

## Features

- MEAN WELL Patent Application Number: 202330347779.4
- Interchangeable AC plugs (I-Type)
- Global certificates in multi-fields  
(ITE 62368-1, Medical 60601-1, Household 60335-1, Industrial 61558-1/-2-16)
- 80~264Vac Universal AC input
- Ultra slim(28mm)
- No load power consumption< 0.075W
- Energy efficiency Level VI
- Class II power (no earth pin)
- Protections: Short circuit / Overload / Over voltage
- Pass LPS
- Extremely low leakage current <100uA
- -30°C~+70°C wide range working temperature
- Various DC plug quick adapter accessory available  
(Plug kit sold sperately, please refer to : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf))
- 3 years warranty

## Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments
- Medical devices
- Household devices

## GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

## Description

NGE12 is a highly reliable, 12W wall-mounted style single-output green adaptor series, which is compact and convenient for carry. This product is equipped with 7 types of interchangeable AC plug (European, USA,U.K. ,Australian, China, Korea and India type) that makes it very suitable for travel use. NGE12 is a Class II power unit (no FG), accepting the input range from 80VAC to 264VAC that it can satisfy the demands for various types of electrical devices.

With the working efficiency up to 88.5% and the extremely low no-load power consumption below 0.075W, NGE12 is compliant with the latest USA energy regulation EISA 2007/DoE, Canada NRCAN, Australia and New Zealand MEPS, Korea KMEPS, EU ErP and CoC version5. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for ITE, medical, household and industrial appliance safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazard.

## Model Encoding

**NGE 12 I 05 -P1J**

- Series name
- Rated wattage
- AC Plug
  - I : AC Pin fixed; Universal version with interchangeable plugs
  - E : AC Pin fixed; EU version with non-interchangeable plug
  - U : Foldable AC Pin; US version with non-interchangeable plug
- Output voltage (5V/9V/12V/15V/18V/24V)
- DC plug type
  - P1J : Plug for standard model, 2.1  $\phi$   $\times$  5.5  $\phi$   $\times$  11mm, C+ tuning fork type
  - USB: USB-type A for 5V model only
  - Other options available by customer requested (see Page 7~8)

**SPECIFICATION**

| ORDER NO.                 |                         |                 | NGE12○05-□<br>□=P1J<br>USB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              | NGE12○09-P1J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NGE12○12-P1J | NGE12○15-P1J                                                                           | NGE12○18-P1J                                                              | NGE12○24-P1J |                   |  |  |
|---------------------------|-------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------|-------------------|--|--|
|                           |                         |                 | ○ = I, U, E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
| OUTPUT                    | DC VOLTAGE              |                 | Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 9V           | 12V                                                                                    | 15V                                                                       | 18V          | 24V               |  |  |
|                           | RATED CURRENT           |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 2.4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.33A        | 1.0A                                                                                   | 0.8A                                                                      | 0.83A        | 0.625A            |  |  |
|                           | CURRENT RANGE           |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 0 ~ 2.4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0 ~ 1.33A    | 0 ~ 1.0A                                                                               | 0 ~ 0.8A                                                                  | 0 ~ 0.83A    | 0 ~ 0.625A        |  |  |
|                           | RATED POWER             |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 12W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 12W          | 12W                                                                                    | 12W                                                                       | 15W          | 15W               |  |  |
|                           | RIPPLE & NOISE (max.)   |                 | Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | 60mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 100mVp-p     | 120mVp-p                                                                               | 150mVp-p                                                                  | 180mVp-p     | 240mVp-p          |  |  |
|                           | VOLTAGE TOLERANCE       |                 | Note.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±5.0%        | ±3.0%                                                                                  | ±3.0%                                                                     | ±3.0%        | ±3.0%             |  |  |
|                           | LINE REGULATION         |                 | Note.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | ±1.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±1.0%        | ±1.0%                                                                                  | ±1.0%                                                                     | ±1.0%        | ±1.0%             |  |  |
|                           | LOAD REGULATION         |                 | Note.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±5.0%        | ±3.0%                                                                                  | ±3.0%                                                                     | ±3.0%        | ±3.0%             |  |  |
| SETUP, RISE, HOLD UP TIME |                         |                 | 1500ms, 30ms, 30ms / 230VAC      3000ms, 30ms, 10ms / 115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
| INPUT                     | VOLTAGE RANGE           |                 | Note.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              | 80 ~ 264VAC      113 ~ 370VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | FREQUENCY RANGE         |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | EFFICIENCY (Typ.)       |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 82%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 86.5%        | 87.5%                                                                                  | 87%                                                                       | 88.5%        | 88.5%             |  |  |
|                           | AC CURRENT              |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 0.4A / 115VAC      0.25A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | INRUSH CURRENT (max.)   |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | COLD START 40A / 115VAC      80A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | LEAKAGE CURRENT (max.)  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | Touch current < 100uA (rms) @264VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                                                                        |                                                                           |              |                   |  |  |
| PROTECTION                | OVERLOAD                |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 110% ~ 150% rated output power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              | Protection type : Hiccup mode, recovers automatically after fault condition is removed |                                                                           |              |                   |  |  |
|                           | OVER VOLTAGE            |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 115% ~ 140% rated output voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | Protection type : Clamp by zener diode                                                 |                                                                           |              |                   |  |  |
|                           |                         |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
| ENVIRONMENT               | WORKING TEMP.           |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | -30 ~ +70℃ (Refer to "Derating Curve")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | WORKING HUMIDITY        |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 20% ~ 90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | STORAGE TEMP., HUMIDITY |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | -20 ~ +85℃, 10 ~ 95% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | TEMP. COEFFICIENT       |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | ±0.03% / °C (0 ~ 45℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | VIBRATION               |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                                                                                        |                                                                           |              |                   |  |  |
| SAFETY & EMC<br>(Note. 8) | SAFETY STANDARDS        |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | CB    IEC62368-1, IEC60601-1/-1-11, IEC61558-1/-2-16, IEC60335-1;<br>UL    UL62368-1, CSA C22.2 NO. 62368-1, ANSI/AAMI ES60601-1/-1-11(3.2 Version), CAN/CSA-C22.2 NO.60601-1/-1-11, ANSI/AAMI ES60601-1-11, CAN/CSA-C22.2 NO.60601-1-11(for U Type only)<br>DEKRA BS EN/EN62368-1, BS EN/EN60601-1/-1-11, BS EN/EN61558-1/-2-16, BS EN/EN60335-1;<br>PSE    J62368-1; BSMI CNS15598-1;<br>RCM    AS/NZS 61558-1/-2-16; EAC TPTC004;<br>CCC    GB4943.1 approved.<br>KC    KC62368-1;<br>BIS    IS13252(part1):2010/IEC60950-1:2005.<br>(Please refer to next page for more details)(NGE12○05-USB without CB/UL/DEKRA 60601-1-11) |              |                                                                                        |                                                                           |              |                   |  |  |
|                           |                         |                 | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              | I/P-O/P:4000VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
|                           |                         |                 | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                                                                        |                                                                           |              |                   |  |  |
|                           |                         |                 | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              | Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              | Standard                                                                               |                                                                           |              | Test Level / Note |  |  |
|                           |                         |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | Conducted emission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              | BS EN/EN55032(CISPR32)/EN55011, FCC Part15, CNS15936, GB/T 9254.1-2021, KC C9832       |                                                                           |              | Class B           |  |  |
|                           | Radiated emission       |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | BS EN/EN55032(CISPR32)/EN55011, FCC Part15, CNS15936, GB/T 9254.1-2021, KC C9832                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                                                                                        | Class B                                                                   |              |                   |  |  |
|                           | Harmonic current        |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | BS EN/EN61000-3-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Class A                                                                   |              |                   |  |  |
|                           | EMC IMMUNITY            |                 | Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              | Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |                                                                                        | Test Level /Note                                                          |              |                   |  |  |
|                           |                         |                 | ESD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | BS EN/EN61000-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 4, 15KV air; Level 4,8KV contact                                    |              |                   |  |  |
|                           |                         |                 | RF field susceptibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | BS EN/EN61000-4-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 2, 3V/m                                                             |              |                   |  |  |
|                           |                         |                 | EFT bursts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              | BS EN/EN61000-4-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 3, 2KV                                                              |              |                   |  |  |
|                           |                         |                 | Surge susceptibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | BS EN/EN61000-4-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 3, 1KV/L-N                                                          |              |                   |  |  |
|                           |                         |                 | Conducted susceptibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              | BS EN/EN61000-4-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 2, 3V                                                               |              |                   |  |  |
|                           |                         |                 | Magnetic field immunity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | BS EN/EN61000-4-8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                                                                        | Level 4, 30A/m                                                            |              |                   |  |  |
|                           |                         |                 | Voltage dips , interruption                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              | BS EN/EN61000-4-11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                                                                        | >95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods |              |                   |  |  |
| OTHERS                    | MTBF                    |                 | 1272.8 Khrs min.      MIL-HDBK-217F (25℃)      7192.4 Khrs min.      Telcordia TR/SR-332(Bellcore) (25℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | DIMENSION               |                 | 48*28*55mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | PACKING                 | MAIN BODY       | Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | NGE12Ixx-P1J | NGE12Ixx-USB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NGE12Exx-P1J | NGE12Exx-USB                                                                           | NGE12Uxx-P1J                                                              | NGE12Uxx-USB |                   |  |  |
|                           |                         |                 | P.W.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 112g         | 71g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 127g         | 86g                                                                                    | 112g                                                                      | 71g          |                   |  |  |
|                           |                         |                 | Q'TY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 96pcs        | 150pcs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 72pcs        | 120pcs                                                                                 | 96pcs                                                                     | 150pcs       |                   |  |  |
|                           |                         |                 | G.W.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 12.6kg       | 12.5kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11.2kg       | 13.3kg                                                                                 | 12.6kg                                                                    | 12.5kg       |                   |  |  |
|                           |                         |                 | M'MENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.02CUFT     | 0.68CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.36CUFT     | 1.25CUFT                                                                               | 1.02CUFT                                                                  | 0.68CUFT     |                   |  |  |
| AC PLUGS                  |                         | Refer to Page 3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
| DC OUTPUT CONNECTOR       | PLUG                    |                 | See page 7~8 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
|                           | CABLE                   |                 | See page 7~8 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |
| NOTE                      |                         |                 | 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.<br>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μ F & 47 μ F capacitor.<br>4.Tolerance: includes set up tolerance, line regulation, load regulation.<br>5.Line regulation is measured from low line to high line at rated load.<br>6.Load regulation is measured from 0% to 100% rated load<br>7.Derating may be needed under low input voltage. Please check the derating curve for more details.<br>8.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>9.Design meet US DoE Level VII (from Docket number EERE-2020-BT-STD-0006).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                                                                                        |                                                                           |              |                   |  |  |

**■ Interchangeable AC Plug Specifically for NGE12/18/30/45/65/90 (I-Type)**

|             |                                                                                                                                       |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                                                                 |                                                                                                                                  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Order NO.   | NGE12Ixx-□<br>□ = P1J USB<br>(Universal Version)<br> |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         | NGE12Exx-□<br>□ = P1J USB<br>(EU Version)<br> | NGE12Uxx-□<br>□ = P1J USB<br>(US Version)<br> |
| AC plug     | Interchangeable Type<br>(Unfoldable; AC Pin fixed)                                                                                    |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         | Non-Interchangeable Type                                                                                                        |                                                                                                                                  |
|             | EU<br>                                               | US<br> | UK<br> | AU<br> | CN<br> | KR<br> | IN<br> | Unfoldable AC Pin                                                                                                               | Foldable AC Pin                                                                                                                  |
| Certificate |                                                     |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                                                                         |                                              |                                              |

**■ AC Plugs Accessory (Sold Separately)**

| MW's order NO. | Per Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Per Bag                          | Per Carton                                     |        |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------|--------|
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Q'Ty                             | Q'Ty                                           | G.W.   |
| AC PLUG-EU4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 5.4Kg  |
| AC PLUG-US4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 4.7Kg  |
| AC PLUG-UK4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 7.1Kg  |
| AC PLUG-AU4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 5.2Kg  |
| AC PLUG-CN4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 4.8Kg  |
| AC PLUG-KR4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 6.3Kg  |
| AC PLUG-IN4    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30 pcs                           | 300 pcs<br>(10 bags)                           | 7.7Kg  |
| AC PLUG-MIX4   |     <br>(Per Set)                                                                                                                                                                          | 30 pcs<br>(5 Types*6 mixed bags) | 300 pcs<br>(5 Types*6 mixed bags)<br>(10 bags) | 5.45Kg |
| AC PLUG-MIX5   |       <br>(Per Set) | 35 pcs<br>(7 Types*5 mixed bags) | 315 pcs<br>(7 Types*5 mixed bags)<br>(9 bags)  | 6.13Kg |

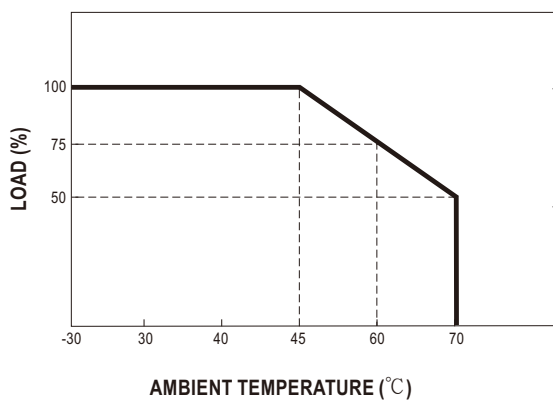
### ■ Interchangeable AC Plug Installation Steps (Convertible with I Type only)

| Step1                                                                                                                     | Step2                                                                              |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                          |  |
| <p>Slide in AC converter along the guided rail between the metal prongs until it is locked in (with a “click” sound).</p> | <p>Check if the new plug type is stable and correct before use.</p>                |

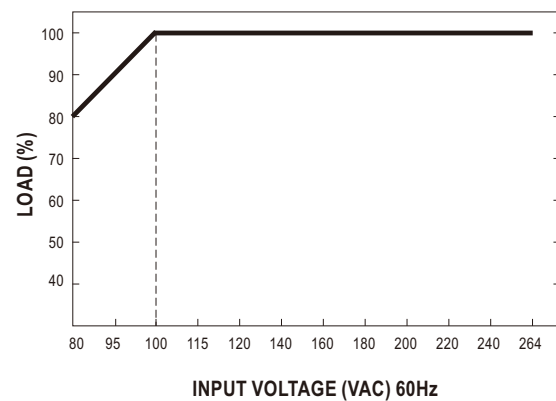
#### Note:

1. NGE12I main body unit and AC inlet plug should be ordered separately.
2. NGE12I needs to be used along with one of the AC inlet plug (EU,US,UK,AU,CN,KR,IN).

### ■ Derating Curve



### ■ Static Characteristics



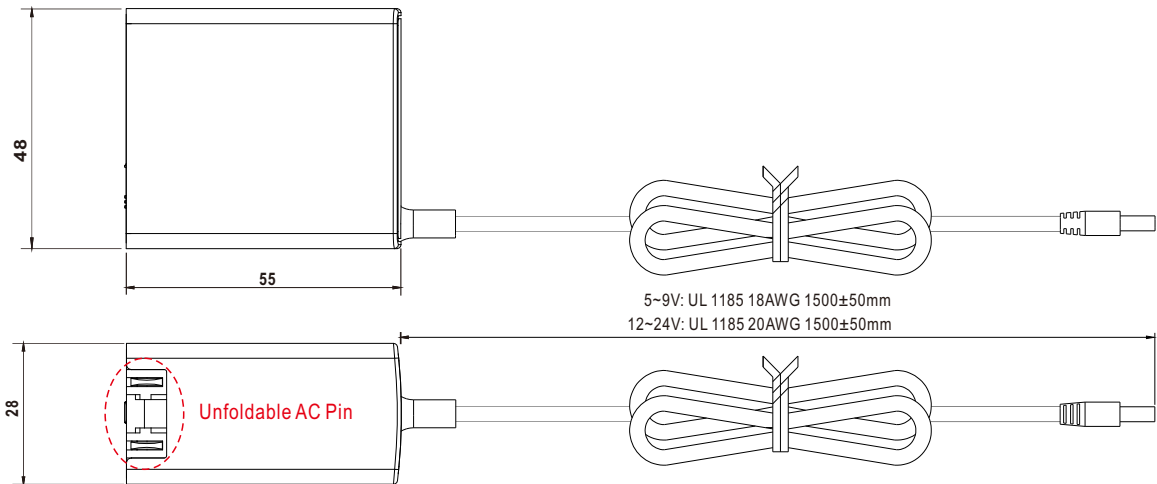
# Mechanical Specification

(Unit: mm , tolerance  $\pm 1$ mm)

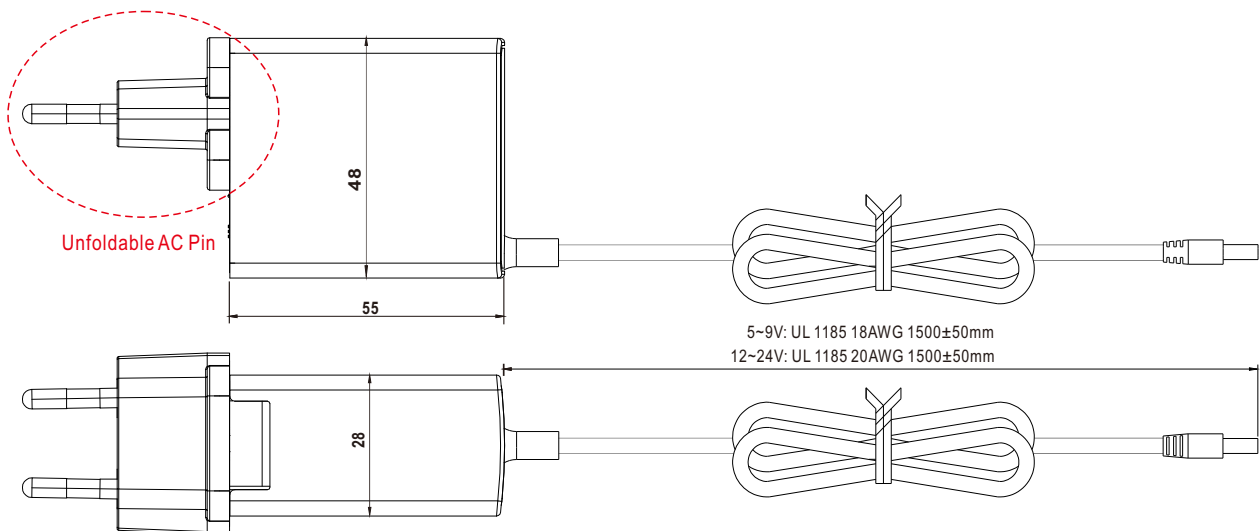
Case No. NGE18

## ✕ Cable connection

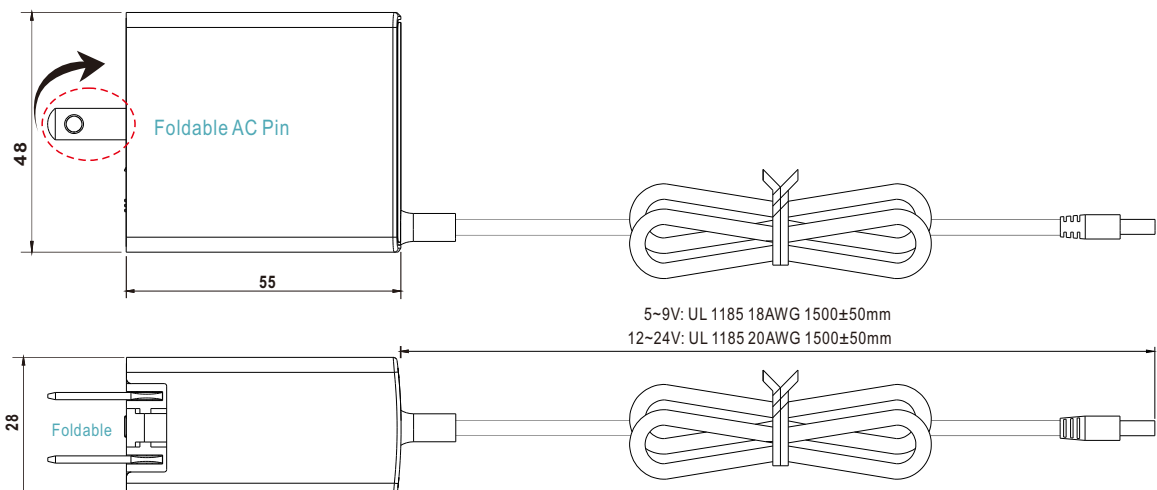
NGE12lxx-P1J (Universal Version - AC Pin fixed; With interchangeable plugs) :



NGE12Exx-P1J (EU Version - AC Pin fixed; With non-interchangeable plug) :



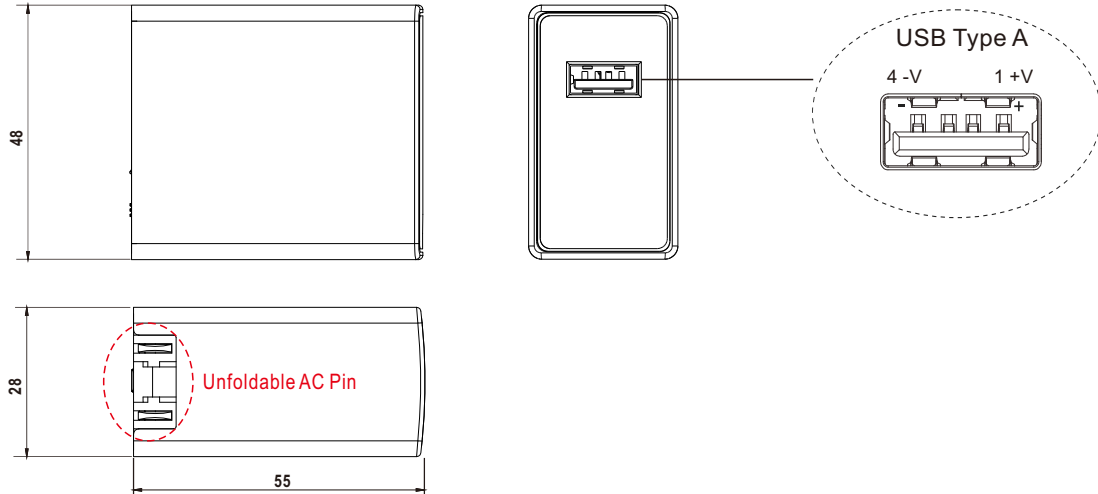
NGE12Uxx-P1J (US Version - Foldable AC Pin; With non-interchangeable plug) :



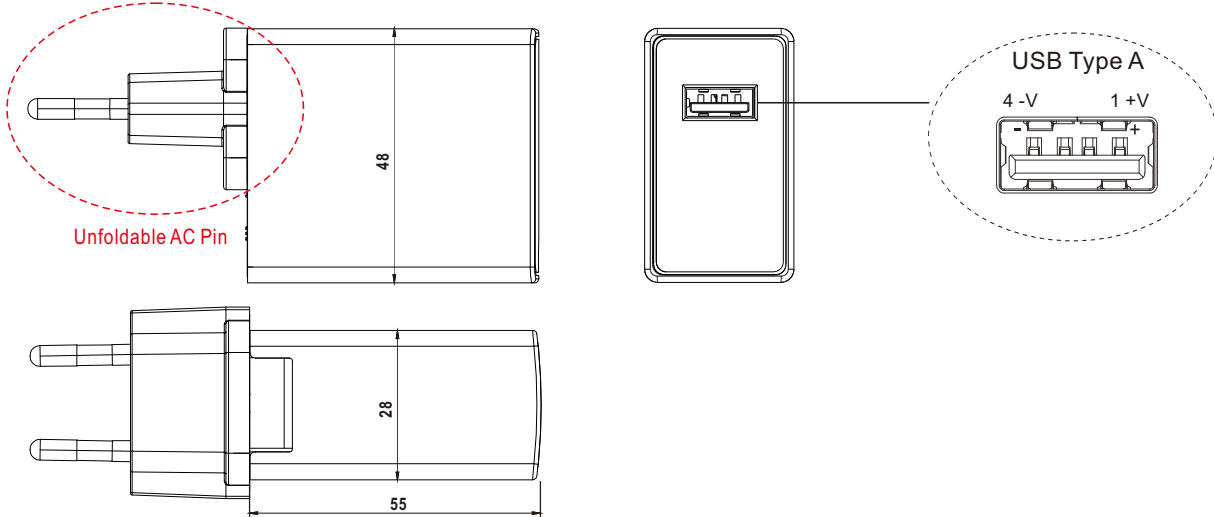
※ USB connection

NGE12I05-USB (Universal Version - AC Pin fixed; With interchangeable plugs) :

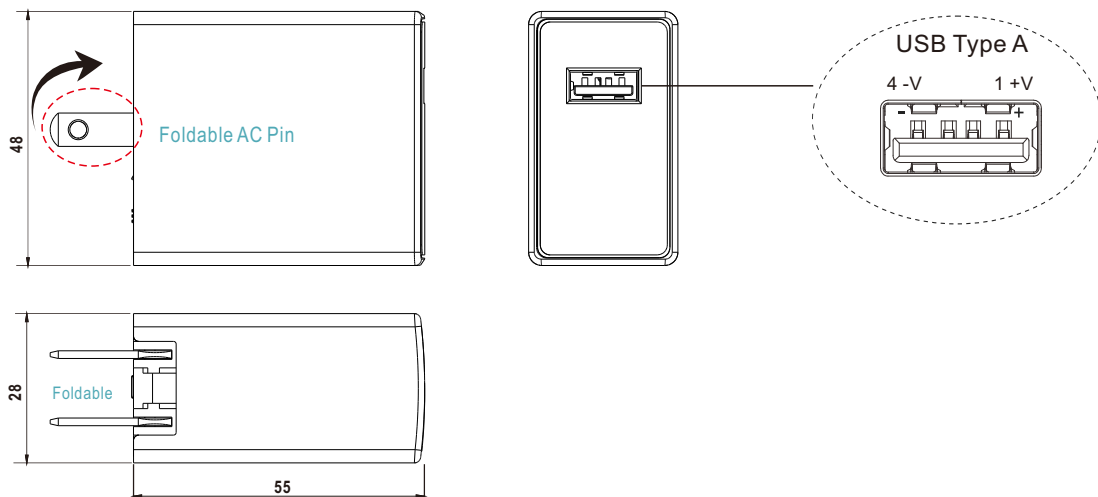
Unit:mm



NGE12E05-USB (EU Version - AC Pin fixed; With non-interchangeable plug) :



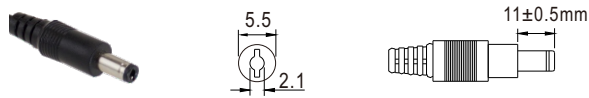
NGE12U05-USB (US Version - Foldable AC Pin; With non-interchangeable plug) :



### ■ DC Output Plug

◎ Standard plug: P1J

Unit:mm

| P1J                                                                               | Pin Assignment                                                                                     |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|  |                 |
|                                                                                   | Outside  Inside |

◎ DC plug changeable through:

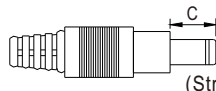
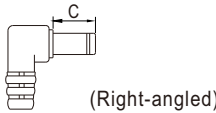
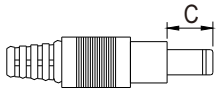
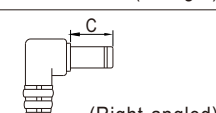
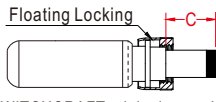
- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

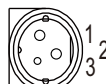
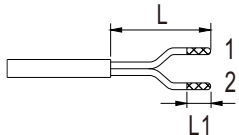
Please refer to below table and online selection guide : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf)

Example quick adapter accessory:



◎ Optional DC plug: (Available in customized cable or quick adapter)

| Tuning Fork Style                                                                   |                                                                                                                                               | Type No.   | A    | B    | C     | Quick Adapter<br>Accessory               |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------|------|------|-------|------------------------------------------|
|                                                                                     |                                                                                                                                               |            | OD   | ID   | L     |                                          |
|  | <br>(Straight)                                             | P1I        | 5.5  | 2.1  | 9.5   | Available<br>(Current rating: 7.5A max.) |
|                                                                                     |                                                                                                                                               | P1L        | 5.5  | 2.5  | 9.5   |                                          |
|                                                                                     | <br>(Right-angled)                                         | P1M        | 5.5  | 2.5  | 11.0  |                                          |
|                                                                                     |                                                                                                                                               | P1IR       | 5.5  | 2.1  | 9.5   |                                          |
|                                                                                     |                                                                                                                                               | P1JR       | 5.5  | 2.1  | 11.0  |                                          |
|                                                                                     |                                                                                                                                               | P1LR       | 5.5  | 2.5  | 9.5   |                                          |
|                                                                                     |                                                                                                                                               | P1MR       | 5.5  | 2.5  | 11.0  |                                          |
| Barrel Style                                                                        |                                                                                                                                               | Type No.   | A    | B    | C     |                                          |
|                                                                                     |                                                                                                                                               |            | OD   | ID   | L     |                                          |
|  | <br>(Straight)                                             | P2I        | 5.5  | 2.1  | 9.5   | None                                     |
|                                                                                     |                                                                                                                                               | P2J        | 5.5  | 2.1  | 11.0  |                                          |
|                                                                                     | <br>(Right-angled)                                         | P2L        | 5.5  | 2.5  | 9.5   |                                          |
|                                                                                     |                                                                                                                                               | P2M        | 5.5  | 2.5  | 11.0  |                                          |
|                                                                                     |                                                                                                                                               | P2IR       | 5.5  | 2.1  | 9.5   |                                          |
|                                                                                     |                                                                                                                                               | P2JR       | 5.5  | 2.1  | 11.0  |                                          |
|                                                                                     |                                                                                                                                               | P2LR       | 5.5  | 2.5  | 9.5   |                                          |
|                                                                                     |                                                                                                                                               | P2MR       | 5.5  | 2.5  | 11.0  |                                          |
| Lock Style                                                                          |                                                                                                                                               | Type No.   | A    | B    | C     |                                          |
|                                                                                     |                                                                                                                                               |            | OD   | ID   | L     |                                          |
|  | <br>Floating Locking<br>SWITCHCRAFT original or equivalent | P2S(S761K) | 5.53 | 2.03 | 12.06 | None                                     |
|                                                                                     |                                                                                                                                               | P2K(761K)  | 5.53 | 2.54 | 12.06 |                                          |
|                                                                                     |                                                                                                                                               | P2C(S760K) | 5.53 | 2.03 | 9.52  |                                          |
|                                                                                     |                                                                                                                                               | P2D(760K)  | 5.53 | 2.54 | 9.52  |                                          |
|                                                                                     |                                                                                                                                               |            |      |      |       |                                          |

| Min. Pin Style                                                                                                                                                                                                                                                          | Type No.    | A               | B      | C    | Quick Adapter<br>Accessory             |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|--------|------|----------------------------------------|------------------------------------------|
|                                                                                                                                                                                                                                                                         |             | OD              | ID     | L    |                                        |                                          |
| <br><br>EIAJ equivalent                                                                               | P3A         | 2.35            | 0.7    | 11.0 | Available<br>(Current rating: 5A max.) |                                          |
|                                                                                                                                                                                                                                                                         | P3B         | 4.0             | 1.7    | 11.0 |                                        |                                          |
|                                                                                                                                                                                                                                                                         | P3C         | 4.75            | 1.7    | 11.0 |                                        |                                          |
| Center Pin Style                                                                                                                                                                                                                                                        | Type No.    | A               | B      | C    | D                                      | Available<br>(Current rating: 7.5A max.) |
|                                                                                                                                                                                                                                                                         |             | OD              | ID     | L    | Center Pin                             |                                          |
| <br><br>EIAJ equivalent                                                                               | P4A         | 5.5             | 3.4    | 11.0 | 1.0                                    |                                          |
|                                                                                                                                                                                                                                                                         | P4B         | 6.5             | 4.4    | 11.0 | 1.4                                    |                                          |
|                                                                                                                                                                                                                                                                         | P4C         | 7.4             | 5.1    | 11.0 | 0.6                                    |                                          |
| Min. DIN 3 Pin with Lock (male)                                                                                                                                                                                                                                         | Type No.    | Pin Assignment  |        |      |                                        | Available<br>(Current rating: 7.5A max.) |
|                                                                                                                                                                                                                                                                         |             | PIN No.         | Output |      |                                        |                                          |
| <br><br>KYCON KPPX-3P equivalent                                                                      | R6B         | 1               | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 2               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 3               | +Vo    |      |                                        |                                          |
| Min. DIN 4 Pin with Lock (male)                                                                                                                                                                                                                                         | Type No.    | Pin Assignment  |        |      |                                        | Available<br>(Current rating: 7.5A max.) |
|                                                                                                                                                                                                                                                                         |             | PIN No.         | Output |      |                                        |                                          |
| <br><br>KYCON KPPX-4P equivalent                                                                  | R7B         | 1               | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 2               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 3               | -Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 4               | +Vo    |      |                                        |                                          |
| Stripped and tinned leads                                                                                                                                                                                                                                               | Type No.    | Pin Assignment  |        |      |                                        | None                                     |
|                                                                                                                                                                                                                                                                         |             | PIN No.         | Output |      |                                        |                                          |
| <br><br>Length of Land L1 by request<br>(MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm) | by customer | 1<br>( Ribbed ) | +Vo    |      |                                        |                                          |
|                                                                                                                                                                                                                                                                         |             | 2<br>( Letter ) | -Vo    |      |                                        |                                          |

## ■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>