

## SM46E Pull Force Sensor

### 1. Description

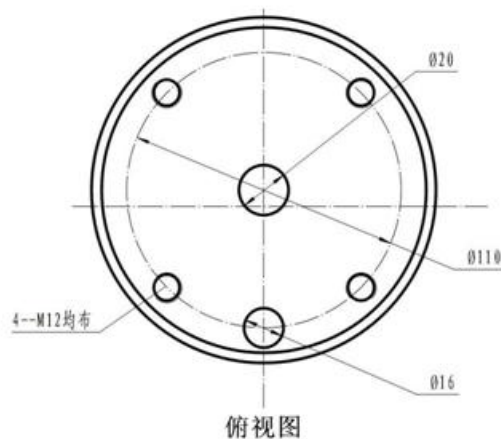
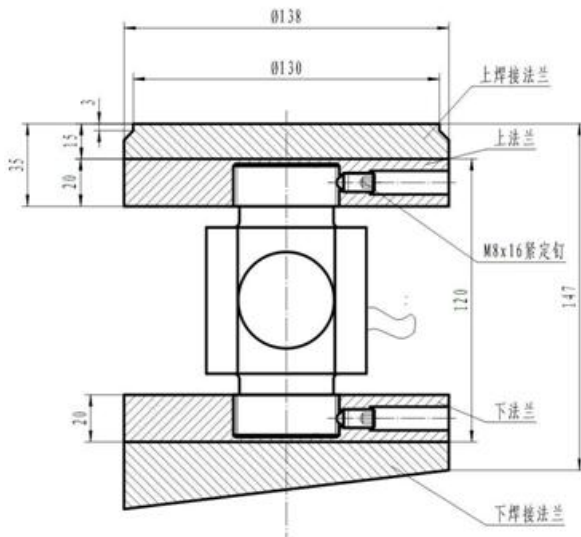
The SM46E pull force sensor adopts an alloy steel structure, which is simple and has strong resistance to eccentric loading. Waterproof, high measurement accuracy, stable and reliable performance and easy to install. It is widely used in force measurement and weighing systems of various cement silos, belt scales, hopper scales, dry-mixed mortar, oil tanks and various engineering devices, etc.

### 2. Characteristics

- Simple structure.
- Strong resistance to eccentric loading.
- High measurement accuracy.
- Stable performance.

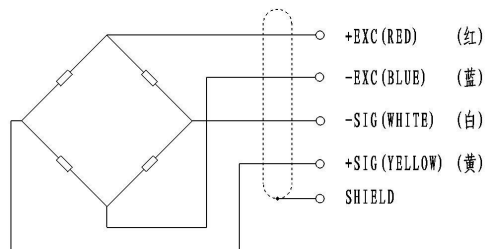


#### Dimensions (In mm, 1mm=0.03937 inches)



#### Circuit Diagram:

Red: +input  
Blue: -input  
White: +output  
Yellow: -output



# Specification:

| Type                                | Technical parameters   |
|-------------------------------------|--|
| Nominal load range                  | 5 ~ 30t  |
| Power supply                        | 10~12 VDC  |
| Drawing current                     | <100 mA  |
| Zero balance                        | 1.0±% of rated output  |
| Analog output                       | 2.0±0.015mV/V  |
| Input resistance (R <sub>ic</sub> ) | 380±10Ω (ohms)   |
| Output resistance (R <sub>o</sub> ) | 350±5Ω (ohms)  |
| Insulation resistance               | ≥5000 MΩ (Mege-Ohms)   |
| Class precision                     | 0.3%FS   |
| Effect of temperature               | 0.3%FS/10°C  |
| Operating temperature               | -40 ~ +85°C  |
| Safe Load Limit                     | 200% FS  |
| Safety margin against yielding      | 300% FS  |
| Safety margin against breakage      | 500% FS  |
| Material material                   | High performance alloy steel or (chromium ratio>15% stainless steel) |
| Protection type                     | IP67/IP68  |