



Electronic Flow Rate Transmitter EVS 3100 for Oils / Viscous Fluids

Description:

The flow rate transmitters of the EVS 3100 series (aluminium 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.

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

Special features:

- Pressure resistant to 5800 psi (depending on model)
- Viscosities of 1 .. 100 cSt
- Output signal 4 .. 20 mA
- Additional connection of temperature and / or pressure transmitters possible

Technical data:

Input data

Measuring ranges¹⁾ and operating pressure

EVS 310X-A-0020	0.26 .. 5.28 gpm	5800 psi
EVS 310X-A-0060	1.59 .. 15.9 gpm	5800 psi
EVS 310X-A-0300	3.96 .. 79.3 gpm	5800 psi
EVS 310X-A-0600	10.6 .. 159 gpm	4567 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
 $R_{Lmax} = (U_B - 10 V) / 20 mA [k\Omega]$

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 Aluminium

Measuring medium²⁾ Hydraulic oils

Viscosity range 1 .. 100 cSt

Calibration viscosity 30 cSt

Supply voltage 10 .. 32 V DC

Residual ripple of supply voltage ≤ 5 %

Weight ~ 730 g (0.26 .. 5.28 gpm)

~ 860 g (1.59 .. 15.9 gpm)

~ 1410 g (3.96 .. 79.3 gpm)

~ 1530 g (10.6 .. 159 gpm)

Note: ¹⁾ Other measuring ranges on request

²⁾ Other fluids on request

Model code:

EVS 3 1 0 X - A - XXXX - 000

Housing material

0 = Aluminium

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

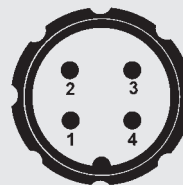
000 = Standard

Accessories:

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

Pin connections:

Binder series 714 M18



Pin EVS 3104-A

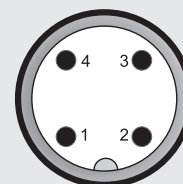
1 reserved

2 Signal +

3 Signal -

4 reserved

M12x1



Pin EVS 3106-A

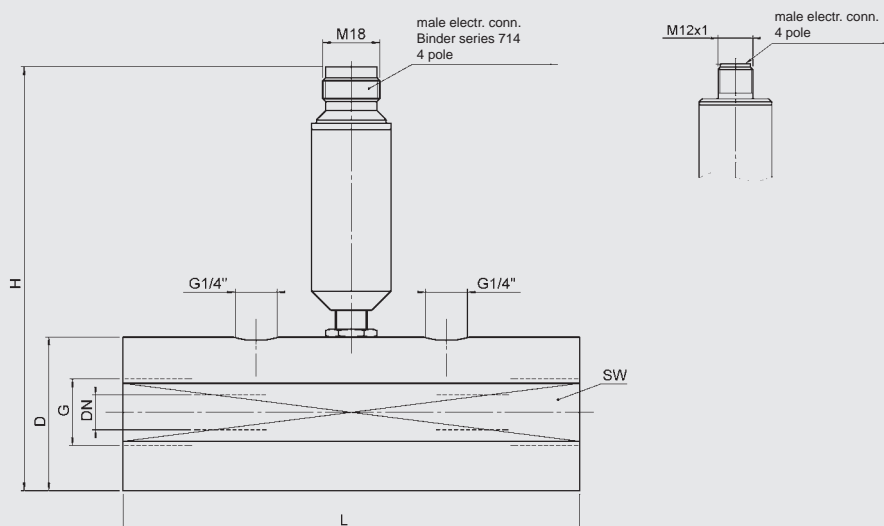
1 Signal +

2 reserved

3 Signal -

4 reserved

Dimensions:



Model	Meas. range [l/min]	L [mm]	H [mm]	D / SW [mm]	G	Torque value [Nm(lb-ft)]	DN [mm]
EVS 310X-A-0020	0.26.. 5.28	117	135	47 / 46	G 1/4"	60(44)	7
EVS 310X-A-0060	1.59.. 15.9	144	135	48.5 / 46	G 1/2"	130(95)	11
EVS 310X-A-0300	3.96.. 79.3	155	150	63.5 / 60	G 1 1/4"	500(370)	22
EVS 310X-A-0600	10.6.. 159	181	150	63.5 / 60	G 1 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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