

# HYDRAULIC LOAD CELL

Model HYDLO

## APPLICATIONS

The HYDLO hydraulic load cell is designed for measurement of loads in tieback anchors and rockbolts, or compressive loads in structures. Typical applications include:

- Anchored retaining walls and strut loads
- Tie-down anchors for buoyant structures
- Rock bolts and soil nails monitoring in mines and slope stabilization
- Load monitoring in structures

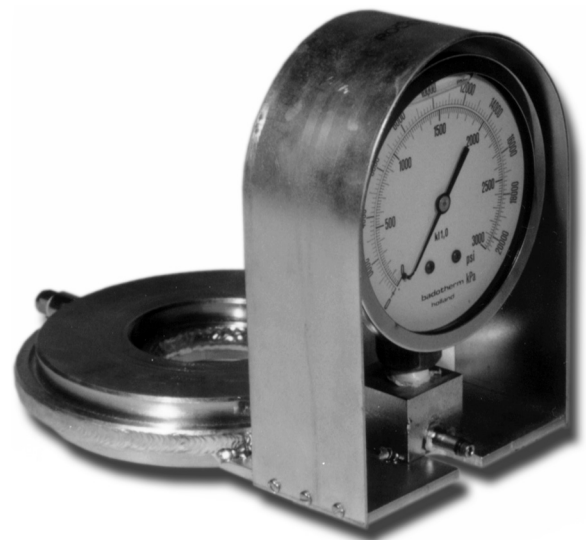
## DESCRIPTION

The HYDLO consists of a sealed cell composed of two plates welded together around the periphery and filled with de-aired oil. The cell is directly connected to a pressure gauge (scale in kPa). The load applied to the cell induces an oil pressure variation, which is sensed by the pressure gauge. The load value in kN can be determined using the table on the calibration sheet. The compact size of the HYDLO makes installation easy, and allows for quick and simple readings.

Two configurations of HYDLO are available. To monitor a tensile load, a hollow center cell enables the passage of an anchor through the cell. To monitor a compressive load, a solid center cell is used.

With both of these configurations, remote pressure reading is available by connecting the cell with flexible tubing to a remote vibrating wire or electrical 4–20 mA pressure transducer. This optional feature suits situations where access to the cell is difficult.

The HYDLO can accommodate small inclinations in loading. Larger misalignments should be compensated with the use of spherical seats.



## FEATURES

- Rugged construction
- Compact size
- High accuracy
- Easy installation and readings
- Negligible drift – suitable for long-term measurements
- No maintenance required
- Remote reading available
- Eccentric loading possible

## SPECIFICATIONS

Accuracy <sup>1</sup>	±1% F.S.						
Thermal drift	0.1% F.S. / °C						
Operating temperature	-20 to +60°C						
Overload	1.2 × F.S.						
Capacity	250 kN	500 kN	750 kN	1000 kN	1500 kN	2000 kN	5000 kN
<b>DIMENSIONS</b>							
A	35 mm	50 mm	75 mm	105 mm	105 mm	135 mm	160 mm
B	123 mm	144 mm	180 mm	219 mm	244 mm	265 mm	380 mm
C	144 mm	162 mm	202 mm	236 mm	261 mm	288 mm	408 mm
Cell thickness	28 mm	28 mm	28 mm	28 mm	30 mm	30 mm	50 mm
Distribution plate thickness	30 mm	40 mm	40 mm	45 mm	45 mm	65 mm	85 mm
Protective housing	70 × 115 × 162 mm high						

Note: Specifications may change when HYDLO is fitted with optional pressure transducer.

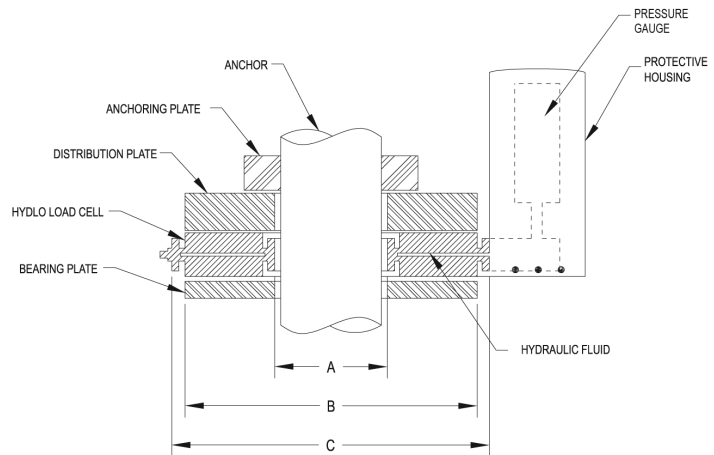
<sup>1</sup> Valid between 20-100% of full scale range.

## OPTIONS

- LCD display
- Maximum pressure indicator
- Remote reading with vibrating wire or electrical 4–20 mA
- Specific capacity and dimensions

## ACCESSORIES

- Distribution and bearing plates
- Spherical seats for extreme misalignment compensation
- Readout instruments



HYDLO typical application

## ORDERING INFORMATION

Please specify:

- Capacity
- Options and accessories