DIEHL
Metering

SWITCHING AMPLIFIER 521

ELECTRONIC ACCESSORY | DISPLAY AND CONTROL DEVICES



APPLICATION

The switching amplifier is preferably used for binary signal transmission of water meters.
The switching amplifier is frequently used as pulse extension relay for fast running processes. It can be used as contact protection relay or non-bounce relay when being triggered by a volt-free contact transmitter (reed switch).
If required, the two binary inputs can be added to one output-channel (via turn switch).

FEATURES

- Snap-bar case version
- Triggered on choice by contact transmitter, infrared transmitter and two-wire primer (NAMUR)
- Each output is a opto-coupler with one no-contact
- Two volt-free outputs, solid state relay, no-contact
- Galvanically isolated measurement and supply circuits
- Adjustable impulse period
- 3 different pulse length, adjustable via turn switch
- Pulse-addition adjustable via turn switch
- Power supply 20 ... 250 V AC/DC

TECHNICAL DATA

		SWITCHING AMPLIFIER 521
Supply voltage		Wide range power supply 20 ... 250 V AC/DC, 100 mA ... 20 mA
Display		LED display for output pulses
Storage temperature	°C	-40 ... +70
Operating temperature	°C	0 ... +55
Output - type		Solid stay relay (SSR), output volt-free
Output - load		Max. 230 V / 100 mA ~
Min. input pulse duration		6 ms
Max. input pulse duration		Infinite
Outputs		Can be switched over via turn switch; S_1 = Channel 1, S_2 = Channel 2
Inputs		Initiator 571 / 572; Reed switch 570, IR transmitter 571, PV14
Housing - type		Snap-on housing
Housing - fixing		Mounting rail to EN 50022 (35 x 7.5)
Protection class - housing	IP	20
Protection class - terminal	IP	10
Weight	g	200

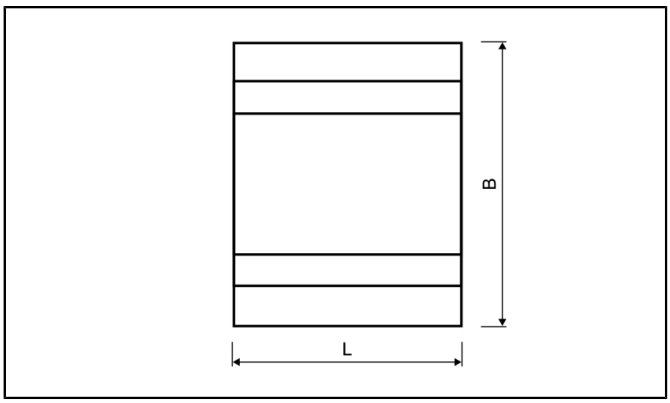
Separate working outputs (S_x = Channel 1 or Channel 2)
S_x = 0 | $Output_x$ = $Input_x$ --> direct transmission / permanent contact
S_x = 2 | $Output_x$ = $Input_x$ with 0.1 sec output pulse
S_x = 3 | $Output_x$ = $Input_x$ with 0.3 sec output pulse
S_x = 4 | $Output_x$ = $Input_x$ with 2 sec output pulse

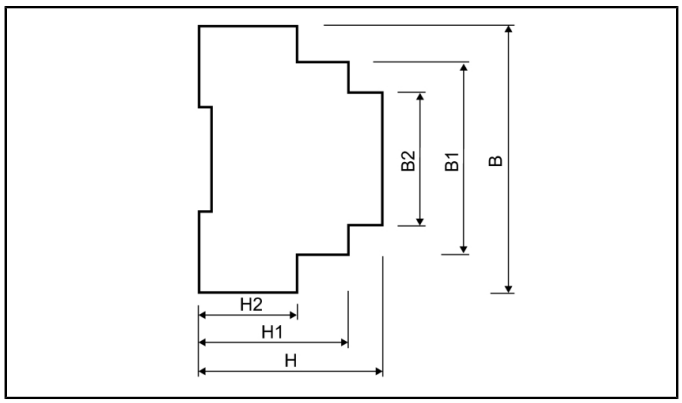
Input-Addition (Channel 1 + 2) --> $Output_x$ (max. up to 100 pulses per channel in memory)
S_x = 9 | $Output_x$ = E1 + E2 with 0.1 sec output pulse
S_x = A | $Output_x$ = E1 + E2 with 0.3 sec output pulse
S_x = B | $Output_x$ = E1 + E2 with 2 sec output pulse

TECHNICAL DATA INPUTS

	SWITCHING AMPLIFIER 521
Initiator 572, 573	8 mA (short-circuit-current), 1.6 mA (switching point)
Reed switch 570	8 mA (short-circuit-current), 1.6 mA (switching point)
IR transmitter 571	5 mA (short-circuit-current), 1.0 mA adjustable by front trimmer (switching point)
PV14	5 mA (short-circuit-current), 1.0 mA (switching point)

DIMENSIONS



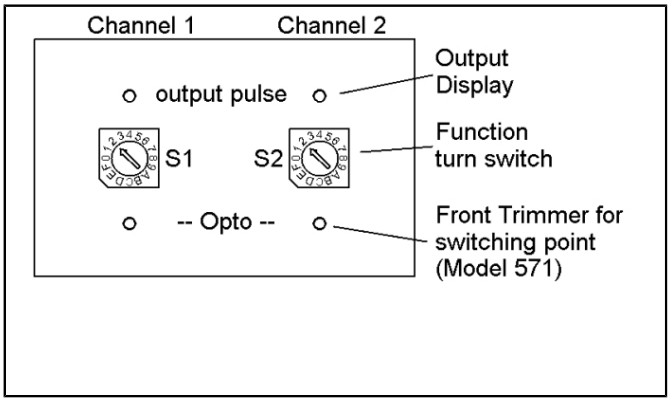


			SWITCHING AMPLIFIER 521
Length	L	mm	72
Width	B	mm	91
Width	B1	mm	65
Width	B2	mm	46
Height	H	mm	62
Height	H1	mm	51
Height	H2	mm	33

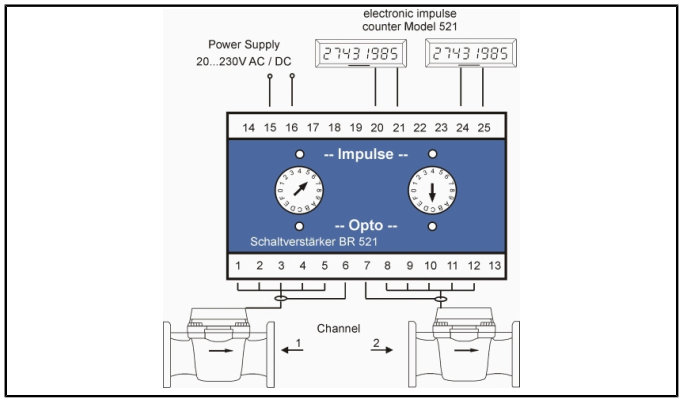
ORDER REFERENCES

	SWITCHING AMPLIFIER 521
Remark	Switching Amplifier (Snap Bar) (SSR) 20 ... 250 V AC/DC
Article number	521 000 16

OPERATION TURN SWITCH | CONNECTIONS

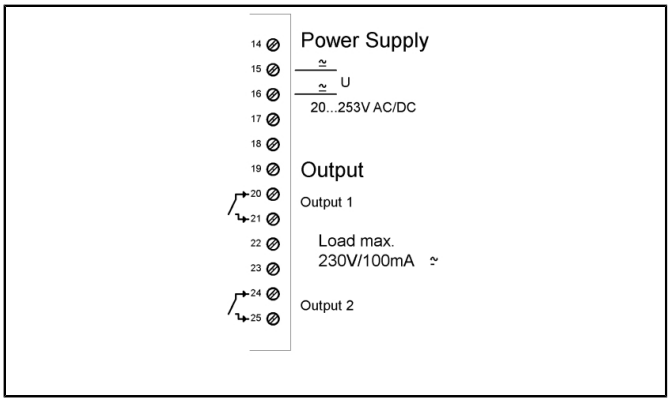


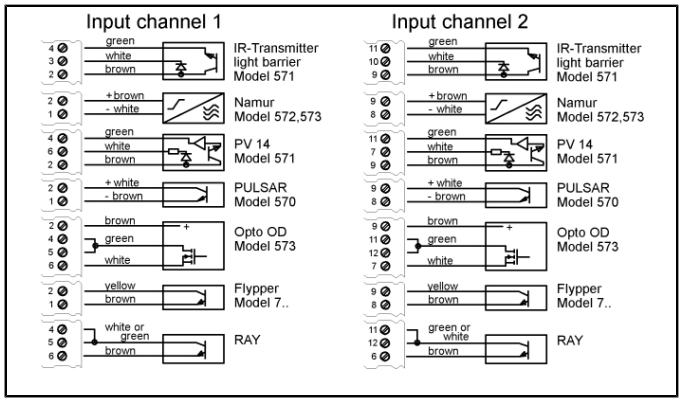
Operation turn switch



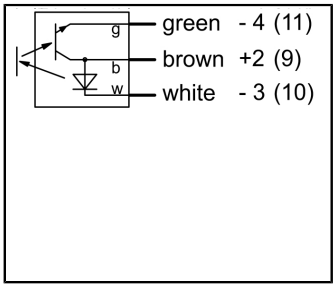
Connections

PIN ASSIGNMENT

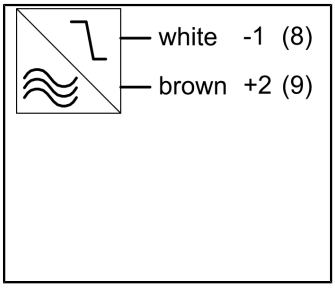




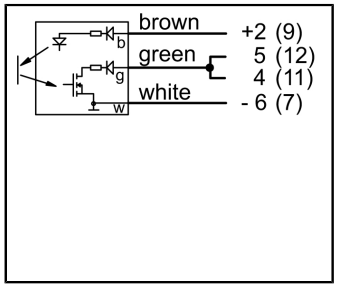
CONNECTION OF SENSORS



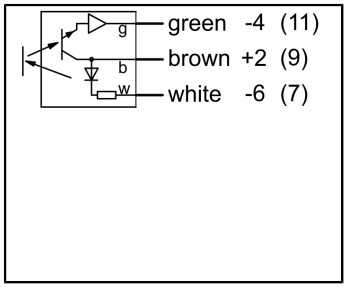
Reflex light barrier (571)



Namur (572, 573)

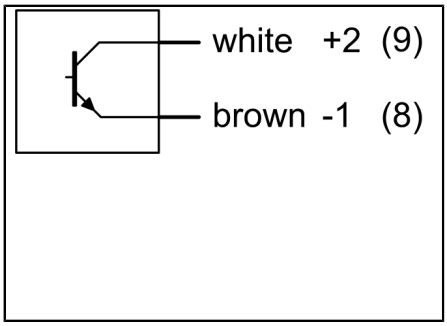


Open drain (573)

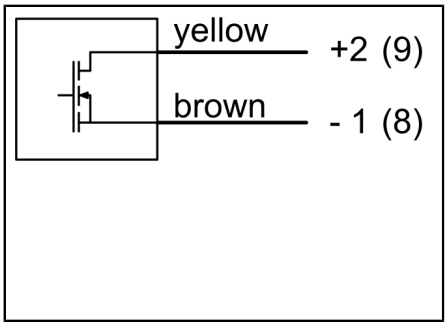


Reflex light barrier PV 14

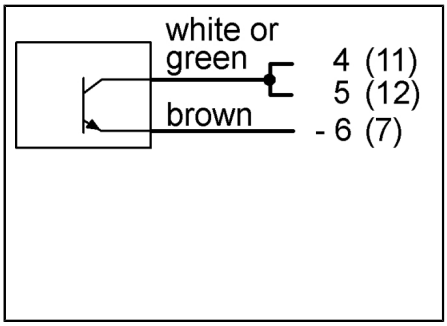
CONNECTION OF SENSORS / METERS



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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