

# How to do

## 1. Components supplied

- HG-420SD
- Cable with connector and rubber membrane
- Jumper (installed)
- Instructions for installation

## 2. General description

The HG-420SD is a complementary unit for Brunata HG energy and water meters type HGQ, HGS and HGW, which converts flow data signals from the meter into a 4-20 mA analogue signal.

The converter output is active, which means that no external DC-power supply is required.

The output device is updated every 3 second - which is also the measuring cyclus of the meter - and thus capable of displaying the meter's current flow.

To prevent accidentally peak flow, the analogue signal from the converter as default setting averages the value of more measurements.

The analogue signal from HG-420SD and the data output port of the meter are galvanically isolated.

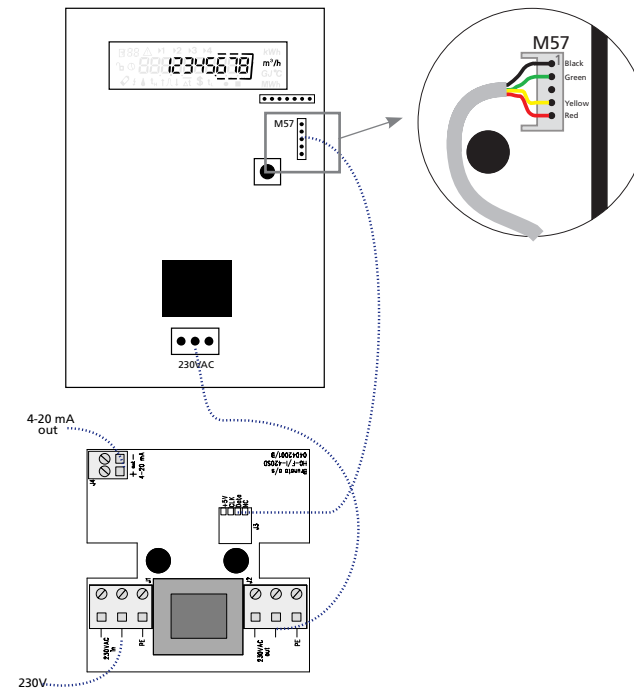
## 3. Installation and connection of HG-420SD

The analogue converter box is designed for wall mounting and is installed on an even surface close to the meter. **Please note** that the enclosed connection cable must not be extended.

The cable is delivered with plug and is connected between the M57-data output port of the meter and the grey connector J3 of the analogue box.

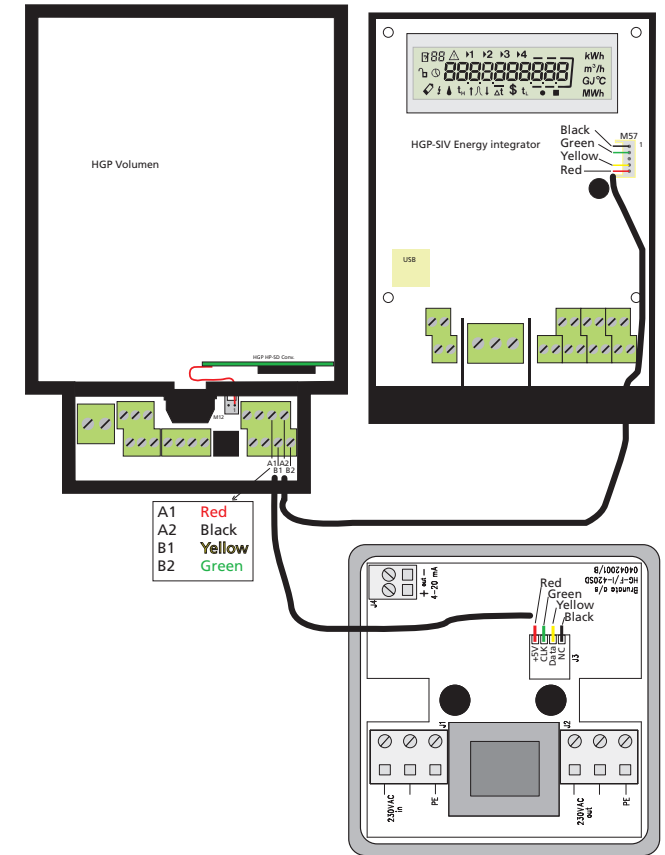
The 4-20mA-output is connected to J4.

The 230 VAC (alternative 24VAC) mains supply are connected to terminals J1 (230VAC in) in the analogue box. Power for the meter is supplied from terminals J2 (230VAC, alternative 24VAC out) in the analogue box.



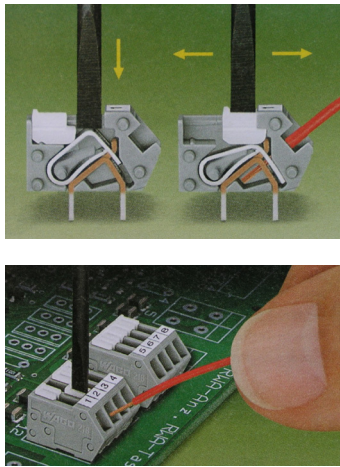
## 4. Connection with HGP-SIV

In case the analogue converter is used together with a HGP-SIV meter, simply cut off the plug and connect the wires directly onto the HGP terminals as illustrated.



## 5. Connection of wires

Press the connection cable through one of the membranes in the box (can be perforated with a small screw driver). Open the clamping unit using a screwdriver, see illustration. Move the locking slide towards the conductor entry hole to open the terminal. Fully insert the stripped wire ends according to the colour codes, and move the locking slide back to its original position (also possible without operating tool using a fingernail).

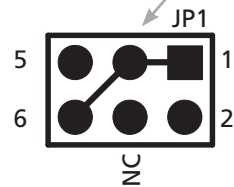
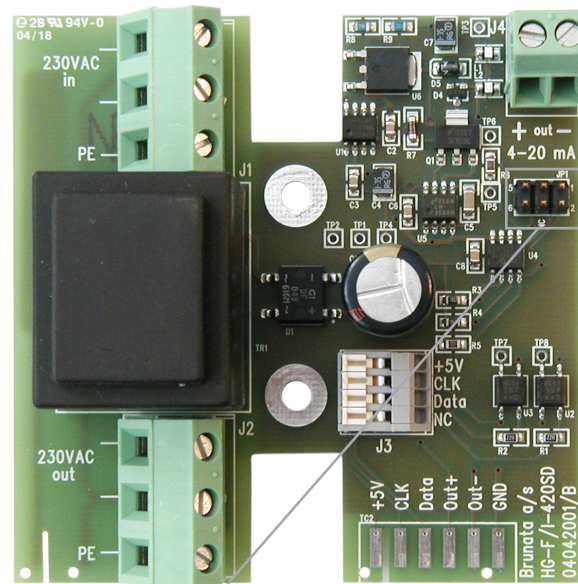


### Connection between meter and analogue box

HGQ-M57	Signal	Cable color	J3	HGP
1	GND	Black ●	NC	A2
2	Clock	Green ●	CLK	B2
3	-	-	-	-
4	F-data	Yellow ●	Data	B1
5	Power	Red ●	+5V	A1

## 6. Averaging of flow signal

When a jumper is mounted on JP1 (pin 1, 3 and 6 short) the data are averaged (4 measurements). See drawing below.



Jumper on for averaging flow signal

## Brunata Analogue Converter HG-420SD

### Installation Manual

