

# SIGNAL CONVERTER 520.11

ELECTRONIC ACCESSORY |  
DISPLAY AND CONTROL DEVICES



## APPLICATION

The spectrum of applications primarily covers the transmission of instantaneous values and provides the basis for the display and/or recording of flow rates in pipes. The current output is also used for various control and monitoring tasks.

## FEATURES

- Designed as snap-on housing for mounting rail
- 2-channel control options for compound meter: infrared reflex pulse transmitter (571), two-wire proximity switch to DIN 19234 (NAMUR) (572, 573) self-optimizing level, electronic counter module, mechanical compact energy meter RAY
- Front-panel programming buttons for setting menu controlled functions
- Freely programmable input pulse values
- Filtered output signal 0/4 mA ... 20 mA and 0/2 V ... 10 V
- 1 floating output (make contact, open collector)
- Electrically isolated measuring and supply circuits
- Selftest, self-monitoring
- LC display for flow rate (m<sup>3</sup>/h or l/s); min./max. flow rate; meter reading; menu guidance
- M-Bus interface (option)

## FUNCTION

The microprocessor-controlled LCD universal signal converter converts the pulses from the volume measuring components in the water meters (main meters and submeters) to a dc current proportional to the flow rate (digital-analogue converter). The current amplitude is proportional to the instantaneous flow rate.

The converter is also used for converting high-resolution pulses to decadic pulses (e.g. m<sup>3</sup>). The signal converter 520.11 is programmed via touch controls on the front panel.

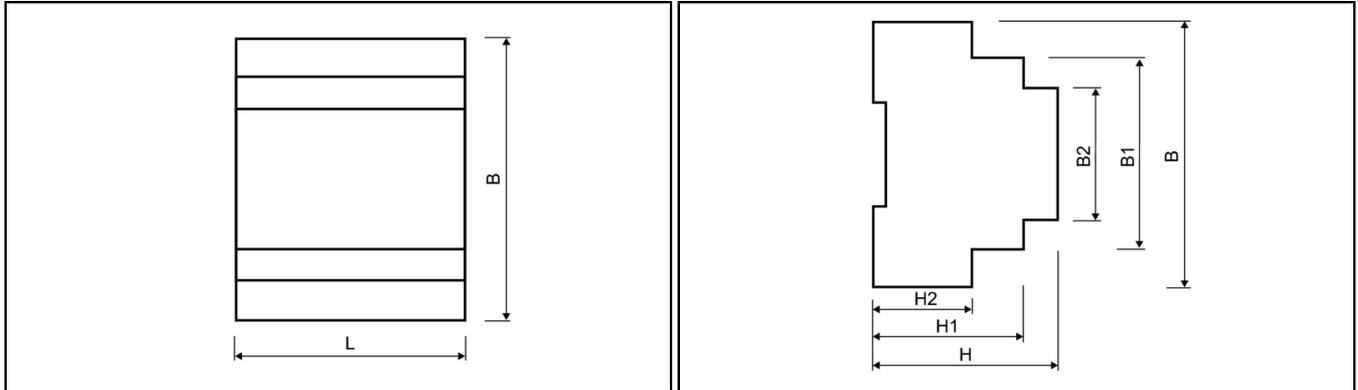
## TECHNICAL DATA

<b>SIGNAL CONVERTER 520.11</b>	
Supply voltage	20 ... 250 V AC / DC, approx. 100 mA ... 10 mA
Linearity	% < 0.4
Temperature drift	% < 0.5 (0 ... 55 °C)
Storage temperature	°C -20 ... +70
Operating temperature	°C -10 ... +55
Inputs	Infrared reflex light barrier (571), Infrared light barrier with amplifier (PV-14), Proximity switch (NAMUR) to DIN 19625/EN 50227 (572, 573), electronic counter module, RAY
Input frequency range	Hz 0 ... 0.1 to 0 ... 99.9
Output current	mA 0 (4) ... 20 (max. load 650 Ω)
Output voltage	V 0 (2) ... 10 (min. load 3 kΩ)
Pulse output	Optocoupler bipolar FET (make), max. 230 V AC / 100 mA
Pulse value	Freely adjustable
Display indication	LCD, 2-line
Values displayed	Current flow rate, current meter reading, min./max. flow rates
Setting / programming	Via touch controls / menu-controlled entry of programming data
Housing - type	Snap-on housing
Housing - fixing	Mounting rail to DIN 46277
Protection class	IP 30
Weight	g Approx. 400
EMC - interference immunity	EN 50081-1
EMC - noise emission	EN 50082-2

**NOTE**

The use of overvoltage protectors is recommended if long cables are necessary for connecting the measuring sensor to the signal converter or the converter to the display unit.

**DIMENSIONS**



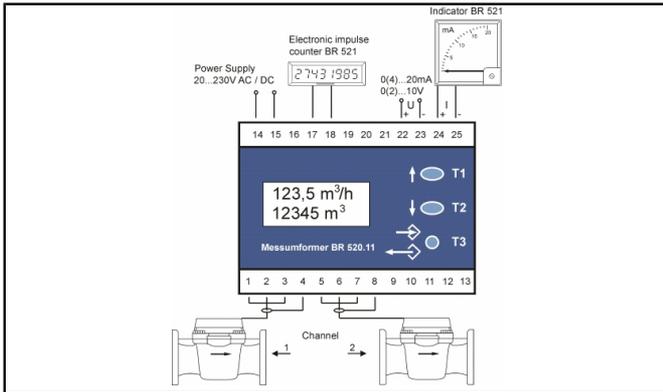
**SIGNAL CONVERTER 520.11**

Length	L	mm	72
Width	B	mm	91
Width	B1	mm	65
Width	B2	mm	46
Height	H	mm	62
Height	H1	mm	51
Height	H2	mm	33

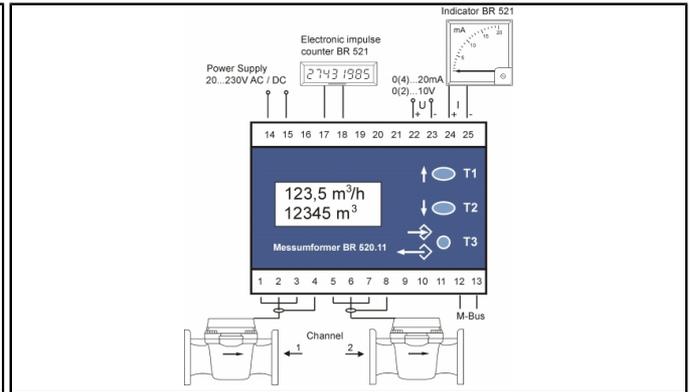
**ORDER REFERENCES**

Type	Standard
Article number	520 000 18

## CONNECTIONS

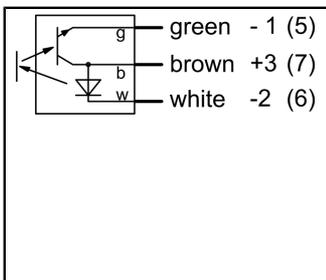


Standard

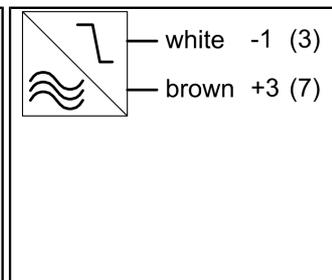


M-Bus

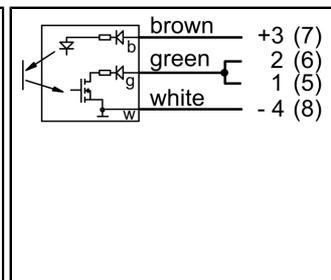
## CONNECTION OF SENSORS



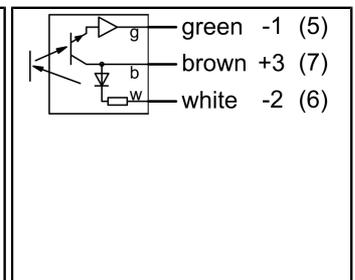
Reflex light barrier (571)



Namur (572, 573)

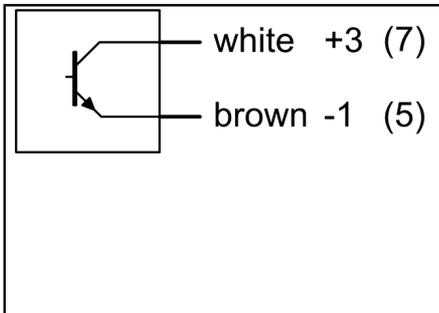


Open drain (573)

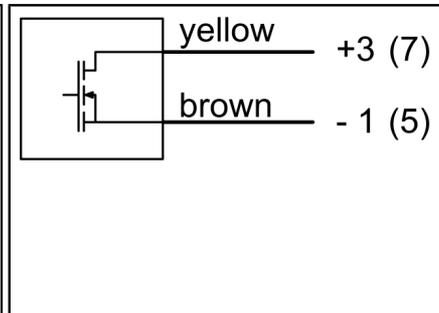


Reflex light barrier PV 14

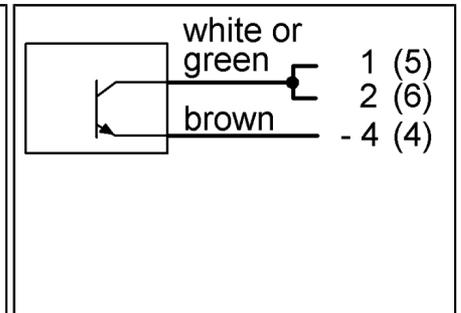
## CONNECTION OF SENSORS / METERS



Pulsar



Electronic counter module



RAY

## **Economic Actor Information**

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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