FLEXCO Load Sensing Technology

Elevator Applications
Introduction About the Technology

• Name: FLEXCO Sensor
• Canadian Technology
• Patented in
  – USA (# 8215178)
  – Canada
  – Japan
  – Australia
  – China
  – Other countries are pending
  – Over 10 years of various applications
• Main reasons for our patented technology is safety and to make steel talk
• Other applications such as weighing, security, case study, R&D...
Benefits of the System

The main benefits of the system are:

• Easy and quick to install on any existing structure without any structural modifications
• Results in accurate readings
• Able to handle unlimited load capacity
• Durable and reliable under severe weather conditions
• Can convert any surface to a scale
Overview – Elevator Application

• Sensors are installed on elevator car sling’s frame
• Sensors will measure the total weight of cabin content and transmits the output in mV to the elevator weight module controller
• Our sensors are currently in use on most common types of car slings configurations. However we can accommodate any other type of configuration
• Very accurate and reliable readings
• Readings are repeatable and linear, resulting in minimum maintenance
• Quick to install, resulting in minimum down time
• Only one technician is required to install and calibrate the system
• Compatible with all elevator brands worldwide
Installation Configuration

Car Sling Type A

Sensor location (1 at each side)
Installation Configuration

Car Sling Type B

Sensor location (1 at each side)

Elevator car

Elevator cabin
Advantages of our System

Our patented sensor technology is replacing traditional weighing systems on elevators for the following reasons:

• Only two sensors are required regardless the model, brand, and type of the elevator
• Very simple and quick to install
• No need to adjust the tension level on every single wire rope of the elevator
• Same size sensor can be applied on any given capacity
• Very easy to calibrate and very accurate
• Light weight (each sensor weighs less than 100 grams)
• Keeps the wire ropes of the elevator free from sensors/parts and cables
• Sensors are fully protected with a stainless steel housing for extra protection
• No modifications required to the elevator’s structure
Technical Specs for Flexco Sensor

- Dimensions of the actual sensor are 25mm X 25mm X 5mm
- Material for Protective Sensor housing: Stainless Steel “Dimensions: 60mm X 40mm X 20mm”
- PG-7 on the sensor’s protective housing “to make the sensor cable waterproof”
- Rated Capacity: Same sensor for any given capacity “no capacity for the actual sensor”
- Input: 350 OHMS ± 3 OHMS
- Output: 350 OHMS ± 3 OHMS
- Insulation Impedance: Less than 5000 MEGA OHMS
- Operating Temperature: -40 TO +60 ℃
- Maximum Safe and Unlimited Overload: Depends on your actual structure
- Excitation: From 1 to 12 VDC “MAX 15 VDC”

Sensor Cable:
- Sensor’s Cable Material “outside jacket”: PVC
- CSA & ULC approved
- Cable length choices: 15’ or 25’
- Four conductors Cable “Red(EXC+), Black(EXC-), Green(Sig+), White(Sig-)”