

Internal Submersible Load Cells (GDSISLC)



Type 9 Load cell



Type 10 Load cell

Overview: GDS has 3 types of submersible load cells which have been designed for measuring compressive loads from 0.5 to 300kN and can be fitted into new and existing triaxial chambers.

The load cells have the unique feature in that pressure does not effect the load reading, therefore corrections for ram upthrust and friction of the ram do not need to be made.

Technical Specification:

	Load Cell: Type 9	Load Cell: Type 10	Load Cell: Type 12
Axial Force Accuracy:	0.1% of Full Range Output	0.1% of Full Range Output	0.1% of Full Range Output
Submersibility:	Up to 7MPa	Up to 64MPa	Up to 100MPa
Diameter:	79mm	79mm	105mm
Height:	54mm	58.5mm	114mm
Sizes Available:	0.5, 1, 2, 4, 5, 8, 10, 12, 16, 20, 25, 32, 40, 50, 64kN	2, 10, 16, 32, 40, 50, 64, 100kN	100, 128, 250, 300kN
Rated Output:	2.0 nominal mV/V	2.0 nominal mV/V	2.0 nominal mV/V
Non-linearity:	< ±0.05% of Full Scale	< ±0.05% of Full Scale	< ±0.05% of Full Scale
Hysteresis:	< ±0.1% of Full Scale	< ±0.1% of Full Scale	< ±0.1% of Full Scale
Temperature Range:	Operating: TBC Compensated: +10 to +50	Operating: TBC Compensated: +10 to +50	Operating: TBC Compensated: +10 to +50
Temperature Effect:	On Output: <0.01 On Zero: <0.02	On Output: <0.01 On Zero: <0.02	On Output: <0.01 On Zero: <0.02
Excitation:	Recommended: 10 Volts AC or DC Maximum: 15 Volts AC or DC	Recommended: 10 Volts AC or DC Maximum: 15 Volts AC or DC	Recommended: 10 Volts AC or DC Maximum: 15 Volts AC or DC
Input Impedance:	750 nominal Ohms	750 nominal Ohms	1100 nominal Ohms
Output Impedance:	700 nominal Ohms	700 nominal Ohms	1050 nominal Ohms
Insulation Impedance:	>2000 (bridge to ground) & >1000 (Shield to ground) Megaohms	>2000 (bridge to ground) & >1000 (Shield to ground) Megaohms	>2000 (bridge to ground) & >1000 (Shield to ground) Megaohms
Deflection Rated Capacity:	<0.05 mm	<0.05 mm	<0.05 mm
Construction:	Stainless Steel	Stainless Steel	Stainless Steel

Why Buy GDS?

GDS have supplied equipment to over 86% of the world's top 50 Universities:

GDS have supplied equipment to over 86% of the world's top 50 Universities who specialise in Civil & Structural Engineering, according to the "QS World University Ranking 2020" report.

GDS also work with many commercial laboratories including BGC Canada, Fugro, GEO, Geolabs, Geoteko, Golder Associates, Inpijn Blokpoel, Klohn Crippen, MEG Consulting, Multiconsult, Statens Vegvesen, NGI, Ramboll, Russell Geotechnical Innovations Ltd, SA Geolabs, SGS, Wiertsema and Partners to name a few.

**TOP
50**

Would you recommend GDS equipment to your colleague, friend or associate?

100% of our customers answered "YES"

Results from our post-delivery survey asked customers for feedback on their delivery, installation (if applicable), supporting documentation, apparatus and overall satisfaction with GDS. The survey ran for two years.



Made in the UK:

All GDS products are designed, manufactured and assembled in the UK at our offices in Hook. All products are quality assured before they are dispatched.

GDS are an ISO9001:2015 accredited company. The scope of this certificate applies to the approved quality administration systems relating to the "Manufacture of Laboratory and Field Testing Equipment".

**40 YEARS OF
BRITISH
INNOVATION**



Extended Warranties:

All GDS apparatus are covered by a 12 month manufacturers warranty. In addition to the standard warranty, GDS offer comprehensive extended warranties for 12, 24 and 36 months, for peace of mind against any repairs in the future. The extended warranties can be purchased at any time during the first 12 months of ownership.



GDS Training & Installation:

All installations & training are carried out by qualified engineers. A GDS engineer is assigned to each order throughout the sales process. They will quality assure the apparatus prior to shipping, if installation has been purchased, install the apparatus on the customers site & provide the training.



Technical Support:

GDS understand the need for ongoing after sales support, so much so that they have their own dedicated customer support centre. Alongside their support centre GDS use a variety of additional support methods including remote PC support, product helpsheets, video tutorials, email and telephone support.

