UDW3-1000 SPECIFICATIONS

The UDW3 is designed for accurate underwater force measurement. The body of the load cell is manufactured from heat treated 17-4 PH stainless steel. The mounting surfaces are equipped with threaded holes, and the unit is sealed and filled with mineral oil. A pressure compensation bladder is used to equalize the internal and external pressures. This allows operation underwater with little effect on the force and moment outputs due to water pressure.

Units: Metric ▼ Capacity: 4448 N ▼

Dimensions(LxDia)	88.9 x 75.44 mm	**IP Rating**	IP68 *
Weight	2.05 Kg.	**Sensing elements**	Strain gage bridge
Channels	Fx, Fy, Fz, Mx, My, Mz	**Amplifier**	Required
Body Material	Stainless Steel	**Analog outputs**	6 Channels
Temperature range	-17.78 to 51.67°C	**Digital outputs**	None
Excitation	10V maximum	**Crosstalk**	< 2% on all channels
Fx, Fy, Fz hysteresis	± 0.2% full scale output	**Fx, Fy, Fz non-linearity**	± 0.2% full scale output

Channel	**Fx**	**Fy**	**Fz**	**Units**	**Mx**	**My**	**Mz**	**Units**
Capacity	2223	2223	4446	N	113	113	56	N-m
Sensitivity	0.54	0.54	0.135	µv/v-N	26.58	26.58	21.26	µv/v-N-m
Natural frequency	-	-	-	Hz	-	-	-	Hz
Stiffness (X 105)	210	210	2979	N/m	-	-	0.226	N-m/rad

Resolution — *To determine the resolution of your system, please use our Output Calculator.*

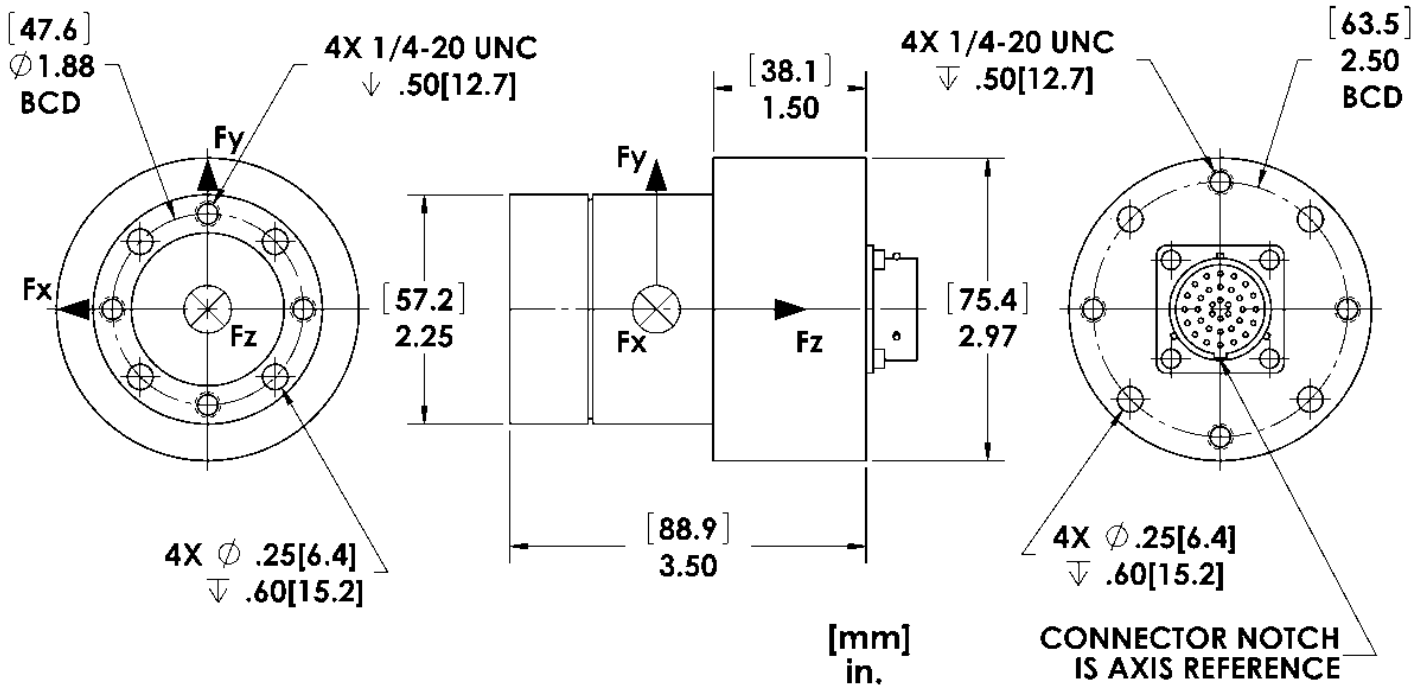
Notes: * The transducer is tested in potable tap water at a pressure of 100 psi (690 kPa) and a temperature of 70°F (21°C) for 8 hours. Any use exceeding these conditions will void the warranty.

Published specifications subject to change without notice.

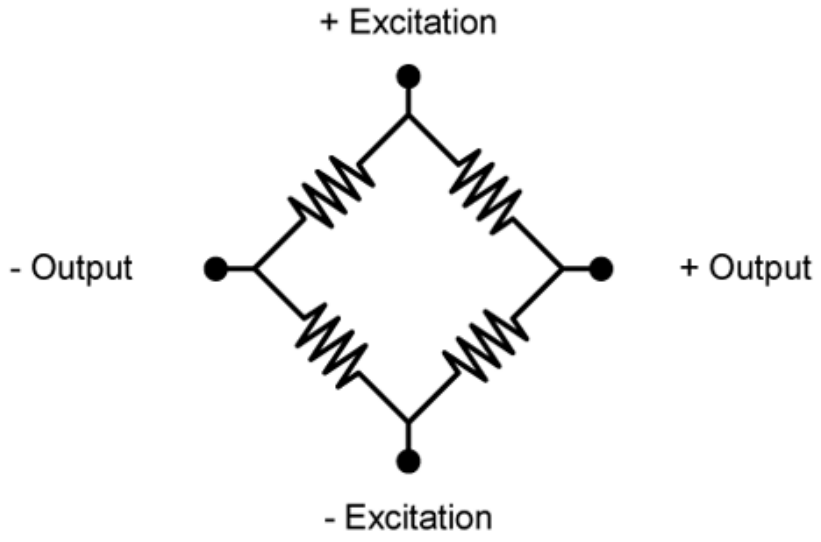
Last modified:2018-03-22

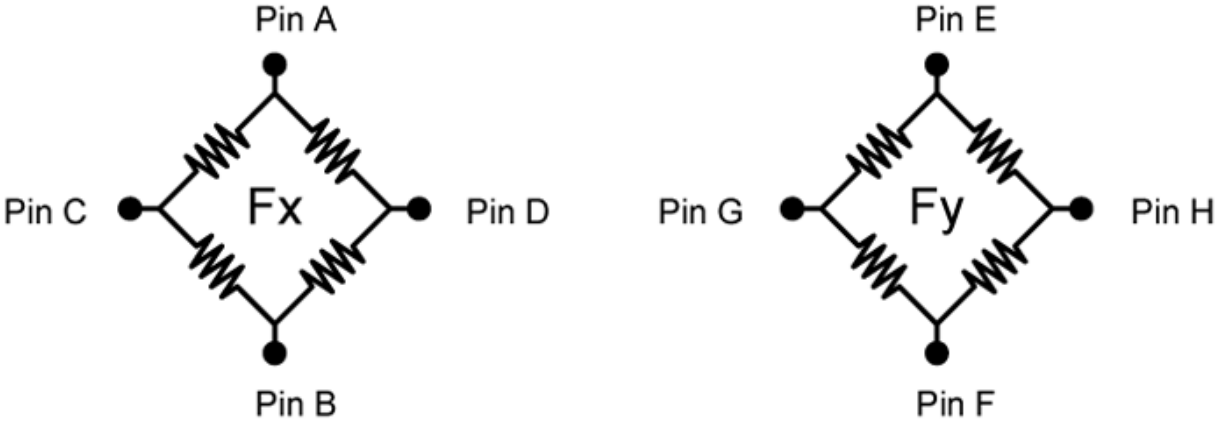
TECHNICAL DRAWINGS
Footprint Drawing (click on image to enlarge)
Electrical Drawing (click on image to enlarge)
TECHNICAL DRAWING

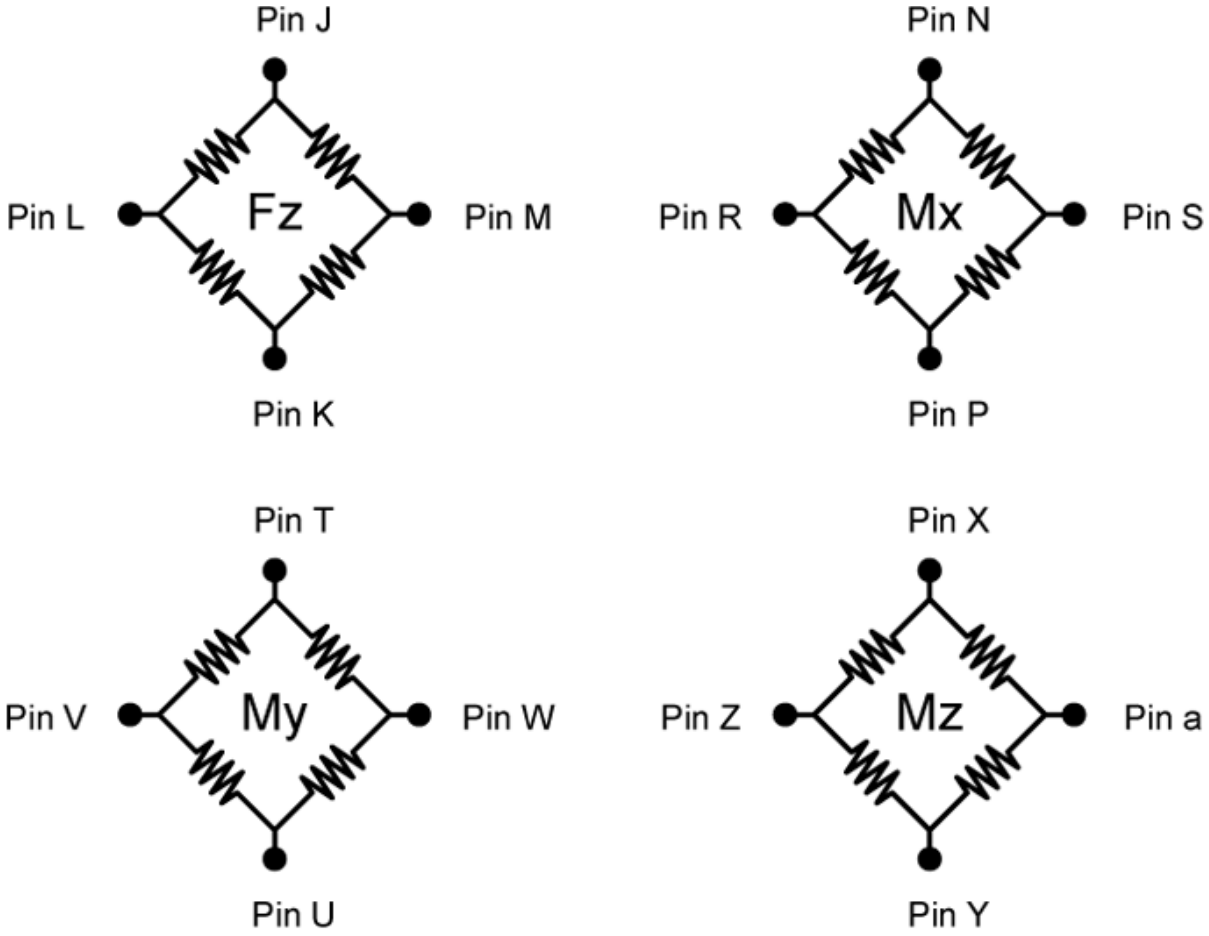
Footprint Drawing



Electrical Drawing







Bridge Fz = 700 ohms

Bridges Fx; Fy; Mx; My; Mz = 350 ohms

Connector Type:

Souriau 851-02E16-26P50-44

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