

► Brunata Analogue Converter – Type HG-420SD for HG Energy and Water Meters

Characteristics

- High accuracy
- For meter types HGQ, HGS and HGW
- 4-20 mA analogue flow signal
- Active output signal
- Short circuit fuse
- Frequent updating
- Jumper for averaging flow signal
- Galvanic separation from meter
- 230V or 24V output
- Can be altered to voltage output 2-10V
- CE-certified



Further information

Brunata analogue converter HG-420SD converts the serial flow signal from a Brunata HG meter to a 4-20 mA analogue signal. It can be used for the flow signal from energy and water meters of type HGQ, HGS and HGW.

The converter is preset for the meter's full flow range, so that 4 mA corresponds to the minimum flow and 20 mA to the meter's permanent flow.

The analogue converter box is designed for wall-mounting and the 230V output acts as the meter's voltage supply (if the analogue box is provided for 24V voltage supply, the output is also 24V). The accompanying cable, which must not be extended, is connected to the meter's data outlet. The analogue signal and the meter's data output are galvanically separated.

The converter's output is active, i.e. external DC voltage supply is not required.

The output signal is updated after the meter's measuring cycle and will therefore show the meter's current flow. To counteract random variations, the signal can be averaged over 4 measuring periods of 1.6 seconds by fitting a jumper.

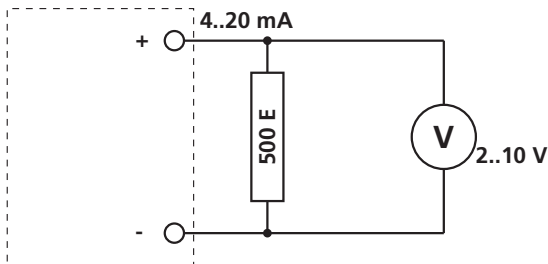
Other analogue converters

Type HG-420 converts the meter's normal pulse output for volume or energy to a 4-20 mA signal. This converter is used for the energy signal, but should not be used for regulation purposes. The meter's volume and energy pulses can be sampled from the analogue box.

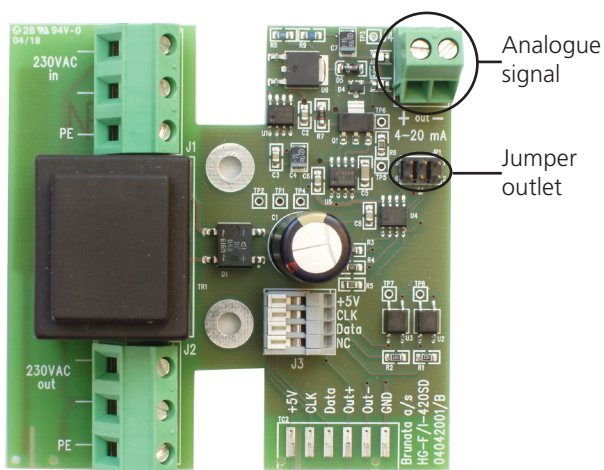
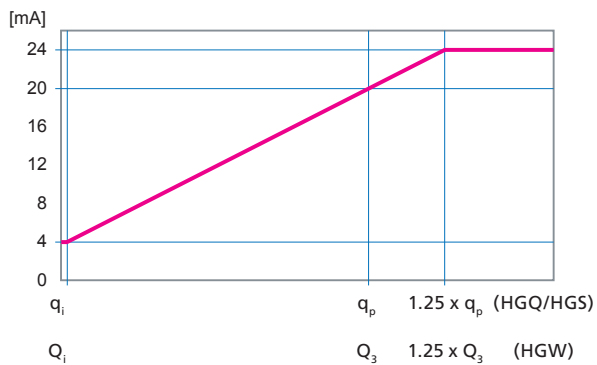
Type HG-420HF converts the meter's fast pulse to a 4-20 mA signal. It can be used for the flow signal from energy and volume meters of type HGP as well as most older HG meters.

Brunata is a 100 % Danish owned company. We have more than 85 years of experience within developing and producing heat cost allocators and heating accounts. Brunata a/s has implemented a quality system in accordance with EN ISO 9001. Please contact us for further information on our products!

By mounting a 500 ohm resistance above the output terminals as shown below, the current signal is converted to a 2-10V signal, see drawing.



The overload protection ensures that the output signal remains constant if the preset maximum frequency is exceeded, see diagram.



Technical Data

Technical specifications HG-F/I-420SD

Terminal voltage	230 Volt AC 50 Hz
Option	24 Volt AC 50 Hz
Power consumption	< 2 watt
Protection	Electronic short circuit fuse
Max. output voltage	12 Volt at 600 Ω (active signal source)
Output current, min	4 mA at the meter's minimum flow (q_i for HGQ/HGS in accordance with EN1434 and Q_i for HGW in accordance with OIML R49)
Output current	20 mA at the meter's permanent flow (q_p for HGQ/HGS in accordance with EN1434 and Q_3 for HGW in accordance with OIML R49)
Output current, max.	24 mA at 1.25 x the meter's permanent flow
Updating frequency	Every 1.6 second
Averaging	Over 4 measuring periods with jumper mounted on pin 5 and 6 (recommended)
Resolution	10 bit.
Absolute accuracy	above 1.5%

Box:

Measurements (HxWxD)	93 mm x 93 mm x 55 mm
Material:	Polystyrene
Colour:	Light grey (RAL 7035)
Inflammability:	Tested to UL94V-2
Mounting:	Directly on wall
Ambient temperature:	5 – 55 °C
Storage temperature:	-10 – 65 °C
Humidity:	10 – 70 % (non-condensing)
Weight:	265 g
Length of signal cable to meter:	0.4 m
Safety class:	Standard: IP44 (membrane) Special: IP65 (couplings)