

SBT beam load cell



product description

The SBT is a high-accuracy, low-profile beam load cell designed for on-board vehicle weighing applications.

Constructed from tough alloy steel and sealed with the most durable potting compound, it will withstand the harsh environments associated with all types of heavy duty vehicles. The SBT is particularly simple to mount under vehicle and trailer bodies. The overall size and strength of the SBT ensures that it can withstand significant loads well beyond its rated capacity.

The SBT is also available with equivalent Unified mounting holes and an alternate cable, please see other datasheet for SBT-B for further details.

applications

Various on-board vehicle weighing applications including, tipper trucks and tipping trailers, bulk tanker vehicles, agricultural trailers, waste collection vehicles and general agricultural machinery.

key features

Tool steel construction

Environmentally sealed by potting to IP68

Electroless nickel-plated finish

Designed for on-board vehicle weighing

Capacity of 10,000kg

accessories

M24x2.0-6H mounting bolts

Compatible range of electronics



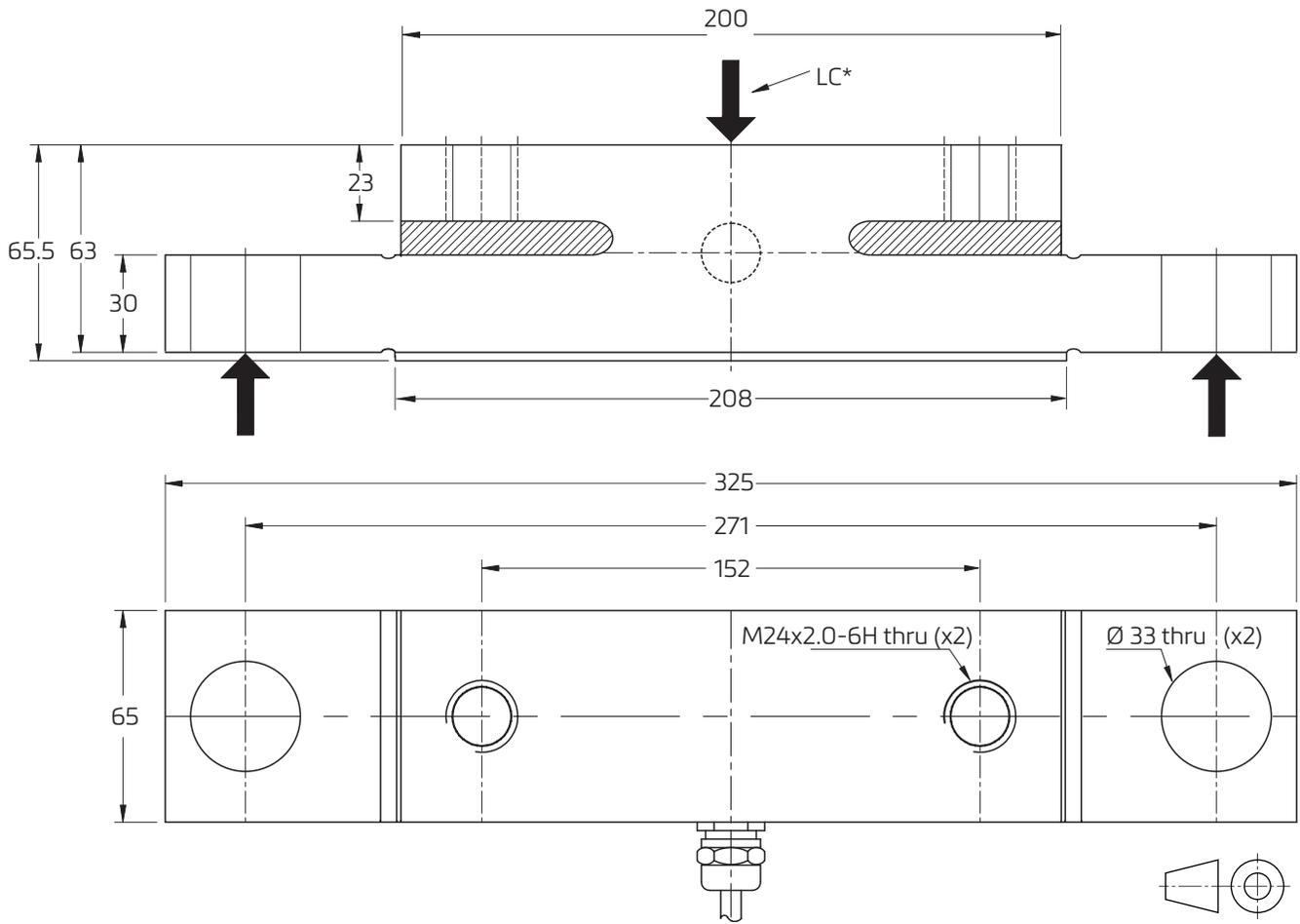
RoHS
compliant



specifications

Maximum capacity (E_{max})	kg	10,000
Accuracy class	-	GP
Temperature effect on minimum dead load output (TC_0)	%*RO/10°C	± 0.0400
Temperature effect on sensitivity (TC_{RO})	%*RO/10°C	± 0.0200
Combined error	%*RO	± 1.0000
Creep error (30 minutes) / DR	%*RO	± 0.0600
Rated Output (RO)	mV/V	0.82 ± 10%
Zero balance	%*RO	± 5
Excitation voltage	V	5...15
Input resistance (R_{LC})	Ω	385 ± 20
Output resistance (R_{out})	Ω	350 ± 3
Insulation resistance (100 V DC)	MΩ	≥ 5,000
Safe load limit (E_{lim})	%* E_{max}	150
Ultimate load	%* E_{max}	300
Safe side load	%* E_{max}	100
Compensated temperature range	°C	-10...+40
Operating temperature range	°C	-30...+70
Load cell material	-	tool steel
Surface finish	-	electroless nickel-plated
Sealing	-	potted
Protection according EN 60 529	-	IP68
Packet weight	kg	8.5

product dimensions (mm)



Recommended torque for mounting bolts: 1,030...1,140Nm. Torque value assumes oiled threads.
 Note: Holes, recesses, cutouts and radii are identical on both sides of the load cell.
 LC* - Load centre

wiring

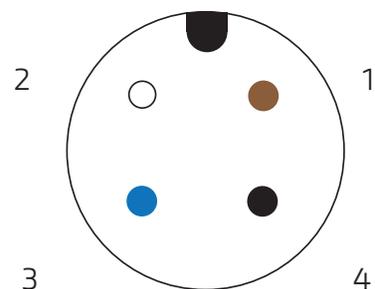
The load cell is provided with unshielded moulded 4-pin M12 male connector (AWG 24). Cable jacket polyurethane.

Cable length: 7.5m
 Longer or shorter on request

Cable diameter: 5.5mm

Optional: Shielded 4 core cable with wire ends earthed to the load cell body is available on request

pin colour	function
1. brown	+ Excitation
2. white	+ Signal
3. blue	- Excitation
4. black	- Signal



Specifications and dimensions are subject to change without notice.