HAEHNE

Product Description

DeviceNet Amplifier Busbox-D

Special features

- ❒ Amplifier with CANopen interface
- ❒ Designed for one or two strain gauge sensors
- ❒ User friendly commissioning via EDS file

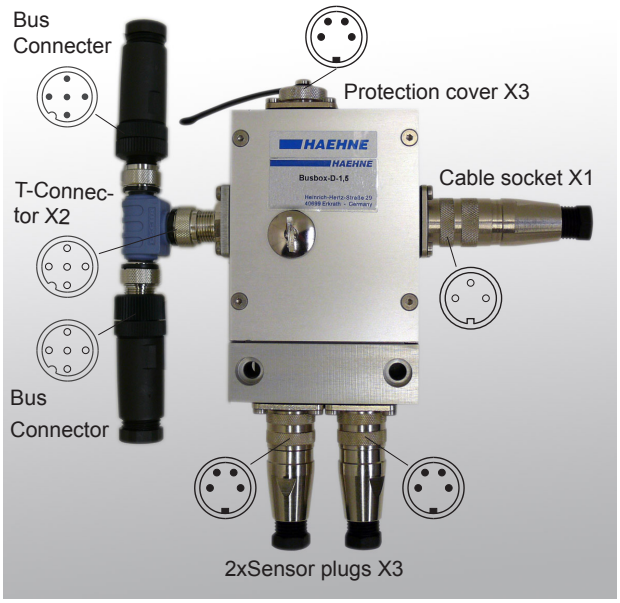
Scope of Supply

- **Electronic unit**
  designed into an aluminium enclosure
- **Disk with EDS-file**
- **2 Sensor plugs for X3** (X02073Z)
- **1 Protection cover for X3** (X02076Z)

Available for Delivery

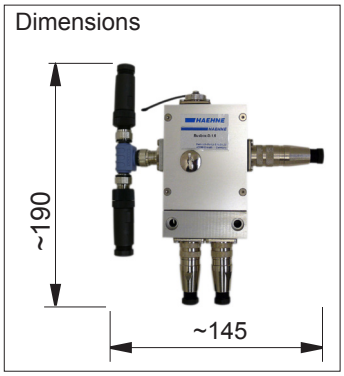
- **Cable socket X1** for external power supply (X02071Z)
- **Bus-T-connector X2**
  Pass-through: 5-pin socket + connector
  T-junction: 5-pin socket (X02218Z)
- **Bus connector**
  5-pin socket (X02219Z)
  5-pin plug (X02220Z)
- **Terminal resistance**
  5-pin socket (X02222Z)

Scope of Supply



2xSensor plugs X3


Examples for additional Busbox-D



Application

The Busbox-D is used whenever strain gauge sensors are to be connected to the DeviceNet. The primary use is for web tension measurement. It is possible to connect either each sensor separately to one Busbox and transmit the measurement value of each sensor onto the Bus or connect two sensors to one Busbox. The first alternative can be used to determine the web tension difference, the second results in the average values being transmitted to the Bus. The electronic device consist of an analog and a digital part.
The system can power one or two sensors and process the measuring signals. The measurement values are converted into digital signals. In the interface module they are converted to the appropriate data format for transmission to the Bus.

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Technical Data	
Power supply V_5	20,5 …30 V, max 150 mA
Sensor supply (Sensor A+B)	4,5 V/ 18 mA
Signal	±10,8 mV ≙ 8000…7FFF hex.
Standard protection	IP 67
Nom. temperature range	+10…+60 °C
Operational temperature range	0…+60 °C

DeviceNet	
Operation range	Group 2 only Slave (Poll, COS, Cyclic)
Transmission rate	125, 250, 500 kbit/s
Datenbreite	2 Byte Daten
Resolution	16 Bit bei ± 160% of nominal sensor force
Converting time	8 ms
Bus participant	max. 64

Micro Connector X2 (Pin)

color	Pin-no	Function
field	1	field
red	2	+24 V (V_5+)
black	3	GND (V_5-)
white	4	CAN_H
blue	5	CAN_L

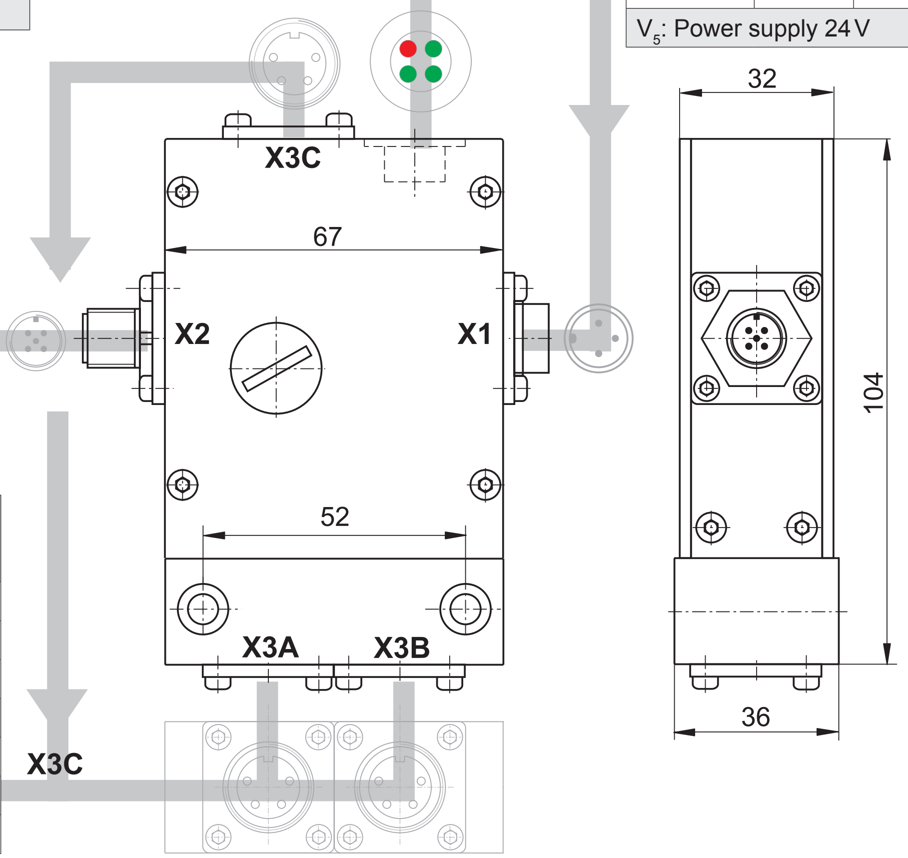
LED-Configuration (LED display):

1	green	LED power
2	red	Color of combined LED
3	green	module/network/status
4	green	————

Pin Configuration X1 (Pin)

color	Pin-Nr.	Function
white	1	+24 V (V_5+)
brown	2	GND (V_5-)
green	3	PE
	Schirm	enclosure

V_5: Power supply 24 V



Pin Configuration belegung X3 A/B/C (Receptacle)

color	Pin-Nr.	X3 A/B/C
white	1	$+V_1$
brown	2	$-V_4$
green	3	$-V_1$
yellow	4	$+V_4$
	field	enclusure

V_1:Signal volt. V_4:Supply volt..

Please consider with the order:

The amplification of the Busbox is preset and in particular correlation with the nominal rating of the HAEHNE sensor.

Version Busbox	Nominal rating HAEHNE sensor
-D-1,5	1,5 mV/V
-D-1,0	1,0 mV/V
-D-0,75	0,75 mV/V
-D-0,5	0,5 mV/V

Ordering Example:
Busbox-D-1,5
- Version
- DeviceNet
- Type

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