

## LINEARlight FLEX DIFFUSE Side Monochrome

– LED modules for professional and industrial applications



### Areas of application

- Individual and customized luminaires
- Organic shaped luminaires
- Architectural Integration – e.g. coves, walls
- Object integration – e.g. handrails
- Signage and illuminated advertising

### Product benefits

- IP67 protection with high performance silicone
- Outdoor use possible: UV and salt mist resistant (UV acc. to ISO 4892-2 - Method A, salt mist acc. to IEC 60068-2-52 severity 1)

### Product features

- Diffused light lines without visible spots
- Flexible and cuttable module to support design freedom
- Long operational length per single power feed possible (up to 6m)
- Ideal for luminaire designs
- Extra strong self-adhesive backside for easy mounting
- 24V technology for easy dimensioning
- Recommended in system use with OPTOTRONIC
- Increased reliability due to single piece reel-to-reel technology
- Dimmable with PWM technology



## Product family datasheet

### Technical data

#### Electrical data

Product description	Nominal voltage	Type of current	Nominal wattage per meter	Rated wattage	Input voltage range	Reverse Voltage
LFD400MS -G1-BL-06 <sup>1)</sup>	24.0 V	DC	12.0 W	72.00 W	23...25 V	25 V
LFD400MS -G1-GR-06 <sup>1)</sup>	24.0 V	DC	12.0 W	72.00 W	23...25 V	25 V
LFD400MS -G1-RE-06 <sup>1)</sup>	24.0 V	DC	12.0 W	72.00 W	23...25 V	25 V
LFD400MS -G1-YE-06 <sup>1)</sup>	24.0 V	DC	12.0 W	72.00 W	23...25 V	25 V
LFD400MS -G1-OR-06 <sup>1)</sup>	24.0 V	DC	12.0 W	72.00 W	23...25 V	25 V
LFD400MS -G1-GR-03 <sup>1)</sup>	24.0 V	DC	12.0 W	36.00 W	23...25 V	25 V

<sup>1)</sup> See product remark

#### Photometrical data

Product description	Light color LED	Nominal dominant wavelength	Luminous flux per meter	Total useful luminous flux	Luminous efficacy	Light color (designation)
LFD400MS -G1-BL-06 <sup>1)</sup>	Blue	457...467 nm	55 lm	330 lm	5 lm/W	Blue
LFD400MS -G1-GR-06 <sup>1)</sup>	Green	525...539 nm	260 lm	1560 lm	22 lm/W	Green
LFD400MS -G1-RE-06 <sup>1)</sup>	Red	612...626 nm	240 lm	1440 lm	20 lm/W	Red
LFD400MS -G1-YE-06 <sup>1)</sup>	Yellow	586...594 nm	150 lm	900 lm	13 lm/W	Yellow
LFD400MS -G1-OR-06 <sup>1)</sup>	Orange	603...611 nm	160 lm	960 lm	13 lm/W	Orange
LFD400MS -G1-GR-03 <sup>1)</sup>	Green	525...539 nm	260 lm	780 lm	43 lm/W	Green

<sup>1)</sup> See product remark

#### Light technical data

Product description	LED pitch	Beam angle	Rated beam angle (half peak value)	Starting time	Warm-up time (60 %)
LFD400MS -G1-BL-06 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s
LFD400MS -G1-GR-06 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s
LFD400MS -G1-RE-06 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s
LFD400MS -G1-YE-06 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s
LFD400MS -G1-OR-06 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s
LFD400MS -G1-GR-03 <sup>1)</sup>	6.7 mm	120 °	120.00 °	< 0.5 s	0.00 s

<sup>1)</sup> See product remark

## Product family datasheet

### LED module information

Product description	Number of LEDs per meter	Number of LEDs per smallest unit
LFD400MS -G1-BL-06 <sup>1)</sup>	150	6
LFD400MS -G1-GR-06 <sup>1)</sup>	150	6
LFD400MS -G1-RE-06 <sup>1)</sup>	150	6
LFD400MS -G1-YE-06 <sup>1)</sup>	150	6
LFD400MS -G1-OR-06 <sup>1)</sup>	150	6
LFD400MS -G1-GR-03 <sup>1)</sup>	150	6

<sup>1)</sup> See product remark

### Dimensions & weight

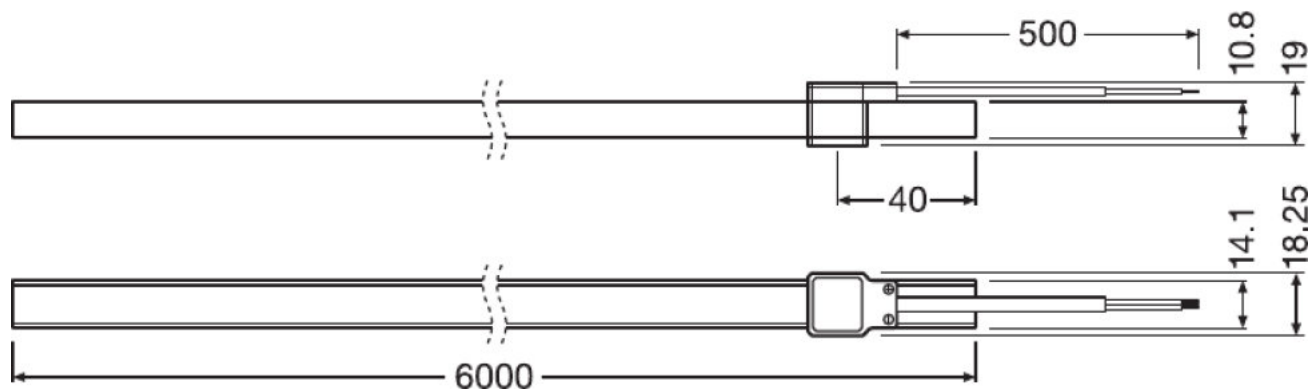
Product description	Length	Length – smallest unit	Width	Height	Cable length
LFD400MS -G1-BL-06 <sup>1)</sup>	6000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm
LFD400MS -G1-GR-06 <sup>1)</sup>	6000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm
LFD400MS -G1-RE-06 <sup>1)</sup>	6000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm
LFD400MS -G1-YE-06 <sup>1)</sup>	6000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm
LFD400MS -G1-OR-06 <sup>1)</sup>	6000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm
LFD400MS -G1-GR-03 <sup>1)</sup>	3000 mm	40.0 mm	10.0 mm	14.1 mm	500.0 mm

Product description	Product weight
LFD400MS -G1-BL-06 <sup>1)</sup>	1040.00 g
LFD400MS -G1-GR-06 <sup>1)</sup>	1040.00 g
LFD400MS -G1-RE-06 <sup>1)</sup>	1040.00 g
LFD400MS -G1-YE-06 <sup>1)</sup>	1040.00 g
LFD400MS -G1-OR-06 <sup>1)</sup>	1040.00 g
LFD400MS -G1-GR-03 <sup>1)</sup>	531.00 g

<sup>1)</sup> See product remark

## Product family datasheet

### Product line drawing



LFD400MS -G1-BL-06, LFD400MS -G1-GR-06, LFD400MS -G1-RE-06, LFD400MS -G1-YE-06, LFD400MS -G1-OR-06, LFD400MS -G1-GR-03

### Colors & materials

Product description	Cover material	Body material
LFD400MS -G1-BL-06 <sup>1)</sup>	Silicone	Silicone
LFD400MS -G1-GR-06 <sup>1)</sup>	Silicone	Silicone
LFD400MS -G1-RE-06 <sup>1)</sup>	Silicone	Silicone
LFD400MS -G1-YE-06 <sup>1)</sup>	Silicone	Silicone
LFD400MS -G1-OR-06 <sup>1)</sup>	Silicone	Silicone
LFD400MS -G1-GR-03 <sup>1)</sup>	Silicone	Silicone

<sup>1)</sup> See product remark

## Product family datasheet

### Temperatures & operating conditions

Product description	Performance temp. acc. to IEC 62717	Temperature range in operation at Tc point	Ambient temperature range
LFD400MS -G1-BL-06 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>
LFD400MS -G1-GR-06 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>
LFD400MS -G1-RE-06 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>
LFD400MS -G1-YE-06 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>
LFD400MS -G1-OR-06 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>
LFD400MS -G1-GR-03 <sup>1)</sup>	35 °C	-20...65 °C <sup>2)</sup>	-20...+50 °C <sup>3)</sup>

<sup>1)</sup> See product remark

<sup>2)</sup> Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

<sup>3)</sup> Rated ambient temp. 25°C/Providing that temperature at Tc point is below max value during operation/Temperature ramping for environmental testing acc. to IEC 62717, 1K/min

### Lifespan

Product description	Rated lamp life time	Nominal lamp life time	Lumen main. fact. at end of nom. life time	Number of switching cycles
LFD400MS -G1-BL-06 <sup>1)</sup>	50000 h <sup>2)</sup>	50000 h	0.70	≥ 15000
LFD400MS -G1-GR-06 <sup>1)</sup>	50000 h <sup>2)</sup>	50000 h	0.70	≥ 15000
LFD400MS -G1-RE-06 <sup>1)</sup>	20000 h <sup>2)</sup>	20000 h	0.70	≥ 15000
LFD400MS -G1-YE-06 <sup>1)</sup>	20000 h <sup>2)</sup>	20000 h	0.70	≥ 15000
LFD400MS -G1-OR-06 <sup>1)</sup>	20000 h <sup>2)</sup>	20000 h	0.70	≥ 15000
LFD400MS -G1-GR-03 <sup>1)</sup>	50000 h <sup>2)</sup>	50000 h	0.70	≥ 15000

<sup>1)</sup> See product remark

<sup>2)</sup> L70/B50

### Capabilities

Product description	Dimmable	Lowest bending radius	Self-adhesive
LFD400MS -G1-BL-06 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes
LFD400MS -G1-GR-06 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes
LFD400MS -G1-RE-06 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes
LFD400MS -G1-YE-06 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes
LFD400MS -G1-OR-06 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes
LFD400MS -G1-GR-03 <sup>1)</sup>	Yes <sup>2)</sup>	100 mm	Yes

Product description	With connection set	With end piece
LFD400MS -G1-BL-06 <sup>1)</sup>	Yes	No
LFD400MS -G1-GR-06 <sup>1)</sup>	Yes	No
LFD400MS -G1-RE-06 <sup>1)</sup>	Yes	No
LFD400MS -G1-YE-06 <sup>1)</sup>	Yes	No
LFD400MS -G1-OR-06 <sup>1)</sup>	Yes	No

## Product family datasheet

Product description	With connection set	With end piece
LFD400MS -G1-GR-03 <sup>1)</sup>	Yes	Yes

<sup>1)</sup> See product remark

<sup>2)</sup> PWM

### Certificates & standards

Product description	Energy consumption	Standards	Type of protection
LFD400MS -G1-BL-06 <sup>1)</sup>	80 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67
LFD400MS -G1-GR-06 <sup>1)</sup>	80 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67
LFD400MS -G1-RE-06 <sup>1)</sup>	80 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67
LFD400MS -G1-YE-06 <sup>1)</sup>	80 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67
LFD400MS -G1-OR-06 <sup>1)</sup>	80 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67
LFD400MS -G1-GR-03 <sup>1)</sup>	40 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP66/IP67

<sup>1)</sup> See product remark

### Logistical data

Product description	Temperature range at storage
LFD400MS -G1-BL-06 <sup>1)</sup>	-20...85 °C
LFD400MS -G1-GR-06 <sup>1)</sup>	-20...85 °C
LFD400MS -G1-RE-06 <sup>1)</sup>	-20...85 °C
LFD400MS -G1-YE-06 <sup>1)</sup>	-20...85 °C
LFD400MS -G1-OR-06 <sup>1)</sup>	-20...85 °C
LFD400MS -G1-GR-03 <sup>1)</sup>	-20...85 °C

<sup>1)</sup> See product remark

### Product remark

Modules perfectly matched to OSRAM OPTOTRONIC LED drivers (see relevant table)/For current photometric data and important safety, installation and application information, see [www.osram.com/led-systems/](http://www.osram.com/led-systems/)All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values

### Application advice

## Product family datasheet

For more detailed application information and graphics please see product datasheet.


















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### Sales and Technical Support










Sales and Technical Support [www.osram.com](http://www.osram.com)

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### Download Data

File	
	User instruction LINEARLIGHT Flex Diffuse Installation Guide - Naed Version (EN)
	Product Datasheet LINEARlight FLEX DIFFUSE Side Specification Sheet (EN)
	Brochures Light is freedom of design (EN)
	Certificates VDE-ENEC Certificate
	Certificates UL Certificate
	Certificates CB TEST CERTIFICATE DE-57743
	Declarations of conformity 726047_Declaration of Conformity_LINEARlight Flex Diffuse
	Declarations of conformity 726048_Manufacturer Declaration_LINEARlight Flex Diffuse
	Eulumdat 727780_Eulumdat_LFD400MS-G1-BL-06.ldt
	Eulumdat Eulumdat LFD400MS-G1-BL-06
	IES data 727807_IES data_LFD400MS-G1-BL-06.ies
	IES data IES LFD400MS-G1-BL-06
	Eulumdat 727782_Eulumdat_LFD400MS-G1-GR-06.ldt
	Eulumdat Eulumdat LFD400MS-G1-GR-06
	IES data 727809_IES data_LFD400MS-G1-GR-06.ies
	IES data IES LFD400MS-G1-GR-06
	Eulumdat 727784_Eulumdat_LFD400MS-G1-RE-06.ldt

## Product family datasheet

	Eulumdat Eulumdat LFD400MS-G1-RE-06
	IES data 727811_IES data_LFD400MS-G1-RE-06.ies
	IES data IES LFD400MS-G1-RE-06
	Eulumdat 727785_Eulumdat_LFD400MS-G1-YE-06.ltd
	Eulumdat Eulumdat LFD400MS-G1-YE-06
	IES data 727812_Eulumdat_LFD400MS-G1-YE-06.ies
	IES data IES LFD400MS-G1-YE-06
	Eulumdat 727783_Eulumdat_LFD400MS-G1-OR-06.ltd
	Eulumdat Eulumdat LFD400MS-G1-OR-06
	IES data 727810_IES data_LFD400MS-G1-OR-06.ies
	IES data IES LFD400MS-G1-OR-06
	Eulumdat 727781_Eulumdat_LFD400MS-G1-GR-03.ltd
	Eulumdat Eulumdat LFD400MS-G1-GR-03
	IES data 727808_IES data_LFD400MS-G1-GR-03.ies
	IES data IES LFD400MS-G1-GR-03

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899953659	LFD400MS -G1-BL-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	13358.00 g
4052899953666	LFD400MS -G1-GR-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	13358.00 g
4052899953673	LFD400MS -G1-RE-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	13358.00 g
4052899953680	LFD400MS -G1-YE-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	13358.00 g
4052899953697	LFD400MS -G1-OR-06	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	13358.00 g



## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899450882	LFD400MS -G1-GR-03	Shipping carton box 6	519 mm x 246 mm x 525 mm	67.03 dm <sup>3</sup>	10304.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

### Accessories Mandatory

Product description	Accessory name	Accessory code
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-RE-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-YE-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-OR-06	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971
LFD400MS -G1-GR-03	FX-DCS -G1-CM2PF-IP67-500-X5	▶ 4052899451971

### Accessories Optional

Product description	Accessory name	Accessory code
LFD400MS -G1-BL-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-BL-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-BL-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-BL-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-BL-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-BL-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-GR-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-GR-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-GR-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-GR-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-GR-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-GR-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-RE-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-RE-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
		▶ 4052899452015

## Product family datasheet

LFD400MS -G1-RE-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	
LFD400MS -G1-RE-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-RE-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-RE-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-RE-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-RE-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-YE-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-YE-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-YE-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-YE-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-YE-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-YE-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-YE-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-YE-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-OR-06	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-OR-06	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-OR-06	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-OR-06	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-OR-06	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-OR-06	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-OR-06	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-OR-06	FX-DCS -G1-GL-25	▶ 4052899452244
LFD400MS -G1-GR-03	FX-LFDM -G1-BS-12H13	▶ 4052899452541
LFD400MS -G1-GR-03	FX-LFDM -G1-BSL-12H13E9	▶ 4052899452572
LFD400MS -G1-GR-03	FX-DCS -G1-CM2PF-IP67-SIDEKIT5	▶ 4052899452015
LFD400MS -G1-GR-03	FX-DCS -G1-CM2PJ-IP67-0190-X5	▶ 4052899452039
LFD400MS -G1-GR-03	FX-DCS -G1-CM2PJ-IP67-SIDEKIT5	▶ 4052899452077
LFD400MS -G1-GR-03	FX-DCS -G1-ECS-KIT20	▶ 4052899452121
LFD400MS -G1-GR-03	FX-DCS -G1-EHS-KIT20	▶ 4052899452206
LFD400MS -G1-GR-03	FX-DCS -G1-GL-25	▶ 4052899452244

### References / Links

System configurator tool is available online at <https://flex.osram.info/en/flex-configurator>

### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.