► EF 4

▶ EF 2

► EF 0.1



- ► Based on the same meshing gear principle as the VSE series VS and VHM the Ecoflow sensor measures viscous media, however as in-line-device.
- An integrated, magnetoresistive pickup with pnp or npn-switching output produces per tooth one impulse with a worth of 0.1 cc for the size EFO.1 and 2 cc for the size EF2. The impulse frequency is proportional to the revolutions of the gear wheels, wich are driven by the volume stream.
- ► The impulse processing is made by means of VSE-made or any other electronical readout.
- ► The Ecoflow is a low-priced alternative to the VS series for application with lower requirements to the technical qualities such as accuracy, pressure, temperature, etc.

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Size	Flow Range		K-Factor		Calculation Factors	
	I/min	GPM	lmp./l	Imp./Gal.		
EF 0.1	0.110	0.02642.64	10 000	37854.4	1 line	
EF 2	0.570	0.132118.49	500	1892.72	1 bor @ 14.503684 psi 1 psi . @ 0.068948 bor	
EF 4	3.0150	0.792539.63	250	946.63	√- 5.07-30 4 - 5.00	

GPM = U.S. Gallon per minute

psi = pound weight per square inch

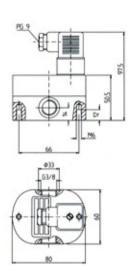
Size	EF 0.1	EF 2	EF 4				
Accuracy	± 2 % of measured value at viscosity > (< 20 cSt reduced accuracy)	± 3 % of measured value at viscosity > 20 cSt (< 20 cSt reduced accuracy)					
	Body: Aluminium						
	Gear wheels: Stainless Steel 1.4122	3GG 40					
Materials	Instrument bearing: Ball bearing (Stainless Steel)	Instrument bearing: DU-Plain bearing	Instrument bearing: Ball bearing or Bronze-plain bearing				
	Seals: FKM (Standard), NBR, PTFE, EPDM						
Max. Operating Pressure	200 bar / 2900 psi						
Medium Temperature	0 °C 80 °C / 32 °F 176 °F						
Viscosity Range	1 2000 cSt	1 5000 cSt	1 8000 cSt				
Mounting Positions/	unrestricted, side pipe thread	unrestricted, side pipe thread	unrestricted, side pipe thread				
Type of connection:	connection G 3/8"	connection G 3/4"	connection G 1"				
Filtering	20 µm	50 µm	100 µm				
Weight	0.70 kg	1.70 kg	5.24 kg				
Supply Voltage	10 30 V DC ± 10 %						
Current consumption, no load	12 mA (24 V DC)						
Max. output current ①	10 mA (at 24 V DC and internal output resistor Ri = 1.2 k Ω)						
Signal switching	0 1666.67 Hz	0 583.33 Hz	0 625 Hz				
frequency	Square Signal	Square Signal	Square Signal				
Signal switching polarity	Selection: NPN – or PNP-type						
Connecting plug	DIN 43650 / ISO 4400						
Isolation-Protection	IP 65 with mounted connecting plug						

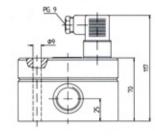
<sup>1</sup> Special execution (upon request): 50 mA (at 24 V DC without internal output restistance, i. e. no short circuit protection)

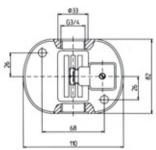
### ► EF 0.1

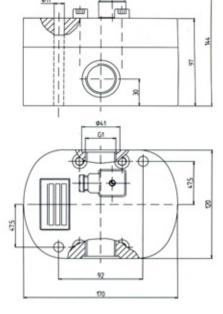
## ▶ EF 2

#### ► EF 4

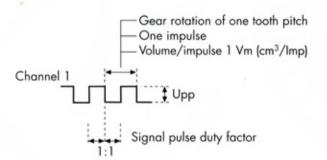


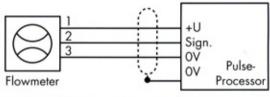






### Pick-up Output Signal





1. Power Supply:

10...30 V DC

Cable connection Flowmeter to Pulse-Processor

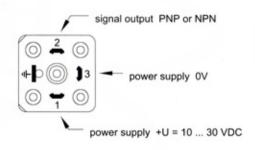
2. Signal Output:

NPN or PNP

3. Power Supply:

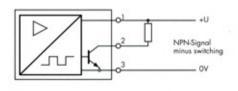
0 V

# ▶ Plug connection diagram



## ► Flowmeter Signal Output

Output: NPN-Signal



Output: PNP-Signal

