

Force Sensor LCT-500KA

- Triaxial force sensor with bolts installation at both side;
- Full bridge strain gauge principle;
- Range $F_X=F_Y=200\text{KN}$, $F_Z=500\text{KN}$;
- Non-Linearity $\pm 1\%\text{FS}$;
- Hysteresis $\pm 1\%\text{FS}$;
- Dallas ID Module optional.

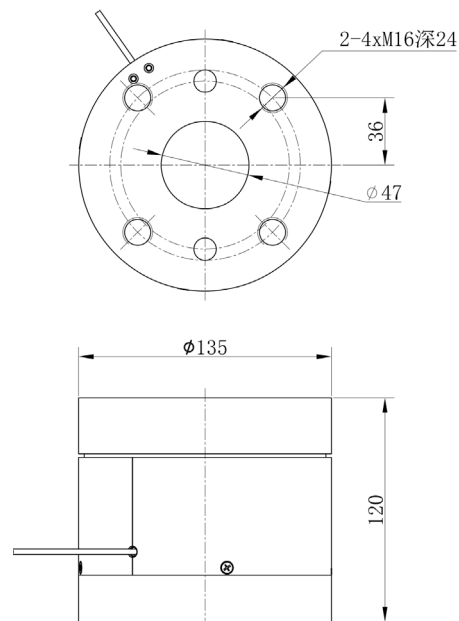


Triaxial force sensor LCT-500KA is based on the full-bridge strain principle, converting the three-directional forces on the two end faces of the sensor into strain. The structural strain causes a change in the resistance of the strain gauge, thereby enabling the measurement of force through electrical signals. The sensor body is made of stainless steel and is equipped with high-performance wear-resistant cables, which can be customized in length. Additionally, the sensor can be configured with a Dallas ID and connector according to user requirements.

Technical Specification: (with 10V and 25°C) :

Name	Unit	Value
Range	KN	$F_X=F_Y=200$ $F_Z=500$
Safe Overload	%FS	150
Non-Lin.	%FS	± 1
Hysteresis	%FS	± 1
Excitation	V	5~15
Span Output	mV/V	$F_X=F_Y=2.0$ $F_Z=1.0$
Zero Drift	mV/V	<0.1
Crosstalk	%FS	± 4
Bridge Res.	Ω	350
Isolation Res.	M Ω	>100
Temperature	$^{\circ}\text{C}$	-20~80
Mounting	/	2×4×M16
Material	/	Stainless Steel
Weight	kg	8
Dimension	mm	$\Phi 135 \times 120$

Drawing:



Wires Assignment

Red	EXC+
Black	EXC-
White	SIG-
Green	SIG+
Shield	Case