

Force Sensor LCT-100KA

- Triaxial force sensor with bolts installation at both side;
- Full bridge strain gauge principle;
- Ultra-thin structure design;
- Range $F_X=F_Y=F_Z=100\text{KN}$;
- $F_Z=200\text{KN}$ is optional;
- Safe overload 150%FS;
- Dallas ID Module optional.

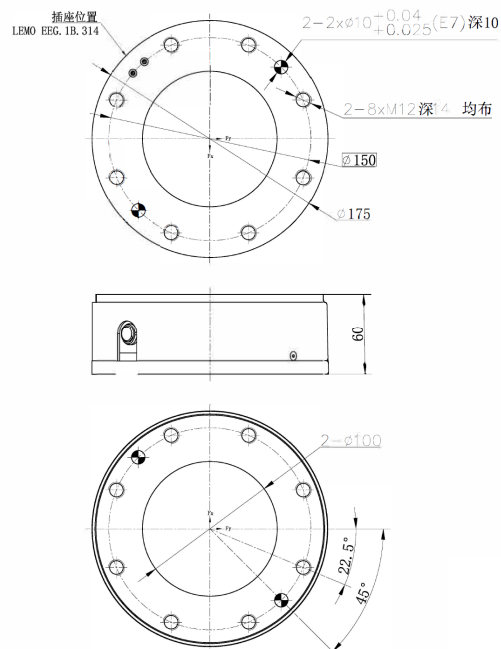


Triaxial force sensor LCT-100KA is based on the full-bridge strain principle, converting the three-directional forces on the two end faces of the sensor into strain. The structural strain causes a change in the resistance of the strain gauge, thereby enabling the measurement of force through electrical 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	100
F_X, F_Y, F_Z		$F_Z=200$ optional
Non-Lin.	%FS	$< \pm 1$
Hysteresis	%FS	$< \pm 1$
Excitation	V	5~15
Span Output	mV/V	$F_X=F_Y=1.8$ $F_Z=0.5$
Zero Drift	mV/V	< 0.1
Crosstalk	%FS	< 4
Bridge Res.	Ω	$F_X=F_Y=350$ $F_Z=1400$
Isolation Res.	$M\Omega$	> 100
Connector	LEMO	EGG.1B.314
Temperature	$^{\circ}\text{C}$	-20~80
Material	/	Stainless Steel
Weight	kg	5.6
Dimension	mm	$\Phi 175 \times 60$

Drawing:



Pin Assignment (EXC+, EXC-, SIG+, SIG-):

F_X : PIN1, PIN2, PIN3, PIN4

F_Y : PIN10, PIN9, PIN8, PIN7

F_Z : PIN5, PIN6, PIN12, PIN14