

# New Generation Weighing Technology

Extreme Accuracy  
More Reliable & Durable  
Simplify & Fast Maintenance



## Digital Load Cells

**BAYKON**  
Industrial Weighing Systems

# Fast maintenance, more precision, higher confidence...



BAYKON new generation digital load cells are designed for quick maintenance, more precision, higher confidence in weighing applications. They have high protection structures and intelligent microprocessors integrated into them and represent the latest in weighing technology, high accuracy and reliability along. With its stainless steel, IP68 hermetically sealed enclosure, it can be used safely in harsh environments.

BAYKON digital load cells; eliminate possible errors which can occur with standard analogue load cell scales such as temperature, nonlinearity, hysteresis, electromagnetic effects and voltage variation. Weighing is blocked in case of load cell is broken.

Its advanced electronic design provide high resolution and long term stable digital output signal for accurate and reliable measurement. BAYKON digital load cells are matched at the production which provides direct replacement without calibration with test weights for non-legal scales.



## Advantages



**Highest Accuracy**  
Higher sensitivity than analog load cells with In-built hybrid processor



**Rust & Corrosion**  
The fully welded stainless steel structure, hermetically sealed, IP68 protection class



**Heavy-duty And Water Resist Cables**  
Dual core cable, creates a protective shield protected by braided stainless steel sheathing



**Eliminated Spoiling Influences**  
Operation Temperature & Voltage variation, Radio and Electromagnetic effects



**Lowest Service Costs**  
Easy and quick fault finding, detects problems and simplifies service



**Electronic Calibration**  
No manual corner adjustment ( like trimpot, resistance etc. ) in junction box and high accuracy electronic calibration (without test weights)



**Lightning & Surge Voltage Protection**  
Standard use with LPK24 Protection & Power Supply Kit for 100-240VAC models



**Preventing Fraud & Cheating**  
Very difficult to cheat through secure digital BLDC RS 485 communication







**Quick Service**  
After load cell change, use without re-calibration for non-legal for trade scales



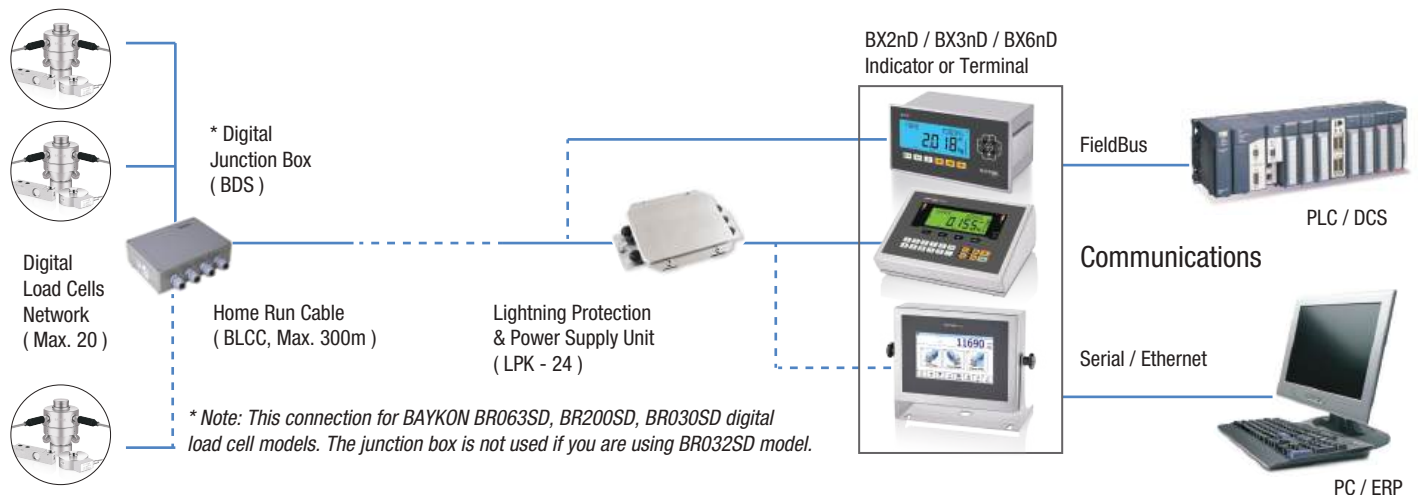
**Advanced Weighing Functions**  
Operates with intelligent European/OIML approved BAYKON weight indicator or terminals

# Technical Specifications

| Model                                 |  |                                 |  |  |  |   |
|---------------------------------------|---|---------------------------------|--|---|---|---|
|                                       | Unit  | BS063D                          | BS063SD  | BR200SD   | BR110D / BR110SD  | BR030SD / BR032SD<br>BR016D   |
| Load Cell Type                        |   | Shear Beam                      |  | Button  | Ring  | Column  |
| Max. capacity ( R.C. )                | t   | 1 / 2 / 5                       | 0.15 / 25 /<br>500 / 1 / 2 / 5   | 5 / 10 / 15   | 10 / 15 / 22 / 33 / 47 / 68 /<br>100 / 150 / 200 / 330                              | 20 / 30 / 50 / 100  |
| Accuracy class                        |   | C3 (OIML R60)                   |  | G3 ( Industrial )   |   | C3 / C4 / C5 ( OIML R60 )   |
| Max. number of verification intervals | ( nLC )   | 3000                            |  | ≥ 3000 ( Non-Approved )   |   | 5000  |
| Min. load cell verification interval  | $Y=E_{max} / V_{min}$   | 10000                           |  | ( Non-Approved )  |   | 10000   |
| Internal resolution                   | Counts @ R.C.   |                                 |  | ≥ 1000000   |   |   |
| External resolution ( R0 )            | Counts @ R.C.   | 62500                           |  | ≥ 50000   |   | 75000   |
| Zero balance                          | % R.C.  |                                 |  | < ± 1   |   |   |
| Zero Return, 30 min.                  | ppm R.C.  |                                 |  | < ± 250   |   | ± 180   |
| Temperature effect ( zero )           | ppm R.C./°C   |                                 |  | < ± 250   |   | < ± 140   |
| Temperature effect ( span )           | ppm R.C./°C   |                                 |  | < ± 30  |   | < ± 14  |
| Safe load limit                       | % R.C.  | 150                             | 120  |   |   | 150   |
| Ultimate load limit                   | % R.C.  | 300                             | 250  |   |   | 300   |
| Excitation                            | VDC   | 12-15                           |  | 10-18   |   |   |
| Compansated temperature range         | °C  |                                 |  | - 10 ... + 40   |   |   |
| Operating temperature range           | °C  |                                 |  | - 40 ... + 80   |   |   |
| Communication out                     |   |                                 |  | RS485, Baykon BLDC Protocol   |   |   |
| Number of bus addresses               |   |                                 |  | 24  |   |   |
| Material                              |   |                                 |  | Alloy Stell and Stainless Stell   |   |   |
| Protection                            |   |                                 |  | Complete hermetic sealing, IP68   |   |   |
| Cable type and diameter               |   |                                 |  | Stainless Stell Armored - Diameter 8,5 mm   |   |   |
| Cable length                          | m   | 3 m (0.15-2 t)<br>4.2 m (3-5 t) |  | 6 m   | 8 m (1-4.7 t)<br>12 m (10-13 t)<br>16 m (68-330 t)                                  | 16 m ( BR030SD )<br>8 m ( BR032SD )<br>14 m (10-30 t) ( BR016D )<br>16 m (40-50 t) ( BR016D ) |

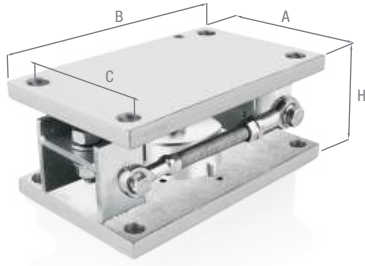
\* With two connector for serial network connection

# Typical Connections



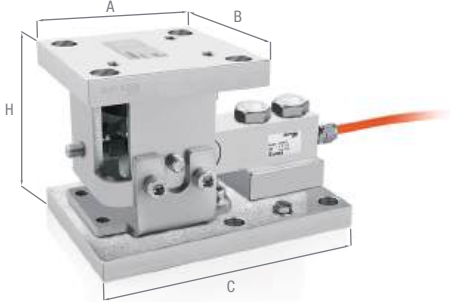
# Dimensions & Assemblies

LAC



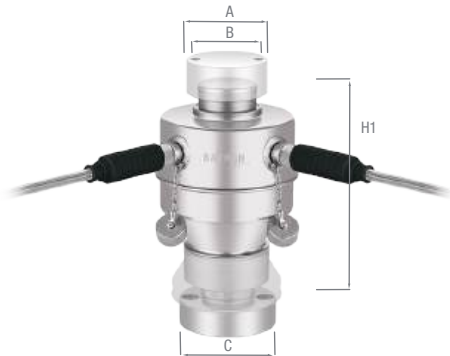
| LAC110 (t) | LAC200 (t) | A   | B   | C   | H       |
|------------|------------|-----|-----|-----|---------|
| 1-4.7      | -          | 150 | 240 | 120 | 103-110 |
| 10-15-22   | 5-10-15-20 | 150 | 240 | 120 | 103-110 |
| 33         | -          | 180 | 300 | 150 | 135-145 |
| 47         | -          | 220 | 380 | 180 | 155-170 |

LEB



|               | A   | B   | C   | H     |
|---------------|-----|-----|-----|-------|
| LEB FL 2      | 100 | 120 | 165 | 120±3 |
| LEB FL 5 / 5L | 140 | 150 | 220 | 152±1 |
| LEB RC 2      | 100 | 120 | 165 | 110±3 |
| LEB RC 5 / 5L | 140 | 150 | 220 | 140±1 |
| LEB SP 2      | 100 | 120 | 165 | 110±3 |
| LEB SP 5 / 5L | 140 | 150 | 220 | 140±1 |

BR030SD / BR032SD / BR016D



|         | Capacity (t)            | A     | B  | C  | H1  |
|---------|-------------------------|-------|----|----|-----|
| BR030SD | 20 / 30 / 50            | ø83.5 | 64 | 64 | 150 |
| BR032SD | 100                     | ø89   | -* | 64 | -   |
| BR016D  | 20 / 30 / 40 / 50 / 100 | ø83.5 | 64 | -  | -   |

\* No holes for 100 t capacity

Assembly with accessories (standard)

# Weighing instruments for Digital Load Cells

BX23D



BX24D / BX25D



BX30D



BX30D Plus



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(Specifications are subject to change without notice. 10 - 06 / 2022)