NXL MAGNETIC FLOWMETER

The NXL - 23 Series Electro Magnetic Flowmeters is the Best Ideal Flowmeter to Measure Flow of the Conductive Liquids Since It is an obstructionless Flowmeter are also ideally suited to media containing solids and Virtually Insensitive to the Temparature,Density and Viscosity, Pressure of the Media.

Minimum Conductivity required is normally 5 MicroOhm/Cm.The NXL Magnetic Flow Meter is a Simply economically priced with a high measuring accuracy and Quality.

The Flow meter is a compact design consists of the Magnetic flow sensor and Signal Converter.The flow meter is powered by pulsed DC field Exitation which confirms Excellent Zero Stability and High Measuring Accuracy. Applications are commonly Found in the Chemical,Pharmaceutical,Minning,Pulp, Paste,Fruit juice,Milk,Paper,Brine,sea Water,High Corrosive Liquids ,Water and WastewatertreatmentIndustries,effuluent solutions,as well as energy management and off shore drilling flat Form System

Principle of Operation

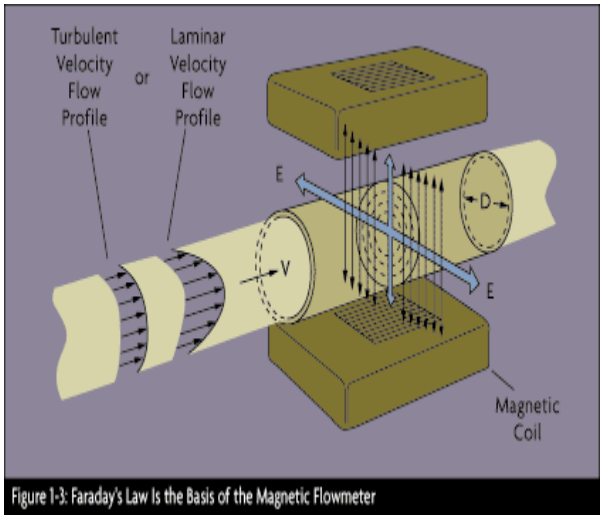

Figure 1-3: Faraday's Law Is the Basis of the Magnetic Flowmeter

The Principle employs faradays law of electro magnetic induction Which States an electro motive Force (emf) is induced across the Conductor which Moves through the magnetic field at Right angles.The Induced Voltage Directly Propotional to the conductor (Fluid) Velocity.

A Magnetic Field is genarated by Compact high density coils mounted to a short section of straight pipe.As a conductive Liquid Passes Thru The Pipe Section and It's a Magnetic Field,a Voltage is genarated that is propotional to the Velocity of the conductive liquid.The Voltage Induced Is Sensed by electrodes mounted by right angles to the magnetic field and in contact with the conductive liquid (or) Slurry.From the electrodes the voltage is transmitted to a Signal Converter Where it is conditioned to the desired output signals.

NXL Magnetic flowmeter genarates an open collector frequency (Propotional to the Liquid Velocity) of 10 KHz at Maximum Flow Rate.

The Standard analog Output is 4-20 mA (or) 0-20 mA DC into a 600 ohms Max Load.

Specifications:

Flow Range : 0.03 to 10 m/s

Accuracy : +/- 1%
(Optional +/- 0.5 %) of Flow Rate.

Max Working Temp :Up to 65°CAmbient.
Up to 150°C InProcess for PTFE Lining
Upto 80°C in Process for Rubber Lining

Repetabilty : 0.3 %

Power Required : 115 VAC /230VAC
+/- 10 % (Jumper Selectable)
24 VDC (Optional)
Connections: Flanged (F Type) /Between Flanges (W Type) /Tri Clamp
Liner materials : PTFE/Rubber Lined /Polyruthene

Housing Material : Cast Aluminium

Electrode Material : 316 SS
(Optional Monel ,HastC ,Tantalum, Titanium,Platinum with 10% Iridium)

CAPACITIES:

Pipe Size	Max Flow Rate At 10 m/s	Min Flow Rate at 0.5 m/s
1/4" (6 mm)	17 LPM	0.85 LPM
1/2" (12 mm)	106 LPM	5.30 LPM
1" (25 mm)	300 LPM	15.00 LPM
11/2"(40 mm)	750 LPM	37.70 LPM
2" (50 mm)	1200LPM	60.00 LPM
3" (75 mm)	180 M^3/Hr	9.0 M^3 /Hr
4" (100 mm)	280 M^3/Hr	14.0 M^3/Hr
6" (150 mm)	630 M^3/Hr	31.5 M^3/Hr
8" (200 mm)	1130 M^3/Hr	56.5 M^3/Hr
10" (250 mm)	1760 M^3/Hr	88.0 M^3/Hr

NXL FLOW INSTRUMENTS

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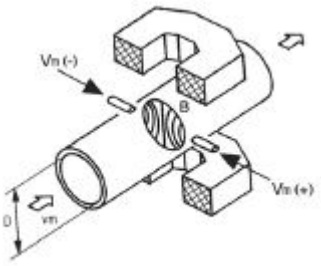
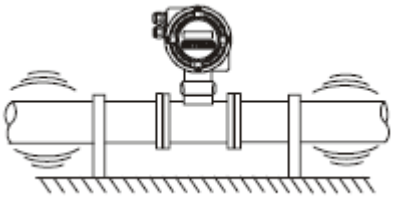
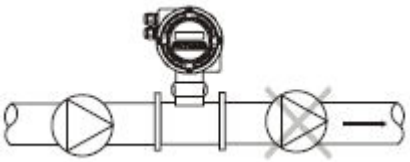
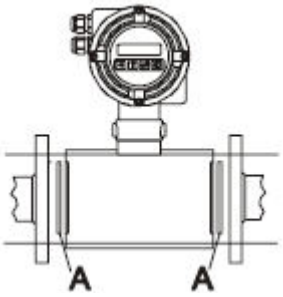
Email:nxlinstruments@yahoo.com WWW.nxlflow.in


Vm (-)
B
Vm (+)
D
vm



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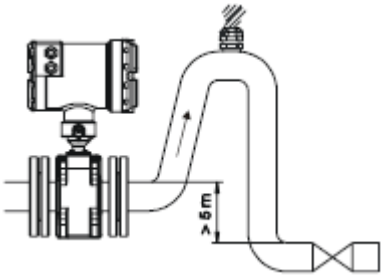
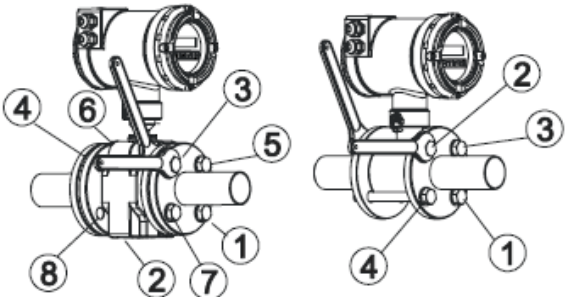
A


≥ 5 m


4
6
3
5
1
8
2
7
2
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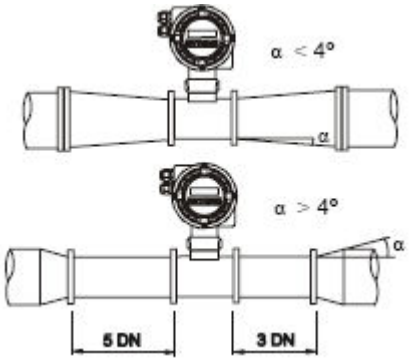
4
1


α < 4°
α
α > 4°
α
5 DN
3 DN