

FUWEI

FGM-LG Series

Non-standard Automatic Machine Safety Light Curtain

Due to its small size, the FGM-LG series safety light curtain can be applied on various non-standard automatic machines. In the meantime, it has great advantages like high resolution, long sensing distance, and self-inspection function (independent dual output loop).



Product Feature

- Long sensing distance up to 4 meters.
- Dual loop and self-inspection function to ensure high safety and reliability.
- Quick response time, the fastest response time < 1ms.
- Low wide voltage power supply, the working voltage is DC10V-30V.
- Great ability to resist electromagnetic interference and can effectively resist influence by electromagnetic of various equipment motors.
- Wire synchronization technology to resist light interference effectively.
- Diverse brackets support different installation methods and suit for different applying environments.
- Proof dust and water well.
- The size is small, and cross-sectional size is 35*27mm.










GuangZhou FUWEI Electronic Technology Co.,Ltd

Specification

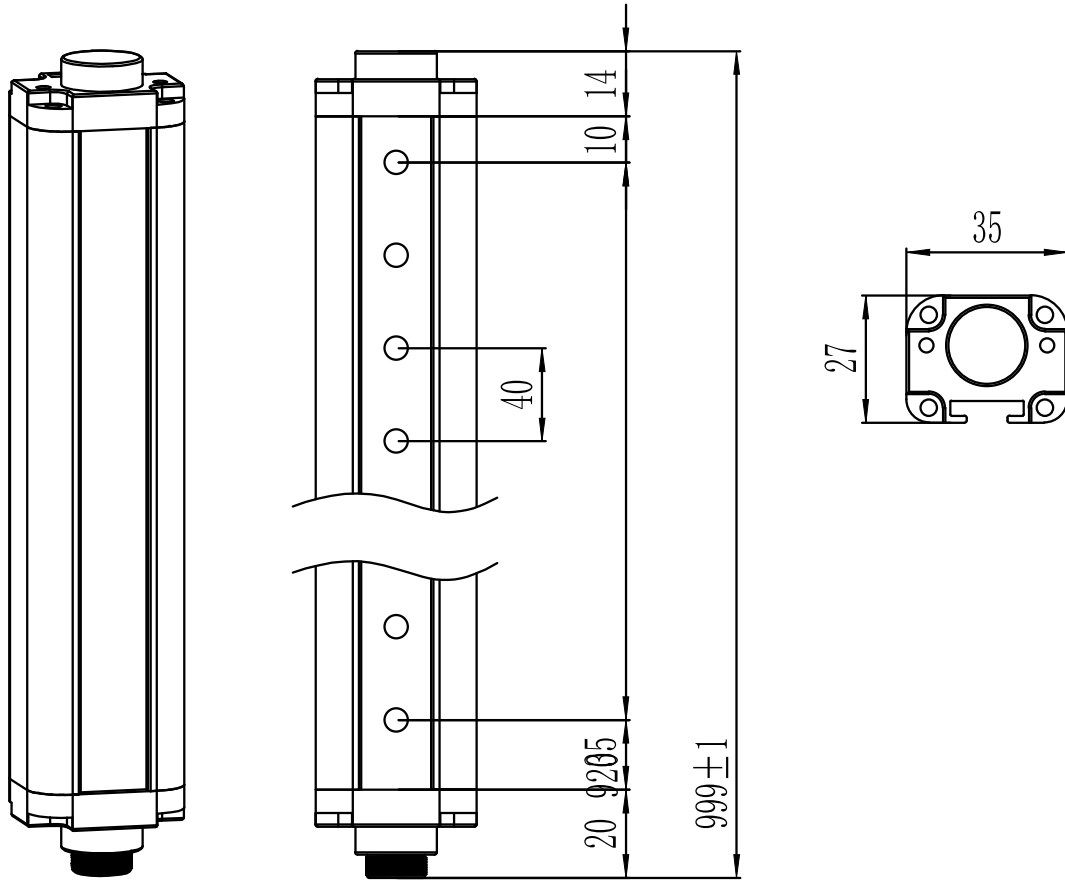
Specification

Power supply	DC10V~30V
Capacity	<5W
Beam space	10mm,20mm,40mm
Resolution	15mm,25mm,45mm
Beams	10mm: 8,12,16.....144 20mm: 4,6,8.....72 40mm: 4,6,8.....36
Protective height	Protective height= (N-1)* beam space, N is beam quantity
Wave length	940nm
Response time	Response time = N*0.1ms + 0.4ms (N is beam quantity)
Type of output (OSSD)	PNP/NPN semiconductors, current <200mA, residual voltage: 1V max, leakage current: 1mA max. (Except voltage influenced by lengthen wire)
Protective circuit	Overvoltage protection, power supply reverse polarity protection, Overcurrent protection
Sensing distance	0.1~0.5m,0.1~2m,0.1~4m (remark: if have light reflection, please let us know)
Anti-optical interference	10000Lux(angle>5°)
Sensing method	Through-beam type
Synchronization	Wire synchronization
Enclosure material	Aluminum alloy
Enclosure rating	IP65
Housing cross-section	35*27mm
Ambient operating temperature	-10°C~55°C (without freezing)
Storage temperature	-30°C~70°C (without freezing)
Ambient operating humidity	When temperature is 20°C, humidity mas 85%

Raster Model Description

FGM-LG	-	16	20	-	L1	N	C	-	2
									
Model		Beams	Beams Gap		Brackets	Output Signal	Output Contact		Sensing Distance
FGM-LG Series		04, 06, 08, 10, 12.....	10mm 20mm 40mm		L1 Bracket L2 Bracket L7 Bracket	N: NPN P: PNP R: Relay (dualoutput)	C: Normal Close O: Normal Open		2: 0.1-2M 4: 0.1-4M

Dimensions



A1: Upper cover

A2: Bottom cover + aviation cap

B1: Upper stop-work range

B2: Bottom stop-work range

D: Beam gap

H: Protective height

L: Total height

A1=14mm; A2=20mm;

When D=10mm, B1=5mm; B2=30mm.

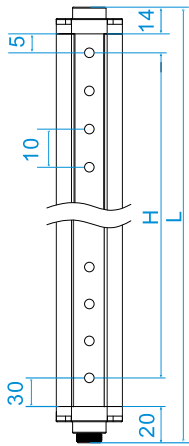
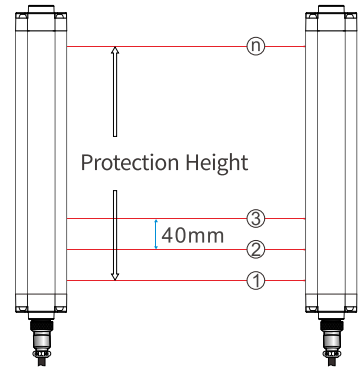
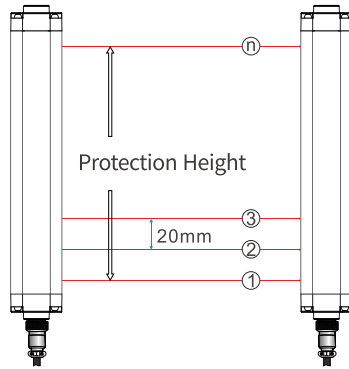
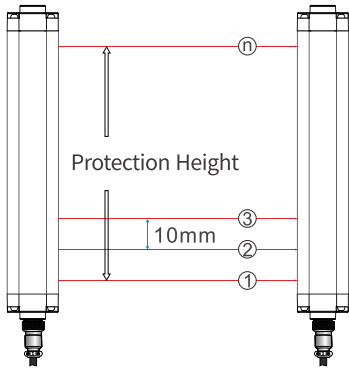
When D=20mm, B1=10mm; B2=35mm.

When D=40mm, B1=10mm; B2=35mm.

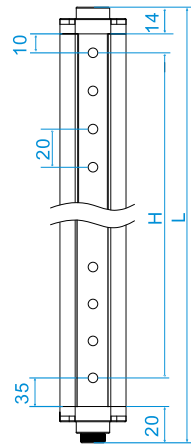
L is total height: $L=A1+A2+B1+B2+H$

H is protective height: $H=(beams-1)* beam\ space$

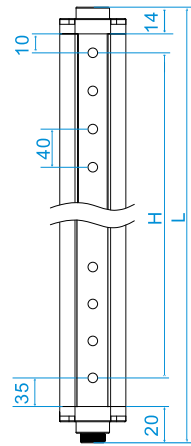
Dimensions



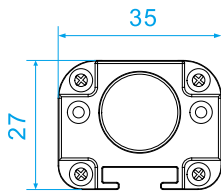
Front View



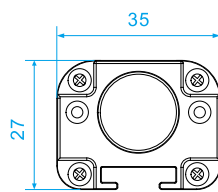
Front View



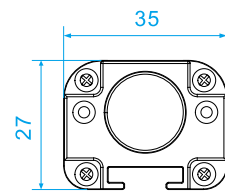
Front View



Top View



Top View



Top View

10mm Beams Pitch

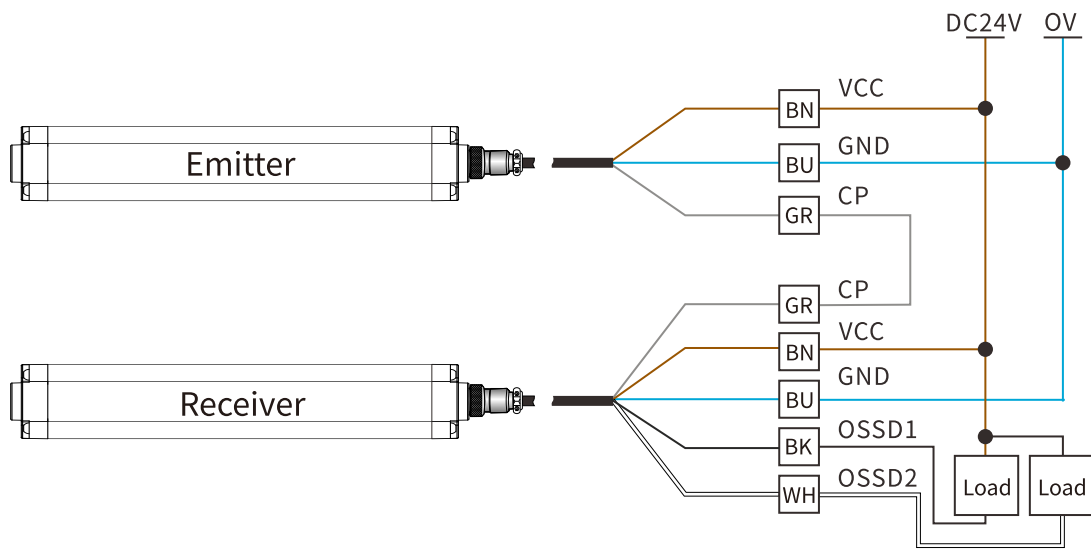
20mm Beams Pitch

40mm Beams Pitch

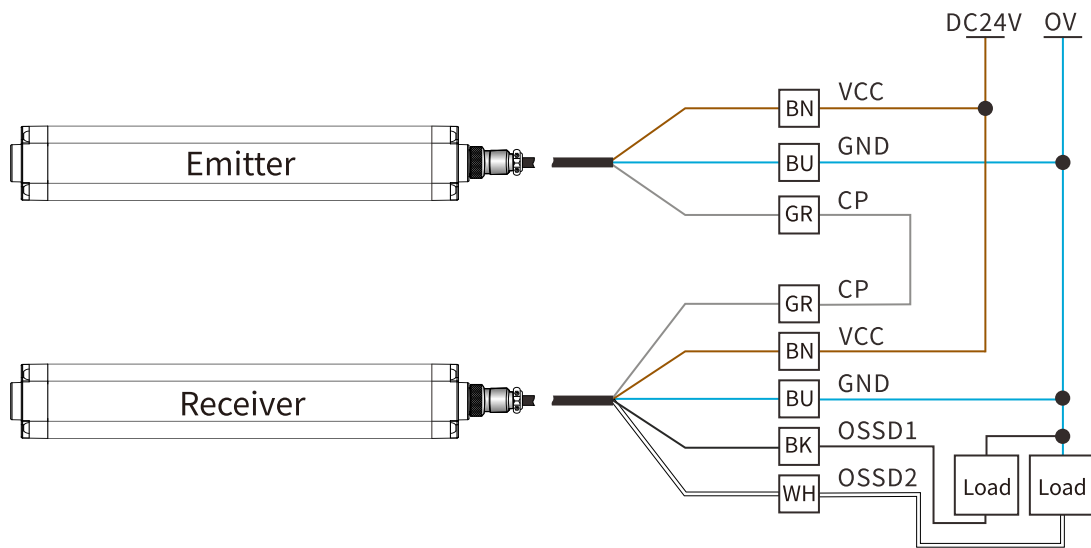
L is total height: $L=A1+A2+B1+B2+H$

H is protective height: $H=(beams-1)* beam\ space$

Wiring Diagram



NPN Output



PNP Output

Select Sheet-Beams Pitch (10mm)

Beams (n)	Protective Height (mm)	Total Height (mm)	Size (mm)	Model NPN.NO	Model NPN.NC	Model PNP.NO	Model PNP.NC
8	70	139	27*35*139	FGM-LG0810-L1NO-2	FGM-LG0810-L1NC-2	FGM-LG0810-L1PO-2	FGM-LG0810-L1PC-2
12	110	179	27*35*179	FGM-LG1210-L1NO-2	FGM-LG1210-L1NC-2	FGM-LG1210-L1PO-2	FGM-LG1210-L1PC-2
16	150	219	27*35*219	FGM-LG1610-L1NO-2	FGM-LG1610-L1NC-2	FGM-LG1610-L1PO-2	FGM-LG1610-L1PC-2
20	190	259	27*35*259	FGM-LG2010-L1NO-2	FGM-LG2010-L1NC-2	FGM-LG2010-L1PO-2	FGM-LG2010-L1PC-2
24	230	299	27*35*299	FGM-LG2410-L1NO-2	FGM-LG2410-L1NC-2	FGM-LG2410-L1PO-2	FGM-LG2410-L1PC-2
28	270	339	27*35*339	FGM-LG2810-L1NO-2	FGM-LG2810-L1NC-2	FGM-LG2810-L1PO-2	FGM-LG2810-L1PC-2
32	310	379	27*35*379	FGM-LG3210-L1NO-2	FGM-LG3210-L1NC-2	FGM-LG3210-L1PO-2	FGM-LG3210-L1PC-2
36	350	419	27*35*419	FGM-LG3610-L1NO-2	FGM-LG3610-L1NC-2	FGM-LG3610-L1PO-2	FGM-LG3610-L1PC-2
40	390	459	27*35*459	FGM-LG4010-L1NO-2	FGM-LG4010-L1NC-2	FGM-LG4010-L1PO-2	FGM-LG4010-L1PC-2
44	430	499	27*35*499	FGM-LG4410-L1NO-2	FGM-LG4410-L1NC-2	FGM-LG4410-L1PO-2	FGM-LG4410-L1PC-2
48	470	539	27*35*539	FGM-LG4810-L1NO-2	FGM-LG4810-L1NC-2	FGM-LG4810-L1PO-2	FGM-LG4810-L1PC-2
52	510	579	27*35*579	FGM-LG5210-L1NO-2	FGM-LG5210-L1NC-2	FGM-LG5210-L1PO-2	FGM-LG5210-L1PC-2
56	550	619	27*35*619	FGM-LG5610-L1NO-2	FGM-LG5610-L1NC-2	FGM-LG5610-L1PO-2	FGM-LG5610-L1PC-2
60	590	659	27*35*659	FGM-LG6010-L1NO-2	FGM-LG6010-L1NC-2	FGM-LG6010-L1PO-2	FGM-LG6010-L1PC-2
64	630	699	27*35*699	FGM-LG6410-L1NO-2	FGM-LG6410-L1NC-2	FGM-LG6410-L1PO-2	FGM-LG6410-L1PC-2
68	670	739	27*35*739	FGM-LG6810-L1NO-2	FGM-LG6810-L1NC-2	FGM-LG6810-L1PO-2	FGM-LG6810-L1PC-2
72	710	779	27*35*779	FGM-LG7210-L1NO-2	FGM-LG7210-L1NC-2	FGM-LG7210-L1PO-2	FGM-LG7210-L1PC-2
76	750	819	27*35*819	FGM-LG7610-L1NO-2	FGM-LG7610-L1NC-2	FGM-LG7610-L1PO-2	FGM-LG7610-L1PC-2
80	790	859	27*35*859	FGM-LG8010-L1NO-2	FGM-LG8010-L1NC-2	FGM-LG8010-L1PO-2	FGM-LG8010-L1PC-2
84	830	899	27*35*899	FGM-LG8410-L1NO-2	FGM-LG8410-L1NC-2	FGM-LG8410-L1PO-2	FGM-LG8410-L1PC-2
88	870	939	27*35*939	FGM-LG8810-L1NO-2	FGM-LG8810-L1NC-2	FGM-LG8810-L1PO-2	FGM-LG8810-L1PC-2
92	910	979	27*35*979	FGM-LG9210-L1NO-2	FGM-LG9210-L1NC-2	FGM-LG9210-L1PO-2	FGM-LG9210-L1PC-2
96	950	1019	27*35*1019	FGM-LG9610-L1NO-2	FGM-LG9610-L1NC-2	FGM-LG9610-L1PO-2	FGM-LG9610-L1PC-2
100	990	1059	27*35*1059	FGM-LG10010-L1NO-2	FGM-LG10010-L1NC-2	FGM-LG10010-L1PO-2	FGM-LG10010-L1PC-2
104	1030	1099	27*35*1099	FGM-LG10410-L1NO-2	FGM-LG10410-L1NC-2	FGM-LG10410-L1PO-2	FGM-LG10410-L1PC-2
108	1070	1139	27*35*1139	FGM-LG10810-L1NO-2	FGM-LG10810-L1NC-2	FGM-LG10810-L1PO-2	FGM-LG10810-L1PC-2
112	1110	1179	27*35*1179	FGM-LG11210-L1NO-2	FGM-LG11210-L1NC-2	FGM-LG11210-L1PO-2	FGM-LG11210-L1PC-2
116	1150	1219	27*35*1219	FGM-LG11610-L1NO-2	FGM-LG11610-L1NC-2	FGM-LG11610-L1PO-2	FGM-LG11610-L1PC-2
120	1190	1259	27*35*1259	FGM-LG12010-L1NO-2	FGM-LG12010-L1NC-2	FGM-LG12010-L1PO-2	FGM-LG12010-L1PC-2
124	1230	1299	27*35*1299	FGM-LG12410-L1NO-2	FGM-LG12410-L1NC-2	FGM-LG12410-L1PO-2	FGM-LG12410-L1PC-2
128	1270	1339	27*35*1339	FGM-LG12810-L1NO-2	FGM-LG12810-L1NC-2	FGM-LG12810-L1PO-2	FGM-LG12810-L1PC-2
132	1310	1379	27*35*1379	FGM-LG13210-L1NO-2	FGM-LG13210-L1NC-2	FGM-LG13210-L1PO-2	FGM-LG13210-L1PC-2
136	1350	1419	27*35*1419	FGM-LG13610-L1NO-2	FGM-LG13610-L1NC-2	FGM-LG13610-L1PO-2	FGM-LG13610-L1PC-2
140	1390	1459	27*35*1459	FGM-LG14010-L1NO-2	FGM-LG14010-L1NC-2	FGM-LG14010-L1PO-2	FGM-LG14010-L1PC-2

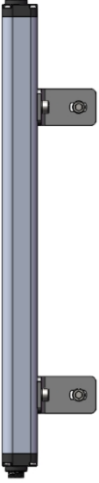
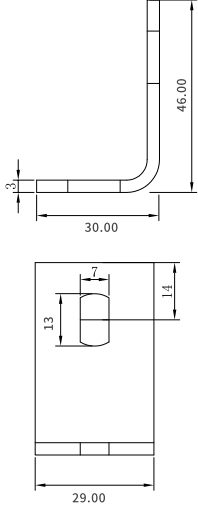

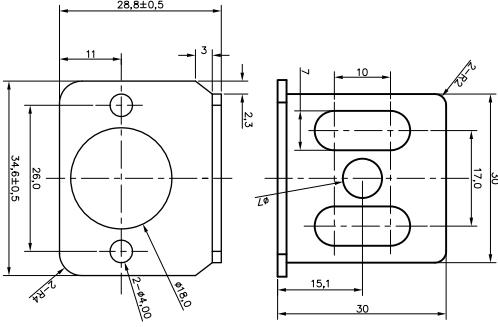

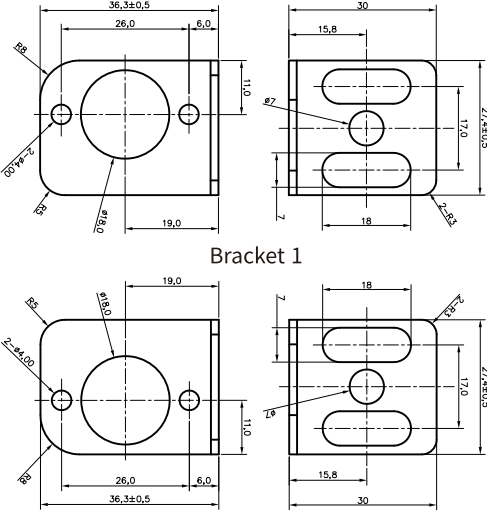
Select Sheet-Beams Pitch (20mm)

Beams (n)	Protective Height (mm)	Total Height (mm)	Size (mm)	Model NPN.NO	Model NPN.NC	Model PNP.NO	Model PNP.NC
4	60	114	27*35*114	FGM-LG0420-L1NO-2	FGM-LG0420-L1NC-2	FGM-LG0420-L1PO-2	FGM-LG0420-L1PC-2
6	100	179	27*35*179	FGM-LG0620-L1NO-2	FGM-LG0620-L1NC-2	FGM-LG0620-L1PO-2	FGM-LG0620-L1PC-2
8	140	219	27*35*219	FGM-LG0820-L1NO-2	FGM-LG0820-L1NC-2	FGM-LG0820-L1PO-2	FGM-LG0820-L1PC-2
10	180	259	27*35*259	FGM-LG1020-L1NO-2	FGM-LG1020-L1NC-2	FGM-LG1020-L1PO-2	FGM-LG1020-L1PC-2
12	220	299	27*35*299	FGM-LG1220-L1NO-2	FGM-LG1220-L1NC-2	FGM-LG1220-L1PO-2	FGM-LG1220-L1PC-2
14	260	339	27*35*339	FGM-LG1420-L1NO-2	FGM-LG1420-L1NC-2	FGM-LG1420-L1PO-2	FGM-LG1420-L1PC-2
16	300	379	27*35*379	FGM-LG1620-L1NO-2	FGM-LG1620-L1NC-2	FGM-LG1620-L1PO-2	FGM-LG1620-L1PC-2
18	340	419	27*35*419	FGM-LG1820-L1NO-2	FGM-LG1820-L1NC-2	FGM-LG1820-L1PO-2	FGM-LG1820-L1PC-2
20	380	459	27*35*459	FGM-LG2020-L1NO-2	FGM-LG2020-L1NC-2	FGM-LG2020-L1PO-2	FGM-LG2020-L1PC-2
22	420	499	27*35*499	FGM-LG2220-L1NO-2	FGM-LG2220-L1NC-2	FGM-LG2220-L1PO-2	FGM-LG2220-L1PC-2
24	460	539	27*35*539	FGM-LG2420-L1NO-2	FGM-LG2420-L1NC-2	FGM-LG2420-L1PO-2	FGM-LG2420-L1PC-2
26	500	579	27*35*579	FGM-LG2620-L1NO-2	FGM-LG2620-L1NC-2	FGM-LG2620-L1PO-2	FGM-LG2620-L1PC-2
28	540	619	27*35*619	FGM-LG2820-L1NO-2	FGM-LG2820-L1NC-2	FGM-LG2820-L1PO-2	FGM-LG2820-L1PC-2
30	580	659	27*35*659	FGM-LG3020-L1NO-2	FGM-LG3020-L1NC-2	FGM-LG3020-L1PO-2	FGM-LG3020-L1PC-2
32	620	699	27*35*699	FGM-LG3220-L1NO-2	FGM-LG3220-L1NC-2	FGM-LG3220-L1PO-2	FGM-LG3220-L1PC-2
34	660	739	27*35*739	FGM-LG3420-L1NO-2	FGM-LG3420-L1NC-2	FGM-LG3420-L1PO-2	FGM-LG3420-L1PC-2
36	700	779	27*35*779	FGM-LG3620-L1NO-2	FGM-LG3620-L1NC-2	FGM-LG3620-L1PO-2	FGM-LG3620-L1PC-2
38	740	819	27*35*819	FGM-LG3820-L1NO-2	FGM-LG3820-L1NC-2	FGM-LG3820-L1PO-2	FGM-LG3820-L1PC-2
40	780	859	27*35*859	FGM-LG4020-L1NO-2	FGM-LG4020-L1NC-2	FGM-LG4020-L1PO-2	FGM-LG4020-L1PC-2
42	820	899	27*35*899	FGM-LG4220-L1NO-2	FGM-LG4220-L1NC-2	FGM-LG4220-L1PO-2	FGM-LG4220-L1PC-2
44	860	939	27*35*939	FGM-LG4420-L1NO-2	FGM-LG4420-L1NC-2	FGM-LG4420-L1PO-2	FGM-LG4420-L1PC-2
46	900	979	27*35*979	FGM-LG4620-L1NO-2	FGM-LG4620-L1NC-2	FGM-LG4620-L1PO-2	FGM-LG4620-L1PC-2
48	940	1019	27*35*1019	FGM-LG4820-L1NO-2	FGM-LG4820-L1NC-2	FGM-LG4820-L1PO-2	FGM-LG4820-L1PC-2
50	980	1059	27*35*1059	FGM-LG5020-L1NO-2	FGM-LG5020-L1NC-2	FGM-LG5020-L1PO-2	FGM-LG5020-L1PC-2
52	1020	1099	27*35*1099	FGM-LG5220-L1NO-2	FGM-LG5220-L1NC-2	FGM-LG5220-L1PO-2	FGM-LG5220-L1PC-2
54	1060	1139	27*35*1139	FGM-LG5420-L1NO-2	FGM-LG5420-L1NC-2	FGM-LG5420-L1PO-2	FGM-LG5420-L1PC-2
56	1100	1179	27*35*1179	FGM-LG5620-L1NO-2	FGM-LG5620-L1NC-2	FGM-LG5620-L1PO-2	FGM-LG5620-L1PC-2
58	1140	1219	27*35*1219	FGM-LG5820-L1NO-2	FGM-LG5820-L1NC-2	FGM-LG5820-L1PO-2	FGM-LG5820-L1PC-2
60	1180	1259	27*35*1259	FGM-LG6020-L1NO-2	FGM-LG6020-L1NC-2	FGM-LG6020-L1PO-2	FGM-LG6020-L1PC-2
62	1220	1299	27*35*1299	FGM-LG6220-L1NO-2	FGM-LG6220-L1NC-2	FGM-LG6220-L1PO-2	FGM-LG6220-L1PC-2
64	1260	1339	27*35*1339	FGM-LG6420-L1NO-2	FGM-LG6420-L1NC-2	FGM-LG6420-L1PO-2	FGM-LG6420-L1PC-2
66	1300	1379	27*35*1379	FGM-LG6620-L1NO-2	FGM-LG6620-L1NC-2	FGM-LG6620-L1PO-2	FGM-LG6620-L1PC-2
68	1340	1419	27*35*1419	FGM-LG6820-L1NO-2	FGM-LG6820-L1NC-2	FGM-LG6820-L1PO-2	FGM-LG6820-L1PC-2
70	1380	1459	27*35*1459	FGM-LG7020-L1NO-2	FGM-LG7020-L1NC-2	FGM-LG7020-L1PO-2	FGM-LG7020-L1PC-2
72	1420	1499	27*35*1499	FGM-LG7220-L1NO-2	FGM-LG7220-L1NC-2	FGM-LG7220-L1PO-2	FGM-LG7220-L1PC-2

Select Sheet-Beams Pitch (40mm)

Beams (n)	Protective Height (mm)	Total Height (mm)	Size (mm)	Model NPN.NO	Model NPN.NC	Model PNP.NO	Model PNP.NC
4	120	199	27*35*199	FGM-LG0440-L1NO-2	FGM-LG0440-L1NC-2	FGM-LG0440-L1PO-2	FGM-LG0440-L1PC-2
6	200	279	27*35*279	FGM-LG0640-L1NO-2	FGM-LG0640-L1NC-2	FGM-LG0640-L1PO-2	FGM-LG0640-L1PC-2
8	280	359	27*35*359	FGM-LG0840-L1NO-2	FGM-LG0840-L1NC-2	FGM-LG0840-L1PO-2	FGM-LG0840-L1PC-2
10	360	439	27*35*439	FGM-LG1040-L1NO-2	FGM-LG1040-L1NC-2	FGM-LG1040-L1PO-2	FGM-LG1040-L1PC-2
12	440	519	27*35*519	FGM-LG1240-L1NO-2	FGM-LG1240-L1NC-2	FGM-LG1240-L1PO-2	FGM-LG1240-L1PC-2
14	520	599	27*35*599	FGM-LG1440-L1NO-2	FGM-LG1440-L1NC-2	FGM-LG1440-L1PO-2	FGM-LG1440-L1PC-2
16	600	679	27*35*679	FGM-LG1640-L1NO-2	FGM-LG1640-L1NC-2	FGM-LG1640-L1PO-2	FGM-LG1640-L1PC-2
18	680	759	27*35*759	FGM-LG1840-L1NO-2	FGM-LG1840-L1NC-2	FGM-LG1840-L1PO-2	FGM-LG1840-L1PC-2
20	760	839	27*35*839	FGM-LG2040-L1NO-2	FGM-LG2040-L1NC-2	FGM-LG2040-L1PO-2	FGM-LG2040-L1PC-2
22	840	919	27*35*919	FGM-LG2240-L1NO-2	FGM-LG2240-L1NC-2	FGM-LG2240-L1PO-2	FGM-LG2240-L1PC-2
24	920	999	27*35*999	FGM-LG2440-L1NO-2	FGM-LG2440-L1NC-2	FGM-LG2440-L1PO-2	FGM-LG2440-L1PC-2
26	1000	1079	27*35*1079	FGM-LG2640-L1NO-2	FGM-LG2640-L1NC-2	FGM-LG2640-L1PO-2	FGM-LG2640-L1PC-2
28	1080	1159	27*35*1159	FGM-LG2840-L1NO-2	FGM-LG2840-L1NC-2	FGM-LG2840-L1PO-2	FGM-LG2840-L1PC-2
30	1160	1239	27*35*1239	FGM-LG3040-L1NO-2	FGM-LG3040-L1NC-2	FGM-LG3040-L1PO-2	FGM-LG3040-L1PC-2
32	1240	1319	27*35*1319	FGM-LG3240-L1NO-2	FGM-LG3240-L1NC-2	FGM-LG3240-L1PO-2	FGM-LG3240-L1PC-2
34	1320	1399	27*35*1399	FGM-LG3440-L1NO-2	FGM-LG3440-L1NC-2	FGM-LG3440-L1PO-2	FGM-LG3440-L1PC-2
36	1400	1479	27*35*1479	FGM-LG3640-L1NO-2	FGM-LG3640-L1NC-2	FGM-LG3640-L1PO-2	FGM-LG3640-L1PC-2

Option of Brackets

Picture	Barckets	Accessories	Size Picture
	L1 side-mounting brackets	1.L type brackets (4pcs) 2.Sliding pot (4pcs) 3.M6 grommet (4pcs) 4.M6 pad(4pcs) 5.M6*16 screw(4pcs) 6.M6*8 screw(4pcs)	
	L2 upper & bottom mounting	1. Brackets(4pcs) 2.M3*6 screw(8pcs)	
	L7 upper & bottom side mounting	1. Brackets (4pcs) 2.M6*12 screw(4pcs) 3.M3*6 screw(8pcs)	 <p style="text-align: center;">Bracket 1</p> <p style="text-align: center;">Bracket 2</p>

Application Example

