



HIGH STIFFNESS & HIGH RESPONSE LOAD CELL



"Virtually unbreakable!" - loadcell with an innovative concept!
A strain gauge sensor with phenomenal rigidity and responsiveness.



Robust

Amazing rigidity is achieved with a strain gauge!
As it rarely gets deformed when loaded, Super Cell can be used for variable applications such as measurement of grinding power of machine tools.

Easy replacement

As zero balance and rated output of the Super Cell series are adjusted before shipping out, re-calibration is not required when replacing with new ones.
Restoration of operations can be done quickly just by replacing the load cells under the same conditions.

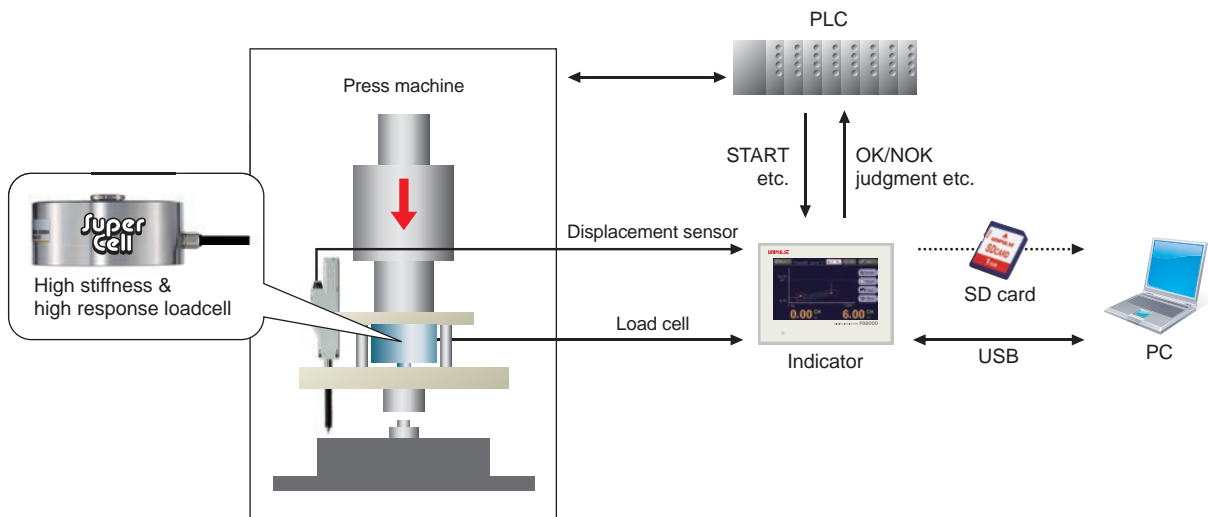
Safe overload of 500%

Overload up to 500% of the rated capacity does not affect the accuracy.
Stable measurement can be performed for a long term even in sever loading conditions (e.g. press fitting machines).

High responsiveness

The resonance frequency is also equivalent to piezoelectric sensors!
It can be used to monitor a high-speed phenomenon.

Example of use

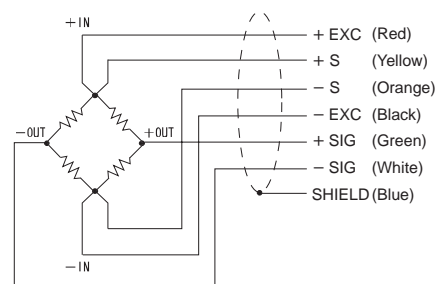


Specifications

Model	SCB-□N										N	
	□ : Rated capacity											
Rated capacity	100	200	500	1k	2k	5k	10k	20k	50k	100k		
Rated output	0.4±0.1% *1										mV/V	
Safe overload	500										%R.C.	
Zero balance	±0.2										%R.O.	
Non-linearity	0.2										%R.O.	
Hysteresis	0.2										%R.O.	
Repeatability	0.1										%R.O.	
Compensated temperature range	-10 to +60										°C	
Safe temperature range	-20 to +70										°C	
Temperature effect on zero	0.015										%R.O./°C	
Temperature effect on span	0.01										%R.O./°C	
Input resistance	Approx. 700					Approx. 1000						
Output resistance	Approx. 700					Approx. 1000						
Recommended excitation voltage	5					10					V	
Maximum excitation voltage	7.5					15					V	
Insulation resistance (DC50V)	1000 or more										M	
Deflection at rated capacity	0.015	0.015	0.015	0.015	0.020	0.025	0.025	0.035	0.065	0.100	mm	
Natural frequency	40			26				15			kHz	
Loadcell material	Stainless steel											
Weight	0.02			0.2		0.4		2.0		2.3		kg

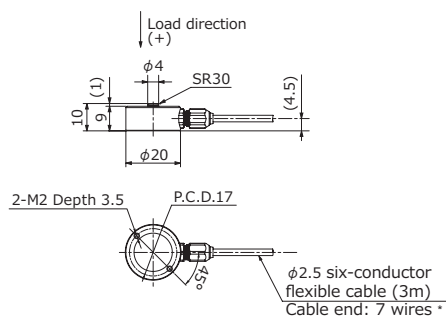
*1 There are several restrictions on the flatness of fitting surface, the thickness of mounting plate, and tightening torque.

Wiring diagram

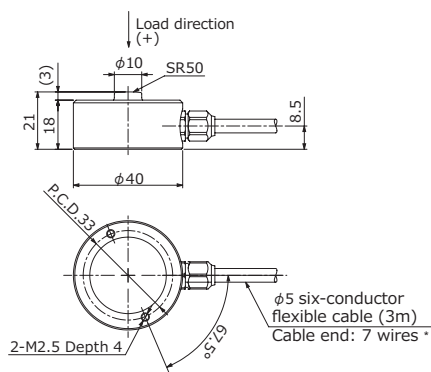


External dimension

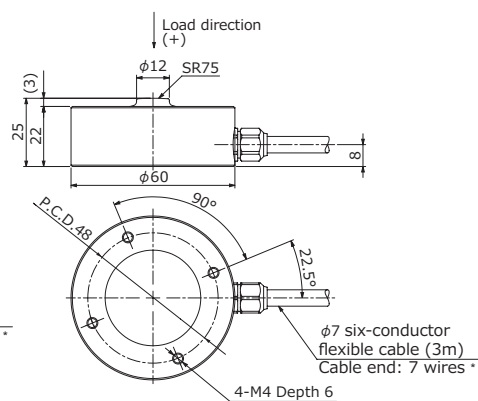
SCB-100N, SCB-200N, SCB-500N



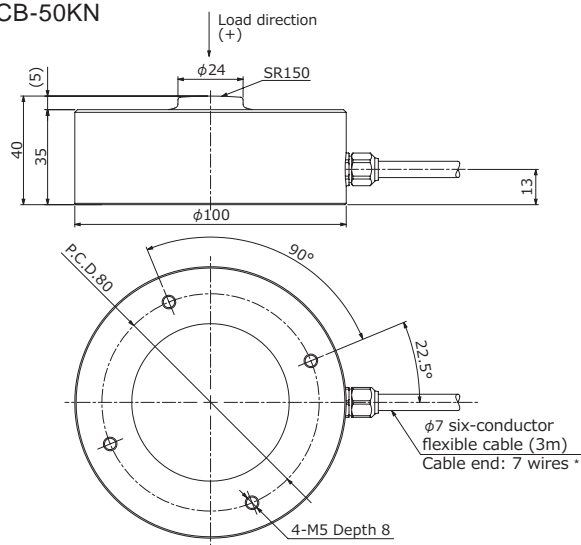
SCB-1KN, SCB-2KN, SCB-5KN



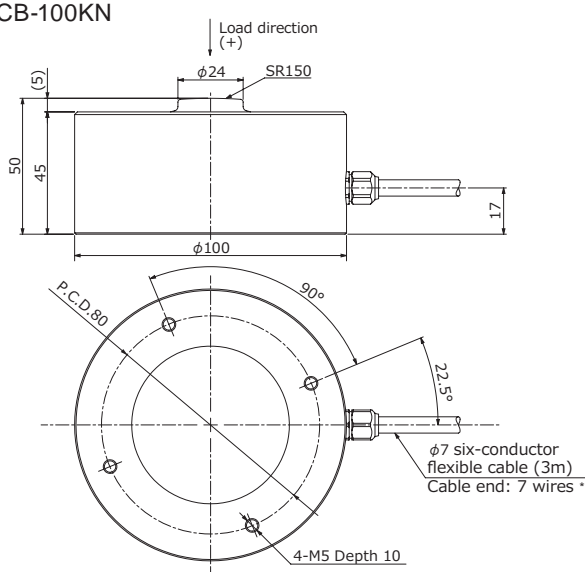
SCB-10KN, SCB-20KN



SCB-50KN



SCB-100KN



* Connector can be attached to the cable according to your requests. Refer to 48 pages for details.

Unit: mm