



LABOR – ASTER

INDUSTRIAL AUTOMATION



CIRCUITS SEPARATOR type S2D

- Rail housing 12,5mm wide
- Circuits separation with translation
any standard $\Rightarrow$ any standard
standard version $0/4 \div 20\text{mA} \Rightarrow 0/4 \div 20\text{mA}$
- Additional voltage source 24Vdc, 30mA in input
circuit for use with two-wire $4 \div 20\text{mA}$
transmitter.
- Full mutually galvanic separation of input,
output and supply.

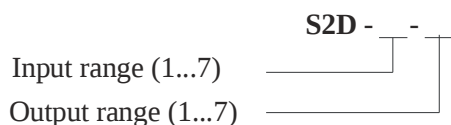
PURPOSE:

Separator **S2D** is designed to galvanically separate measuring input circuit from measuring output circuit.

The device is powered from 24Vdc voltage source. Input, output and supply circuits are mutually galvanically separated from each other. Using the separator reduces the impact of object interference, eliminates the influence of the ground potential difference between objects and allows to adjust different standard signals ($0 \div 5\text{mA}$, $0 \div 20\text{mA}$, $4 \div 20\text{mA}$, $0 \div 5\text{V}$, $0 \div 10\text{V}$, $1 \div 5\text{V}$).

User can correct starting settings of “zero” and “range” by using potentiometers (ZERO and RANGE) located on the front panel of the separator.

ORDER CODE



Input and output range:

1 - $0 \dots 5\text{mA}$ 2 - $0 \dots 20\text{mA}$

3 - $4 \dots 20\text{mA}$, also two-wire transmitter on input

4 - $0 \dots 5\text{V}$ 5 - $0 \dots 10\text{V}$

6 - $1 \dots 5\text{V}$ 7 - other (not typical)

Order example:

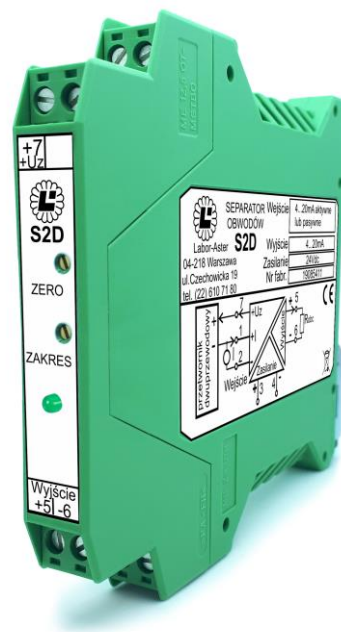
Separator S2D in standard version:

input $4 \dots 20\text{mA}$, output $4 \dots 20\text{mA}$ typ **S2D-3-3**

input $0 \dots 20\text{mA}$, output $0 \dots 20\text{mA}$ typ **S2D-2-2**

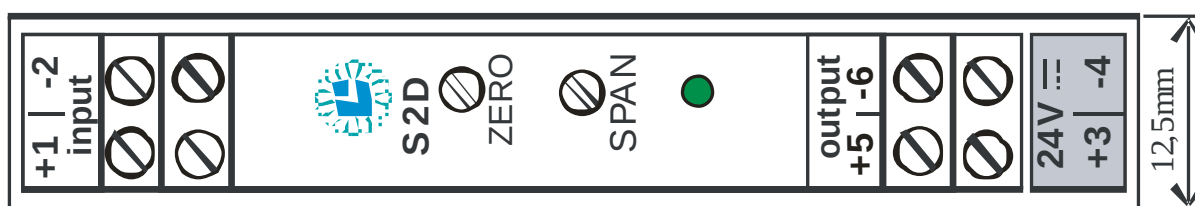
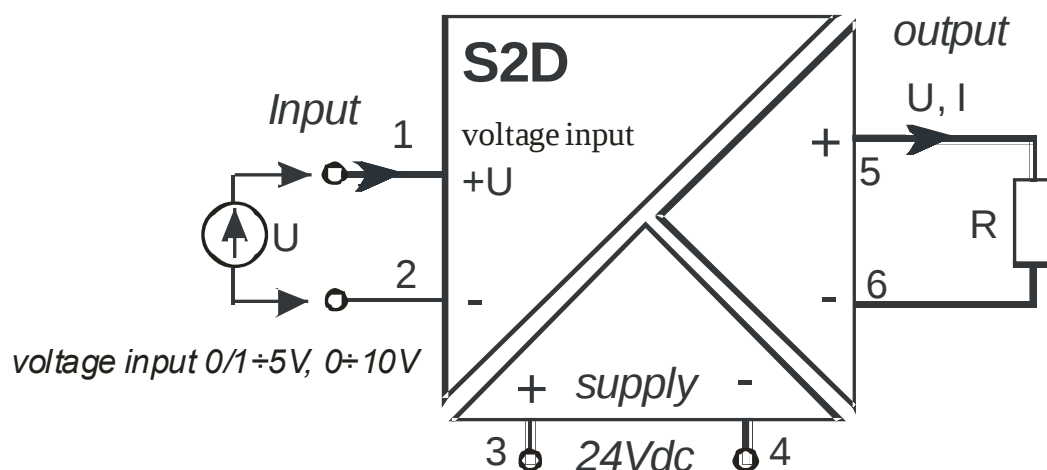
Separator S2D not in standard version:

input $0 \dots 20\text{mA}$, output $0 \dots 10\text{V}$ typ **S2D-2-5**

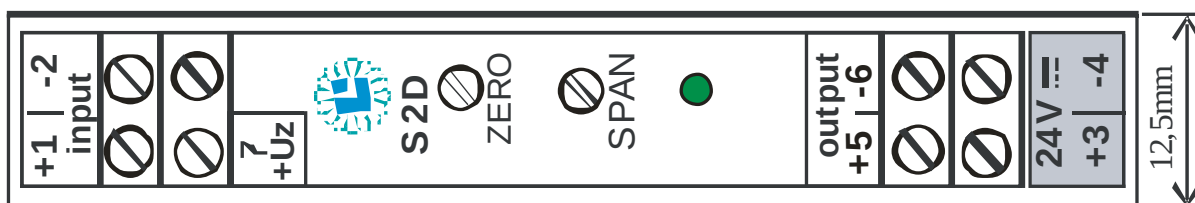
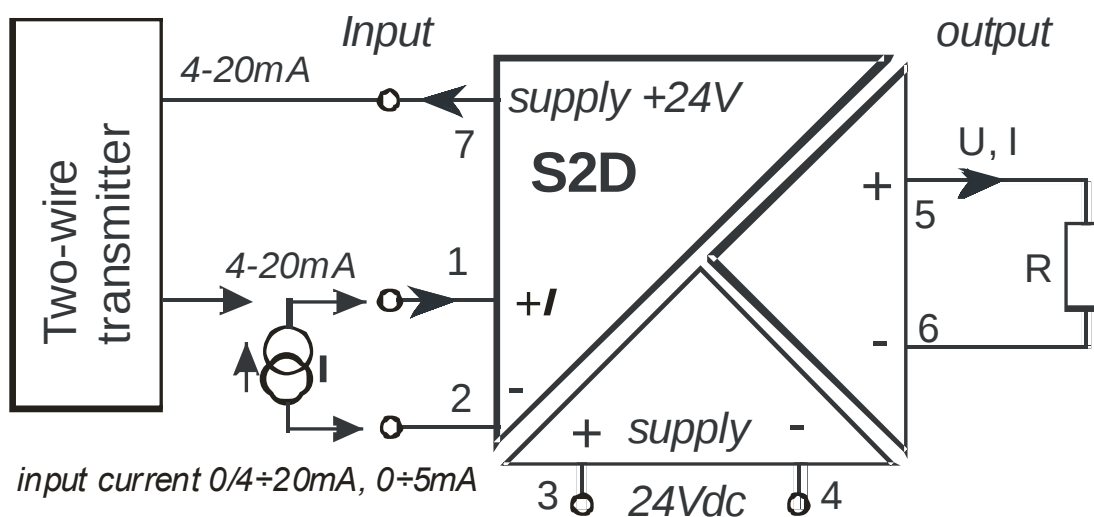


BASIC TECHNICAL PARAMETERS :

Input signal	- any U, I standard
	- $4 \div 20\text{mA}$ loop supply for two-wire transmitter
Input resistance:	
$0/4 \div 20\text{mA}$ input	- 50Ω
voltage inputs	- $\geq 100\text{k}\Omega$
Output signal	- any U, I standard
Load resistance:	
$0/4 \div 20\text{mA}$ output	- $0 \div 650\Omega$
voltage outputs	- $\geq 3\text{k}\Omega$
Supply voltage	- $21 \div 28 \text{ V}_{\text{DC}} / 65\text{mA}$
Auxiliary power supply U_z for two-wire transmitter	- $24 \text{ V}_{\text{DC}} \pm 1,5 \text{ V}$ (16V at 20mA)
Class	- 0,1%
Nonlinearity	- $\pm 0,05\%$
Error due to changes in load resistance	- 0,02%
Temperature coefficient	- $\pm 0,01\%/^{\circ}\text{C}$
Time constant	- 20ms
Galvanic separation	- 2kV between all circuits
Capacitance between circuits	- $< 10\text{pF}$
Housing	- rail housing $12,5 \times 99 \times 114 \text{ mm}$
mounting	- on TS35 rail
protection level	- IP20



Terminals description for S2D separator with voltage input: S2D-4-?, S2D-5-?, S2D-6?



Production and distribution:

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The manufacturer reserves the right to make changes to the product.

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