











# Load cells

				
<b>MODEL-CK</b>	<b>MODEL-VCV</b>	<b>MODEL-US</b>	<b>MODEL-QF</b>	<b>MODEL-CH</b>
Small size load cell for compression test	High performance load cell for compression test	Load cell for tension/compression	Non-Rotary Type Torque Meter	Load cell for compression test
<b>Capacity: 100N to 20kN</b>	<b>Capacity: 500N to 100kN</b>	<b>Capacity: 10kN to 500kN</b>	<b>Capacity: 0.2 N · m to 1kN · m</b>	<b>Capacity: 5kN to 500kN</b>
<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 1mV/V (10 &amp; 20kN: 1.5mV/V)</li> <li>Non-linearity: 1%R.O. (10 &amp; 20kN: 2%R.O.)</li> <li>Hysteresis: 1%R.O. (10 &amp; 20kN: 2%R.O.)</li> <li>Repeatability: 1%R.O.</li> <li>Recommend applied voltage: 5V</li> <li>Allowable applied voltage: 7V</li> <li>Temp. Compensation range: -5 to +65 °C (2 to 20kN: -5 to +50 °C)</li> <li>Allowable compensation range: -10 to +70 °C (2 to 20kN: -10 to +60 °C)</li> <li>Allowable overload: 120%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 2mV/V±0.25% (50 &amp; 100kN: 2mV/V±0.5%)</li> <li>Non-linearity: 0.15%R.O. (50 &amp; 100kN: 0.1%R.O.)</li> <li>Hysteresis: 1%R.O.</li> <li>Repeatability: 0.05%R.O.</li> <li>Recommend applied voltage: 8V</li> <li>Allowable applied voltage: 12V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -15 to +80 °C (50 to 100kN: -15 to +75 °C)</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 2mV/V±0.25% (10kN: 1.5mV/V)</li> <li>Non-linearity: 0.1%R.O.</li> <li>Hysteresis: 0.1%R.O.</li> <li>Repeatability: 0.05%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 1mV/V±1%</li> <li>Non-linearity: 0.3%R.O.</li> <li>Hysteresis: 0.3%R.O.</li> <li>Repeatability: 0.2%R.O.</li> <li>Recommend applied voltage: 10V (6V at 1N · m or less)</li> <li>Allowable applied voltage: 15V (10V at 1N · m or less)</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 1mV/V±1%</li> <li>Non-linearity: 0.5%R.O.</li> <li>Hysteresis: 0.5%R.O.</li> <li>Repeatability: 0.1%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>
				
<b>MODEL-CM</b>	<b>MODEL-DCD</b>	<b>MODEL-DUD</b>	<b>MODEL-QR</b>	<b>MODEL-CB</b>
Very small size load cell for compression test	High performance load cell for compression test	Small high performance load cell for tension/compression test	Rotary type torque meter	Load beam
<b>Capacity: 10N to 2kN</b>	<b>Capacity: 500N to 200kN</b>	<b>Capacity: 500N to 20kN</b>	<b>Capacity: 10N · m to 2kN · m</b>	<b>Capacity: 50N to 10kN</b>
<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 1mV/V</li> <li>Non-linearity: 1%R.O.</li> <li>Hysteresis: 1%R.O.</li> <li>Repeatability: 0.3%R.O.</li> <li>Recommend applied voltage: 6V</li> <li>Allowable applied voltage: 10V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 2mV/V±0.5%</li> <li>Non-linearity: 0.15%R.O.</li> <li>Hysteresis: 0.1%R.O.</li> <li>Repeatability: 0.1%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 2mV/V±1%</li> <li>Non-linearity: 0.15%R.O.</li> <li>Hysteresis: 0.1%R.O.</li> <li>Repeatability: 0.1%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 1.5mV/V±1% (10 to 50N · m: 1mV/V)</li> <li>Non-linearity: 0.3%R.O.</li> <li>Hysteresis: 0.2%R.O.</li> <li>Repeatability: 0.3%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +75 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Specifications</li> <li>Rated output: 2mV/V±1%</li> <li>Non-linearity: 0.05%R.O.</li> <li>Hysteresis: 0.05%R.O.</li> <li>Repeatability: 0.05%R.O.</li> <li>Recommend applied voltage: 10V</li> <li>Allowable applied voltage: 15V</li> <li>Temp. Compensation range: -10 to +70 °C</li> <li>Allowable compensation range: -20 to +80 °C</li> <li>Allowable overload: 150%R.C.</li> </ul>

## MODEL-3000 Series



### Standard Specifications

<b>Rated capacity</b>	20 N to 20 kN
<b>Rated output</b>	2mV/V±1%(20N:1mV/V,10kN & 20kN:1.8mV/V)
<b>Non-linearity</b>	0.1% R.O.
<b>Hysteresis</b>	0.1% R.O.
<b>Repeatability</b>	0.1% R.O.
<b>Recommended applied voltage</b>	10 V
<b>Allowable applied voltage</b>	15 V
<b>I/O resistance</b>	350 Ω ±2%
<b>Temp.compensation range</b>	-10 to +70°C
<b>Allowable compensation range</b>	-20 to +80°C
<b>Temp.influence upon zero point</b>	±0.005% R.O. / °C
<b>Temp.influence upon output</b>	±0.005% / °C
<b>Allowable overload</b>	150% R.C.

## Tensile & Compression Type Load Cells

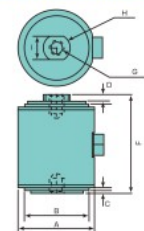
While these load cells with female threads on both sides are designed for both tensile and compression tests, they feature high precision, high output, and less output errors in pushing and pulling, resulting in high reliability. They are widely used for performance tests and industrial measurement of materials and car parts in as wide ranges as 50 N to 20 kN.

### Dimensions

Model	Rated capacity	ΦA	ΦB	C	D	F	G	H	I
3005	50 N	60	50	2	5	80	M10 P1.5	20	17
3020	200 N	60	50	2	5	80	M10 P1.5	20	17
3050	500 N	60	50	2	5	80	M10 P1.5	20	17
3200	2KN	60	50	2	5	80	M10 P1.5	20	17
3500	5KN	68	58	2	10	90	M20 P1.5	36	30
3800	10KN	60	50	3	15	120	M20 P1.5	36	30
3900	20KN	60	50	3	15	120	M20 P1.5	36	30

※3002 (20 N) type is also available. The rated output is 1 mV/V.

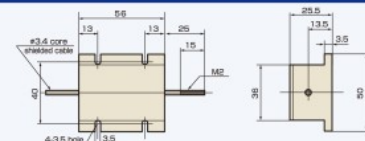
### 3000 Series



UP-05K 5N  
UP-2K 20N



### UP Series



<b>Rated capacity</b>	5N, 20N	<b>Rated output</b>	1 mV/V
<b>Allowable overload</b>	150%R.C.	<b>Non-linearity</b>	0.2%R.O.
<b>Hysteresis</b>	0.2%R.O.	<b>Repetition Performance</b>	0.1 %R.O.
<b>Temp.compensation range</b>	-10~+70 °C	<b>Allowable compensation range</b>	-20~+80 °C