

Strand tension measurement

KCH-NA Center-hole type Compression Load Cell

Civil engineering design



The KCH-NA is a center-hole type load cell used for the management of tensile force acting on a rod or strand in various anchor methods. The diameter of its center-hole is larger than that of our conventional type KCE-NA.

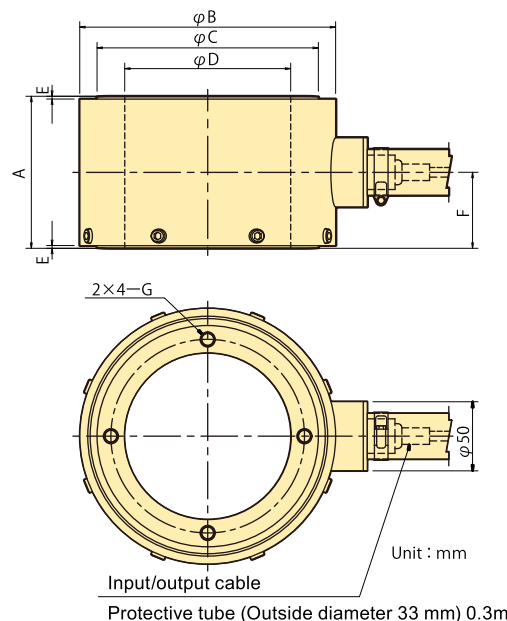
Protection ratings: IP68 equivalent

Large center-hole

Waterproof construction

(IP68 equivalent)

Small effect of eccentric load



DIMENSIONS

TYPE	A	φB	φC	φD	E	F	G
KCH-500KNA	80	140	125	95	2	40	M 8 DP10 PCD110
KCH-1MNA	110	185	160	120	2	55	M10DP12 PCD140
KCH-1.5MNA	135	210	185	145	4	67.5	M12DP15 PCD165
KCH-2MNA	Made-to-order manufacturing						

SPECIFICATIONS

Type	KCH-500KNA	KCH-1MNA	KCH-1.5MNA	KCH-2MNA	
Capacity	500kN	1MN	1.5MN	2MN	
Rated output	1.25mV/V (2500×10 ⁻⁶ strain) ±10%				
Non-linearity	0.5%RO				
Hysteresis	0.5%RO				
Natural frequency	16kHz	12kHz	11kHz	Made-to-order manufacturing	
Temperature effect on zero	0.1%RO/°C				
Temperature effect on span	0.05%/°C				
Compensated temperature range	-10~-+60°C				
Allowable temperature range	-20~-+70°C				
Overload	120%				
Ultimate overload rating	200%				
Input/output resistance	350Ω				
Recommended exciting voltage	10V or less				
Allowable exciting voltage	20V				
Zero balance	5%RO				

Input/Output cable : Φ9mm 0.5mm² 4-core shielded Chloroprene cable 5m

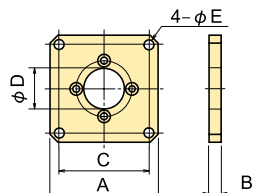
*Output polarity (note) : The output polarity of this load cell changes to positive polarity as the compression force increases.

In addition to the above, custom-made products will also be available. Please contact us for the details.

ACCESSORY

● FLANGE KCHF-11

This flange is a pressure plate used to secure a load cell to a structure.

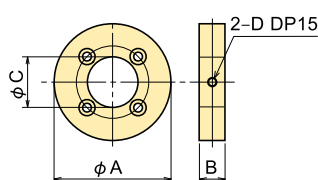


Dimensions

Type	Applicable Load Cell	A	B	C	φD	φE	Weight
KCEF-11-50	KCH-500KA	190	20	160	95	12.5	4.4kg
KCEF-11-100	KCH-1MNA	235	20	205	120	12.5	6.7kg
KCEF-11-150	KCH-1.5MNA	245	35	215	145	12.5	11.4kg
KCEF-11-200	KCH-2MNA	Made-to-order manufacturing Please contact us for the details.					

● FLANGE KCHF-12

This flange is a pressure plate used to consistently measure eccentric loads although with limitations.



Dimensions

Type	Applicable Load Cell	φA	B	φC	D	Weight
KCHF-12-50	KCH-500KA	160	30	95	M10	2.9
KCHF-12-100	KCH-1MNA	200	40	120	M10	6.0
KCHF-12-150	KCH-1.5MNA	230	47	145	M12	8.8
KCHF-12-200	KCH-2MNA	Made-to-order manufacturing Please contact us for the details.				