

2-Axis Force Sensor



Features

F from 20N to 2000N

M from 1N.m to 50N.m

Low crosstalk

Compact size

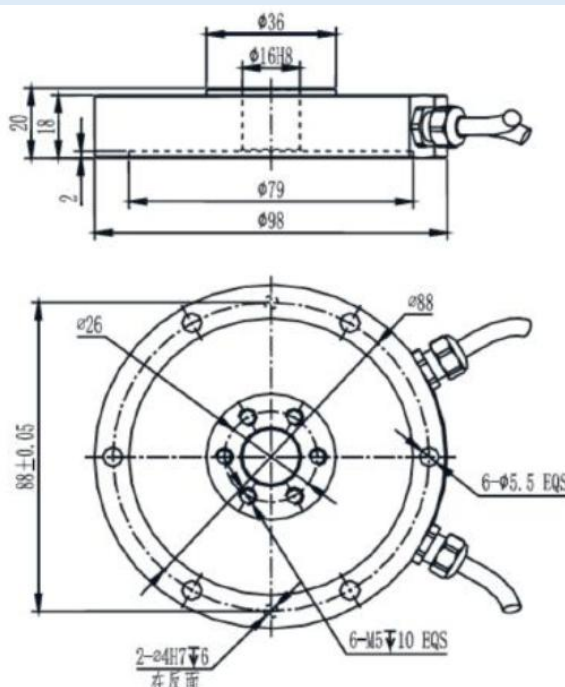
Optional features

0-5V output signal

DESCRIPTION

The ZM2DW force sensor F, M utilizes 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



SPECIFICATIONS

PARAMETER	VALUE	UNIT
Material	Alloy steel	
Capacity	F:20/30/50/100/200/500/1000/2000 M: 1/2/3/5/10/20/30/50	N/N.m
Sensitivity F-Axis	0.5-1.0	mV/V
Sensitivity M-Axis	0.5-1.0	mV/V
Zero balance	1	±% of rated output
Input resistance F-Axis	350±5	Ohms
Output resistance F-Axis	350±5	Ohms
Input resistance M-Axis	350±5	Ohms
Output resistance M-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/°C
Temperature effect on sensitivity	0.0015	±% of rated output/°C
Creep error (30 minutes)	0.03	±% of rated output
Crosstalk from F to M	1	±% of rated output
Safe overload	150	% of R.C
Ultimate overload	300	Vdc
Excitation, recommended	10	Vdc
Compensated temperature range	-10 to +40	°C
Operating temperature range	-20 to +60	°C

All specifications listed subject to change without notice.