

Flow Converter UNICON-DF®



- Measuring range programmable from ± 99999 Digit
- Unit programmable
- Totalizer programmable
- Output 4..20 mA, loop powered
- Impulse output for external evaluation
- 2 alarm outputs electronic, voltage free

Characteristics

The Flow-Converter UNICON-DF is used in food technology, chemical and pharmaceutical industry and water technology. In connection with any type of pulse flow sensor the flow rate can be measured, displayed and converted in a 4..20 mA signal. An additional feature is the summation function (totalizer). Using the alarm outputs a quantity dosage can be realized. The overall totalizer is zero voltage protected and can only be reset by a special code (password protection).

Technical data

Power supply

Loop voltage : 12..30 V DC, 2-wire
 Operating temperature : -10..+55 °C
 CE-conformity : EN 61326-1:2013

Measuring input

Type : Inductive transmitter (coil),
 Namur sensor or e.g. Hall-Sensor
 (rectangular pulse) programmable
 alternatively external pulses 0/5..24 V DC.

- Coil : switching level from $\pm 5.. \pm 1000$ mV
 programmable

- NPN sensor : switching level < 0.9 V low, > 2.1 V high
 pull-up-resistance 20 k Ω

- PNP sensor : switching level < 0.9 V low, > 2.1 V high
 pull-down-resistance 20 k Ω

- Namur : switching level < 1.4 mA low,
 > 1.8 mA high, hysteresis approx. 0.4 mA

Frequency : 0.1/10..2000 Hz
 (depends on the measuring interval)

Outputs

Signal : 4..20 mA
 Burden : $RA \leq (U_B - 14 \text{ V}) \div 0,02 \text{ A}$
 Accuracy : ± 0.1 % measuring value ± 2 Digit
 Impulse output : Transistor ≤ 5 Hz, load max. 60 mA,
 short-circuit-proof
 impulse width 100 ms,
 quantity / volume per impulse
 programmable from 1..99999 Digit

Alarm outputs

Transistor : max. 30 V DC, 60 mA,
 short-circuit-proof

Voltage drop : < 2 V

Display : LCD-dot matrix, 4.9 mm character height
 2 lines 16 character each

Flow : -99999..0..99999 Digit,
 max. 3 decimal digits

- Unit : l/s, l/min, l/h, m³/s, m³/min, m³/h,
 (US)gal/s, (US)gal/min, (US)gal/h,

bar(rel)/s, : bar(rel)/min, bar(rel)/h

Totalizer : -999999..0..999999 Digit,
 max 3 decimal digits

- Unit : l, m³, (US)gallon, barrel

- Storage : daily totalizer, not voltage safe
 total totalizer, voltage safe

Case : field mounting

Material : Case Polyamide with fiber glass
 PA6-GF/GK 15/15, Front foil Polyester

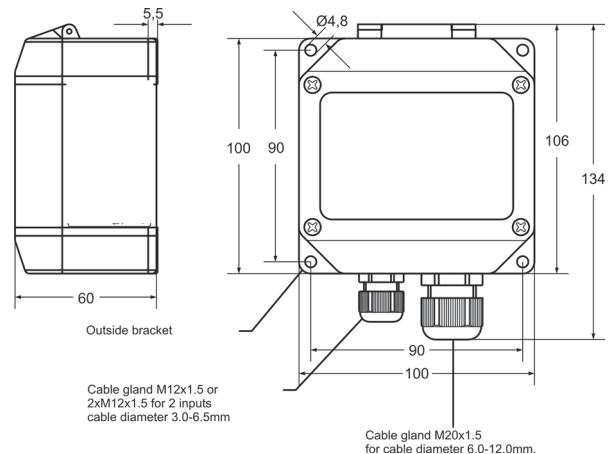
Dimensions : 100 x 100 x 60 mm (WxHxD)

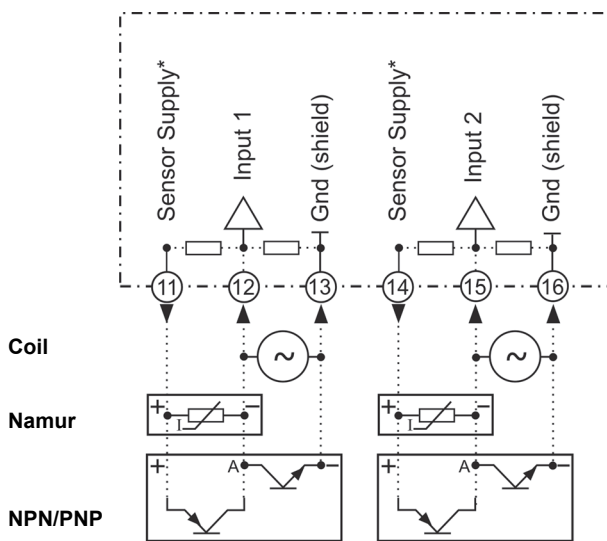
Weight : max. 360 g

Connection : screw terminal with pressure plate,
 2,5 mm² flexible, 4 mm² single wire

Protection class : IP65, terminals IP20 acc. to BGV A3

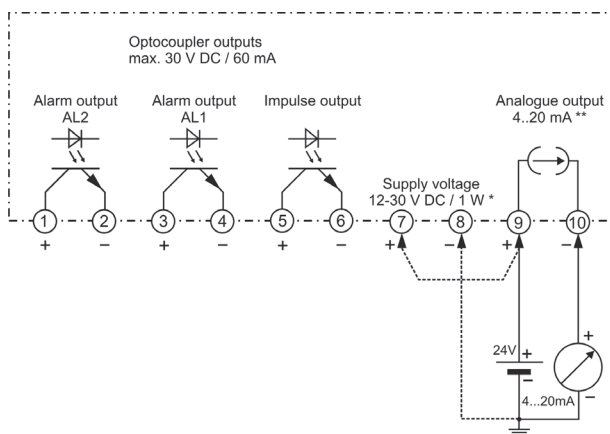
Dimensions



Connection diagrams
Terminal strip sensor input

Ordering code

 UNICON-DF - 1. - 2. - 3.

1. Type	
1	inductive sensor (coil), Namur sensor, NPN and PNP sensor (Impulse), analog output 4...20 mA, 1 Impulse output for ext. evaluation, 2 electronic alarm outputs
2	as 1, but additional input for addition / subtraction, incl. 2nd cable gland
2. Mounting	
02	field mounting, connection of the flow sensor with separate cable
3. Options	
00	without option

Terminal strip in-/outputs


* Separate supply voltage over the terminals 7 and 8 only when using Namur sensors (according to DIN EN60947) or sensors with NPN- or PNP output with power demand $U_b > 5 \text{ V} / > 2 \text{ mA}$.

** For supplying the converter use terminals (9) and (10) as shown. If the converter is used for monitoring only, terminals (9) and (10) must be connected direct to the supply voltage.