



# ESA Messtechnik GmbH

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## TRANSDUCER AMPLIFIER MODEL CL 71

### FEATURES:

- High accuracy
- Rugged design
- 24 V DC
- Operating temperature -25 to 65 °C
- Triwiring line



Mod. CL 71 DC amplifier is designed for use with industrial applications in hostile climatic and mechanical environments. It is particularly recommended when a high degree of protection against dust, vibrations and humidity is required.

Mod. CL 71 is an ideal amplifier unit for strain gauge based pressure sensors, load cells and force sensors in unipolar measuring mode, i.e. either in tension or in compression. Its input circuitry is compatible with 120 Ω to 1200 Ω strain gauge full bridge configurations.

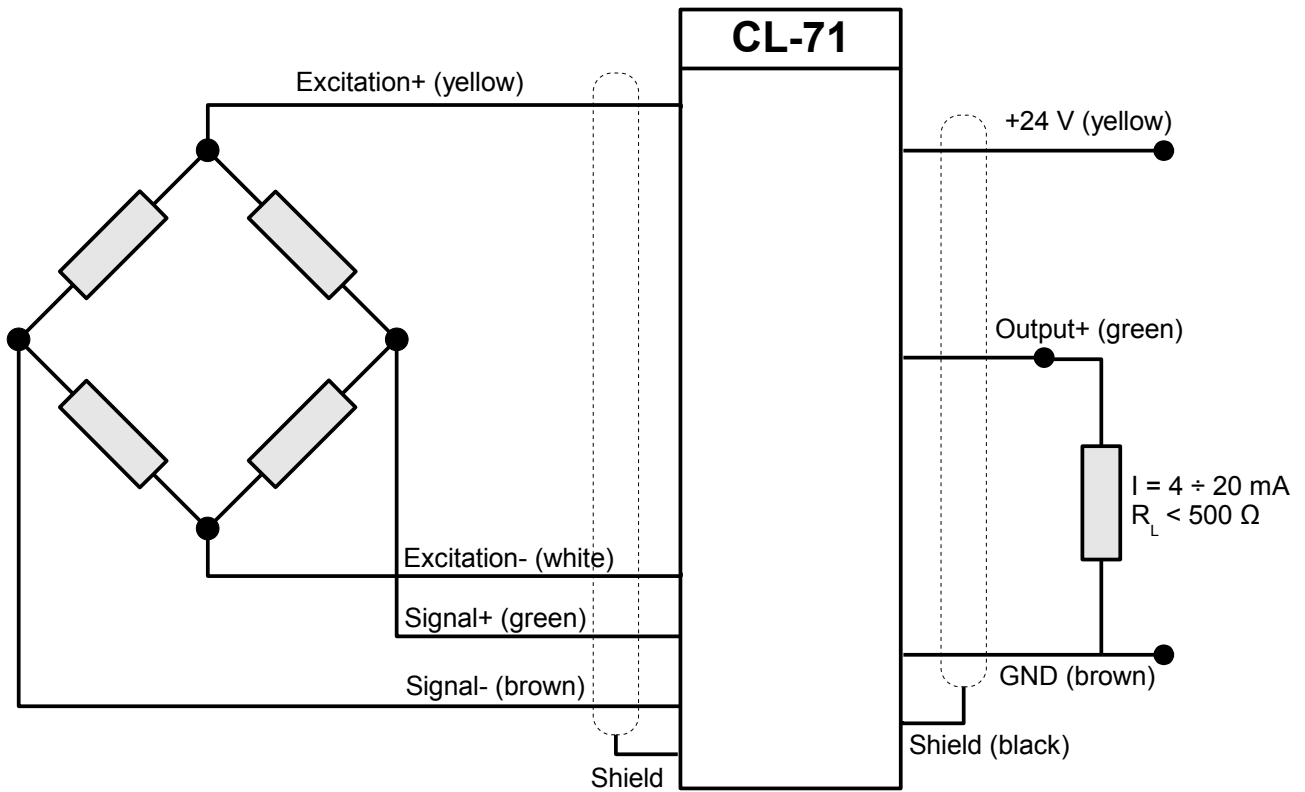
### TECHNICAL SPECIFICATIONS:

		Min	Typ	Max
Operating temperature* in °C		-25	-	+65
Signal cable length in m		-	-	3
Signal band with in Hz		DC	200 **	1000
Bridge excitation in V		5 **	10 **	10
Bridge resistance in Ω		120	350	1200
Input sensitivity in mV/V		0,5	2	100
Nonlinearity in %FS		-	-	0,02
Temperature coefficient of gain in % FS/°C		-	0,001	0,005
Temperature coefficient of zero in % FS/°C		-	0,001	0,002
Gain adjustment in % FS		-	Factory-set	+/-5
Zero adjustment in % FS		-	Factory-set	+/-5
Input	- Type	symmetric		
	- Resistance in GΩ	1	-	-
Output	- Type	asymmetric		
	- Current in mA	4	-	20
	- Impedance in Ω	-	-	500
Supply	- Voltage in V	+12	+24	+30
	- Current in mA	44	-	80
	- Cable length in m	-	-	3

\* optional temperature range of -40 ° C to +85 ° C

\*\* Factory settings

**CONNECTION DIAGRAM:**



Connection for the transducer		
white	-Z	Excitation of the transducer 10V
brown	-S	Signal
green	+S	Signal
yellow	+Z	Excitation of the transducer 10V
black		Shield

Connection for Excitation and Signal-Output	
brown	GND
yellow	+24V
green	Output I (4÷20mA)
black	Shield

**DIMENSIONS:**

