CRESSTO
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Short instruction for use S series transmitters

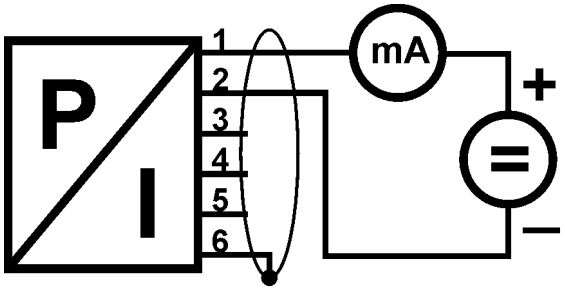
- Before connection of the transducer into the pressure circuit, it is necessary to verify that the pressure being measured corresponds to the nominal range of this transducer. Even a transient loading over the maximum allowable overpressure may cause a destruction of the measuring membrane!
- If you measure a pressure of aggressive media it is necessary to verify the transducer material compatibility.
- Caution when sealing of thread (with teflon or with oakum) in liquid medium, because of screwing into the closed volume of liquid can cause uncontrollable rise of pressure and destroy this way measuring membranes!
- All S series transmitters are involved in the electrical circuit by the usual manner. Supply voltage in always in range 5 to 36V. Especially in two-wire connection is necessary to have this voltage at the terminals of the sensor, not for supplying whole loop.
- In case that any of screw terminal inputs is empty, it is not possible to connect it somewhere else. Because it is electrically connected with transmitter circuits and wrong connection can result in error, non-functionality or destruction of transmitter. Specification of individual signals is on label.
- All analog and digital circuits of transmitter are galvanically connected to shared ground, node -Ucc. At the combination of analog and digital inputs is necessary to think about it.
- All inputs are separated by 22uH inductors and protected by varistors against short high-voltage spikes.
- Numbering of leads corresponds to numbering of internal screw terminal.
- Pin 6 is connected to the metal box and serves as a shielding around the sensor. Pin is galvanically isolated from electrical circuits of sensor, tested by the 1000V DC voltage.
- For screw terminal is allowed to use only wires with cross section max 1mm2. In case of connection more inputs and outputs we recommend to use wires with smaller cross section.

Outputs table, pin assignments of screw terminal and connector

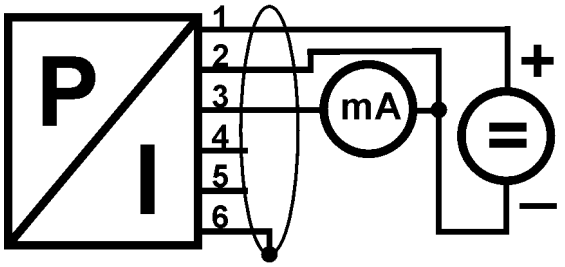
Connector	3	2	1			⊥				
Screw terminal	1	2	3	4	5	6	7	8	9	10
4 ÷ 20mA	+Ucc	-Ucc				case				
0÷20mA	+Ucc	-Ucc	Out			case				
0÷10V	+Ucc	-Ucc	Out			case				
0÷3V	+Ucc	-Ucc	Out			case				
RS232	+Ucc	-Ucc		RxD	TxD	case				
RS485	+Ucc	-Ucc		B	A	case				
Switching outputs							Re1	Re2	OK1	OK2

In case of any doubt read the complete instructions for use S-series or contact the manufacturer, company Cressto s.r.o. !!!

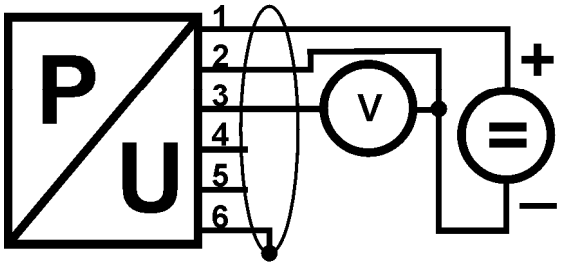
Diagram



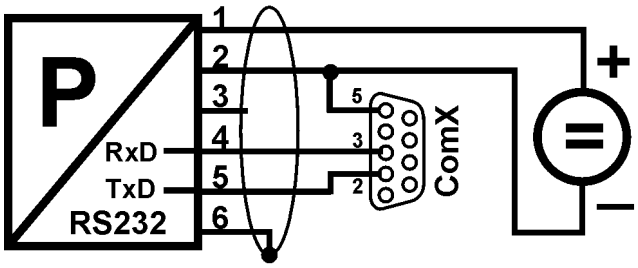
F 4 - 20mA two-wire is most common analog output. Minimum supply voltage is 5V. Transmitter has its software and hardware max. current limitation in loop.



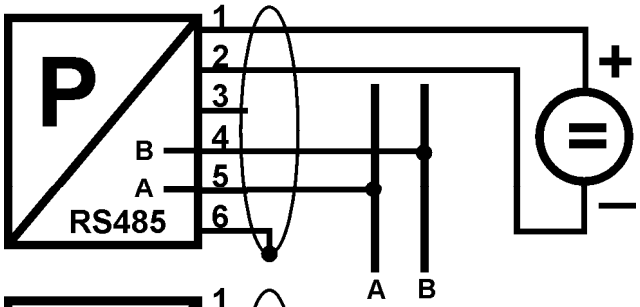
G 0 - 20mA three-wire. Can be set on 4-20mA range. Maximum load impedance R = (Ucc - 2) / 20mA



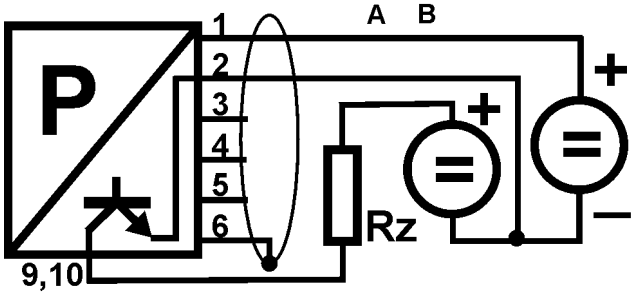
H 0-10V, can be also set different ranges. For ranges smaller than 3V is recommended to switch transmitter output range for resolution D/A converter. Min. supply voltage has to be 2V higher than max. output voltage. Max. current load is 20mA



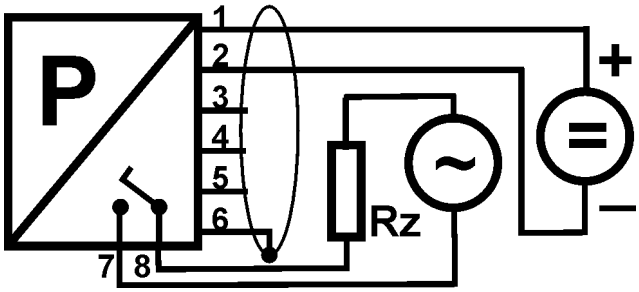
A digital output RS232. Can be connect directly to native or maped (USB, LAN) serial port. For communication are used data signals Rx and Tx. RS232 line is not galvanically isolated.



B connection on RS485 bus. Device address can be assigned in range 00 to FF and can set other communication parameters. Line is not galvanically isolated, when the power supplies from various sources is recommended to interconnect their grounds.



L is double switching output with NPN transistors with open collector. It is possible to switch by current up to 100mA and DC voltage up to 50V. Load can be simple resistor, bulb, LED, relay etc.. Load is always galvanically connected with transmitter supply. Transmitter power supply and load power supply can be shared. Switching levels, hysteresis, polarity are setting by software. It can be also set switching „window“.



R is switching output with galvanically isolated contact bistable relay. It is possible to switch DC and AC up to 40V and max. current 0,5A. Switching levels, hysteresis, polarity are setting by software. It can be also set switching „window“.