

Cable Amplifier CA

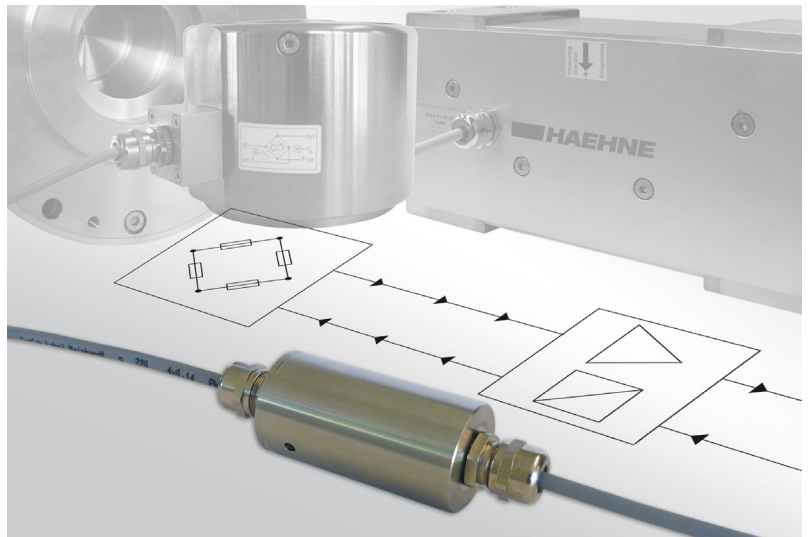
Scope of Supply

Amplifier in stainless steel housing with 4 m signal cable and 1 m sensor cable, incl. fastening clamp

Factory-provided connected to the respective sensor

Variants

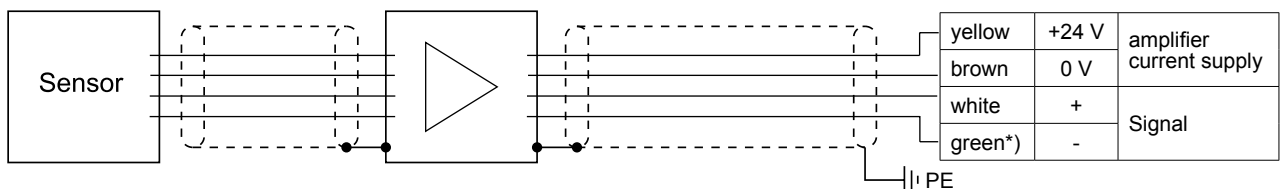
- **AU:** 1 voltage output ± 10 V
- **AC:** 1 current output 4...20 mA



Special Features

- Minimum space requirement
- Very good EMC characteristics
- Minimal amount of cabling

The in-line cable strain gauge amplifier supplies standardized current signals for direct use in machinery and equipment without additional external components. The location of the amplifier in close proximity to the sensor reduces noise interference and results in better signal amplification and transmission of the current output. Practically all HAEHNE sensors can be powered with this cable amplifier.



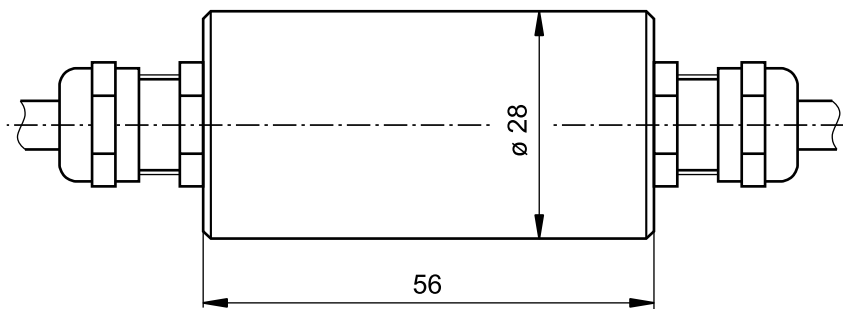
*) With CA-AU this line does not exist. The reference potential of the signal is 0 V of the amplifier supply.

Ordering data:

CA-AU Amplifier with voltage output
CA-AC Amplifier with current output

Select „voltage version“ for sensors with negative preload

Technical Data		
Strain gauge excitation supply	Voltage (V_4):	4,9 ...5,1 V, typical. 5 V
	Min. resistance of strain gauge bridge	350 Ω
	Max. resistance of strain gauge bridge	5000 Ω
Nominal rating	Manufacturer adjustment range 0,5...150 mV/V Factory calibrated to the connected sensor	
Signal output	CA-AU	Voltage \pm 10 V
		Min. load resistance 5 k Ω
	CA-AC	Current 4...20 mA
		Max. load resistance 1 k Ω
Band width	DC to 1 kHz	
Auxiliary power	Voltage	Min. 14 V Typical 24 V Max. 27 V
	Typical current requirements with standard wiring	Approx. 8 mA + strain gauge excitation supply
Linearity deviation	< 0,02 % from final value	
Temperature drift	Zero point	Typical 9 ppm / $^{\circ}\text{C}$ Max. 25 ppm / $^{\circ}\text{C}$
	Amplification	Typical 25 ppm / $^{\circ}\text{C}$ Max. 64 ppm / $^{\circ}\text{C}$
Temperature range	- 40...85 $^{\circ}\text{C}$	
Standard enclosure protection	IP 67	



When mounting the amplifier to grounded machine parts:
A potential equalization cable with sufficient cross section has to be provided.