# WER series

## Draw wire position sensor

### Feature:

- Flexible installation and feedback length and tilt Angle signals
- Compact size linearity up to 0.5% F.S
- Resolution 0.1mm, life of more than 500,000 times
- Protection level: Standard IP67
- Maximum range up to 12.5M, signal output CANopen.

### Details:

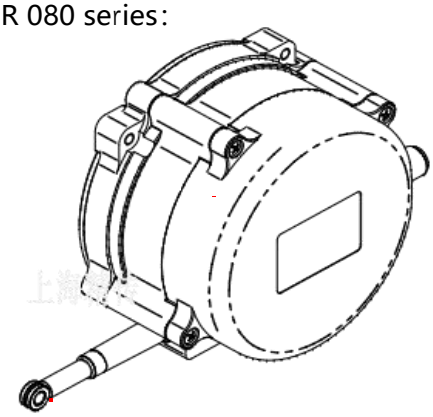
- Outer shell nylon
- Steel wire AISI304 diameter 0.8mm
- Axle bearing flexible double bearing
- Resistance element precision wire-wound potentiometer,MEMS inertial measurement unit
- Mechanical connection fixed copper ring, inner diameter 8mm, outer diameter 15mm, height 5mm
- Electrical connection 5-pin M12 round aviation plug with high electromagnetic compatibility

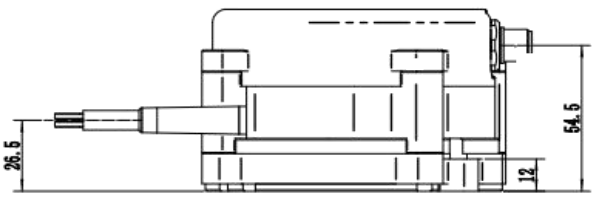
### Usage:

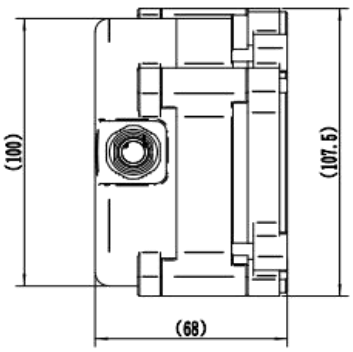
- Elevator, elevator, lifting platform
- Factory automation, forklift
- Crane, remote control, aerial work platform

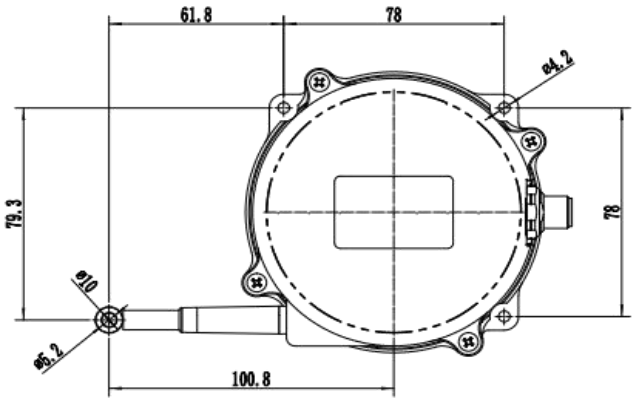
### Dimensions:

WER 080 series:



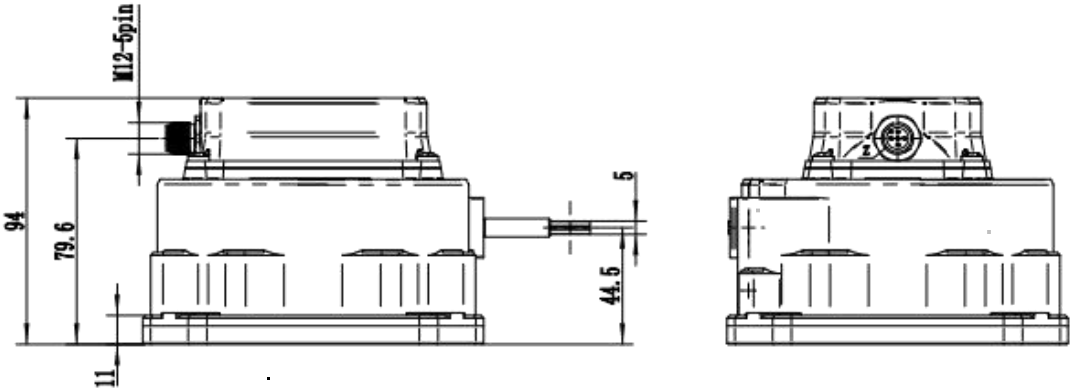


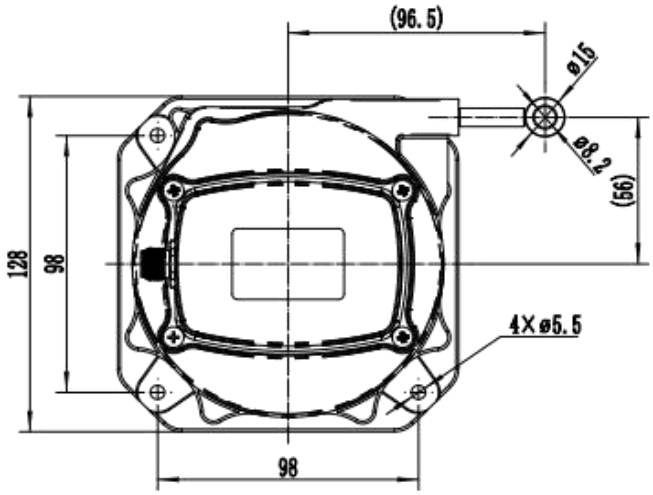



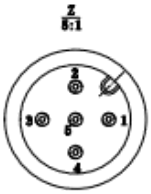



## Dimensions:

WER 128 series:



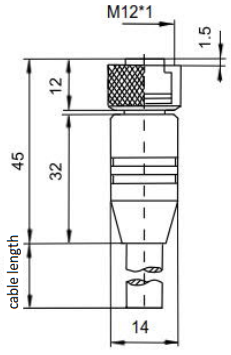



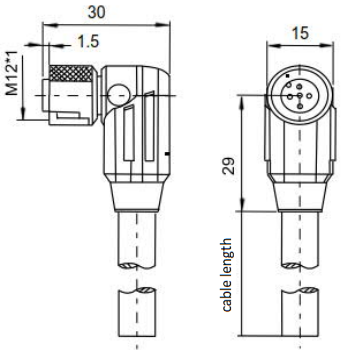
## accessary size:

round aviation plug :

K4P*M-S-M12 (shielding)



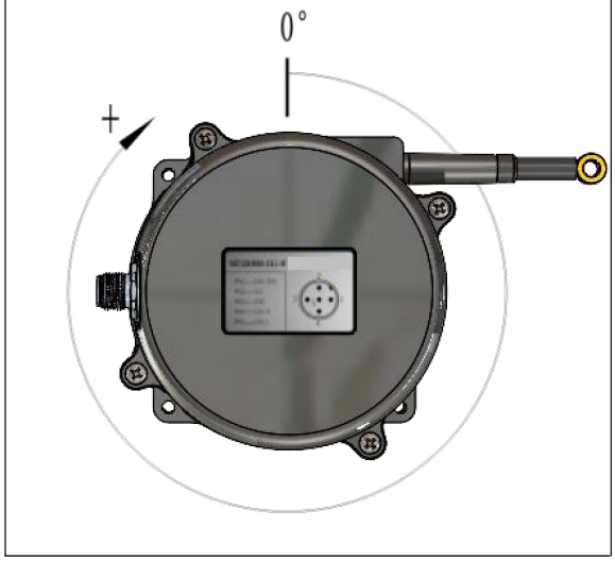
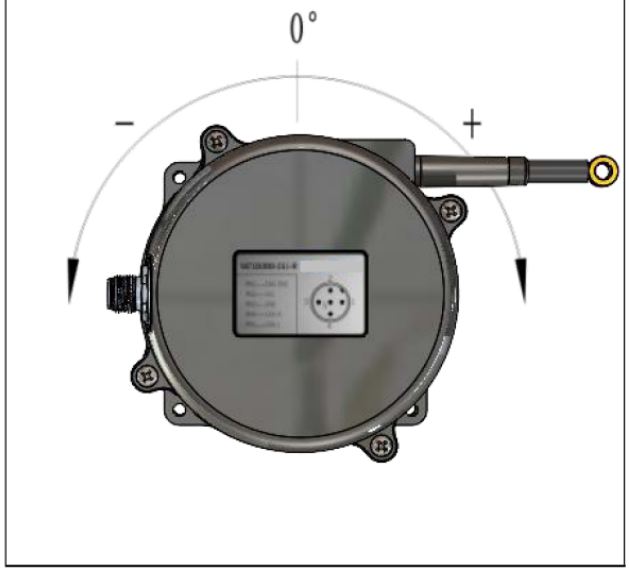

K4P*M-SW-M12 (shielding)



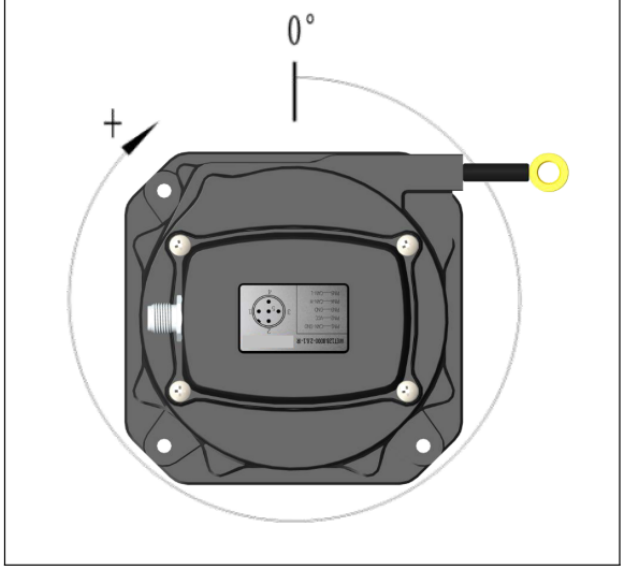
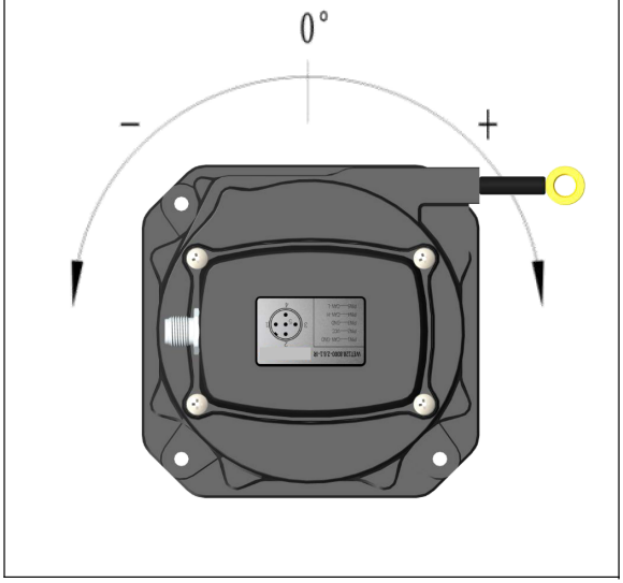
## tilt sensor set：

- available in ±180 degree and 360 degree modes
- Rotation direction can be set (CW/CCW)
- User signal bias setting and reset

WER 080 series:

| model 0...360°【standard】 | model ±180° |
| --- | --- |
|  |  |

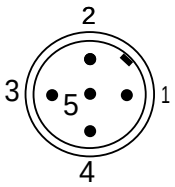
WER 128 series:

| model 0...360°【standard】 | model ±180° |
| --- | --- |
|  |  |

## Parameters：

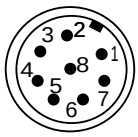
| Parameter | unit | detail |
|---|---|---|
| Series | | WER 080 WER 128 |
| Output signal | | CANopen （4-20mA need customized） |
| work voltage | V DC | 9-30V (MAX.30V) |
| work temperature | ℃ | -40 ...+85 |
| storage temperature | ℃ | -20...+100 |
| reciprocating speed | M/S | 0.5 |
| antiviberation frequency | Hz | 5...500 |
| amplitude | mm | Max0.75 |
| acceleration | g | aMax=10 |
| anti-shock time | ms | 11 |
| force | g | 50 |
| work life | time | > 0.5 x $10^6$ up to 500 thousands |
| protection class | | IP 65 |
| linearity | ± | ≤0.5% repeatability（±0.2%.F.S) ≤±0.3°（tilt angle 25℃） |
| resolutions | mm | ≤ 0.1mm (for draw wire postion sensor) 0.1° (tilt measure) |
| electro magnetic compatibility | | acc. to EN 61326-1, EN 61326-3-1 |
| current consumption | mA | ＜100 |
| initializing time | S | ＜1.5 |

## wirings：




PIN1---CAN-GND
PIN2---VCC
PIN3---GND
PIN4---CAN-H
PIN5---CAN-L

CAN signal：male connector M12，5-pin




PIN1---GND1 PIN2---GND2
PIN3---SIG1 PIN4---VCC1
PIN5--- NC PIN6---VCC2
PIN7---SIG2 PIN8--- NC

current signal：male connector M12，8-pin (full redundant)

## Instructions：

WER XXX - XXXX - C - X - X

- XXX: structure
  - series: 080
  - 128
- XXXX: range
  - 080: 5300、6300 7300、8300
  - 128: 5000、8000 10000、12000 15000 mm
- C: output signal
  - CAN open
  - A:4-20mA need customized
- X: tilt sensor
  - X: no tilt sensor
  - L: with tilt sensor
- X: signal type
  - S:single
  - R:redundant