

ROPE TENSION CONTROL - ROPE LIFTSENTRY (OT)



DESCRIPTION

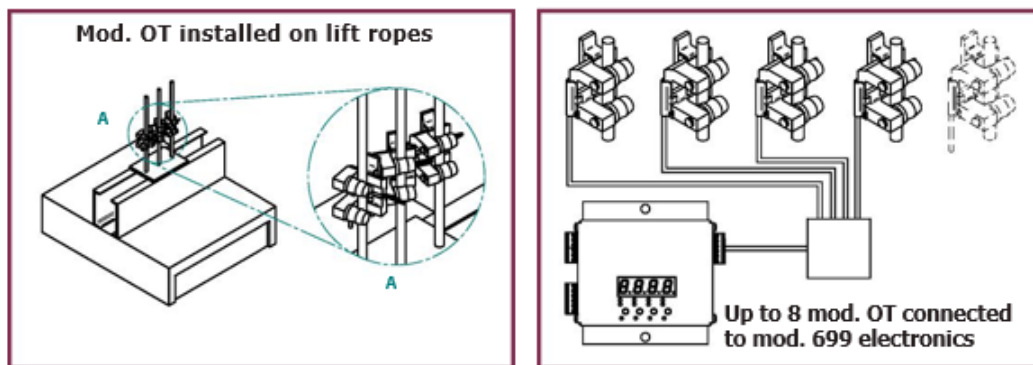
Rope Liftsentry system (OT) allows to measure and control load on traction lifts (elevators, hoists, cranes, vehicles, industrial machines), in a cost effective way, by measuring the tension on each single wire. Easy installation, small dimensions and autocalibration with the rope diameters allow to apply Rope Liftsentry on new or retrofitted applications. The system allows load control accordingly to regulations. It can be used as a portable instrument, during installation and maintenance, to set an equal tension on the ropes or to calculate the counterweight for the cabin. The system, applicable when there is not much room left at the top of the host way, can be installed on the wire ropes in a short time with one hand and without using any other tool.

It can be easily modified by customers in the field to accept many rope diameter types (option). A double clamping system allows to keep it in position even when rope is not tensioned. The system can be installed even on ropes with non circular shape (e.g. tapes).

The system allows:

- to avoid unequal rope tension and pulley wear
- Counterweight balancing

The OT system can be connected to the 699 device or to the electronics already present on the machinery.



TECHNICAL CHARACTERISTICS

OT Strain gauge transducer:

Automatic calibration: no known weight has to be used for calibration

Warehousing cost reduction: It can be easily modified by customer in the field to accept many rope diameter types (option)

Installable also when ropes have a wide spacing

Pre-cabled: easy to apply with a 3m long connection cabling

Innovative: patented.

Output: 2mV/V typ.

Non-linearity: 0,2%FS

Impedance: 1KOhm typ

699 Digital electronics:

With microprocessor feeds power supply to connected mod. OT transducers and it shows the measured load from (Kg, daN, lb.) with 4 digits high brightness LEDs **display**

Easy to install: no calibration with weights is necessary

Easy to service: error codes that guide the service technician

Reliability: automatic zeroing function grants long term stability (i.e.: in case of panoramic lift with sunlight heating)

Connectable OT transducers: up to 8 pcs maximum

Alarm levels: 2 pcs NO/NC relays outputs (full load and overload) auto-calibrating with the set full load

Power supply: 12 or 24Vdc/ac (calibration parameters are not lost in case of blackouts)

Drive machine optimization: Rope Liftsentry measures allow to optimize the cabin movement

Available options:

Three alarm levels: 3rd alarm level to signal passenger presence for booking purposes and GSM distress message handling

Digital outputs: CANopen, RS485, RS422

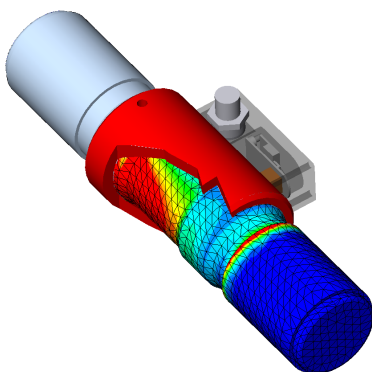
Optically insulated contacts: for additional software activation (i.e.: towed chain load compensation)

Buzzer: for sound signalling

IP65 case: for outdoor use

Display with 10 coloured led bar for load signalling

DEVELOPMENT AND MANUFACTURING OF CUSTOM PRODUCTS



S2Tech technical department, with 30 years of experience acquired with DS Europe, can develop products accordingly to customers technical specifications with the following tools:

- **3D** mechanical design CAD software stations
- Finite Element Analysis **FEA** software stations
- Digital and analog electronic development accordingly to EMC (=CE) stricter industrial marking regulations
- Software and embedded firmware development accordingly to most popular industrial bus system (CANopen, Modbus, PROFIBUS)
- Fast prototyping

S2Tech develops new products or modifies existing ones, in order to realize the fittest and more convenient product.