LABOR – ASTER
INDUSTRIAL AUTOMATION

SF-S2 CONVERTER OF ANALOG SIGNAL TO FREQUENCY
ZSF-S2 SUPPLIER – SEPARATOR OF TWO-WIRE TRANSMITTERS WITH CONVERTING TO FREQUENCY

● **Linear change of analog signal to frequency**

APPLICATION:

Converter **SF-S2** linearly converts value of analog signal to frequency of square wave with 50% duty cycle or constant pulse time agreed with the customer.
Typical application of the converter is:
  - control of binary inputs of the drivers, counters and integrators (integration of the analog signal);
  - counter of Ah (ampere-hour) or kWh ;
  - control of inverters etc.
Difference between converter **SF-S2** and **ZSF-S2** is that it supplies two-wire 4...20mA transmitter and converts this signal to frequency.
User can calibrate beginning and span of the range with potentiometers (ZERO and SPAN) which are on the front panel of the converter.

BASIC TECHNICAL PARAMETERS:

Input signal: SF-S2 - any standard
               ZSF-S2 - 4...20mA from two-wire transmitter

Input resistance:
  input 0(4)...20mA - 50Ω
  voltage input - ≥250kΩ

Output signal - square wave with 50% duty cycle, or constant pulse time if agreed (e.g. 1ms),
  - pulse amplitude to agree (e.g. 0/24V)
  - frequency from range 0...10kHz
  - OC pnp or npn max. 40V/100mA

Supply - 21...28 Vdc/70mA or 230Vac
Galvanic separation - 2kV, 50Hz between all circuits
Class - 0.2%
Temperature drift - 0.015%/°C
Nonlinearity - 0.1%
Time constant - 0.1s (or as agreed 0.05...1s)
Housing - rail IP40 with a width of 40mm
  mounting - universal rail clinch
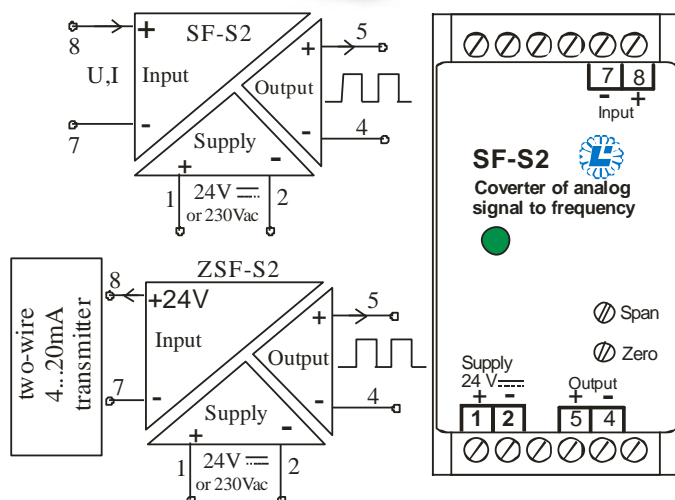
How to order   SF-S2- _ - _ - _
ZSF-S2

Version :
L - rail housing
P - wall housing

supply :
- 24Vdc
- 230Vac

input range (1...7) :
1 - 0...5mA ; 2 - 0...20mA ; 3 - 4...20mA
4 - 0...5V ; 5 - 0...10V ; 6 - 1...5V
7 - other atypical (describe)

Output type :
 - frequency band (fmin / fmax)
 - square wave (pulse duration, pulse amplitude)
 - OC PNP , OC NPN (amplitude)