

# PYCC-2U1UNV100S-40C

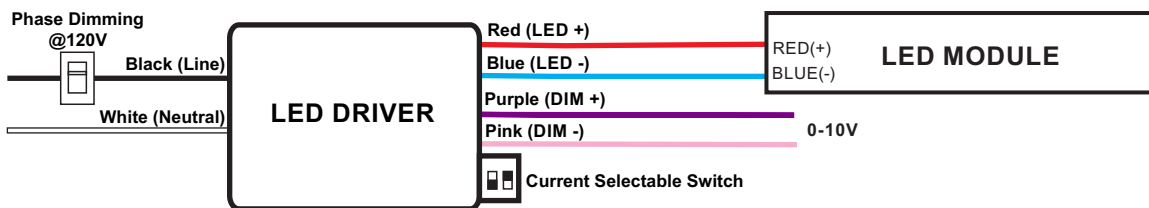
## Selectable Constant Current LED Driver, 0-10V & Phase@120V Dimming

- Input Voltage: 120V - 277V, 50/60Hz
- Dimming Types: 0-10V & Phase@120V
- Dimming Range: 100% - 10%
- Class 2 LED Driver
- cULus Listed, Class P
- Isolated 0-10V from Input and Output
- Selectable Output Current: 850 / 900 / 950 / 1000mA
- Output Voltage: 30-40VDC

### General Specifications

|                                     |                                                                                                                                                      |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Voltage / Frequency           | 120V - 277VAC 50/60Hz                                                                                                                                |
| Input Current                       | 0.42A Max.                                                                                                                                           |
| Input Power                         | 50W Max.                                                                                                                                             |
| Input Power Factor                  | >0.9                                                                                                                                                 |
| THD                                 | <20%                                                                                                                                                 |
| Driver Type                         | Current Selectable                                                                                                                                   |
| Output Voltage Range                | 30VDC - 40VDC                                                                                                                                        |
| Selectable Output Current           | 850mA, 900mA, 950mA, 1000mA (±5%)<br>remark: 1000±5% means at least 90% load, others (no specified range), the tolerance of I <sub>out</sub> is ±10% |
| Output Power                        | 40W Max. (UL limit output power max. 40W)                                                                                                            |
| Efficiency@Full load                | >84%@120VAC; >85%@277VAC                                                                                                                             |
| Output Type                         | Constant Current                                                                                                                                     |
| Inrush Current                      | 30A @277VAC                                                                                                                                          |
| Max. Leakage Current                | 0.75mA                                                                                                                                               |
| Total Over All Ripple               | <30%                                                                                                                                                 |
| Flicker Percentage                  | <30%                                                                                                                                                 |
| Dimming Type                        | 0-10V & Phase@120V (see dimmer list)                                                                                                                 |
| Dimming Range                       | 100% - 10%                                                                                                                                           |
| Dimming isolation                   | Yes                                                                                                                                                  |
| Storage Temperature Range           | -40°F ~ 131°F (-40°C ~ 55°C)                                                                                                                         |
| Operating Ambient Temperature Range | -22°F ~ 113°F (-30°C ~ 45°C)                                                                                                                         |
| Max. Driver Case Temperature        | 194°F (90°C)                                                                                                                                         |
| Start Up Time                       | 0.7s @ Full load                                                                                                                                     |
| Number of Output Channels           | 1                                                                                                                                                    |
| Overall Size                        | 3.4"x 1.9"x 1.12" (86.4mm x 47.6mm x 28.5mm)                                                                                                         |
| Weight                              | 0.40lbs (180g)                                                                                                                                       |
| Wire Type / Length                  | Input: Black/White 18AWG 160mm/6.3"<br>Output: Red/Blue 20AWG 150mm/ 5.9"; Dimming: Purple/Pink 22AWG 300mm/ 11.8"                                   |
| Safety / Compliance                 | cULus Listed, Class P; LED Class 2<br>CAN/CSA-C22.2 No. 250.13<br>FCC Title 47 Part 15A<br>Dry and Damp locations, IP20                              |
| IP Rating                           |                                                                                                                                                      |
| Operating Humidity                  | 10-90% RH Non-condensing                                                                                                                             |
| Input Surge Protection              | C62.41 RingWave 2.5kV                                                                                                                                |
| Protections                         | Over-Voltage Protection<br>Short-Circuit Protection                                                                                                  |
| Sound Rating                        | A                                                                                                                                                    |
| Service Life                        | 50,000Hrs @Max Load, 75°C T <sub>c</sub>                                                                                                             |
| Warranty                            | 5 years @ T <sub>c</sub> 75°C from the date of manufacture                                                                                           |

### General Wiring Diagram

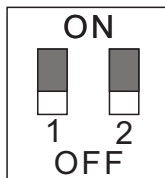


Note: 0-10V and Phase dimming should not use together.

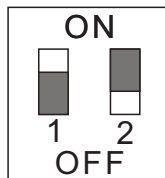
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Output Current Adjustable

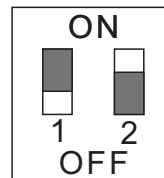
| Switch 1 | Switch 2 | I <sub>out</sub> |
|----------|----------|------------------|
| OFF      | OFF      | 1000mA           |
| ON       | OFF      | 950mA            |
| OFF      | ON       | 900mA            |
| ON       | ON       | 850mA            |



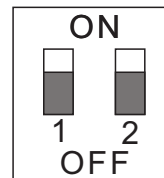
1000mA



950mA



900mA



850mA

## Typical Characteristics Curve

Figure 1

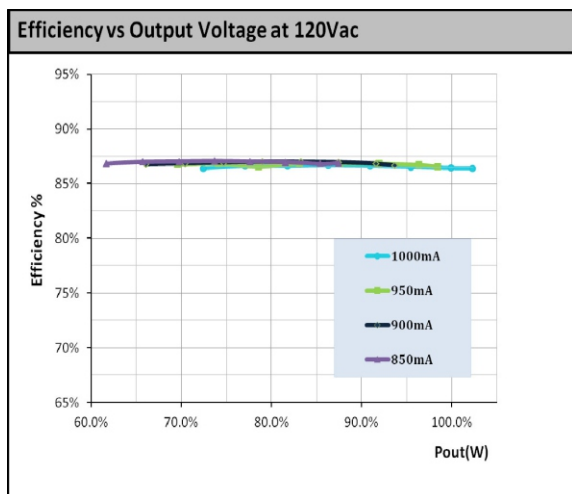


Figure 2

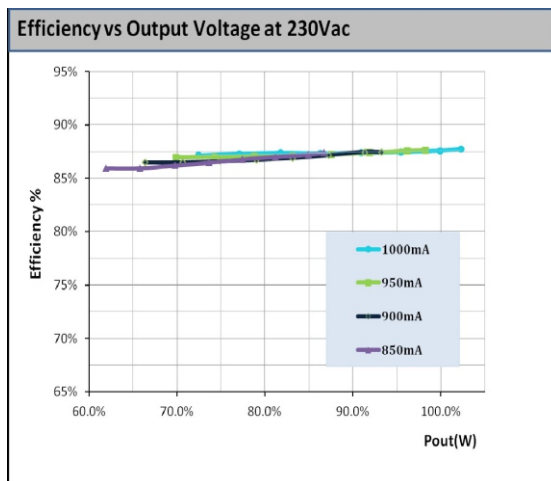


Figure 3

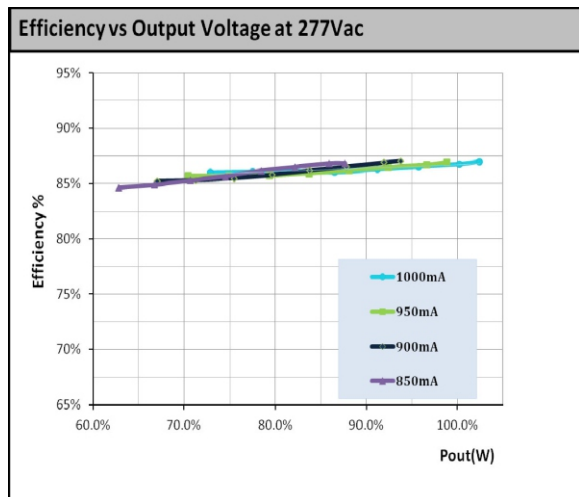
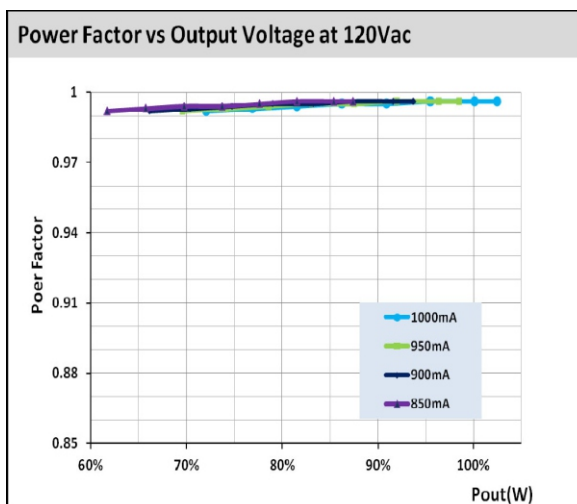


Figure 4



# PYCC-2U1UNV100S-40C

## Typical Characteristics Curve

Figure 5

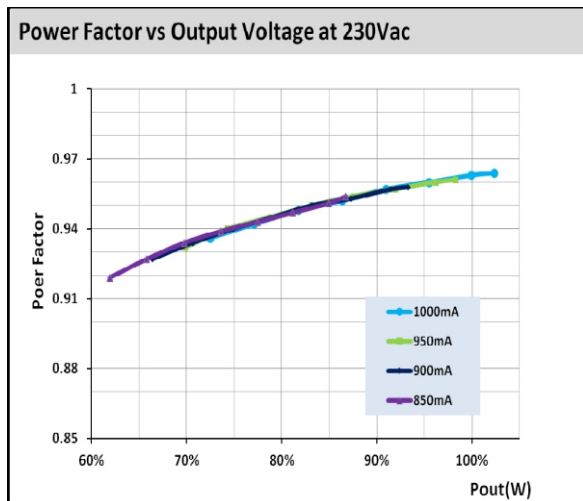


Figure 6

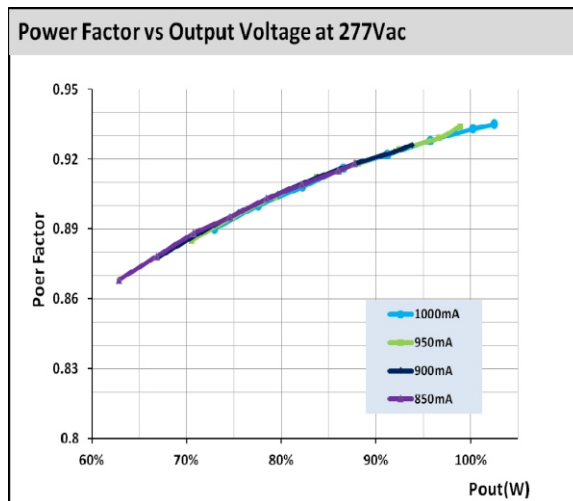


Figure 7

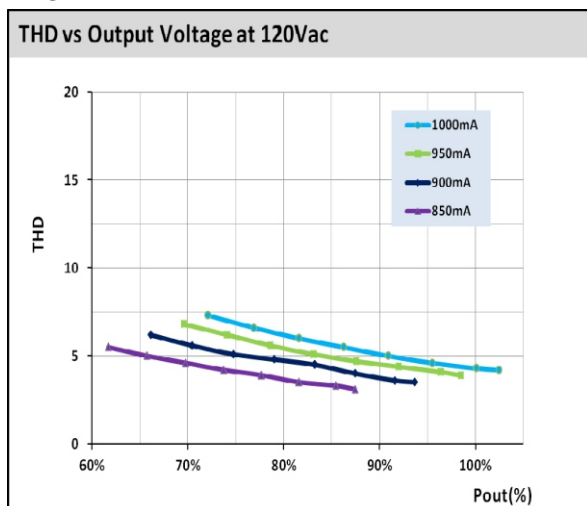


Figure 8

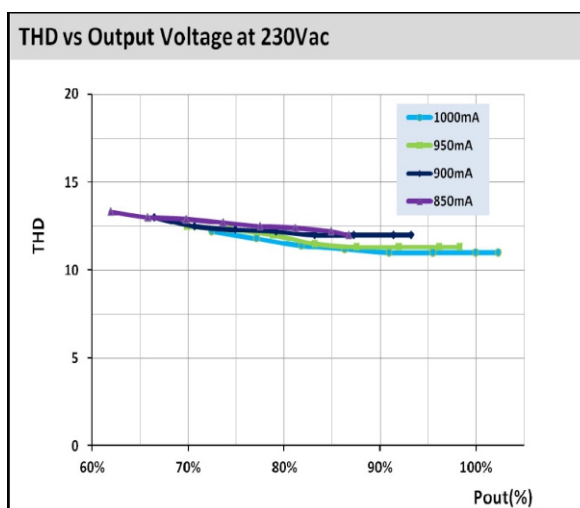


Figure 9

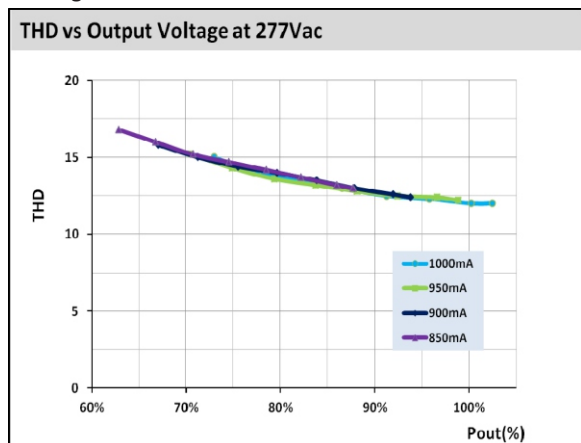
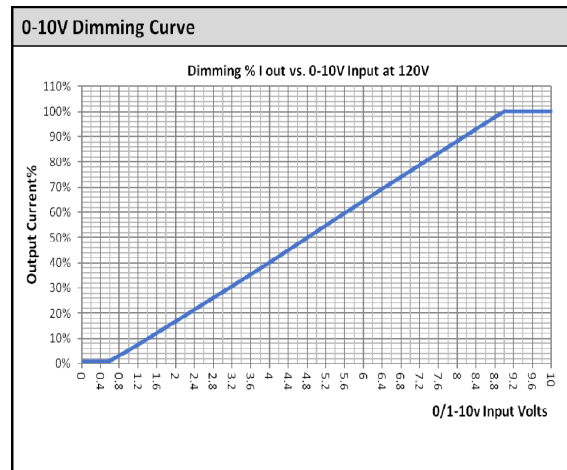


Figure 10



# PYCC-2U1UNV100S-40C

## Typical Characteristics Curve

Figure 11

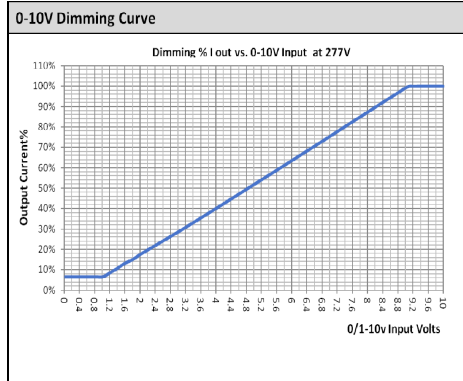
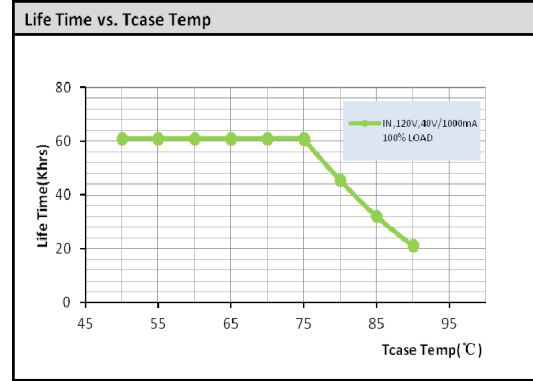


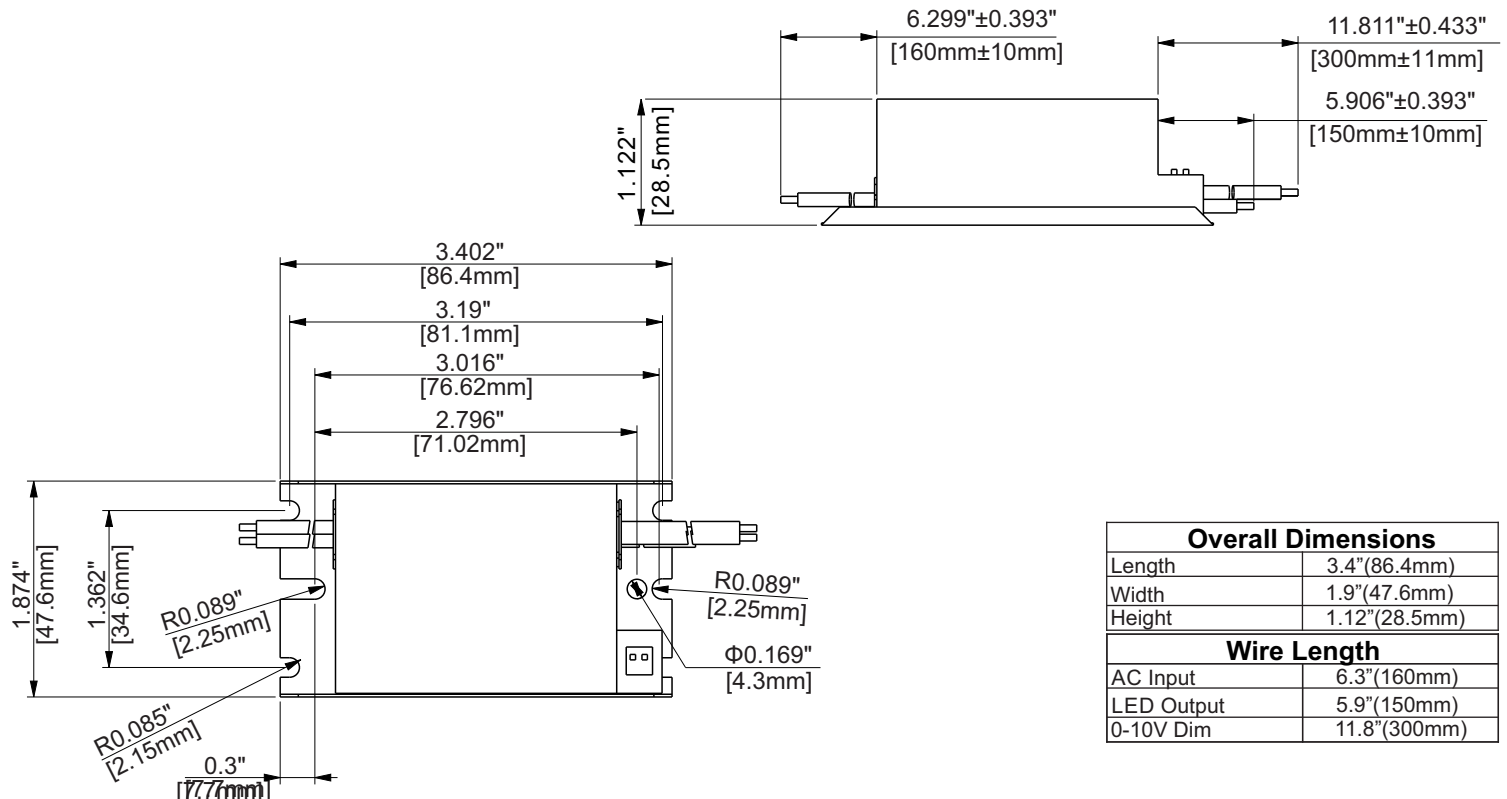
Figure 12

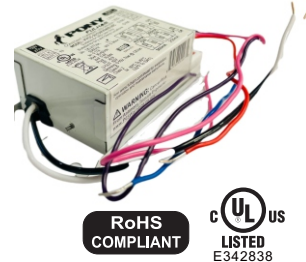


## Compatible 120V Phase Dimmer List

| Manufacturer | Part Number of Manufacturer | Type of Dimmer | Manufacturer | Part Number of Manufacturer | Type of Dimmer |
|--------------|-----------------------------|----------------|--------------|-----------------------------|----------------|
| LUTRON       | SCL-153P                    | TRIAC          |              |                             |                |
| LUTRON       | DVCL-153P                   | TRIAC          |              |                             |                |
| LUTRON       | SELV-300P                   | ELV            |              |                             |                |
| LUTRON       | SELV-303P                   | ELV            |              |                             |                |
| LUTRON       | DVELV-300P                  | ELV            |              |                             |                |

## Mechanical Drawings





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## Guidelines

### Grounding

- Driver must be grounded by means of the Driver case.

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### LED load

- The Fulham Pony LED drivers are designed to drive passive LEDs, -COB's and -LED assemblies. Proper function is not guaranteed when (LED) loads with active components are used.

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### Short-circuit protection

- In case of a short circuit the LED driver switches to protection mode. After the removal of the short-circuit the LED driver will recover automatically.

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### No-load Operation

- In no-load operation the output voltage will not exceed the specified open circuit output voltage.

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### Hot Swapping

- This driver does not support hot swapping of the LEDs.

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### Remote Mounting

- Up to 26ft with 18AWG. Contact Fulham for higher remote distance.

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### Service life/Lifetime

- Failure Rate Info based upon MTBF modeling: 90% survivals at end of life @  $\leq T_c$  lifetime rating.

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### Warranty

- Reference Fulham's limited Warranty: <https://cdn.fulham.com/PDFs/Limited-Warranty.pdf>

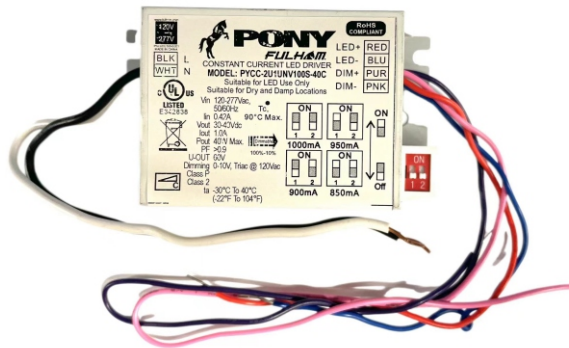
# PYCC-2U1UNV100S-40C

## Part Number Matrix

PY CC 2 U 1 UNV100S 40 C

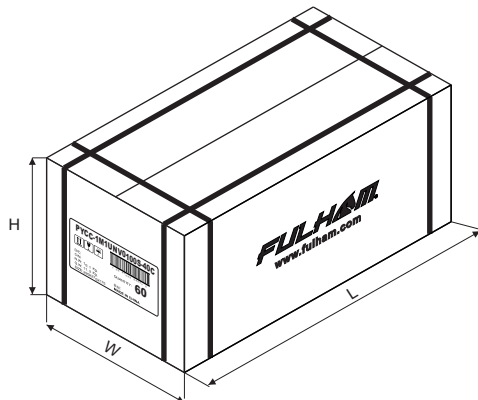
| LED Driver    | Output Type         | # of Control   | Type Of Control   | # of Output Channels | Input Voltage   | Output Current                          | Max. Output Power | Case Type   |
|---------------|---------------------|----------------|-------------------|----------------------|-----------------|-----------------------------------------|-------------------|-------------|
| PY = Pony LED | CC=Constant Current | 2 = 2 Controls | U = 0-10V & Phase | 1 = 1 Channel        | UNV = 120V~277V | 100S = 1000/950/900/850mA<br>Selectable | 40 = 40W          | C = Compact |

## Product Image



## Packaging

### Master Carton



| OUTER DIMENSION        |                        |              |
|------------------------|------------------------|--------------|
| L                      | W                      | H            |
| 11.42"(290mm)          | 10.63"(270mm)          | 6.89"(175mm) |
| Net Weight             | Gross Weight           | QUANTITY     |
| 23.80lbs.<br>(10.8 kg) | 24.91lbs.<br>(11.3 kg) | 60pcs.       |