



Electronic Flow Rate Transmitter

EVS 3100 for Oils / Viscous Fluids

Description:

The flow rate transmitters in the series EVS 3100 (aluminium range) are specially designed for use in hydraulic and other fluid technology systems.

They operate according to the turbine principle, i.e. the speed of an impeller turning in the fluid flow is measured and converted into a 4 .. 20 mA analogue signal.

Two further G1/4 threaded holes in the turbine housing provide connections for additional units, e.g. temperature and pressure transmitters.

Special features:

- Pressure resistant to 400 bar (depending on model)
- Viscosities of 1 .. 100 cSt
- Output signal 4 .. 20 mA
- Additional connection of temperature and / or pressure transmitters possible

Technical specifications:

Input data

Measuring ranges * and operating pressure

| | | |
|-----------------|---------------------|---------|
| EVS 310X-A-0020 | 1.2 .. 20.0 l/min | 400 bar |
| EVS 310X-A-0060 | 6.0 .. 60.0 l/min | 400 bar |
| EVS 310X-A-0300 | 15.0 .. 300.0 l/min | 400 bar |
| EVS 310X-A-0600 | 40.0 .. 600.0 l/min | 315 bar |

Additional connection options 2 x G1/4 female threads for pressure and/or temperature sensors

Output data

Output signal, permitted load resistance 4 .. 20 mA, 2 conductor
 $R_{Lmax} = (U_B - 10 V) / 20 mA [k\Omega]$

Accuracy $\leq 2\%$ of the actual value

Ambient conditions

| | |
|-------------------------------|----------------|
| Compensated temperature range | -20 .. +70 °C |
| Operating temperature range | -20 .. +70 °C |
| Storage temperature range | -40 .. +100 °C |
| Fluid temperature range | -20 .. +90 °C |

CE mark EN 61000-6-1 / 2 / 3 / 4

Protection class to DIN 40050 IP 65 (Binder 714 M18)
 IP 67 (M12x1, when an IP 67 connector is used)

Other data

| | |
|-----------------------------------|-------------------|
| Housing material | Aluminium |
| Measuring medium | Hydraulic oils ** |
| Viscosity range | 1 .. 100 cSt |
| Calibration viscosity | 30 cSt |
| Supply voltage | 10 .. 32 V DC |
| Residual ripple of supply voltage | $\leq 5\%$ |

Note: * Other measuring ranges on request
 ** Other fluids on request

Model code:

EVS 3 1 0 X - A - XXXX - 000

Housing material

0 = Aluminium

Electrical connection

4 = 4 pole Binder series 714 M18, male
(connector not supplied)

6 = M12x1, 4 pole, male
(connector not supplied)

Signal

A = 4 .. 20 mA, 2 conductor

Measuring range

0020 = 1.2 .. 20 l/min

0060 = 6.0 .. 60 l/min

0300 = 15.0 .. 300 l/min

0600 = 40.0 .. 600 l/min

Modification number

000 = Standard

Note:

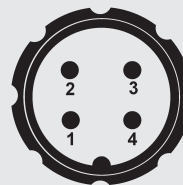
On units with a different modification number, please read the label or the technical amendment details supplied with the instrument.

Accessories:

Appropriate accessories, such as electrical connectors, can be found in the Accessories section.

Pin connections:

Binder series 714 M18



Pin EVS 3104-A

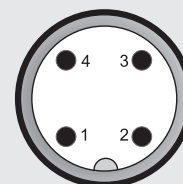
1 n.c.

2 Signal +

3 Signal -

4 n.c.

M12x1



Pin EVS 3106-A

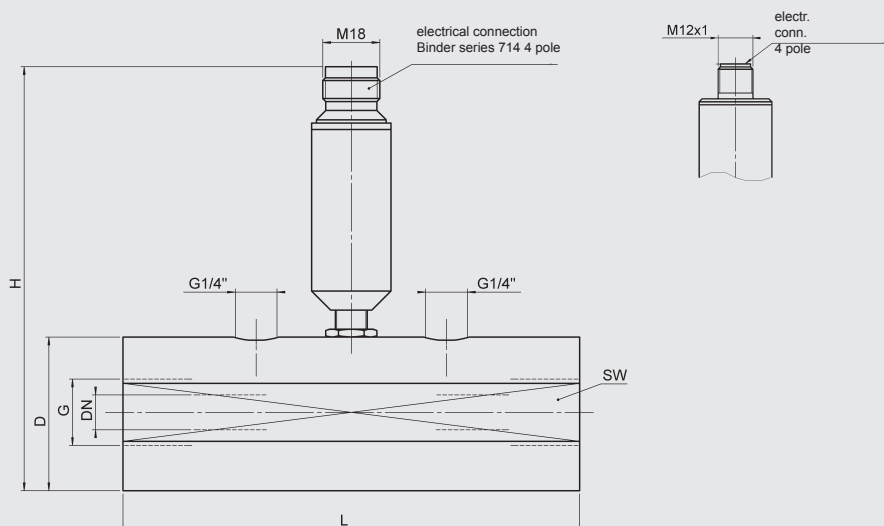
1 Signal +

2 n.c.

3 Signal -

4 n.c.

Dimensions:



| Model | Meas. range [l/min] | L [mm] | H [mm] | D / SW [mm] | G | Torque value [Nm] | DN [mm] |
|-----------------|---------------------|--------|--------|-------------|----------|-------------------|---------|
| EVS 310X-A-0020 | 1.2 .. 20 | 117 | 135 | 47 / 46 | G 1/4" | 60 | 7 |
| EVS 310X-A-0060 | 6 .. 60 | 144 | 135 | 48.5 / 46 | G 1/2" | 130 | 11 |
| EVS 310X-A-0300 | 15 .. 300 | 155 | 150 | 63.5 / 60 | G 1 1/4" | 500 | 22 |
| EVS 310X-A-0600 | 40 .. 600 | 181 | 150 | 63.5 / 60 | G 1 1/2" | 600 | 30 |

Note:

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.