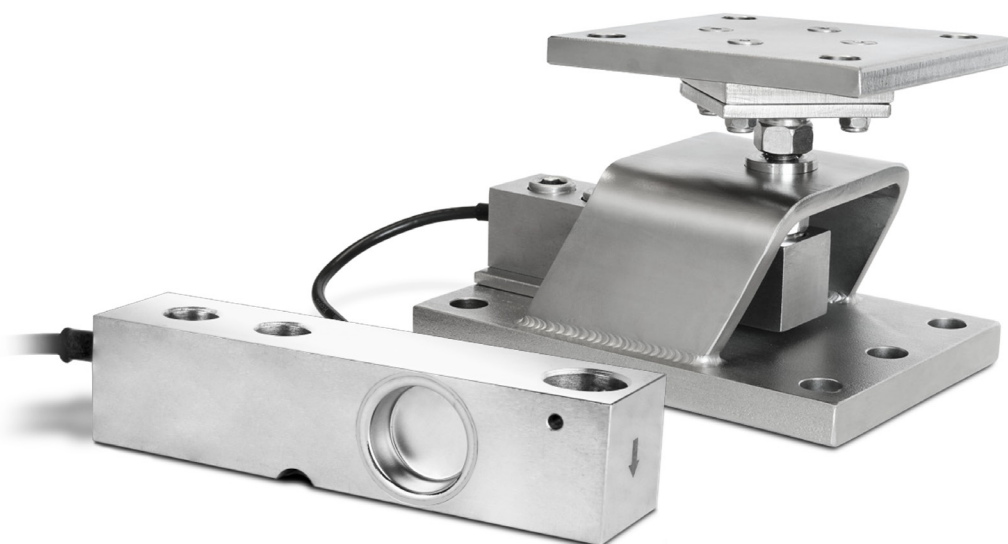


SBX / KSBX Load Cell and Weighing Kit

DATASHEET



SBX – SHEAR BEAM LOAD CELL

SBX Series shear beam load cells are designed for high-accuracy industrial weighing applications in bioreactor systems where precise mass measurement is critical for process control. Available in capacities from 500 kg to 2500 kg, they comply with C3 precision class requirements. The stainless steel body with laser-welded construction ensures excellent mechanical strength, hygienic compatibility, and long-term reliability. Protection degree is IP68, making the SBX series suitable for demanding environments such as bioprocessing, pharmaceutical, and life science applications. The load cells are supplied with a shielded connection cable for stable and reliable signal transmission.

	SBX
Minimum load cell verification interval	$V_{min} = E_{Max} / 10.000$
Maximum number of verification intervals	nLC = 3000
Combined error	0,017% of Full Scale Output (F.S.)
Full Scale Output	2mV/V +/- 0.5%
Temperature effect on zero	0,002%/°C
Temperature effect on full scale output	0,002%/°C
Compensated Temperature Range	-10°C/+50°C
Operating Temperature Range	-20°C/+60°C
Creep error after 30 minutes	0,02% F.S.
Maximum tolerated excitation voltage	15 VDC
Input Resistance	1100 ± 20 Ohm
Output Resistance	1000 ± 20 Ohm
Insulation Resistance	>5000 MOhm
Safe Overload	120% F.S.
Ultimate Overload	300% F.S.
Shielded cable	6-wire shielded cable, 5m long, 5 mm diameter

KSBX – WEIGHING KIT

The KSBX kit is designed to speed up and simplify the installation of SBX series shear beam load cells with capacities up to 2500 kg. It is specifically developed for weighing silos, hoppers, tanks, bioreactors, and other rigid structures used in industrial and bioprocessing applications. The kit ensures correct load introduction, mechanical stability, and reliable performance, supporting accurate weight monitoring during fermentation, cell culture, and production processes.

		KSBX
COMPATIBLE LOAD CELLS		SBK/SBX SERIES UP TO 2500 kg
MATERIAL		STAINLESS STEEL AISI304
WEIGHT (kg)	WITH LOAD CELL	6,2
	WITHOUT LOAD CELL	5,1
SAFETY LOAD IN COMPRESSION	WITH LOAD CELL	120% F.S.
	WITHOUT LOAD CELL	2500 kg
BREAKING LOAD IN COMPRESSION	WITH LOAD CELL	300% F.S.
	WITHOUT LOAD CELL	3000 kg
SAFETY LOAD IN TRACTION	WITH LOAD CELL	1000 kg
	WITHOUT LOAD CELL	1000 kg
BREAKING LOAD IN TRACTION	WITH LOAD CELL	1500 kg
	WITHOUT LOAD CELL	1500 kg
MAXIMUM ANGLE OF THE SUPPORTING LEVEL		+/- 1°

Rev. 0125