

LCB176 2t



Description

Technical Data

Force sensor

Type	load cell
Force direction	Compression
Material	Aluminium alloy
Breaking force	300 %Fs

Electrical Data

Input resistance	415 Ohm
Tolerance input resistance	15 Ohm
Output resistance	350 Ohm
Tolerance output resistance	3.5 Ohm
Insulation resistance	2 GOhm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 10 V
Zero signal	10 %Fn
Rated output	2 mV/V
relative error of characteristic value	0.1 mV/V

Precision

Accuracy class	0,02%
Temperature effect on zero signal	0.06 %Fs / 10°C
Temperature effect on characteristic value	0.014 %Rd / 10°C
Relative creep	0.025 %Rd

Connection Data

Connection type	6 conductor open
Cable length	6 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-30 ... 70 °C
Environmental protection	IP67








Pin Configuration

Symbol	Description	Wire colour
+Us	positive bridge supply	green
-Us	negative bridge supply	black
+Ud	positive bridge output	red
-Ud	negative bridge output	white
+Uf	positive sense lead	blue
-Uf	negative sense lead	brown

Shield - transparent.

accessories

Description Description	
	GSV-15KL4 Junction box with measuring amplifier for sensors with strain gauges. Analogue output ± 10 Volt and 4...20 mA configurable.
	KL4 CG clamping box for parallel connection of 4 sensors, dimensions: 175mm x 105mm x 60mm, 4xPG9, 7-pole
	KL4 M12 clamping box for parallel connection of 4 sensors, dimensions: 175mm x 105mm x 60mm, 4xM12 female, 1xM12 male
	GSV-1H Measuring amplifier in top-hat rail housing for sensors with strain gauges. Analogue output -10V...+10V, limiting frequency 250Hz, 4 input sensitivities from 2.0mV/V.
	GSV-6K analog amplifier pcb for sensors with strain gauges. Analog output configurable; sampling frequency is 10Hz ... 25kHz, input sensitivity adjustable 0.1 mV / V ... 8 mV / V