WHY USE A TORQUE MEASURING SYSTEM?

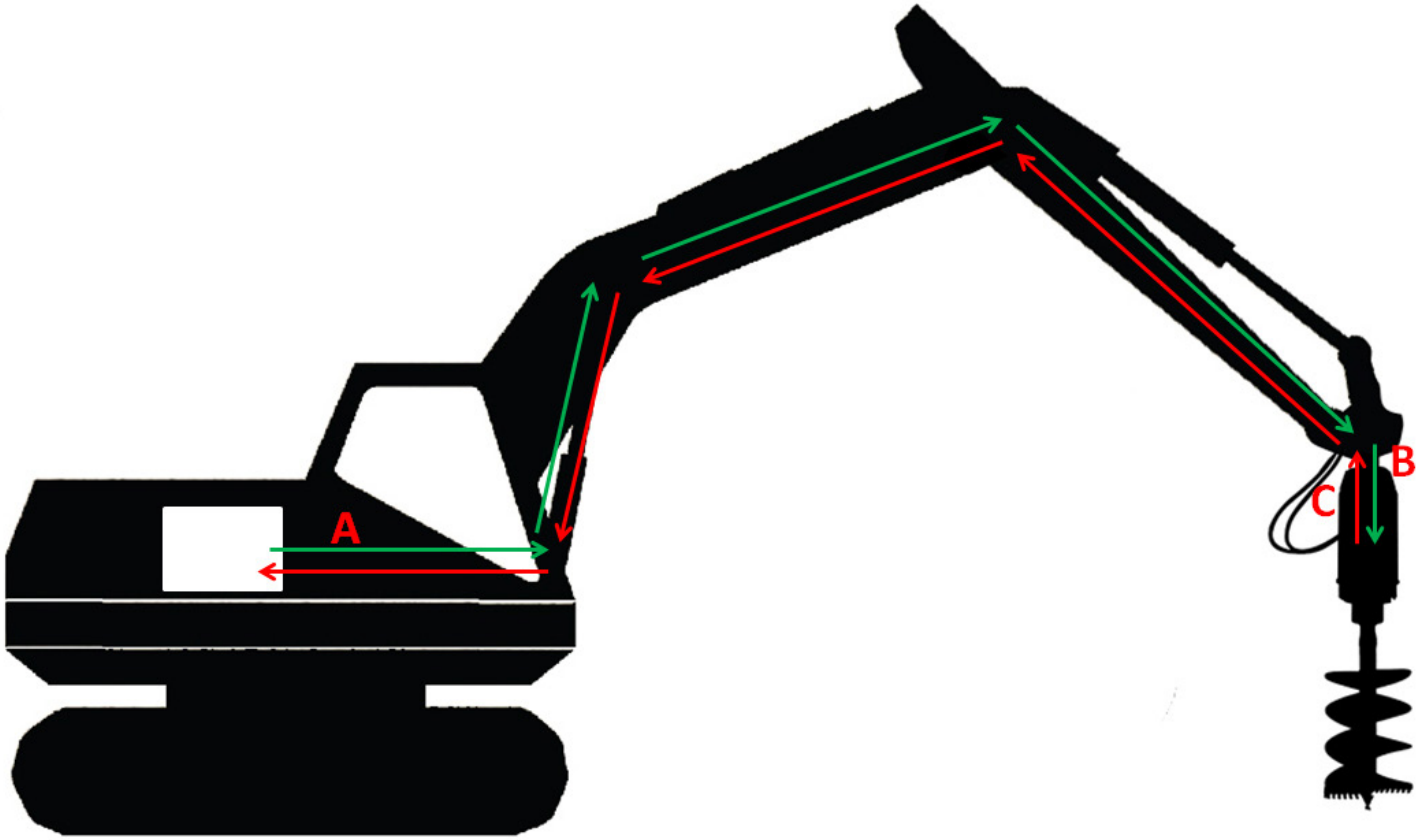
When screw anchoring a torque reading is required to ensure the pile/pier has been screwed in at the correct specification. Project engineers will generallly demand that a specific torque amount is reached depending on what the piles / piers are being used for.

Traditionally, torque is calculated by a single sensor located at the hydraulic pump (A) in the excavator. Unfortunately this is not accurate as pressure is lost as oil travels up the boom, through the drive unit, and back again long the boom to the excavator. Pressure readings can be out by as much as 15-20% compared to actual working pressure.

Digga's Pressure Differential Gauge comprises of two sensors. The first sensor located on the supply line at the entry to the drive unit (B). The second sensor is located on the return line where oil leaves the drive unit (C).

A micro processor calculates the 'actual usable' pressure using the two sensors, giving a reading which is up to 12-15% more accurate than other traditional methods.

The reading is displayed in BAR or PSI - depending on the option chosen at the time of purchase. This pressure read-out is compared to a supplied torque chart to obtain the equivalent torque reading in Nm.



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PRESSURE DIFFERENTIAL GAUGE

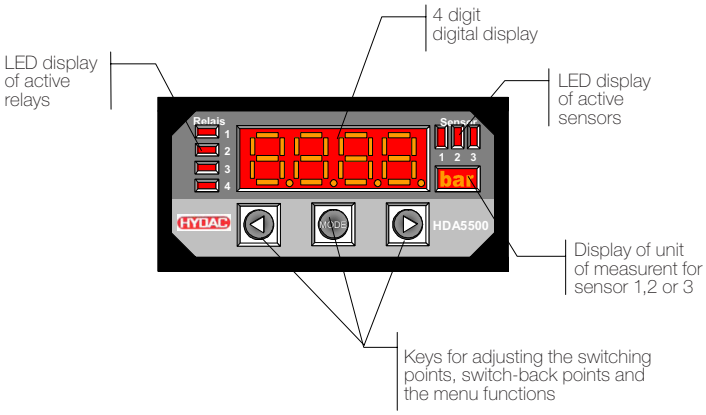
The digital display units in the HDA 5500 series are micro processor controlled and are designed for control panel mounting.

The Digga Electronic Display Gauge Kit displays the differential pressure or usable hydraulic pressure. This pressure displayed on the digital screen allows the user to cross reference the displayed pressure (units displayed in bar) with the torque chart supplied to determine the theoretical torque generated by the planetary drive unit.

Note: This kit can only operate on a supply voltage of 12 -32 V DC.

Features:

- Digital display of analogue signals
- Clear 4-digit 7-segment LED display
- Up to 3 analogue inputs (4.. 20mA or 0 .. 5 V)
- Accuracy ≤ ± 0.5%
- Differential measurement possible
- Analogue output (4.. 20mA or 0 .. 10 V)
- Up to 4 relay switching outputs
- RS232 interface
- Voltage supply - 12 .. 32V DC
- Option for PT100 sensor input or frequency input

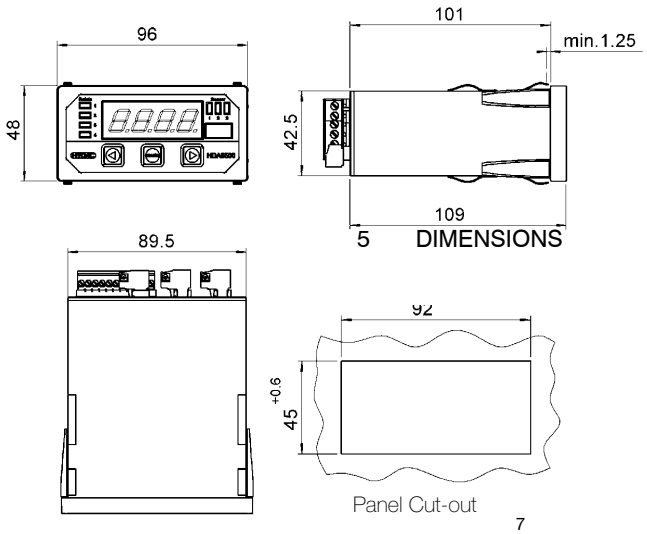


Ideal Use:

Accurately measures the true hydraulic pressure that is being applied through the hydraulic motor and gearbox of your drive unit.

Machine suitability:

Excavators, skid steer loaders, and tele-handlers.



DIMENSIONS	
Control panel housing	96 x 48 x 109 mm
Control panel cut-out	92 (+0.8) x 45 (+0.6) mm
Front panel thickness	1.25 .. 15 mm
Maximum installation depth	121 mm