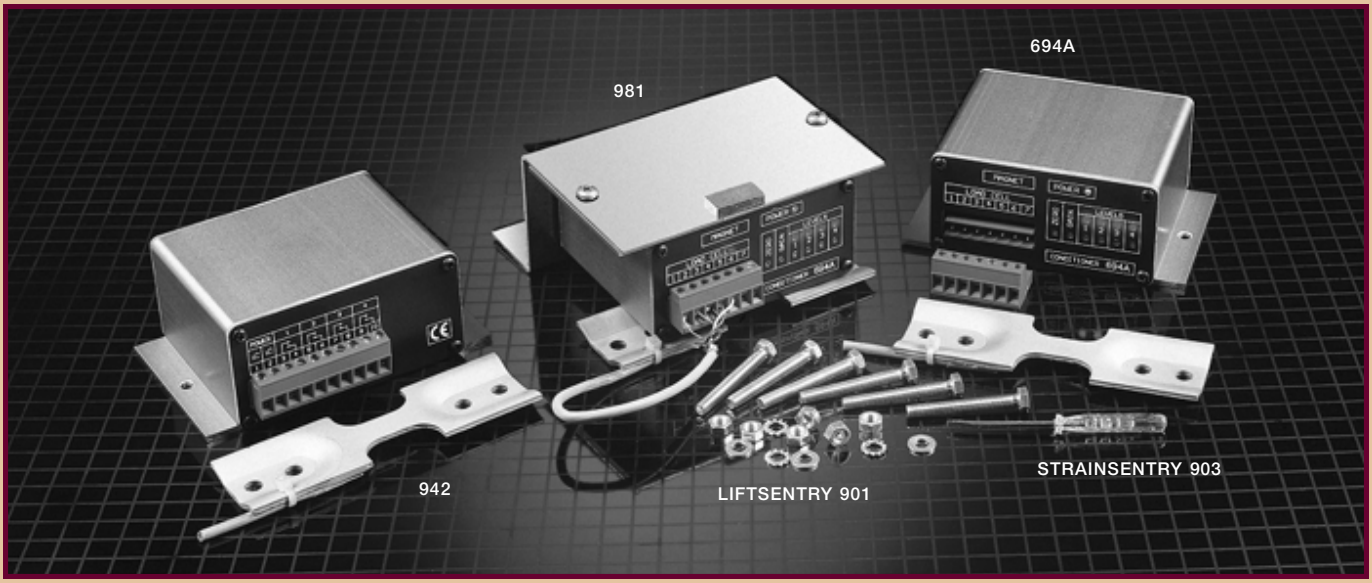
FORCE LINK SYSTEMS

FOR: FLEXION - FORCE - TORSION - SERIES 900



SYSTEM LIFTSENTRY® 901: FOR LIFTS

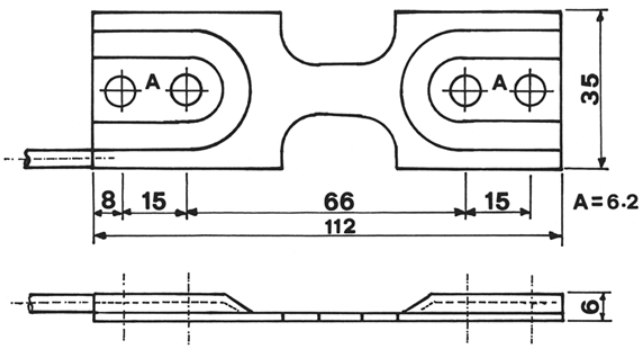
The force link system **LIFTSENTRY® 901** allows the monitoring of the load into the cabin of a lift and gives at the output 2 or 4 overload levels.
It is mainly addressed to the Manufacturers of new lifts and to the Technicians involved with installation, maintenance and in retrofit of existing lifts.

The **LIFTSENTRY® 901** is supplied in a box including: the flexion link 942 complete with cable; the signal conditioner 694 A; the base of protection and installation 981, a set of screws and a screwdriver for the electrical regulations.

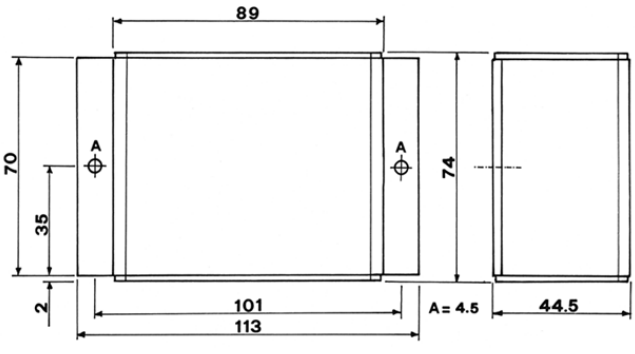
SYSTEM STRAINSENTRY® 903: GENERAL PURPOSE

The force link system **STRAINSENTRY® 903** includes: a link of the Series 900 and the signal conditioner 694 A, supplied as separated units or already connected (under request).

- The ***link Series 900*** includes: the link 942: for flexion; the link 943: for tension and compression; the link 944: for torsion.
- The ***links Series 900***, when used separately from the structure, become: beam load cells or reaction torque-sensors, which full scale is depending on the point of application of the load (>10 Kg. FS)
- The ***signal conditioner Mod. 694 A***, with signal and with level outputs, can be used, in its standard version, either as a signal conditioner or as a level discriminator.
- ***Applications*** of the system 903: on uprights of presses, on tie rods of die-casting machines, on power hammers, on shearing machines, on metal trestles of bridge, on cranes, on frameworks of tanks, on industrial mixers (Mod. 944: torsion) and they are often advised in substitution of load cells more expensive and of strain gauges (due to the fact that they cannot be substituted, either calibrated, or bonded by long life cements).



LINK SERIES 900



CONDITIONER 694A

Units of the system:

LINKS SERIES 900

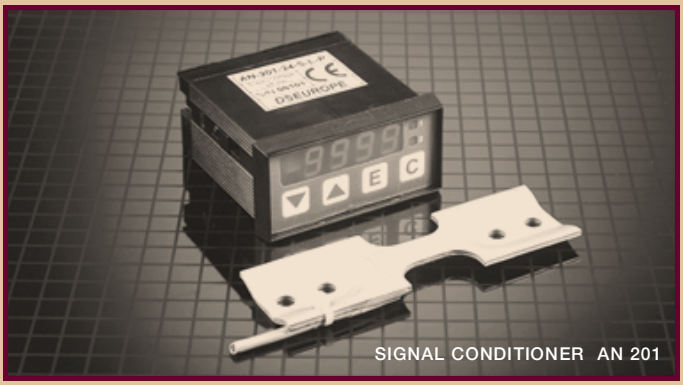
FEATURES

The **links** are fixed to the metal structure undergone the strains to be tested: flexion; tension and compression; torsion.
These strains, usually too low to be tested, are mechanically amplified by the link and measured.
The **links Series 900** allow a good repeatability, an easy installation, an high sturdiness and a low cost.

TECHNICAL SPECIFICATIONS

- Application modes: Mod. 942: flexion; Mod. 943: tension and compression; Mod. 944: torsion.
- Measuring range: ±1000 με, typical. • Overload: 5 times FS (FS = full scale).
- Sensitivity: 1 mV/V , typical. • Amplification factor: about 10 times, compared to a single gauge bonded on the specimen under test.
- Excitation: 10 Vdc/ac; 28 V max. • Total error: < ±2 % FS. • Repeatability: < ±0,2 % FS.
- Body material: steel. • Operating temperature range: -30 ÷ + 85°C; R h < 95%.
- Manufacturing features and procedure: under **patent MI 2000 A 001281.**


STRAINSENTRY 903


SIGNAL CONDITIONER AN 201

SIGNAL CONDITIONER MOD. 694 A

FEATURES

It is a general purpose signal amplifier with analog output, complete of 2 (standard) level discriminators, suggested for the connection to links (Series 900), to load cells, to pressure transducers and to other transducers not-amplified and amplified.

The block diagram includes: a general power supply; an high stability amplifier; 2 (standard) or 4 (optional) level discriminators with output relays. Amplifier with filters and trigger delay for the relays.

CONSTRUCTIVE FEATURES

Low absorption switching power supply for alternative or direct current without polarity direction.
- System calibration circuit by an internal reed and an external proximity magnet (supplied) for a field control of the system without any electrical operation of the User.
- Components: SMD. • Circuits against EMC disturbances CE mark approved.
- Circuits against overvoltages. • Front multiturns regulations and light indications (LED) of the levels reached. • Mating connector-terminal boards: for a quick installation.
- Enclosure: in aluminum extruded and anodized.

TECHNICAL SPECIFICATIONS

- Supply voltage: DC: from 12 to 50 Vdc (without polarity direction) and AC: from 8 to 35 Vrms.
- Transducer excitation: 10 Vdc. or 0 to 10 V for amplified transducer. • Inputs: 5 to 100 mV differential, for not-amplified transducer; • Analog output: 0 to 10 V.
- Regulations: of zero: ±200 % FS; of gain: 1 to 1500 times. (FS = full scale)
- *Data for the analog output*: bandwidth: 0 to 5 KHz. • Temperature sensitivity: of the zero: < ±0,05 % FS/°C, of the gain: < ±0,004 %FS/°C. • Operating temperature range: -30 to +70°C. • Rh < 95%.

Specifications and prices may change without notice.

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