

# Basic Flex G3 Shortpitch

## Technical Datasheet



## Product description

Basic Flex G3 shortpitch is design for high uniformity, and cost-effective solution, widely used for embedded lighting. Use it with our slimmest 24V OPTOTRONIC driver to get the most out of our flexible and easy system.

## Key Features & Benefits

- Energy saving Low-power LED flexible strip
- Easy installation with Track
- Multi cut-able with CONNECT system
- Available in warm white and neutral white
- 3 SDCM, CRI80
- 120LED per meter for all series
- IP00 and IP66 version available\*
- 120°viewing angle per module
- Dimmable
- Up to 30,000 hrs lifetime @  $t_c \text{ max}$

\*IP66 version if cut and re-connected by using OSRAM Connect system accessories, IP protect will be IP54.

## Applications

- Hospitality lighting
- Cabinet lighting
- Signage
- Architecture lighting
- Wall integration

# SPECIFICATION

The typical values involved in this specification are under the following conditions:

Flex Type	Product category	t <sub>p</sub> -normal
Non-IP	BF400S/BF600S	45 °C
	BF800S/BF900S/BF1000S	50 °C
	BF1200S/BF1500S	55 °C
IP	BFP400S/BFP600S	40 °C
	BFP800S/BFP900S/BFP1000S	45 °C
	BFP1200S/BFP1500S	50 °C

## 1.1 Non-IP version

Product	Color	Voltage [V DC]*	Current/m [mA]*	Power/m [W]*	Lumen/m [lm]*	Power/reel [W]*	Lumen/reel [lm]*	CRI	Color Temp [K]*	Operable length [mm]	Beam Angle [°]
BF400S-G3-827-05	White	24	150	3.5	400	16.5	1920	80	2700	5000	120
BF400S-G3-830-05	White	24	150	3.5	420	16.5	2000	80	3000	5000	120
BF400S-G3-840-05	White	24	150	3.5	450	16.5	2100	80	4000	5000	120
BF400S-G3-865-05	White	24	150	3.5	430	16.5	2040	80	6500	5000	120
BF600S-G3-830-05	White	24	208	5.0	590	23.0	2580	80	3000	5000	120
BF800S-G3-827-05	White	24	292	7.0	760	31.0	3560	80	2700	5000	120
BF800S-G3-830-05	White	24	292	7.0	800	31.0	3650	80	3000	5000	120
BF800S-G3-840-05	White	24	292	7.0	850	31.0	3850	80	4000	5000	120
BF800S-G3-865-05	White	24	292	7.0	830	31.0	3700	80	6500	5000	120
BF900S-G3-830-05	White	24	313	7.5	860	34.0	4020	80	3000	5000	120
BF1000S-G3-827-05	White	24	358	8.6	980	38.0	4050	80	2700	5000	120
BF1000S-G3-830-05	White	24	358	8.6	1020	38.0	4230	80	3000	5000	120
BF1000S-G3-840-05	White	24	358	8.6	1050	38.0	4500	80	4000	5000	120
BF1000S-G3-865-05	White	24	358	8.6	1030	38.0	4410	80	6500	5000	120
BF1200S-G3-827-05	White	24	458	11.0	1100	46.0	4960	80	2700	5000	120
BF1200S-G3-830-05	White	24	458	11.0	1160	46.0	5150	80	3000	5000	120
BF1200S-G3-840-05	White	24	458	11.0	1220	46.0	5400	80	4000	5000	120
BF1200S-G3-865-05	White	24	458	11.0	1170	46.0	5260	80	6500	5000	120
BF1500S-G3-827-05	White	24	600	14.4	1440	62.0	6520	80	2700	5000	120
BF1500S-G3-830-05	White	24	600	14.4	1510	62.0	6750	80	3000	5000	120
BF1500S-G3-840-05	White	24	600	14.4	1550	62.0	6880	80	4000	5000	120
BF1500S-G3-865-05	White	24	600	14.4	1530	62.0	6800	80	6500	5000	120

1.2 IP version

Product	Color	Voltage [V DC]*	Current/m [mA]*	Power/m [W]*	Lumen/m [lm]*	Power/reel [W]*	Lumen/reel [lm]*	CRI	Color Temp [K]*	Operable length [mm]	Beam Angle [°]
BFP400S-G3-827-05	White	24	150	3.5	370	16.5	1780	80	2700	5000	120
BFP400S-G3-830-05	White	24	150	3.5	390	16.5	1860	80	3000	5000	120
BFP400S-G3-840-05	White	24	150	3.5	415	16.5	1950	80	4000	5000	120
BFP400S-G3-865-05	White	24	150	3.5	400	16.5	1900	80	6500	5000	120
BFP600S-G3-830-05	White	24	208	5.0	545	23.0	2510	80	3000	5000	120
BFP800S-G3-827-05	White	24	292	7.0	700	31.0	3310	80	2700	5000	120
BFP800S-G3-830-05	White	24	292	7.0	740	31.0	3400	80	3000	5000	120
BFP800S-G3-840-05	White	24	292	7.0	790	31.0	3580	80	4000	5000	120
BFP800S-G3-865-05	White	24	292	7.0	770	31.0	3440	80	6500	5000	120
BFP900S-G3-830-05	White	24	313	7.5	800	34.0	3740	80	3000	5000	120
BFP1000S-G3-827-05	White	24	358	8.6	910	38.0	3860	80	2700	5000	120
BFP1000S-G3-830-05	White	24	358	8.6	950	38.0	3950	80	3000	5000	120
BFP1000S-G3-840-05	White	24	358	8.6	975	38.0	4180	80	4000	5000	120
BFP1000S-G3-865-05	White	24	358	8.6	960	38.0	4100	80	6500	5000	120
BFP1200S-G3-827-05	White	24	458	11.0	1020	46.0	4720	80	2700	5000	120
BFP1200S-G3-830-05	White	24	458	11.0	1080	46.0	4800	80	3000	5000	120
BFP1200S-G3-840-05	White	24	458	11.0	1130	46.0	4990	80	4000	5000	120
BFP1200S-G3-865-05	White	24	458	11.0	1090	46.0	4890	80	6500	5000	120
BFP1500S-G3-827-05	White	24	600	14.4	1340	62.0	6060	80	2700	5000	120
BFP1500S-G3-830-05	White	24	600	14.4	1400	62.0	6270	80	3000	5000	120
BFP1500S-G3-840-05	White	24	600	14.4	1440	62.0	6400	80	4000	5000	120
BFP1500S-G3-865-05	White	24	600	14.4	1420	62.0	6320	80	6500	5000	120

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

\*1. Testing based  $t_p$ =normal, one-meter data, tolerance of lumen flux is  $\pm 10\%$ .

2. Tolerance of measurements for the color rendering Ra is  $\pm 3$ ;

3. Tolerance of measurements for the Chromaticity Coordinate is  $\pm 0.005$ ; the tolerance of CCT should be calculated accordingly.

## Operating data for complete reel

Item	BF(P)400S-G3-8XX-05	BF(P)600S-G3-8XX-05	BF(P)800S-G3-8XX-05	BF(P)900S-G3-8XX-05	BF(P)1000S-G3-840-05	BF1200S-G3-8XX-05	BF1500S-G3-8XX-05
Driving modes	constant voltage	constant voltage	constant voltage	constant voltage	constant voltage	constant voltage	constant voltage
Supply voltage range	24.0 ± 1.0VDC	24.0 ± 1.0VDC	24.0 ± 1.0VDC	24.0 ± 1.0VDC	24.0 ± 1.0VDC	24.0 ± 1.0VDC	24.0 ± 1.0VDC
Supply current range	0.68 A ± 10%	0.96 A ± 10%	1.3 A ± 10%	1.42 A ± 10%	1.58 A ± 10%	1.92 A ± 10%	2.58 A ± 10%
Power Range/reel @ Non-IP $t_p=55^{\circ}\text{C}$ ; IP $t_p=45^{\circ}\text{C}$	14.0 ~ 19.0 W	19.7 ~ 26.5 W	26.5 ~ 35.7 W	29 ~ 39.3 W	32.5 ~ 43.9 W	39.0 ~ 53.0 W	53.0 ~ 71.5 W
Reverse Connection voltage range	≤24VDC	≤24VDC	≤24VDC	≤24VDC	≤24VDC	≤24VDC	≤24VDC
ESD protection	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV	Contact 4KV, Air 8KV
Connection wire gauge	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG	22AWG
Dimmable	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

## Optical parameter

### 1.1 CCT and Color rendering parameters

Product	Typical CCT [K]*	Min. CCT [K]*	Max. CCT [K]*	Ra*
BF400S-G3-8xx-05 BF600S-G3-8xx-05 BF800S-G3-8xx-05 BF900S-G3-8xx-05	2700	2580	2780	80
BF1000S-G3-8xx-05 BF1200S-G3-8xx-05 BF1500S-G3-8xx-05	3000	2870	3220	80
BFP400S-G3-8xx-05 BFP600S-G3-8xx-05 BFP800S-G3-8xx-05 BFP900S-G3-8xx-05	4000	3710	4260	80
BFP1000S-G3-8xx-05 BFP1200S-G3-8xx-05 BFP1500S-G3-8xx-05	6500	6020	7040	80

\*1. Testing based on  $t_p$ =normal.

2. Tolerance of measurements for the color rendering Ra is ±3;

3. Tolerance of measurements for the Chromaticity Coordinate is ±0.005; the tolerance of CCT should be calculated accordingly.

### 1.2 Brightness parameter

Product	Typical CCT [K]*	Lumen Flux [lm]	
		Min.	Max.
BF400S-G3-827-05	2700	360	440
BF400S-G3-830-05	3000	370	465
BF400S-G3-840-05	4000	400	500
BF400S-G3-865-05	6500	385	475
BF600S-G3-830-05	3000	530	650
BF800S-G3-827-05	2700	680	840
BF800S-G3-830-05	3000	720	880
BF800S-G3-840-05	4000	765	935
BF800S-G3-865-05	6500	745	915

BF900S-G3-830-05	3000	775	950
BF1000S-G3-827-05	2700	880	1080
BF1000S-G3-830-05	3000	915	1120
BF1000S-G3-840-05	4000	945	1160
BF1000S-G3-865-05	6500	925	1140
BF1200S-G3-827-05	2700	990	1210
BF1200S-G3-830-05	3000	1040	1280
BF1200S-G3-840-05	4000	1090	1340
BF1200S-G3-865-05	6500	1050	1290
BF1500S-G3-827-05	2700	1290	1585
BF1500S-G3-830-05	3000	1360	1660
BF1500S-G3-840-05	4000	1400	1700
BF1500S-G3-865-05	6500	1370	1690
BFP400S-G3-827-05	2700	330	410
BFP400S-G3-830-05	3000	350	430
BFP400S-G3-840-05	4000	375	460
BFP400S-G3-865-05	6500	360	440
BFP600S-G3-830-05	3000	490	603
BFP800S-G3-827-05	2700	635	780
BFP800S-G3-830-05	3000	670	820
BFP800S-G3-840-05	4000	710	870
BFP800S-G3-865-05	6500	690	850
BFP900S-G3-830-05	3000	720	880
BFP1000S-G3-827-05	2700	820	1000
BFP1000S-G3-830-05	3000	850	1040
BFP1000S-G3-840-05	4000	880	1075
BFP1000S-G3-865-05	6500	860	1060
BFP1200S-G3-827-05	2700	920	1130
BFP1200S-G3-830-05	3000	970	1190
BFP1200S-G3-840-05	4000	1020	1250
BFP1200S-G3-865-05	6500	980	1200
BFP1500S-G3-827-05	2700	1200	1480
BFP1500S-G3-830-05	3000	1260	1550
BFP1500S-G3-840-05	4000	1300	1590
BFP1500S-G3-865-05	6500	1280	1570

Remarks: Testing condition is DC 24V, tp=normal, one-meter data.

- Exceeding maximum ratings for operating and storage temperature will reduce expected lifetime or destroy the LED Module.
- The temperature of the LED module must be measured at the tc-point according to EN60598-1 in thermal stable status.
- Due to the special conditions of the manufacturing processes of LED, the typical data or calculated correlations of technical parameters can only reflect statistical figures. These do not necessarily correspond to the actual parameters of each single product, which could differ from the typical data and calculated correlations or the typical characteristic line. If requested, e.g. because of technical improvements, these typ. data will be changed without any further notice.

### 1.3 Light distribution

Product	Distribution Graph	Beam angle range (2X $\theta_{1/2}$ )
BF400S-G3-8xx-05 BF600S-G3-8xx-05 BF800S-G3-8xx-05 BF900S-G3-8xx-05 BF1000S-G3-8xx-05 BF1200S-G3-8xx-05 BF1500S-G3-8xx-05 BFP400S-G3-8xx-05 BFP600S-G3-8xx-05 BFP800S-G3-8xx-05 BFP900S-G3-8xx-05 BFP1000S-G3-8xx-05 BFP1200S-G3-8xx-05 BFP1500S-G3-8xx-05		120 ± 5°

### 1.4 Lumen maintenance

Operating voltage	Lumen maintenance x1000 hours	L70		L80	
		B50	B10	B50	B10
24V	T <sub>c</sub> =25°C	>35	>35	>35	>35
	T <sub>c</sub> =55°C	>30	>30	>30	>30
	T <sub>c</sub> =75°C	>30	>30	>30	>30

## Environmental and Application Conditions

Items	Non-IP version	IP version
Ambient temperature (t <sub>a</sub> )	-20~55°C	-20~55°C
Operating temperature (t <sub>c</sub> max)	75°C	75°C
Storage temperature range	-30°C~80°C	-30°C~80°C
IP rating	IP00	IP66
Accessories IP rating	IP00	IP54
Lifetime @ t <sub>c</sub> max (L70B50)	30,000 hrs	30,000 hrs

The modules are designed for operation with OPTOTRONIC® / Element Driver.

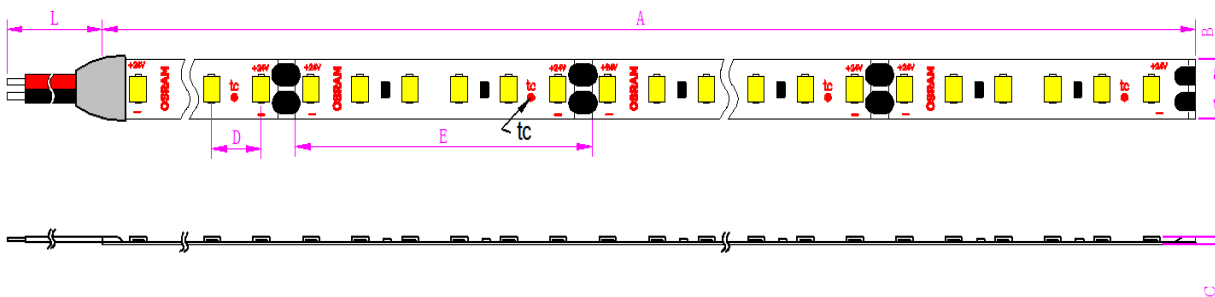
\*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the light engine. The temperature of the LED module must be measured at the t<sub>c</sub>-point according to EN60598-1 in thermally settled conditions with a temperature sensor.

## Standards / Normative Requirements

Eye security	IEC/TR 62778
Flammability	IEC/EN 61347-1
Protection class	IEC/EN 60529
Safety Requirements	IEC/EN 62031
	IEC/EN 60598-1
	IEC/EN 61347-1
RoHS	Yes
CE/CB	Yes

## Product Drawing

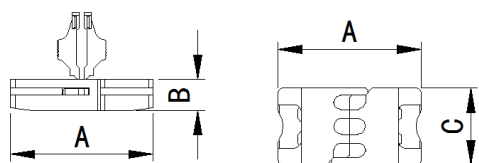
### Non-IP version Flex dimension



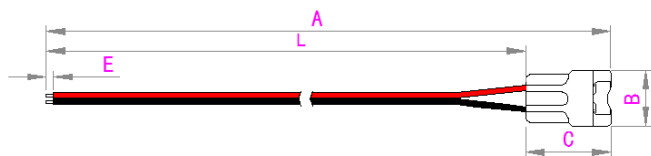
Dimension [mm]	BFXXXS-G3-8XX-05					
	A	B	C	D	E	L
Min.	4,980	7.9	1.0	8.23	49	290
Typ.	5,000	8.0	1.1	8.33	50	300
Max.	5,020	8.1	1.2	8.43	51	310

Remark: The C quantitative value doesn't contain 3M glue height.

### Non-IP version Accessories dimension

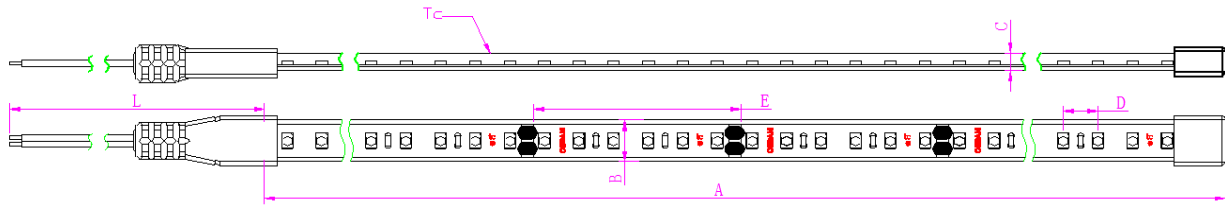


Dimension [mm]	FX-BF08-G3-C2PI-IP00 20XBT25		
	A	B	C
Min.	4,980	7.9	1.0
Typ.	5,000	8.0	1.1
Max.	5,020	8.1	1.2



Dimension [mm]	FX-BF08-G3-C2PJ-IP00-0500 10XBT25				
	A	B	C	E	L
Min.	496	10.2	15.8	1.5	480
Typ.	506	10.4	16.0	2.0	490
Max.	516	10.6	16.2	3.5	500

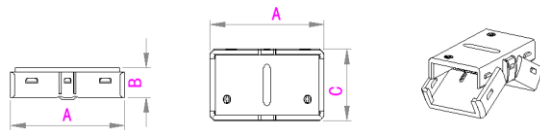
IP version



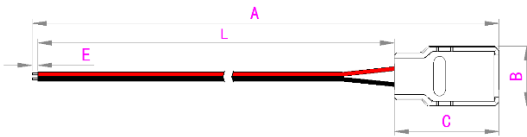
Dimension [mm]	BFP400-G3-8XX-05, BFP800-G3-8XX-05					
	A	B	C	D	E	L
Min.	5,000	10.0	3.7	8.23	49	290
Typ.	5,025	10.3	4.0	8.33	50	300
Max.	5,050	10.6	4.3	8.43	51	310

Remark: The C quantitative value doesn't contain 3M glue height.

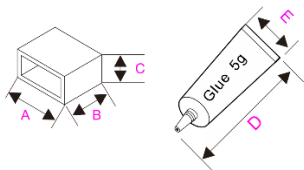
IP version Accessories dimension



Dimension [mm]	FX-BFP10-G3-C2PI-IP66 25X1		
	A	B	C
Min.	26.8	6.8	14.8
Typ.	27.0	7.0	15.0
Max.	27.2	7.2	15.2

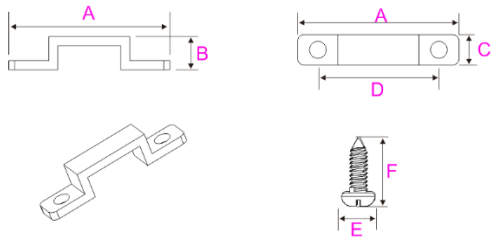


Dimension [mm]	FX-BFP10-G3-C2PJ-IP66 25X1				
	A	B	C	E	L
Min.	506	14.8	25.8	2.5	480
Typ.	516	15.0	26.0	3.0	490
Max.	526	15.2	26.2	4.0	500



Dimension [mm]	FX-BFP10-G3-IP54-ENDCAP 25X1				
	A	B	C	D	E
Min.	12.3	9.8	6.3	91	23
Typ.	12.5	10.0	6.5	93	25
Max.	12.7	10.2	6.7	95	27





Dimension [mm]	FX-BFP10-G3-TT-27H06-06 25X1					
	A	B	C	D	E	F
Min.	26.8	5.3	4.8	19.8	4.8	11.5
Typ.	27.0	5.5	5.0	20.0	5.0	12.0
Max.	27.2	5.7	5.2	20.2	5.3	12.5

### System matching combination

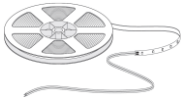
Following recommended driver is matching Basic Flex G3 as system using. By using DC24V OSRAM OPTOTRONIC® driver can provide system warranty. For more information, please contact our sales.

Type	Item	EAN list	model	Remark
On/Off	1	4052899605503	ELEMENT 30/220-240/24 G2 VS40 OSRAM	
	2	4052899605527	ELEMENT 60/220-240/24 G2 VS30 OSRAM	
	3	4052899605541	ELEMENT 120/220-240/24 G2 VS20 OSRAM	
	4	4052899605565	ELEMENT 180/220-240/24 G2 VS20 OSRAM	
	5	4062172168007	IT FIT 30/220-240 /24 VS50 OSRAM	
	6	4062172168021	IT FIT 60/220-240 /24 VS30 OSRAM	
	7	4062172168045	IT FIT 120/220-240 /24 VS30 OSRAM	
	8	4062172168069	IT FIT 180/220-240 /24 VS20 OSRAM	
	9	4062172168083	IT FIT 250/220-240 /24 VS10 OSRAM	
	10	4062172085465	OT FIT 80/220-240/24 P	
	11	4062172085601	OT FIT 150/220-240/24 P	
	12	4062172085649	OT FIT 200/220-240/24 P	
	13	4062172085687	OT FIT 300/220-240/24 P	
Dimmable	1	4052899605503	ELEMENT 30/220-240/24 G2 VS40 OSRAM	+OT DIM 4050300943459
	2	4052899605527	ELEMENT 60/220-240/24 G2 VS30 OSRAM	
	3	4052899605541	ELEMENT 120/220-240/24 G2 VS20 OSRAM	
	4	4052899605565	ELEMENT 180/220-240/24 G2 VS20 OSRAM	
	5	4062172168007	IT FIT 30/220-240 /24 VS50 OSRAM	
	6	4062172168021	IT FIT 60/220-240 /24 VS30 OSRAM	
	7	4062172168045	IT FIT 120/220-240 /24 VS30 OSRAM	
	8	4062172168069	IT FIT 180/220-240 /24 VS20 OSRAM	
	9	4062172168083	IT FIT 250/220-240 /24 VS10 OSRAM	
	10	4062172085465	OT FIT 80/220-240/24 P	
	11	4062172085601	OT FIT 150/220-240/24 P	
	12	4062172085649	OT FIT 200/220-240/24 P	
	13	4062172085687	OT FIT 300/220-240/24 P	
	14	4052899545847	OT 60/220-240/24 DIM P	1~10V dim
15	4052899545861	OT 100/220-240/24 DIM P		
16	4052899545885	OT 130/220-240/24 DIM P		
17	4052899545908	OT 250/220-240/24 DIM P		

## Package and Order information

### Non-IP version

#### 1.1 Unit package information


Component name	Quantity/unit package [PCS]	Picture
Basic Flex G3 Shortpitch Non-IP	1	

#### 1.2 Order number

Model	EAN10	S-unit	EAN40	S-unit
BF400S-G3-827-05 16,5W 24V 40X1 OSRAM	4062172231251	1	4062172231268	40
BF400S-G3-830-05 16,5W 24V 40X1 OSRAM	4062172231275	1	4062172231282	40
BF400S-G3-840-05 16,5W 24V 40X1 OSRAM	4062172231299	1	4062172231305	40
BF400S-G3-865-05 16,5W 24V 40X1 OSRAM	4062172231312	1	4062172231329	40
BF600S-G3-830-05 23W 24V 40X1 OSRAM	4062172231336	1	4062172231343	40
BF800S-G3-827-05 31W 24V 40X1 OSRAM	4062172231350	1	4062172231367	40
BF800S-G3-830-05 31W 24V 40X1 OSRAM	4062172231374	1	4062172231381	40
BF800S-G3-840-05 31W 24V 40X1 OSRAM	4062172231398	1	4062172231404	40
BF800S-G3-865-05 31W 24V 40X1 OSRAM	4062172231411	1	4062172231428	40
BF900S-G3-830-05 34W 24V 40X1 OSRAM	4062172231435	1	4062172231442	40
BF1000S-G3-827-05 38W 24V 40X1 OSRAM	4062172231459	1	4062172231466	40
BF1000S-G3-830-05 38W 24V 40X1 OSRAM	4062172231473	1	4062172231480	40
BF1000S-G3-840-05 38W 24V 40X1 OSRAM	4062172231497	1	4062172231503	40
BF1000S-G3-865-05 38W 24V 40X1 OSRAM	4062172231510	1	4062172231527	40
BF1200S-G3-827-05 46W 24V 40X1 OSRAM	4062172231534	1	4062172231541	40
BF1200S-G3-830-05 46W 24V 40X1 OSRAM	4062172231558	1	4062172231565	40
BF1200S-G3-840-05 46W 24V 40X1 OSRAM	4062172231572	1	4062172231589	40
BF1200S-G3-865-05 46W 24V 40X1 OSRAM	4062172231596	1	4062172231602	40
BF1500S-G3-827-05 62W 24V 40X1 OSRAM	4062172231619	1	4062172231626	40
BF1500S-G3-830-05 62W 24V 40X1 OSRAM	4062172231633	1	4062172231640	40
BF1500S-G3-840-05 62W 24V 40X1 OSRAM	4062172231657	1	4062172231664	40
BF1500S-G3-865-05 62W 24V 40X1 OSRAM	4062172231671	1	4062172231688	40

## IP version

### 1.1 Unit package information

Component name	Quantity/unit package [PCS]	Picture
Basic Flex G3 Shortpitch IP	1	

### 1.2 Order number

Model		EAN10	S-unit	EAN40	S-unit
BFP400S-G3-827-05 16,5W 24V 20X1 OSRAM		4062172231695	1	4062172231701	20
BFP400S-G3-830-05 16,5W 24V 20X1 OSRAM		4062172231718	1	4062172231725	20
BFP400S-G3-840-05 16,5W 24V 20X1 OSRAM		4062172231732	1	4062172231749	20
BFP400S-G3-865-05 16,5W 24V 20X1 OSRAM		4062172231756	1	4062172231763	20
BFP600S-G3-830-05 23W 24V 20X1 OSRAM		4062172231770	1	4062172231787	20
BFP800S-G3-827-05 31W 24V 20X1 OSRAM		4062172231794	1	4062172231800	20
BFP800S-G3-830-05 31W 24V 20X1 OSRAM		4062172231817	1	4062172231824	20
BFP800S-G3-840-05 31W 24V 20X1 OSRAM		4062172231831	1	4062172231848	20
BFP800S-G3-865-05 31W 24V 20X1 OSRAM		4062172231855	1	4062172231862	20
BFP900S-G3-830-05 34W 24V 20X1 OSRAM		4062172231879	1	4062172231886	20
BFP1000S-G3-827-05 38W 24V 20X1 OSRAM		4062172231893	1	4062172231909	20
BFP1000S-G3-830-05 38W 24V 20X1 OSRAM		4062172231916	1	4062172231923	20
BFP1000S-G3-840-05 38W 24V 20X1 OSRAM		4062172231930	1	4062172231947	20
BFP1000S-G3-865-05 38W 24V 20X1 OSRAM		4062172231954	1	4062172231961	20
BFP1200S-G3-827-05 46W 24V 20X1 OSRAM		4062172231978	1	4062172231985	20
BFP1200S-G3-830-05 46W 24V 20X1 OSRAM		4062172231992	1	4062172232005	20
BFP1200S-G3-840-05 46W 24V 20X1 OSRAM		4062172232012	1	4062172232029	20
BFP1200S-G3-865-05 46W 24V 20X1 OSRAM		4062172232036	1	4062172232043	20
BFP1500S-G3-827-05 62W 24V 20X1 OSRAM		4062172232050	1	4062172232067	20
BFP1500S-G3-830-05 62W 24V 20X1 OSRAM		4062172232074	1	4062172232081	20
BFP1500S-G3-840-05 62W 24V 20X1 OSRAM		4062172232098	1	4062172232104	20
BFP1500S-G3-865-05 62W 24V 20X1 OSRAM		4062172232111	1	4062172232128	20

## Accessories Non-IP version

### 1.1 Connector for board-to-board connection



Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BF08-G3-C2PI-IP00 20XBT25	4062172013727	Connector	25	4062172013741	Connector	500

### 1.2 Connector for connection to the power supply



Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BF08-G3-C2PJ-IP00-0500 10XBT25	4062172013758	Connector	25	4062172013772	Connector	250

Remark: Cable length showing in picture just for reference.

## IP version

### 1.1 Connector for board-to-board connection



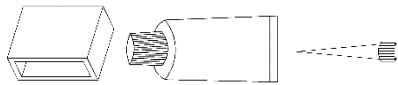
Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BFP10-G3-C2PI-IP66 25X1	4062172013680	Connector	4	4062172013697	Connector	100
		Glue	1		Glue	25
		Nozzles	1		Nozzles	25
		Block terminal	4		Block terminal	100

### 1.2 Connector for board-to-board connection



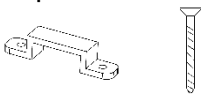
Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BFP10-G3-C2PJ-IP66 25X1	4062172013703	Connector	4	4062172013710	Connector	100
		Glue	1		Glue	25
		Nozzles	1		Nozzles	25
		Block terminal	4		Block terminal	100

### 1.3 Endcap



Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BFP10-G3-IP54-ENDCAP 25X1	4062172232173	Endcap	4	4062172232180	Endcap	100
		Glue	1		Glue	25
		Nozzles	1		Nozzles	25

### 1.4 Clips



Model	EAN10			EAN40		
	EAN10	Component list	Quantity [PCS]	EAN40	Component list	Quantity [PCS]
FX-BFP10-G3-TT-27H06-06 25X1	4062172232197	Clip	20	4062172232203	Clip	500
		Screw	40		Screw	1000

## Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.

The LED module incorporates no protection against short circuits, overload or overheating.  
**In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating.**

For dimming applications attention should be paid to specific references in "OPTOTRONIC® Technical Guide".

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules must carry the CE mark.

In Europe the declarations of conformity must include the following standards:

CE: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2.

Also check for the mark of an independent authorized certification institute.

Please see the relevant application guides for more detailed information.

When using power supplies other than OPTOTRONIC® the following basic safety features are required, in addition to any other application specific concerns and local safety codes.

**OSRAM OPTOTRONIC® electronic control gear complies with all relevant standards and guarantees safe operation.**

- To avoid mechanical damage, the LED modules should be attached securely to the intended substrate. Heavy vibration should be avoided.
- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity! Incorrect polarity will lead to no light emission and may cause damage of the LED module.
- Parallel connection is highly recommended as safe electrical operation mode. Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- The maximum length of BF G3 shortpitch is 5M with power feed at one end.
- When mounting on metallic or otherwise conductive surfaces, there needs to be an electrical isolation at soldering points between module and the mounting surface,
- Pay attention to ESD steps when mounting the module.
- Please ensure that the power supply is of adequate power to operate the total load.
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC® OT DIM.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable protection class.

## Assembly Information

- The smallest electrical unit (SEU) can be removed by cutting at the printed marks at the side.
- After cutting connect the module via IP66 CONNECT system. Insert module into connector and apply pressure on a hard surface until locked.
- The mounting of the single LED coupons is facilitated by means of the double-sided adhesive on the back surface of the module. Care must be taken to provide a clean and dry mounting surface, free of oils or silicone coatings as well as dirt particle. The mounting substrate must have sufficient structural integrity. Take care to completely remove the adhesive backing. Once the module is appropriately positioned, press on the module with about 20N/cm<sup>2</sup> (refer to application techniques of Tessa adhesive transfer tapes). To support adhesion at higher temperatures, use additional mounting brackets if temperature exceeds  $t_c = \text{normal } ^\circ\text{C}$ .
- The minimum bending radius Non-IP version is 2cm, IP version is 5cm.
- When installing in environments with large variations in temperature (e.g. outdoor applications) and operating length of more than 2 m, the use of adequate mounting surfaces is necessary. Otherwise it is advisable to use an additional thicker adhesive tape to absorb the stress of any mismatch in expansion.
- Pay attention to avoid highly corrosive atmospheres, e.g. permanent high humidity or Hydrogen Sulfide (H<sub>2</sub>S). With current LED technology, H<sub>2</sub>S is causing accelerated corrosion which will lead to shortened time life or premature failure. Sources for H<sub>2</sub>S may be rubber, foamed rubber, soft-foam-tapes, sealing on rubber basis, natural sources (e.g. sulfur springs), etc. To avoid H<sub>2</sub>S from sulfur-vulcanized rubber it is necessary to switch to silicon-based materials or rubber that is Peroxid-crosslinked.
- Indication may be found in the material datasheet of the rubber supplier.

### OSRAM Asia Pacific