

IO-Link Amplifier CA-IO-S

Scope of Supply

Electronic unit in stainless steel housing

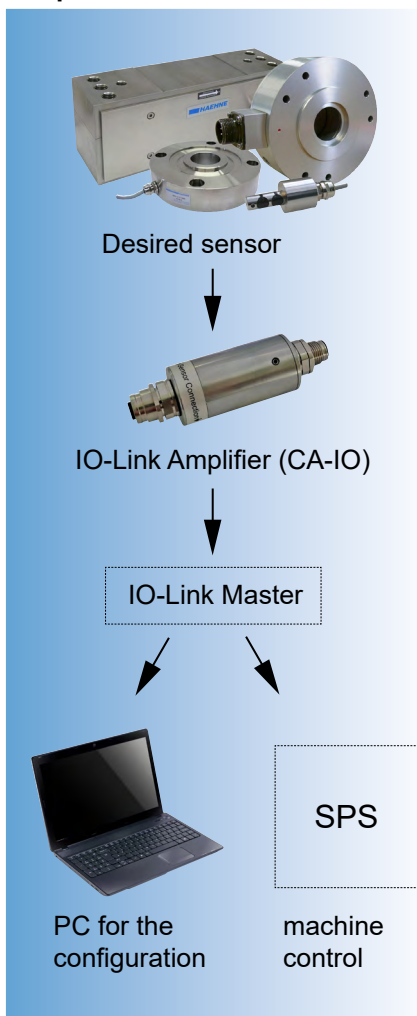
- Cable plug for connection to strain gauge sensors
- Mounting clamp

Additionally Available

- Assembled IO-Link standard cable with M12 cable plug and socket in 5, 10 or 15 m length for the connection to the master



Simplest connection



Special Features

- Connection to different force measurement sensors possible
- Small space requirement , minimal wiring effort
- Simple and fast tool parameterization via PLC / PC
- Comprehensive diagnostics during operation, such as limit monitoring or peak storage
- Bidirectional point-to-point communication standard according to IEC 61131-9

The CA-IO-S cable amplifier is used where sensors with resistance full bridges (strain gauge force transducers) are to be connected to IO-Link. In addition to *HAEHNE*'s own sensors, force sensors from other manufacturers can also be connected and evaluated at the analog input of the amplifier. The sensor parameters can be easily stored in the measuring amplifier.

The cable amplifier is connected between the sensor and the IO-Link master, a separate power supply is not necessary. The sensor signals are converted into digital signals with a cycle time of 1 ms, averaged and provided to the interface circuit.

The CA-IO-S supports bidirectional communication of the IO-Link specification so that the higher-level controller can transmit parameter settings and settings to the amplifier during operation, which in particular significantly simplifies installation and commissioning. Even during production and maintenance, the *HAEHNE* IO-Link interface offers many advantages, such as comprehensive diagnostics options and detailed information with regard to possible troubleshooting, maintenance or replacement of the devices.

Ordering Example

CA-IO-S

Technical Data

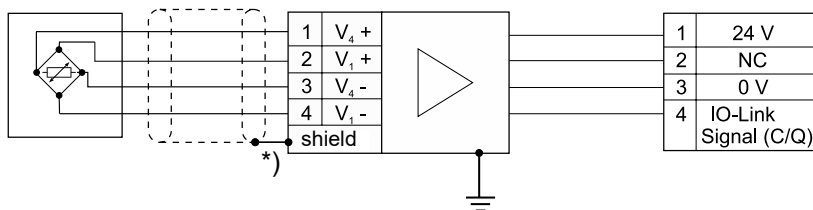
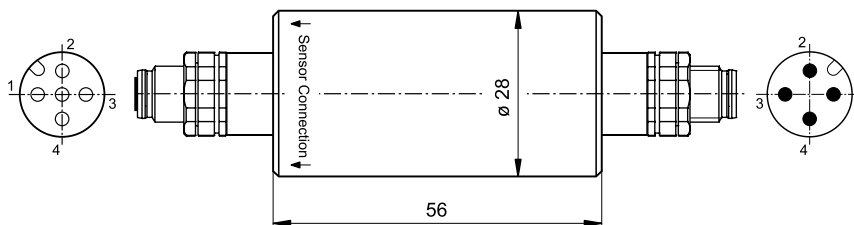
Power supply	Power supply	24 V DC, 18...30 V
	Typical current requirements with standard wiring	approx. 20 mA
Signal	-160 % ... 0 ... +160 % $\hat{=}$ 8000...0000...7FFF	
Sampling rate	1 ms	
Resolution	16 bit	
Data width	1 word	
Temperature range	0...+60° C	
Protection class	IP67	

Analog Input

Strain gauge excitation supply	Voltage (V_4) Current max.	2,5 V 10 mA
Nominal resistance of strain gage bridge	350 Ω ...5 k Ω	
Nominal rating	Standard	0.5 - 3,00 mV/V
	Other values for nominal rating on request	

IO-Link Specification

IO-Link revision	1.1
Transmission type	COM2 / 38.4 kBit/s
Min. Cycle time	3 ms
SIO Mode	No
Required master port class	A



V_1	Output signal of full bridge strain gauge
V_4	Excitation voltage to the full bridge strain gauge in the sensors

*) Place the shield of the sensor cable on the plug supplied.

When mounting the amplifier, equipotential bonding with a sufficient cross-section must be established.