



### Main features

- Range of measurement: from 20 to 200 Kg
- Accuracy class: C (OIML R60)
- All stainless steel construction
- Corrosion resistant
- Grade of protection: IP68 ( EN 60529)

CB series load cells are designed for trouble free application in industrial environments. The cell body and the protective bellows of the strain gauge are in corrosion resistant stainless steel and the bellows are welded using microplasma torch. CB load cells are supplied in three grades of accuracy and characteristics.

The 1000 division is the most economical and suitable for most applications. The 2000 division version has a good price/performance ratio. The 3000 division is available if higher accuracy is required.

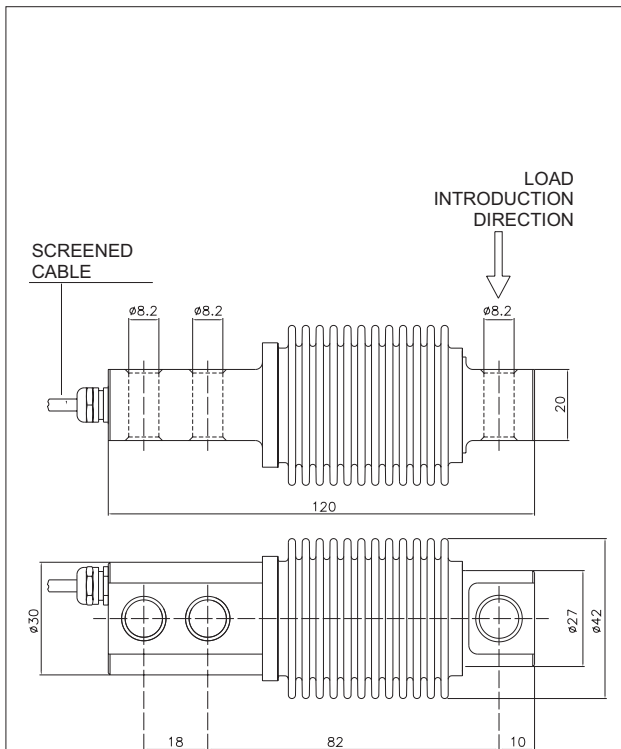
CB load cells are used in particularly hostile environments in the food, petrochemical and pharmaceutical industries and in all applications that demand components in stainless steel and IP68 grade of protection.

### TECHNICAL DATA

| Accuracy (OIML IR60)                                        | C1               | C2                                                  | C3        |
|-------------------------------------------------------------|------------------|-----------------------------------------------------|-----------|
| Divisions                                                   | 1000             | 2000                                                | 3000      |
| Nominal full scale load (Ln)                                | 20...200 kg      |                                                     |           |
| Nominal output at FSO                                       | 2 mV/V           |                                                     |           |
| Output tolerance at Ln (%FSO)                               | < ± 0,5          | < ± 0,5                                             | < ± 0,2   |
| Combined errors: Non linearity<br>Hysteresis, Repeatability | C1<br>C2<br>C3   | < ± 0,05 % FSO<br>< ± 0,03 % FSO<br>< ± 0,017 % FSO |           |
| Creep (after 30 min. at Ln)%FSO                             | < ± 0,05         | < ± 0,025                                           | < ± 0,017 |
| Zero load out of balance signal                             | < ± 1% FSO       |                                                     |           |
| Thermal drift in compensated range * %FSO°C                 | Sensitivity      | < ± 0,006                                           |           |
|                                                             | Zero Calibration | < ± 0,01                                            |           |
| Nominal input resistance                                    | 400 Ohm          |                                                     |           |
| Nominal output resistance                                   | 350 Ohm          |                                                     |           |
| Isolation resistance                                        | > 5 GOhm         |                                                     |           |
| Nominal supply voltage                                      | 10 V             |                                                     |           |
| Maximum supply voltage                                      | 15 V             |                                                     |           |
| Compensated temperature range                               | -10...+40°C      |                                                     |           |
| Maximum temperature range                                   | -20...+50°C      |                                                     |           |
| Storage temperature range                                   | -25...+70°C      |                                                     |           |
| Permitted static load                                       | 130% Ln          |                                                     |           |
| Maximum applicable load                                     | 150% Ln          |                                                     |           |
| Rupture load                                                | >200% Ln         |                                                     |           |
| Maximum elastic deformation at Ln                           | < 0,5 mm         |                                                     |           |
| Grade of protection (EN60529)                               | IP68             |                                                     |           |
| Electr. connections screened cable                          | 4x0,25 3m.       |                                                     |           |
| Elastic element material                                    | Stainless steel  |                                                     |           |

\* The combined errors and thermal drift of sensitivity are within the framework defined by the OIML IR60

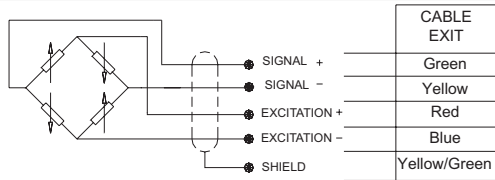
### MECHANICAL DIMENSIONS



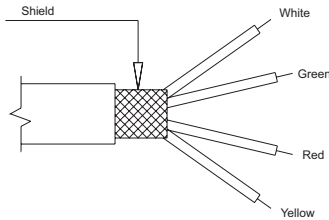
Dimensions mm. (± 0,1)

Recommended torque with UNI 5931 screws of resistance class 10.9 according to UNI 3740 - 20Nm.

## ELECTRICAL CONNECTIONS

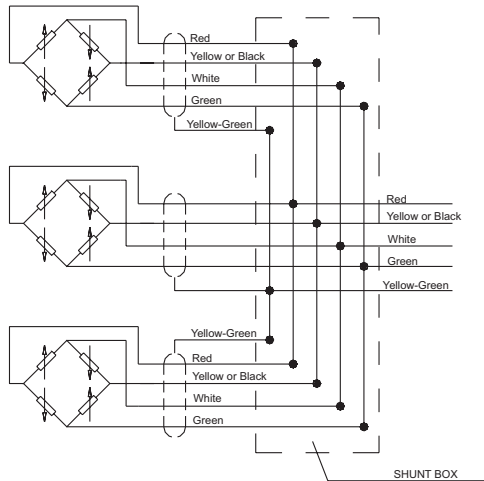


**4x0.25  
Screened cable**



\* The screen is isolated from the transducer body. It is recommended that the ground is connected at the instrument end.

### Cells connected in parallel



In systems that use several cells, the parallel connection automatically sums the loads on each individual cell. Using this method of measurement, the maximum load will be the sum of the loads on the individual cells and the sensitivity will be the average value of these cells. It is important that the user ensures that no cell is stressed beyond its maximum rating under any load condition.

## CONVERSION TABLE

| Kg    | N     | Lb    |
|-------|-------|-------|
| 1     | 9.807 | 2.205 |
| 0.102 | 1     | 0.225 |
| 0.454 | 4.448 | 1     |

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.

## OPTIONAL ACCESSORIES

### ORDER CODE

Load cell

CB

| MEASUREMENT RANGE (Kg) |            |
|------------------------|------------|
| 0 - 20                 | <b>K2D</b> |
| 0 - 50                 | <b>K5D</b> |
| 0 - 100                | <b>K1C</b> |
| 0 - 200                | <b>K2C</b> |

| ACCURACY CLASS OIML |           |
|---------------------|-----------|
| C1 1000 divisions   | <b>C1</b> |
| C2 2000 divisions   | <b>C2</b> |
| C3 3000 divisions   | <b>C3</b> |

If request, it is possible to supply models with non-standard mechanical and/or electrical features.

Ex.: **CB - K1C - C2**

CB load cell, measurement range 0-100 kg., accuracy class C2/2000 divisions.