Novatech
Loadcell Design & Manufacture

ICA6H Four Wire ±10V Output Integral Loadcell Amplifier

Operating Information

Loadcells fitted with ICA6H 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. The amplifier may be mounted inside the loadcell or in an in-line pod. See the ICA6H data-sheet for details.

Supply voltage	Minimum	15V
	Maximum	24V
	Current - typical	30mA

Use a low ripple power supply with current limiting or fuse protection. The amplifier is protected against reverse supply protection up to –30V. The voltage between the loadcell screen and the power supply connections must not exceed 50V.

Standard output	Zero load	0V
	Full load	10V
Bi-directional output	Tension full load	-10V
	Zero load	0V
	Compression full load	10V
Minimum load resistance		5kΩ
Calibration configuration	24V supply and 10MΩ load resistance	
Span setting accuracy	Standard output	±0.3% of span
	Bi-directional output	±0.5% of span
Non-linearity - Typical		±0.02% of full range
Operating temperature range		-40 to 85°C

NB The amplifier specifications may be limited by the loadcell that it is mounted in, check the loadcell data-sheet.

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 high	Yellow	White	C	3
Output low	Green	Green	D	4
Screen	Orange	Orange		

The loadcell cable should be segregated from power cables and other sources of electrical interference.

Do not run the loadcell cable parallel to power cables and always cross power cables at right angles.

Earth the cable screen at the power supply. The body of the loadcell must be connected to a good quality earth when the in-line pod is used.

The connector options apply to chassis type connectors mounted on the loadcell.

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

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