













Comparison chart

ALL LOAD CELL RANGES AT A GLANCE.







MODELS	8402	8413	8414	8415	8416	8417
Figure						
Page	6 - 7	8 - 9		12 - 13	12 - 13	26 - 27
Description	Miniature compression load cell	Subminiature compression load cells with overload protection		Miniature compression load cell	Ultra-miniature compression load cell	Miniature tension and compression load cell
Non-linearity	0.5	0.25	0.25	0.5/0.75	0.5	0.5
Measuring Range smallest: largest:	0 ... 1 kN 0 ... 100 kN	0 ... 5 N 0 ... 5 kN	0 ... 5 N 0 ... 100 N	0 ... 200 N 0 ... 5 kN	0 ... 20 N 0 ... 5 kN	0 ... 10 N 0 ... 5 kN
Special Features	Large measuring ranges combined with small dimensions, short measurement deflection, high number of load cycles	Ultra-small external dimensions, extremely low overall height with temperature compensation, high resonance frequency (up to 167 kHz)	Overload protection included in ultra-small external dimensions	Economical flat disc sensor, external diameter 20 mm	Extra-small load cell, external diameter 10.6 mm and height 4.5 mm	Just 10 mm in diameter and 6.5 mm in height, easy to fit using external thread
Main Application Fields	Measurement of press-insertion forces on longitudinal and lateral press-fit seatings, measurement of force in punching machines, chucks and tools	Where space is tight for measuring contact and friction forces and testing pushbuttons & switches	Automatic production lines, for testing joints and smooth running	Contact forces, positioning forces, pressing forces in machines	Instrument-making, microsystem technology, production lines, handling equipment	Micro-mechanics, actuator systems, switches, bowden cables

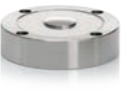
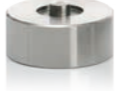



MODELS	8510	8511	8512	8523	8524	8526
Figure						
Page	28 - 29	28 - 29	28 - 29	22 - 23	18 - 19	10 - 11
Description	Miniature bending beam load cell	Bending beam load cell	S-beam tension and compression load cell	Tension and compression load cell	Precision tension and compression load cell	Compression load cell
Non-linearity	0.25	0.1	0.1	0.15	0.1	0.25
Measuring Range smallest: largest:	0 ... 1 N 0 ... 20 N	0 ... 5 N 0 ... 2 kN	0 ... 20 N 0 ... 880 N	0 ... 20 N 0 ... 5000 N	0 ... 500 N 0 ... 200 kN	0 ... 100 N 0 ... 200 kN
Special Features	Mechanical overload protection, very small size	Insensitive to sources of parasitic errors and lateral forces	High number of load cycles > 10 ⁶ , connecting cable suitable for drag chains	Economical multipurpose aluminium sensor, lightweight, compact	Robust load cell for industrial and laboratory applications, available with overload protection	Compact design combined with high measuring ranges, protection class IP64, internal thread for easy fixing
Main Application Fields	Test equipment (switches, pushbuttons), contact forces, packaging and adhesive technology	Weighing equipment, filling scales, water level gages, filling equipment	Automated tool testing, test and analysis systems in the pharma industry, measuring loads in cable systems	Forces in rods, bars and frameworks, counting and test scales	Monitoring jointing processes, torque measurement via force x lever length	Contact forces, pedal forces, filling systems, presses

- Options:**
- Extended temperature range from -55 °C ... +200 °C
 - Hermetically sealed version (IP68) / submersible cable
 - Standardization of nominal sensitivity

- Built-in amplifier
- Integrated cable, including range of lengths for drag chain use
- Vacuum equalization hole

- Load application parts
- Pull plates

8427	8431	8432	8435	8438	8451/8552
					
26 - 27	24 - 25		20 - 21	12 - 13	16 - 17
Tension and compression load cell	Miniature tension and compression load cells		Tension and compression load cell	Miniature ring load cell	Presses load cells
0.7	0.15	0.15	0.25	1.0	0.5
0 ... 100 N 0 ... 10 kN	0 ... 10 N 0 ... 100 kN	0 ... 5 N 0 ... 2 kN	0 ... 200 N 0 ... 5 kN	0 ... 5 N 0 ... 200 kN	0 ... 100 N 0 ... 100 kN
Each end fitted with a flange designed for holding with a spanner, also available with external thread, choice of fixing options	Versatile precision sensor, insensitive within limits to lateral forces, bending and torsion moments, IP68, temperature from -55 °C ... +200 °C	Like model 8431, but with overload protection for both tensile and compressive loads	Stainless steel tension and compression load cell for OEM applications	Central through-hole, low overall height	Easy to fit directly, factor of 10 mechanical overload protection, attachment for mounting displacement sensor actuator
All areas of mechanical engineering, automated production, test equipment for safety areas on rail vehicles	Push and pull rods, balancing scales, electromagnets, baffles	Production and test lines, but also laboratory equipment	Press-insertions, forming operations, proportioning, connector tests	Measurement of screw-connection force, contact forces of bolts, threaded rods, cutting forces	Manual presses and automatic pressing stations

8527	8532	8560	85041/85043 85073/85075	855D-M231
				
16 - 17	14 - 15	30 - 31	22 - 23 / 14 - 15	30 - 31
High-precision compression load cell	Low-cost compression load cell	Multi-axis tension and compression load cells	Precision tension and compression load cells	Multi-axis load cell
0.05	1	0.5	0.1	0.1
0 ... 500 N 0 ... 100 kN	0 ... 500 N 0 ... 20 kN	0 ... 250 N 0 ... 50 kN	0 ... 20 N 0 ... 2 MN	X: 0 ... 2000 lbs Y: 0 ... 1000 lbs
High-precision sensor, protection class IP65, easy to fit	Particularly economical load cell with IN-LINE amplifier, output 0 ... 10 VDC	Compensated temperature range -40 ... +120 °C, can be customized, extremely high factor for the nominal force ratio Fz/Fx, CANopen	Precision sensors, hermetically sealed, very low sensitivity to lateral forces, also suitable for highly dynamic applications	Up to 100 million load cycles, low cross-talk < 0.5 % F.S., standardized nominal sensitivity
As a reference in precision measurements in both laboratory and industry	Weights, press-insertions, feed forces	Medical technology, automated handling and robotics, sorting systems, multi-axis use in R&D	Presses, containers (e.g. silos), materials testing, calibration	Testing and balancing car and truck tyres

- Services:**
- In-line calibration with external instrumentation
 - Cable/connector assemblies
 - DAkKS/factory calibration certificate

- Custom full scale calibrations
- User training and commissioning training
- Online retrieval of calibration and test certificates

- CAD data
- How-to-do videos
- Application advice

You can find further information on our load cells at www.burster.com. Our website contains detailed technical **data sheets**, **installation instructions** and **CAD data** available for download.

You can also use the website comparison tool to compare directly the sensors you are specifically interested in, and contact us **online with your questions**.

Visit us at our website or call us! We are happy to help.