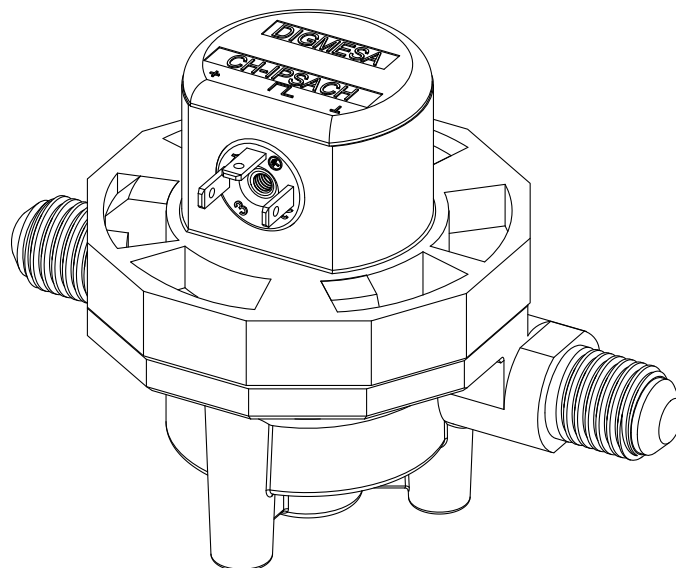


# DATA SHEET



**DIGIMESA**<sup>®</sup>  
CHOOSE THE ORIGINAL

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FFC 40 Arnite  
Part number: 934-0540

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# General Description

The FFC 40 Flowmeter is a general-purpose precision device. It measures with constant precision and guarantees maximum accuracy in the measurement of fluid volumes. Its integrated electronic pulse emitter gives an additional guarantee for a practically unlimited useful life. This flowmeter is employed with great success in beer and premix dispensing systems. In addition to this, it can

measure spirits or chemically-aggressive products and therefore finds much use in the most varied of industrial sectors just as accurately.

**Special features:** By means of its special jewelled bearing, its fitting position can be freely selected. Inlet and outlet are freely selectable.

## Approvals / Standards

EN55014-1:00+A1:01+A2:02, EN61000-6-3:01+A11:04, IEC61000-6-3:06(ed.2.0), EN61000-3-2:06, IEC61000-3-2:05(ed.3.0), EN61000-3-3:95+A1:01+A2:05, IEC61000-3-3:94+A1:01+A2:05(Cons.ed 1.2), EN55014-2:97+A1:01, EN61000-6-1:01, IEC61000-6-1:05(ed.2)



## Material:

|              |   |
|--------------|---|
| Housing:     | PBT 35%GF (Arnite)                                  |
| Bearing pin: | Inox 1.4404, Ruby                                   |
| O-ring:      | MVQ (Silikon)                                       |
| Turbine:     | PVDF  |
| Magnets:     | Ceramic Sr Fe O<br>(not in contact with the medium) |

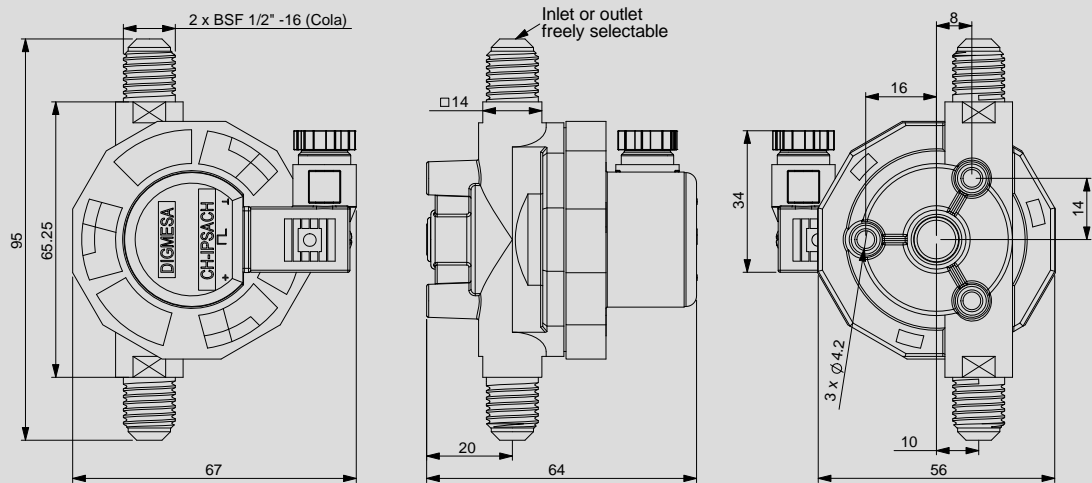
## Technical data:

|                     |                                 |
|---------------------|---------------------------------|
| Flow rate:          | 0.22 - 7.75 l/min               |
| Speed:              | max. 500 rpm                    |
| Measuring accuracy: | +/- 2.0%                        |
| Repetition:         | < +/- 0.25%                     |
| Temperature range:  | -10°C to +65°C<br>14°F to 149°F |
| Pressure range:     | 5,5 bar at 20°C<br>79 psi /68°F |
| Mounting position:  | freely selectable               |
| Nozzle size:        | Ø 4.0mm                         |

## Electrical connection ratings:

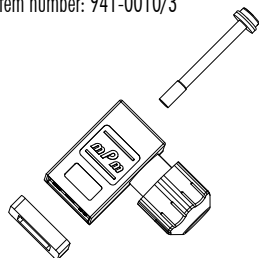
|                    |                                 |
|--------------------|---------------------------------|
| Power supply:      | 3.8-24 VDC                      |
| Consumption:       | < 20.1mA                        |
| Signal connection: | Open collector NPN              |
| Signal voltage:    | 0 VDC GND<br>(Sättigung <0.7 V) |
| Signal load:       | max. 20 mA                      |
| Leakage current:   | max. 10 µA                      |
| Connections:       | 3Pin- AMP 2.8 x 0.8 mm          |
| Signal:            | Rechteck-Ausgang                |
| Duty Cycle:        | ~ 50%                           |

## Abmessungen in mm:



## Included in the delivery:

3-pin valve connector  
Item number: 941-0010/3



We reserve the right to make modifications in the interests of technical progress.

## RESISTANCE

Special regulations which must be complied with by the flowmeter manufacturer apply to each country, e.g. CE, NSF, FDA and SK. The various media flowing through the flowmeter differ from application to application. You are advised to enquire with the medium manufacturer as to whether the entire installation and the flowmeter are resistant to the medium itself (see Material)!

## ELECTRONIC

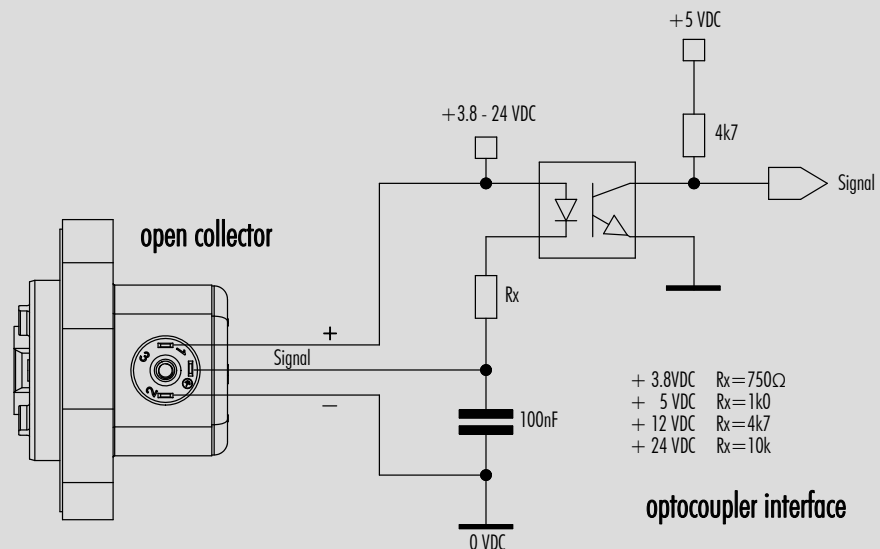
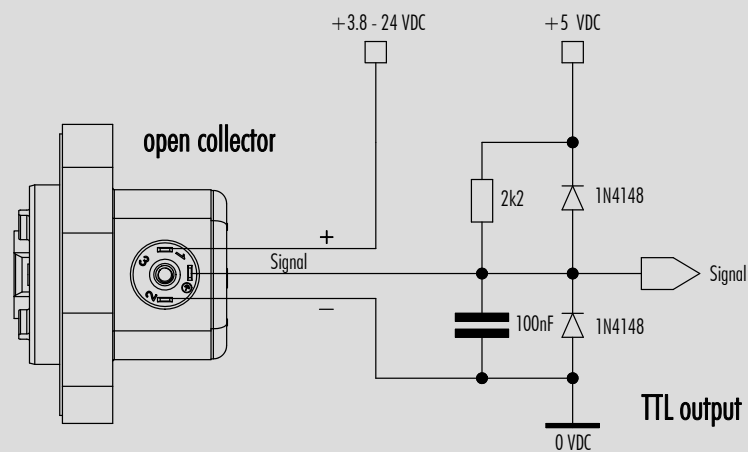
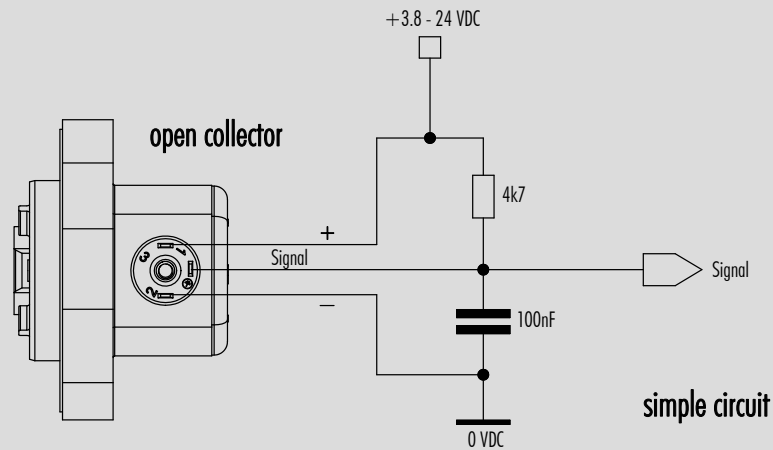
DIGMESA electronic circuitry is always designed for operation with DIGMESA flowmeters. Please note the following if connecting to other electronic circuitry:

- The flowmeter does not supply an output voltage but switches the signal terminal to 0 V ground (actuated) or leaves it open (non-actuated)
- There must be a pull-up resistor between power supply + and signal depending on electronic circuitry!

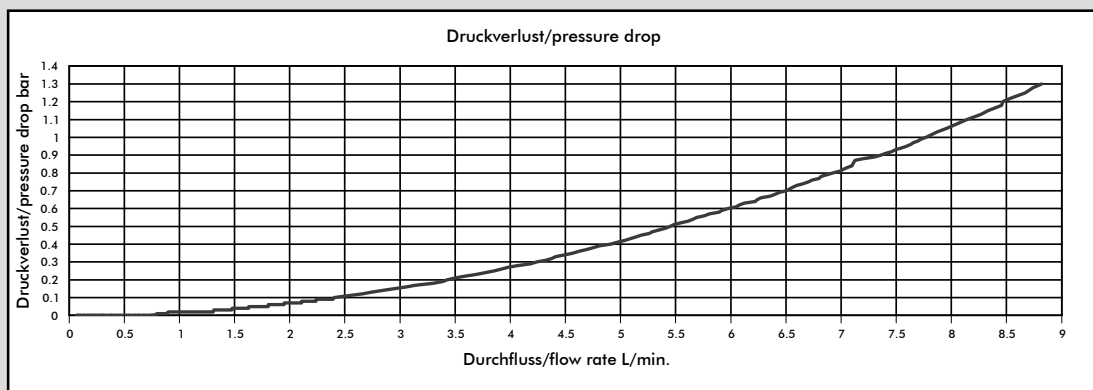
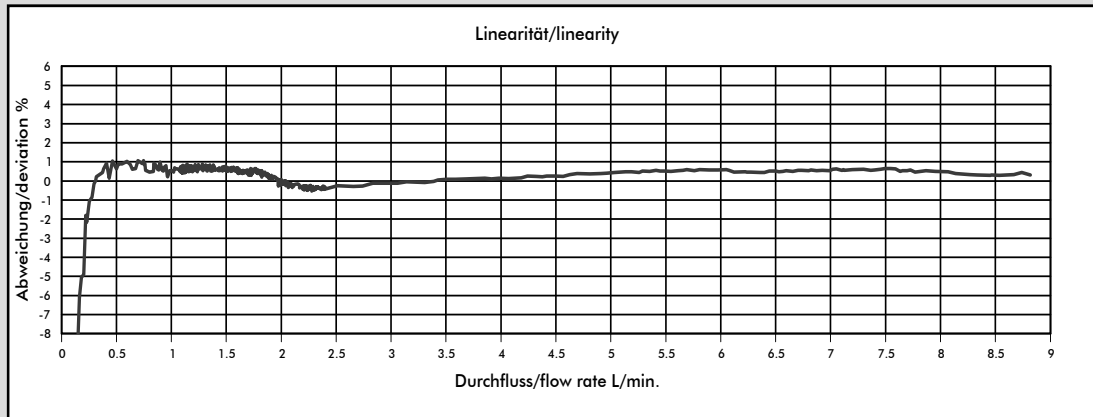
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# Interface Connection: Examples Open Collector



# Measurement Curve FF Ø4.00 mm



Medium: Water / max. Pressure: 3.3 bar

| Nozzle size | Pulses/litre | g/pulse | min. flow rate in litres/min at Linear start | max. flow rate in litres/min | Pressure loss (bar) |
|-------------|--------------|---------|--|------------------------------|---------------------|
| Ø 4.00 mm   | 343          | 2.9     | 0.220  | 7.75                         | 1.0                 |

## MEASUREMENT TIPS

- Ensure that there is no fast-pulsatory movement of the media
- Ensure that there are no reverse pressure surges
- Ensure that there is no air in the system
- Keep the pressure loss as small as possible
- Note the mounting position of the flowmeter
- Min/max flow should be in the linear range of the selected flowmeter
- Clean the system at appropriate intervals
- Avoid electrical current peaks
- Incorrect cabling of power supply +, signal and ground will destroy the flowmeter
- Do not mechanically load electrical contacts
- Avoid moisture on the electrical contacts
- Avoid stray pick-up via the cable (Do not lay cables in parallel with high current loads)

**The values specified must be considered as approximate values.**

**The number of pulses per litre may differ depending on medium and installation.**

**We recommend to calibrate the number of pulses per litre in line with the complete installation.**