6-Axis Force Load Cell

Features

Capacity 5KN-15KN; 250Nm-1200Nm

6 axis-Fxyz, Mxyz independent bridges

Low crosstalk

Compact size

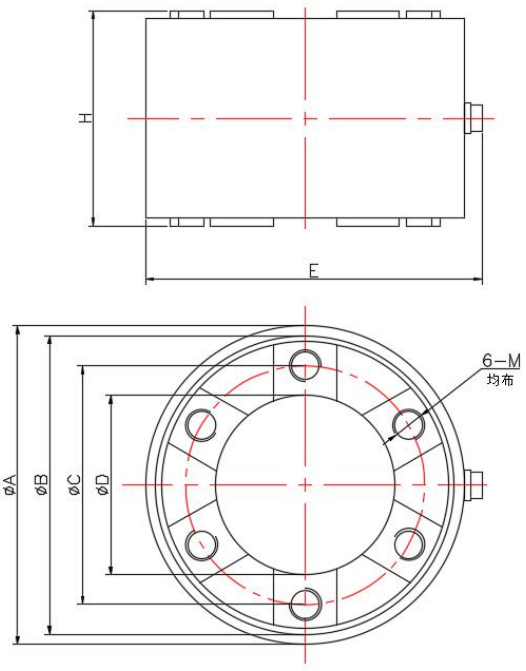
Optional features

0-5V output signal

DESCRIPTION

The ZM6DW load cell Fxyz and Mxyz utilize independent wheatstone full bridge for each axis which provides mV/V output proportional to the applied force and requires no mathematical manipulation. Typical applications for this type of transducer are for example force exertion control in robotics, automotive crash testing, industrial test benches, grinding force control, actuator operating force measurement,etc.

DIMENSIONS



Capacity	ΦA	ΦB	ΦC	ΦD	E	H	M
5KN/250Nm	80	75	60	45	92	50	6-M8×1.25↓9
10KN/750Nm	110	100	80	65	114	60	6-M10×1.5↓10
15KN/1200Nm	130	120	80	80	133	80	6-M12×1.75↓15

SPECIFICATIONS

PARAMETER	VALUE	UNIT
Material	Alloy steel	
Capacity	5KN,10KN,15KN/250Nm,750Nm,1200Nm	KN/Nm
Sensitivity X-Axis	0.5-1.0	mV/V
Sensitivity Y-Axis	0.5-1.0	mV/V
Sensitivity Z-Axis	0.5-1.0	mV/V
Zero balance	1	±% of rated output
Input resistance X,Y-Axis	350±5	Ohms
Output resistance X,Y-Axis	350±5	Ohms
Input resistance Z-Axis	350±5	Ohms
Output resistance Z-Axis	350±5	Ohms
Insulation resistance	5000	Mega-Ohms
Accuracy	1	±% of rated output
Non linearity	0.2	±% of rated output
Hysteresis	0.05	±% of rated output
Temperature effect on min. dead load output	0.0026	±% of rated output/℃
Temperature effect on sensitivity	0.0015	±% of rated output/℃
Creep error (30 minutes)	0.03	±% of rated output
Crosstalk from X to Y	1	±% of rated output
Crosstalk from Y to X	1	±% of rated output
Crosstalk from Z to X/Y	1	±% of rated output
Crosstalk from X/Y to Z	2	% of R.C
Safe overload	150	% of R.C
Ultimate overload	300	% of R.C
Excitation, recommended	10	Vdc
Compensated temperature range	-10 to +40	℃
Operating temperature range	-20 to +60	℃

All specifications listed subject to change without notice.