产品介绍/Product Description

WIKA 销轴力传感器是一个中空的圆柱体,由防锈、耐腐蚀优质不锈钢制成,它由中间部分即压力承载区、传感器支撑区和两个测量槽构成。测量装置为由应变片组成的惠斯通电桥,安装在销轴力传感器内,以防外部不良影响(如:机械损伤、灰尘、潮湿等)

销轴力传感器的中间部分力的输入形式为剪切载荷,作用在传感器左、右两部分的支撑力使传感器发生变化,由剪切应力引起的变形转换成与负载成正比的电信号。因为考虑到测量形式,所以销轴力传感器有一个最佳测量方向。在这个最佳方向上,输出信号可达到最大值。此时,传感器中间部分上的压力方向与主要测量方向一致,测量方向由箭头在传感器上表示出来

WIKA pin shaft force sensor is a hollow cylinder made of rust resistant and corrosion resistant stainless steel, which consists of the middle part of the pressure bearing area, sensor support area and two measuring grooves. The measuring device is a whiss power bridge composed of strain gauge, installed in the pin shaft force sensor to prevent external adverse effects (such as mechanical damage, dust, moisture, etc.). The input form of the force in the middle part of the pin shaft force sensor is the shear load. The supporting force acting on the left and right parts of the sensor changes the sensor, and the deformation caused by the shear stress is converted into an electrical signal proportional to the load. Considering the measurement form, the pin axial force sensor has an optimal measurement direction. In this optimal direction, the output signal can reach a maximum value. At this point, the pressure direction on the middle part of the sensor is consistent with the main measurement direction, and the measurement direction is indicated by the arrow on the sensor

产品特点 Product Features



- 标准化产品或客户定制化产品/Standardized products or customer-customized products
- 安装简单方便/The installation is simple and convenient
- 极高的过载保护能力和抗疲劳极限/Very high overload protection capacity and fatigue resistance limit
- 高精确度和线性度/High precision and the linearity
- 具备温度补偿/Have temperature compensation
- 测力范围从 0.5 吨到千吨级/ force range from 0.5 tons to thousand tons
- 高防护等级: IP66、IP67/High protection level: IP66, IP67
- 使用寿命长、无须保养/Long service life, no maintenance

性能参数/ performance parameter

描述/Description	技术参数/technical parameters
工作温度/operating temperature	- 40°C ~ +85°C
存储温度/storage temperature	- 40°C ~ +85°C
平均相对湿度/Average relative humidity	≤98%RH (25°C)
工作电流/working current	10~30V
海拔高度/height above sea level	≤2000m(气压 86kPa~110kPa)
测量范围/measuring range	销轴力传感器/Pin axle force sensor: 10~5000kN
线性误差/linear error	销轴力传感器/Pin axle force sensor: 1%

产品安装 Product Installation

