

Strain Gauge Measuring Amplifier

Applications

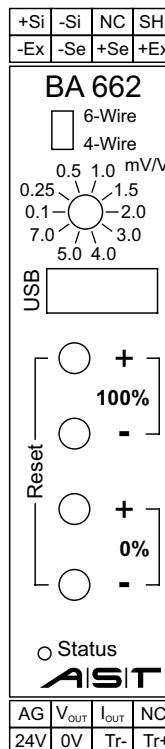
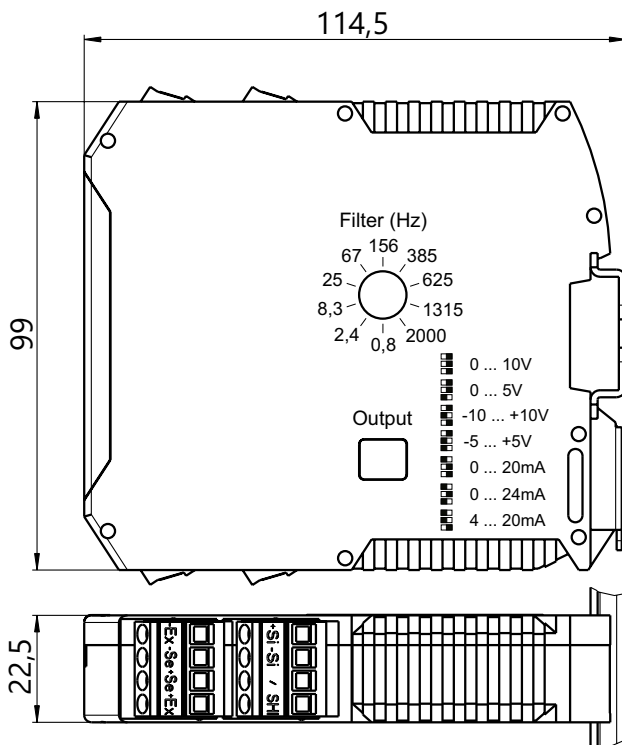
- Strain gauge measuring
- Process control
- Industrial automation
- Testing machines

Features

- Universal applicable
- High accuracy by 24 bit A/D-converter
- Configurable including multipoint calibration via USB interface and PC with **ASTAS** *
- Conversion rate up to 3200 Sps
- Filter from 0.8 Hz to 2.0 kHz
- Power supply 9 to 36 V galvanic isolated
- 4- or 6-wire technology
- Trigger input for zero point adjustment
- Simple handling
- DIN rail mountable

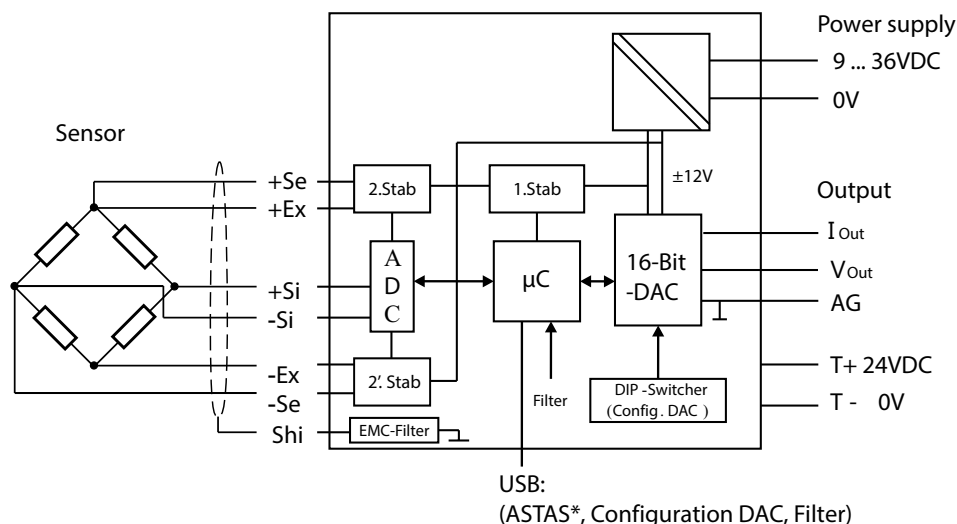


Dimensions/ Connections



Terminal connection	Description	
-Ex	neg. Excitation voltage	Sensor with 6 wire
-Se	neg. Sense signal	
+Se	pos. Sense signal	
+Ex	pos. Excitation voltage	
+Si	pos. Signal	
-Si	neg. Signal	
NC	not connected	
SHI	Shield	
AG	Ground for output signal	Output signal
V-Out	Voltage output	
I-Out	Current output	
NC	not connected	
+24V	Supply voltage	Power supply
0V	Supply voltage ground	
Tr+	Trigger 24V	electrically isolated input
Tr-	Trigger 0V	

Principle Overview



Specifications

Accuracy Class at Input Signal 2mV/V	% FSR	< 0.02 (typ.)	
Connection for strain gauge sensor		4- or 6-wire	
Bridge resistance/ Input impedance range	Ω	58 ... 2000 (up to 6 loadcells each 350 Ω)	
Input signal range (+Si/-Si)	mV/V	0.1/ 0.25/ 0.5/ 1.0/ 1.5/ 2.0/ 3.0/ 4.0/ 5.0/ 7.0	
Excitation voltage (+Ex/-Ex)	VDC	± 2.5	
Standard Output Signal			
Current output signal	mA	0/ 4 ... +20/ 0 ... 24	
Voltage output signal	V		-10/ -5 ... 0 ... +5/ +10
Load resistance (burden)	Ω	≤ 350	≥ 1000
Measurement Characteristics			
Conversion rate	Sps	6 ... 3200	
Resolution of the A/D Converter	Bit	24	
Filter	Hz	0.8 ... 2000	
Error at S=2mV/V			
Nonlinearity	% FSR	0.0025	
Noise (at measurement rate)	% FSR	0.002 (0.8Hz) ... 0.009 (2000Hz)	
Input sensitivity for 1 LSB	nV	150	
Zero drift	%/10K	< 0.01	
Power Supply			
Voltage range	VDC	9 ... 36	
Power consumption (without sensor)	W	3	
Environmental Conditions			
Operating temperature range	°C	-20 ... +60	
Storage temperature range	°C	-25 ... +85	
Construction			
		Plastic Housing for DIN-rail Mounting	
Weight	kg	0.2	
Dimensions (W x H x D)	mm	22.5 x 114.5 x 99	
Environmental protection (EN 60529)		IP 20	
Terminal block, wire size	mm ²	0.14 ... 2.5	

Order Example

* Software  download over www.ast.de

Type Code	Description
BA662	Strain gauge measuring amplifier for DIN rail mounting