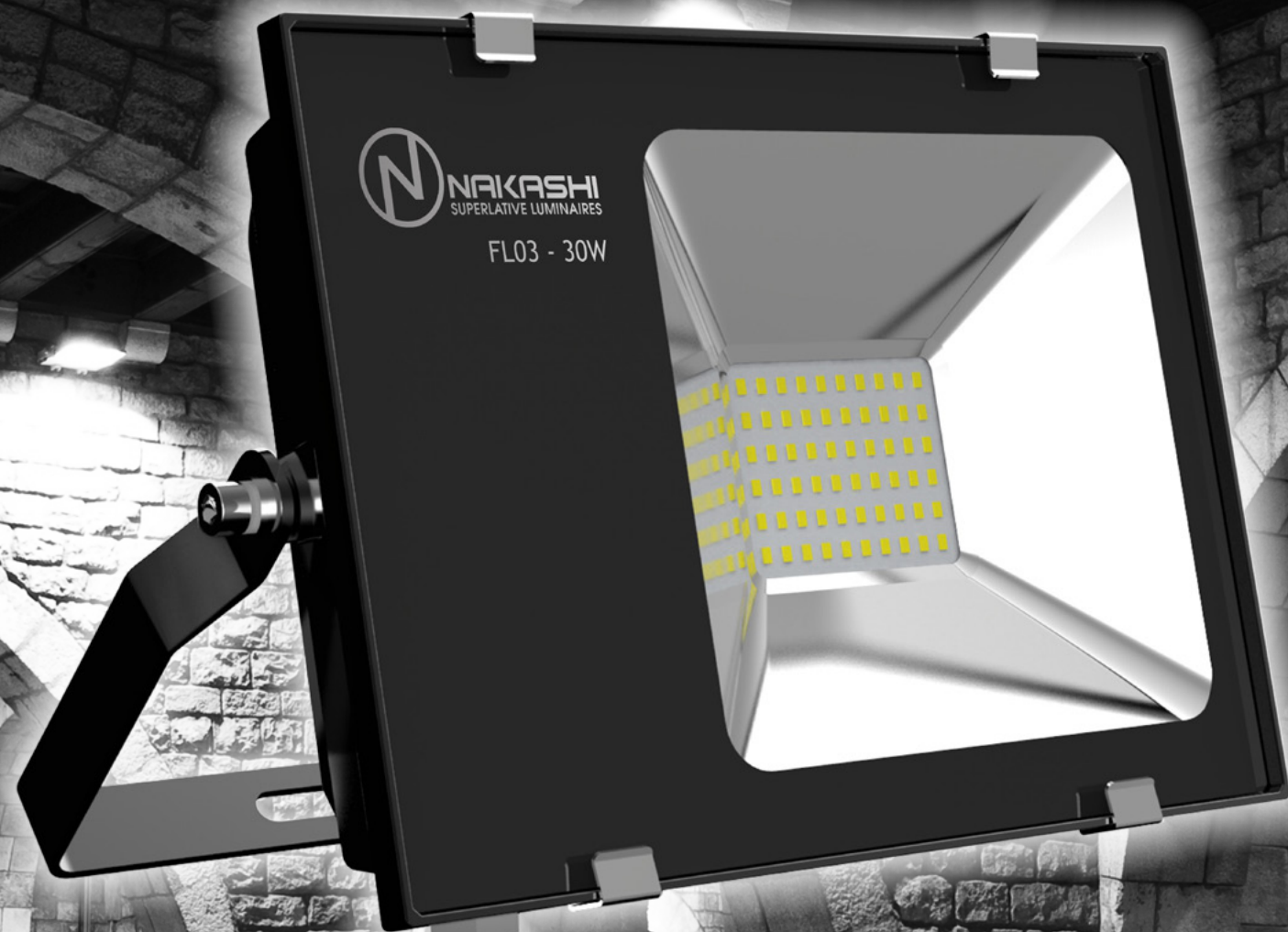




**NAKASHI**  
SUPERLATIVE LUMINAIRES  
FL03 - 30W

## SERIES FL

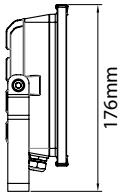
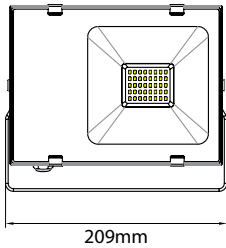
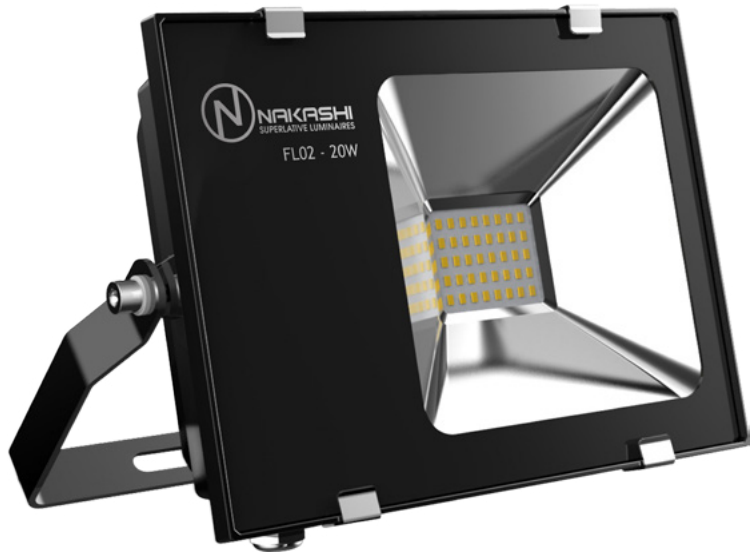
- SMD 3020, high efficiency LEDs
- Wide PCB for better heat dissipation
- 5mm toughened glass
- High power factor, constant current driver
- CRI >80Ra

**Lifespan** >40000 hours (L70)  
**Warranty** 3 years / 13000 hours



20 W

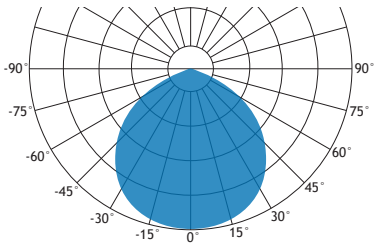
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 40 pcs                   |
| System Power        | 20 W                     |
| Lumen Output        | 1900 lm @ 4000 K         |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 600 mA                   |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 1.0 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 600 mA           |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

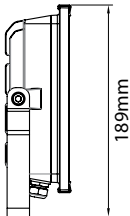
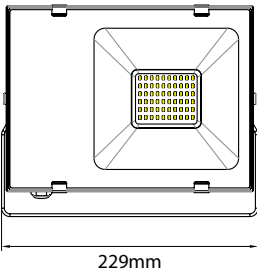
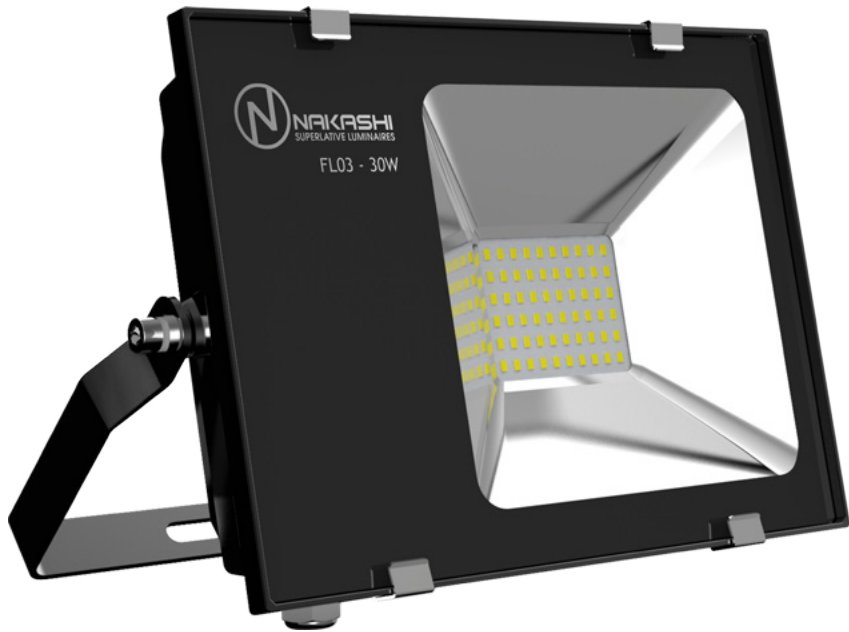
Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 20 W                | FL02 |

30 W

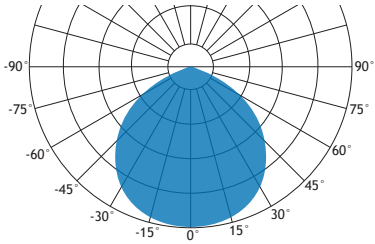
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 60 pcs                   |
| System Power        | 30 W                     |
| Lumen Output        | 2850 lm @ 4000 K         |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 900 mA                   |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 1.2 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 900 mA           |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

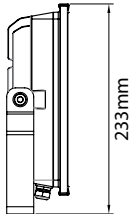
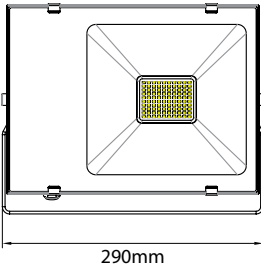
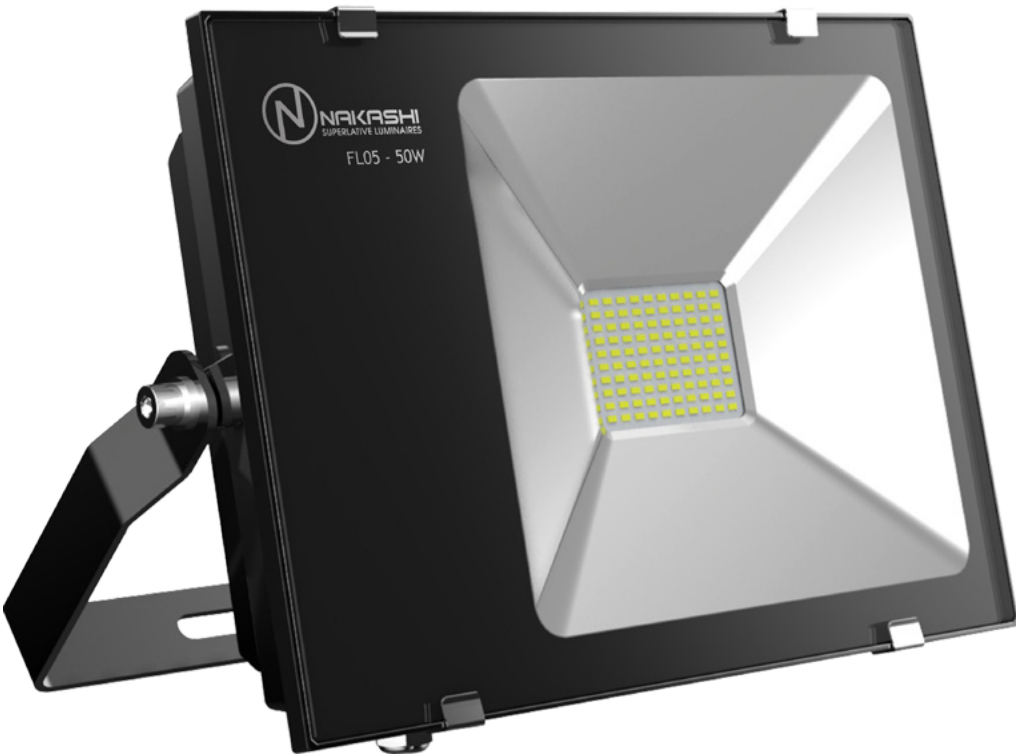
Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 30 W                | FL03 |

50 W

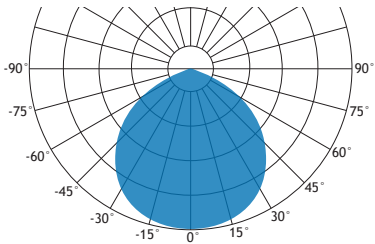
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 100 pcs                  |
| System Power        | 50 W                     |
| Lumen Output        | 4750 lm @ 4000 K         |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 1.5 A                    |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 2.2 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 1.5 A            |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

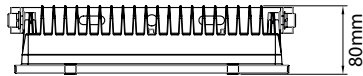
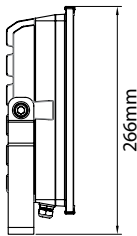
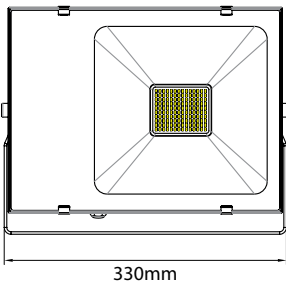
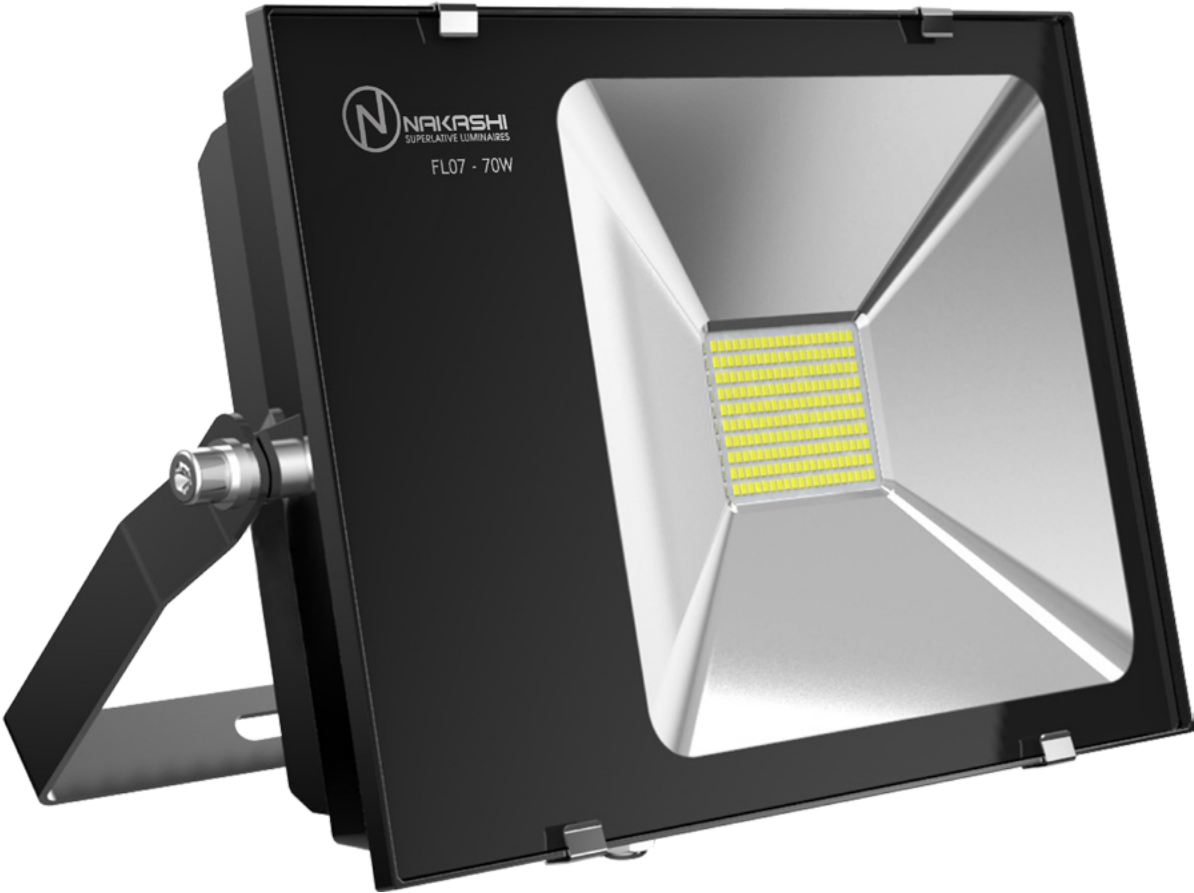
Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 50 W                | FL05 |

70 W

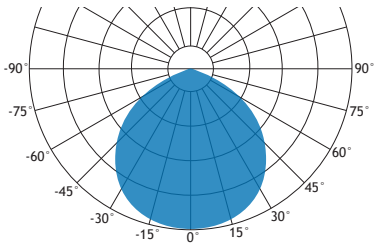
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 140 pcs                  |
| System Power        | 70 W                     |
| Lumen Output        | 6650 lm @ 4000 K         |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 2.1 A                    |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 3.5 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 2.1 A            |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

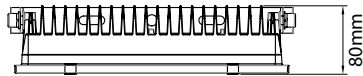
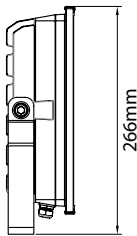
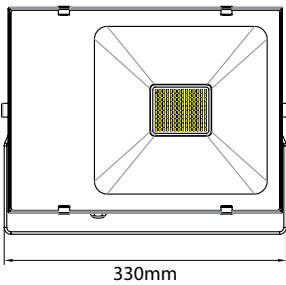
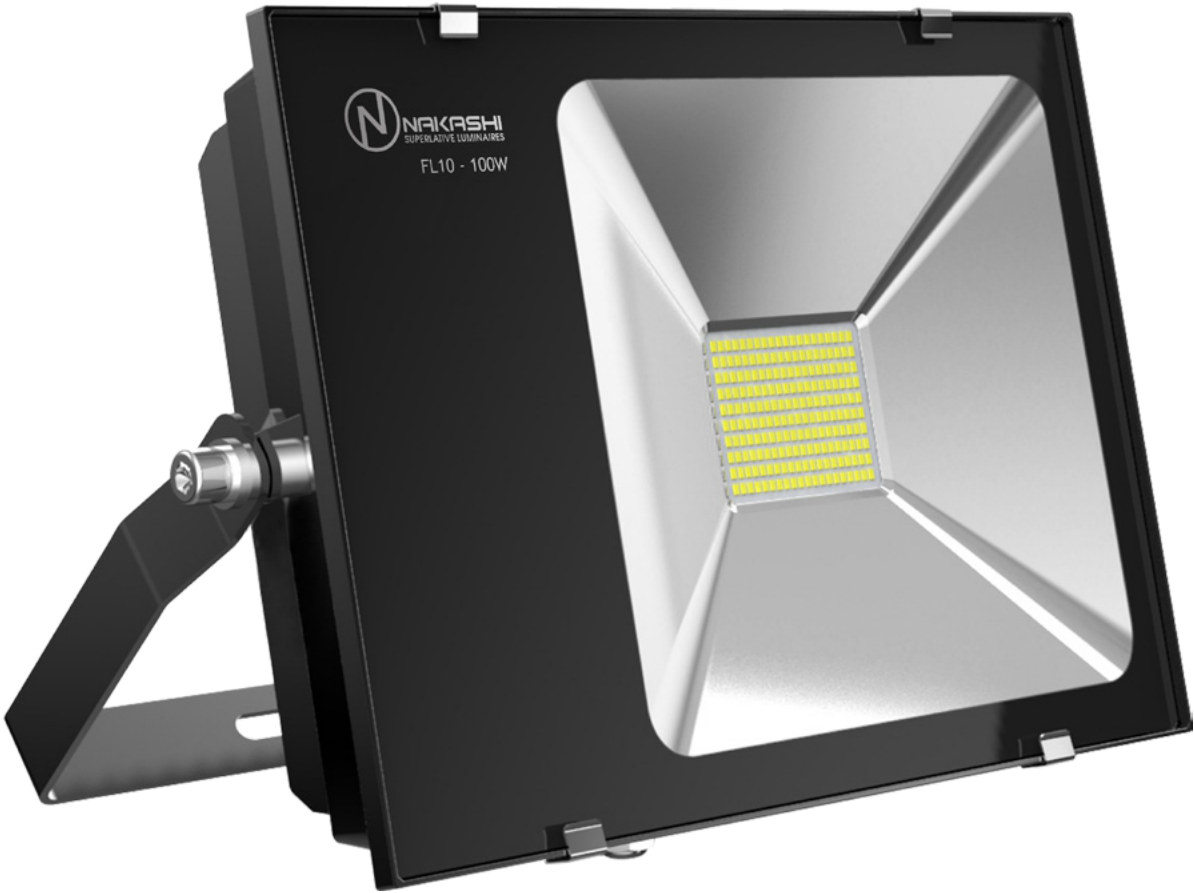
Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 70 W                | FL07 |

100 W

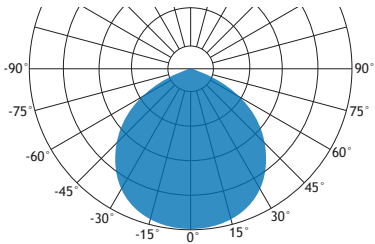
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 200 pcs                  |
| System Power        | 100 W                    |
| Lumen Output        | 9500 lm @ 4000 K         |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 3 A                      |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 4.6 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 3 A              |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

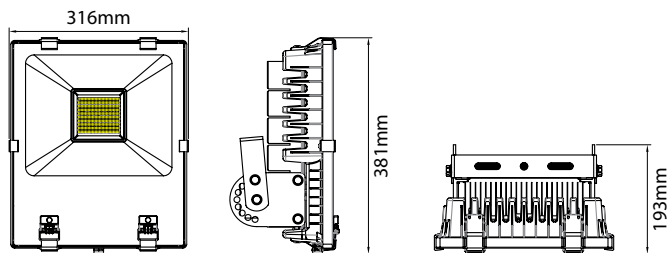
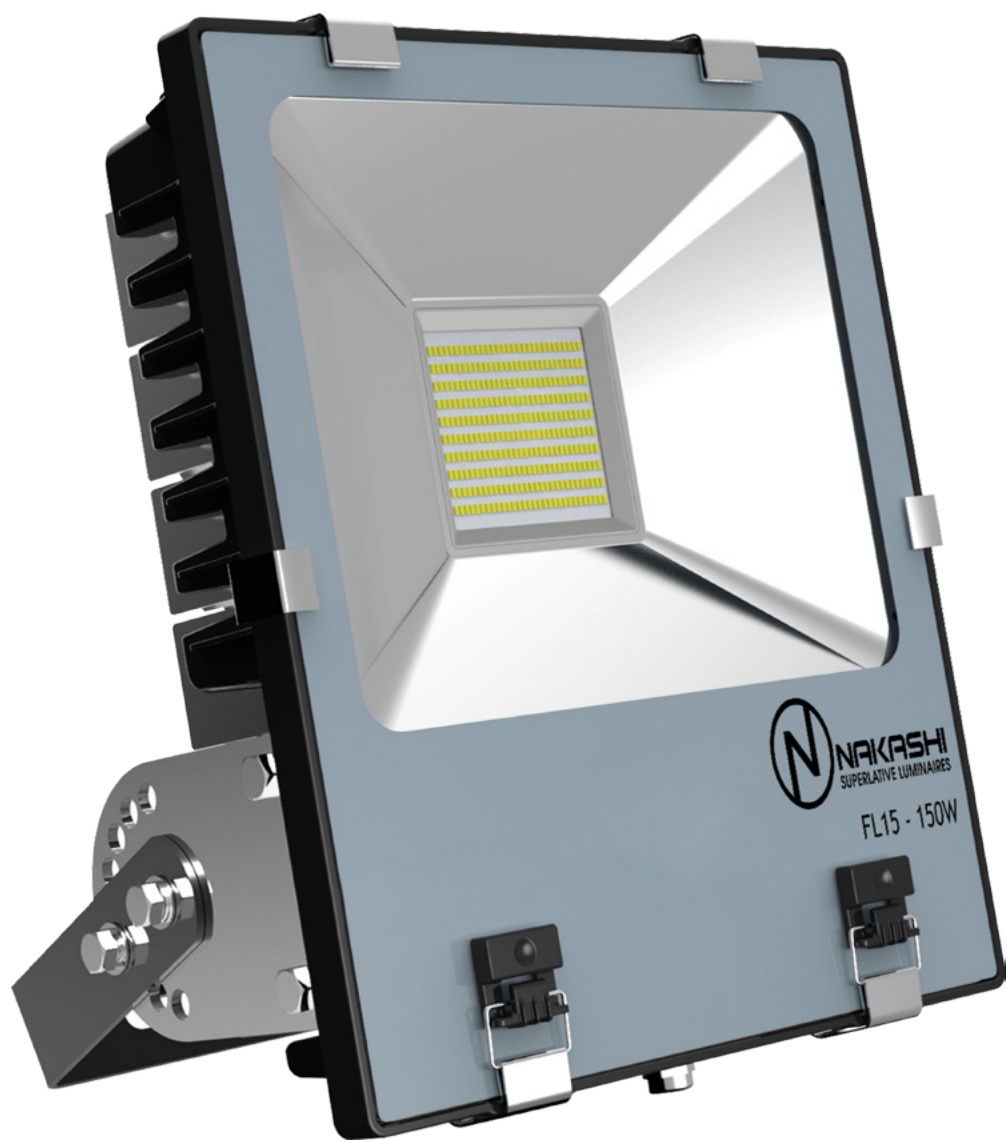
Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 100 W               | FL10 |

150 W

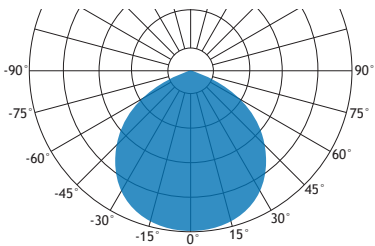
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 300 pcs                  |
| System Power        | 150 W                    |
| Lumen Output        | 14250 lm @ 4000 K        |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 4.3 A                    |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 7.1 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 4.3 A            |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

Environmental

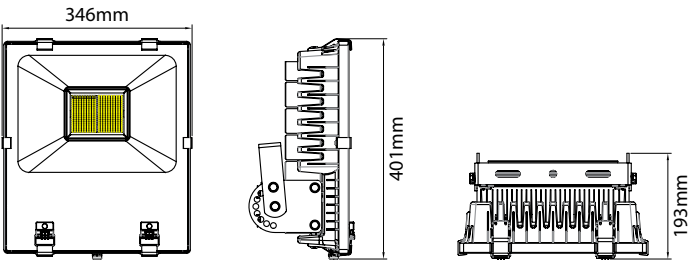
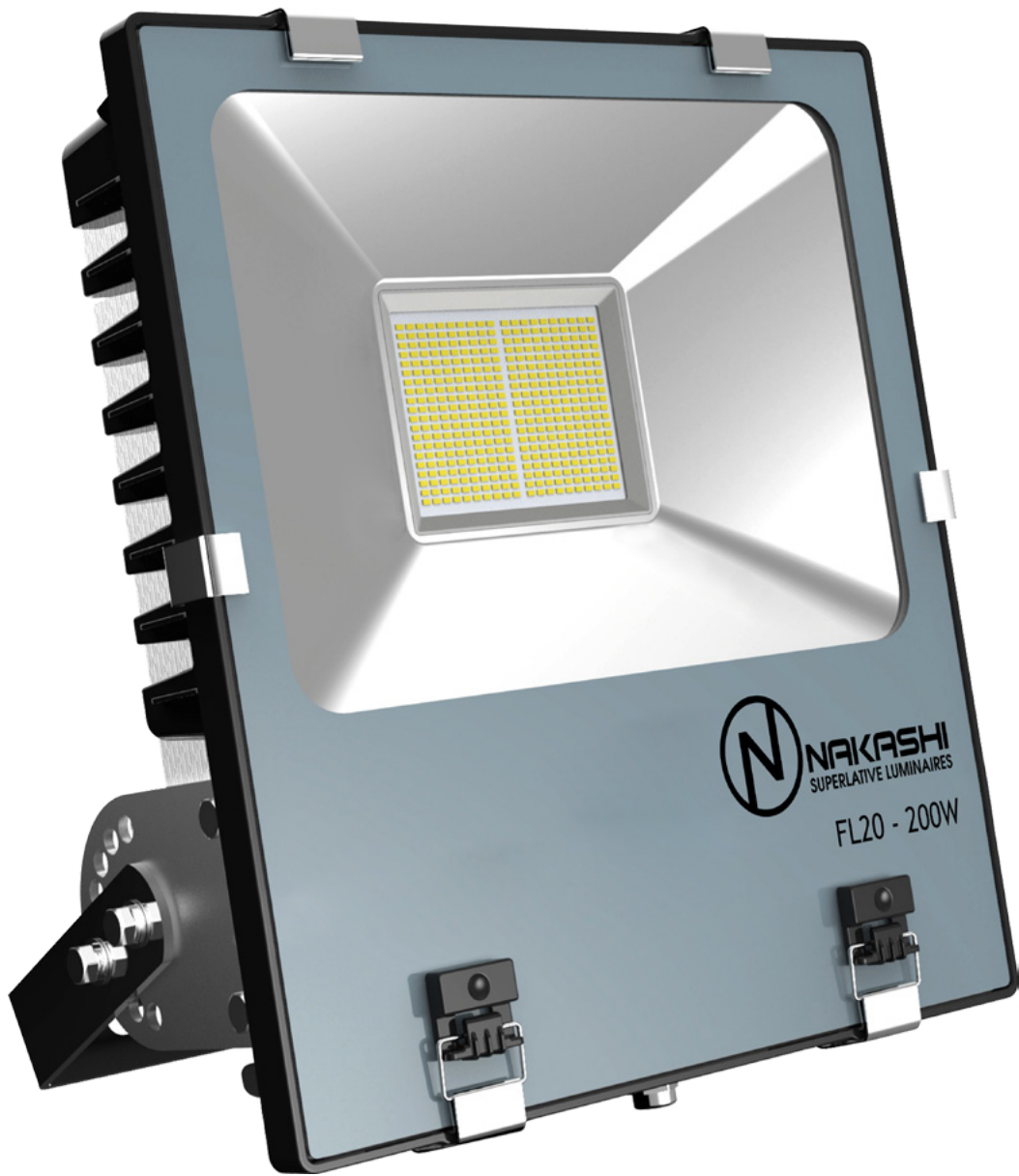
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 150 W               | FL15 |



200 W

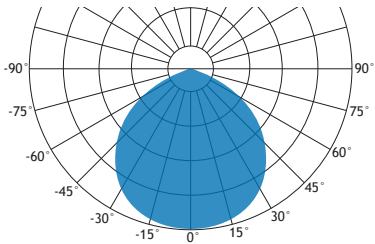
SERIES FL



SERIES FL

Technical

|                     |                          |
|---------------------|--------------------------|
| LED                 | SMD 3020                 |
| LED Quantity        | 400 pcs                  |
| System Power        | 200 W                    |
| Lumen Output        | 19000 lm @ 4000 K        |
| Colour Temperature  | 3000 K / 4000 K / 6000 K |
| CRI                 | >80 Ra                   |
| Beam Angle          | 100°                     |
| Input Current       | 5.5 A                    |
| UGR                 | <20                      |
| System Efficiency   | up to 100 lm/W           |
| SDCM (MacAdam step) | <6                       |
| Starting Time       | <1s                      |
| Rated Lifespan      | >40000 hrs (L70)         |



Materials

|              |                             |
|--------------|-----------------------------|
| Body Shell   | Cold forged Aluminium       |
| Colour       | Black                       |
| PCB          | Aluminium 1070              |
| Optics       | Clear Toughened Glass, 5 mm |
| Installation | Mounted                     |
| Weight       | 8.3 kg                      |

Power Supply

|                 |                  |
|-----------------|------------------|
| Type            | Constant Current |
| Input Voltage   | AC100-240 V      |
| Input Frequency | 50 / 60 Hz       |
| Output Current  | 5.5 A            |
| Power Factor    | > 0.95           |
| Efficiency      | > 90 %           |

Environmental

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20° C ~ 45° C |
| Humidity              | 10 % ~ 90 % RH |
| IP Rating             | IP65           |
| IK Rating             | IK09           |

| Product order codes |      |
|---------------------|------|
| 200 W               | FL20 |