



# ELECTROMAGNETIC FLOW METER

## AIEF17



**PTFE  
LINING**



**PTFE  
REMOTE**



**RUBBER  
LINING**



**PPR  
BODY**



**SS/AL  
BODY**



**FULL S.S.  
BODY**

### OPERATION PRINCIPAL

Following Faraday's law of magnetic induction, a voltage is induced in a conductor moving through a magnetic field. In the electromagnetic measuring principle, the following medium is the moving conductor. The voltage induced is proportional to the flow velocity and is supplied to the amplifier by means of two measuring electrodes. The flow volume is calculated by means of the pipe cross section area.

### APPLICATION

- \* Waster water industry: transport networks sewage treatment plants, sludges;
- \* Chemical industry: acids alkalis, dosing applications, abrasive or corrosive mediums;
- \* Metal & mining industry: mediums with a high solid content, like one or excavator mud;
- \* Water industry: Revenue metering, district metering water abstraction, leakage detection;
- \* Pulp & paper industry: pulp, pastes, sludges & other caustic mediums, liquor, additives, bleaches, colourants;
- \* Food & beverage industry: mixing, dosing and filling of drinks under hygienic conditions filling systems applications.

### FEATURE

- **Full Bore Type**
- **Simple & cost effective construction**
- **Provides wide flow ranges**
- **Outstanding accuracy**
- **Operates over wide ranges of temperature & pressure**
- **Easy maintenance as no moving parts**
- **Pulsed DC coil excitation**
- **Integral grounding**



## SPECIFICATIONS

Media:	Liquids / Chemicals / Diesel / Water etc...
Viscosity:	200 cp max
Conductivity:	Minimum 10 <sup>-5</sup> S/cm
Line Size Range :	15 ~ 700 mm NB (3/8" to 28")
Excitation:	Pulsed DC coil
Type of Output :	4~20 mA DC / RS485 [optional]
Accuracy :	±0.5% FS
Linearity :	±0.5%
Repeatability :	±1%
Process Temperature :	-20°C ~ 160°C [Depend of Lining]
max Process Pressure :	10 kg/cm <sup>2</sup> max
Material of Construction of Sensor :	Hastelloy C/ SS 316L/Titanium/tantalum [optional]
Body :	S.S/CS / HDPE / PVC [optional]
Pipe Lining :	Rubber / PTFE ( TEFLON ) / Without Lining [optional]
Power Supply :	Battery operated / 24VDC / 230 VAC, 50Hz ±10%
Power Consumption :	<10 VA

## FLOW RATE

DIAMETER		FLOW RATE IN MB/h	
MM	INCH	MIN	MAX
15	1/2"	0.1909	6.362
20	3/4"	0.3393	11.31
25	1"	0.5301	17.67
32	1 1/4"	0.8686	28.95
40	1 1/2"	1.357	45.24
50	2"	2.121	70.69
65	2 1/2"	3.584	119
80	3"	5.429	181
100	4"	8.482	282
125	5"	13.25	441
150	6"	19.09	636
200	8"	33.93	1131
250	10"	53.01	1767
300	12"	76.34	2545
350	14"	103	3465
400	16"	135	4524
450	18"	171	5726

## ORDER CODE

[illegible]

# ARANKA



CE -2209

**ISO 9001:2015  
COMPANY**



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50, NILKANTH INDUSTRIAL PARK,  
AMBIKA TUBE COMPOUND,  
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