# Tension-Compression Low Range Force Tranducer FU-AC Series

The FU series force transducer is an LVDT type, featuring a practically unlimited life time, making it suitable for fast automatic weighing machines, or other dynamic force measurements..

Internal spring construction includes damping properties, thus limiting overshoot and shortening the response time.

This Load-Cell contains an AC LVDT and therefore requires a signal conditioner to operate it, such as digital or analog EL-35 signal conditioners and USB-10 or USB-10-4 digital controllers.
All are manufactured by Singer Instruments & Control.


## Specifications:

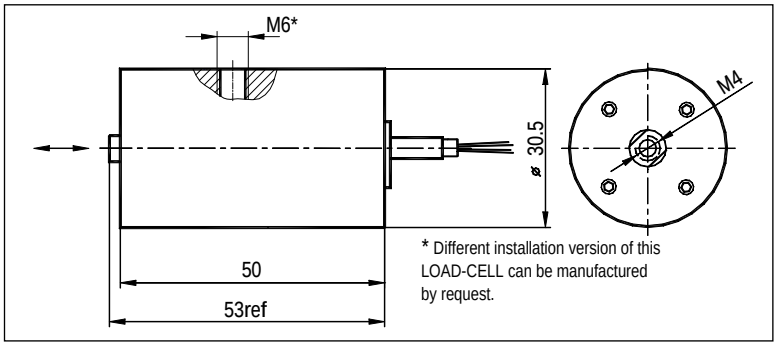
**Measuring range.** . . . . . 10 gr. (FU-10AC); 100gr. (FU-100AC); 400gr (FU-400AC); 1000gr (FU-1000AC);
**Measuring frequency** . . . DC to 60 Hz
**Linearity error.** . . . . . 0.1% F.S. to 0.25% F.S. typ, depending of range
**Hysteresis error** 0.02% F. S. to 0.05% F.S. typ
**Input voltage** . . . . . 3V rms (nominal)
**Input Frequency** . . . . . 6kHz (nominal)
**Output** . . . . . 150 to 300 mV rms F. S.
**Deflection** . . . . . 0.1 mm typ.
**Overload capability** . . . . . 200% to 1000%, depending on range
**Side load capability** . . . . . 100% typ.
**T.C. of sensitivity** . . . . . 0.01% / ºC typ.
**T.C. of zero** . . . . . 0.01% to 0.05% FS / ºC typ.
**Operating temperature range** . . . . . -20ºC to + 70°C
**Resistance:**
**Prim.** . . . . . 190 Ω
**Sec.** . . . . . 190 Ω
**Impedance:**
**Prim.** . . . . . 250 Ω
**Sec.** . . . . . 350 Ω
**Shock Survival** . . . . . 500g for 11 msec
**Vibration Survival** . . . . . 20 g up to 2 kHz
**Lead wires** . . . . . Shielded 6 Wire Cable, 500 mm long

**Housing material** . . . . Anodized Aluminum alloy or AISI 300 series Stainless Steel
**Weight** . . . . . 100 grams for Aluminum housing 220 grams for Stainless Steel housing

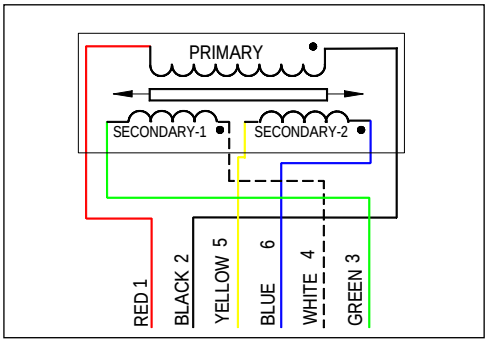
## How to order

Ordering example:
Model number: FU – 10AC. (for measuring range 10 gr.)

## Dimensions (mm):




## Wiring




Rev. G



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