

SY014-3 Three Wire 4 to 20mA Output Loadcell Amplifier

Operating Information

Loadcells fitted with SY014-3 amplifiers are supplied set up as detailed below unless special instructions are stated on the order. A System Certificate is supplied giving the amplifier output at each loadcell calibration point.

Supply voltage	Loadcell code -Z	12.0V (11.5V to 12.5V)
	Loadcell code -Y	24.0V (15V to 30V)
	Current limit	<1.0A
	Ripple	<10mV RMS
Standard output	Zero load	4.0mA
	Full load	20.0mA
Bi-directional output	Tension full load	4.0mA
	Zero load	12.0mA
	Compression full load	20.0mA
Maximum loop resistance		400Ω
Calibration configuration	Loadcell code -Z	12V supply and 250Ω loop resistance
	Loadcell code -Y	24V supply and 250Ω loop resistance
Span setting accuracy	Standard output	±0.3% of span
	Bi-directional output	±0.5% of span
Non-linearity - Typical		±0.05% of full range
Operating temperature range		0 to 50°C

Connections

Function	Loadcell Cable PVC Wire Colour	Loadcell Cable Raychem Wire Colour	MS Connector Pin Number	Binder 723, Lemo 1B & DIN Connector Pin Number
+Supply	Red	Red	A	1
-Supply	Blue	Black	B	2
Output	Yellow	White	C	3
Screen	Orange	Orange	No connection	No connection

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 connector options are only available on certain loadcells, please check the loadcell data sheets for availability.

The body of the loadcell must be connected to a good quality earth to maintain the EMC performance of the product.

THE SUPPLY CONNECTIONS MUST NOT BE REVERSED.

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

Document number MN0017 Issue 8 Date 27:01:04

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