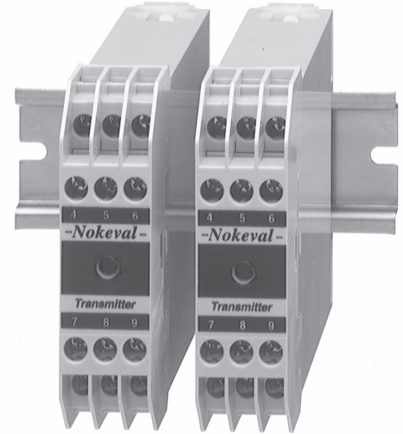


f/I/U Pulse converter 6420

- Frequency conversion in the range 0.0003 Hz..20 kHz
- Sensors NPN, PNP, Namur, pickup or contact
- Alarm level or pulse divider/ multiplier
- Output 0..20 mA, 4..20 mA, 0..5 V or 0..10 V
- Output linearisation
- Adjustable digital input filter
- Pulse counter with analog output (optional)
- Configuration by PC software or hand held programmer
- Power supply 24 VDC



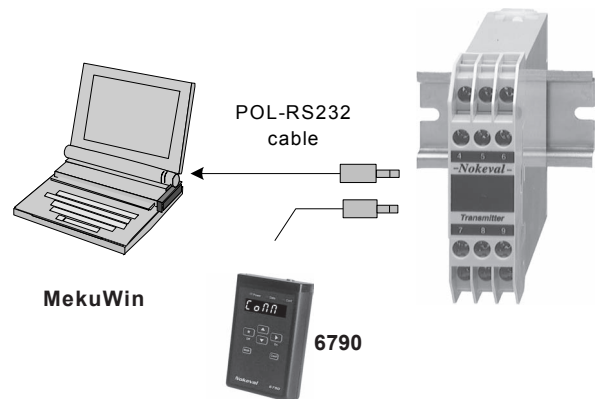
The pulse converter 6420 is designed for pulse sensors whose input frequency needs to be converted into analog output 0/4..20 mA or 0..5/10 V. The converter has an exceptionally wide frequency range 0.0003 Hz..20 kHz, so that it is ideally suited to e.g. flow sensors providing very low pulse frequencies.

Besides the current output the converter features one alarm level and a digital output. Making use of the alarm level the converter may function as a batch controller as well. Alternatively, the digital output may function as an internal configurable pulse divider/ multiplier that transmits impulses to an external counter, e.g. 1 pulse/ litre.

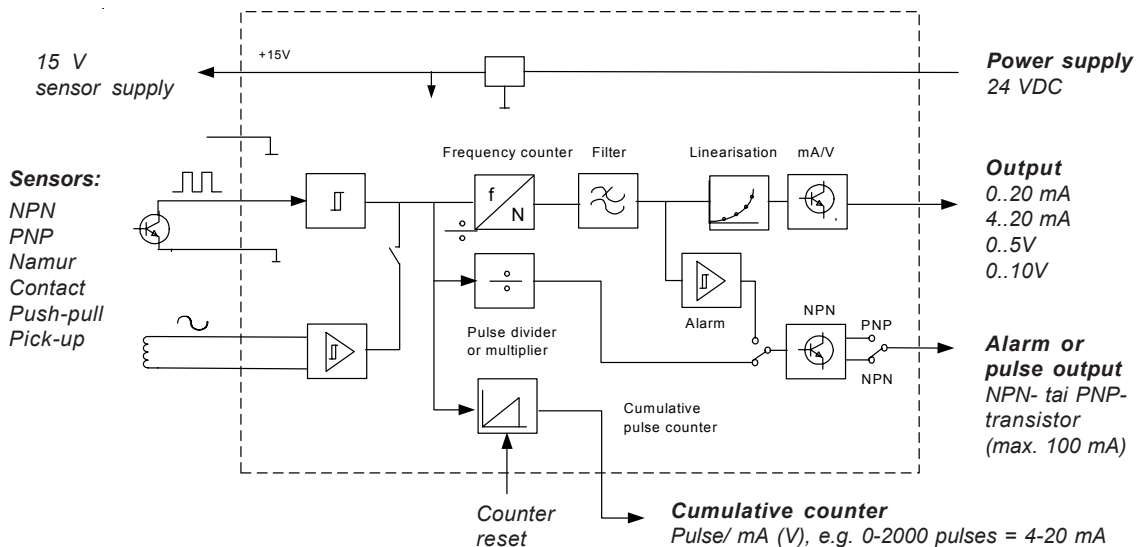
The converter can also be used as a pulse counter that increases the output signal according to the scaling. The counter is reset via an external contact.

The processor-based converter is easy to program by the general-purpose MekuWin PC-software or with the hand-held programmer 6790.

Configuration is easy by PC-based MekuWin software or the hand-held programmer 6790



Schematic drawing



Technical specification:

Sensors: NPN, PNP, Namur, contact, push-pull or magnetic pickup

Namur, NPN and Contact: input current range <1 and >2,7 mA
open input voltage 9,7 V
input resistance 1.2 kΩ
shortage input current 8 mA

PNP: input resistance 5 kΩ
trigger level 2.5V (common)

Pickup: signal level 20...500 mV
input resistance >1 MΩ

Input range:
Min. frequency 4000 seconds /pulse 0.00025 Hz
Max. frequency 20 kHz
Min. pulse width 100 μs
Filter digital filter freely selectable,
filter prevents double contacts

Sensor supply: 15 V, max. 50 mA
power supply 24 VDC can also be used for sensor supply

Output:
Current output 0..20 mA , 4..20 mA
Max. load 650 Ω
Load effect <0.01%
Voltage output 0..5 V, 0..10 V
Linearisation 9 points
Max load 1000 Ω
Configuration freely scalable on the full range
Accuracy <0.1% of span
Resolution 12 bits

Counter function: counting of incoming pulses; the counter value increases the output (mA/V); reset via external push button. Counter function is alternative to the frequency input.

Alarms: 1 alarm level freely adjustable
Hysteresis freely selectable
Digital output PNP- or NPN-transistor, max. 28 V, 100 mA

Pulse divider/multiplier: Internal pulse divider divides or multiplies incoming pulses and provides a 50-ms-wide impulse for the digital output. (alternative to the alarm function)

General:
Power supply 19..28 VDC, current demand 20..60 mA
Operating temp. 0..60°C
Installation DIN rail 46277 (15 mm)
Weight 100 g

How to order:

6420 - A - B - C

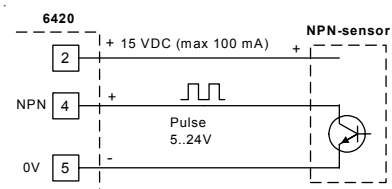
A: Input range (Hz)
B: Output
0-20 mA, 4-20 mA, 0-5V, 0-10V
C: Alarm /Divider /Multiplier
Alarm limit=AL/value

Example: 6420-0/150Hz-4/20mA-AL/100Hz
Input range 0-150 Hz, output 4-20 mA, alarm limit 100 Hz

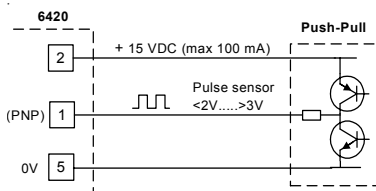
When a programmer is used, the input frequency and other values need not be specified in the order.

Connections and dimensions:

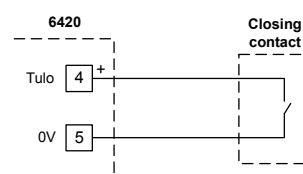
NPN-sensor



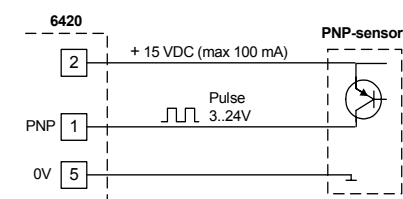
Push-Pull sensor



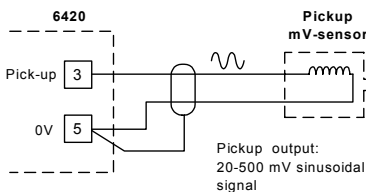
Contact input



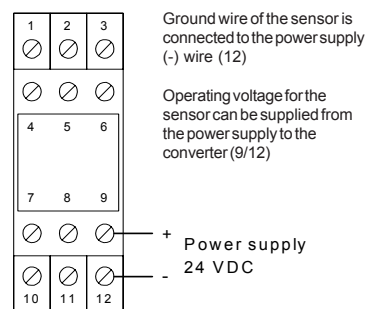
PNP sensor



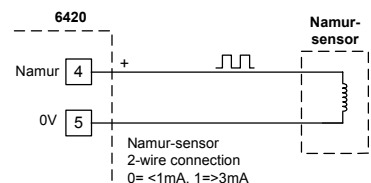
Pickup sensor



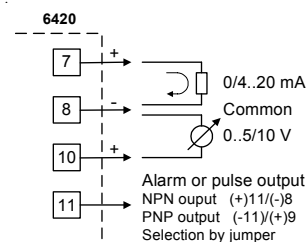
Power supply



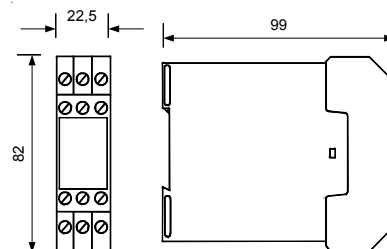
Namur-sensor



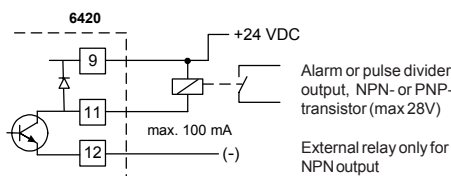
Outputs



Dimensions (mm):



Alarm relay connection



Reset of counter

