

Soil pressure at construction site

KDA-PA/KDB-PA Soil Pressure Gauge

Civil engineering design



The KDA-PA and KDB-PA are soil pressure gauges each 200 mm in outside diameter. They are widely used at construction sites. They are designed with a dual-diaphragm structure that can minimize the displacement of a sensing area and thereby can keep the stress distribution in soil undisturbed under pressure. The KDA-PA is used to measure the pressure in soil and to monitor the behavior of embankments. The KDB-PA is used to measure the pressure in earth retaining walls or the pressure on wall surfaces of structures.

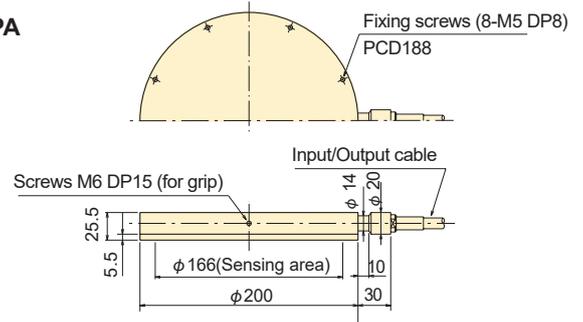
Protection ratings: IP68 equivalent

Minute displacement of pressure-sensitive area due to dual-diaphragm structure
Can measure dynamic earth pressure, too

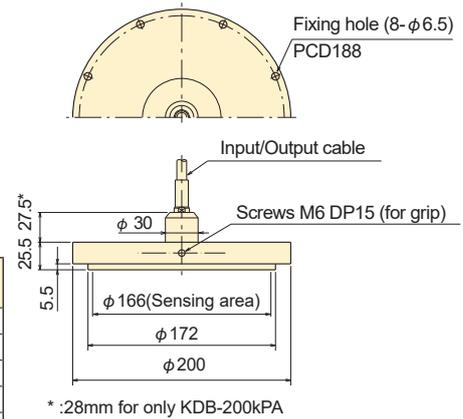
■ SPECIFICATIONS

TYPE	KDA-200KPA KDB-200KPA	KDA-500KPA KDB-500KPA	KDA-1MPA KDB-1MPA	KDA-2MPA KDB-2MPA
Capacity	200kPa	500kPa	1MPa	2MPa
Rated Output	1mV/V(2000×10 ⁻⁶ strain)			
Non-linearity	2%RO	1%RO		
Allowable temperature range	-20 ~ +60°C			
Input/Output resistance	350Ω			
Recommended exciting voltage	3V or less			
Allowable exciting voltage	10V			
Cable drawing direction	KDA-PA: from side of body		KDB-PA: from back of body	
Weight	6 kg			

KDA-PA



KDB-PA



Input/Output cable :
 φ9mm 0.5mm² 4-core shielded chloroprene cable 2m

KDC-PA/KDD-PA Soil Pressure Gauge

Civil engineering design



The KDC-PA and KDD-PA are anticorrosion stainless-steel soil pressure gauges each 100 mm in outside diameter. They are used to measure the pressure in soil in ocean or coastal civil engineering structures and to measure the dynamic pressure of waves. The difference between these two models is the way the cable is attached to the gauge body.

Protection ratings: IP68 equivalent

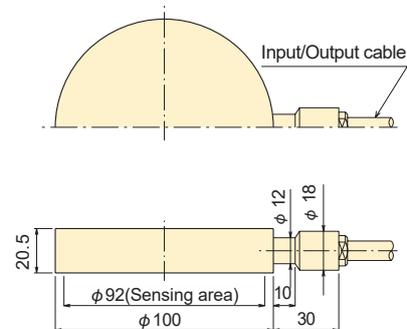
Made of all stainless steel with excellent corrosion resistance

Minute displacement of pressure-sensitive area due to dual-diaphragm structure
Can measure dynamic earth pressure, too

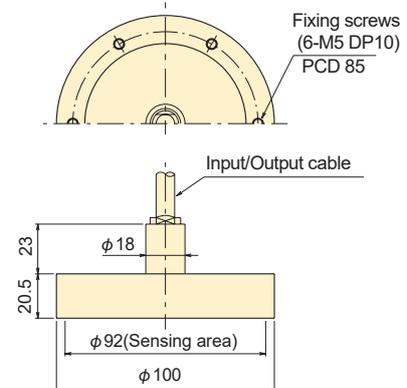
■ SPECIFICATIONS

TYPE	KDC-200KPA KDD-200KPA	KDC-500KPA KDD-500KPA	KDC-1MPA KDD-1MPA	KDC-2MPA KDD-2MPA
Capacity	200kPa	500kPa	1MPa	2MPa
Rated Output	1mV/V(2000×10 ⁻⁶ strain)			
Non-linearity	2%RO	1%RO		
Allowable temperature range	-20 ~ +60°C			
Input/Output resistance	350Ω			
Recommended exciting voltage	3V or less			
Allowable exciting voltage	10V			
Cable drawing direction	KDC-PA: from side of body		KDD-PA: from back of body	
Weight	1.2 kg			

KDC-PA



KDD-PA



Input/Output cable :
 φ9mm 0.5mm² 4-core shielded chloroprene cable 2m