



SY011I Loadcell Amplifier

Operating Information

SY011I amplifiers are supplied set up as detailed below unless special instructions are stated on the order. The span and zero presets should not be adjusted unless accurate calibration facilities are available. If the amplifier is supplied with a single loadcell a System Certificate is supplied giving the amplifier output at each loadcell calibration point.

Supply voltage	Recommended	24.0V												
	Maximum	30.0V												
	Minimum	12.0V												
	Current limit	<1.0A												
Standard output	Zero load	4.0mA												
	Full load	20.0mA												
Bi-directional output	Tension full load	4.0mA												
	Zero load	12mA												
	Compression full load	20.0mA												
Maximum loop resistance	24V supply	400Ω												
Calibration configuration	24V supply	250Ω loop resistance												
Non-linearity - Typical		±0.05% of full range												
	Option Code	<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 2px 5px;">I</td><td style="padding: 2px 5px;">4</td><td style="padding: 2px 5px;">2</td><td style="padding: 2px 5px;">0</td></tr></table> <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 2px 5px;">0</td><td style="padding: 2px 5px;">5</td></tr></table> <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 2px 5px;">I</td><td style="padding: 2px 5px;">4</td><td style="padding: 2px 5px;">2</td><td style="padding: 2px 5px;">0</td></tr></table> <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="padding: 2px 5px;">1</td><td style="padding: 2px 5px;">0</td></tr></table>	I	4	2	0	0	5	I	4	2	0	1	0
I	4	2	0											
0	5													
I	4	2	0											
1	0													
Excitation voltage - Nominal		5.0V 10.0V												
Maximum excitation current		35mA 50mA												
Operating temperature range		0 to 50°C												

Connections

Terminal	Loadcell Cable	Terminal	Function
Ex-	Blue & orange	Gnd	Supply 0V & output low
Sig+	Yellow	O/P	Output high
Sig-	Green	V+	+ Supply
Ex+	Red		

Sig+ and Sig- colours are shown for a positive output in compression, if a positive output is required in tension reverse the yellow and green wires.

Use good quality screened cable for the output with the screen only earthed at one point. This will usually be at the electronics powering the amplifier.

THE SUPPLY CONNECTIONS MUST NOT BE REVERSED.

DO NOT SHORT CIRCUIT THE AMPLIFIER OUTPUT TO THE POSITIVE SUPPLY TERMINAL.

This product complies with the requirements of the European EMC directive.