



## PRODUCTS GUIDE

LOAD CELLS  
MOUNTING ACCESSORIES  
WEIGHING INDICATORS





## UTILCELL

### ACKNOWLEDGED WORLDWIDE BRAND NAME IN WEIGHING

#### LOAD CELLS – MOUNTING ACCESSORIES – WEIGHING INDICATORS

Leaders in the domestic load cell market and one of the five main manufacturers in the world.

UTILCELL arranges and sends shipments in five continents, with a direct regular supply to over sixty countries.

The headquarters are located in Barcelona, with local offices in several countries and an extensive worldwide distribution network.



#### MANUFACTURER'S GUARANTEE

- 45 years of experience and more than 2,000,000 units installed worldwide
- High production capacity
- Extensive product range. Complete weighing solution from 0.3 kg to 600 t
- Custom-made designs
- Quality Management System certified according to ISO 9001
- Manufacturing in accordance with international standards OIML, NTEP, VCAP, GOST, MID, EN 45501, EN 1090, CE, ATEX, FM, IECEx, etc.

#### SECTORS OF APPLICATION

- Chemical & pharmaceutical industry
- Food industry
- Agricultural & livestock sectors
- Steel, cement & plastic industry
- Packaging machinery
- Waste treatment & renewable energy
- Transport sector

#### MANUFACTURING QUALITY

- Total reliability and product homogeneity for the most demanding environments
- Top quality raw materials selected in collaboration with the main manufacturers throughout the world
- 100% production control
- Each unit is individually tested under load conditions and inside climatic chambers at various temperatures
- Network instrumentation to guarantee complete production traceability

#### UTILITIES AND BENEFITS

- Control of the reception and stocking of raw materials
- Control of the production process
- Control of filling, packing & palletizing
- Improvement of efficiency & batch repeatability
- Improvement of traceability & quality control
- Improvements in safety & limiting of overloadings
- Improvement of productivity & reduction of losses



# LOAD CELL SELECTION BY APPLICATION

## APPLICATIONS

## MODELS



SINGLE POINT PLATFORM  
SCALES



4-CELLS  
PLATFORM SCALES



LIGHT VEHICLE  
WEIGHBRIDGES,  
AXLE WEIGHING



TRUCK SCALES



PACKING AND FILLING  
MACHINES



PRICE COMPUTING  
SCALES



MEDICAL SCALES



MIXERS, TANKS  
AND HOPPERS



HIGH CAPACITY  
WEIGHING SYSTEMS



# LOAD CELL SELECTION BY APPLICATION

## APPLICATIONS

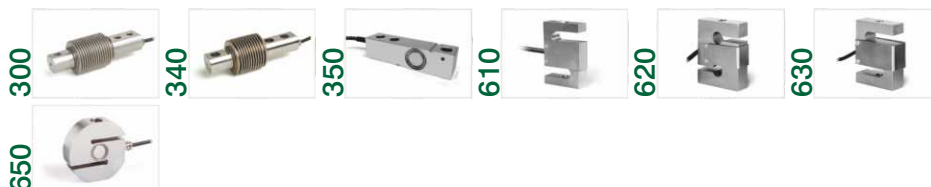
## MODELS



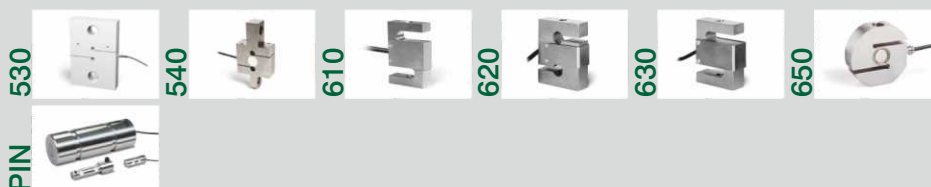
CHECK WEIGHERS



HYBRID OR SCALE  
CONVERSIONS



CRANE SCALES,  
TENSION TEST  
MACHINES



HOPPERS AND SILOS  
IN HIGH TEMPERATURE  
ENVIRONMENTS FOR  
THE METAL INDUSTRY



APPLICATIONS THAT  
REQUIRES HIGH IP  
PROTECTION



HIGH TEMPERATURE

HT  
APPLICATIONS  
REQUIRING  
WORKING IN HIGH  
TEMPERATURE  
ENVIRONMENTS



ATEX CERTIFICATIONS  
FOR WORKING IN  
POTENTIALLY EXPLOSIVE  
ATMOSPHERES  
OF GAS AND DUST



WEIGHING  
INDICATORS

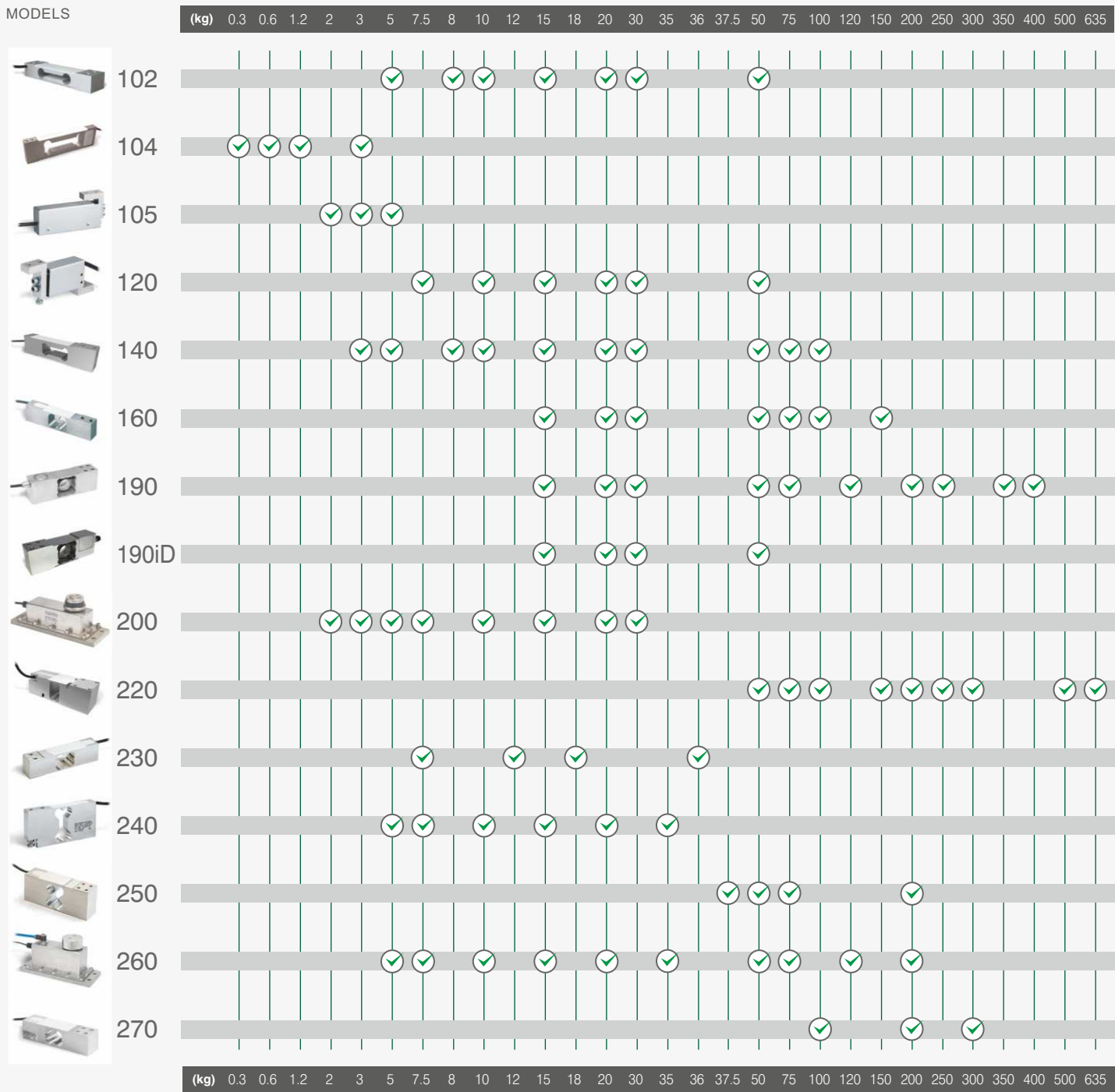


# LOAD CELL SELECTION

## BY CAPACITY

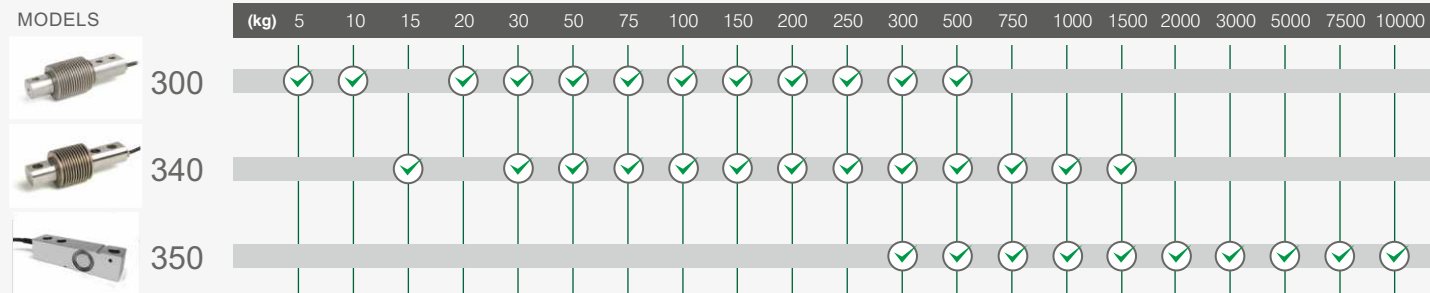
### PLATFORM CELLS

MODELS



### FLEXION AND SHEAR BEAMS

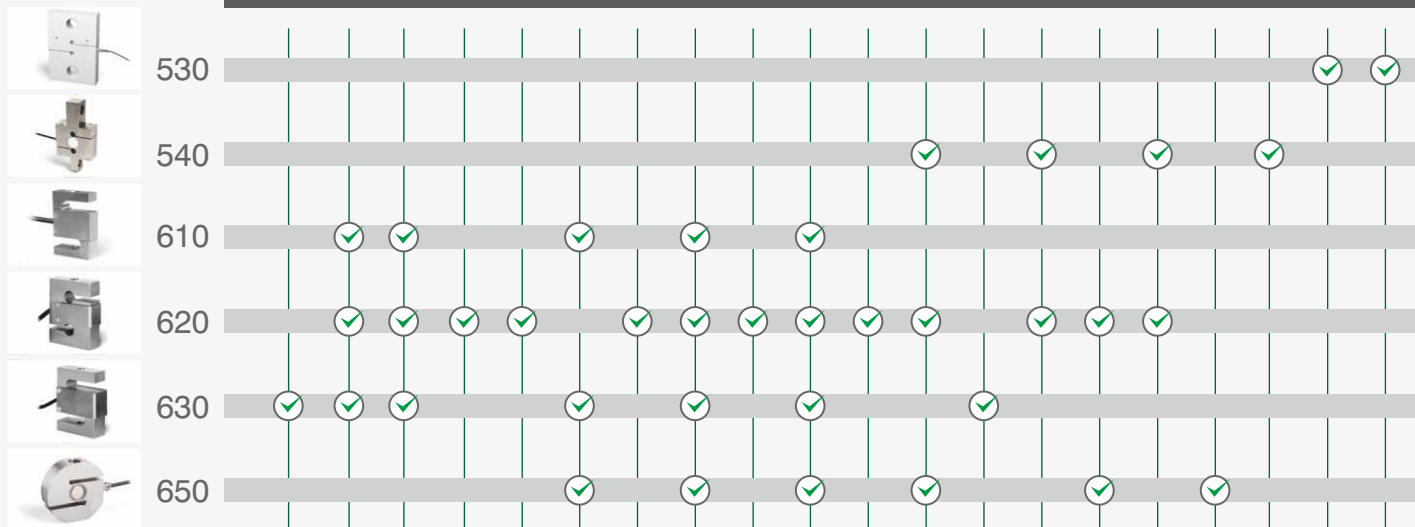
MODELS



# LOAD CELL SELECTION BY CAPACITY

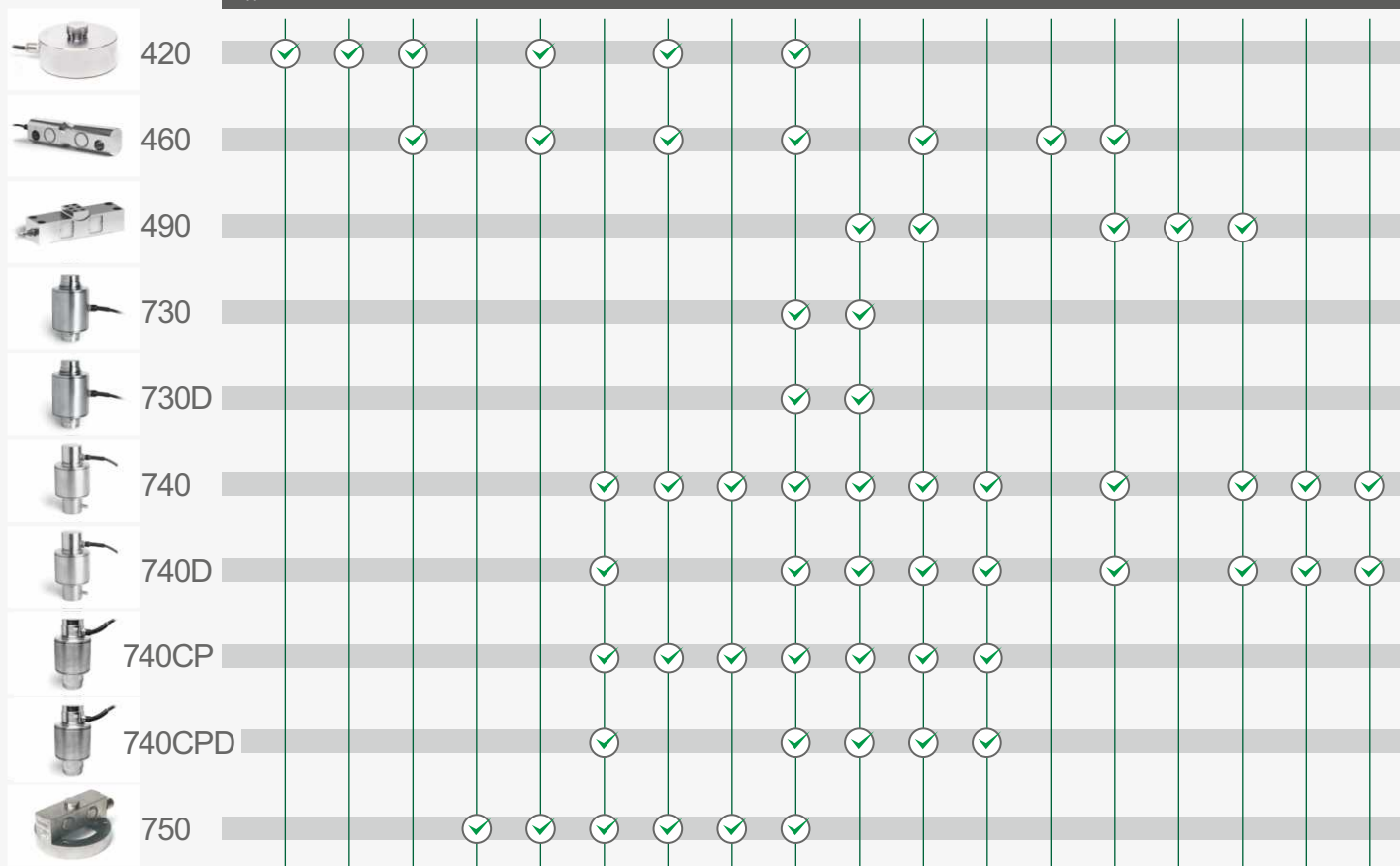
## TENSION OR COMPRESSION

MODELS

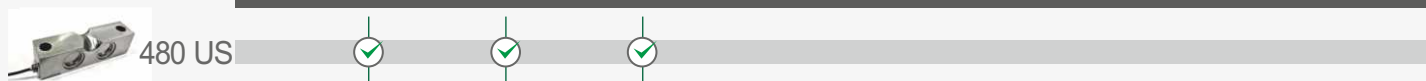


## COMPRESSION OR SHEAR BEAMS

MODELS



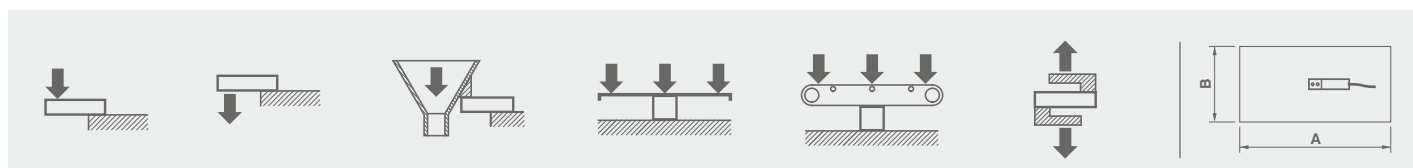
MODELS



# PLATFORM CELLS

## APPLICATIONS

- Platform scales, medium and high capacity
- Price computing scales
- Medical scales
- Bench and hopper weighing
- Counting scales
- Packing and filling machines
- Check weighers
- Multihead weighers
- Textile machines
- Bagging scales



### MOD. 102

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66

| Capacity (kg) | Plat. Ax B (mm) |
|---------------|-----------------|
| 5 - 8 - 10    | 350 x 350       |
| 15 - 20       | 350 x 350       |
| 30 - 50       | 350 x 350       |



### MOD. 104

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66

| Capacity (kg) | Plat. Ax B (mm) |
|---------------|-----------------|
| 0.3 - 0.6     | 200 x 200       |
| 1.2 - 3       | 200 x 200       |



### MOD. 105

#### Characteristics:

- 3000 Div.
- Double bending beam
- Beryllium-Copper alloy

| Capacity (kg) | Plat. Ax B (mm) |
|---------------|-----------------|
| 2 - 3         | 150 x 150       |
| 5             | 250 x 250       |



### MOD. 120

#### Characteristics:

- 4000 Div.
- Double bending beam
- Beryllium-Copper alloy

#### Certificates:

| Capacity (kg) | Plat. Ax B (mm) |
|---------------|-----------------|
| 7.5           | 400 x 300       |
| 10 - 15       | 400 x 400       |
| 20 - 30 - 50  | 400 x 400       |



### MOD. 140

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66

#### Certificates:

| Capacity (kg)  | Plat. Ax B (mm) |
|----------------|-----------------|
| 3 - 5 - 8 - 10 | 400 x 400       |
| 15 - 20 - 30   | 400 x 400       |
| 50 - 75 - 100  | 400 x 400       |



### MOD. 160

#### Characteristics:

- 3000 Div.
- Double bending beam
- Nickel-plated steel
- IP 66
- HT option for high temperature

#### Certificates:

| Capacity (kg) | Plat. Ax B (mm) |
|---------------|-----------------|
| 15 - 20 - 30  | 500 x 500       |
| 50 - 75       | 500 x 500       |
| 100 - 150     | 500 x 500       |



# PRODUCTS

## LOAD CELLS – MOUNTING ACCESSORIES – WEIGHING INDICATORS



### MOD. 190

#### Characteristics:

- Double bending beam
- 190 a:** 4000 Div. Nickel-plated steel. Silicone sealing, IP 66
- 190 i:** 3000 Div. Fully stainless steel. Hermetically sealed, Fully welded, IP 68 / IP 69K
- Digital Stainless Steel version optional



#### Certificates:

| Capacity (kg) | Plat. AxB (mm) |
|---------------|----------------|
| 15 - 20 - 30  | 600 x 600      |
| 50 - 75 - 120 | 600 x 600      |
| 200 - 350     | 600 x 600      |
| 250 - 400     | 800 x 800      |



### MOD. 220

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 67



#### Certificates:

| Capacity (kg)   | Plat. AxB (mm) |
|-----------------|----------------|
| 50 - 75 - 100   | 600 x 600      |
| 150 - 200 - 250 | 600 x 600      |
| 300 - 500 - 635 | 600 x 600      |



### MOD. 230

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66

| Capacity (kg) | Plat. AxB (mm) |
|---------------|----------------|
| 7.5 - 12      | 400 x 400      |
| 18 - 36       | 400 x 400      |



### MOD. 240

#### Characteristics:

- 4000 Div.
- Double bending beam
- Aluminium alloy
- IP 66



#### Certificates:

| Capacity (kg) | Plat. AxB (mm) |
|---------------|----------------|
| 5 - 7.5 - 10  | 500 x 500      |
| 15 - 20 - 35  | 500 x 500      |



### MOD. 250

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66



#### Certificates:

| Capacity (kg) | Plat. AxB (mm) |
|---------------|----------------|
| 37.5 - 50     | 600 x 600      |
| 75 - 200      | 500 x 500      |



### MOD. 270

#### Characteristics:

- 3000 Div.
- Double bending beam
- Aluminium alloy
- IP 66

| Capacity (kg) | Plat. AxB (mm) |
|---------------|----------------|
| 100 - 200     | 400 x 400      |
| 300           | 400 x 400      |

## Dynamic Weighing

### CHARACTERISTICS

- Faster settling time
- Higher weighing speeds
- Fluid damping
- Increase load cell life
- Reduction of vibrations



### MOD. 200

#### Characteristics:

- Double bending beam
- Stainless steel housing
- Oil damped
- IP 65

| Capacity (kg)     | Plat. AxB (mm) |
|-------------------|----------------|
| 2 - 3             | 150 x 150      |
| 5                 | 250 x 250      |
| 7.5               | 300 x 300      |
| 10 - 15 - 20 - 30 | 400 x 300      |



### MOD. 260

#### Characteristics:

- 3000 Div.
- Double bending beam
- Stainless steel housing
- Oil damped
- IP 68



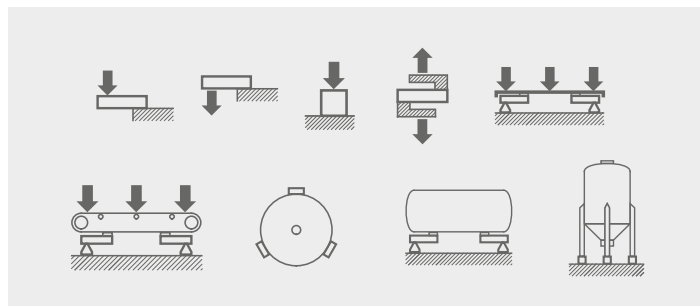
#### Certificates:

| Capacity (kg)       | Plat. AxB (mm) |
|---------------------|----------------|
| 5 - 7.5 - 10        | 500 x 500      |
| 15 - 20 - 35        | 500 x 500      |
| 50 - 75 - 120 - 200 | 600 x 600      |

### FLEXION AND SHEAR BEAMS

#### APPLICATIONS

- Hybrid or scale conversions
- 4-cell platform scales
- Silos, tanks and hopper scales
- Industrial applications in the harshest environments



#### MOD. 300

##### Characteristics:

- 3000 Div.
- Double bending beam
- Fully stainless steel
- Hermetically sealed, fully welded
- IP 68 / IP 69K
- HT option for high temperature
- Option: 6000 Div

##### Certificates:

Capacity (kg)

5 - 10 - 20 - 30 - 50 - 75 - 100  
150 - 200 - 250 - 300 - 500



##### Accessories



30901 + RO12x1.75



30904 + 30903  
From 5 to 50 kg  
30905 + 30903  
From 75 to 300 kg  
30906 + 30903  
500 kg



30907



#### MOD. 340

##### Characteristics:

- 3000 Div.
- Double bending beam
- Fully stainless steel
- Hermetically sealed, fully welded
- IP 68 and IP69K

##### Certificates:

Capacity (kg)

15 - 30 - 50 - 75 - 100 - 150 - 200  
250 - 300 - 500 - 750 - 1000 - 1500



##### Accessories



34905 + RO12x1.75



30904 + 34903  
From 15 to 50 kg  
30905 + 34903  
From 75 to 300 kg  
34906 + 34903  
From 500 to 750 kg



35901



FT12i



#### MOD. 350

##### Characteristics:

- 3000 Div.
- Shear beam
- 350 i: Inox-Hermetic IP 68/IP 69K
- 350 a: Inox-Silicone IP 66
- 350 n: Nickel-Silicone IP 66
- 350T Version optional
- HT option for high temperature

##### Certificates:

Capacity (kg)

300 - 500 - 750 - 1000 - 1500 - 2000  
3000 - 5000 - 7500 - 10000



##### Accessories



35901  
From 0.3 to 2 t



FT12i  
From 0.3 to 2 t



35913  
From 0.3 to 2 t



35917i  
From 3 to 5 t



35916i  
For 350T Version



35902  
From 0.3 to 2 t  
35903  
From 3 to 5 t

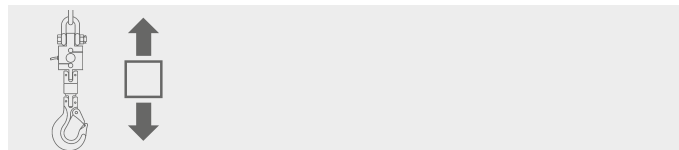


35909 + 35911  
From 0.3 to 2 t  
35910 + 35912  
From 3 to 5 t  
35918 + 35919  
From 7.5 to 10 t

### TENSION

#### APPLICATIONS

- Crane scales
- Tension test machines



#### MOD. 530

##### Characteristics:

- 2000 Div.
- Tension
- Nickel-plated steel
- IP 66

Capacity (t)

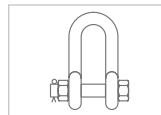
20 - 25

#### Accessories



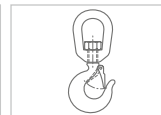
100003

From 20 to 25 t



108003

From 20 to 25 t



110003

From 20 to 25 t



#### MOD. 540

##### Characteristics:

- 3000 Div.
- Tension
- Nickel-plated steel
- IP 66

Capacity (t)

2 - 3 - 6 - 10

#### Accessories



549001

From 2 to 3 t

549002

From 6 to 10 t

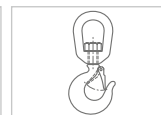


549003

From 2 to 3 t

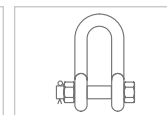
549004

6 t



108002

10 t



110001

From 2 to 3 t

110002

6 t

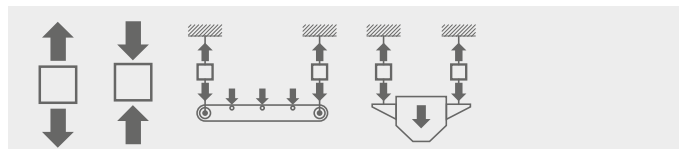
110004

10 t

### TENSION OR COMPRESSION

#### APPLICATIONS

- Crane scales
- Tanks, hoppers & conveyor belt scales
- Hybrid or scale conversions
- Test machines



#### MOD. 610

##### Characteristics:

- 3000 Div.
- Tension - Compression
- Nickel-plated steel
- IP 67

Capacity (kg)

50 - 100 - 250  
500 - 1000

#### Accessories



TE10x1.5

From 50 to 100 kg

TE12x1.75

From 250 to 1000 kg



RO10x1.5

From 50 to 100 kg

RO12x1.75

From 250 to 1000 kg



#### MOD. 620

##### Characteristics:

- 3000 Div.
- Tension - Compression
- Nickel-plated steel
- IP 67

Capacity (kg)

50 - 100 - 150 - 200 - 300  
500 - 750 - 1000 - 1500  
2000 - 3000 - 5000 - 6000

#### Accessories



TE12x1.75

From 50 to 1000 kg

TE16x2

From 1500 to 2000 kg

TE24x2

From 3000 to 6000 kg



RO12x1.75

From 50 to 1000 kg

RO16x2

From 1500 to 2000 kg

RO24x2

From 3000 to 6000 kg

# PRODUCTS

## LOAD CELLS – MOUNTING ACCESSORIES – WEIGHING INDICATORS



### MOD. 630

#### Characteristics:

- 3000 Div.
- Tension - Compression
- Nickel-plated steel
- IP 67

#### Certificates:

| Capacity (kg)                            |
|------------------------------------------|
| 25 - 50 - 100 - 250<br>500 - 1000 - 2500 |



#### Accessories



#### TE8x1.25

From 25 to 100 kg

#### TE12x1.25

From 250 to 1000 kg

#### TE20x1.5

2500 kg



#### RO8x1.25

From 25 to 100 kg

#### RO12x1.25

From 250 to 1000 kg

#### RO20x1.5

2500 kg



### MOD. 650

#### Characteristics:

- 3000 Div. (\*2000 Div.)
- Tension - Compression
- Fully stainless steel
- Hermetically sealed. Fully welded. IP 68
- HT option for high temperature

#### Certificates:

| Capacity (kg)                           |
|-----------------------------------------|
| 250* - 500 - 1000 - 2000<br>5000 - 7500 |



#### Accessories



#### TE12x1.75

From 250 to 500 kg

#### TE20x1.5

From 1000 to 2000 kg

#### TE24x2

From 5000 to 7500 kg



#### RO12x1.75

From 250 to 500 kg

#### RO20x1.5

From 1000 to 2000 kg

#### RO24x2

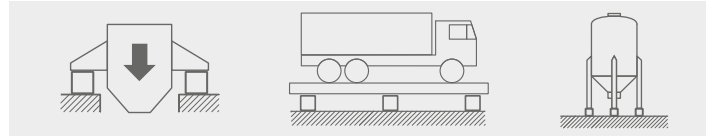
From 5000 to 7500 kg

## COMPRESSION OR SHEAR BEAMS

### APPLICATIONS

- Truck scales
- Axle weighing

- Tanks and vessels
- Silos



### MOD. 420

#### Characteristics:

- 2000 Div.
- Compression
- Fully stainless steel
- Hermetically sealed. Fully welded. IP 68 (EN 605629) and IP69K (ISO 20653)
- Acc. Zinc-plated (inox. optional)
- HT option for high temperature

#### Certificates:

| Capacity (t)             |
|--------------------------|
| 1-2.5 - 5 - 10 - 20 - 30 |



#### Accessories



#### 42901

From 1 to 10 t

#### 42902

From 20 to 30 t



### MOD. 460

#### Characteristics:

- 3000 Div.
- Double shear beam
- Fully stainless steel
- Hermetically sealed. Fully welded. IP 68 (EN 605629) e IP69K (ISO 20653)
- Acc. Zinc-plated (inox. optional)
- HT option for high temperature
- Option: Certified mounting kit EN 1090

#### Certificates:

| Capacity (t)                      |
|-----------------------------------|
| 5 - 10 - 20 - 30 - 50<br>75 - 100 |



#### Accessories



#### 46901

From 5 to 20 t

#### 46902

From 30 to 50 t

#### 46903

From 75 to 100 t



#### 46902CG

50 t

#### 46903CG

100 t



### MOD. 480 US

#### Characteristics:

- Double shear beam
- 10000 Div NTEP class IIIIL
- 480n: Nickel-Silicone IP 66
- 480i: Inox-Hermetic IP 68/IP 69K

#### Certificates:

| Capacity (lb)   |
|-----------------|
| 25k - 50k - 75k |





### MOD. 490

#### Characteristics:

- Double shear beam
- Nickel-plated steel
- IP 67
- High temperature (HT)

#### Capacity (t)

40 - 50 - 100 - 150 - 200



### MOD. 730

#### Characteristics:

- 4000 Div. (5000 Div.\*)
- Selfcentering column
- Fully stainless steel
- Lightning protection
- Hermetically sealed.
- Fully welded. IP 68 / IP 69K
- Digital version\* optional and HT for high temperature

#### Certificates:

#### Capacity (t)

30 - 40



#### Accessories



73902

Mod. 730 30 t

73903

Mod. 730 40 t + 730D



### MOD. 740

#### Characteristics:

- 4000 Div. (\*1000 Div.)
- Selfcentering column
- Fully stainless steel
- Lightning protection
- Hermetically sealed.
- Fully welded. IP 68 / IP 69K
- Digital version optional and HT for high temperature

#### Certificates:

#### Capacity (t)

15 - 20 - 25 - 30 - 40 - 50 - 60  
100\* - 200\* - 400\* - 600\*



#### Accessories



74901 + 74902 + 74903

From 15 to 50 t

74905 + 74902 + 74903

60 t



74901

From 15 to 50 t

74905

60 t

74904

From 100 to 200 t

74911

400 t

74912

600 t



74907

From 15 to 50 t

74908

60 t

74909

From 100 to 200 t

74910

400 t

74914

600 t



### MOD. 740 CP

#### Characteristics:

- 4000 Div.
- Selfcentering column
- Fully stainless steel
- Lightning protection
- Hermetically sealed.
- Fully welded. IP 68 / IP 69K
- Digital version optional and HT for high temperature

#### Certificates:

#### Capacity (t)

15 - 20 - 25 - 30 - 40 - 50 - 60



#### Accessories



74901CPN

74905CPN



### MOD. 750

#### Characteristics:

- 3000 Div.
- Double shear beam
- Hermetically sealed. Fully welded. IP 68
- 750 a: Epoxy painted
- 750 i: Fully stainless steel

#### Certificates:

#### Capacity (t)

7.5 - 10 - 15 - 20 - 25 - 30



#### Accessories



75905 + 75903

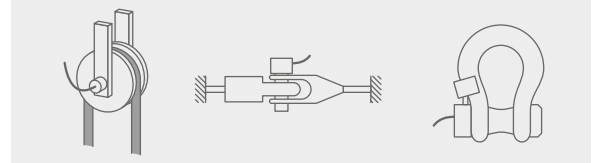


75906

### CUSTOM MADE LOAD PIN

#### APPLICATIONS

- Overload protection
- Cranes and lift equipment
- Load limiting in conveyor systems
- On-board weighing in mobile machinery
- Pivots and shackles
- Winches and mooring lines



#### PIN

##### Characteristics:

- Custom dimensioning load pin
- Double shear beam
- Stainless steel
- IP 66
- Optional: IP 68, integrated amplifier, connector and HT for high temperature

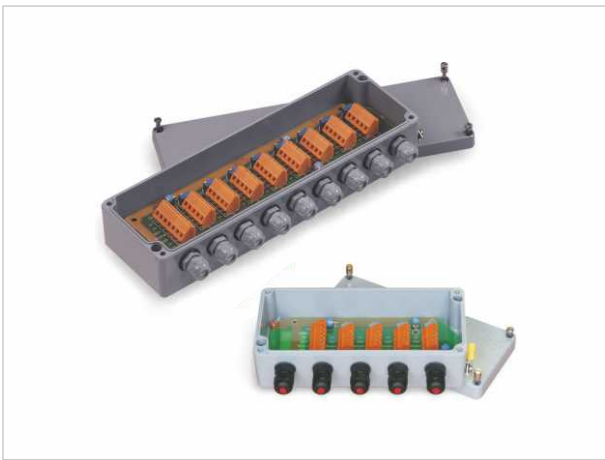
##### Certificates:

Capacity

According to client design



### JUNCTION BOX



#### CHARACTERISTICS:

- Allows the connectivity of up to 4 or 8 load cells to the weighing indicator.
- Available in plastic or aluminium.
- Corner trimming potentiometers.
- Version with Surge arrestors for lightning protection.
- Available ATEX version Zone 0-1-2 (gas) and 20-21-22 (dust).

#### JUNCTION BOX

|       |                                                                                                                                                |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 89053 | Junction box up to 4 load cells plastic hermetic                                                                                               |
| 89128 | Junction box up to 4 load cells over voltage protected- aluminium hermetic                                                                     |
| 89093 | Junction box up to 4 load cells aluminium hermetic in ATEX  |
| 89002 | Junction box up to 8 load cells plastic hermetic                                                                                               |
| 89068 | Junction box up to 8 load cells over voltage protected- aluminium hermetic                                                                     |
| 89092 | Junction box up to 8 load cells aluminium hermetic in ATEX  |
| 89090 | Digital Junction box up to 8 load cells aluminium hermetic                                                                                     |

#### JUNCTION CIRCUITS (Circuit Board without box)

|       |                                                     |
|-------|-----------------------------------------------------|
| 89069 | Junction circuit board up to 4 load cells           |
| 89129 | Junction circuit board up to 4 load cells protected |
| 89070 | Junction circuit board up to 8 load cells           |
| 89071 | Junction circuit board up to 8 load cells protected |

### MATRIX II HIGH PERFORMANCE ALPHANUMERIC WEIGHING INDICATOR



#### CHARACTERISTICS:

- Approved according to OIML R76 and EN 45501, single-range or multi-range
- Graphic monochrome display 240x128 pixels
- Single Scale connection or Double Scale connection
- Time & Date
- Connectivity: two RS-232 ports, one RS-485 port, one free port to extend the indicator to several fieldbuses
- Universal power supply 100/240 V AC, 50/60 Hz and 10/24 V DC.
- Multi-range
- Configurable ticket
- Metrological sealing by software or mechanical
- Flash memory for software update

#### SELECTABLE APPLICATIONS:

##### ▪ Weighbridge:

Software for management of vehicle entrance and exit in plants, database (registration numbers, products, customers/suppliers...) as well as the printing tickets and listings  
Multilingual: english, french, german, spanish, portuguese and czech

##### ▪ Industrial:

Weigh-Tare. Piece counting. Weight accumulation  
Programmable pre-fixed tares

##### ▪ Dosing

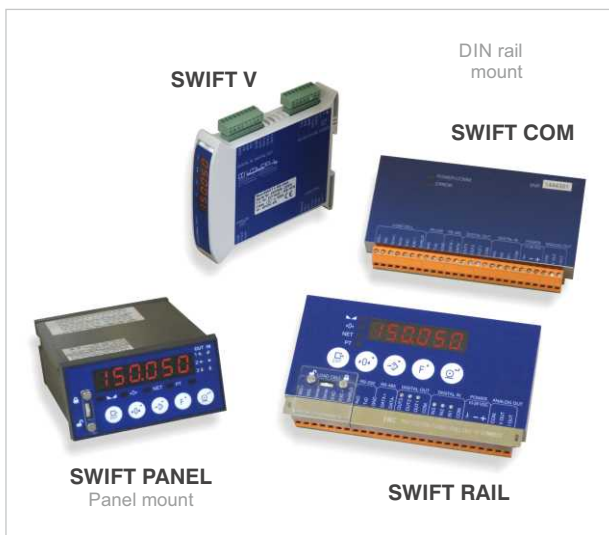
#### INTERFACE FOR ANALOG LOAD CELLS:

- A/D 24 bits; 16.000.000 internal divisions; 100.000 external divisions. Power up to 8 load cells (350  $\Omega$ ) or up to 16 load cells (700 $\Omega$ )
- Milivolt pre-calibration: Allows start-up without calibration masses

#### INTERFACE FOR DIGITAL LOAD CELLS:

- Power up to 16 digital load cells and 1200 m distance
- Digital pre-calibration: Allows start-up without calibration masses

### SWIFT WEIGHING INDICATOR & HIGH SPEED TRANSMITTER



#### CHARACTERISTICS:

- Approved according to OIML R76 and EN 45501, 6000 div at 0.5  $\mu$ V/div
- Display 6 digit 10mm LED
- High resolution: 24bits ADC with 16.000.000 internal divisions and 500.000 external divisions
- High speed reading: 2400 measures per second
- Configuration and calibration by keyboard or computer
- Calibration by masses or in mV/V, allowing the start-up without calibration masses entering the load cell capacity and sensitivity in mV/V
- Selectable digital filters
- Calibration sealing by software or mechanically
- Power up to 8 load cells (350  $\Omega$ ) or up to 16 load cells (700  $\Omega$ )
- Communication RS-232 & RS-485 (Modbus RTU y ASCII) and optional Profibus, Profinet or Ethernet/IP
- Analogue output configurable at 0/5 V, 0/10 V, 0/20 mA y 4/20 mA, with galvanic isolation
- 3 Digital opto-isolated inputs
- 3 or 4 Digital outputs to relay
- Power supply 10 - 28 V DC.

#### APPLICATIONS:

- Process weighing and level measurement in tanks & silos
- Filling and dosing machines, by weight, in charge or discharge
- Check-weigher scales
- Animal weighing scales
- Test machinery
- High speed dynamic sorting scales
- Multihead scales
- PC/PLC weight transmission
- Multiple weight indicators connection in the same bus
- Crane overload control

#### VERSIONS:

- **SWIFT RS** Serial outputs
- **SWIFT RS + ANALOG** Serial and analogue outputs
- **SWIFT PROFIBUS** Profibus version
- **SWIFT PROFINET** Profinet version
- **SWIFT ETHERNET/IP** Ethernet/IP version

### SMART WEIGHING INDICATOR



#### CHARACTERISTICS:

- OIML R76 & EN 45501 Approved, single or Multirange, 6000 div at 0,6  $\mu$ V/div.
- Display 7 digit 20mm LED high bright.
- High resolution: 24 bits A/D, 16.000.000 internal divisions; 100.000 external divisions.
- Friendly configuration and calibration menu.
- Calibration by Masses or in mV/V, allowing the start-up without calibration masses entering the load cell capacity and sensitivity in mV/V.
- Calibration sealing by software or mechanically
- Power up to 4 load cells (350  $\Omega$ ) or up to 8 load cells (700  $\Omega$ ).
- RS-232 serial port for PC, printer or remote display connection.
- Mounting: bench/wall mounting kit.
- External Power supply 100-240V AC 50/60 Hz.
- High electromagnetic interference protection using filters, ferrites and shields.
- Multi-range: for a dual range and dual division size.
- Standard Ticket or customized from PC.
- Linearity correction.

#### APPLICATIONS:

- Weight Indicator for industrial scales, platform scales, pallet-scales, truck scales
- Scales in food, chemical and pharma industries, with hermetic stainless steel version IP65
- Weighing Indicator for tanks and silos
- Piece counting and totalizations (accumulation of weights)
- Configurable as a weight indicator or as a remote display of other indicator
- Animal weighing / check-weigher

#### OPTIONS:

- Available **ATEX**  version Zone 2 (gas) and 21-22 (dust)
- Alibi Memory DSD legal-for-trade with half million weight registers
- 4 digital inputs
- 4 digital outputs
- Analogue output configurable at 0-5 V, 0-10 V, 0-20 mA, 4-20 mA
- External power supply of 12 V DC
- Additional communication RS-232 and RS-485

### SMART DIGITAL WEIGHING INDICATOR



#### CHARACTERISTICS:

- Approved on OIML R76 and EN 45501, Single Range or Multi-range
- Display 7 digit 20mm LED high bright.
- Configuration and adjustment by keyboard and/or PC Software
- Calibration by Masses or numerical. Allows to start up the scale without physical masses, using the digital load cells internal values
- Corner adjustment by PC software
- Calibration sealing by software or mechanically
- Connect up to 16 digital load cells model 740D or compatibles
- Communication RS-232 and USB to PC
- Communication RS-232 to a printer or repeater
- Communication MODBUS RTU and ASCII by serial ports or USB
- Mounting: bench/wall mounting kit
- External power supply 100-240 V AC 50/60 Hz
- High electromagnetic interference protection using filters, ferrites and shields
- Multi-range: for dual range and dual division size
- Standard Ticket or customized from PC
- Linearity correction

#### APPLICATIONS:

- Weight Indicator for industrial scales and truck scales
- Weight Indicator for Tanks and Silos
- Piece counting and Totalizations (accumulation of weights)
- Animal weighing / Checkweigher

#### OPTIONS:

- Alibi Memory DSD legal-for-trade, with more than half million weight registers
- 4 Digital inputs
- 4 Digital outputs
- Additional communication RS-232 and RS485

# PRODUCTS

## LOAD CELLS – MOUNTING ACCESSORIES – WEIGHING INDICATORS

### RD 60 REMOTE DISPLAY FOR WEIGHING



#### CHARACTERISTICS:

- Remote display for SMART, SMART DIGITAL, MATRIX II and SWIFT
- 7 digit weight LED 57 mm and 8 status LED
- IP 65 Stainless Steel enclosure
- Communication RS-232 & RS-485
- External Power supply: 230 ± 10% V AC 50/60 Hz 12 W
- Mounting hardware included

### DAT DIGITAL/ANALOG LOAD CELL TRANSMITTER

#### DAT 400

DIN rail mount



#### DAT 500

Panel mount

#### CHARACTERISTICS:

- Configuration and calibration by computer interface or via front panel keyboard
- Calibration by tension and/or by mass
- 2 optically-isolated logic Inputs
- 2 optically-isolated logic Outputs
- Selectable Digital filtering
- Auto zero and zero-tracking functions
- Linearity compensation
- Analog outputs: 0/5 V DC, 0/10 V DC, 0/20 mA and 4/20 mA
- Serial Outputs:  
RS-232, RS-422 or RS-485 with MODBUS RTU protocol.  
Option: PROFIBUS or DEVICENET (replace analog output)
- Up to 32 addressable units can be connected point to point by using the RS-485 serial output
- ABS enclosure

### DP100 WEIGHING INDICATOR



#### CHARACTERISTICS:

- High resolution: 20 bits A/D, 1.000.000 internal divisions
- Display 6 digits 25.4 mm LCD with LED backlight
- RS-232 serial port for PC or printer connection
- Load cell excitation at 5 V DC, power up to 4 load cells (350 Ω) or up to 8 load cells (700 Ω)
- Power supply: Adaptor of 9 V DC included or 5 batteries AA size
- Multi-range
- Animal weighing

# PRODUCTS

## LOAD CELLS – MOUNTING ACCESSORIES – WEIGHING INDICATORS

### SGA

ANALOG CONVERTER  
FOR LOAD CELLS



#### CHARACTERISTICS:

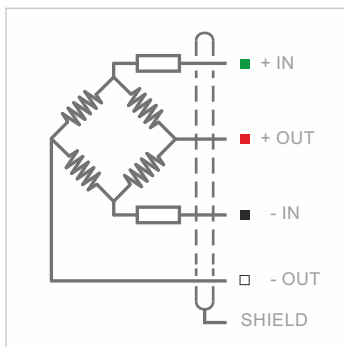
- User-selectable analogue output:  
 $\pm 10\text{ V}$ ,  $\pm 5\text{ V}$ ,  $0/10\text{ V}$ ,  $0/5\text{ V}$ ,  $0/20\text{ mA}$ ,  $4/20\text{ mA}$
- Power up to 4 load cells ( $350\ \Omega$ ) or up to 8 load cells ( $700\ \Omega$ )
- Gain adjustment for different load cell sensibilities
- Zero adjustment
- ABS enclosure with cable glands

#### VERSIONS:

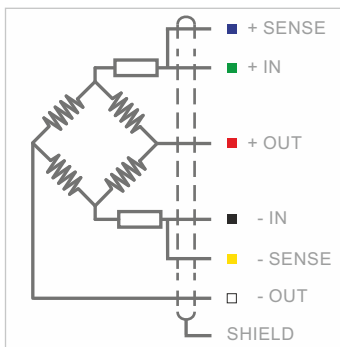
- **SGA/A** 110/230 V AC 50/60 Hz and 18/24 V DC
- **SGA/D** 18/24 V DC

## ELECTRICAL CONNECTION

#### 4 WIRES:



#### 6 WIRES:



#### "SENSES"

2 additional wires to maintain a constant voltage supply at the load cell when used with proper instrumentation.

Use specially when long wires and wide temperature range.

#### SHIELD

Not connected to transducer body



Handwriting practice lines consisting of 20 horizontal gray lines.



## APPLICATIONS

- Single point platform scales
- 4-cell platform scales
- Light vehicle weighbridges
- Truck scales
- Axle weighing
- Packing and filling machines
- Price computing scales
- Medical scales
- Dosing in mixers, tanks and hoppers
- Silo level measurement
- Check weighers
- Hybrid or scale conversions
- Crane scales, tension test machine
- Hoppers and silos in the metal industry
- Demanding environments: high IP protection, HT for high temperatures and ATEX for explosive atmospheres

