

"MRDT" / Ultra-small type

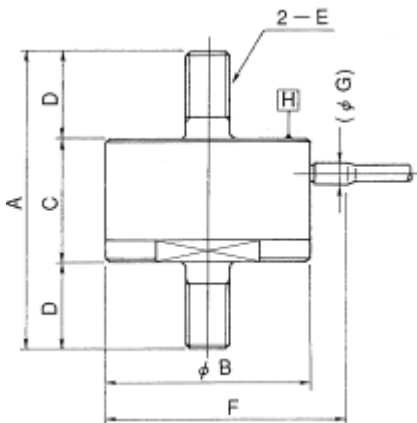


Features

- Ultra-small load cell for tension application.
- A wide capacity range (50N to 2kN).
- Low cost.
- Can be used for both tension and compression applications.
- Accuracy Class: 1%.
- Special versions with vibration-proof, waterproof or with welded features can be supplied optionally.

Related products : RTD...

Appearance Dimensions



*1 The surface "H" should be free from any mechanical contacts with other objects, in other words, the surface "H" should have a gap to the extent of 0.5 to 1 mm from another object if any.

Model and Capacity / Dimension / etc. (unit : mm)

Model	Capacity	A	B	C	D	E	F	G	Natural frequency	Weight
MRDT-50N	50N	24	15	10	7	M3*0.5	2.0	2.4	17kHz	11 g
MRDT-100N	100N	31	20	15	8	M4*0.7	25	3	21kHz	30g
MRDT-200N	200N	31	20	15	8	M4*0.7	25	3	35kHz	30g
MRDT-500N	500N	31	20	15	8	M4*0.7	25	3	21kHz	30g
MRDT-1KN	1kN	31	20	15	8	M4*0.7	25	3	25kHz	30g
MRDT-2KN	2kN	41	28	17	12	M6*1	33	3	41kHz	74g

- * The weight indicated in the specifications does not include that of the cable.

Specifications

Safe Overload	120%RC
Rated Output	1mV/V±20%
Nonlinearity	1%RO
Hysteresis	1%RO
Repeatability	0.5%RO
Excitation Voltage	4V (or less)
Safe Excitation Voltage	6V
Input Resistance	390Ω
Output Resistance	390Ω
Compensated Temp.Range	0 to 60°C
Safe Temp.Range	-10 to 60°C
Temp.Effect on Zero	0.2%RO/°C
Temp.Effect on Output	0.1%/°C
Cable	Φ2mm-4wire shielded cable, length : 3m (10N to 50N) Φ2.4mm-4wire shielded cable, length : 3m (100N to 2kN)

*RE:

Cable

An extremely thin side wound shielded cable with an excellent bendability is used in this Model of Load Cell. In order for this extremely thin cable to be free from any accidents of being snapped off in the course of operation, it is recommended that this thin cable is connected with the robot cable via relay terminals if the load cell is installed on fluctuating positions.

Although the standard length of the drawn out cable from the load cell is determined to be 3 M, we see no particular effects provided even that the load cells are used with the drawn out cable in the different lengths.