



## ACCESSORIES FOR CONNECTION FOR LOADCELL ELECTRICAL CONNECTIONS

Electrical connection of **S-E-G** load cells is according to the circuit diagram for the respective device. The following connection accessories can be used with S.E.G. scale systems.

### TYPE G CONNECTION BOX

The type G connection box is used for connecting load cells to a single cable which is connected, in turn, to the scale system's control console. Up to 6 load cells can be interconnected. The load cells are connected direct to control console or via an extension cable as shown below.

The tachometer in belt scales is also connected to the joint cable. The connection box then contains a switch for tachometer signal on/off. The switch is used to simplify measuring of belt length at start-up of the belt scale.

A twisted pair cable with 3x2 conductors (4x2 conductors for belt scales) is connected to the control console. All connections in the box are to screw-type terminal strips and with shields to a common ground bar. The ground bar is only to be grounded when the connection box is installed on an **isolated** surface.

The type **G** connection box is available in versions for 2, 4 or 6 load cells. The enclosure is in stainless steel (AISI 304) and comply in respects of protection to IP65.

### The ordering code for a type G connection box acc. to below:

Type:

- G-2-B** For connection of up to 2 load cells cables and 1 tachometer cable. With switch for belt length measurement.
- G-4-B** For connection of up to 4 load cells cables and 1 tachometer cable. With switch for belt length measurement.
- G-4** For connection of up to 4 load cell cables.
- G-6** For connection of up to 6 load cell cables.

### TYPE A-1 TERMINAL BOX

The type **A-1** terminal box is used as an adapter between the load cell's fixed cable and the twisted-pair cable connected to control console or box type G. The type A terminal box is made from corrosion-resistant alloy and uses polyurethane gaskets. All connections in the box are to screw-type terminal strips

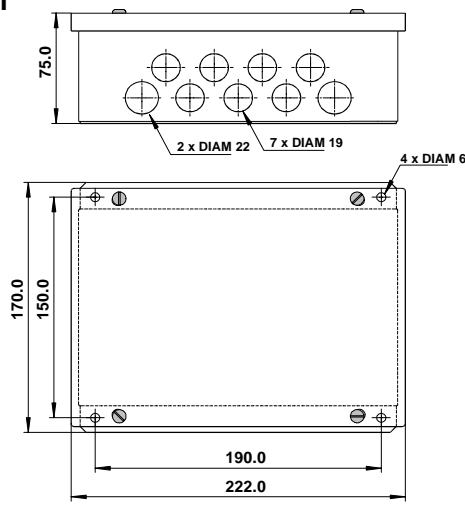
The box can be supplied with an extension cable in a protective sleeving. The cable has 3x2 twisted-pair conductors.

The box and attached cable is coded:

- A-1** Terminal box only.
- A-1-14** Terminal box **A-1** with 4m cable in protective sleeving with nipple.

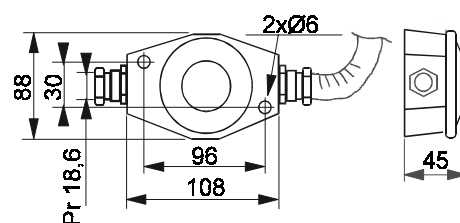
### DIMENSIONS AND WEIGHT

#### Connection box type G



Weight: 1,5 kg

#### Terminal box type A



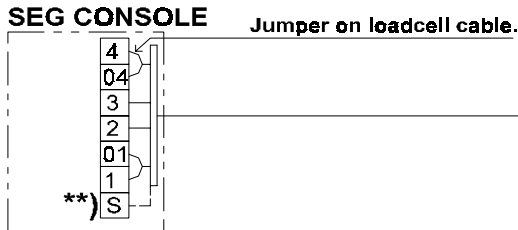
Weight: 1 kg

All lead wires entering the connection box is connected to screw terminals.  
 The grounding of the cable shields is made to the common isolated ground bar.  
 The ground bar may be connected to the chassis only when the connection box is installed on an **isolated surface**.

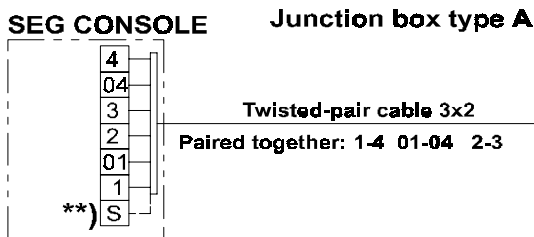
**DRAWINGS**

**WIRE MARKINGS ON LOADCELL CABLE.**

INPUT: +Yellow [1] -Blue [4] OUTPUT: +Red [2] -Green [3]

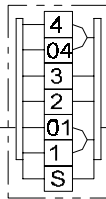


**Fig. A.** Scale system with 1 load cell with load cell located next to the control console. The fixed load cell cable is connected directly to the console. Jumpers are connected at the terminals 1 to 01 and 4 to 04.



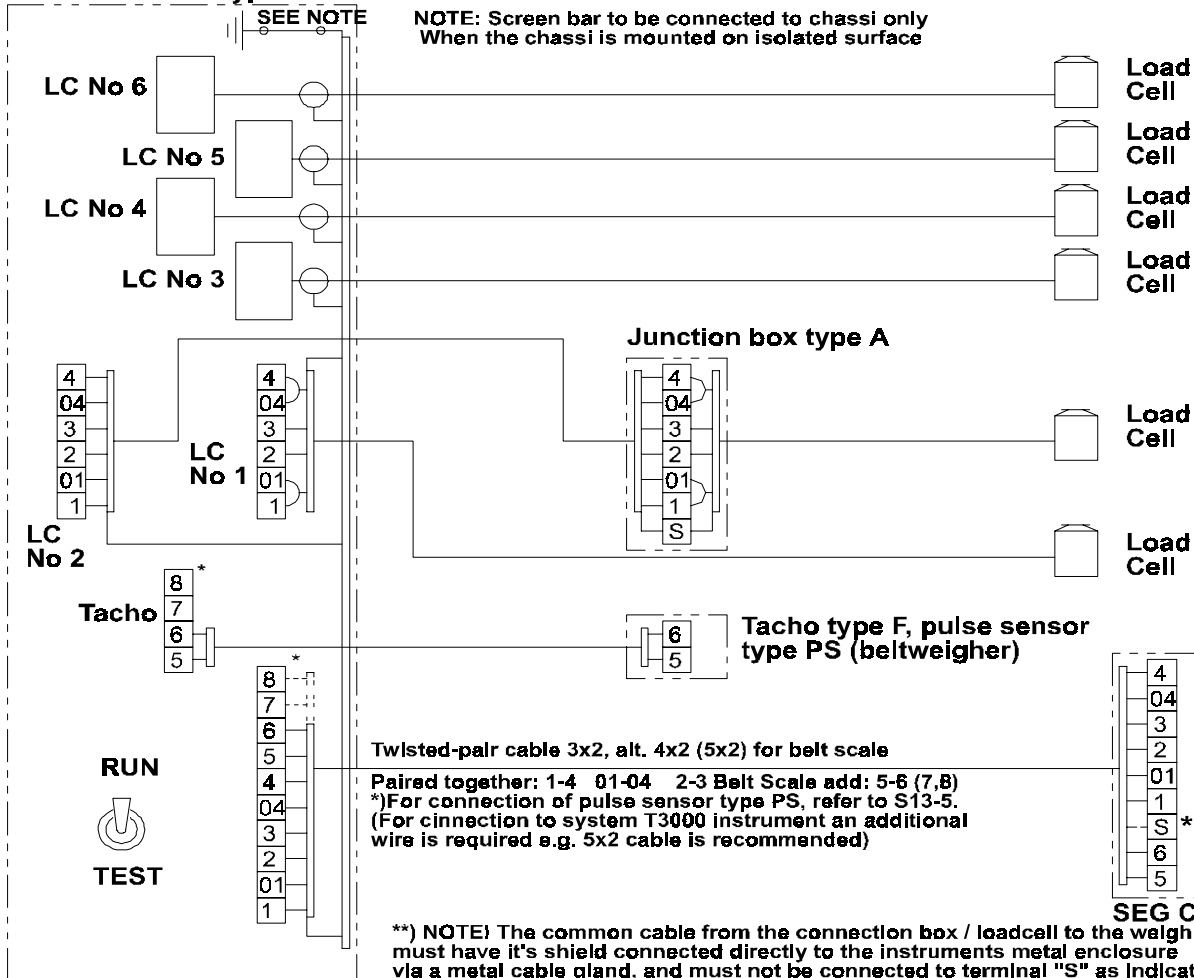
**Fig. B.** Scale system with 1 load cell with the load cell at a distance from the console. The fixed load cell cable is connected to a typical junction box, which is connected to the console using a twisted pair extension cable with the pairing as shown.

Twisted-pair cable 3x2  
 Paired together: 1-4 01-04 2-3



**Fig. C.** Scale system with 2 - 6 load cells. Multiple load cells are connected to the console with a SEG type G connection box.

**Connection box type G**



**\*\*)** NOTE! The common cable from the connection box / loadcell to the weigh instrument must have its shield connected directly to the instrument's metal enclosure via a metal cable gland, and must not be connected to terminal "S" as indicated above other than for EEX connected systems (connection via zenerbarriers).