

# SBK Series IP68 Stainless Steel Shear Beam Load Cells, from 300kg to 2000kg



As of: Thursday, March 19,  
2026



## Standard Features

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- C3 precision class
- Stainless steel construction
- IP68 protection
- Max. capacities from 300 to 2000kg
- Shielded connection cable
- OIML certificate available upon request
- Test certificate available upon request

## Approvals

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**Capacities (kg):** 300, 500, 1000, 2000

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**OIML R60. C3** precision class

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**Stainless steel. IP68** protection

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Output Resistance **350 Ohm**

Stainless steel shear beam load cells suitable for building, for example, CE-M approved scales with 4 load cells or for weighing tanks and hoppers with the relevant accessories.

## Specifications

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**Minimum load cell verification interval:**

$V_{min} = E_{Max} / 10.000$

**Maximum number of verification intervals:**

$n_{LC} = 3000$

**Combined error:**

0,017% of Full Scale Output (F.S.)

**Full Scale Output:**

2mV/V +/- 0.1%

**Temperature effect on zero:**

0,0014% /°C

**Temperature effect on full scale output:**

0,0014% /°C

**Compensated temperature range:**

-10°C/+40°C

**Operating temperature range:**

-20°C/+60°C

**Creep error after 30 minutes:**

0,024% F.S.

**Maximum tolerated excitation voltage:**

15 VDC

**Input Resistance:**

385 ± 20 Ohm

**Output Resistance:**

350 ± 5 Ohm

**Insulation Resistance:**

>5000 MOhm

**Safe Overload:**

150% F.S.

**Ultimate Overload:**

200% F.S.

**Shielded cable:**

6-wire shielded cable, 5m long,  
5 mm diameter

## Wiring Code

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<u>Wiring Code</u>	
<u>Colour</u>	<u>Function</u>
--	SHIELD
YELLOW	OUTPUT +
GREY	SENSE +
BROWN	INPUT +
WHITE	OUTPUT -
GREEN	INPUT -
PINK	SENSE -

## ATEX Version

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The CCATEX certificate makes the load cell suitable for use in hazardous areas with protection methods according to:

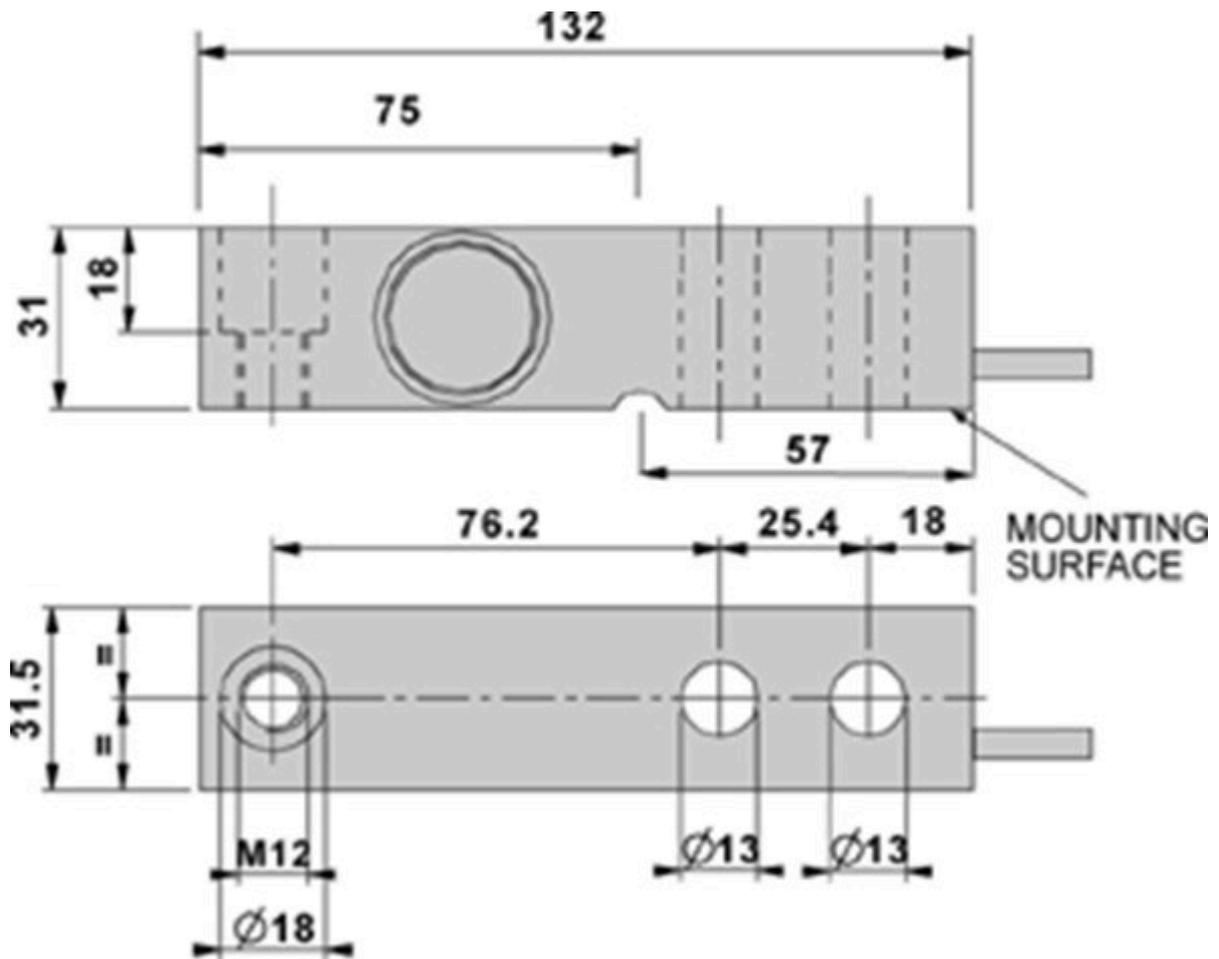
ATEX II 1G Ex ia IIC T6 (Ta -20÷+40°C) TX (Ta -20÷+65°C) Ga

ATEX II 1D Ex ta IIIC TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°C) Da IP65

The certificate includes the manual and the ATEX CE conformity declaration (available in EN, DE, FR, and IT).

**IMPORTANT:** the certificate refers to the single load cell. For systems with more load cells, it is necessary to order one certificate for each load cell.

## Dimensions



## Available versions

Code	Max (kg)
<u>SBK300</u>	300
<u>SBK500</u>	500
<u>SBK1000</u>	1000
<u>SBK2000</u>	2000

# Parts

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**Part #**    **Description**

## Available Versions

**SBK300**    Shear beam approved load cell, C3, Max=300kg. Stainless steel, IP68 protection degree, 350 Ohm output resistance.

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**SBK500**    Shear beam approved load cell, C3, Max=500kg. Stainless steel, IP68 protection degree, 350 Ohm output resistance.

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**SBK1000**    Shear beam approved load cell, C3, Max=1000kg. Stainless steel, IP68 protection degree, 350 Ohm output resistance.

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**SBK2000**    Shear beam approved load cell, C3, Max=2000kg. Stainless steel, IP68 protection degree, 350 Ohm output resistance.

# Options

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## Part # Description

### Joints

**AVM12** Stainless steel/rubber M12 elastic joint for SBX/SBK/SBT cells up to 2500kg.

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**SBJ12** M12 ball joint for load cells

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### Base Plates

**BPSB3** 3 mm stainless steel base plate for SBT SBX SBK load cells up to 2500 kg. Size: 55 x 30 x 3 mm

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**BPSB5** 5 mm stainless steel base plate for SBT SBX SBK load cells up to 2500 kg. Size: 55 x 30 x 5 mm

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### Mounting kits

**KSBN2** Galvanized steel kit for assembling 1 SBT/SBK/SBX cell from 300 to 2500kg.

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**KSBC2** Alloy steel kit for assembling 1 SBT/SBK/SBX cell from 300 to 2500kg.

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**KSBX2** Stainless steel kit for assembling 1 SBT/SBK/SBX cell from 300 to 2500kg.

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**KSB2H** Stainless steel articulated plate with M12x50mm threading. Applicable to SB.. load cells with capacity up to 2000 kg. To combine with BLKM12I bush.

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### Support feet for 4-cell platforms

**SBFI-1** Stainless steel articulated foot with 50 mm non-slip rubber support base. Threading M12 x 1.75 x 43. For SBxx cells up to 2500kg . To combine with BLKM12I bush.

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**KSB2FI-1** Stainless steel articulated foot with 60 mm non-slip rubber support base. Threading M12 x 1.75 x 46.

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**SBFA** Nickel-plated steel articulated foot with 60 mm non-slip rubber support base. Threading M12 x 1.75 x 45.

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**BLKM12I** Stainless steel M12 bush.

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### Stay Rod

**LNK2635** Galvanized stay rod with ball-and-socket joints. Max 100 kN. For proper installation, 2xLNKST are needed. Note: They can't be ATEX-certified.

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**LNKST** Single plate for stay rod. Fitted with fixing screw. (For proper installation, LNK2635 and a second LNKST are needed). Note: They can't be ATEX-certified.

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### Connection Cables

**LCCB** Shielded cable 6x0.25 mm<sup>2</sup> (suitable for Ex zones). PVC inner sheath. Tinned copper braid shielding. PVC outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius  $\geq 6 \times \text{O.D.}$  €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

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**LCCBA** Armoured cable 6x0.25 mm<sup>2</sup> (suitable for Ex zones). PVC inner sheath, diameter 5mm. Iron-zinc alloy armour. Transparent PVC outer sheath, 8 mm diameter. Temperature range: -15 / +70 °C. Minimum bending radius  $\geq 5 \times \text{O.D.}$  €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

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<b>Part #</b>	<b>Description</b>
<b>LCCBM</b>	Shielded 4x0,34 mm <sup>2</sup> cable for moving applications. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
<b>PRCB</b>	Protection sheathing for shielded cable. €/meter internal Ø 15mm. Maximum orderable length: 100 m (longer lengths available only upon request).

## Junction Boxes

<b>JB4Q</b>	Equalisation box for connection with up to 4 load cells. ABS box, IP67 protection rating, with 4 + 1 fairleads.
<b>JB4QI</b>	Stainless steel equalisation box for connection with up to 4 load cells. IP65 protection rating, with 4 + 1 fairleads.
<b>JC4Q</b>	Equalisation board for up to 4 cells. With UL marked PCB, Terminal block, plastic box and labels (if expected).

## Available Weight Indicator / Transmitter

<b>DGT1S</b>	Weight transmitter on DIN bar, with 2 INPUTS and 2 OUTPUTS. Fitted with 5-key keypad and LED display. Multifunction weighing program.
<b>DGT1</b>	Weight transmitter for DIN bar. 5-key keypad, LED display, date/time, alibi memory, and multifunction weighing program.
<b>DGT4</b>	Transmitter for DIN bar with 4 channels, 2 IN and 2 OUT. 5-key keypad, LED display, and standard weighing program.
<b>DGTQ</b>	Transmitter for panel mounting, with 2 IN and 2 OUT. 5-key keypad, LED display, and standard weighing program.

## Options for ATEX Version

<b>ZBA1S</b>	Intrinsic protection three channel Zener barrier. Specific for connection to load cells, for mounting on DIN rail in a safe area, or in a flame-proof case. Marking: ATEX/IECEx II (1) GD [Ex ia Ga] IIC [Ex ia Da] IIIC. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
<b>KZBA-1</b>	ATEX ABS housing kit with Zener Barrier ZBA1S for load cells. For intrinsically safe weighing systems in a dangerous zone. Dimensions 179x359x166,5mm. Marking of housing + Zener Barrier ZBA1S: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc X for gas, ATEX II 3(1)D Ex tc [ia Da] IIIC T135°C Dc IP66 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
<b>JB4QAI</b>	ATEX equalisation box made of stainless steel IP66 for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
<b>JB4QA</b>	ATEX equalisation box made of ABS IP67, for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
<b>LCCB</b>	Shielded cable 6x0.25 mm <sup>2</sup> (suitable for Ex zones). PVC inner sheath. Tinned copper braid shielding. PVC outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius >= 6 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
<b>EXCB6</b>	Blue shielded cable 6x0.22 mm <sup>2</sup> , only for EX i (2GD) assemblies. PVC inner sheath. Tinned copper braid shielding. Polyurethane outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum

**Part #****Description**

bending radius  $\geq 7 \times \text{O.D.}$  €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

**KMB4-1**

Kit of 3 ATEX Zener barriers for load cells, in an ABS box. For up to 4 load cells of 350 ohm, for intrinsic protection weighing systems in a dangerous area. Marking of the whole box with three Zener barriers: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc (-20°C = Ta = +40°C) for gas, ATEX II 3(1)D Ex tb [ia Da] IIIC T130°C Dc IP65 (-20°C = Ta = +40°C) for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).

**CCATEX-1**

Optional ATEX version for single load cell. Marking: ATEX II 1G Ex ia IIC T6 (Ta -20÷+40°C) TX (Ta -20÷+65°C) Ga and ATEX II 1D Ex ta IIIC TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°C) Da IP65. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).

**CCATEX3GD**

ATEX certificate for each load cell. Marking: ATEX II 3G Ex nA IIC T6 Gc for gas and ATEX II 3D Ex tc IIIC T115°C Dc IP65 for dusts. Complete with manual and ATEX CE conformity declaration (available in EN, DE, FR and IT).

**DCATEXMECH**

ATEX version for the PLATFORM / LOAD CELL MOUNTING KIT for zone 1/21 (for the load cells ATEX declaration see CCATEX code). Option to be offered only if the platform is ordered without the indicator, otherwise refer to the available certifications for the chosen weight indicator. Provided with safety instructions and ATEX EU declaration of conformity (EN, DE, FR, ES and IT). Includes IP68 connection between platform and weight indicator.

**DCATEXMB4**

ATEX declaration for the whole system with Dini Argeo Zener barriers. Ex II 2G IIC T6 Gb X e Ex II 2D IIIC T125°C Db X system, with label of the whole system, for weight indicator connected to Dini Argeo zener barriers, connected to a mechanical structure with ATEX load cells (each cell must be certified with CCATEX option). Provided with descriptive document of the assembly and ATEX EU declaration of conformity of the assembly (EN and IT).

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