

"FR" / Pedal force sensor

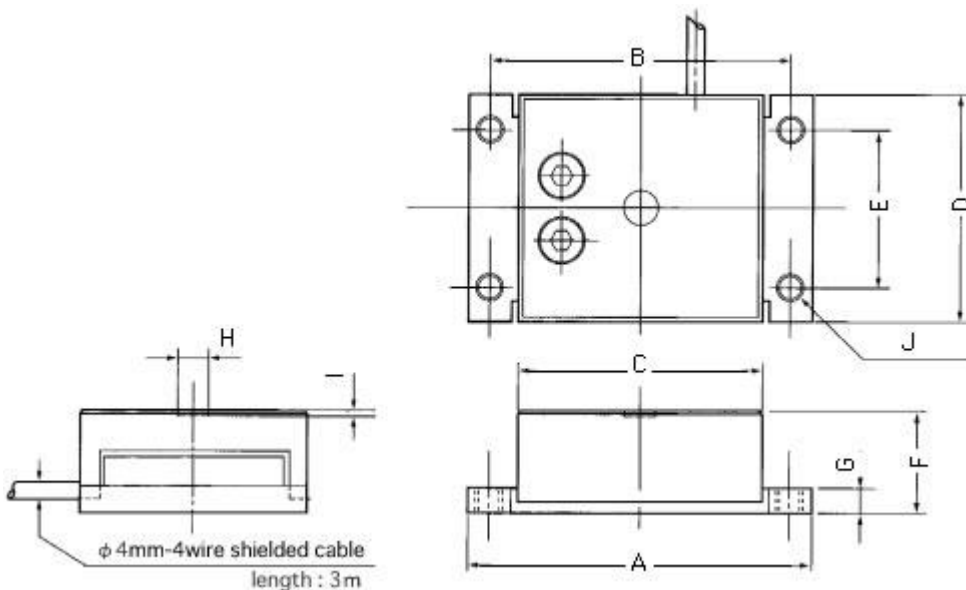


Features

- This is a pedal treading force sensor made of aluminium. Thin shape and light weight.
- Less variation in output to be necessarily brought about by the change in loading position.
- Excellent linearity (0.2%).

Related products : [Shift-knob force sensor](#) / [6-Component force sensor](#)

Appearance Dimensions



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

Model	Capacity	Objects for measurement	A	B	C	D	E	F	G	H	I	J	Weight
FRA-100N	100N	Accelerator pedal	88	80	70	45	30	13.5	2.5	---	---	4- $\Phi 4$	115g
FRC-500N	500N	Clutch pedal	74	64	50	50	33	20	6	$\Phi 8^{\text{H}8}$	1.5	4-M6	160g
FRB-1KN	1kN	Brake pedal	84	74	60	55	38	25	6	$\Phi 8^{\text{H}8}$	1.5	4-M6	550g
FRB-2KN	2kN	Brake pedal	94	84	70	60	42	30	7	$\Phi 8^{\text{H}8}$	1.5	4-M6	650g

- * The weight indicated in the tables of this data sheet does not include the weight of cables.

- * The standard sizes of "H" and "I" (dimensions for rubber pad inlaying) are $H=\Phi 8^{H8}$, $I=1.5\text{mm}$, but subject to change in accordance with the stipulations sent from users. These sizes do not apply to the acceleration pedals of Model "FRA".

■ Specifications

Safe Overload	150%RC
Rated Output	1mV/V \pm 20%(100N) 1.5mV/V \pm 20%(500N to 2kN)
Nonlinearity	0.2%RO
Hysteresis	0.2%RO
Repeatability	0.1%RO
Excitation Voltage	10V (or less)
Safe Excitation Voltage	15V (or less)
Input Resistance	400 Ω
Output Resistance	350 Ω
Compensated Temp.Range	0 to 40°C
Safe Temp.Range	-10 to 50°C
Temp.Effect on Zero	0.1%RO/°C
Temp.Effect on Output	0.05%/°C
Cable	Φ 4mm-4wire shielded cable, length : 3 m

- * Can meet the requirements for changing the length of cables and for mounting the connectors (NDIS Standard) on the cables.
- * Guaranteeing that the output variation due to the change of loading position to be within 1% or less.