

## MULTIROPE SENSOR (MRL)



### DESCRIPTION

Multirope sensor MRL is a load weighing device system that measures and controls the load on elevators and hoist systems with ropes.

Multirope system includes an MRL rope transducer, installed on all the elevator ropes, and a 699 electronics. The MRL transducer is fixed on all the elevator ropes, at the same time, close to their fixing point on the cabin roof. The MRL transducer detects the load, in the cabin, by measuring the proportional tension on all the ropes and can be installed on new as well as on modernized elevators because it is easy to install and it has a good price.

Mod. 699 electronics is electrically connected to MRL sensor and it controls the load by means of its alarm levels that can also control the cabin booking procedure with multiple elevators in the same building.

MRL sensor can optionally have a 699 built-in electronics (no connection cable and RJ connector are necessary and no analog and digital outputs are available).

The optional analog or digital output allows to optimize the winch torque for a better comfort and safety.

The sensor is easy and fast to install, by fixing only two screws. Its miniaturized shape allows it to be installed even when the cabin is on the top of hoist way and there is not much room left relatively to the winch sheaves.

It can be installed with widely spaced ropes or with many ropes: ropes can be normally inserted into the MRL internal rope housing.

MRL sensor can be modified for installations on belts instead of ropes.

Different versions of products are available, according to the width (mm) of the sensor:

- MRL 100
- MRL 150
- MRL 200

## TECHNICAL CHARACTERISTICS

**Output:** mV/V

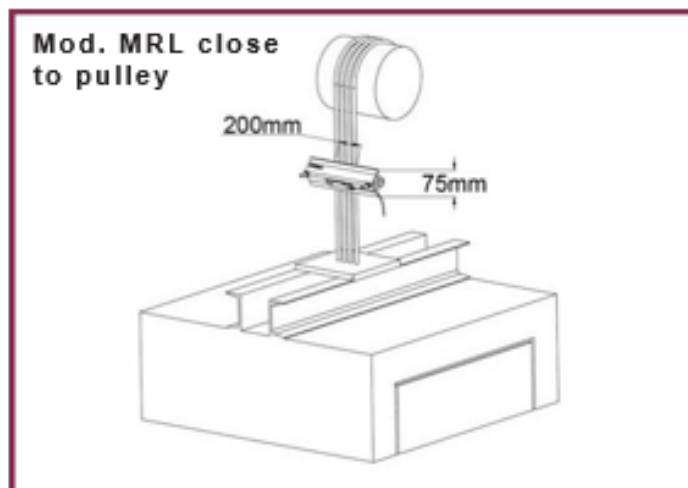
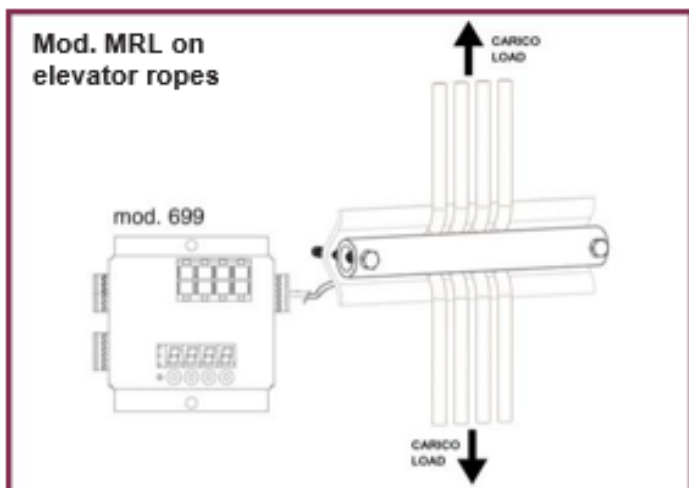
**Strain gauge bridge impedance** 1Kohm, 2 m cable with RJ connector

**Allowed load:** 100 Kg min, up to 2000 Kg (MRL200) and 4000 Kg (MRL100 and MRL150)

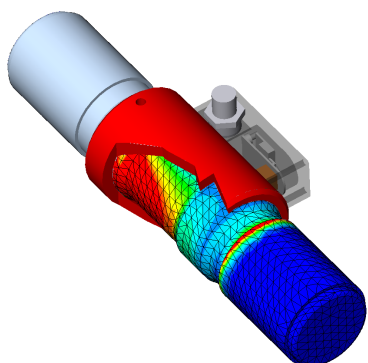
**Space for ropes:** 72 mm (MRL100); 122 mm (MRL150); 200 mm (MRL200)

**Patented**

## OVERALL DIMENSIONS



## 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.