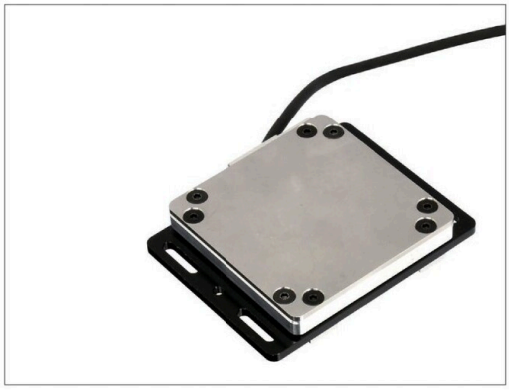
LPR-D-S1

NEW

Thin 2-component Pedal Force Transducer



Force measurement in two directions on pedals

- Rated capacity (Fy, Fz): ±500 N, 1 kN
- Thin (12 mm high)
- Can measure force in two directions (Fy, Fz)

Thin pedal component force transducers that allow measurement with a feel close to actual pedal operation.
They can be secured to measurement targets of various shapes using a bolt or Velcro tape.

Specifications

Performance	
Rated Capacity	See table below.
Nonlinearity	Fy: Within ±1% RO
	Fz: Within ±0.3% RO
Hysteresis	Fy: Within ±1% RO
	Fz: Within ±0.3% RO
Rated Output	See table below.
Interference	Within ±5% RO
Environmental Characteristics	
Safe Temperature	-10 to 70℃ (Non-freezing or Non-condensing)
Compensated Temperature	0 to 50℃ (Non-freezing or Non-condensing)
Temperature Effect on Zero	Fy: Within ±0.1% RO/℃
	Fz: Within ±0.05%/℃
Electrical Characteristics	
Safe Excitation	8 V AC or DC
Recommended Excitation	1 to 5 V AC or DC
Input Resistance	240 Ω ±3%
Output Resistance	240 Ω ±3%
Insulation Resistance	500 MΩ (50 VDC) or more
Cable	12-conductor (0.035 mm²), vinyl shielded cable,
	ϕ3.5 mm 1 m long terminated with
	connector plug HR10A-10P-12P
	(SHIELD WIRE IS NOT CONNECTED TO MAINFRAME)
Dedication Cable	4-conductor (0.05 mm²), vinyl shielded cable, ϕ2.5 mm
	3 m long terminated with HR10A-10J-12S to the sensor
	and PRC03-12A10-7M (×2) to measuring instruments.
	(SHIELD WIRE IS NOT CONNECTED TO MAINFRAME)
Mechanical Properties	
Safe Overloads	120%
Safe Moment	My : 20 N・m
	Mz : 40 N・m
Degree of Protection	IP20 (JIS C 0920/IEC 60529)
Material	Aluminum alloy and stainless steel
Exterior	Alumite treatment (mounting surface)
Weight	Approx. 160 g (Excluding cable)
Others	
*Fz component is calibrated plus direction only.	

*Specifications and design are subject to change without notice.
*Please contact us for information on product warranties.

■Models

Model	Rated Capacity (Fy, Fz)	Rated Output (Approx.)	
		Fy	Fz
LPR-D-05KNS1	±500 N	0.7 mV/V	1.5 mV/V
LPR-D-1KNS1	±1 kN	0.4 mV/V	0.9 mV/V

*We can also manufacture 3-component force transducers. Please contact us for details.
*No moments of My and Mz are measured.

■Standard Accessories

Attachment LPR-C-S15-J1
Countersunk screw 4 pcs
Hook and loop fastener 1 m

■Dimensions

