Made in Spain

LWD Manufacture

LWD 2014*

Load Weighing Device

for Elevators

Since 1994 Dinacell Electrónica has developed several projects in the field of the load cells with applications in different industrial sectors, such as cranes, automotive industry, industrial weighing andhandling, silos and elevators. The concept of our work involves the whole process of a load weighing system, including the design and manufacturing of the load cells as well as the electronic devices such as displays and controllers.

The company, located in Madrid (Spain), has in present day a world-wide distribution offering its high quality products with very competitive prices and a special customer service to several countries all around the world.

Dinacell counts on qualified and competent people who contribute with their large experience, around 20 years, to the continued improvement and development of the company to raise it to the top, working hard day by day.

During these years the company has won its clients confidence by the good quality of the products and an effective post sales service where our customers are always friendly attended.

This quality is guaranteed by the exclusive selection of the materials and the professionalism of our staff, as well as the introduction of new technologies in the production line.

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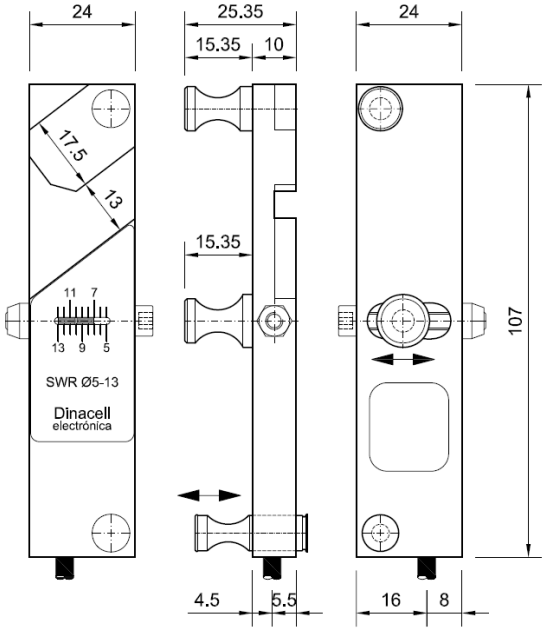
Load Sensor on Ropes

Data Sheet
6026-01

SWR



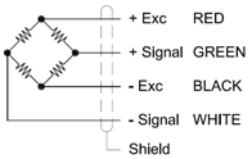
Dimensions in mm.

Loads Table Depending on Ropes Ø

Ø Rope (mm)	nL (kg)
5	200
6	250
6.5	
7	300
8	350
9	400
10	450
11	550
12	650
13	800

- Individual sensor for ropes
- Fast and easy to install
- Just one sensor format to cover the range of ropes Ø 5-13 mm., the middle pin is used to adjust the sensor to the required rope diameter.

Wiring Diagram



USB Connection

The Installation can be performed:

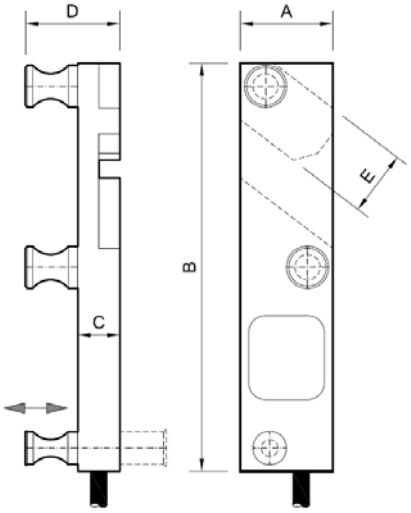
- Standard wrench
- Dinacell installation tool

Technical Characteristics

Nominal Load (nL)	200 ...800 kg	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Sensibility	0,5...2,0 mV/V	Maximum Working Load	120 % F.S.
Tolerance Adjust on Zero	20 % F.S.	Load Limit Without Loss of Characteristics	150 % F.S.
Service Temperature Range	-20 ... 60 ºC	Protection Class	IP65
Input Resistance	350 ± 1.5Ω	Material	Aluminum
Output Resistance	350 ± 1.5Ω	Surface Treatment	Anodized
Accuracy	0.25 % F.S.	Cable Type	Flexible, 4x0.09 mm2 Ø4.3
Maximum Excitation Voltage	12 V.	Cable Length	0.5 or 2m.

Load Sensor on Ropes

SWK



Dimensions In mm

The installation can be performed:

- Standard wrench
- Dinacell installation tool

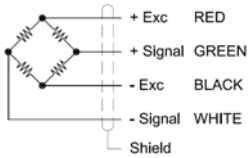
- Load limiter sensor design for measuring the load on steel ropes that work to traction (elevators, lifts…)

	Ø Rope	4	5	6	6.5	8	9	10	11	12	13	14	15	16
Dimensions (mm.)	nL (kg)	150	200	250		350	400	450	550	650	800	950	1100	1250
	A	12.5	18	20				22		24		28		
	B	70	80	87				97		107		110		130
	C	8	10									12		
	D	14	18.5			21		22.5		25		30.5		
	E	10	14					15.5		17.5		–		
Nominal load (nL) kg. Depending on Mod	SWK4	**150**(1)	130(2)											
	SWK5	250(2)	**200**(1)	150(2)										
	SWK6		300(2)	**250**(1)	200(2)									
	SWK6.5			350(2)	**250**(1)	200(2)								
	SWK8				400(2)	**350**(1)	250(2)							
	SWK9					500(2)	**400**(1)	300(2)						
	SWK10						550(2)	**450**(1)	350(2)					
	SWK11							650(2)	**550**(1)	450(2)				
	SWK12								750(2)	**650**(1)	550(2)			
	SWK13									900(2)	**800**(1)	700(2)		
	SWK14										1050(2)	**950**(1)	850(2)	
	SWK15											1200(2)	**1100**(1)	1000(2)
	SWK16												1350(2)	**1250**(1)

(1) Optimal Rope Ø
(2) Valid for Other Ø

Optional USB Connector

Wiring Diagram



Total Load = Nominal Load (see table) kg. X Number of Ropes

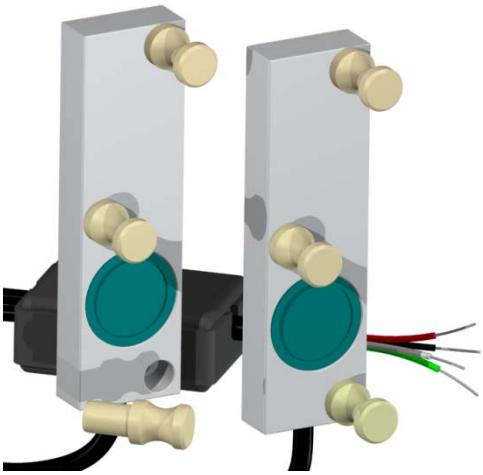
Technical Characteristics

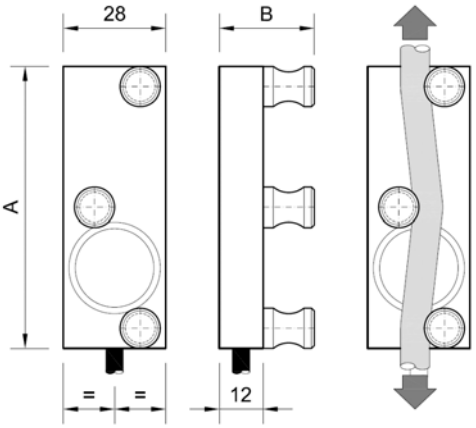
Nominal Load (nL)	150 …1250 kg	Maximum Excitation Voltage	12 V.
Sensibility	1,3…2,0 mV/V	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Tolerance Adjust on Zero	20 % F.S.	Maximum Working Load	150 % F.S.
Service Temperature Range	-20 … 60 ºC	Load limit Without Loss of Characteristics	200 % F.S.
Input Resistance	350..400 Ω	Protection Class	IP65
Output Resistance	350 ± 1.5Ω	Material	Aluminum
Accuracy	0.25 % F.S.	Surface Treatment	Anodized

Load Sensor on Ropes

Data Sheet
8505-00

SW





Dimensions in mm

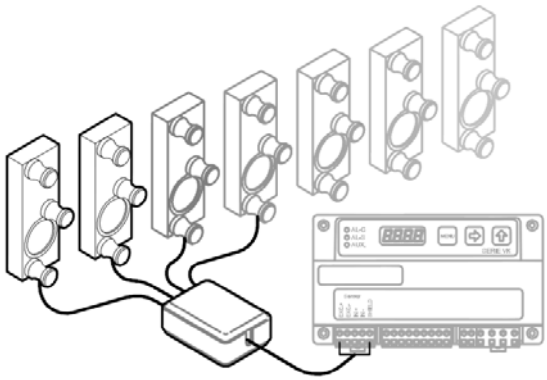
Ø Rope	A	B
8 ... 13	77	26
14 ... 16	97	30

The installation can be performed:

- Standard wrench
- Dinacell installation tool

Model	Load control	Compatible Devices
SW-OMEGA	Total load in the elevator or individual load on each rope	Only **SV-Omega**
SW-GAMA	Total load in the elevator	Any of the **SV** Serie except **SV-Omega**

- Fast and easy to Install.
- Their placement is suitable whatever the separation among the cables. Ideal in those cables with excessive separation.
- It doesn´t produce frictions neither displacements along the cable.
- Load & tension control in each one of the cables in an independent way.
- For monitoring the force unequal tension among the cables.
- Avoids the wearing of the pulley..
- A miniaturized design.



Connection diagram grouping sensors SW with the control device

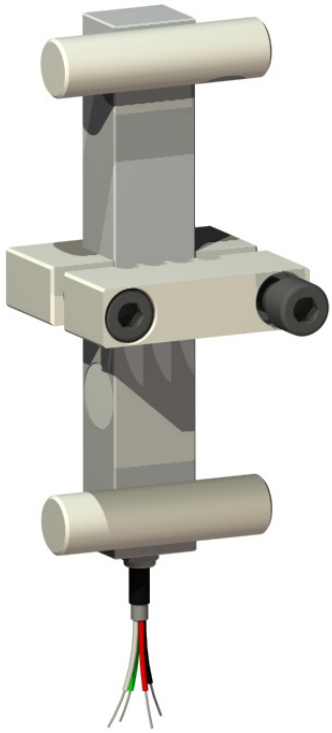
To make an order, it is necesary to specify:
Model, nº of Ropes, Ø Rope and Capacity

MODEL	Ø Rope	Nominal Load kg. / Rope	Nº Sensors for each Group (S)
SW-Omega-1	8, 9, 10	600 x (S)	2, 3, 4, 5, 6, 7, 8
SW-Gama-1			
SW-Omega-2	11, 12, 13	800 x (S)	
SW-Gama-2			
SW-Omega-3	14, 15, 16	1200 x (S)	
SW-Gama-3			

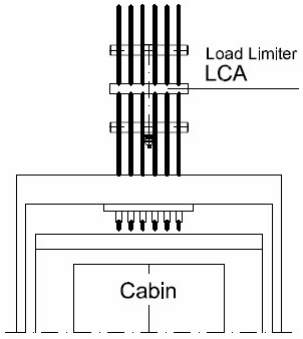
Technical Characteristics

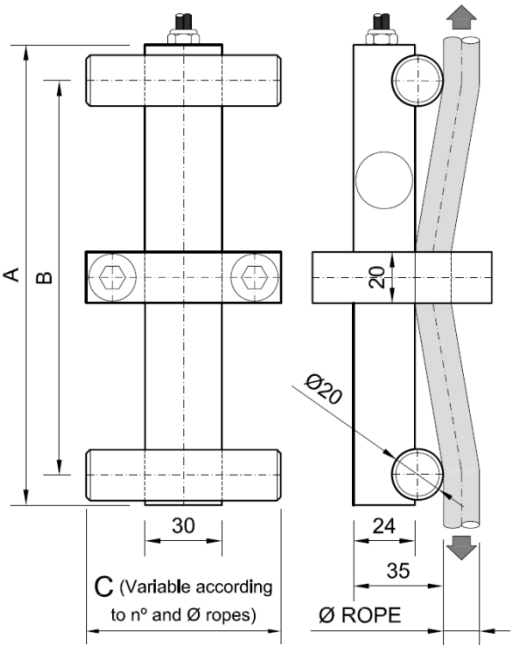
Nominal Load (nL)	600, 800, 1200 kg	Maximum Excitation Voltage	12 V.
Sensibility	1,3...2,0 mV/V	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Tolerance Adjust on Zero	10 % F.S.	Maximum Working Load	150 % F.S.
Service Temperature Range	-20 ... 60 ºC	Load Limit Without Loss of Characteristics	200 % F.S.
Input Resistance	350 ± 3 Ω	Protection Class	IP65
Output Resistance	350 ± 2Ω	Material	Aluminum
Pressure	0.25 % F.S.	Surface Treatment	Anodized

LCA 1.6 ... 6 t



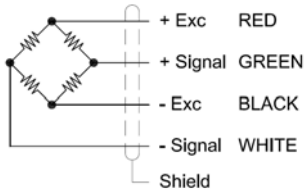
nL. (t.)	A	B
1.6	166	140
4		
6	180	154





Dimensions In mm

Wiring Diagram



Optional USB connector

- Load limiter design for measuring the load on several steel ropes (traction ropes, lifts, elevators...)

Nº of Ropes	Ø of Ropes (mm)			
	3 .. 5	6 .. 8	8 .. 13	14 .. 16
1	76			
2				
3	76		96	96
4				126
5	96		126	
6				156
7	--	126	156	186
8	--			

Remarks:

To manage the orders, please specify the following information:

- Nº of ropes .....
- Ø of ropes .....

Technical Characteristics

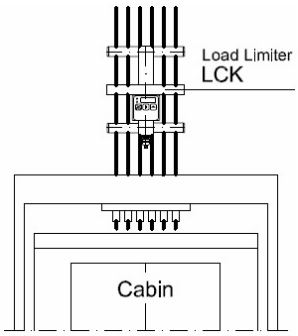
Nominal Load (nL)	1.6, 4, 6 t	Input Resistance	350.. 400 Ω
Sensibility	1.4 ... 2.0 mV/V	Output Resistance	350Ω ± 2 Ω
Tolerance Adjust on Zero	10 % F.S.	Maximum Working Load	150% F.S.
Non Linearity	0.11 % F.S.	Load Limit Without Loss of Characteristics	200 % F.S.
Accuracy	0.25 % F.S.	Protection Class	IP 65
Service Temperature Range	-20 ... 60 ºC	Cable Type	Flexible, 4x0.22 mm^2 Ø6
Maximum Excitation Voltage	12V.	Cable Length	2 m.
Insulation Resistance (V. Test = 100V)	>4 GΩ	Material	Aluminum

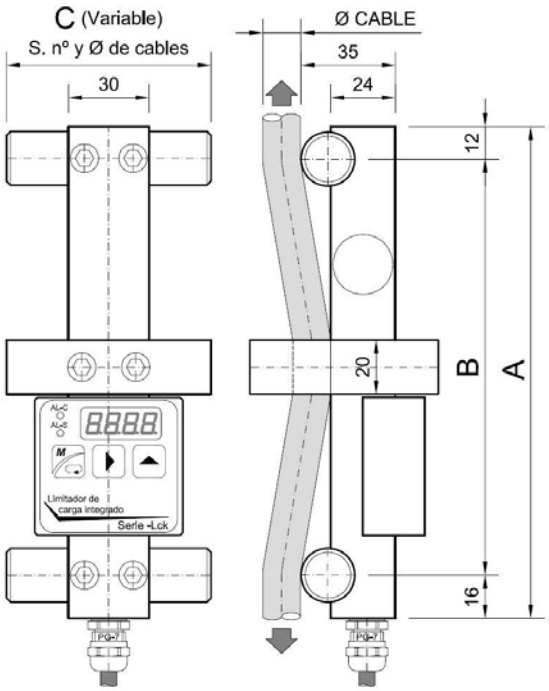
Load Limiter on Ropes

LCK 3, 4, 6 t

nL. (t.)	A	B
3	168	140
4	182	154
6		

Dimensions in mm





Ø Ropes	C (Variable Dimension) Nº Ropes							
	1	2	3	4	5	6	7	8
Ø3 .. 5	76				96		---	
Ø6 .. 8							126	
Ø8 .. 13	76		96		126		156	
Ø14 .. 16			96	126		156	186	

- Load limiter design for measuring the load on several steel ropes (traction ropes, lifts, elevators...)
- Integrated electronics of great precision and stability for the measurement of the load in steel ropes
- Auto-calibrated. No need to introduce a well-known weigh in cabin for their adjustment
- Special software for chain compensation

Remarks:

Asides from the standard, we manufacture other measures acording to the clients request.

To manage the orders, please specify the following information:

- Nº of ropes .....
- Ø of ropes .....

Connection cable

Red	Power Supply (+) 24-48 Vdc
Black	Power Supply (-)
Violet /Blue	Relay Contact of "Complete" (AL-C) 3A
Pink/Brown	Relay Contact of "Overload" (AL-S) 3A
Grey/White	Hold 24-220 Vac/Vdc
Yellow	Groundwire
Green	Not Connected

Technical Characteristics

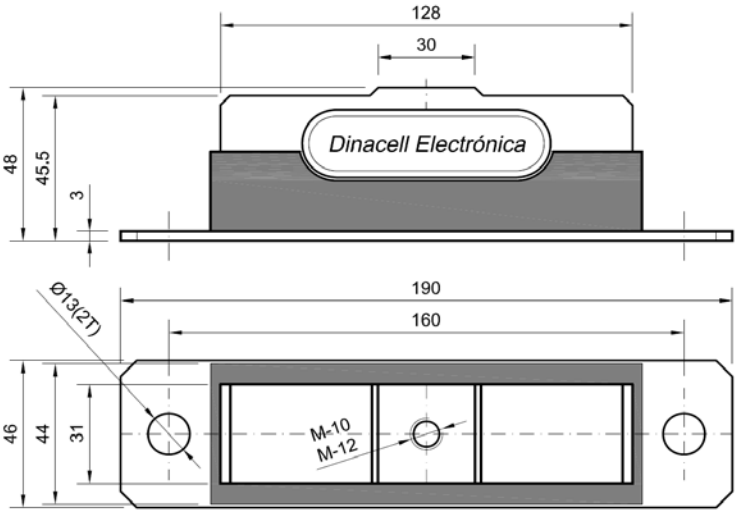
Nominal Load (nL)	3, 4, 6 t	Insulation Resistance (V. Test = 100V)	>4 GΩ
Non Linearity	0.11 % F.S.	Maximum Working load	150% F.S.
Accuracy	0.25 % F.S.	Load Limit Without Loss of Characteristics	200 % F.S.
Service Temperature Range	-20 ... 60 ºC	Protection Class	IP 65
Relays	3° / 250V	Cable Type	Flexible, 10x0.22 mm^2 Ø6
Maximum Excitation Voltage	24-48 VDC	Cable Length	2 m.
Current Consumption	<100 mA	Material	Aluminum

TCA-800

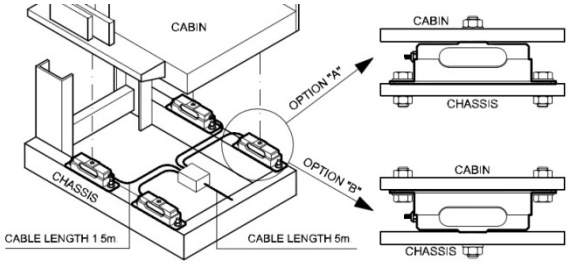
- Maximum accuracy load sensor designed for elevators installation under car.
- Factory calibrated:
- It is not necessary to use a known weight for adjustment of measuring devices.
- It comes in a silent-block to avoid vibration transmission.
- The following models are available (with optional USB connector):

They are Manufactured in 4 Options

Model	Meter	Number of cells
TCA-800/I-M10	M10	1 (individual) 800 kg
TCA-800/I-M12	M12	
TCA-800/G-M10	M10	4 (in group) 800 kg x 4 = 3200 kg
TCA-800/G-M12	M12	

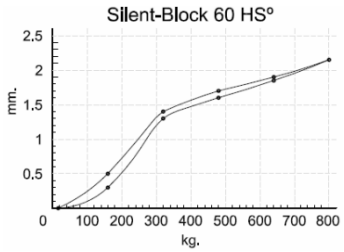


Dimensions in mm.

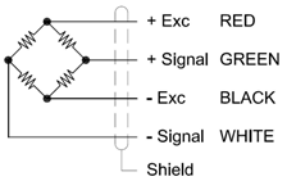


Installation Detail

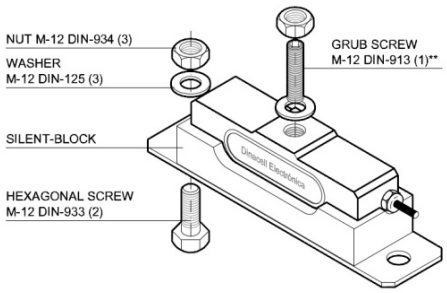
Strain curve



Wiring Diagram



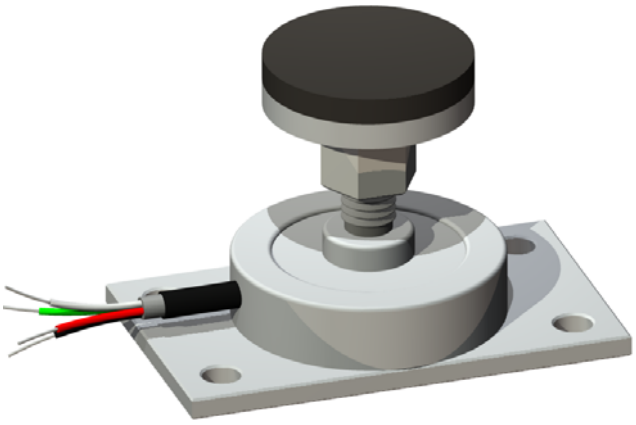
Optional
USB Connector

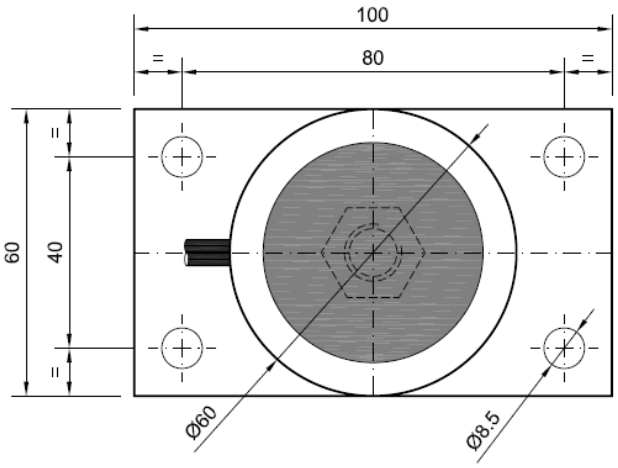


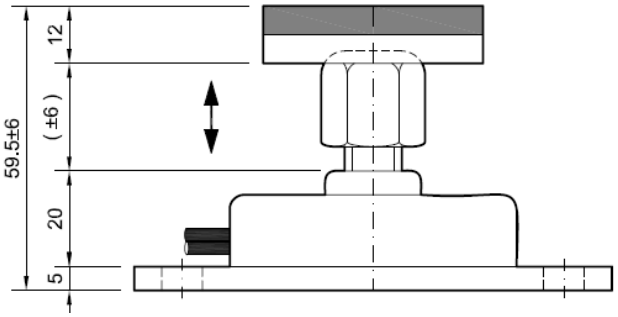
Technical Characteristics

Nominal Load (nL)	800 Kg.	Output Resistance	1000 ± 5 Ω
Sensibility	2 ± 0.2% (mV/V)	Minimum Insulation Resistance(Test voltage = 100V)	4 GΩ
Tolerance Adjust on Zero	± 2 % F.S.	Maximum Working Load	150 % F.S..
Compensated Temerature Range	-10 .. 40 ºC	Load Limit Without Loss of Characteristics	180 % F.S.
Operation Temperature	-20 .. 60 ºC	Protection Class	IP 66
Accuracy	± 0.06 % F.S.	Connection Cable	Ø6 mm 4 x 0.22 mm^2
Non Linearity	± 0.04 % F.S.	Cable Length	5 m (*/I) ó 1. 5 m (*/G)
Maximum Excitation Voltage	12 V	Material	Aluminum
Input Resistance	1050 ± 60 Ω		

BPP-LR 1.2 - 3t.







Dimensions in mm.

- Load cell specially designed for the Installation under cabin (placed in the center)
- Equipped with silent-block pad to avoid the transfer of vibrations.
- Can be connected to any unit control on the Series **VK**, except the **VK-Omega**

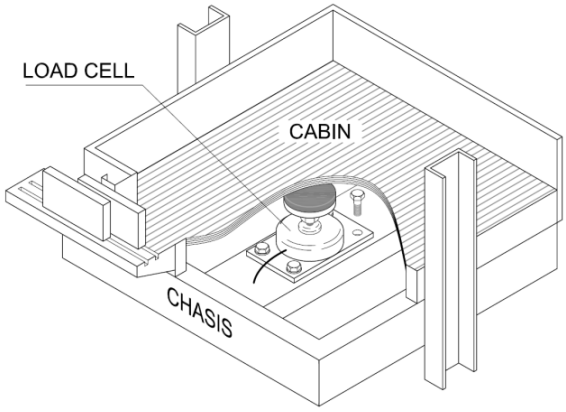
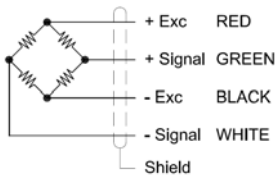


Diagram of Installation

Wiring Diagram

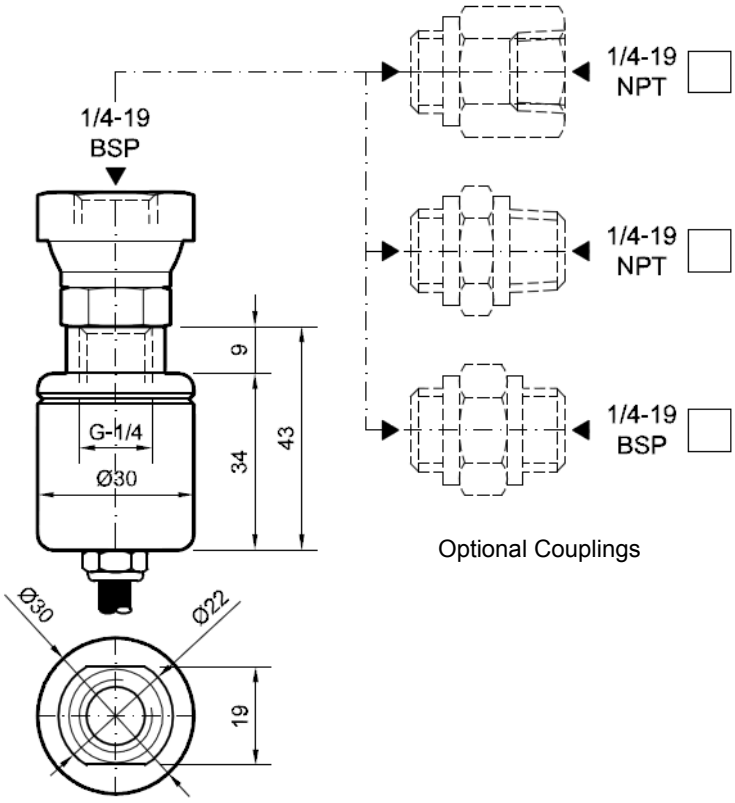


Optional USB Connector

Technical Characteristics

Nominal Load (nL)	1.2 y 3 t	Maximum Excitation Voltage	12 V
Sensibility	1,4...2,0 mV/V	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Tolerance Adjust on Zero	5 % F.S.	Maximum Working Load	150 % F.S.
Input Resistance	350 ± 3Ω	Protection Class	IP67
Output Resistance	350 ± 2Ω	Cable Type	Flexible Ø6 4x0,22 mm^2
Compensated Temperature Range	-10..40 ºC	Cable Length	4 m
Service Temperature Range	-20..60 ºC	Material	Alloy Steel
Accuracy	0.2 %	Surface Treatment	Chemical Nikel
Non Linearity	0,07% F.S.		

CH-100

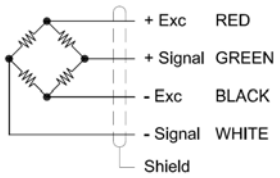


Optional Couplings

Dimensions in mm.

- Pressure sensor model **CH-100**, suitable to control the load in hydraulic elevators. It´s simple and economical.
- Measure range of 0 to 100 bar.
- Can be connected to any unit control on the Series **VK**, except the **VK-Omega**
- Calibrated in the factory. If connected to the unit control **VK**, there is no need to use any known weight in the Installation.

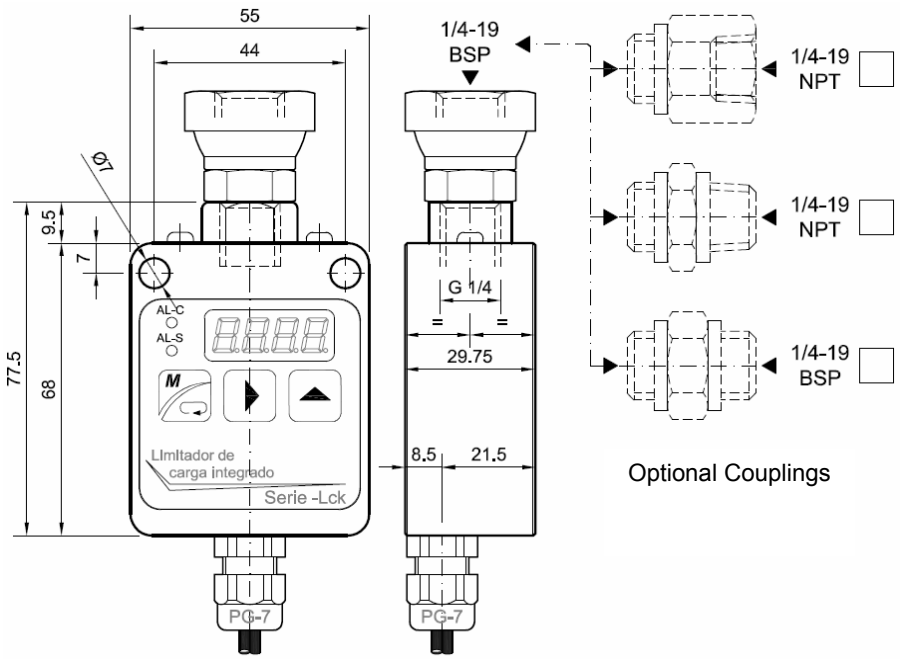
Wiring Diagram



Technical Characteristics

Full Scale FS	100 bar	Load Limit Without Loss of Characteristics	200 % F.S.
Non Linearity	<0.072 % F.S.	Protection Class	IP 67
Maximum Excitation Voltage	12 V	Cable Connection	Flexible, 4x0.22 mm^2 Ø6
Hysteresis	<0.09 % F.S.	Cable Length	4 m.
Accuracy	<0.2 %	Material	Sensor: Stainless Steel
Minimum Insulation Resistance (V.Test = 100V)	4 GΩ		Casing: Aluminum
Maximum Working Load	150 % F.S.	Surface Treatment	Anodized
Service Temperature	-20...60ºC		

CHD-100



Optional Couplings

Dimensions in mm.

- Digital pressure sensor mod. **CHD-100** with an integrated circuit developed to measure and control the pressure in hydraulic elevators.
- Measure range of 0 to 100 bar.
- 2 Relays of alarm.
- Calibrated in the factory. No need to use any known weight to calibrate it.
- Display of 4 digits to visualize the pressure.

Connection Cable

Red	Power Supply (+) 24-48 Vdc
Black	Power Supply (-)
Violet /Blue	Relay Contact of "Complete" (AL-C) 3A
Pink/Brown	Relay Contact of "Overload" (AL-S) 3A
Grey/White	Hold 24-220 Vac/Vdc
Yellow	Groundwire
Green	Not Connected

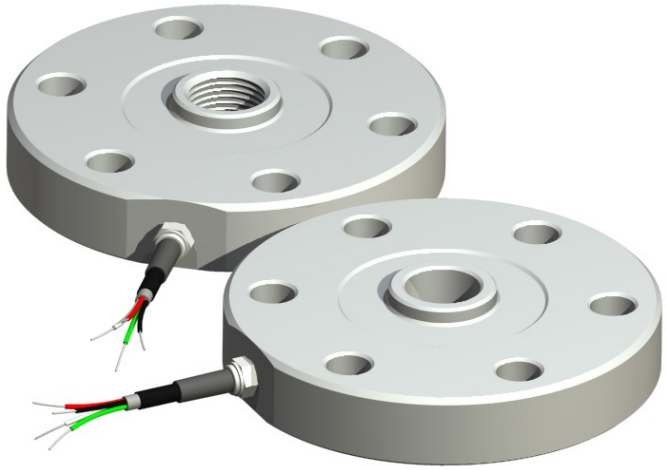
Technical Characteristics

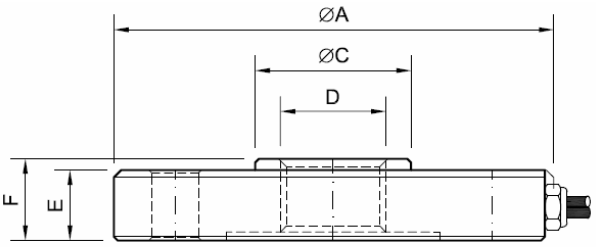
Full Scale (F.S.)	100 bar	Protection Class	IP 67
No Linearity	<0.1 % F.S.	Cable Type	Flexible, 10x0.22 mm^2 Ø6
Power Supply	24 – 48 Vdc	Cable Length	2 m.
Hysteresis	<0.1 % F.S.	Material	Sensor: Stainless Steel
Accuracy	0.2 % F.S.		Structure: Aluminum
Maximum Work Load	150 % F.S.	Surface	Anodized
Work Temperature	-20..60 ºC		

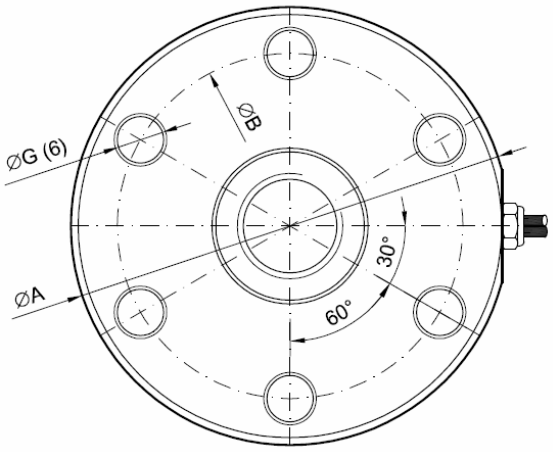
Compressión Load Cell

Data Shee
6033-01

BPH-PM 3 - 6 t.
BPH-GD 3 - 6 t.

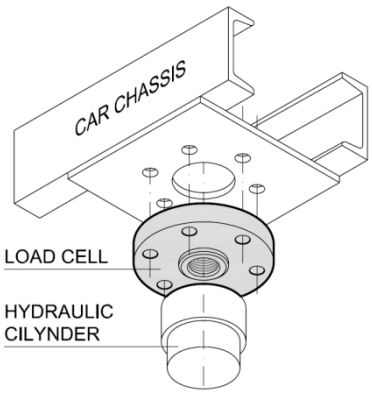




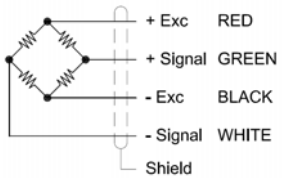


- Load cells specially designed to work in traction and compression.
- The application is on the field of hydraulic elevators. The sensor is mounted between the piston rod and the cabin chassis.

Dimensions in mm.



Wiring Diagram



Mod.	PM-24		PM-30		GD25	
nL (t)	3	6	3	6	3	6
ØA	118			145		
ØB	93			12.5		
ØC	36		42		36	
D	M-24		M-30		Ø25	
E	19			25		
F	22			30		
ØG	12.5			15		

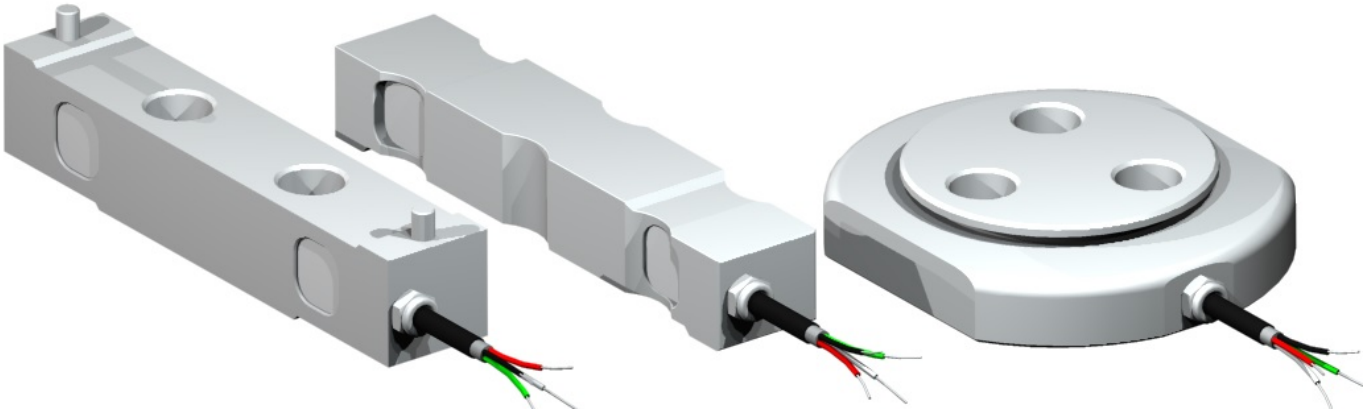
Technical Characteristics

Nominal Load (nL)	3 - 6 t.	Creep (over 30 Minutes)	0,06% F.S.
Sensibility	1,4..2,0 mV/V	Maximum Excitation Voltage	12 V
Tolerance Adjust on Zero	5 % F.S.	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Temperature Effect on Sensitivity	0,044% F.S.	Maximum Working Load	150 % F.S.
Temperature Effect on Zero	0,035% F.S.	Breaking Load	>300 % F.S.
Compensated Temperature Range	-10..40 ºC	Protection Class	IP67
Service Temperature Range	-20..60 ºC	Cable Type	Ø6 4x0,22 mm^2
Input Resistance	350 ± 3Ω	Cable Length	4 m
Output Resistance	350 ± 2Ω	Material	Alloy steel
Histeresys Error	0,067 % F.S.	Surface Treatment	Chemical Nikel
Non Linearity	0,04% F.S.		

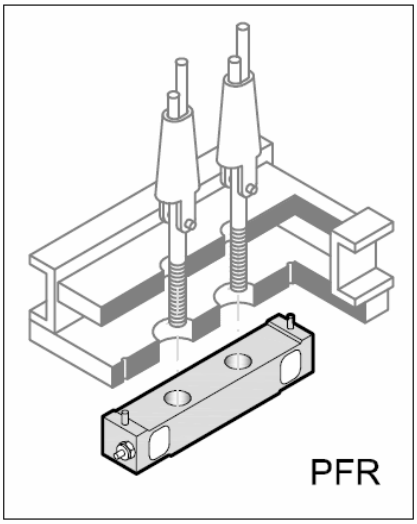
Crosshead Sensor Chassis Cabin

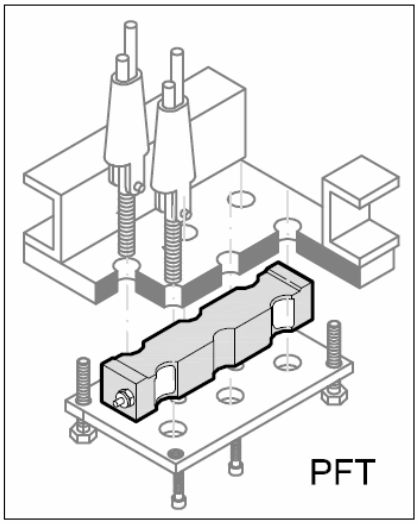
Data Sheet
7782-00

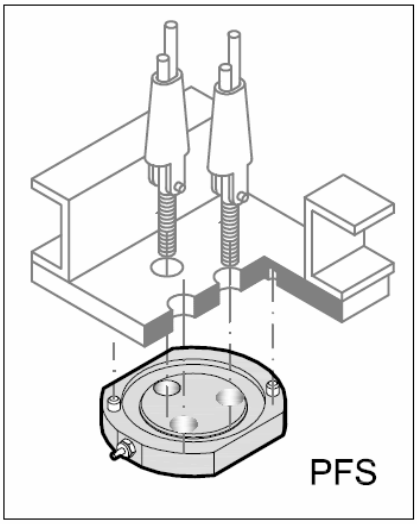
PF 1, 3, 6t



- Load cell especially designed to work on compression.
- Made of alloy steel or aluminium material of high resistance with anti-corrosion treatment.
- Field of application: on the dead end hitch or in the terminals of the traction cable (elevators, cranes...).
- Nominal load: 1000 - 3000 - 6000 kg





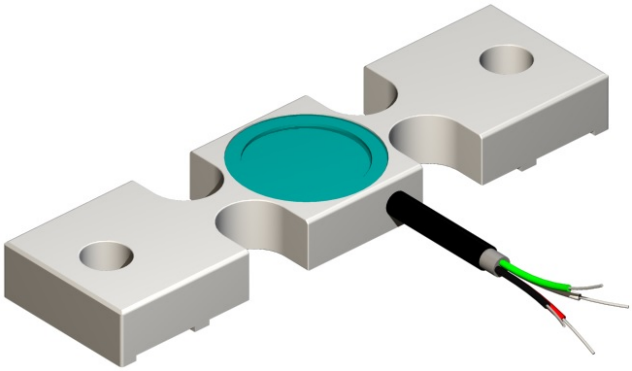


Technical Characteristics

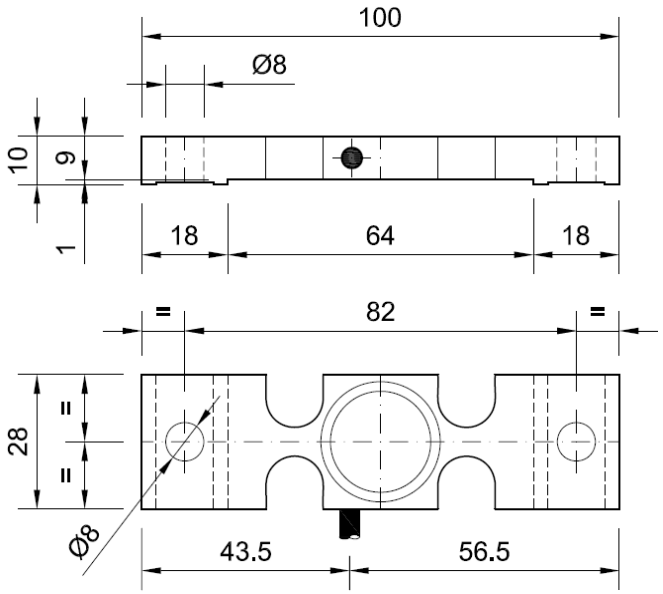
Nominal Load (nL)	1, 3, 6 t	Non Linearity	0,108% F.S.
Sensibility	1,4..2 mV/V	Maximum Excitation Voltage	12 V
Tolerance Adjust on Zero	5 % F.S.	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Temperature Effect on Sensitivity	0,133% F.S.	Maximum Working Load	150 % F.S.
Temperature Effect on Zero	0,067% F.S.	Break Load	>250 % F.S.
Compensated Temperature Range	-10..40 ºC	Protection Class	IP67
Service Temperature Range	-20..60 ºC	Cable Type	Flexible Ø6 4x0,22 mm^2
Input Resistance	350 ± 3Ω	Cable Length	4 m
Output Resistance	350 ± 2Ω	Material	Alloy Steel / Aluminum
Hysteresis Error	0,116 % F.S..	Surface Treatment	Chemical Nikel / Anodized

Crosshead Sensor Chassis Cabin

SV-3000



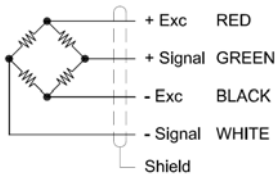
Deformation 3000με



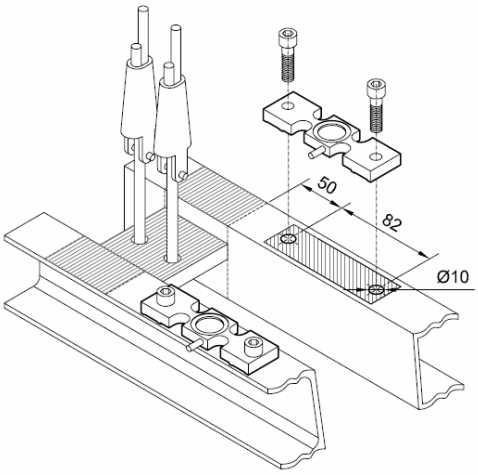
Dimensions in mm.

- Sensor designed to work on traction and compression, specially for weighing depending on the deformations of steel beams.
- Easy to install and suitable for any type of beam.
- Field of application: load limitation on metallic structures, elevation systems (lifts, elevators, freight elevators...).

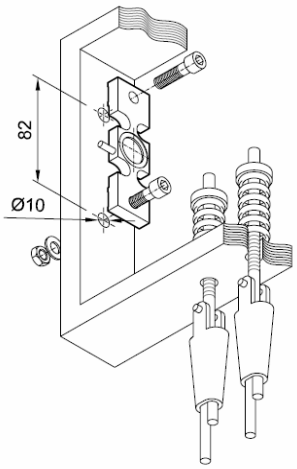
Wiring Diagram Cable



Optional USB Connection



On the crosshead beam



Mounting on fixed point

Technical Characteristics

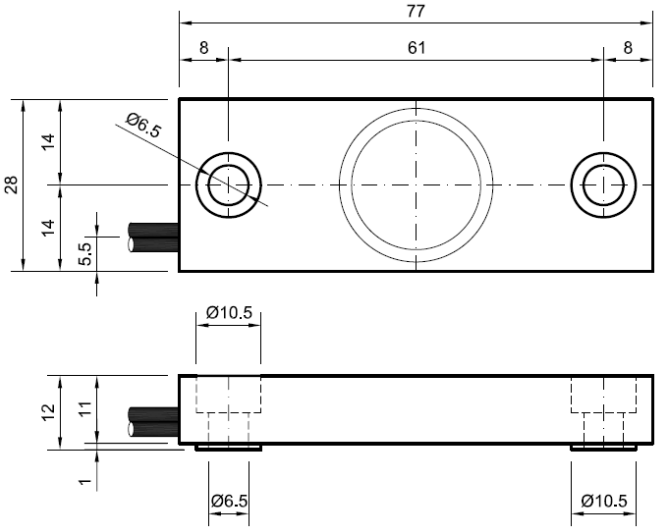
Sensibility	2 mV/V a 3000με	Output Resistance	350 ± 2 Ω
Tolerance Adjust on Zero	± 20 % F.S.	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Tolerance on Zero	± 10 % F.S.	Maximum Deformation	150 % F.S.
Maximum Excitation Voltage	12 V	Cable Type	Ø4 - 4 x 0.14 mm^2 Shielded
Accuracy	0.2 %	Cable Length	6 m
Service Temperature Range	-20..60 ºC	Material	Alloy Steel
Input Resistance	350 ± 2 Ω	Surface Treatment	Chemical Nikel

Crosshead Sensor Chassis Cabin

Data Sheet
6027-02

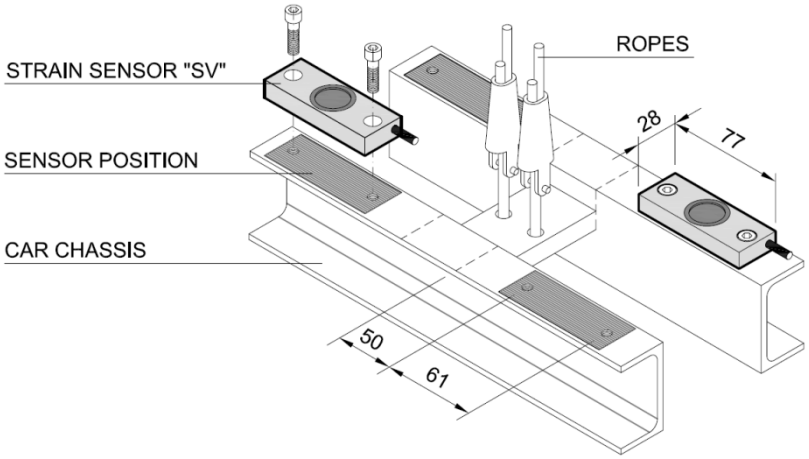
SV-1000

Deformation 1000με

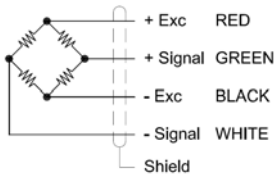


Dimensions in mm.

- Sensor designed to work on traction and compression, specially for weighing depending on the deformations of steel Beams.
- Easy to install and suitable for any type of beam.
- Field of application: load limitation on metallic structures, elevation systems (lifts, elevators, freight elevators...)



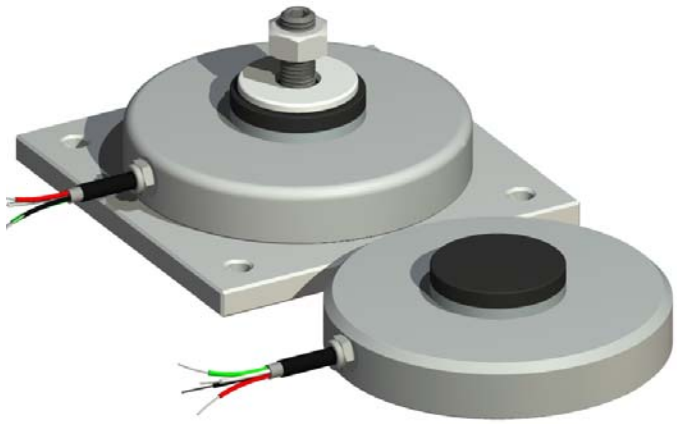
Wiring Diagram

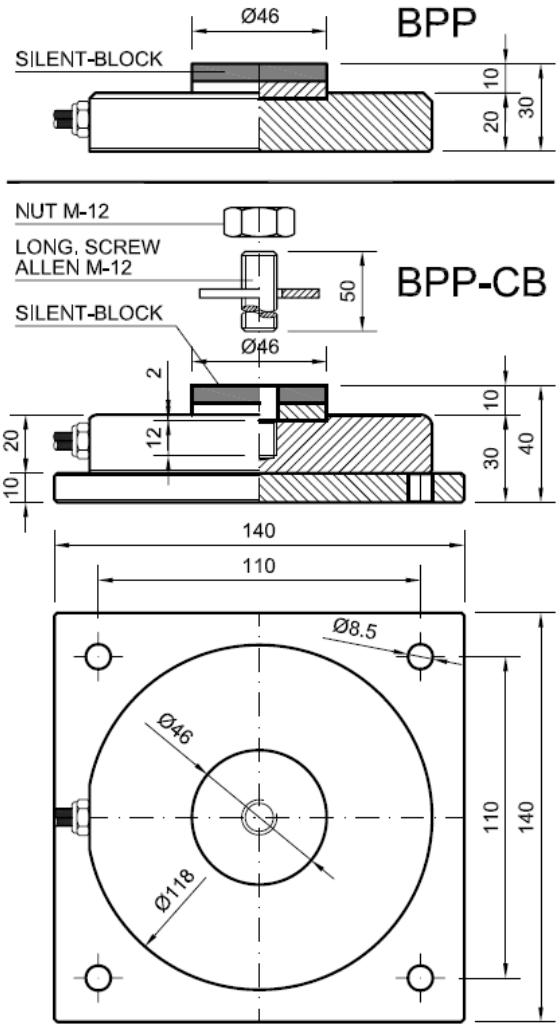


Technical Characteristics

Sensibility	2 mV/V a 1000με	Output Resistance	350 ± 2 Ω
Tolerance Adjust on Zero	± 20 % F.S.	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Tolerance on Zero	± 10 % F.S.	Maximum Deformation	150 % F.S.
Maximum Excitation Voltage	12 V	Maximum Working Load	150 % F.S.
Accuracy	0.3 %	Cable Type	Ø4 - 4 x 0.14 mm^2 Shielded
Service Temperature Range	-20..60 ºC	Cable Length	6 m
Input Resistance	350 ± 2 Ω	Material	Aluminum

BPP 1.5 … 6.5t.
BPP-CB 1.5 … 6.5t

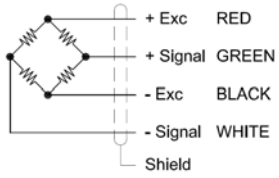


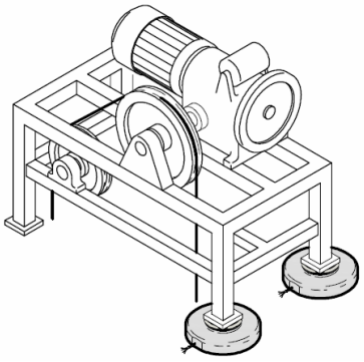


- Load cells designed to install under motor bedframe

  2 Models **BPP** supported
  BPP-CB bolted to bench
- Equipped with silent-block to prevent the transfer of vibrations.
- It is recommended to Install at least two cells to obtain high precision
- You can install up to 4 load cells connected in parallel to a unit control **VK-3**

Wiring Diagram



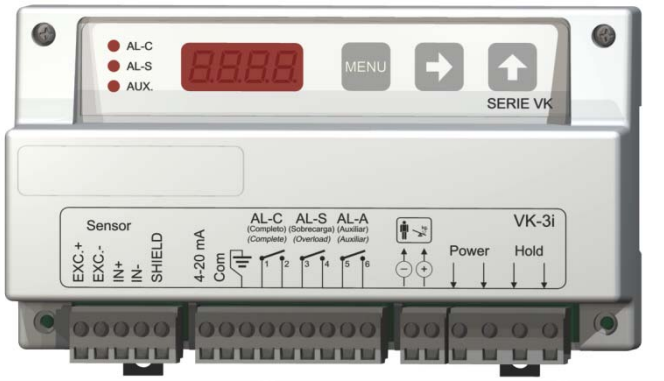


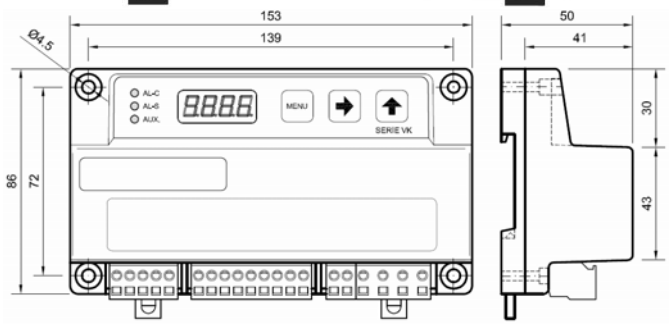
Dimensions in mm.

Technical Characteristics

Nominal Load (nL)	1.5, 3, 5, 6.5 t	Non Linearity	0,065% F.S.
Sensibility	1,4...2,0 mV/V	Maximum Excitation Voltage	12 V
Tolerance Adjust on Zero	5 % F.S.	Minimum Insulation Resistance (V.Test = 100V)	4 GΩ
Temperature Effect on Sensitivity	0,080% F.S.	Maximum Working Load	150 % F.S.
Temperature Effect on Zero	0,035% F.S.	Break Load	>300 % F.S.
Compensated Temperature Range	-10..40 ºC	Protection Class	IP67
Service Temperature Range	-20..60 ºC	Cable Type	Flexible Ø6 4x0,22 mm^2
Input Resistance	350 ± 3Ω	Cable Length	4 m
Output Resistance	350 ± 2Ω	Material	Alloy Steel
Hysteresis Error	0,067 % F.S.	Surface Treatment	Chemical Nikel

Serie VK





The VK series stands out for its wide range of models and its great versatility to give solution to all the possible necessities, that acts to the control and load limitation in elevators.

- The VK series includes a software that depending on the model, it can carry out a functions such as: detection of errors, auto-calibrated (adjusts of the load without necessity of introducing a known weight in the cabin), compensation of the weight of the chain, etc....
- Flexibility in the fixation of the unit (rail DIN or fixed screws).
- Applicable for any measurement system like weighing in cabin, cables, motor bedframe, etc.
- Compact box manufactured in ABS fireproof material.
- Programming by keyboard.
- 4 Digits display .
- Cabin display output, inhibition input (Hold).

Standard Models for Elevators

VK-OMEGA

This unit is prepared to be used with the sensor SW-OMEGA. Their specific software allows:

- To carry out the standard functions of any load weighing system, such as control and limitation of the load (complete, overload etc.).
- To visualize the weight that supports each one of the cables.
- To carry out the adjustment of the force that exercises on each one of the cables. In this operation the software will guide us in an automatic way and get this way a perfect level among them.
- Assigned a value of alarm shot for the imbalance level between the cables, so that once surpassed this value it will emit us a signal alarm.

Relay alarm: 3
Output: 1 (Cabin Display)
Accuracy : 0,1%
Power supply: 230 Vac
Communication: RS-485

VK-3

Relay alarm: 3
Output: 1 (Cabin Display)
Power supply: 230, 115, 48 Vac

VK-3V

Relay alarm: 3
Output: 1 (Cabin Display), 1 (0-10 V ± 1%)
Power supply: 230, 115, 48 Vac, 24 Vdc

VK-3SV

Relay Alarm: 3
Output: 1 (Cabin Display), Used for Sensor SV
Power Supply: 230, 115, 48 Vac

VK-3i

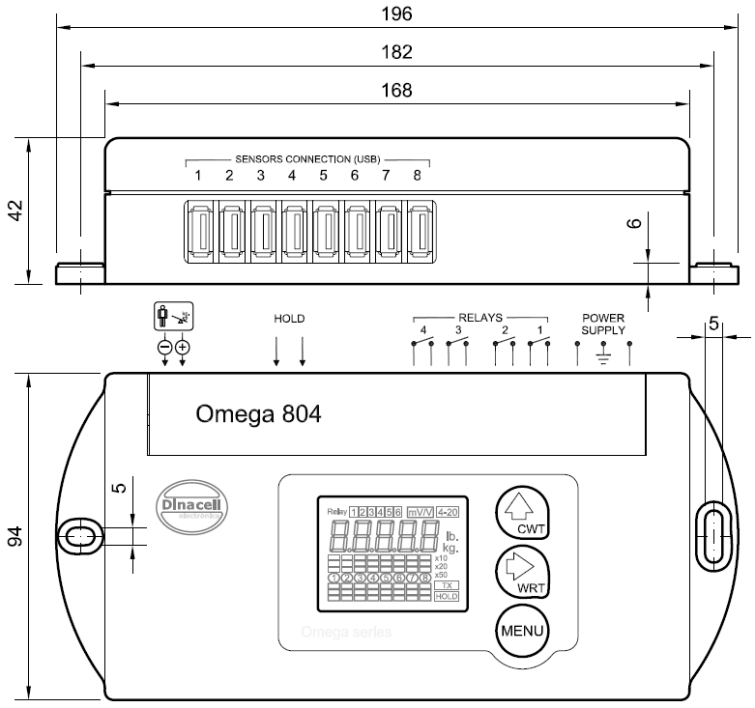
Relay alarm: 3
Output: 1 (Cabin Display), 1 (4-20 mA +_ 1%)
Power supply: 230, 115, 48 Vac, 24 Vdc

Technical Characteristics

Power Supply	115 VAC ó 230 VAC 50-60 Hz - Maximum 5W	Cabin Output Display (Buzzer) Programable Working Mode.	MB-D (2 Wires Without Polarity) or Intermitence Overload 9V
Number of Alarms	3	Material Box	Fire Proof ABS
Relay Contacts	250V / 3A	Protection Class	IP-50
Analog Output	4-20 mA	Fixing	Screws or DIN Rail
Hold Inhibition Input	24 ... 230 VAC/VDC	Load Cell Connection Cable	EXC. (+) Red
Accuracy	0.1% F.S.		EXC. (-) Black
Temperature Range	-10 ... 60 ºC		IN (+) Green
Programming	By Keyboard		IN (-) White
User Interface	Display 4 Digits & 3 Keys		SHIELD

OMEGA-804

OMEGA-804 is a load control unit to monitor and limit the lifts charge as well as measure individual rope tension.



Dimensions in mm.

LIFT INTERFACE

- Up to 8 charge cells can be connected (with a USB connector).
- Four programmable alarm relays to indicate full charge, overload, non uniform cable tension and general objectives.
- Cabin display output.
- HOLD function to inhibit meditions when the lift is moving.

USER INTERFACE

- Very easy configuration with 3 control keys.
- 5 digits display with indicators for:
- Alarms situation.
- HOLD input situation.
- Cable tension (numeric or 6 levels toolbar).
- Configurated sensors number.
- Measure units.

OTHER CHARACTERISTICS

- Lift chain compensation function.
- Cortocircuitable power supply: no need to replace any fusible

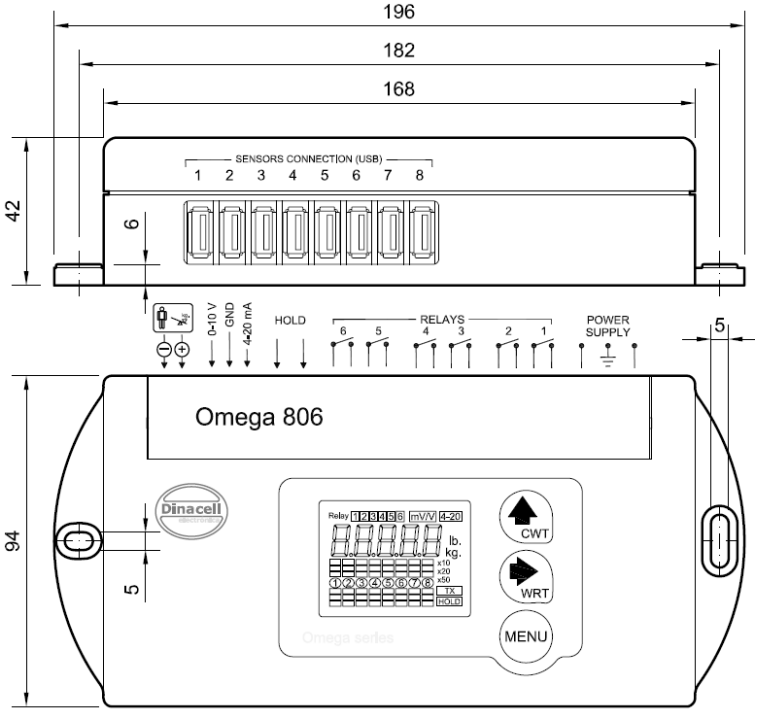
Compatible Dinacell sensors: SWK, SWR, TCA-800 and LCA

Technical Characteristics

Power Supply	80-260 Vac 50-60Hz	Relay Contacts (Maximum Voltage/Stream Energy)	250 V
	24Vdc		3 A
Maximum Energy Consumption	6 W	Accuracy	0.1 5 %
HOLD Input Voltage	260 Vac or 24 Vdc	Frame	Fireproof Plastic V0 IP-50

OMEGA-806

OMEGA-806 is a load control unit to monitor and limit the lifts charge as well as measure individual rope tension.



Dimensions in mm.

LIFT INTERFACE

- Up to 8 charge cells can be connected (with a USB connector).
- Six programmable alarm relays to indicate full charge, overload, non uniform cable tension and general objectives.
- Cabin display output.
- HOLD function to inhibit meditions when the lift is moving.
- Selectable analogic output: 0-10V or 4-20mA

USER INTERFACE

- Very easy configuration with 3 control keys.
- 5 digits display with indicators for:
  - Alarms situation.
  - HOLD input situation.
  - Cable tension (numeric or 6 levels toolbar).
  - Configurated sensors number.
  - Measure units.

OTHER CHARACTERISTICS

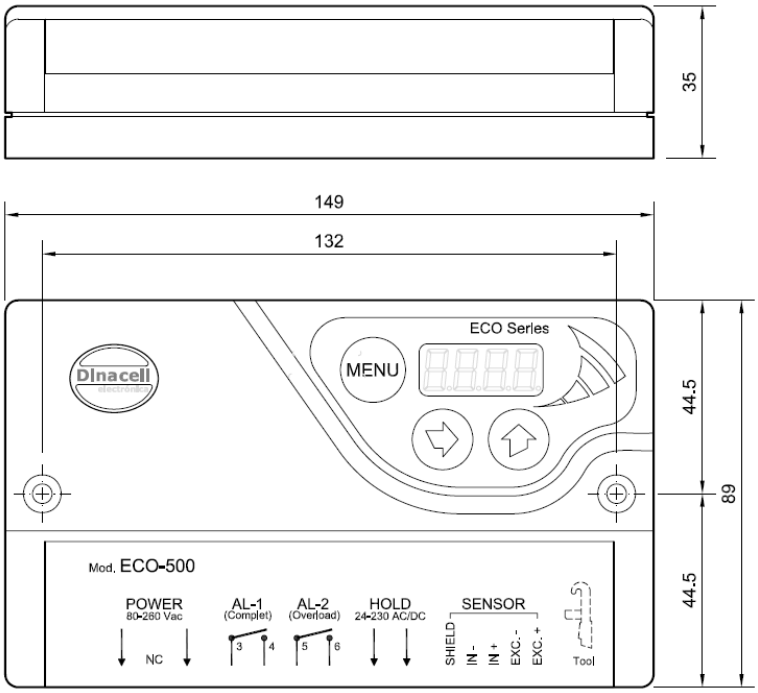
- Lift chain compensation function.
- Cortocircuitable power supply: no need to replace any fusible

Compatible Dinacell sensors: SWK, SWR, TCA-800 , RTM, RTM2 and LCA

Technical Characteristics

Power Supply	80-260 Vac 50-60Hz	Relay Contacts (Maximum Voltage/Stream Energy)	250 V
Maximum Energy Consumption	6 W		3 A
Accuracy	0.1 5 %	HOLD input Voltage	260 Vac or 24 Vdc
Analog Output Accuracy	0.5% F.S.	Frame	Fireproof Plastic V0 IP-50

ECO-500



Dimensions in mm.

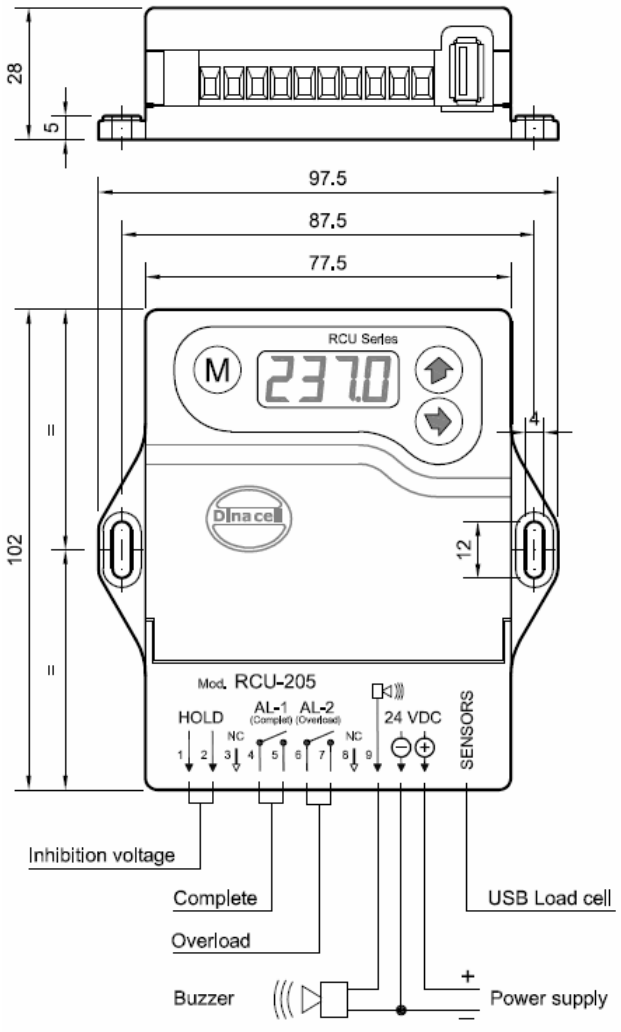
ECO-500 is a measuring device that controls all kind of weighings (in steel ropes, under cabin cells….)

- Device specially designed for elevators.
- Low energy consumption.
- Chain compensation.
- Adjustable without a known weight.
- Power for up to eight load cells (16 in a TCA model).
- Keyboard digital programming.
- Four digits display.
- Two alarms with display (programmable rest state).
- Weight precision of 0.1%.

Technical Characteristics

Power Supply	Minimum	80V	Relay Contact Voltage Intensity	3 A	
	Maximum	260V	Hold Signal Level (AC/DC)	Minimum	24V
Maximum Energy Consumption	2 W			Maximum	230V
Relay Contact Voltage	Minimum	12V	Load Cell Excitation Voltage	5V	
	Maximum	250V	Frame	Fireproof Plastic V0 IP-50	

RCU-205



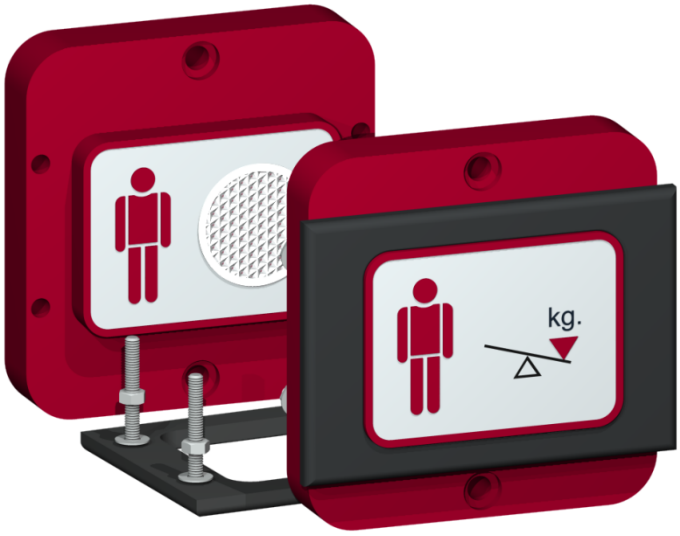
RCU-205 is a weight limit measuring device

- Device developed especially for elevators
- Low energy consumption
- Chain compensation
- Possible adjustment without weight
- Power for up to eight load cell (16 if the model is TCA)
- Device valid for all weighting modes (cable, under cabin…)
- Digital programming via keyboard
- Four digits display
- Two alarms with relay (programmable relay state).
- Weight precision of 0.1 %
- Very low cost device

Electric Characteristic

Power Supply	24 VDC
Energy Consumption	2 W
Relay Contact Voltage	250 V
Relay Contact Current	3 A
Hold Signal (AC/DC)	24 - 230 V
Load Cell Excitation Voltage	3.3 V
Protection Class	IP-50

MBD & MBL



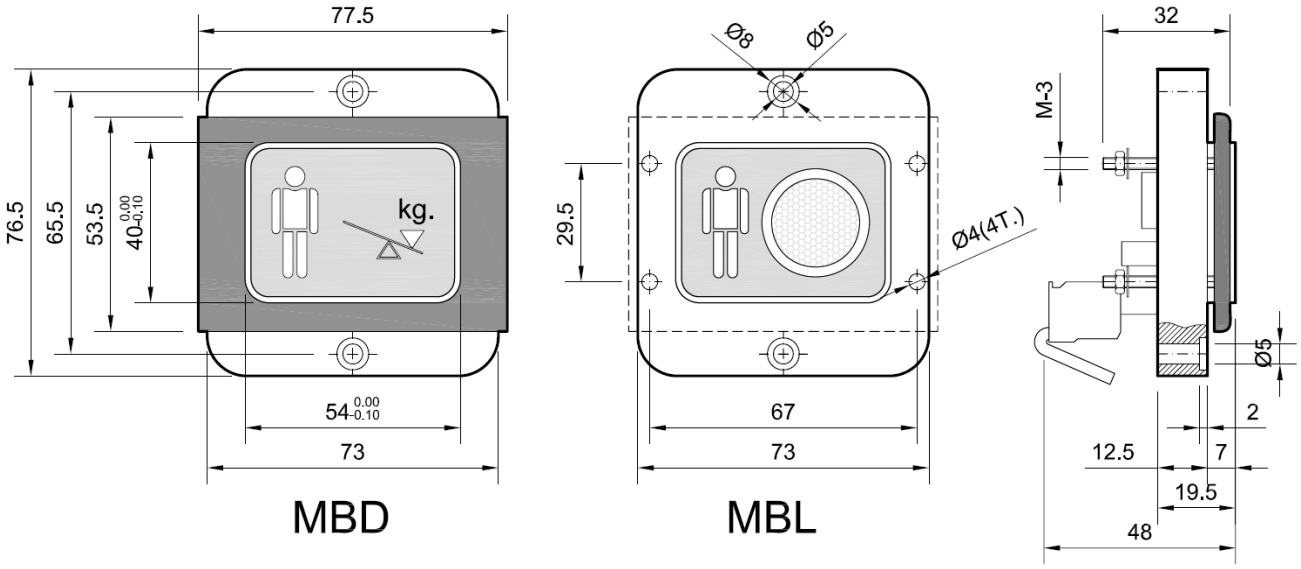
Cabin display designed to see the progressive charge (luminosity) in the elevator.

MBD visual and sound indicator.

MBL visual and sound indicator with emergency lighting.

- Visual indicator of full load.
- Visual and sound indicator of overload.
- 2 wire connections without polarity.
- Front panel made of stainless steel.

Dimensions in mm.

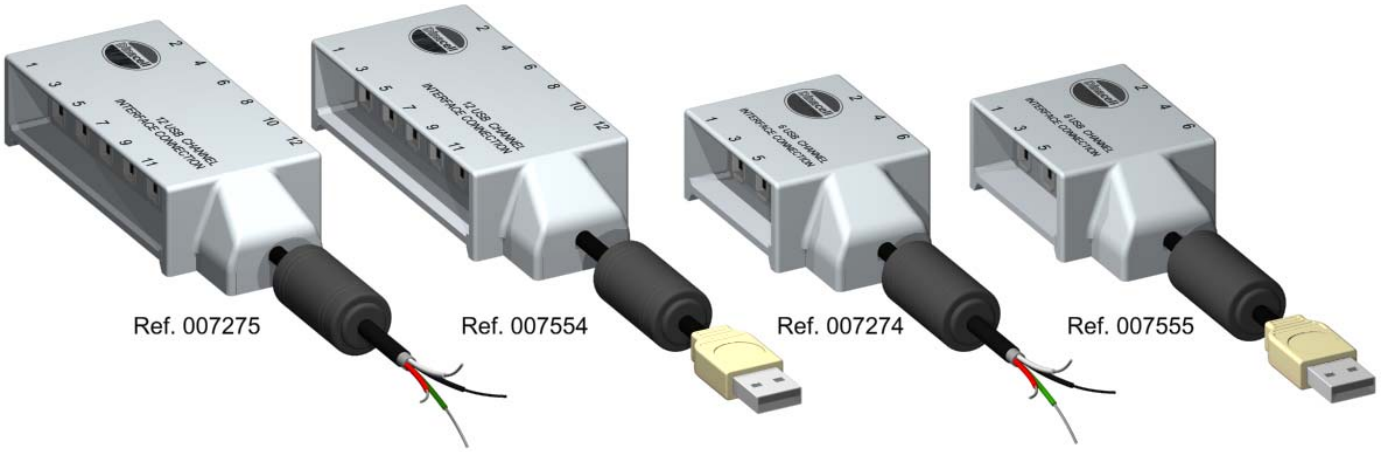


Remarks:

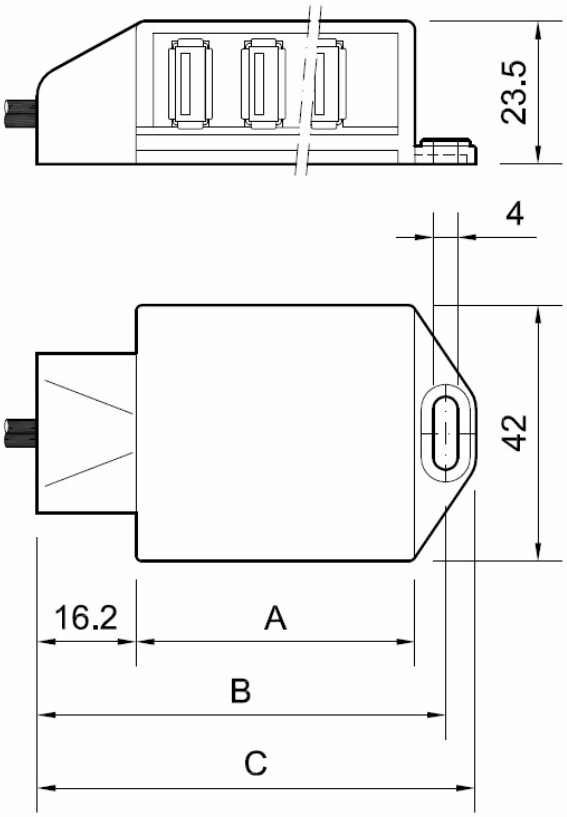
For other designs and special measures, contact with our commercial department.

- Installation:
  - Furred with the decorative panel (rear fixing).
  - Fixed with the black plastic frame supplied by Dinacell (available on request), sandwich type.

6-12 USB



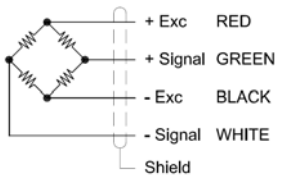
- You could order the sensors SWK or TCA800 independently or individually.
- You could create your stocks for the quick response to the clients.
- If one of the sensors has a problem, you could replace only the defective sensors and not all.
- Could have a chance to choose easily the cable length 0.5m or 2m as standard cable for the sensor SWK.
- Could easily connect sensors up to 12 sensors in one group.
- Simplify the numbers of items and could combine the number of sensors required on each application.
- Available to plug it to devices with 5 wires connection or USB connection.
- Available with 6 or 12 channels.



Dimensions In mm

	6 USB	12 USB
A	48	84
B	69	105
C	74	110

Wiring Diagram



Technical Characteristics

Temperature Range	-20..60 ºC
Protection Class	IP-50
Material	Fire Proof ABS
Cable Type	Flexible Ø4 4x0,22 mm^2
Cable Length	5 m + Ferrite
Cable end Termination	5 Wires
	USB

RTM Sensor

Sensor for testing and monitoring in elevator cables

- Fast and easy to install and uninstall without tools.
- Calibrated in the manufactory.
- Two sizes cover cables from 4 to 16 mm.
- Quick connection with analog USB connector.

Technical Characteristics

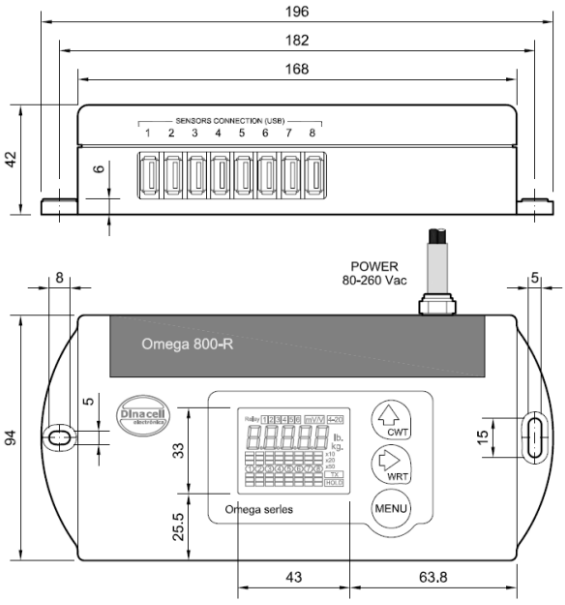
Tension of Excitement	5..12 V
Non Linearity	<0.15 % F.S.
Non Repeatibility	<0.15 % F.S.
Hysteresis	<0.05 % F.S.
Combined Error	<0.2 % F.S.
Input Resistance	350Ω ± 2
Output Resistance	350Ω ± 2
Insulation Resistance....(V. Test =100V	5.000x106
Maximum Work Load	150 % F.S.
Load Limit Without Lost of Characteristic	200 % F.S

Nominal Load for Ø of Rope

	RTM1 (Ø5 a 13mm.)							**RTM-2** (Ø13 a 20mm.)								
Ø (mm)	**Ø5**	**Ø6**	**Ø8**	**Ø9**	**Ø10**	**Ø11**	**Ø12**	**Ø13**	**Ø14**	**Ø15**	**Ø16**	**Ø17**	**Ø18**	**Ø19**	**Ø20**
Kg/rope (Nl)	200	250	350	400	450	550	650	800	950	1100	1250	1450	1600	1700	1800

Control Unit OMEGA-800R

- Device for wire rope tension control (WRT) adjustment and monitoring.
- It Gives the measure of the car weight (CWT) & counter weight (CTWT).
- 5 Digits LCD with 8 bars that show the deviation of each rope.

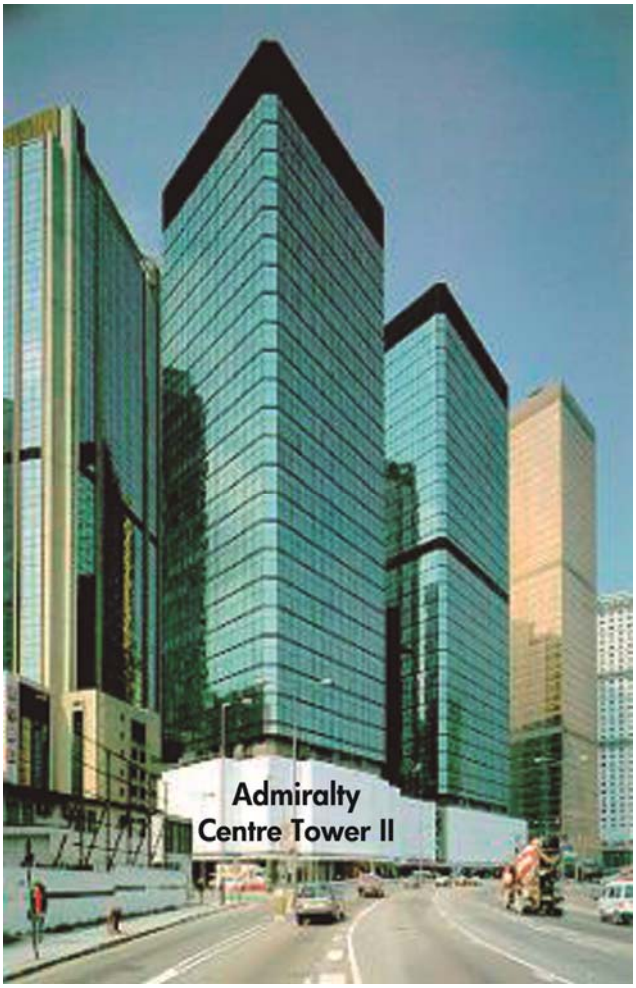


Technical Characteristics

Universal Power Supply	80-260 Vac
Load cell USB Inputs	8 sensors RTM
Maximum Current	130 mA
Nominal Frequency	50-60 Hz
Shortcircuitable Power Supply.	Fuse is not Replaceable.

Dinacell Subsidiaries

Dinacell Hong Kong



In a new global expansion scenery, Dinacell has the commitment to enhance the service to our Asian clients.
Since 2013, the Hong Kong subsidiary is offering a quick response to the demand supplying directly from its warehouse based in Hong Kong covering the Asian market and assisting our clients in their most suitable product for their needs.
The subsidiary brings the opportunity to have the highest European quality product with a short delivery time, with a competitive and more than satisfactory costumer relationship. Both are the sign of identity of Dinacell Electrónica.
Our new office is located in the building of Admiralty Centre-Tower II situated in the heart of Admiralty area Hong Kong Island.

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Dinacell Uruguay

Our company Dinacell Electrónica has established in 2013 a subsidiary in Montevideo (Uruguay), able to expand and promote our business in the American countries like Argentina, Brazil, Chile, Uruguay, Mexico and other countries from MERCOSUR.
Dinacell Uruguay subsidiary will also cover up the demand and the logistic supply of the materials to all Latin American countries.

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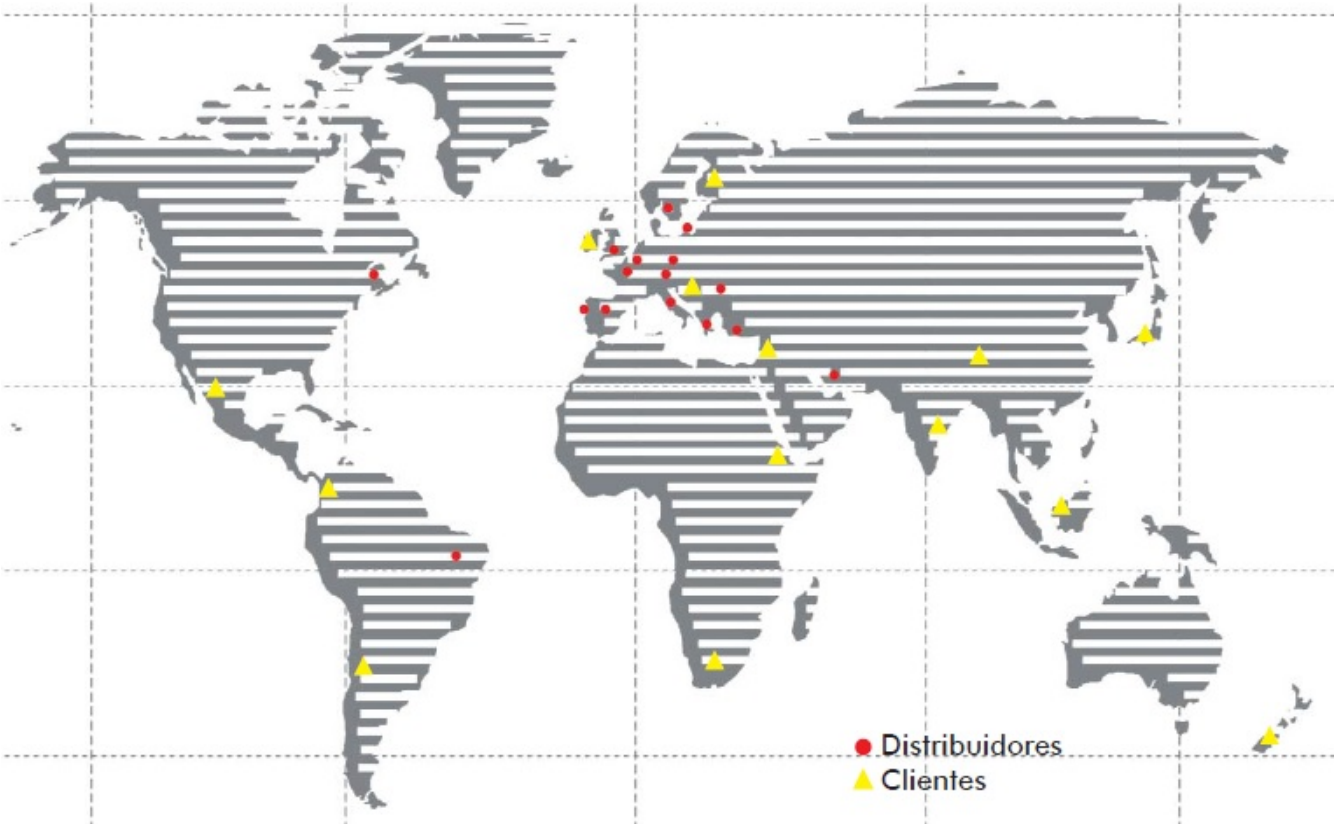

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