



■ Features :

- Wide input range 180~480VAC
- Built-in active PFC function
- High efficiency up to 92%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Three in one dimming function (0~10Vdc or 10V PWM signal or resistance)
- Suitable for LED lighting and street lighting applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.6)



HVGC-100-350[A] A : IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
 B : IP67 rated. Constant current level adjustable through output cable with 0~10Vdc or 10V PWM signal or resistance.  
 D (option) : IP67 rated. Timer dimming function, contact MEAN WELL for details.

**SPECIFICATION**

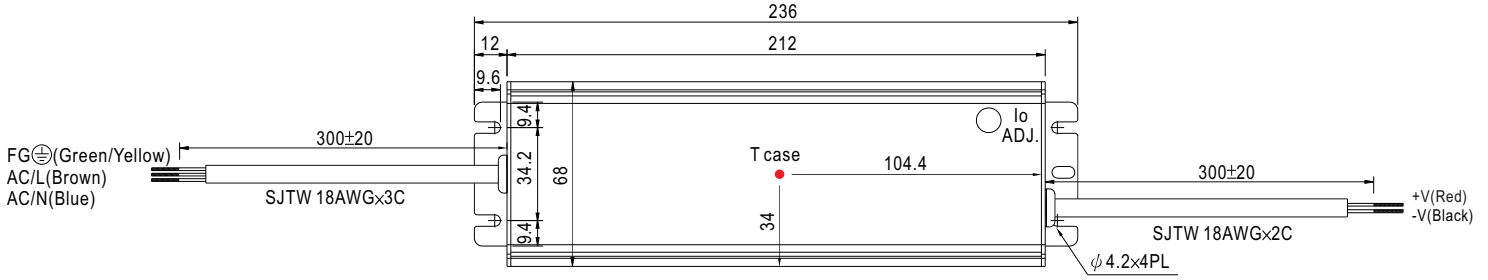
| MODEL        |  | HVGC-100-350 □  | HVGC-100-700 □  |
|--------------|--|---|---|
| OUTPUT       | RATED CURRENT  | 350mA   | 700mA   |
|              | CURRENT ACCURACY   | ±5.0%   |   |
|              | MAX. OUTPUT VOLTAGE  | 285V  | 142V  |
|              | RATED POWER  | 99.75W  | 99.4W   |
|              | RIPPLE & NOISE (max.) Note.2   | 1Vp-p   | 0.5Vp-p   |
|              | CURRENT ADJ. RANGE   | Can be adjusted by internal potentiometer or through output cable   |   |
|              |  | 210 ~ 350mA   | 420 ~ 700mA   |
|              |  | SETUP, RISE TIME  | 3000ms, 150ms at full load 440VAC / 347VAC ; B type 5000ms, 150ms at 95% load 440VAC / 347VAC |
|              | HOLD UP TIME (Typ.)  | 30ms at full load 440VAC / 347VAC   |   |
| INPUT        | VOLTAGE RANGE Note.3   | 180 ~ 480VAC  | 254VDC ~ 679VDC   |
|              | FREQUENCY RANGE  | 47 ~ 63Hz   |   |
|              | POWER FACTOR (Typ.)  | PF ≥ 0.99/230VAC, PF ≥ 0.98/277VAC, PF ≥ 0.97/347VAC, PF ≥ 0.94/440VAC at full load (Please refer to "Power Factor Characteristic" curve) |   |
|              | EFFICIENCY (Typ.)  | 92%   | 92%   |
|              | AC CURRENT (Typ.)  | 0.32A / 347VAC  | 0.26A / 440VAC  |
|              | INRUSH CURRENT (Typ.)  | COLD START 40A / 440VAC   |   |
|              | LEAKAGE CURRENT  | <0.75mA / 440VAC  |   |
| PROTECTION   | SHORT CIRCUIT  | Constant current limiting, recovers automatically after fault condition is removed  |   |
|              | OVER VOLTAGE   | 300 ~ 320V  | 150 ~ 160V  |
|              |  | Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery   |   |
|              | OVER TEMPERATURE   | 100°C ±10°C (RTH2)<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down                         |   |
| ENVIRONMENT  | WORKING TEMP.  | -40 ~ +70°C (Refer to "Derating Curve")   |   |
|              | WORKING HUMIDITY   | 20 ~ 95% RH non-condensing  |   |
|              | STORAGE TEMP., HUMIDITY  | -40 ~ +80°C, 10 ~ 95% RH  |   |
|              | TEMP. COEFFICIENT  | ±0.03%/°C (0 ~ 50°C)  |   |
|              | VIBRATION  | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes   |   |
| SAFETY & EMC | SAFETY STANDARDS Note.4  | UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, IP65 or IP67 approved ; Design refer to UL60950-1                    |   |
|              | WITHSTAND VOLTAGE  | I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC   |   |
|              | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |   |
|              | EMC EMISSION   | Compliance to EN55015, EN61000-3-2 Class C (≥50% load) ; EN61000-3-3, FCC part 15 class B   |   |
|              | EMC IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (surge 4KV), criteria A   |   |
| OTHERS       | MTBF   | 186.1Khrs min. MIL-HDBK-217F (25°C)   |   |
|              | DIMENSION  | 236*68*38.8 mm (L*W*H)  |   |
|              | PACKING  | 1.18Kg; 12pcs/15.2Kg/0.74CUFT   |   |
| NOTE         | 1. All parameters NOT specially mentioned are measured at 347VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 2.2uf parallel capacitor.<br>3. Derating may be needed under low input voltages. Please check the static characteristics for more details.<br>4. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1.<br>5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.<br>6. Refer to warranty statement. |   |   |

**Mechanical Specification**

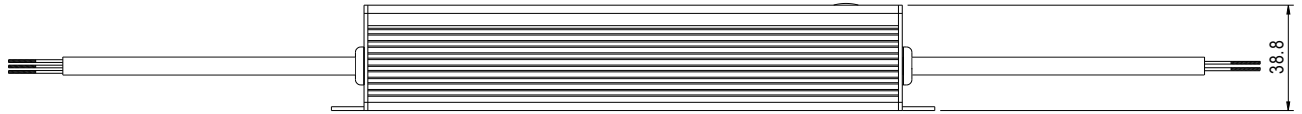
Case No.994

Unit:mm

**A Type:(HVGC-100-\_A)**

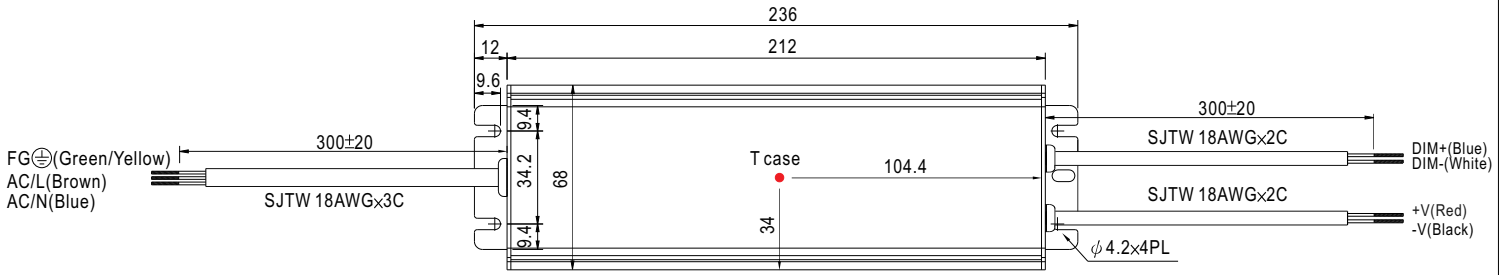


※ T case: Max. Case Temperature.

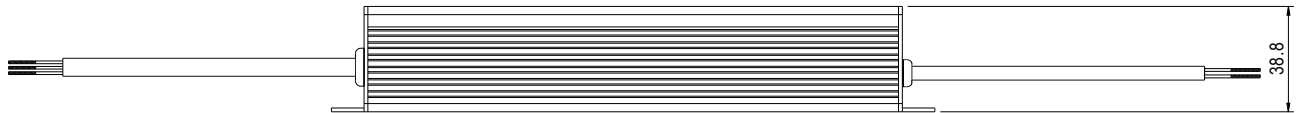


※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
(Can access by removing the rubber stopper on the case.)

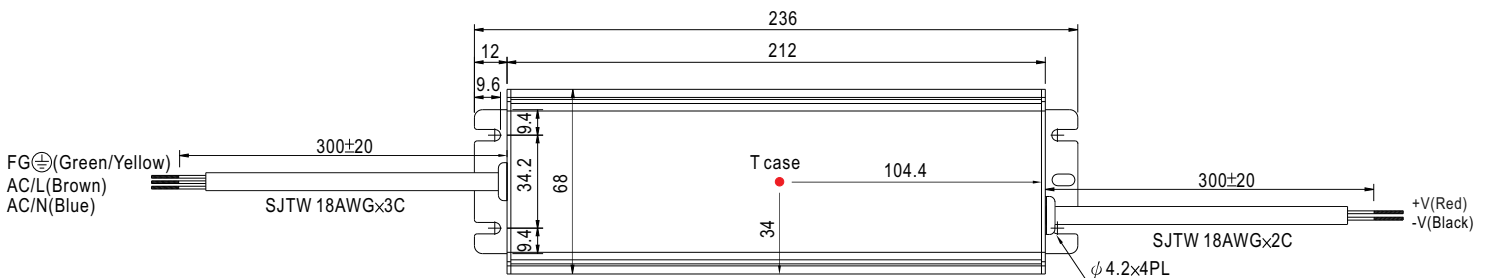
**B Type:(HVGC-100-\_B)**



※ T case: Max. Case Temperature.



**D Type(option):(HVGC-100-\_D)**

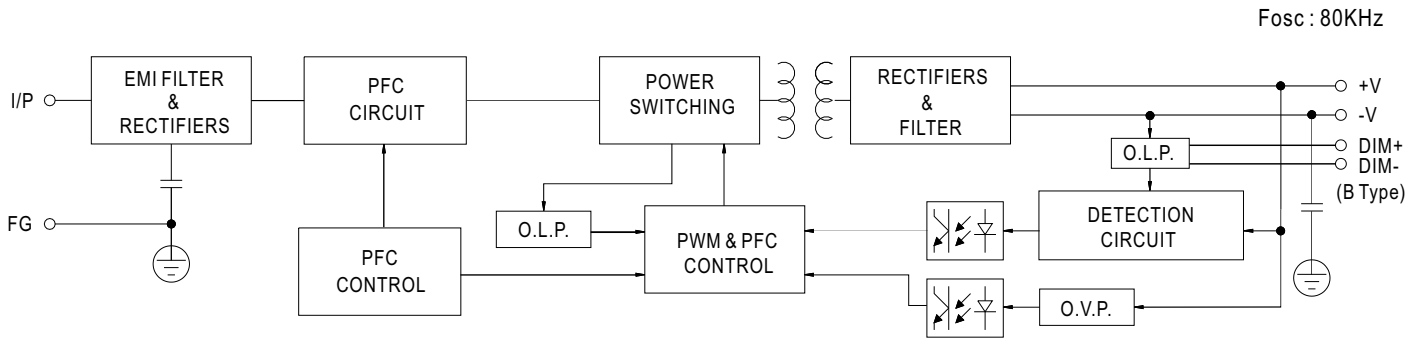


※ T case: Max. Case Temperature.

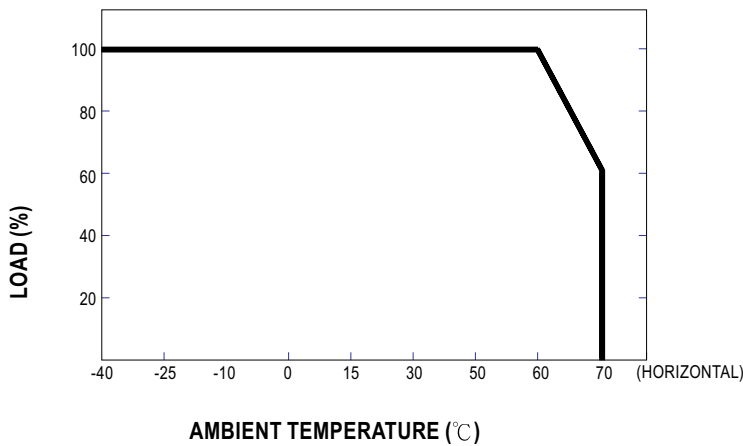


※ IP67 rated. Timer dimming function, contact MEAN WELL for details.

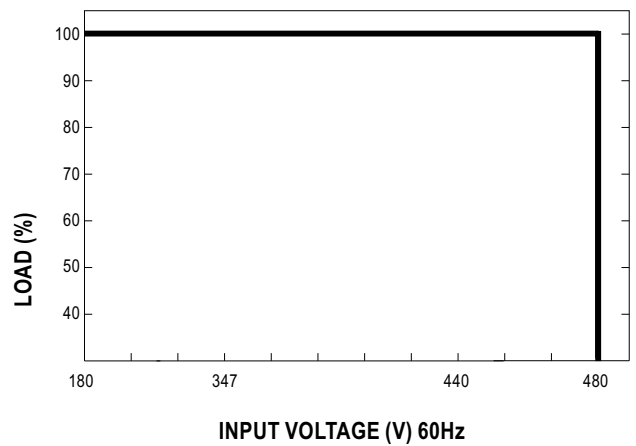
**Block Diagram**



**Derating Curve**

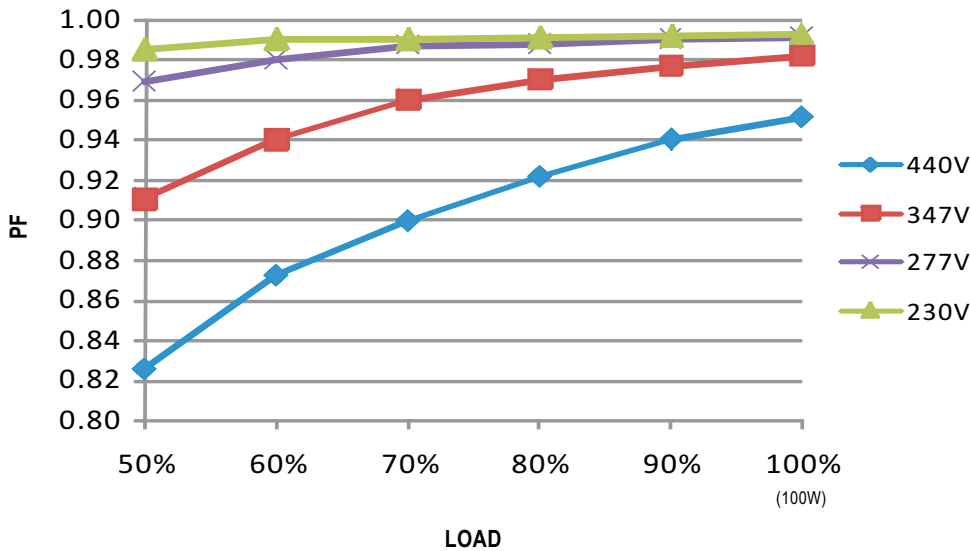


**Static Characteristics**



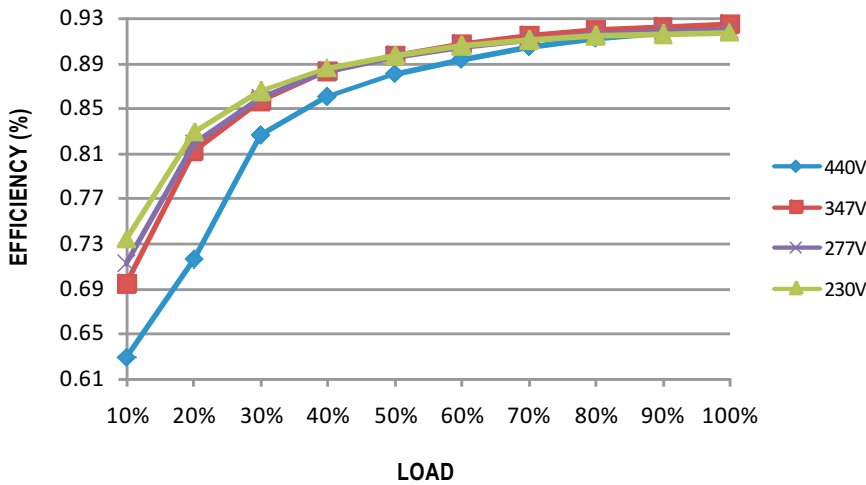
**Power Factor Characteristic**

**Constant Current Mode**



**EFFICIENCY vs LOAD (HVGC-100-700 Model)**

HVGC-100 series possess superior working efficiency that up to 92% can be reached in field applications.

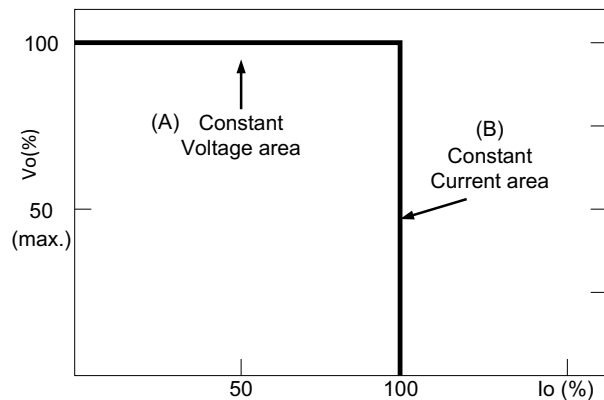


**DRIVING METHODS OF LED MODULE**

There are two major kinds of LED drive method "direct drive" and "with LED driver".

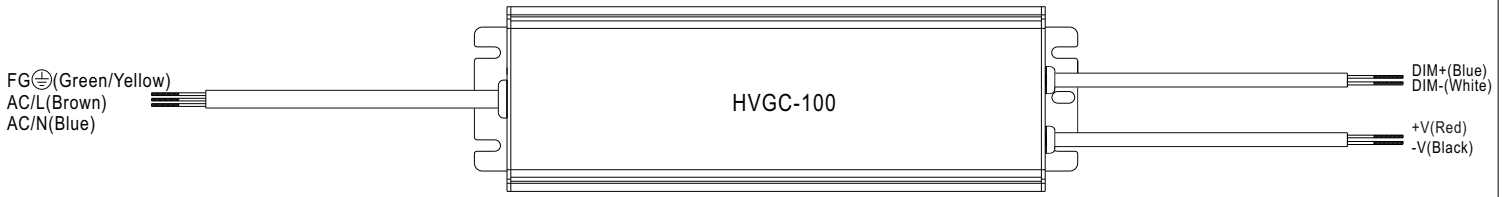
A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B)).



Typical LED power supply I-V curve

**DIMMING OPERATION**



※ Built-in 3 in 1 dimming function, IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistance or 0 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

※ Please DO NOT connect "DIM-" to "-V".

※ Reference resistance value for output current adjustment (Typical)

| Resistance value            | Single driver  | 10KΩ   | 20KΩ   | 30KΩ   | 40KΩ   | 50KΩ   | 60KΩ   | 70KΩ   | 80KΩ   | 90KΩ   | 100KΩ   | OPEN      |
|-----------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-----------|
|                             | Multiple drivers<br>(N=driver quantity for synchronized dimming operation) | 10KΩ/N | 20KΩ/N | 30KΩ/N | 40KΩ/N | 50KΩ/N | 60KΩ/N | 70KΩ/N | 80KΩ/N | 90KΩ/N | 100KΩ/N | -----     |
| Percentage of rated current |  | 10%    | 20%    | 30%    | 40%    | 50%    | 60%    | 70%    | 80%    | 90%    | 100%    | 102%~108% |

※ 1 ~ 10V dimming function for output current adjustment (Typical)

|                             |    |     |     |     |     |     |     |     |     |     |      |           |
|-----------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----------|
| Dimming value               | 0V | 1V  | 2V  | 3V  | 4V  | 5V  | 6V  | 7V  | 8V  | 9V  | 10V  | OPEN      |
| Percentage of rated current | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 102%~108% |

※ 10V PWM signal for output current adjustment (Typical): Frequency range : 100Hz ~ 3KHz

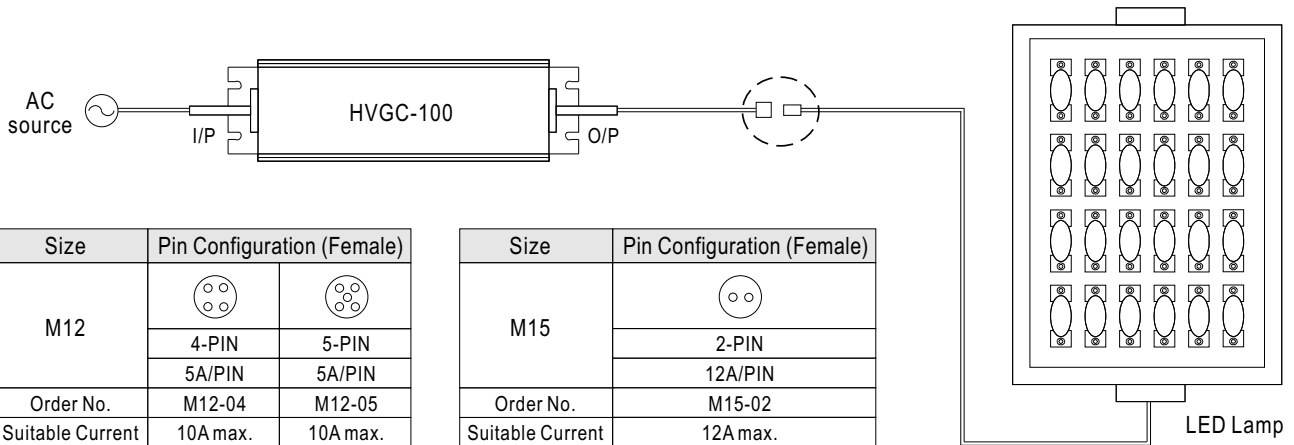
|                             |     |     |     |     |     |     |     |     |     |      |           |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----------|
| Duty value                  | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | OPEN      |
| Percentage of rated current | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 102%~108% |

※ Using the built-in dimming function on B-type model can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

**WATERPROOF CONNECTION**

◎ Waterproof connector

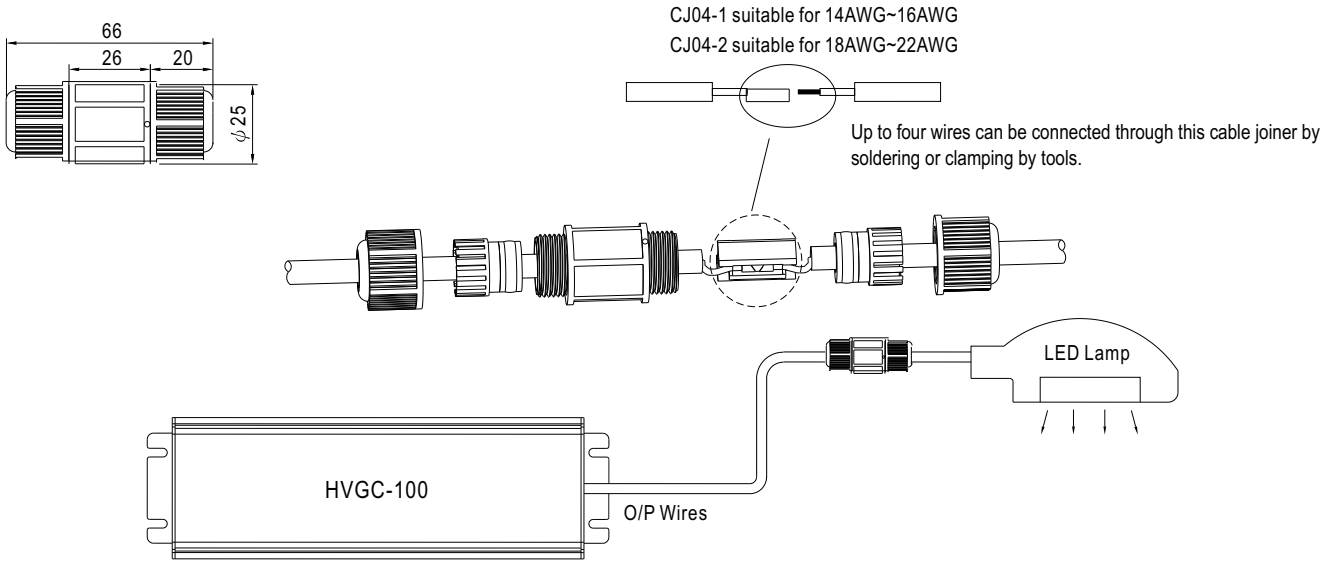
Waterproof connector can be assembled on the output cable of HVG-100 to operate in dry/wet/damp or outdoor environment.



| Size             | Pin Configuration (Female) |          |
|------------------|----------------------------|----------|
| M12              |                            |          |
|                  | 4-PIN                      | 5-PIN    |
|                  | 5A/PIN                     | 5A/PIN   |
| Order No.        | M12-04                     | M12-05   |
| Suitable Current | 10A max.                   | 10A max. |

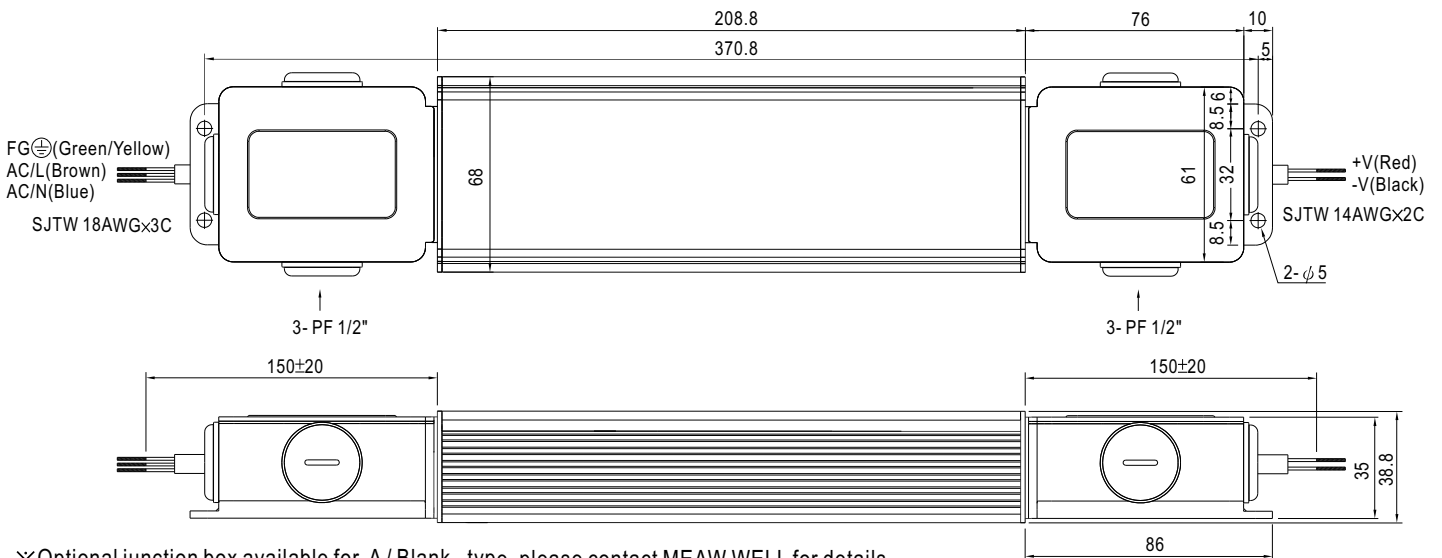
| Size             | Pin Configuration (Female) |
|------------------|----------------------------|
| M15              |                            |
|                  | 2-PIN                      |
|                  | 12A/PIN                    |
| Order No.        | M15-02                     |
| Suitable Current | 12A max.                   |

◎ Cable Joiner



※CJ04 cable joiner can be purchased independently for user's own assembly.  
MEAN WELL order No. : CJ04-1, CJ04-2.

◎ Junction Box(Option )



※Optional junction box available for A / Blank - type, please contact MEAW WELL for details.