



Flow Rate Transmitter

EVS 3100

EVS 3110

Description

Flow rate transmitters are specially designed for use in hydraulic and other fluid technology systems. They operate according to the turbine principle, i.e. the rpm of an impeller turning in the fluid flow is measured and converted into a 4 .. 20 mA analogue signal.

On the stainless steel range, EVS 3110, the impeller is carbide-coated as standard and the resulting increased robustness also makes it suitable for use in pulsating, dynamic applications.

Two further G ¼ threaded holes on the turbine housing provide the flow rate transmitter with connections for additional units, e.g. temperature and pressure transmitters.

Special features:

- Suitable for pressures up to 400 bar, depending on the model
- Viscosities from 1 .. 100 cSt
- Output signal 4 .. 20 mA
- Additional connection of temperature and pressure transmitters possible

Technical specifications

Housing material	EVS 3100	Aluminium
	EVS 3110	Stainless steel
Measuring medium	EVS 3100	Hydraulic oils*
	EVS 3110	Water*
Viscosity range	1 .. 100 cSt	
Calibration viscosity	EVS 3100	30 cSt
	EVS 3110	5 cSt
Supply voltage	10 .. 32 V DC	
Analogue output	4 .. 20 mA (2 conductor)	
Temperature of fluid	-20 .. +90 °C	
Ambient temperature	-20 .. +70 °C	
Class accuracy	≤ 2 % of the actual value	
CE mark	EN 50081-1, EN 50081-2, EN 50082-1, EN 61000-6-2	
Electrical connection	4 pole Binder connector series 714 M 18	

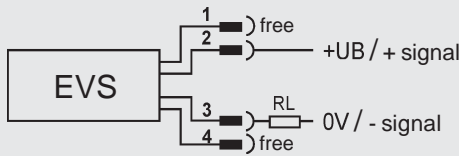
Measuring ranges ** and operating pressure

EVS 31X0-1	6 .. 60 l/min	400 bar
EVS 31X0-2	40 .. 600 l/min	315 bar
EVS 31X0-3	15 .. 300 l/min	400 bar
EVS 31X0-5	1.2 .. 20 l/min	400 bar
Additional connection options	2 x G1/4 female threads for pressure and temperature transmitter	

* other fluids on request

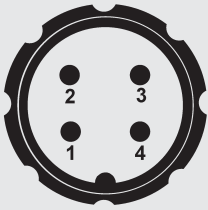
** other ranges on request

Electrical connection



$$R_{L_{max}} = (UB - 10V) / 0.02A [\Omega]$$

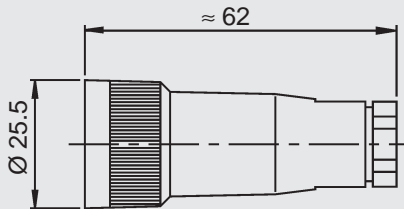
Pin connections (EVS 31X0)



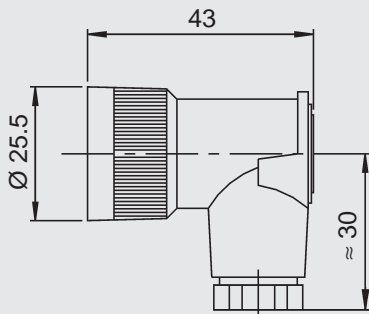
Pin 1	Description
1	free
2	signal +
3	signal -
4	free

Electrical accessories

ZBE 02 connector
4 pole Binder series 714M18

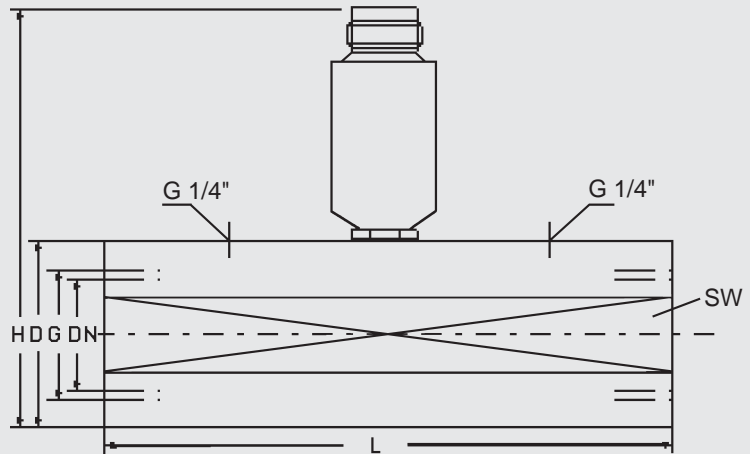


ZBE 03 right-angled connector
4 pole Binder series 714M18



Dimensions

EVS 31X0-1; EVS 31X0-2;
EVS 31X0-3; EVS 31X0-5:



Model	Measuring range [l/min]	L	H approx.	D/SW	G	Tightening torque	DN
EVS 3100 - 1	6 - 60	144	135	48.5 / 46	G½"	130 Nm	11
EVS 3100 - 2	40 - 600	181	150	63.5 / 60	G1½"	600 Nm	30
EVS 3100 - 3	15 - 300	155	150	63.5 / 60	G1¼"	500 Nm	22
EVS 3100 - 5	1.2 - 20	117	135	47 / 46	G¼"	60 Nm	7
EVS 3110 - 1	6 - 60	144	135	48.5 / 46	G½"	130 Nm	11
EVS 3110 - 2	40 - 600	181	150	63.5 / 60	G1½"	600 Nm	30
EVS 3110 - 3	15 - 300	155	150	63.5 / 60	G1¼"	500 Nm	22
EVS 3110 - 5	1.2 - 20	117	135	47 / 46	G¼"	60 Nm	7

Model code

EVS 31 X 0 - X

Housing material

0 = aluminium
1 = stainless steel

Measuring range

1 = 6 .. 60 l/min
2 = 40 .. 600 l/min
3 = 15 .. 300 l/min
5 = 1.2 .. 20 l/min

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.

HYDAC

HYDAC ELECTRONIC GMBH

Hauptstraße 27, D-66128 Saarbrücken
Telefon +49 (0)681 7099-0, Telefax +49 (0)681 7099-202
E-Mail: electronic@hydac.com, Internet: www.hydac.com