

## TRANSDUCER SPECIFICATIONS

**Range:** 0–100 kPa

**Signal:**

0 kPa = 4 mA

100 kPa = 20 mA

**Temperature shift:**

Temperature compensated in the range 0–50°C—typical shift 0.5% full scale.

**Output:**

Transducer has a 4-20 mA output signal. Data transfer up to 1000m

**Resolution:** 0.1 kPa

**Accuracy:** ±1.0% span

**Power Requirements:**

**Power Supply:**

24 V DC, stabilised

**Cable:**

A one meter cable is standard.

**Transducer Thread:**

¼ inch NPT suitable for Tensiometers such as Soilmoisture Equipment Corp.

# Tensiometer Transducer

## GT3-15 0–100 kPa with 4-20 mA output

### Measuring Principle

The soil water tension is transmitted via the ceramic cup into the tensiometer. The vacuum inside the tensiometer is measured by a pressure transducer, which gives a continuous analogue output signal.

### Resolution and Accuracy

A resolution of 0.1 kPa (1 cm H<sub>2</sub>O) can be attained for the GT3 Tensiometer Transducer. The accuracy actually obtained is related to the calibration and resolution of the analogue to digital converter.

In field applications the values obtained should consider the shaft/cup length of the tensiometer: 1 cm = 0.1 kPa.

### Transducer GT3-15 4-20 mA connection

○	V+ Red
○	S Blue
○	G Shield

**Red:** +24 V power supply

**Blue:** Signal output 4-20 mAmp  
Pressure change from 0 to -100 kPa

**Shield:** Battery ground



The GT3-420 has an industry-standard 4 to 20 mA current loop output that can be used to interface it to a wide variety of standard devices including programmable logic controllers (PLCs) and data loggers.

### Ordering Information

GT3-420 Transducer with ¼ inch NPT thread, 1 m cable with 4-20 mA current loop output.

### Notes:

- Customers requiring cable lengths greater than 1 m are requested to source cable locally.
- Voltage range is dependant on load resistance; For example, For a load of between 130-200 ohm the minimum voltage would be 16 V.



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