



## Electronic Flow Rate Transmitter EVS 3110 for Water-Based Fluids

### Description:

The flow rate transmitters in the EVS 3110 series (stainless steel series) 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 analog signal.

On the EVS 3110 stainless steel range, the impeller has a carbide bearing and the resulting increased robustness also makes it suitable for use in pulsating, dynamic applications.

Two further G1/4 threaded holes in the turbine housing allow additional devices to be connected, e.g. temperature and pressure transmitters.

### Special features:

- Suitable for pressures up to 5800 psi
- Viscosities of 1 .. 100 cSt
- Output signal 4 .. 20 mA
- Additional connection of temperature and / or pressure transmitters possible

### Technical data:

#### Input data

Measuring ranges<sup>1)</sup> and operating pressure

EVS 311X-A-0020	0.26 .. 5.28 gpm	5800 psi
EVS 311X-A-0060	1.59 .. 15.9 gpm	5800 psi
EVS 311X-A-0300	3.96 .. 79.3 gpm	5800 psi
EVS 311X-A-0600	10.6 .. 159 gpm	5800 psi

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  
 $R_{Lmax} = (U_B - 10 \text{ V}) / 20 \text{ mA} [\text{k}\Omega]$

Accuracy

≤ 2 % of the actual value

#### Environmental conditions

Compensated temperature range

-4 .. 158 °F

Operating temperature range

-4 .. 158 °F

Storage temperature range

-40 .. +212 °F

Fluid temperature range

-4 .. +194 °F

CE mark

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

Protection class to IEC 60529

IP 65 (Binder 714 M18)

IP 67 (M12x1, when an IP 67 connector is used)

#### Other data

Housing material

Stainless steel

Test medium<sup>2)</sup>

Water-based fluids

Viscosity range

1 .. 100 cSt

Calibration viscosity

5 cSt

Supply voltage

10 .. 32 V DC

Residual ripple of supply voltage

≤ 5 %

Weight

~ 1790 g ( 0.26 .. 5.28 gpm)

~ 2100 g ( 1.59 .. 15.9 gpm)

~ 3320 g ( 3.96 .. 79.3 gpm)

~ 3500 g ( 10.6 .. 159 gpm)

Note: <sup>1)</sup> Other measuring ranges on request

<sup>2)</sup> Other fluids on request

## Model code:

**EVS 3 1 1 X - A - XXXX - 000**

### Housing material

1 = Stainless steel

### Electrical connection

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

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

### Signal

A = 4 .. 20 mA, 2 conductor

### Measuring range

0020 = 0.26 .. 5.28 gpm

0060 = 1.59 .. 15.9 gpm

0300 = 3.96 .. 79.3 gpm

0600 = 10.6 .. 159 gpm

### Modification number

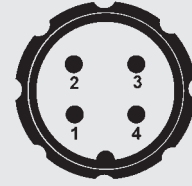
000 = Standard

### Accessories:

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

## Pin connections:

Binder series 714 M18



Pin EVS 3114-A

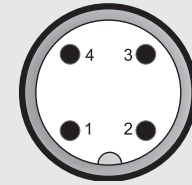
1 reserved

2 Signal +

3 Signal -

4 reserved

M12x1



Pin EVS 3116-A

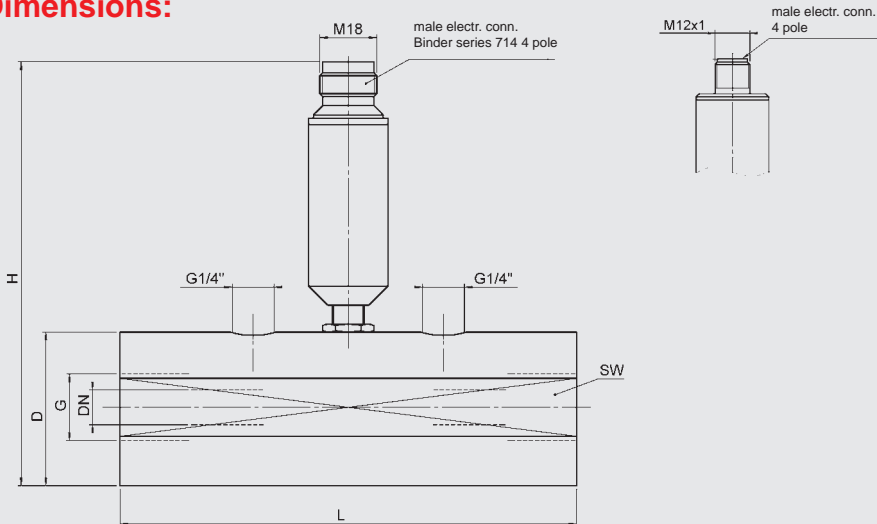
1 Signal +

2 reserved

3 Signal -

4 reserved

## Dimensions:



Model	Meas. range [gpm]	L [mm]	H [mm]	D / SW [mm]	G	Torque value [Nm(lb-ft)]	DN [mm]
EVS 311X-A-0020	0.26 .. 5.28	117	135	47 / 46	G $\frac{1}{4}$ "	60(44)	7
EVS 311X-A-0060	1.59 .. 15.9	144	135	48.5 / 46	G $\frac{1}{2}$ "	130(95)	11
EVS 311X-A-0300	3.96 .. 79.3	155	150	63.5 / 60	G $1\frac{1}{4}$ "	500(370)	22
EVS 311X-A-0600	10.6 .. 159	181	150	63.5 / 60	G $1\frac{1}{2}$ "	600(440)	30

## Note:

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

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

Subject to technical modifications.

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