-2700-II Fully Coated	2700 ±300	18	320	200	140	3.4
571126	AluLED-920-2700-II Fully Coated	2700 ±300	54	920	600	420	10.1
571127	AluLED-1220-2700-II Fully Coated	2700 ±300	72	1220	800	560	13.5
561698	AluLED-320-3000-II Fully Coated	3000 ±300	18	320	240	140	3.4
561699	AluLED-920-3000-II Fully Coated	3000 ±300	54	920	720	420	10.1
561700	AluLED-1220-3000-II Fully Coated	3000 ±300	72	1220	960	560	13.5
571136	AluLED-320-4000-II Fully Coated	4000 ±300	18	320	300	140	3.4
571137	AluLED-920-4000-II Fully Coated	4000 ±300	54	920	900	420	10.1
571138	AluLED-1220-4000-II Fully Coated	4000 ±300	72	1220	1200	560	13.5
571115	AluLED-320-6000-II Fully Coated	6000 ±300	18	320	280	140	3.4
571116	AluLED-920-6000-II Fully Coated	6000 ±300	54	920	840	420	10.1
571117	AluLED-1220-6000-II Fully Coated	6000 ±300	72	1220	1120	560	13.5

Ref. No.	Type	LEDs pcs.	Length mm	Lumen red	Lumen green	Lumen blue	Dom. wavelength (nm) red	Dom. wavelength (nm) green	Dom. wavelength (nm) blue	Power W
RGB modules										
571130	AluLED-320-RGB-II Fully Coated	18	320	25	75	15	620-630	520-535	465-475	3.4
571131	AluLED-920-RGB-II Fully Coated	54	920	75	225	45	620-630	520-535	465-475	10.1
571132	AluLED-1220-RGB-II Fully Coated	72	1220	100	300	60	620-630	520-535	465-475	13.5
Blue modules										
571120	AluLED-1220-BLUE-II Fully Coated	72	1220	-	-	60	-	-	465-475	8.4

EasyConnect Cable for AluLED

Max. permissible current: 3 A
 Number of strands: 2/4
 For monochrome modules with 2 strands
 Ref. No.: 543426 25 cm, feed-in connector
 Ref. No.: 543427 50 cm, PCB to PCB connector
 For RGB modules with 4 strands
 Ref. No.: 543428 25 cm, feed-in connector
 Ref. No.: 543429 50 cm, PCB to PCB connector

Shrink caps

For sealing exposed connection wires
 Adhesive coating on the inside
 Ref. No.: 571150 colour: transparent
 Ref. No.: 571151 colour: black

LED Constant-voltage Drivers

Suitable constant-voltage drivers please see page 66-67



AluLED IP20

Voltage supply: 24 V DC
 Beam angle: 120°
 Ambient temperature: -30 to 85 °C
 Max. current load: 3 A
 Including mounting clips (brackets) and screws

24 V

L70/B20
50.000 h

3 SDCM

IP20



P. 91



120°



Ref. No.	Type	Kelvin	LEDs pcs.	Length mm	Lumen	Current mA	Power W
571142	AluLED-320-2700-IHP20-D	2700 ±300	18	320	140	140	3.4
571143	AluLED-920-2700-IHP20-D	2700 ±300	54	920	420	420	10.1
571144	AluLED-1220-2700-IHP20-D	2700 ±300	72	1220	560	560	13.5
571145	AluLED-320-3000-IHP20-D	3000 ±300	18	320	168	140	3.4
571146	AluLED-920-3000-IHP20-D	3000 ±300	54	920	504	420	10.1
571147	AluLED-1220-3000-IHP20-D	3000 ±300	72	1220	672	560	13.5
571133	AluLED-320-4000-IHP20-D	4000 ±300	18	320	255	140	3.4
571134	AluLED-920-4000-IHP20-D	4000 ±300	54	920	765	420	10.1
571135	AluLED-1220-4000-IHP20-D	4000 ±300	72	1220	1020	560	13.5
571152	AluLED-320-6000-IHP20-D	6000 ±300	18	320	196	140	3.4
571153	AluLED-920-6000-IHP20-D	6000 ±300	54	920	588	420	10.1
571154	AluLED-1220-6000-IHP20-D	6000 ±300	72	1220	784	560	13.5

Ref. No.	Type	LEDs pcs.	Length mm	Lumen red	green	blue	Dom. wavelength (nm) red	green	blue	Current mA	Power W
RGB modules											
571139	AluLED-320-RGB-IHP20-D	18	320	18	53	11	620-630	520-535	465-475	140	3.4
571140	AluLED-920-RGB-IHP20-D	54	920	53	158	32	620-630	520-535	465-475	420	10.1
571141	AluLED-1220-RGB-IHP20-D	72	1220	70	210	42	620-630	520-535	465-475	560	13.5
Blue modules											
571157	AluLED-1220-BLUE-IHP20-D	72	1220	-	-	42	-	-	465-475	560	8.4

Shrink caps

For sealing exposed connection wires

Adhesive coating on the inside

Ref. No.: 571150 colour: transparent

Ref. No.: 571151 colour: black

LED Constant-voltage Drivers

Suitable constant-voltage drivers please see page 66-67

EasyConnect Cable for AluLED

Max. permissible current: 3 A

Number of strands: 2/4

For monochrome modules with 2 strands

Ref. No.: 543426 25 cm, feed-in connector

Ref. No.: 543427 50 cm, PCB to PCB connector

For RGB modules with 4 strands

Ref. No.: 543428 25 cm, feed-in connector

Ref. No.: 543429 50 cm, PCB to PCB connector

Colour Control Modules

– DigiLED CA

Ambient temperature: 0 to 45 °C
 Operating voltage: 24 V
 Max. current: 5 A (on the supply line)
 Push-in terminals: 0.25–1.5 mm², grid: 3.5 mm
 All DigiLED not suitable for the US market.

24 V



P. 92

DigiLED Manual CA

Colour controls via key pads (6 keys)
 Individual colour control or selection of pre-set programs
 $t_c = 55\text{ °C max.}$
 Max. current per control channel: 1.25 A
 Type: WU-ST-001-Digi-manuell-CA
 Ref. No.: 186136



DigiLED DALI CA

Digital colour controls via DALI light management
 $t_c = 60\text{ °C max.}$
 Max. current per control channel: 1.25 A
 Type: WU-ST-004-Digi-DALI-CA
 Ref. No.: 186138



DigiLED DMX CA

Digital colour controls via DMX light management
 $t_c = 60\text{ °C max.}$
 Max. current per control channel: 1.25 A
 Type: WU-ST-003-Digi-DMX-CA
 Ref. No.: 186153



DigiLED Push CA

Colour adjustment by separate push button
 Permits retrieval of pre-set programs
 $t_c = 55\text{ °C max.}$
 Max. current per control channel: 1.25 A
 Type: WU-ST-006-DigiLED-Push CA
 Ref. No.: 186144



DigiLED Mono CA

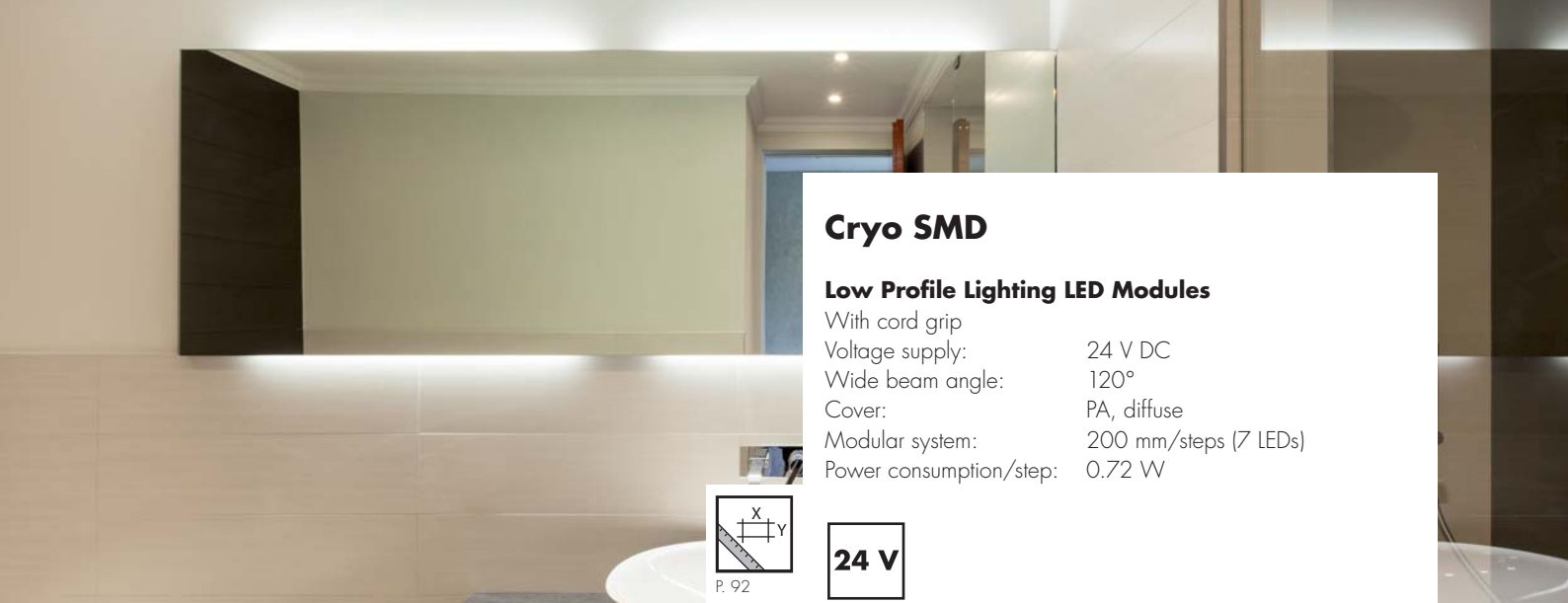
For dimming of single-colour LED modules
 Dimming via 1–10 V interface or external PWM signal
 $t_c = 55\text{ °C max.}$
 Max. current per control channel: 5 A
 Type: WU-ST-010-DigiLED-Mono CA
 Ref. No.: 186155



DigiLED Slave CA

Increase of the system performance for 24 V CA LED built-in system
 Signal amplification on channels RGB(W)
 $t_c = 65\text{ °C max.}$
 Max. current per control channel per slave: 1.25 A
 Type: WU-ST-002-DigiLED-Slave CA
 Ref. No.: 186142





Cryo SMD

Low Profile Lighting LED Modules

With cord grip
 Voltage supply: 24 V DC
 Wide beam angle: 120°
 Cover: PA, diffuse
 Modular system: 200 mm/steps (7 LEDs)
 Power consumption/step: 0.72 W



P. 92

24 V



120°



Ref. No.	Type	Kelvin	Length mm	LEDs pcs.	Lumen	Power W	EEC
562596	Cryo-P-600	5700	610	21	250	2.15	A++
562597	Cryo-P-1200	5700	1210	42	500	4.30	A++

LED Constant-voltage Drivers

Suitable constant-voltage drivers please see page 66–67

LED Line SMD Kit Gen. 2

Built-in PCB lighting modules with optics

The LED Line SMD Kit consists of SMD modules in two lengths (280 mm and 560 mm) as well as matching optics. LED modules and optics are an ideal LED solution to replace luminaires with T5/T8 lamps.

On-board push terminal system

Use of external LED constant-current drivers

Dimensions (LxW): 280x39.6 mm (WU-M-480)
560.6x39.6 mm (WU-M-481)

Operating temperature: -20 to 75 °C

Efficiency: up to 183 lm/W



P. 92



120°



Ref. No.	Type	Length mm	Kelvin	LEDs pcs.	Beam angle °	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
560115	WU-M-480-G-830	280	3000	30	120	1500	10.5	15
560116	WU-M-480-G-840	280	4000	30	120	1570	10.5	15
560123	WU-M-481-G-830	560	3000	60	120	3005	20.9	29.9
560124	WU-M-481-G-840	560	4000	60	120	3145	20.9	29.9

Optics

Dimensions (LxW): 280x43 mm
can be joined together
Material: PMMA
Fixation: flat or cylinder head screws (M4)
or fixing clip
Max. torque: 1.2 Nm (M4)

Ref. No.	Optics type	Efficiency %	Weight g
555437	Standard	95	50
559972	Diffuse	88	50
560570	Extra Wide 90°	95	50
560573	Wide 60°	95	50
560571	Narrow 30°	95	50
555438	Retail SYM	95	50
555439	Retail ASYM	95	50

End cap

Lateral tongue and groove for optics attachment
Type: 98810
Ref. No.: 555482

Fixing Clip

For fastening LED optics and LED PCBs to luminaire sheets without needing screws
Vibration resistant version
Material: PA, natural (UL-94 V-2)

Type	Ref. No.	For luminaire sheet thickness (MS) mm	Length mm
98002	562558	1.4-2.2	9
98003	562559	2.3-3.1	10

LEDLine SMD Kit	LED driver	Current mA	ON/OFF	Page
280 mm	560 mm			
•	•	186443	700	• 58
•	•	186444	700	• 58
•	•	186409	700	• 59

LEDLine SMD Kit	LED driver	Page	ON/OFF	DAI	Current mA
280 mm	560 mm				
•	•	186445	57	•	700
•	•	186446	57	•	700
•	•	186429	60	•	700



LED Line SMD Kit 3R

Built-in PCB lighting modules with optics

The LED Line SMD Kit 3R consists of an SMD module as well as matching optics. LED modules and optics are an ideal LED solution to replace luminaires with T5/T8 lamps.

On-board push terminal system

Use of external LED constant-current drivers

Dimensions (LxW):

280x55 mm

Operating temperature:

-20 to 75 °C

Efficiency:

up to 186 lm/W



P. 93



120°



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 500 mA	Power consumption at 500 mA (W)	Typ. voltage at 500 mA (V)
561061	WU-M-526-BC-830	3000	120	2280	17.3	34.5
560716	WU-M-526-BC-840	4000	120	2385	17.3	34.5

End cap

Lateral tongue and groove for optics attachment

With fixing clips

Weight: 1.6/1 g

Type: 994

Ref. No.: 560377 for tongue side

Ref. No.: 560378 for groove side

Fixing Clip

For fastening LED optics of type 994 and LED PCBs to luminaire sheets without needing screws

Vibration resistant version

Material: PA, natural (UL-94 V-2)

Weight: 0.2 g

Type	Ref. No.	For luminaire sheet thickness (MS) mm	Length mm
98001	562557	0.5-1.3	8
98002	562558	1.4-2.2	9
98003	562559	2.3-3.1	10

Optics

Dimensions (LxWxH):

285.4x62x11.25 mm

can be joined together

Material: PMMA

Fixation: flat or cylinder head screws (M4)

or fixing clip

Max. torque:

1.2 Nm (M4)

Ref. No.	Optics type	Efficiency %	Weight g
560371	Extra Wide 110°	95	105
562543	Diffuse	85	105.8
560376	Wide 90°	95	80
560372	Wide 60°	95	88
560375	Narrow 30°	95	94
560373	Retail SYM	95	93
560374	Retail ASYM	95	99

LED driver	Current mA	ON/OFF	DAI	Page
186443	500	•		58
186444	500	•		58
186409	500	•		59
186445	500		•	57
186446	500		•	57
186315	500	•		59

LED Line SMD Gen. 2

- L28/56 W2

Built-in PCB lighting modules with optics

The SMD PCB LED Line SMD L28/56 W is optimally suited for use in classic T5/T8 luminaires. Available in two different lengths (280 mm and 560 mm), the LED modules are easy to fix.

On-board push terminal system

Use of external LED constant-current drivers

Dimensions (LxW): 280x20 mm (WU-M-510)
560x20 mm (WU-M-512)

Operating temperature: -20 to 75 °C

Efficiency: up to 179 lm/W



P. 93



120°



Ref. No.	Type	Length mm	LEDs pcs.	Kelvin	Beam angle °	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
560168	WU-M-510-G-830	280	20	3000	120	1180	8.58	12.26
560169	WU-M-510-G-840	280	20	4000	120	1235	8.58	12.26
560172	WU-M-512-G-830	560	40	3000	120	2365	17.17	24.53
560173	WU-M-512-G-840	560	40	4000	120	2475	17.17	24.53

LEDLine SMD Kit		LED driver	Current mA	ON/OFF	DALI	Page
280 mm	560 mm					
•	•	186443	700	•		58
•	•	186444	700	•		57
•	•	186409	700	•		59
•	•	186445	700	•	•	57
•	•	186446	700	•	•	57
•		186414	700	•		60
•	•	186429	700	•		60

LED Line AluFix LUGA RX

Lighting modules with holder and optics

LED Line AluFix LUGA RX consists of an energy-efficient linear COB module, an aluminium holder and a clear cover or, alternatively, optics. The light module is available with up to five pre-wired LUGA RX modules in lengths of 305 to 1429 mm.

On-board push terminal system

Use of external LED constant-current drivers

Dimensions (LxWxH): 305x36.2x21.3 mm

586x36.2x21.3 mm

Profile material: aluminium

Cover material: PMMA

Operating temperature: -40 to 85 °C

Efficiency: 146 lm/W

Rear slots: for screws M3

Max. tightening torque: 0.5 Nm



P. 94



COVER



OFFICE



SYM



ASYM



CRI
85

L80/B10
55.000 h

3 SDCM



IP40

Ref. No.	clear	diffuse	LUGA Line RX	Optics type	Length mm	LEDs pcs.	Kelvin	Lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
561392	561401		DML068C30FR	Cover	305	48	3000	1490	12.3	17.6
561395	561404		DML068C40FR	Cover	305	48	4000	1585	12.3	17.6
561410	561419		DML068C30FR	Cover	586	2x48	3000	2980	24.6	35.2
561413	561422		DML068C40FR	Cover	586	2x48	4000	3170	24.6	35.2
561482	–		DML068C30FR	Optics Office	305	48	3000	1490	12.3	17.6
561485	–		DML068C40FR	Optics Office	305	48	4000	1585	12.3	17.6
561491	–		DML068C30FR	Optics Office	586	2x48	3000	2980	24.6	35.2
561494	–		DML068C40FR	Optics Office	586	2x48	4000	3170	24.6	35.2
561527	–		DML068C30FR	Optics Retail Sym	305	48	3000	1490	12.3	17.6
561530	–		DML068C40FR	Optics Retail Sym	305	48	4000	1585	12.3	17.6
561536	–		DML068C30FR	Optics Retail Sym	586	2x48	3000	2980	24.6	35.2
561539	–		DML068C40FR	Optics Retail Sym	586	2x48	4000	3170	24.6	35.2
561572	–		DML068C30FR	Optics Retail Asym	305	48	3000	1490	12.3	17.6
561575	–		DML068C40FR	Optics Retail Asym	305	48	4000	1585	12.3	17.6
562288	–		DML068C30FR	Optics Retail Asym	586	2x48	3000	2980	24.6	35.2
562291	–		DML068C40FR	Optics Retail Asym	586	2x48	4000	3170	24.6	35.2

LED driver	Current mA	ON/OFF	DAI	Page
186491	700	•		58
186492	700	•		58
186443	700	•		58
186444	700	•		58
186406	700	•		59
186409	700	•		59
186445	700		•	57
186446	700		•	57
186315	700	•		59
186229	700	•		60
186414	700	•		60
186429	700	•		60

LED Line AluFix SMD Gen. 2

– Cover

Lighting modules with holder and cover

LED Line AluFix SMD consists of an energy-efficient linear SMD module, an aluminium holder and a clear for diffuse cover. The light module is available with up to five pre-wired SMD modules in lengths of 305 to 1429 mm and is thus an ideal component for LED lighting strips.

On-board push terminal system

Use of external LED constant-current drivers

Dimensions (LxVxH): 305 or 586 mm

Profile material: aluminium

Cover material: PMMA

Operating temperature: -20 to 75 °C

Efficiency: 183 lm/W

Rear slots: for screws M3

Max. tightening torque: 0.5 Nm



P. 94



COVER



Ref. No.	SMD type	Length mm	LEDs pcs.	Kelvin	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
561307	561311 ALUFixSMD / 305 / 30	305	30	3000	1500	10.5	15
561308	561312 ALUFixSMD / 305 / 40	305	30	4000	1570	10.5	15
561315	561319 ALUFixSMD / 586 / 30	586	60	3000	3005	20.9	29.9
561316	561320 ALUFixSMD / 586 / 40	586	60	4000	3145	20.9	29.9

LED driver	Current mA	ON/OFF	DALI	Page
186491	700	•		58
186492	700	•		58
186443	700	•		58
186444	700	•		58
186406	700	•		59
186409	700	•		59
186445	700		•	57
186446	700		•	57
186315	700	•		59
186229	700	•		60
186414	700	•		60
186429	700	•		60



LED Line SMD LightBar

Built-in lighting module

The new SMD LightBar modules constitute a highly effective SMD solution. Available in sets of six, the new modules are particularly suitable for installation in louvered luminaires.

Dimensions (LxW):

520x17 mm

Driving current:

up to 300 mA



P. 94



145°



Ref. No.	Type	LEDs pcs.	Kelvin	Typ. lumen at 300 mA	Power consumption at 300 mA (W)	Typ. voltage at 300 mA (V)
559932	89520	7	3000	595	6.9	23.1
559933	89520	7	4000	630	6.9	23.1

LED driver	Current mA	ON/OFF	Page
186488	300	•	58

Connection leads

Lead with 6 plugs (connected in series)

All connectors must be attached to modules

Lead:

UL 1007 22AWG 1C Red /
White JST-PH-3Pn-Serial MINI JST
PH 3pin Male

Length:

1325 mm

Lead ends:

tinned, 10 mm

Type:

89520

Ref. No.: 559935

LED Light Panel SMD

270x270

Built-in lighting modules

The new LED light panels are a highly effective SMD solution for producing very homogeneous, widely distributed light. They are particularly suitable for integration in louvered luminaire.

On-board push-in terminals

Use of external LED constant-current drivers

Dimensions (LxV): 269x269 mm

Fixing holes: Ø 4.5 mm

Efficiency: up to 190 lm/W



P. 95



120°



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 350 mA	Power consumption at 350 mA (W)	Typ. voltage at 350 mA (V)
561098	WU-M-537-830	3000	120	1260	7.7	21.9
561099	WU-M-537-840	4000	120	1320	7.7	21.9
561100	WU-M-537-850	5000	120	1440	7.7	21.9
561101	WU-M-537-865	6500	120	1385	7.7	21.9

LED driver	Current mA	ON/OFF	DALI	Page
186443	350	•		58
186444	350	•		58
186406	350	•		59
186445	350		•	57
186446	350		•	57
186229	350	•		60
186414	350	•		60



LUGA Shop Gen. 5 – 3500 lm

Built-in lighting modules

Due to their tiny size, the LUGA Shop Gen. 5 modules are particularly suitable as a replacement for mains and low-voltage halogen lamps.

Use of external LED constant-current driver

Dimensions (LxW): 19x19 mm

LES: Ø 13.8 mm

Operating temperature: -40 to 110 °C

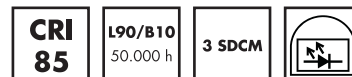
Efficiency: up to 140 lm/W



P. 95



120°



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
562225	DMS128C30G	3000	120	3420	24.5	35
562229	DMS128C40G	4000	120	3555	24.5	35

LED driver	Current mA	ON/OFF	DALI	Page
186572	700	•	•	61
186531	700	•	•	62

LUGA Shop Gen. 5 – 5500 lm

Built-in lighting modules

Use of external LED constant-current driver

Dimensions (LxW): 28x28 mm

LES: Ø 22 mm

Operating temperature: -40 to 105 °C

Efficiency: up to 148 lm/W

CRI
85

L90/B10
50.000 h

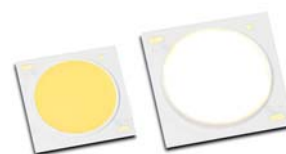
3 SDCM



P. 95



120°



Ref. No.	Type	Kelvin	Beam angle °	Typ. lumen at 1050 mA	Power consumption at 1050 mA (W)	Typ. voltage at 1050 mA (V)
562259	DMS12CC30G	3000	120	5395	36.4	34.7
562263	DMS12CC40G	4000	120	5610	36.4	34.7

LED driver	Current mA	ON/OFF	Page
186532	1050	•	65



Accessories for LUGA Shop Gen. 5

The combination of PCB version and holder provides the option of simply replacing LED modules within their holder. Simple and secure attachment is enabled with a separate holder.



Holder

For LUGA Shop Gen. 5 DMS128C**G
 Dimensions (ØxH): 35x4.2 mm
 Material: PBT, white
 Fixing holes: M3
 Hole distance: 25 mm
 Type: 89721
 Ref. No.: 559165



Holder

For LUGA Shop Gen. 5 DMS12CC**G
 Dimensions (ØxH): 50x4.2 mm
 Material: PBT, white
 Fixing holes: M3
 Hole distance: 35 mm
 Type: 89720
 Ref. No.: 559164



Ring reflector

For PCB holder type: 89720
 For changing the height of the holder
 Diameter: Ø 42 mm (incl. clip: 43 mm)
 Height incl. holder: 7 mm
 Material: PC, white
 Beam angle: 90°
 Type: 89720
 Ref. No.: 560347



Phase-change thermal pads (PC TIM)

For optimum heat dissipation
 Softening temperature: 45 to 55 °C
 Solid material at room temperature for easy assembly
 Thermal conductivity R_{th} : 3 W/mK
 Ref. No.: 561002 for Ø 35 mm
 Ref. No.: 561003 for Ø 50 mm

Optics for LUGA Shop Gen. 5

Silicone optics especially designed and optimized for the use of COB modules with LES sizes up to Ø 23 mm
Material: silicone
Self sealing ability (IP65)



P. 95

COB silicone optics M-Class (M1)

Optics: M-Class silicone
Optical efficiency: 93%
Optimum illumination –
installation ratio: 4:1
(pole distance to pole height)
Ref. No.: 559042



COB silicone optics Area*

Optics: Area silicone
Optical efficiency: 96%
Optimum illumination –
installation ratio: 4.5:1
(pole distance to pole height)
Ref. No.: 562512



COB silicone optics SYM II

Optics: SYM II silicone
Optical efficiency: 97%
Optimum illumination –
installation ratio: 2:1
(luminaire distance to height)
Ref. No.: 562513



Support for COB silicone optics

Material: PC, black
Ref. No.: 558607





Global LUGA

Built-in light engine for HID replacement

LUGA COB with silicone lens (M-Class)
 Use of external LED constant-current driver
 Heat sink material: aluminium
 Max. operating temperature at t_p point: 65 °C
 Efficiency: 163 lm/W



P. 96

CRI
85

L90/B10
50.000 h

3 SDCM



COMPARISON

Power consumption (W)
 Typ. luminous flux (lamp/LED)
 Typ. luminous flux (lamp/LED) after 2000 h
 Optical losses (%)
 Luminous flux (system)
 Luminous flux after 2000 h (system)
 Average service lifetime (h)

LED	150 W HID
54.2	150
7575	14000
7575	11900
7	45
7045	7700
7045	6545
50000	12000



Ref. No.	Type	Kelvin	Colour °	Typ. lumen** at 1050 mA	Power consumption at 1050 mA (W)	Typ. voltage at max. 1050 mA (V)	CRI typ.	EEC
563955	GLOBAL DMS120	4000	neutral white	4885	37.2	35.4	85	A++
563956	GLOBAL DMS12C	4000	neutral white	5050	36.4	34.7	85	A++
563957	GLOBAL DMS18C	4000	neutral white	7345	54.6	52.0	85	A++

Versions with different colour temperatures on request | * Production tolerance of luminous flux, voltage and power consumption: $\pm 10\%$ | ** Preliminary data
 GLOBAL DMS12C could also be operated with 1400 mA

Global LUGA	Current mA	LED driver	ON/OFF	Page
DMS120 DMS12C DMS18C	1050	186453	•	56

LED Roadway Light

M-Class Silicone Gen. 2

These LED modules are suitable for standard-compliant street lighting, paths and squares in accordance with EN 13201.

For luminaires of protection class II

Encapsulated for outdoor applications

Use of external LED constant-current driver

Design for optimum thermal management

Dimensions (LxVxH): 120x120x16 mm

Optics material: silicone

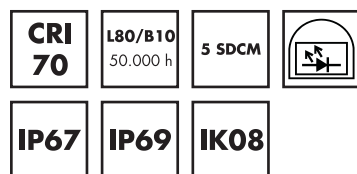
Pre-assembled leads: 2 leads: + (white); - (black)

Length: 500 mm

Number of LEDs: 16

Efficiency: up to 154 lm/W

Optimum illumination – installation ratio: 4.5:1
(pole distance to pole height)



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Ref. No.	Type	Kelvin	Typ. lumen at 700 mA	Power consumption at 700 mA (W)	Typ. voltage at 700 mA (V)
562482	WU-M-515-740	4000	4380	32.2	46

LED driver	Current mA	ON/OFF	Page
186452	700	•	65

LINEAR



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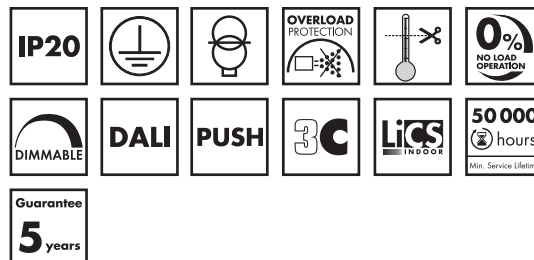


PrimeLine LED Drivers – Dimmable with Programmable Current

350–700 mA

The output current can be freely adjusted in 1 mA steps between 350 mA and 700 mA (factory setting: see table). An iProgrammer (Ref. No. 186428) and a PC running the respective VS software are required for programming purposes.

Dimensions (LxVxH):	359x30x21 mm
Power factor at full load:	0.95 (ECXd 700.150) 0.97 (ECXd 700.149)
Standby losses:	< 0.5 W
Programmable output DC:	350–700 mA
Mains voltage:	220–240 V $\pm 10\%$, 50–60 Hz
DC operation:	198–264 V DC, 0 Hz
Max. voltage without load:	< 250 V
Ambient temperature:	–25 to 50 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Factory setting mA	Voltage output* DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186446	ECXd 700.150	M10	42	220–240	215–200	350–700 $-5/+10\%$	350	34–120	> 92	60
186575	ECXd 700.150	M10	42	220–240	215–200	350–700 $-5/+10\%$	500	34–120	> 91	60
186576	ECXd 700.150	M10	42	220–240	215–200	350–700 $-5/+10\%$	700	34–120	> 91	60
186445	ECXd 700.149	M10	84	220–240	410–380	350–700 $-5/+10\%$	350	60–220	> 94	75
186577	ECXd 700.149	M10	84	220–240	410–380	350–700 $-5/+10\%$	500	60–220	> 94	75
186578	ECXd 700.149	M10	84	220–240	410–380	350–700 $-5/+10\%$	700	60–220	> 93	75

* Depends on the adjusted current output
See page 65 for iProgrammer Ref. No. 186428

ComfortLine LED Drivers – with Selectable Current

125 to 700 mA

The required current output can be chosen by selecting the respective pin at the output terminal.

Dimensions (LxWxH): 359x30x21 mm
Power factor at full load: 0.97
Mains voltage: 220–240 V ±10%, 50–60 Hz
Max. voltage without load: < 250 V



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LINEAR



Guarantee
5 years



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C	Ambient temperature °C
186486	ECXe 175.173	M10	27.5	220–240	150–140	125 ±5%	155–220	> 90	70	–20 to 60
			33		175–165	150 ±5%	130–220	> 91	70	
			38.5		200–190	175 ±5%	110–220	> 92	70	
186444	ECXe 700.148	M10	40	220–240	200–190	350 ±5%	57–114	> 90	75	–20 to 60
			40		205–190	500 ±5%	40–80	> 89	75	
			40		210–195	700 ±5%	28–57	> 88	80	
186487	ECXe 250.174	M10	44	220–240	220–205	200 ±5%	112–220	> 93	70	–20 to 60
			47		230–220	250 ±5%	104–208	> 92	70	
			47		235–220	250 ±5%	94–188	> 92	70	
186488	ECXe 325.175	M10	46.8	220–240	235–220	275 ±5%	85–170	> 91	75	–20 to 60
			46.8		235–220	300 ±5%	78–156	> 91	75	
			46.8		235–220	325 ±5%	72–144	> 91	75	
186491	ECXe 425.178	M10	82.5	220–240	410–375	375 ±5%	113–220	> 93	65	–20 to 50
			84.8		420–385	400 ±5%	105–212	> 94	65	
			85		420–390	425 ±5%	100–200	> 94	65	
186443	ECXe 700.147	M10	79	220–240	400–370	350 ±5%	120–225	> 94	75	–20 to 50
			85		420–390	500 ±5%	80–170	> 93	75	
			85		420–390	700 ±5%	60–120	> 92	80	
186492	ECXe 650.179	M10	84.7	220–240	420–390	550 ±5%	77–154	> 93	65	–20 to 50
			84.6		420–390	600 ±5%	71–141	> 93	70	
			85.1		420–390	650 ±5%	65–131	> 93	70	

LINEAR



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ComfortLine LED Drivers

2x350 mA / 2x500 mA / 2x700 mA

The linear LED constant-current drivers are designed for use in office and retail lighting.

Dimensions (LxWxH):	359x30x21 mm (M10.1) 425x30x21 mm (M11.1)
Power factor at full load:	> 0.9 C
Mains voltage:	220–240 V $\pm$ 10%, 50–60 Hz
DC operation:	198–264 V DC, 0 Hz
Max. voltage without load:	< 60 V (M10.1/M11.1)
Ambient temperature:	–20 to 50 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 0 Hz, 50–60 Hz V	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186406	ECXe 2350.123	M10.1	2x20	198–264 DC 220–240 AC	500–340 400–370	2x350 $\pm$ 5% 2x350 $\pm$ 5%	17–57	> 85	75
186409	ECXe 2700.126	M11.1	2x28.5/2x40	198–264 DC 220–240 AC	260–175 200–190	2x500 $\pm$ 5% 2x700 $\pm$ 5%	17–57	> 88	75

ComfortLine LED Drivers

500 mA

The linear LED constant-current drivers are designed for use in office and retail lighting.

Dimensions (LxWxH):	359x30x21 mm
Power factor at full load:	> 0.96
Mains voltage:	220–240 V $\pm$ 10%, 50–60 Hz
DC operation:	198–264 V DC, 0 Hz
Max. voltage without load:	< 420 V
Ambient temperature:	–25 to 50 °C

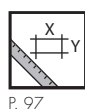
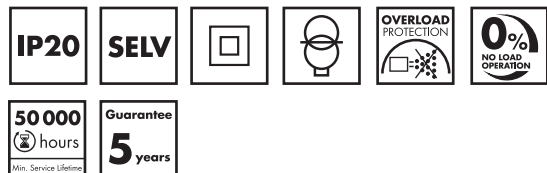


Ref. No.	Type	Casing	Max. output W	Mains voltage 0 Hz, 50–60 Hz V	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186315	ECXe 500.068	M10	107	198–264 DC 220–240 AC	650–410 520–440	500 $\pm$ 5%	90–215	> 94	70

ComfortLine LED Drivers

350 mA

Dimensions (LxWxH): 146.7x21x18 mm
 Power factor at full load: 0.55 C
 Mains voltage: 220–240 V $\pm 10\%$, 50–60 Hz
 DC operation: 176–264 V DC, 0 Hz
 Max. voltage without load: 42 V
 Ambient temperature: –25 to 50 °C



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LINEAR



Ref. No.	Type	Casing	Max. output W	Mains voltage 0 Hz, 50–60 Hz V	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186229	ECXe 350.031	K21	15	176–264 DC 220–240 AC	140–90 81–75	350 $\pm 5/10\%$	2–40	> 81	80

EasyLine LED Drivers

350 mA / 700 mA

Dimensions (LxWxH): 280x30x21 mm
 Power factor at full load: > 0.9 C
 Mains voltage: 220–240 V, 50–60 Hz
 Max. voltage without load: < 130 / < 95 V
 Ambient temperature: –15 to 45 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186414	ECXe 350.129	M7.1	42	220–240 AC	220–200	350 $\pm 5\%$	80–120	> 88	70
186429*	ECXe 700.140	M7.1	60	220–240 AC	305–275	700 $\pm 5\%$	46–86	> 89	75

RETAIL



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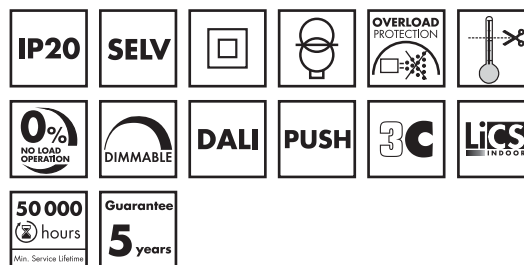


PrimeLine LED Drivers – with Programmable Current

350–700 mA

The output current can be freely adjusted in 1 mA steps between 350 mA and 700 mA (factory setting: see table). An iProgrammer (Ref. No. 186428) and a PC running the respective VS software are required for programming purposes.

Dimensions (LxWxH): 103.6x67.4x31 mm (K2.1)
123.4x79.4x32.6 mm (K3.2)
Power factor at full load: > 0.95
Mains voltage: 220–240 V ±10%, 50–60 Hz
DC operation: 198–264 V DC, 0 Hz
Max. voltage without load: < 45 / < 60 V
Ambient temperature: –25 to 50 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Factory setting mA	Voltage output* DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186465	ECXd 700.166	K2.1	24	220–240 AC	160–100	350–700 ±5%	350	14–34	> 84	75
186573	ECXd 700.166	K2.1	24	220–240 AC	130–120	350–700 ±5%	500	14–34	> 84	75
186574	ECXd 700.166	K2.1	24	220–240 AC	130–120	350–700 ±5%	700	14–34	> 84	75
186503	ECXd 700.184	K3.2	37	220–240 AC	235–155	350–700 ±5%	350	30–53	> 87	75
186571	ECXd 700.184	K3.2	37	220–240 AC	200–180	350–700 ±5%	500	30–53	> 87	75
186572	ECXd 700.184	K3.2	37	220–240 AC	200–180	350–700 ±5%	700	30–53	> 87	75

* Depends on the adjusted current output
See page 65 for iProgrammer Ref. No. 186428

EasyLine LED Drivers – with Selectable Current

250/350/500 mA or 500/600/700 mA or 800/925/1050 mA

The required current output can be chosen by selecting the respective pin at the output terminal.

Dimensions (LxVxH): 103.6x67.4x31 mm
Power factor at full load: > 0.93
Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz
Max. voltage without load: < 60 V
Ambient temperature: –20 to 50 °C



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Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186463	ECXe 500.164	K2.1	10	220–240 AC	53–48	250 $\pm$ 7.5%	17–40	> 83	75
			14		73–67	350 $\pm$ 7.5%	17–40	> 84	75
			20		104–95	500 $\pm$ 7.5%	17–40	> 85	75
186531	ECXe 700.199	K2.1	28.5	220–240 AC	145–130	500 $\pm$ 7.5%	25–57	> 89	80
			40		175–160	600 $\pm$ 7.5%	25–57	> 90	80
			34.2		200–185	700 $\pm$ 7.5%	25–57	> 90	80
186464	ECXe 700.165	K2.1	15	220–240 AC	80–71	500 $\pm$ 7.5%	17–30	> 85	75
			18		94–86	600 $\pm$ 7.5%	17–30	> 85	75
			31		110–100	700 $\pm$ 7.5%	17–30	> 85	75
186532	ECXe 1050.200	K2.1	34.4	220–240 AC	185–160	800 $\pm$ 7.5%	25–43	> 89	80
			39.8		210–185	925 $\pm$ 7.5%	25–43	> 89	80
			45		245–210	1050 $\pm$ 7.5%	25–43	> 89	80

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ComfortLine LED Drivers

350/500/700 mA

Dimensions (LxWxH): 65x30.7x21.5 mm (K29)
128x37x28 mm (K39)
Power factor at full load: > 0.55 C
(1886180: > 0.6 C)
Mains voltage: 220–240 V $\pm 10\%$, 50–60 Hz
DC operation: 176–264 V DC, 0 Hz
Max. voltage without load: < 34 V
Ambient temperature: –25 to 50 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 0 Hz, 50–60 Hz V	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186519*	ECXe 350.192	K29	8.75	176–264 DC	60–39	350 $\pm 5\%$	2–24	> 78	80
				220–240 AC	79–73	350 $\pm 5\%$	2–24	> 78	80
186424	ECXe 350.009	K39	11	176–264 DC	75–51	350 $\pm 5\%$	2–32	> 87	70
				220–240 AC	122–117	350 $\pm 5\%$	2–32	> 87	70
186425	ECXe 500.010	K39	16	176–264 DC	106–72	500 $\pm 5\%$	2–32	> 88	75
				220–240 AC	160–155	500 $\pm 5\%$	2–32	> 88	75
186426	ECXe 700.011	K39	17	176–264 DC	117–79	700 $\pm 5\%$	2–25	> 87	75
				220–240 AC	188–178	700 $\pm 5\%$	2–25	> 87	75

EasyLine LED Drivers – Dimmable

150/250/350/500/700 mA

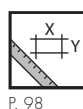
Dimensions (LxVxH): 122.8x45x19 mm (K52)
153x41.4x32 mm (K53)

Power factor at full load: 0.85

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

Max. voltage without load: 30 / 35 / 60 V

Ambient temperature: –15 to 45 °C



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Ref. No.	Type	Casing	Max. output W	Mains voltage (V) 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186447	ECXd 150.151	K52	6	220–240 AC	40–35	150 $\pm$ 8%	27–41	> 78	70
186448	ECXd 500.152	K52	10	220–240 AC	60–50	500 $\pm$ 8%	13–20	> 80	70
186449	ECXd 250.153	K52	12	220–240 AC	70–60	250 $\pm$ 8%	27–48	> 80	70
186415	ECXd 350.130	K53	18	220–240 AC	100–90	350 $\pm$ 8%	32–52	> 85	80
186450	ECXd 700.134	K53	18	220–240 AC	95–85	700 $\pm$ 8%	16–26	> 85	70
186416	ECXd 700.131	K53	25	220–240 AC	140–120	700 $\pm$ 8%	22–36	> 85	80
186451	ECXd 700.155	K53	36	220–240 AC	190–170	700 $\pm$ 8%	32–52	> 83	80

EasyLine LED Drivers

350/500/700 mA

Dimensions (LxVxH): 122.8x45x19 mm (K52)
166x52x24 mm (K54)

Power factor at full load: > 0.5 or > 0.95 (186353)

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

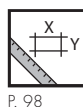
Max. voltage without load: < 60 V

Ambient temperature: –15 to 45 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186341	ECXe 350.078	K52	12.6	220–240 AC	100–70	350 $\pm$ 5%	8.4–36	> 83	75
186349	ECXe 500.082	K52	15	220–240 AC	90–70	500 $\pm$ 5%	8–30	> 83	75
186431	ECXe 350.142	K52	20	220–240 AC	110–95	350 $\pm$ 5%	16–57	> 85	70
186350	ECXe 700.083	K52	20.3	220–240 AC	115–100	700 $\pm$ 5%	8–29	> 83	75
186353	ECXe 700.086	K54	25.2	220–240 AC	130–115	700 $\pm$ 5%	22–36	> 88	70

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EasyLine LED Drivers IP67

700–2100 mA

Dimensions (LxVxH): 185.5x49.4x40.6 mm (M56)
216x68.6x46.3 mm (M58)
206x68.6x37 mm (M58.1)

Power factor at full load: > 0.9

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

Max. voltage without load: 75 / 85 V

Ambient temperature: –30 to 50 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage (V) 50–60 Hz AC (V)	Mains current mA	Current output DC (mA)	Voltage output DC (V)	Efficiency at full load % (230 V)	Max. casing temperature °C
186452	ECXe 700.156	M56	50	220–240	255–235	700 $\pm$ 5%	35–72	> 88	75
186453	ECXe 1050.157	M56	75	220–240	380–350	1050 $\pm$ 5%	35–72	> 88	75
186454	ECXe 1400.158	M58	100	220–240	510–470	1400 $\pm$ 5%	30–72	> 90	75
186455	ECXe 1700.159	M58	125	220–240	625–580	1700 $\pm$ 5%	30–72	> 90	75
186456	ECXe 2100.160	M58.1	150	220–240	750–690	2100 $\pm$ 5%	45–72	> 90	75

iProgrammer

For programming LED drivers

The iProgrammer is designed to let you configure LED drivers using the 3C function.



Using DALI commands, the iProgrammer enables various functions to be configured on all VS LED drivers that feature the "3C" symbol. As an example, not only can the current be set to a precise level, but programming functions for the street lighting zone can also be transferred.

Dimensions (LxVxH): 123.4x79.4x32.6 mm

Configuration interface: DALI/USB

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

Max. power consumption: 5 W

Degree of protection: IP20

Ambient temperature: 5 to 50 °C

Ref. No.: 186428



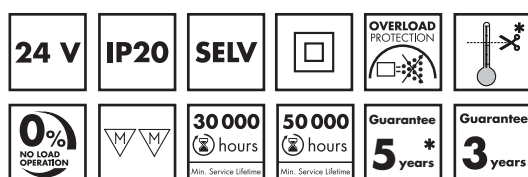
ComfortLine LED Constant-voltage Drivers 24 V

Dimensions (LxWxH):	153x41x32 mm (K53) 180x52x30 mm (K55.1) 182x42x18 mm (K62 with cord grip) 300x40x30 mm (K60)
Power factor:	> 0.9 at load > 50% > 0.9 at full load (186129)
Mains voltage:	220–240 V $\pm 10\%$, 50–60 Hz
DC operation:	176–264 V DC, 0 Hz (only EDXe 150)
Ambient temperature:	–20 to 45 °C (K60/K62) –15 to 45 °C (K53/K55.1)



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24 V



Ref. No.	Type	Casing	Max. output W	Mains voltage 0 Hz, 50–60 Hz V	Output voltage V	Mains current mA	Current output A	Max. casing temperature °C
186129*	EDXe 120/24.009	K62	20	220–240	24	230–210	0.0–0.85	75
186624	EDXe 130/24.057	K53	30	220–240	24	160–140	1.25	80
186625	EDXe 160/24.058	K55.1	60	220–240	24	320–280	2.5	85
186626	EDXe 175/24.059	K55.1	75	220–240	24	395–345	3.125	85
186627	EDXe 1120/24.060	K60	120	220–240	24	700–540	5.00	90

EasyLine LED Constant-voltage Drivers 24 V – IP67

Dimensions (LxWxH):	131x42x34 mm (K52.1) 180x49x32 mm (K30.2) 206x68.6x37 mm (M58.1)
Power factor:	> 0.9 at load > 50%
Mains voltage:	220–240 V $\pm 10\%$, 50–60 Hz
Ambient temperature:	–15 to 45 °C –15 to 60 °C**



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC [V]	Output voltage V	Mains current mA	Output current A	Efficiency at full load % (230 V)	Max. casing temperature °C
186432*	EDXe 175/24.040	K30.2	75	220–240 AC	24	385–355	0.0–3.125	> 89	80
186433	EDXe 1100/24.041	M58.1	100	220–240 AC	24	505–465	0.0–4.2	> 90	80
186434	EDXe 1150/24.042	M58.1	150	220–240 AC	24	760–700	0.0–6.25	> 90	80
186633*	EDXe 130/24.066	K52.1	30	220–240 AC	24	160–140	1.25	> 88	80
186634**	EDXe 1200/24.067	M58.1	200	220–240 AC	24	1000–900	8.3	> 92	85

12 V



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EasyLine LED Constant-voltage Drivers 12 V

Dimensions (LxWxH): 81.6x42,5x23 mm (K51)
103.5x36x22 mm (K39.1)
123x45x19 mm (K52)
180x45x19 mm (K55.1)
300x40x30 mm (K60)

Power factor
> 0.55 C at full load (K51)
> 0.57 C at full load (K39.1)
> 0.5 C at load > 50% (K52)
> 0.9 at load > 50% (K55.1)
> 0.9 at load > 50% (K60)

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

Ambient temperature: –15 to 45 °C*
–20 to 50 °C**



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC [V]	Output voltage V	Mains current mA	Current output A	Efficiency at full load % (230 V)	Max. casing temperature °C
186412*	EDXe 106/12.037	K51	6	220–240 AC	12	70–60	0.0–0.5	72	75
186204**	EDXe 112/12.033	K39.1	12	220–240 AC	12	120	0.0–1.0	80	75
186620*	EDXe 120/12.053	K52	20	220–240 AC	12	200–190	1.68	83	75
186621*	EDXe 160/12.054	K55.1	60	220–240 AC	12	305–280	5	88	80
186622*	EDXe 175/12.055	K55.1	75	220–240 AC	12	380–350	6.25	88	85
186623*	EDXe 1100/12.056	K60	100	220–240 AC	12	600–440	8.40	87	90

EasyLine LED Constant-voltage Drivers 12 V – IP67

Dimensions (LxWxH): 131x42x34 mm (K52.1)
155x50x32 mm (K53.1)
206x69x37 mm (M58.1)

Power factor: > 0.9 at load > 50%

Mains voltage: 220–240 V $\pm$ 10%, 50–60 Hz

Ambient temperature: –15 to 45 °C



Ref. No.	Type	Casing	Max. output W	Mains voltage 50–60 Hz AC [V]	Output voltage V	Mains current mA	Current output A	Efficiency at full load % (230 V)	Max. casing temperature °C
186628	EDXe 130/12.061	K52.1	30	220–240 AC	12	160–145	2,50	83	80
186629	EDXe 175/12.062	K53.1	75	220–240 AC	12	390–350	6,25	88	80
186630	EDXe 1100/12.063	M58.1	100	220–240 AC	12	540–480	8,34	88	80
186631	EDXe 1150/12.064	M58.1	150	220–240 AC	12	800–720	12,5	88	80

Luminaire Protection Device

SP 230/10 K

Suitable for luminaires of protection class II

Type 3 product

With integrated thermal fuse

Dimensions (LxWxH): 32 x22x13 mm

Connecting: solid wire, length: 50 mm

Mains voltage: 220–240 V $\pm 10\%$, 50–60 Hz

Casing temperature: max. 80 °C

Ambient temperature: min. –30 °C



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Ref. No.	Type	Max. impulse voltage U_{OC}		Discharge current (8/20 μ s)		Protection level at discharge current of 1000 A	Fuse max. (A)
		V		I_N (A)	$I_{max.}$ (A)		
147230	SP 230/10 K	10000		5000	10000	≤ 850 V	25

SPC 230/10 K and SPC 230/10 K/i

If the protective luminaire component overloads, the connected lighting circuit will be interrupted. This cut-out function makes it easier to detect the end of life of the protective component, facilitates quick replacement by maintenance staff and provides reliable protection for lighting components.

Suitable for luminaires of protection class II

Type 3 product

With integrated thermal fuse

Dimensions (LxWxH): 53x28x27 mm (SPC 230/10 K)
79x34x27 mm (SPC 230/10 K/i)

Mains voltage: 220–240 V $\pm 10\%$, 50–60 Hz

Casing temperature: max. 80 °C

Ambient temperature: min. –30 °C

Fixation: M8x10



Ref. No.	Type	Max. load current A	Max. impulse voltage U_{OC}		Discharge current (8/20 μ s)		Protection level at discharge current of 1000 A	Fuse max. A
			V		I_N (A)	$I_{max.}$ (A)		
142736	SPC 230/10 K	16	10000		5000	10000	≤ 850 V	16
142737	SPC 230/10 K/i	16	10000		5000	10000	≤ 1000 V	16

Luminaire Protection Device

SPC 3/230/10 K/i

At the end of the service life time of a protective luminaire component, the voltage supply to the LED driver is permanently disrupted; this status is shown by the green indicator LED going out.

Suitable for luminaires of protection class I

Type 3 product

Dimensions (LxVxH): 74x34x27 mm

Fixation: M8x10

Mains voltage: 100–277 V $\pm 10\%$, 50–60 Hz

Max. load current: 16 A

Casing temperature: max. 80 °C

Ambient temperature: min. –30 °C



P. 100



Ref. No.	Type	Max. load current A	Protection level at discharge current of 1000 A		Max. impulse voltage U_{OC} V	Discharge current (8/20 μ s)	
			L-N (V)	L-PE (V)		I_N (A)	I_{max} (A)
142738	SPC 3/230/10 K/i	16	< 1100	1520	10000	5000	10000



Inrush Current Limiter ESB-6K

Limits capacitive inrush currents of electronic ballasts and LED drivers or converters

Casing material: PC

Dimensions (LxVxH): 55x28x27 mm

Fixation: M8x10

Mains voltage: 220–240 V $\pm 10\%$, 50–60 Hz

Casing temperature: max. 80 °C

Ambient temperature: min. –30 °C

Ref. No.	Type	Power consumption W	Max. direct current A	Limiting resistor Ω	Period of limitation ms
149820	ESB-6K	0.25	6	20	approx. 18

Automatical Power Switch for LED Drivers – PR 12 K LC

The PR 12 K LC can be used for power switching of LED drivers with LST control input.

A control phase is not needed.

Once it's connected to the mains supply voltage the power switch will switch automatically.

The power switch complies with the specification of DIN EN 61347 and is suitable for the application in luminaires of protection class I and II.



P. 100

Casing material:	PC
Dimensions (LxWxH):	76x34x30 mm
Fixation:	M8x10
Mains voltage:	220–230 V ±10%, 50 Hz 220 V ±10%, 60 Hz*
Casing temperature:	max. 80 °C
Ambient temperature:	min. –30 °C



Ref. No.	Type	Max. switching capacity VA	Max. contact current (A)		Internal loss W	Inherent heating K	Switching time
			$\lambda = 0.5$	$\lambda = 1$			
142170	PR 12 K LC	3000	8	12	< 1	< 12	selectable

* 120–240 V ±10% available on request

Switch Units for Electronic Operating Devices with 1–10 V Interface

Power reduction PR 1–10 V K LC for lighting systems without a control phase

This switch unit can be used to effect power reduction in lighting systems that do not feature a control phase.

Casing material:	PC
Dimensions (LxWxH):	56x28x27 mm
Fixation:	M8x10
Fastening:	plastic male nipple with pre-assembled washer and nut
Casing temperature:	max. 80 °C
Ambient temperature:	min. –30 °C



Ref. No.	Type	Externally (on site) connected resistor ($R_{ext.}$) k Ω (min. 0.1 W)	Inherent heating K
149993	PR 1–10 V K LC	1–70	< 10

Resistor Networks for LED Drivers

These resistor networks are used to adjust the output currents of LED drivers. 255 different resistance values can be adjusted in 10-Ohm steps within a range from 0 to 2550 Ohm by connecting the SU 1-10 V K and PR 1-10 V K LC power switches.

As an example, this makes it possible to even out differences in luminous flux common to LED luminaires.

The component is designed for use in protection class II luminaires.



P. 101



Casing material:	PC
Dimensions (LxWxH):	32x25x15 mm
Connection leads, solid:	0.5 mm ² , length: 50 mm
Casing temperature:	max. 80 °C
Ambient temperature:	min. -30 °C

Ref. No.	Type	Number of dip switch pcs.	Max. internal loss of resistors W	Max. voltage at resistors V
149800	R10-1280	8	0.25	200

Resistor network for LED driver with LEDset interface

Ref. No.	Type	Number of dip switch pcs.	Max. internal loss of resistors W	Max. voltage at resistors V
149802	R6,25k-70k	8	0.25	200

Emergency Lighting Modules

12–50 V, 20–130 V or 30–220 V voltage output

Weekly automatic self-diagnosis and daily testing of system status

Battery charge is checked during regular testing cycles

Optical status display via two-colour LED

Dimensions (LxWxH): 210x31.4x21.5 mm

Ambient temperature: 5 to 50 °C

Power consumption: 4 VA (EMCc 180)

3.5 VA (EMCc 60)

Constant power output: > 3 W

Mains voltage: 220–240 V ±10%, 50–60 Hz



Choice of rechargeable battery depends on the operating device.

Charging time of rechargeable batteries: max. 24 hrs.

Rechargeable batteries: nickel-cadmium (NiCd)

Ref. No.: 188824 Type: EMCc 180

4.8V/4.5Ah

Ref. No.: 188823 Type: EMCc 60

4.8V/1.8Ah



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Ref. No.	Type	Nominal operating period hrs.	Mains current at 230 V mA	Current output mA	Voltage output V
186498*	EMCc 180.003	3	22	250–60	12–50
186499	EMCc 180.004	3	22	150–23	20–130
186500	EMCc 180.005	3	22	100–13	30–220
186495*	EMCc 60.000	1	16	250–60	12–50
186496	EMCc 60.001	1	16	150–23	20–130
186497	EMCc 60.002	1	16	100–13	30–220

Holders

For rechargeable batteries for emergency LED lighting modules

It is recommended to use two holders per rechargeable

battery to ensure optimum hold.

For rechargeable batteries Type: 4.8V/4.5Ah NiCd

Material: PBT

Ref. No.: 188828

For rechargeable batteries Type: 4.8V/1.8Ah NiCd

Material: PC

Ref. No.: 188827





DimONE

Digital phase-cut LED dimmer

Stylish full protected trailing-edge dimmer device for residential use. Adjustable minimum level against flickering.

Suitable for all dimmable phase-cut LED products and halogen lamps. Optimized for dimming of retrofit LED products.

Dimensions (LxVxH): 82x82x44 mm
 Mains voltage: 220-240 V $\pm$ 10%, 50 Hz
 Rated power: 3-300 W
 Ambient temperature: 0 to 35 °C
 Ref. No.: 186607



DimONE Bluetooth® LED dimmer

With the following functions

- Scene Mode (5 light moods)
- Timer Mode (5 scheduler profiles per day)
- Holiday Mode (random program)
- Away Mode (leaving home function)
- Zone Mode (controls a group of dimmers)

Ref. No.: 186608



Light Controller XS

For luminaire installation

These light control devices are suitable for operation in luminaires.

Functions

Automatic and semi-automatic motion detection, constant light control, push function (10 EBs synchronously), ON/OFF function, control option (broadcast)

Dimensions (LxWxH):	83x30x19 mm
Configuration interface:	dip switch (on the device)
Ambient temperature:	5 to 50 °C
Max. power consumption:	0.8 W
Mains connection:	220–240 V AC/DC, 0/50–60 Hz
1 DALI bus:	max. current on DALI bus = 20 mA



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Ref. No.	Max. No. of operating devices pcs./controller	Max. No. of MultiSensors pcs./controller	EnOcean
186220	10	4	no

Light Controller S

For independent operation

These light control devices are suitable for independent operation (e.g. in false ceilings).

Functions

Automatic and semi-automatic motion detection, constant light control, push function (64 EBs synchronously), ON/OFF function, stairwell function (timer), control option (broadcast)

Dimensions (LxWxH):	175x42x31.5 mm
Configuration interface:	dip switch (on the device)
Ambient temperature:	5 to 50 °C
Max. power consumption:	6.5 W
Mains connection:	220–240 V AC/DC, 0/50–60 Hz
1 DALI bus:	max. current on DALI bus = 200 mA



Ref. No.	Max. No. of operating devices pcs./controller	Max. No. of MultiSensors pcs./controller	EnOcean
186210	64	36	no



Extender

To extend LiCS Indoor system

An extender enables the maximum number of DALI-compliant control gear units within a standard DALI system to be increased.

Functions

Connection of up to 64 ballasts to a single DALI address
Extender Flex serves to transfer characteristics, which permit light to be staged in a more flexible manner, to the connected DALI addresses. Example: group devices can be dimmed to varying degrees.



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Dimensions (LxWxH):	175x42x31.5 mm
Configuration interface:	via a DALI controller
Ambient temperature:	0 to 50 °C
Max. power consumption:	6.5 W
Mains connection:	220-240 V AC/DC, 0/50-60 Hz
1 DALI bus to	
3 terminal pairs:	max. current on the DALI bus = 200 mA



Ref. No.	Max. No. of secondary control gear units per Extender pcs./Extender	Functions
186194	64	Broadcast Classic
186481	64	Broadcast Flexible: a compilation of characteristics can be made available on request

Light Controller XSW-E6

Suitable for installation in luminaires/ on mounting rails

These light controllers are suitable for installation in luminaires or on mounting rails.

Functions of the Network version

Wireless training and coupling of the system, integration into Light Controller IP network (Ref. No.: 186485 and 186340), centralized configuration.

Functions of Stand-alone mode

Teach-in function of EnOcean modules, push function (6 synchronised drivers/EBs), ON/OFF function, individual addressing option, group formation, scenes, light values

Software available for download:

see product page under www.vossloh-schwabe.com

Requirement for Stand-alone mode:

EnOcean USB drive (available on request)

Dimensions (LxWxH): 146.7x21x18 mm

Configuration interface: wireless (EnOcean)
and mode dip switch

Ambient temperature: 5 to 50 °C

Max. power consumption: 1 W

Mains connection: 220–240 V AC/DC,
0/50–60 Hz

1 DALI bus: max. current on DALI bus
= 20 mA
(see the respective data sheet
for current consumption of
individual components)



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Ref. No.	Max. No. of operating devices pcs./controller	Max. No. of MultiSensors pcs./controller	EnOcean
186516	6	1	yes



Light Controller XSW-64

Wireless light controller

These light control devices are suitable for independent operation (e.g. in false ceilings).

Functions

Wireless training and coupling of the system, integration into Light Controller IP network (Ref. No.: 186485 and 186340), centralized configuration.



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Dimensions (LxWxH): 175x42x31.5 mm
 Configuration interface: wireless (EnOcean)
 Ambient temperature: 0 to 50 °C
 Max. power consumption: 6.7 W
 Mains connection: 220–240 V AC/DC, 0/50–60 Hz
 1 DALI bus: max. current on DALI bus = 200 mA
 (see the respective data sheet for current consumption of individual components)



Ref. No.	Max. No. of operating devices pcs./controller	Max. No. of MultiSensors pcs./controller	EnOcean
186605	64	36	yes

MultiSensors

To supplement LiCS Indoor system

Daylight and motion sensors increase both energy savings and convenience.

VS MultiSensors detect both light levels and motion. In addition, MultiSensors feature a space-saving design and were specifically developed to work with VS Light Controllers. No external power supply is required, as the sensors are supplied via the DALI bus.

Functions

Motion detection and monitoring of lighting levels. With built-in LED (red): the light flashes during configuration when the sensor is selected.

Configuration interface: via the Light Controller
Ambient temperature: 0 to 50 °C
DALI current consumption: 4 mA



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MultiSensor SM-E

For surface mounting

Dimensions (ØxH): 53x48.5 mm

Ref. No.: 186320



MultiSensor FM-E

For ceiling installation

With cord grip

Dimensions (ØxH): 40x43.8 mm

Ref. No.: 186321



MultiSensor IL-E

For luminaire installation

Dimensions (ØxH): 45x31.9 mm

Ref. No.: 186322





Industrial Sensors High Bay for Industrial Applications

To supplement LiCS Indoor system

Using DALI MovementSensors increases both energy savings and application flexibility.

Functions

Reliable HF motion detection with indication LED (red)
(MovementSensor)

Reliable monitoring of light levels with indication
LED (red) (BrightnessSensor)



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IP65



MovementSensor HB 65

For surface mounting

With cord grip

DALI current consumption: 2 mA

Ref. No.: 186311



BrightnessSensor IP65

For surface mounting

With cord grip

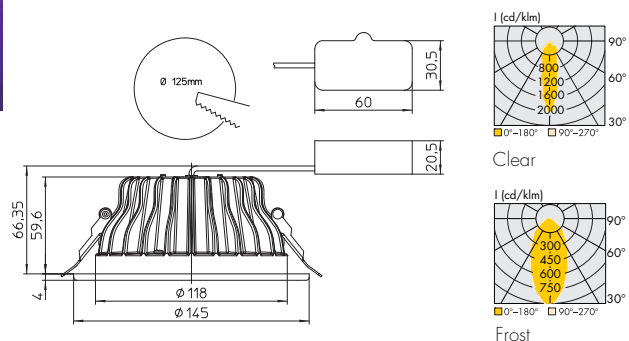
DALI current consumption: 4 mA

Ref. No.: 186370



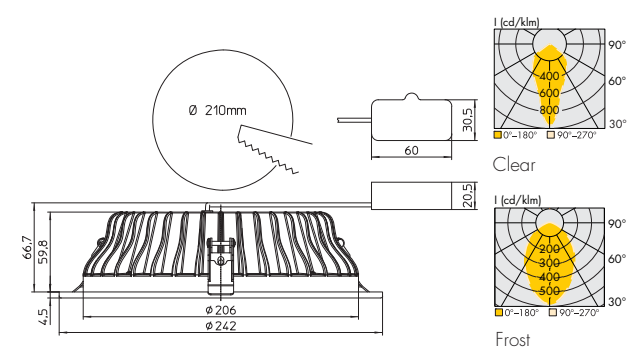
Product Drawings and LDCs

■ Prime K R



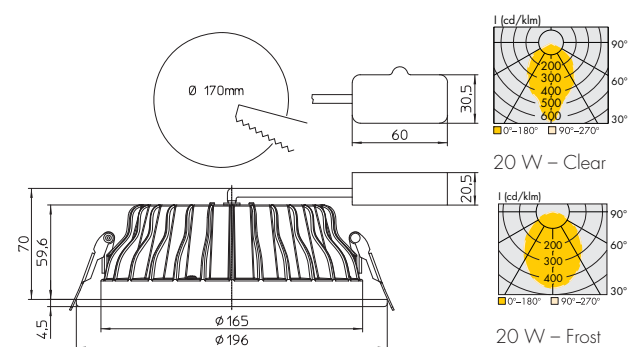
Prime K R - 4"

563107, 563109, 563111, 563108, 563110, 563112



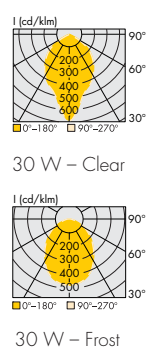
Prime K R - 6"

563119, 563121, 563123, 563120, 563122, 563124



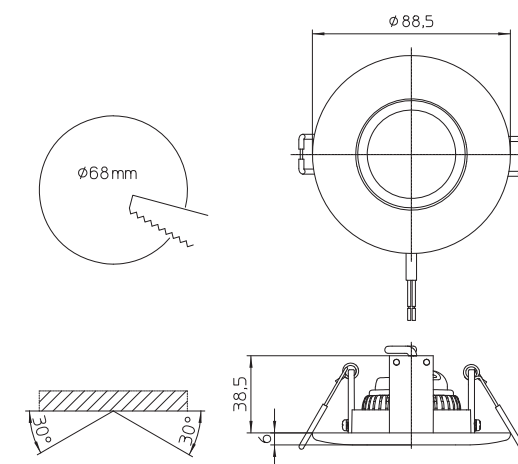
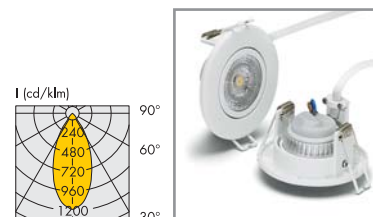
Prime K R - 8"

563113, 563115, 563117, 563114, 563116, 563118

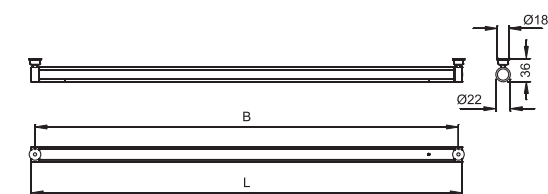
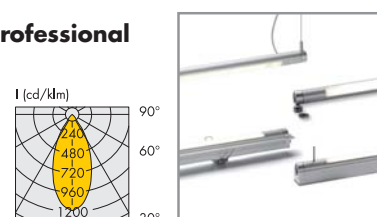


■ DecoLED

562284, 562282, 562285

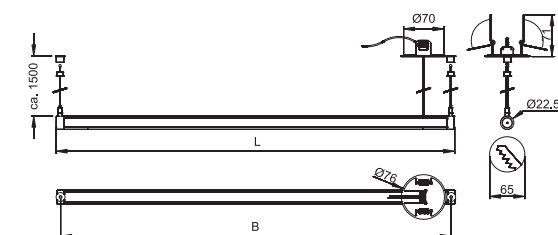


■ LED RegaLine Professional



Magnetic attachment

560557, 566089, 566090, 566091, 566092, 566093

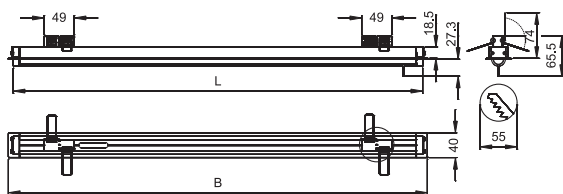


Suspension

566094, 566095, 566096, 566097, 566098, 566099

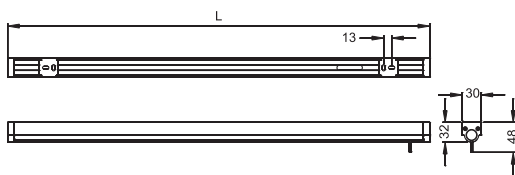
Product Drawings and LDCs

■ LED RegaLine Professional



Built-in

566100, 566101, 566102, 566103, 566104, 566105



Surface mounting

566106, 566107, 566108, 566109, 566110, 566111

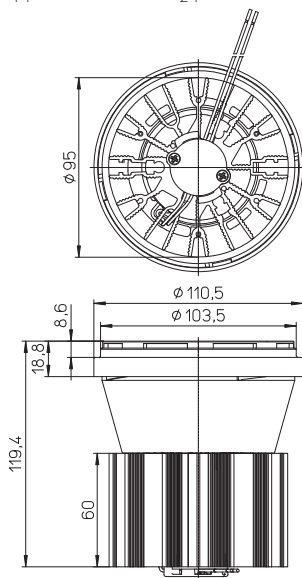
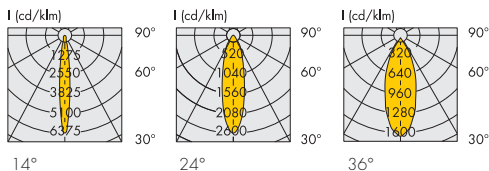
■ NEXT 111 R

Black LED Spot

561713, 561714, 561715, 561716, 561717, 561718

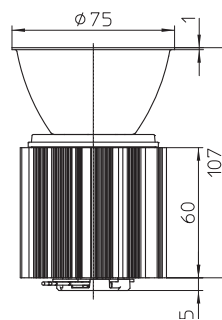
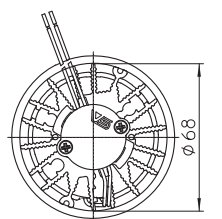
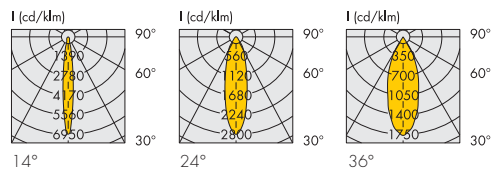
White LED Spot

561719, 561720, 561721, 561722, 561723, 561724

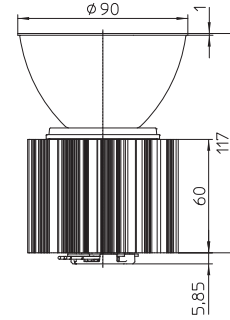
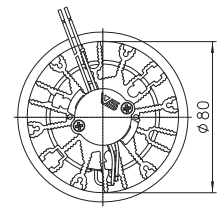


■ EVO90 R / EVO75 R

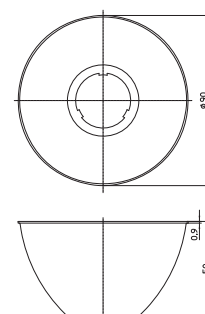
561751, 561752, 561753, 561754, 561755, 561756, 561757, 561758, 561759, 561760, 561761, 561762



EVO75 R



EVO90 R



Reflector D90 - H = 50

557359, 557360, 557361, 563446

Reflector D75 - H = 40

557152, 557153, 557154, 562157

Product Drawings and LDCs

ReadyLine COB

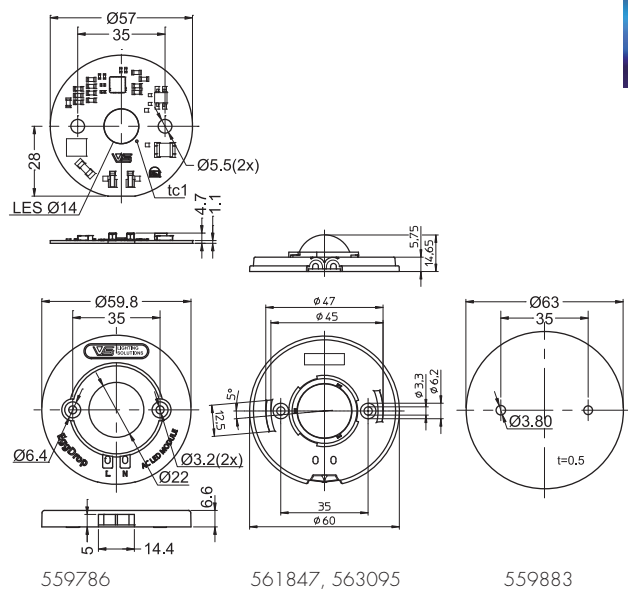
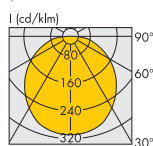
559772, 559774, 559782, 559784

Holders

559786, 561847

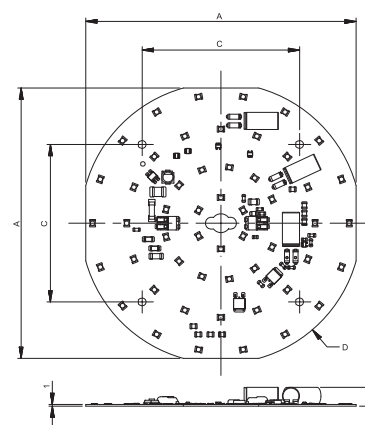
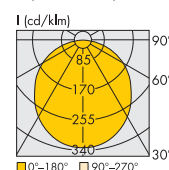
Thermal Pad

559883



ReadyLine DL 164, 250, 350

562159, 562160, 562163, 562163,
562167, 562168

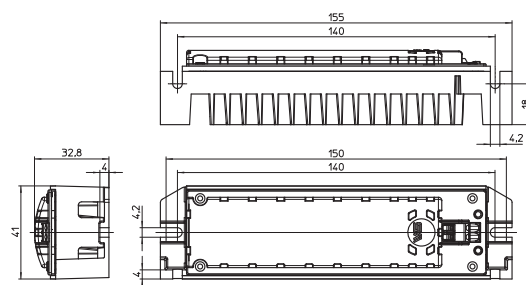
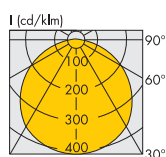


LED module	Dimensions			
	A	B	C	D
WU-M-538	158	12	92	164
WU-M-539	244	11.5	111.7	250
WU-M-540	340	15	152	350

ReadyLine S

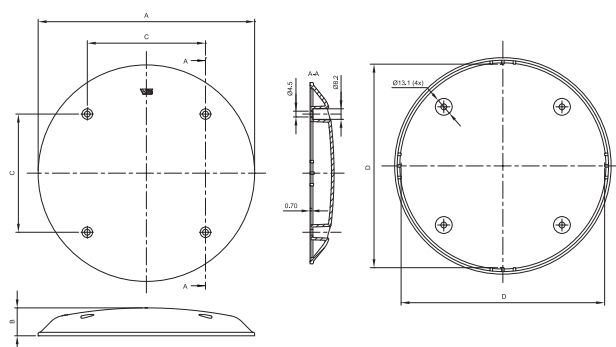
With heat sink

550438, 550439, 551983, 551984,
551985, 551986, 551987, 551988



Cover for ReadyLine DL 164, 250, 350

563858, 563859, 563860



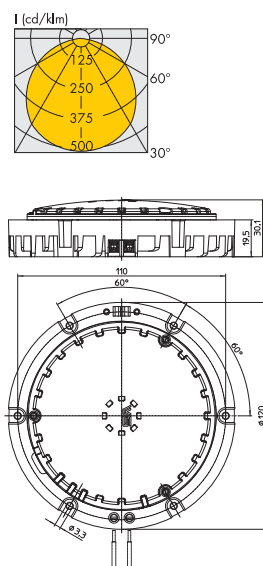
Cover for	Dimensions			
	A	B	C	D
WU-M-538	168.5	21.7	92	158.4
WU-M-539	255.5	22.2	111.7	244.2
WU-M-540	355.5	22.7	152	340.5

Product Drawings and LDCs

■ ReadyLine C 10

With heat sink

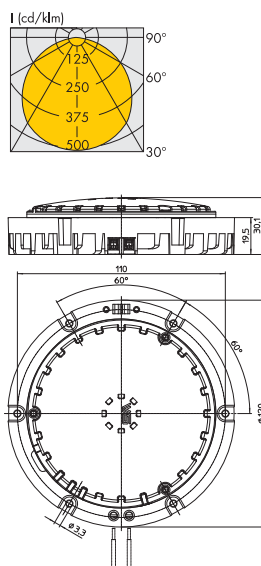
553828, 553829, 553830, 553831,
554951, 554952, 554953, 554954



■ ReadyLine C 07

With heat sink

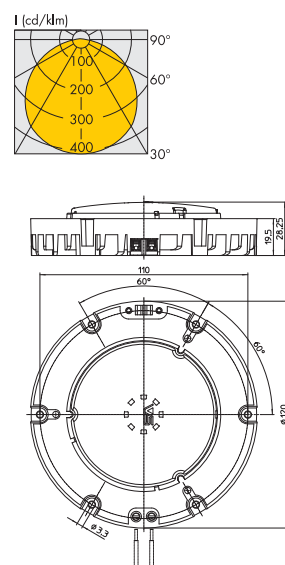
552019, 552020, 552021, 552022



■ ReadyLine C 08

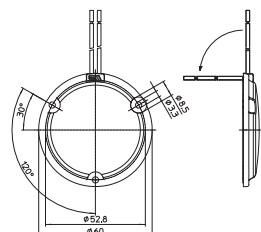
With heat sink

557843, 557844,
557845, 557846



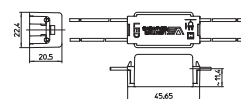
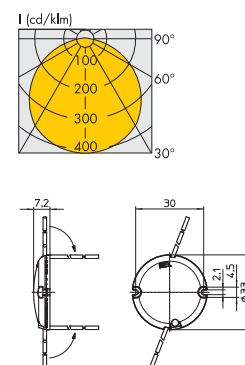
■ ReadyLine C 06

557835, 557837, 557839, 557841



■ ReadyLine C 03

563935, 563936, 563937, 563938



Product Drawings and LDCs

ShopLine 111

C125 - H1 = 60 mm

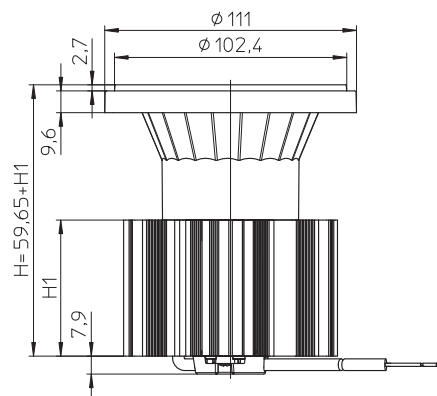
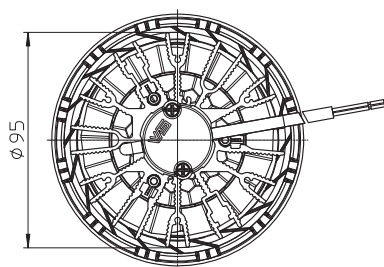
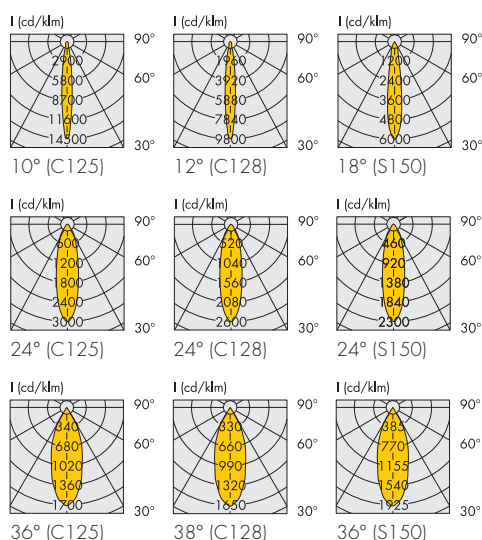
561664, 561665, 561666, 566134,
566135, 566136

C128 - H1 = 60 mm

566137, 566138, 566139, 566140,
566141, 566142

S150 - H1 = 80 mm

560835, 560840, 560836, 560841,
560771, 560772



NEXT 111

C125 - H1 = 40 mm

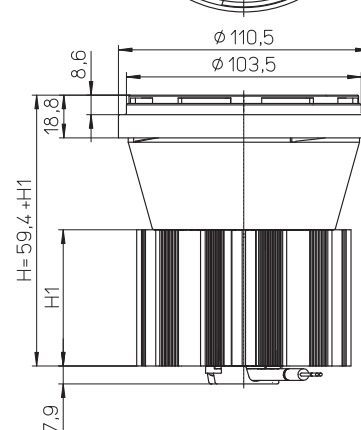
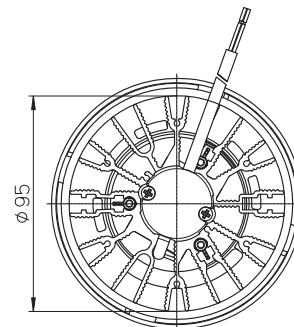
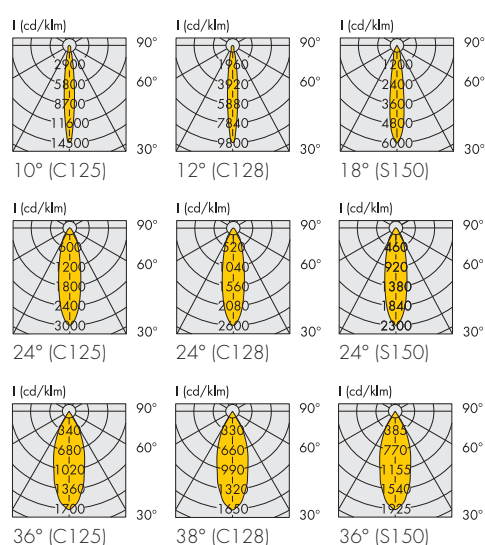
561701, 561702, 561703, 561704,
561705, 561706, 561707, 561708,
561709, 561710, 561711, 561712,
561822

C128 - H1 = 60 mm

561810, 561811, 561812, 561813,
561814, 561815, 561816, 561817,
561818, 561819, 561820, 561821,
561823

S150 - H1 = 80 mm

560866, 560873, 560867, 560874,
560868, 560876, 560887, 560892,
560888, 560893, 560889, 560894,
561824



Product Drawings and LDCs

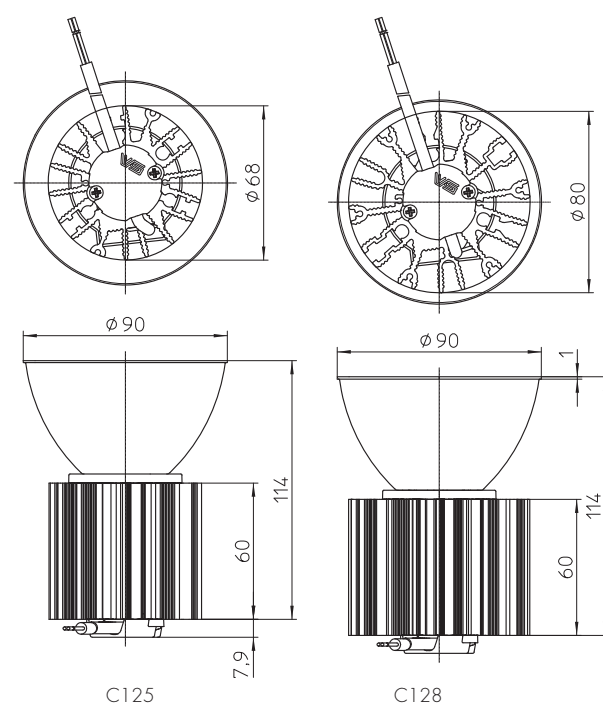
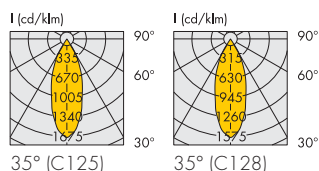
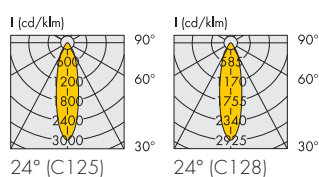
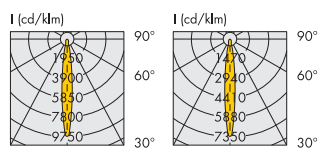
■ EVO90

C125

561745, 561746, 561747, 561748,
561749, 561750

C128

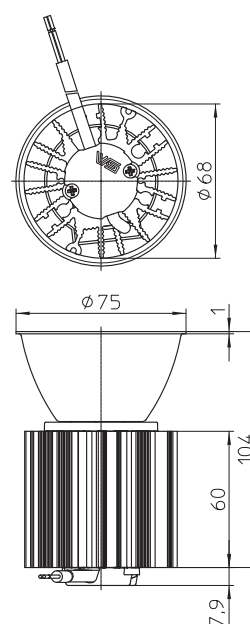
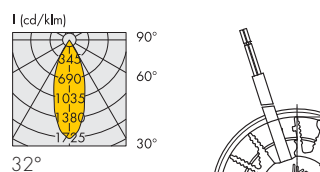
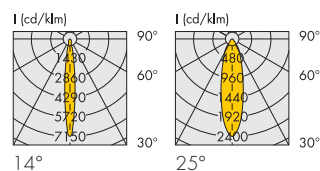
561837, 561838, 561839, 561840,
561841, 561843



■ EVO75

C125

561739, 561740, 561741, 561742,
561743, 561744



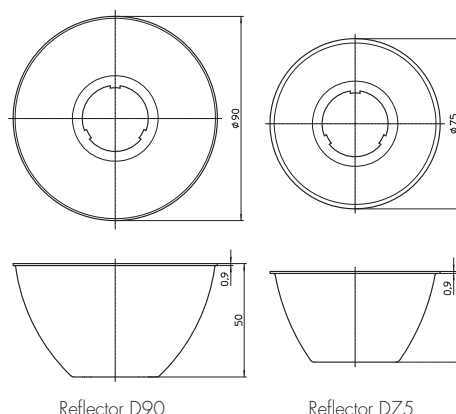
■ Reflectors for EVO, ReadyLine COB and NEXT 111 R

Reflector D90 - H = 50

557359, 557360, 557361, 563446

Reflector D75 - H = 40*

557152, 557153, 557154, 562157
(* not for NEXT 111 R)



Product Drawings and LDCs

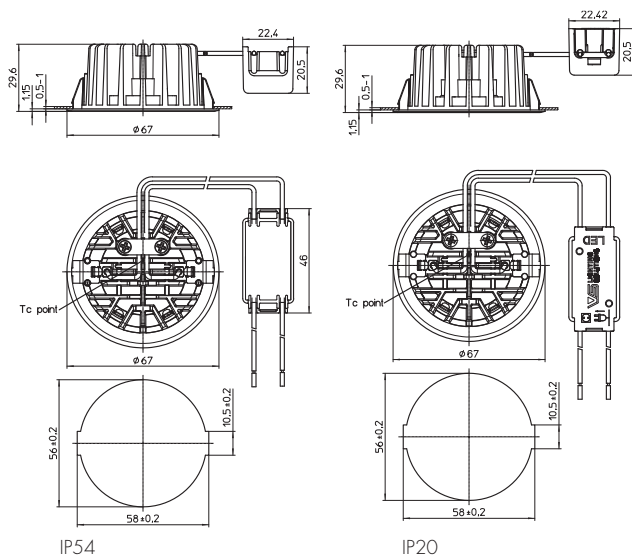
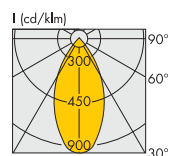
ReadyLine IP

LEDSpot – IP54

554956, 554957, 554958, 554959

LEDSpot – IP20

555016, 555017, 555019, 555020



ActiveLine LUGA C

Beam angle 25°

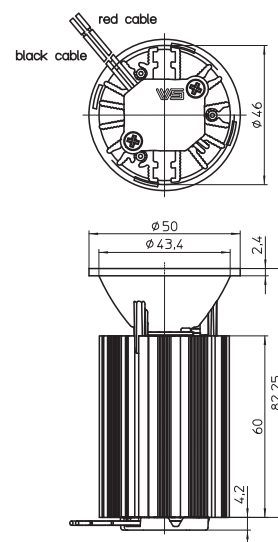
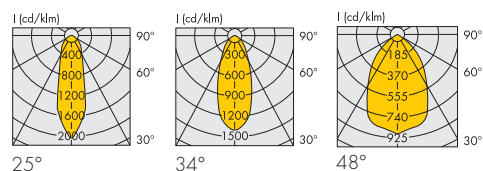
559379, 559382, 559385, 559406

Beam angle 34°

559380, 559383, 559386, 559407

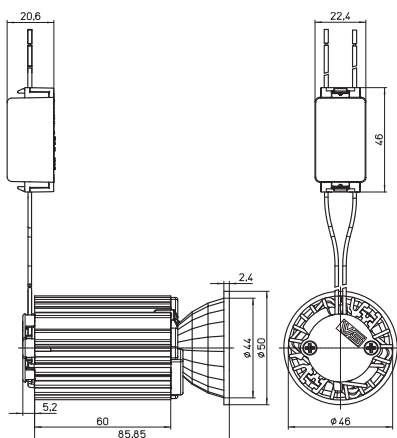
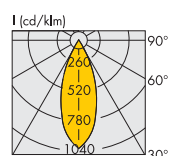
Beam angle 48°

559381, 559384, 559387, 559408



ReadyLine MR16

554960, 554961



Product Drawings and LDCs

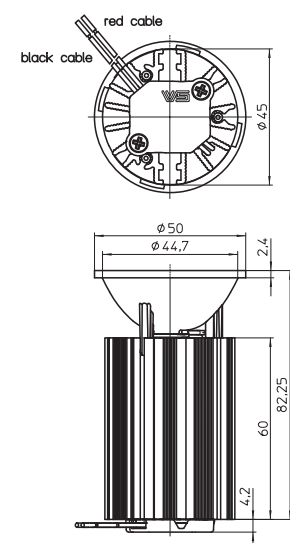
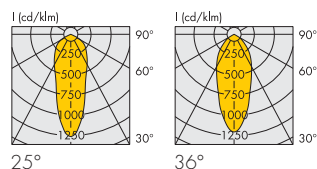
■ ActiveLine 9.1/ 7.1 /6.1

ActiveLine 9.1

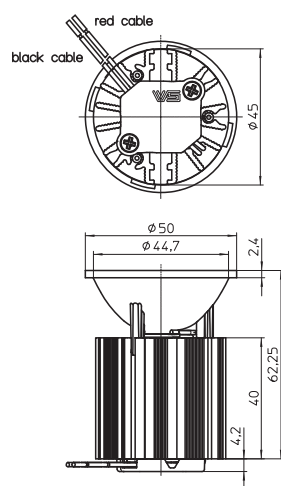
559442, 559443, 559444, 559445,
559446, 559447

ActiveLine 7.1

559436, 559437, 559438, 559439,
559440, 559441



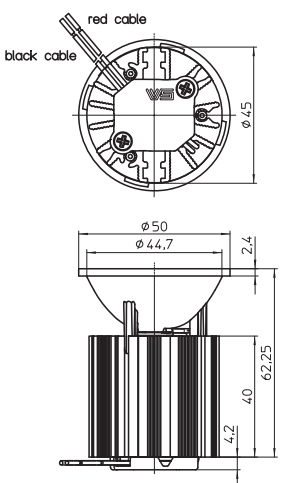
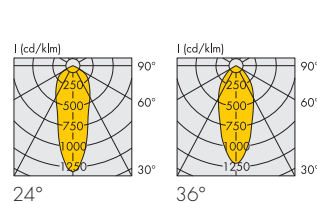
ActiveLine 9.1



ActiveLine 7.1

ActiveLine 6.1

559430, 559431, 559432, 559433, 559434, 559435



ActiveLine 6.1

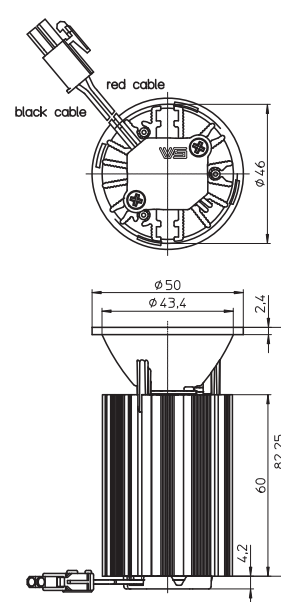
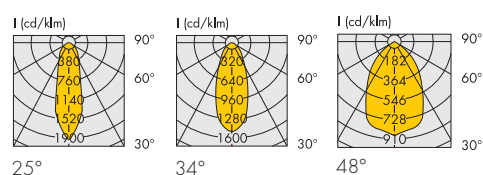
■ ActiveLine HALO

ActiveLine HALO 6.6 W

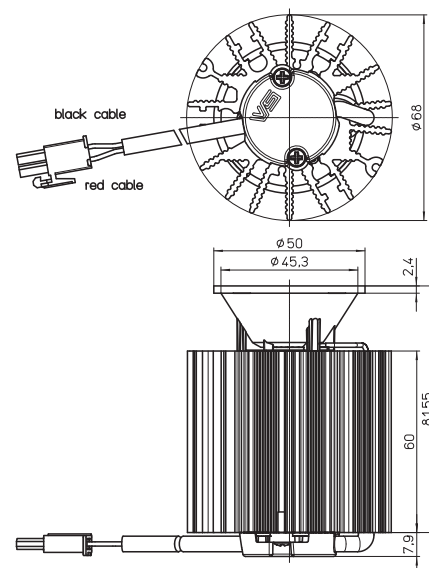
561865, 561866, 561867

ActiveLine HALO 12.8 W

559962, 559963, 559645



ActiveLine HALO 6.6 W



ActiveLine HALO 12.8 W

Product Drawings and LDCs

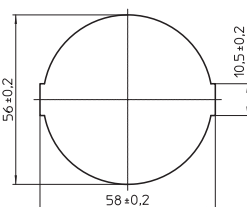
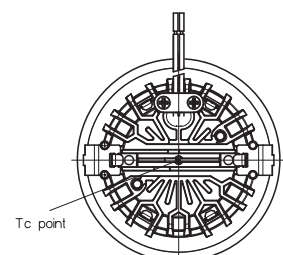
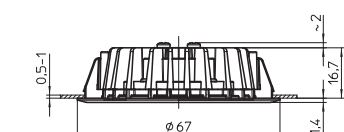
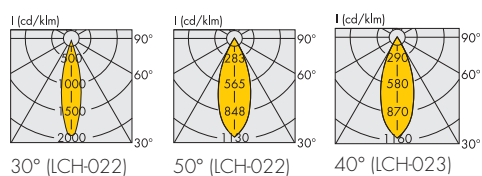
■ LEDSpot IPLine

LEDSpot IPLine (LCH-022)

561771, 561773, 561775, 561777

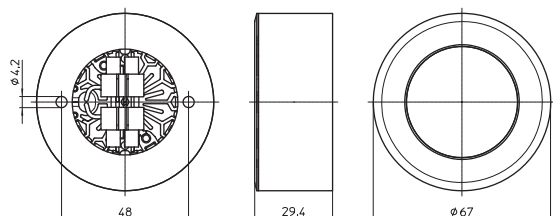
LEDSpot IPLine COB (LCH-023)

552088, 552090



Surface Kit with LEDSpot IPLine

559623, 559624



■ LEDSpot SmartLine COB

LCH-017

548912, 548913, 548915, 548916, 548917, 548919

LCH-019

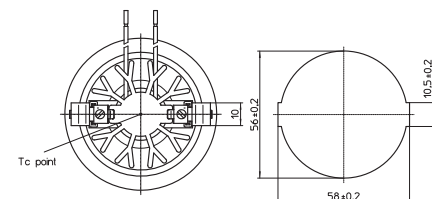
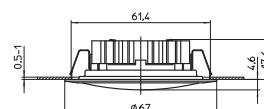
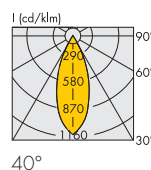
548920, 548921, 548923, 548924, 548925, 548927

LCH-020

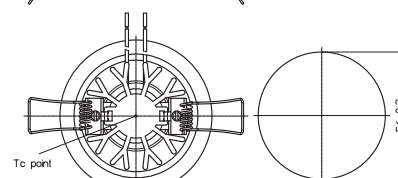
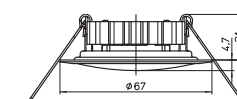
548928, 548931, 548932, 548935

LCH-021

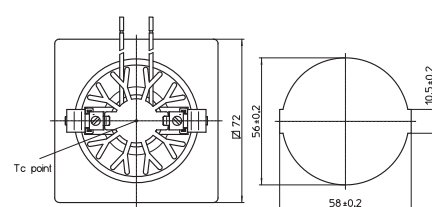
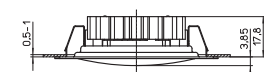
548936, 548939, 548940, 548943



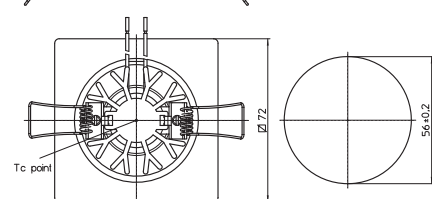
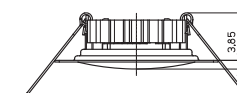
LCH-017



LCH-019



LCH-020



LCH-021

Product Drawings and LDCs

■ LEDSpot SmartLine

LCH-002

561778, 561779, 561780, 561783,
561809, 561785

LCH-004

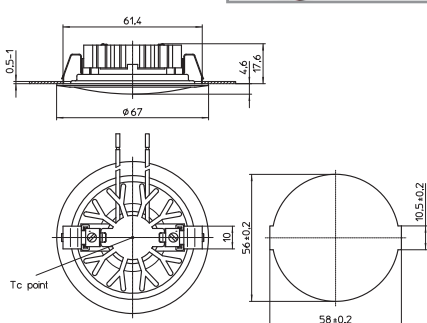
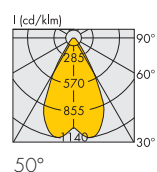
561788, 561789, 561790, 561794,
561795, 561796

LCH-008

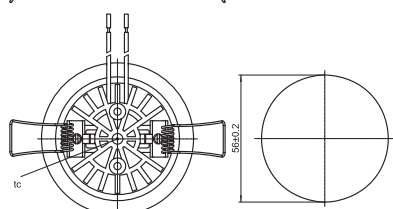
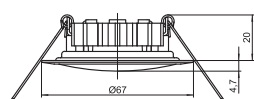
561781, 561782, 561786, 561787

LCH-009

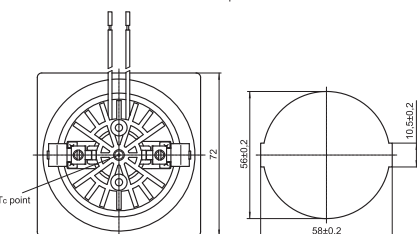
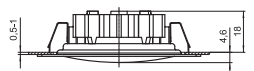
561791, 561792, 561797, 561798



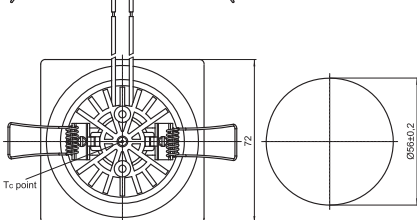
LCH-002



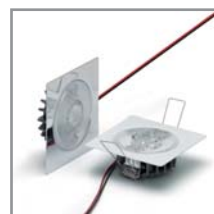
LCH-004



LCH-008

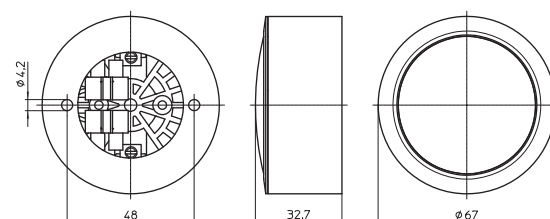


LCH-009



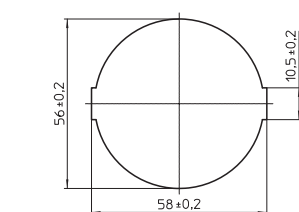
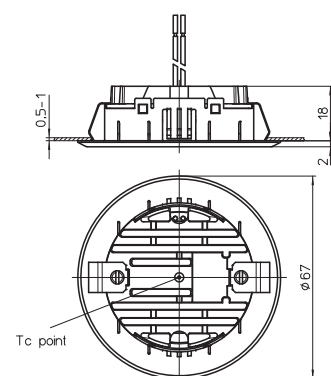
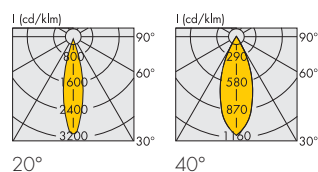
Surface Kit with LEDSpot SmartLine

557158, 559622



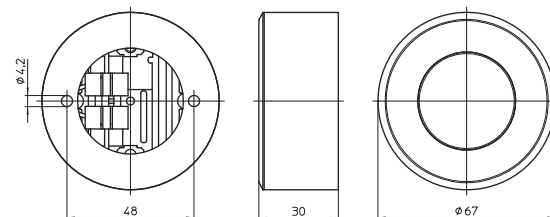
■ LEDSpot StartLine

561799, 561800, 561801, 561802,
561803, 561804, 561805, 561807



Surface Kit with LEDSpot StartLine

557157, 559621

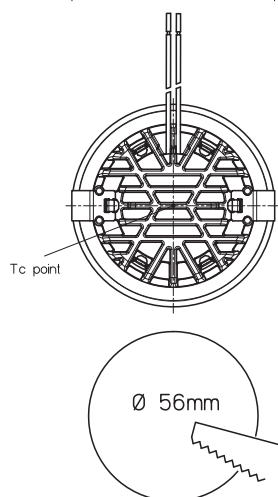
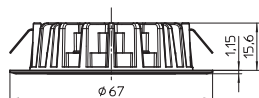
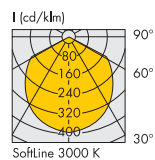


Product Drawings and LDCs

■ LEDSpot SoftLine

Constant-voltage 24 V

563861, 563863, 563865,
563862, 563864, 563866,
563336, 562742, 562885



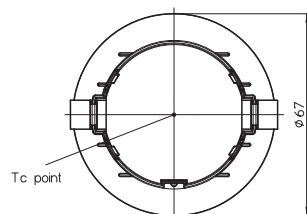
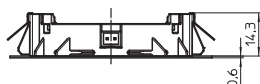
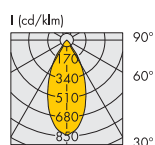
■ LEDSpot FlatLine

Constant-current

561580, 561582

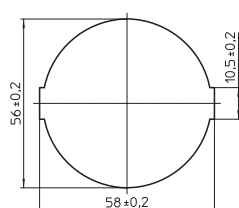
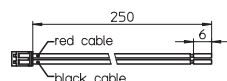
Constant-voltage 12 V

561588, 561590



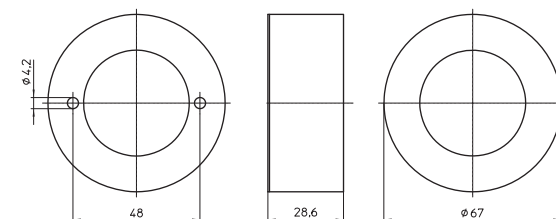
Cable set

561868



Surface Kit with LEDSpot FlatLine

561870, 561871



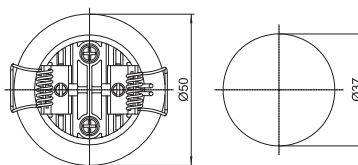
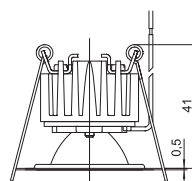
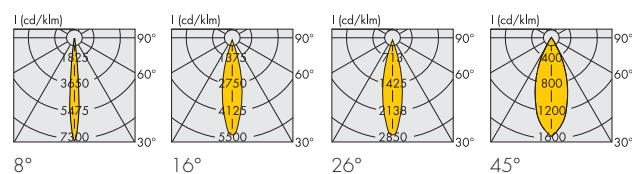
■ LEDSpot EffectLine

LCH-010

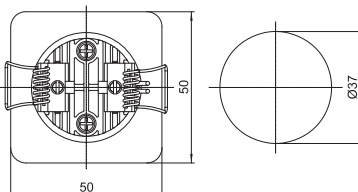
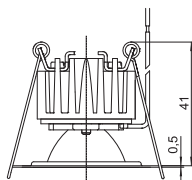
561808, 566143, 566144, 566145,
566146, 566147, 566148, 566149,
566158, 566159, 566160, 566161,
566162, 566163, 566164, 566165

LCH-011

5561831, 561833, 561834, 561835,
566150, 566151, 566152, 566153,
566154, 566155, 566156, 566157,
566166, 566167, 566168, 566169



LCH-010

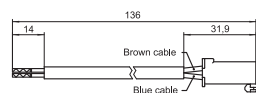


LCH-011

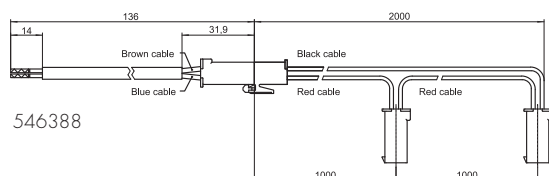
Product Drawings and LDCs

Lead Sets

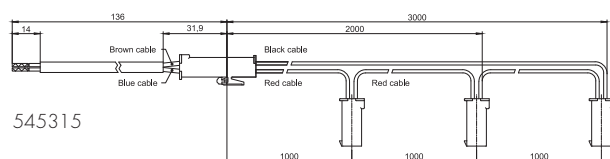
554929, 545029, 545315, 545316, 546388



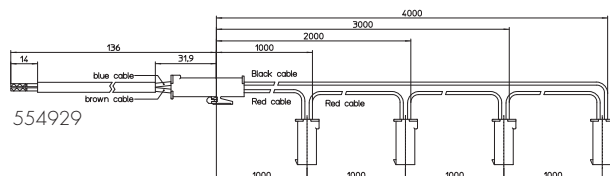
545029



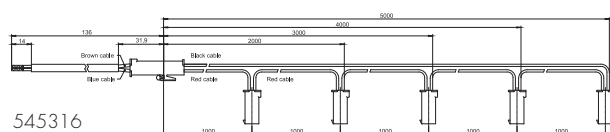
546388



545315



554929



545316

AluLED IP66/IP67

White

561698, 561699, 561700, 571115, 571116, 571117, 571125, 571126, 571127

RGB

571130, 571131, 571132

Blue

571120



AluLED IP20

White

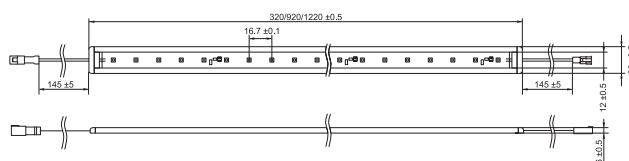
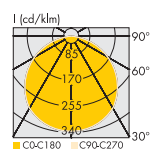
571142, 571143, 571144, 571145, 571146, 571147, 571133, 571134, 571135, 571152, 571153, 571154

RGB

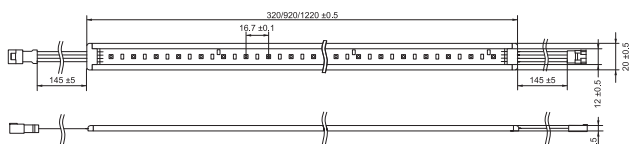
571139, 571140, 571141

Blue

571157



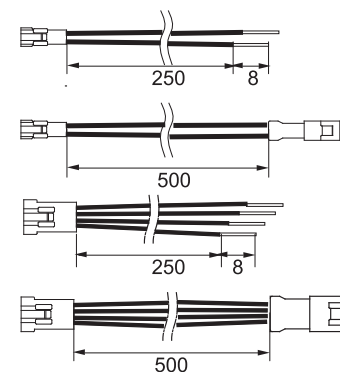
White / Blue



RGB

EasyConnect - Cable for AluLED

543426, 543427, 543428, 543429

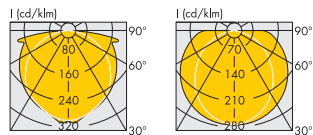


Product Drawings and LDCs

■ LED Line AluFix LUGA RX

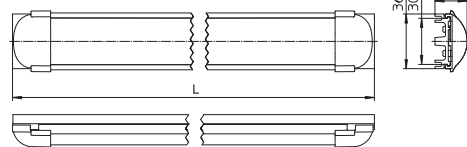
LED Line AluFix LUGA RX – Cover

305 mm: 561392, 561395, 561401, 561404
586 mm: 561410, 561413, 561419, 561422



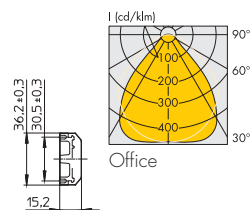
With clear cover

With diffuse cover



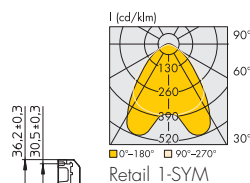
LED Line AluFix LUGA RX – Optics Office

305 mm: 561482, 561485
586 mm: 561491, 561494



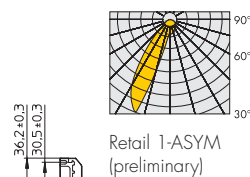
LED Line AluFix LUGA RX – Optics Retail 1-SYM

305 mm: 561527, 561530
586 mm: 561536, 561539



LED Line AluFix LUGA RX – Optics Retail 1-ASYM

305 mm: 561572, 561575
586 mm: 562288, 562291



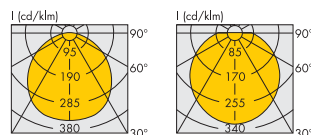
■ LED Line AluFix SMD Gen. 2 – Cover

305 mm

561307, 561308, 561311, 561312

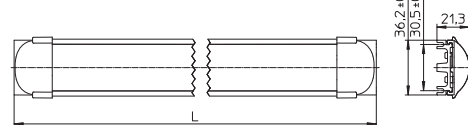
586 mm

561315, 561316, 561319, 561320



With clear cover

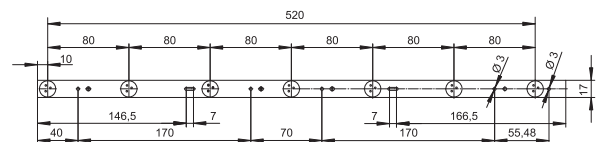
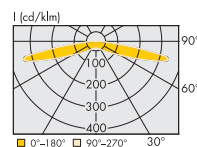
With diffuse cover



■ LED Line SMD LightBar

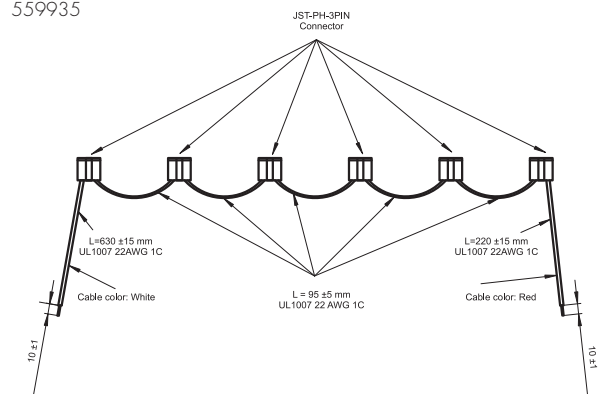
LED Line SMD LightBar

559932, 559933

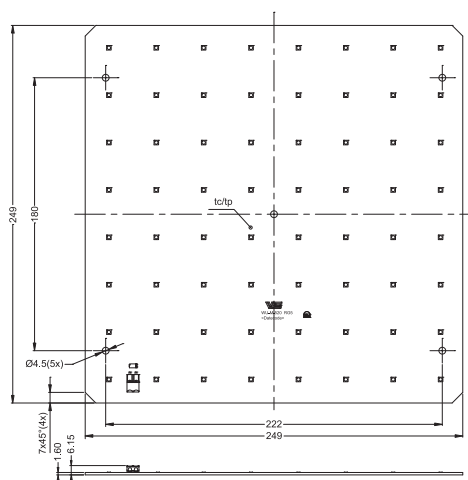
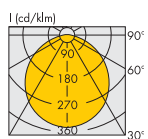


Connection lead

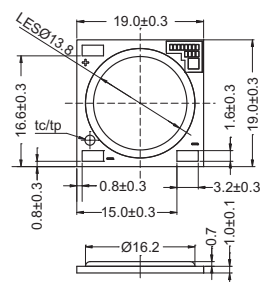
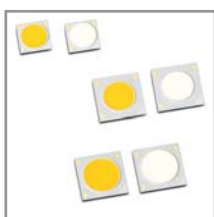
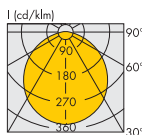
559935



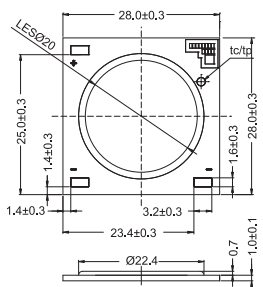
561599, 561600, 561601, 561602



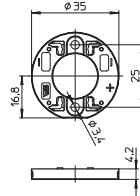
562225, 562229



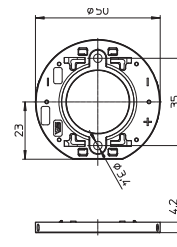
562259, 562263



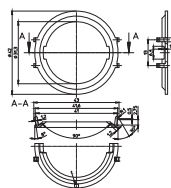
Ø 35 mm
559165



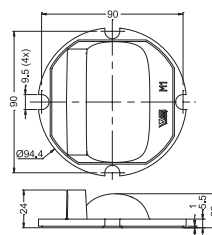
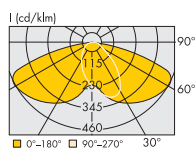
Ø 50 mm
559164



Ring reflector
560347



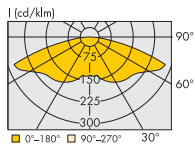
COB silicone optics M-Class (M1)
559042



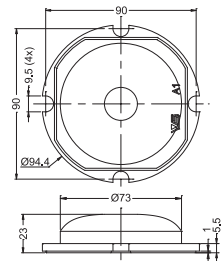
Product Drawings and LDCs

■ Optics for LUGA Shop Gen. 5

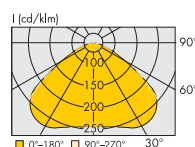
COB silicone optics Area
562512



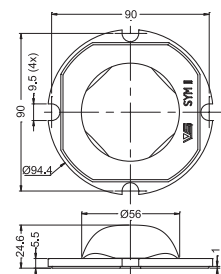
simulated LDC



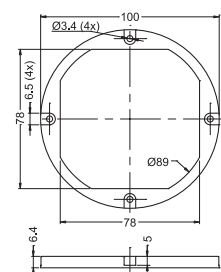
COB silicone optics SYM II
562513



simulated LDC

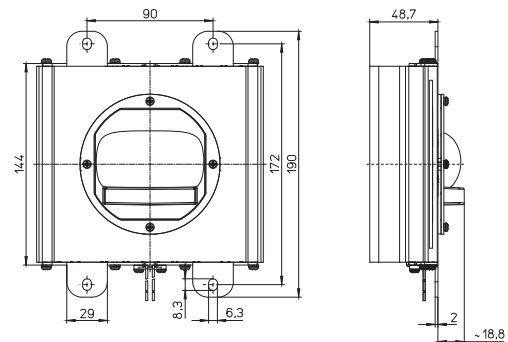
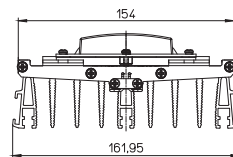


Support for COB silicone optics
558607



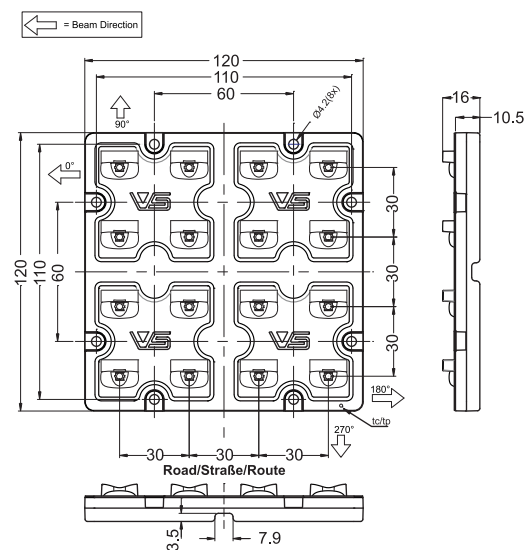
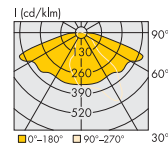
■ Global LUGA

563955, 563956, 563957



■ LED Roadway Light M-Class Silicone Gen. 2

562482



Product Drawings

■ PrimeLine LED Drivers – Dimmable with Programmable Current

M10

186446, 186575, 186576, 186445,
186577, 186578



■ ComfortLine LED Drivers – with Selectable Current

M10

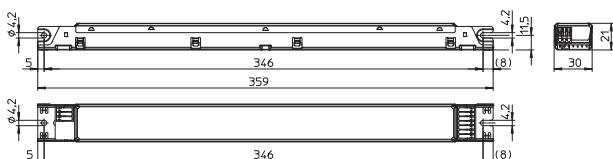
186486, 186444, 186487, 186488,
186491, 186443, 186492



■ ComfortLine LED Drivers

M10

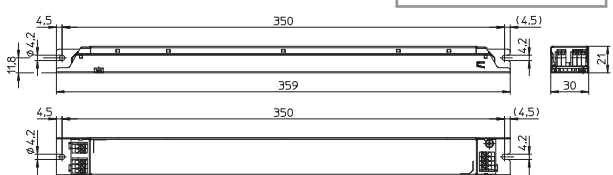
186315



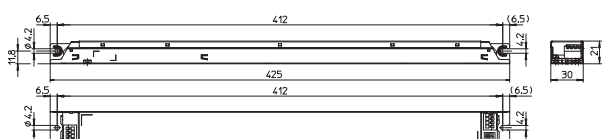
■ ComfortLine LED Drivers

M10.1/M11.1

186406, 186409



M10.1

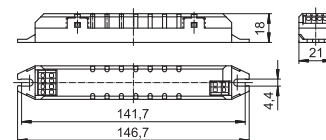


M11.1

■ ComfortLine LED Drivers

K21

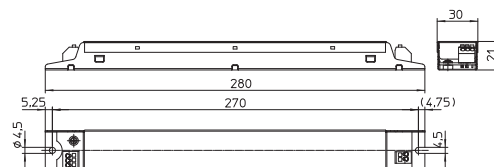
186229



■ EasyLine LED Drivers

M7.1

186414, 186429



■ PrimeLine LED Drivers – with Programmable Current

K2.1/K3.2

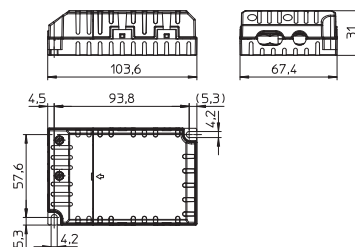
186465, 186573, 186574, 186503,
186571, 186572



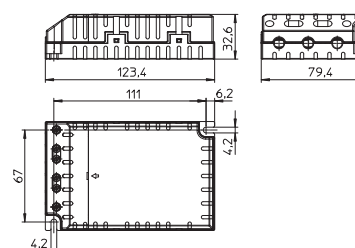
■ EasyLine LED Drivers – with Selectable Current

K2.1

186463, 186531, 186464, 186532



K2.1



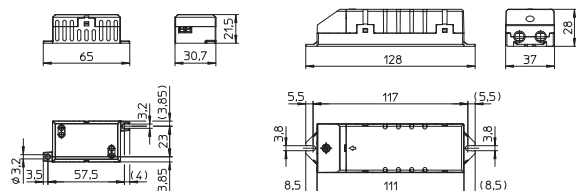
K3.2

Product Drawings

■ ComfortLine LED Drivers

K29/39

186519, 186424, 186425, 186426



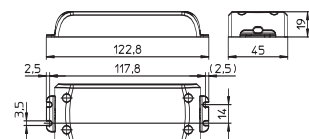
K29

K39

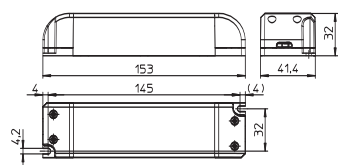
■ EasyLine LED Drivers - Dimmable

K52/K53

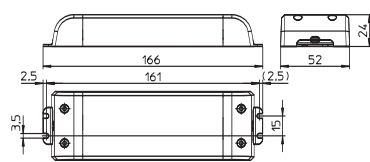
186447, 186448, 186449, 186415,
186450, 186416, 186451



K52



K53

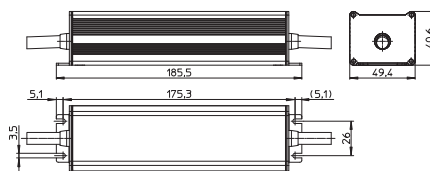


K54

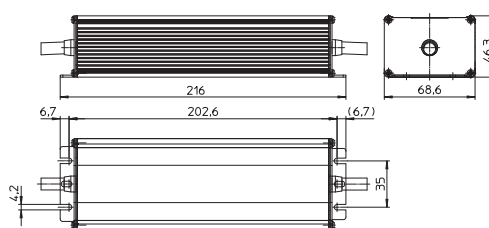
■ EasyLine LED Drivers IP67

M56/M58/M58.1

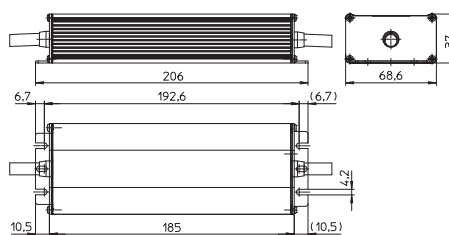
186452, 186453, 186454, 186455,
186456



M56



M58

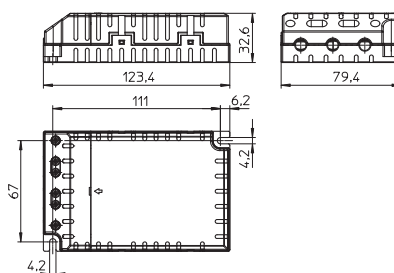


M58.1

■ iProgrammer

K3.2

186428

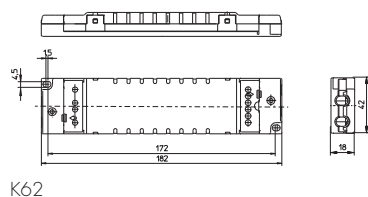
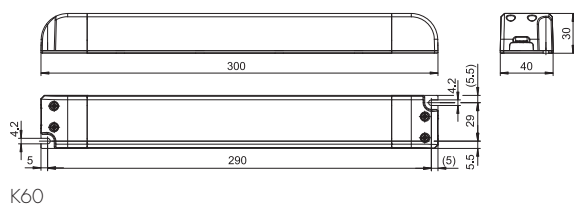
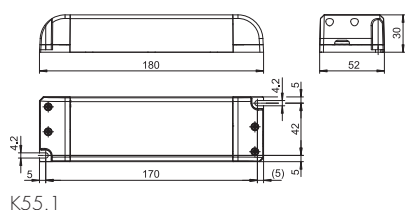
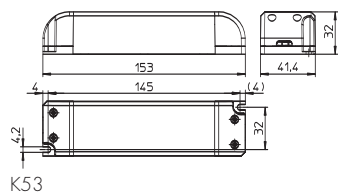


Product Drawings

■ ComfortLine LED Constant-voltage Drivers 24 V

K53/K55.1/K60/K62

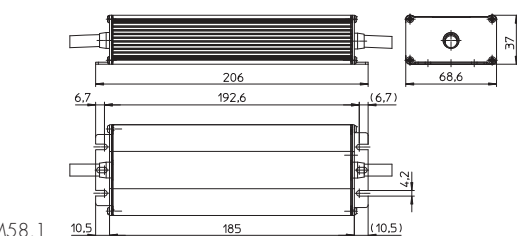
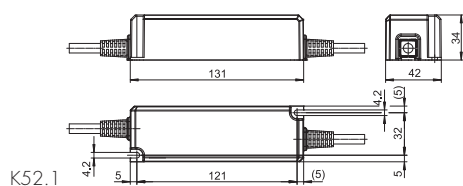
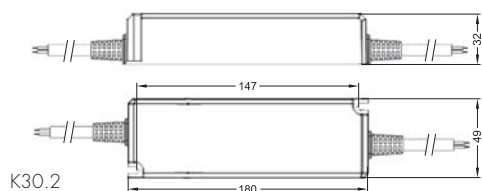
186129, 186624, 186625, 186626, 186627



■ EasyLine LED Constant-voltage Drivers 24 V - IP67

K30.2/K52.1/M58.1

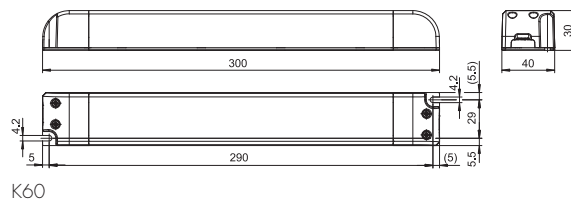
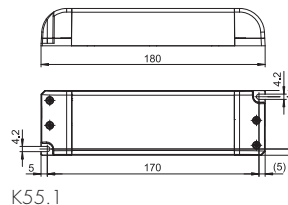
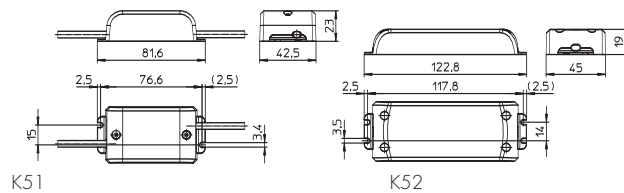
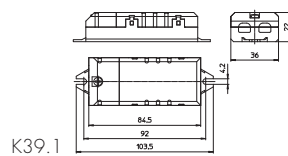
186432, 186433, 186434, 186634



■ EasyLine LED Constant-voltage Drivers 12 V

K39.1/K51/K52/K55.1/K60

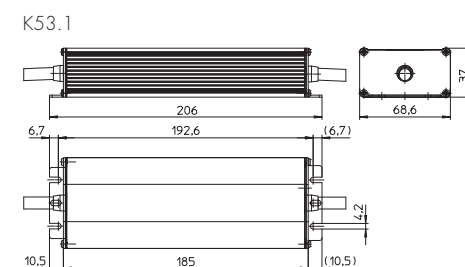
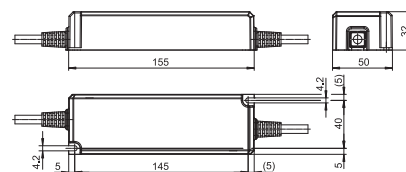
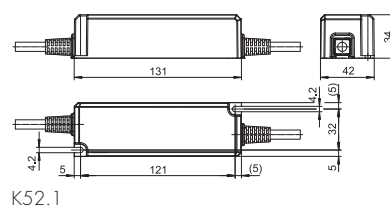
186412, 186204, 186621, 186622, 186623



■ EasyLine LED Constant-voltage Drivers 12 V - IP67

K52.1/K53.1/K58.1

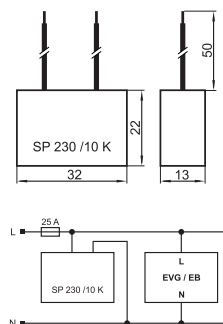
186628, 186629, 186630, 186631



Product Drawings

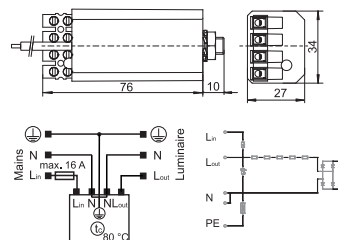
■ Luminaire Protection Device

SP 230/10 K
147230



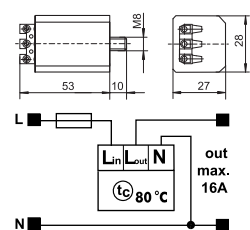
■ Luminaire Protection Device

SPC 3/230/10 K/i
142738



■ Luminaire Protection Device

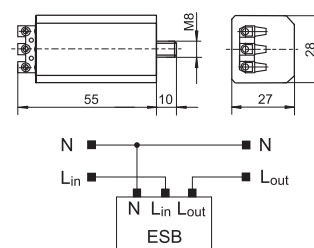
SPC 230/10 K
142736



■ Inrush Current Limiter

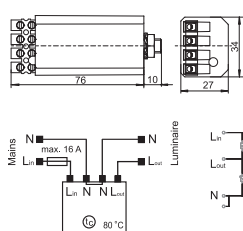
ESB-6K

149820



■ Luminaire Protection Device

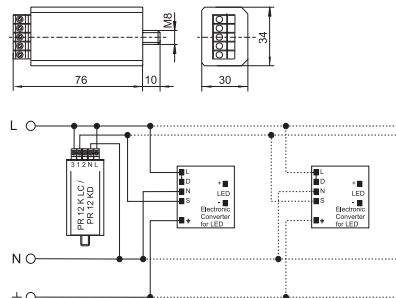
SPC 230/10 K/i
142737



■ Automatic Power Switch

for LED Drivers – PR 12 K LC

142170

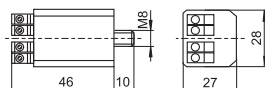


■ Switch Units for Electronic

Operating Devices with

1-10 V Interface

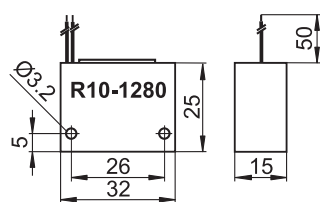
149993



Product Drawings

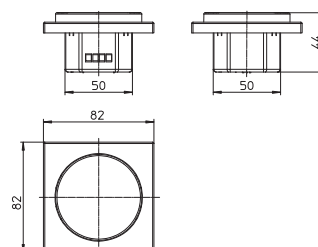
■ Resistor Networks

149800, 149802



■ DimONE

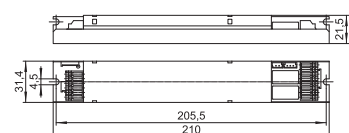
186607, 186608



■ Emergency Lighting Modules

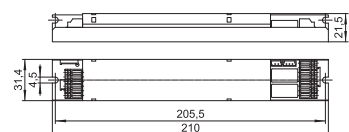
M5.1 – EMCc 180

186498, 186499, 186500



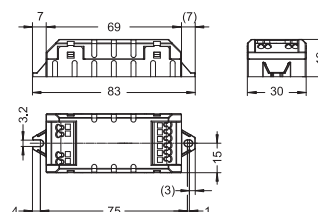
M5.1 – EMCc 60

186495, 186496, 186497



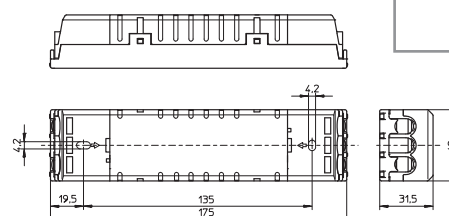
■ Light Controller XS

186220



■ Light Controller S

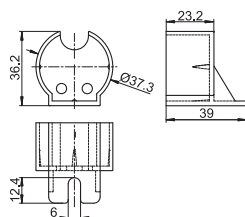
186210



■ Holders for Rechargeable Batteries

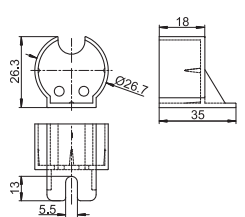
For EMCc 180

188828



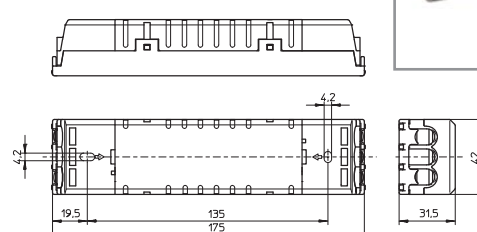
For EMCc 60

188827



■ Extender

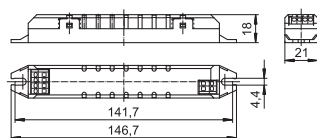
186194, 186481



Product Drawings

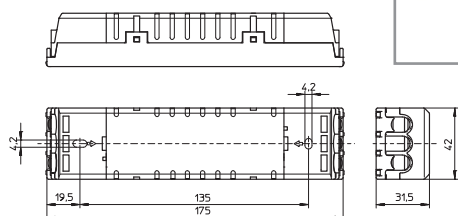
■ Light Controller XSW-E6

186516



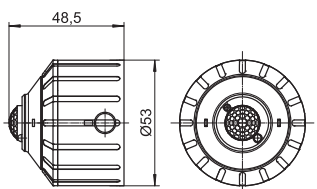
■ Light Controller XSW-E64

186517



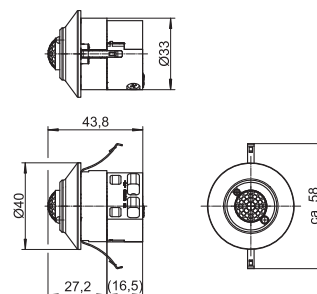
■ MultiSensor SM-E

186320



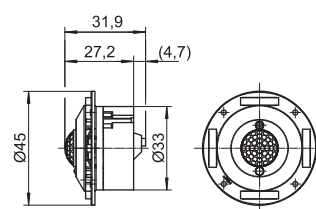
■ MultiSensor FM-E

186321



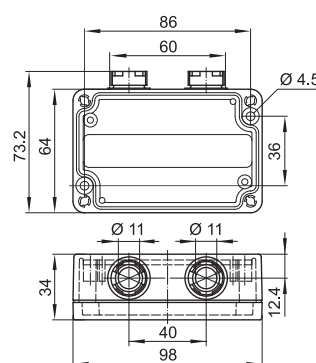
■ MultiSensor IL-E

186322



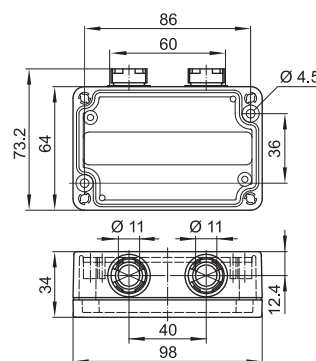
■ MovementSensor HB 65

186311



■ BrightnessSensor IP65

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