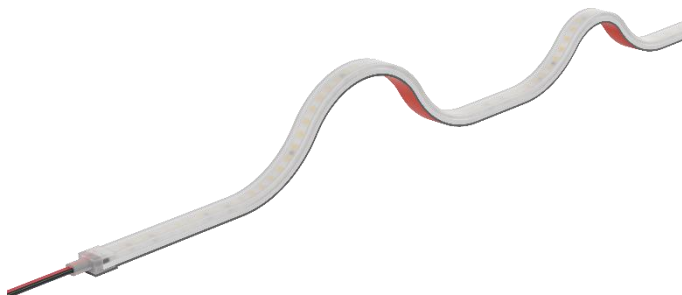


Basic Flex G4 24V IP66



1.Product Description

Basic Flex G4 is designed for high uniformity with up to 168leds per meter, and cost-effective solution, widely used for embedded lighting. This family provides 3SDCM, CRI90 and R9>50, and up to 50,000hrs lifetime.

2.Key Features & Benefits

SDCM<3 and CRI/Ra>90, R9>50.

L70B50 up to 50,000 hrs.

Lumen output up to 3000lm/m.

High Efficiency up to 122lm/w

3.Certificates

CE/CB/ENEC/BIS

4.Applications

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

5. Photometrical data

Product Name	CRI/Ra	Color Temp. [K]	Cx	Cy	SDCM	Luminous flux / M [lm]	Nominal wattage/M [W]	Luminous flux/reel [lm]	Luminous efficacy [lm/w]
BFP400S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	370	3.5	1810	112
BFP400S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	380	3.5	1850	115
BFP400S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	400	3.5	1960	121
BFP400S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	400	3.5	1960	121
BFP600S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	540	5	2600	112
BFP600S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	560	5	2690	116
BFP600S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	590	5	2830	122
BFP600S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	590	5	2830	122
BFP900S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	860	8.0	3950	105
BFP900S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	890	8.0	4090	111
BFP900S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	940	8.0	4320	119
BFP900S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	940	8.0	4320	119
BFP1200S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	1130	10.5	5080	110
BFP1200S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	1170	10.5	5260	113
BFP1200S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	1250	10.5	5620	121
BFP1200S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	1250	10.5	5620	121
BFP1500S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	1400	13.5	6680	104
BFP1500S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	1450	13.5	7030	109
BFP1500S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	1530	13.5	7380	114
BFP1500S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	1530	13.5	7380	114
BFP2000S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	1900	19	7600	102
BFP2000S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	1990	19	7960	107
BFP2000S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	2140	19	7400	115
BFP2000S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	2140	19	7400	115
BFP2400S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	2210	21.5	8840	101
BFP2400S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	2340	21.5	9360	106
BFP2400S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	2420	21.5	9640	110
BFP2400S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	2420	21.5	9640	110
BFP3000S-G4-927-24-05	>90	2700	0.4598	0.4078	< 3	2700	27	10500	100
BFP3000S-G4-930-24-05	>90	3000	0.4307	0.4008	< 3	2860	27	11000	106
BFP3000S-G4-940-24-05	>90	4000	0.3840	0.3785	< 3	3000	27	11300	114
BFP3000S-G4-965-24-05	>90	6500	0.3157	0.3309	< 3	3000	27	11300	114

6. Electrical Data

Product Name	Nominal voltage [V, DC]	Input voltage range [V, DC]	Reverse Voltage [V, DC]	Nominal wattage /M [W]	Nominal wattage [W]	Nominal current / M [mA, DC]	Nominal current /reel [mA, DC]	Dimmable
BFP400S-G4-9XX-24-05	24	23...25	25	3.5	16	146	660	Yes
BFP600S-G4-9XX-24-05	24	23...25	25	5	23	208	970	Yes
BFP900S-G4-9XX-24-05	24	23...25	25	8.0	36	333	1480	Yes
BFP1200S-G4-9XX-24-05	24	23...25	25	10.5	46	433	1920	Yes
BFP1500S-G4-9XX-24-05	24	23...25	25	13.5	60	558	2500	Yes
BFP2000S-G4-9XX-24-05	24	23...25	25	19	80	792	3330	Yes
BFP2400S-G4-9XX-24-05	24	23...25	25	21.5	95	895	3960	Yes
BFP3000S-G4-9XX-24-05	24	23...25	25	27	111	1125	4630	Yes

7. Temperatures & operating conditions & lifespan

Product Name	ta ¹⁾ [°C]	tp ²⁾ [°C]	tc_max ³⁾ [°C]	ts ⁴⁾ [°C]	Lifetime[hrs] L70B50 @tc_max	Switch Times ⁶⁾	ESD Protection
BFP400S-G4-9XX-24-05	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP600S-G4-9XX-24-05	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP900S-G4-9XX-24-05	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP1200S-G4-9XX-24-05	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP1500S-G4-9XX-24-05	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP2000S-G4-9XX-24-05 ⁵⁾	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP2400S-G4-9XX-24-05 ⁵⁾	-20 ... 50	55	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV
BFP3000S-G4-9XX-24-05 ⁵⁾	-20 ... 45	60	85	-30 ... 80	>50000	>1,000,000	Contact±4KV, Air±8KV

1) Ambient temperature range

2) Performance temp. acc. to IEC 62717

3) Maximum temperature at tc test point

4) Temperature range at storage

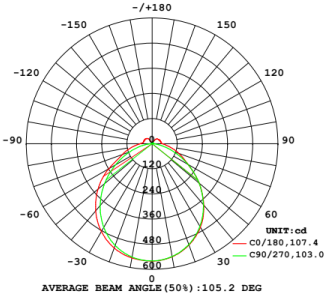
5) Operating with heat sink or aluminum profile is needed.

6) 1s ON, 1s OFF

8. Lumen maintenance

Operating voltage	Operating Temperature	L90			L80			L70		
		B10	B30	B50	B10	B30	B50	B10	B30	B50
24V	ta = 25°C	25,000	25,000	25,000	35,000	35,000	35,000	50,000	50,000	50,000
	ta = 35°C	25,000	25,000	25,000	35,000	35,000	35,000	50,000	50,000	50,000
	ta = 45/50°C	25,000	25,000	25,000	35,000	35,000	35,000	50,000	50,000	50,000

9. Light distribution

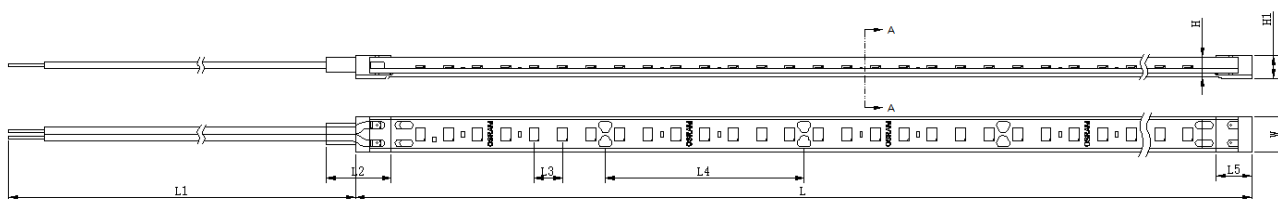
Product Name	Light Distribution Graph	Beam Angle (2Xθ1/2)
BFP400S-G4-927-24-05 BFP600S-G4-927-24-05 BFP900S-G4-927-24-05 BFP1200S-G4-927-24-05 BFP1500S-G4-927-24-05 BFP2000S-G4-927-24-05 BFP2400S-G4-927-24-05 BFP3000S-G4-927-24-05	 <p>The graph is a polar plot with a circular grid. The radial scale represents candela (cd) with markings at 120, 240, 360, 480, 600, and 720. The angular scale ranges from -180 to +180 degrees with major markings every 30 degrees. Two curves are plotted: a red curve for C0/180, 107.4 and a green curve for C90/270, 103.0. The average beam angle is indicated as 105.2 DEG.</p>	105°±10°

10.LED Module Information

Product Name	Number of LEDs per smallest unit	Number of LEDs per meter	Number of LEDs per module	Flux variability on the full length	LED Pitch	Prewired Cable Length [mm]	Conductor cross section	Lowest bending radius [mm]
BFP400S-G4-9XX-24-05	7	126	630	< 20%	7.94	>300	0.5mm ²	50
BFP600S-G4-9XX-24-05	7	126	630	< 20%	7.94	>300	0.5mm ²	50
BFP900S-G4-9XX-24-05	7	126	630	< 20%	7.94	>300	0.5mm ²	50
BFP1200S-G4-9XX-24-05	7	126	630	< 20%	7.94	>300	0.5mm ²	50
BFP1500S-G4-9XX-24-05	7	126	630	< 20%	7.94	>300	0.5mm ²	50
BFP2000S-G4-9XX-24-05	7	140	700	< 25%	7.14	>300	0.5mm ²	50
BFP2400S-G4-9XX-24-05	7	140	700	< 25%	7.14	>300	0.5mm ²	50
BFP3000S-G4-9XX-24-05	7	168	840	< 25%	5.95	>300	0.5mm ²	50

11. Dimensions & Weight

BFP400S-G4-9XX-24-05 / BFP600S-G4-9XX-24-05 / BFP900S-G4-9XX-24-05 / BFP1200S-G4-9XX-24-05 / BFP1500S-G4-9XX-24-05									
Dimension/mm	L	L1	L2	L3	L4	L5	H	H1	W
Min.	4990	340	17.8	7.8	55.5	9.8	5.2	6.7	9.8
Typ.	5010	350	18.0	7.9	55.6	10.0	5.5	7.0	10.0
Max.	5030	360	18.3	8.0	55.7	10.3	5.8	7.3	10.2
BFP2000S-G4-9XX-24-05 / BFP2400S-G4-9XX-24-05									
Dimension/mm	L	L1	L2	L3	L4	L5	H	H1	W
Min.	4990	340	17.8	7.0	49	9.8	5.2	6.7	9.8
Typ.	5010	350	18.0	7.1	50	10.0	5.5	7.0	10.0
Max.	5030	360	18.3	7.2	51	10.3	5.8	7.3	10.2
BFP3000S-G4-9XX-24-05									
Dimension/mm	L	L1	L2	L3	L4	L5	H	H1	W
Min.	4990	340	17.8	5.8	40.7	9.8	5.2	6.7	9.8
Typ.	5010	350	18.0	5.9	41.7	10.0	5.5	7.0	10.0
Max.	5030	360	18.3	6.0	42.7	10.3	5.8	7.3	10.2



12. Max Cable length

Product Name	Flex Length(m)	20AWG(0.52mm ²)		18AWG(0.81mm ²)		16AWG(1.32mm ²)		14AWG(2.07mm ²)	
		m	ft	m	ft	m	ft	m	ft
BFP400S-G4-9XX-24-05 BFP600S-G4-9XX-24-05 BFP900S-G4-9XX-24-05 BFP1200S-G4-9XX-24-05	1	10	32	13	42	21	68	25	82
	2	8	26	11	36	18	59	20	65
	3	5	16	8	26	12	39	15	49
	4	3	9	5	16	8	26	10	32
	5	1	3	2	6	3	9	5	16
BFP2000S-G4-9XX-24-05 BFP2400S-G4-9XX-24-05	1	8	26	11	36	18	59	20	65
	2	5	16	8	26	12	39	15	49
	3	3	9	5	16	8	26	10	32
	4	1	3	2	6	3	9	5	16
	5	0.5	1	2	6	3	9	5	16
BFP3000S-G4-9XX-24-05	1	5	16	8	26	12	39	15	49
	2	3	9	5	16	8	26	10	32
	3	1	3	2	6	3	9	5	16
	4	0.5	1	2	6	3	9	5	16
	5	0.3	1	1	3	2	6	3	9

13. Maximum LED Flex Length In Relation to Supply Cable Length

NO.	Product Name	Example based on 0,5 mm ² wire cross-section				
		0m	1m	3m	6m	10m
1	BFP400S-G4-9XX-24-05	14	13	12	8.5	4
2	BFP600S-G4-9XX-24-05	13	12	11	6	3.5
3	BFP900S-G4-9XX-24-05	11	10	7	3.5	2.0
4	BFP1200S-G4-9XX-24-05	10	9	6.5	2.5	1.5
5	BFP1500S-G4-9XX-24-05	7	6	4	2	1
6	BFP2000S-G4-9XX-24-05	6	4.5	3.0	1.5	1.0
7	BFP2400S-G4-9XX-24-05	5	4	2.5	1.0	0.5
8	BFP3000S-G4-9XX-24-05	5	3.0	2.0	1.0	0.5

14. 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

EMC / immunity: IEC/EN 61547

15. Safety Information

- The LED module itself and all its components must not be mechanically stressed.

The LED module incorporates no protection against short circuits, overload or overheating.

In order to drive Inventronics LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized SELV 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:

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

- Assembly must not damage or destroy conducting paths on the circuit board.
- 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) need to be made regarding 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.
- 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 SELV CV drivers from Inventronics.
- 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.

16. Ordering Information

Item	Product Name	Family Code	Basic Code	EAN10	EAN40	S/Unit
1	BFP400S-G4-927-24-05	D30087335	AM51203	6977770433762	6977770433779	20
2	BFP400S-G4-930-24-05	D30087335	AM51204	6977770433786	6977770433793	20
3	BFP400S-G4-940-24-05	D30087335	AM51205	6977770433809	6977770433816	20
4	BFP400S-G4-965-24-05	D30087335	AM51206	6977770433823	6977770433830	20
5	BFP600S-G4-927-24-05	D30087335	AM51207	6977770433847	6977770433854	20
6	BFP600S-G4-930-24-05	D30087335	AM51208	6977770433861	6977770433878	20
7	BFP600S-G4-940-24-05	D30087335	AM51209	6977770433885	6977770433892	20
8	BFP600S-G4-965-24-05	D30087335	AM51210	6977770433908	6977770433915	20
9	BFP900S-G4-927-24-05	D30087335	AM51211	6977770433922	6977770433939	20
10	BFP900S-G4-930-24-05	D30087335	AM51212	6977770433946	6977770433953	20
11	BFP900S-G4-940-24-05	D30087335	AM51213	6977770433960	6977770433977	20
12	BFP900S-G4-965-24-05	D30087335	AM51214	6977770433984	6977770433991	20
13	BFP1200S-G4-927-24-05	D30087335	AM51215	6977770434004	6977770434011	20
14	BFP1200S-G4-930-24-05	D30087335	AM51216	6977770434028	6977770434035	20
15	BFP1200S-G4-940-24-05	D30087335	AM51217	6977770434042	6977770434059	20
16	BFP1200S-G4-965-24-05	D30087335	AM51218	6977770434066	6977770434073	20
17	BFP1500S-G4-927-24-05	D30087335	AM51219	6977770434080	6977770434097	20
18	BFP1500S-G4-930-24-05	D30087335	AM51220	6977770434103	6977770434110	20
19	BFP1500S-G4-940-24-05	D30087335	AM51221	6977770434127	6977770434134	20
20	BFP1500S-G4-965-24-05	D30087335	AM51222	6977770434141	6977770434158	20
21	BFP2000S-G4-927-24-05	D30087335	AM51223	6977770434165	6977770434172	20
22	BFP2000S-G4-930-24-05	D30087335	AM51224	6977770434189	6977770434196	20
23	BFP2000S-G4-940-24-05	D30087335	AM51225	6977770434202	6977770434219	20
24	BFP2000S-G4-965-24-05	D30087335	AM51226	6977770434226	6977770434233	20
25	BFP2400S-G4-927-24-05	D30087335	AM51227	6977770434240	6977770434257	20
26	BFP2400S-G4-930-24-05	D30087335	AM51228	6977770434264	6977770434271	20
27	BFP2400S-G4-940-24-05	D30087335	AM51229	6977770434288	6977770434295	20
28	BFP2400S-G4-965-24-05	D30087335	AM51230	6977770434301	6977770434318	20
29	BFP3000S-G4-927-24-05	D30087335	AM51231	6977770434325	6977770434332	20
30	BFP3000S-G4-930-24-05	D30087335	AM51232	6977770434349	6977770434356	20
31	BFP3000S-G4-940-24-05	D30087335	AM51237	6977770434363	6977770434370	20
32	BFP3000S-G4-965-24-05	D30087335	AM51238	6977770434387	6977770434394	20

Disclaimer

Subject to change without notice. Errors and omission accepted. Always make sure to use the most recent release. The latest release of the datasheet is available under the following link www.inventronics-light.com.