

# ITECHFLOW PRIVATE LIMITED

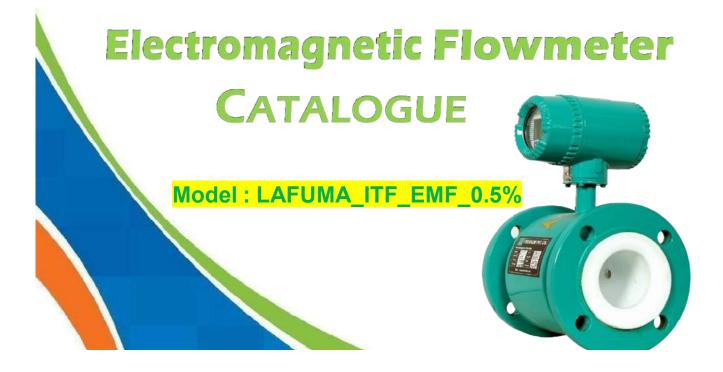
**An Integrated Metering Company** 

ITECHFLOW is located in Jaipur Rajasthan India.

Our company is a specialized manufacturer of automation instrumentation such as electromagnetic flowmeters, vortex flowmeters, ultrasonic flowmeters, sensor, converter, flow totalizer, Turbine Flow Meter, Piezo Meter, Water Analyzer COD, BOD, Tss, pH,

Our business are established on the basis of high quality, good price and honest. All the customers will have our best services and share the most reasonable prices. We have very good cooperation with many enterprises in domestic and abroad. Now our products not only sale on the market of Indian , but also export to USA, Europe and other Asian countries, etc.

If you are interested in any items, or your customers require to fill, you can contact us directly. Thank you for visiting our website and we welcome the business discussion through either telephone or email to us.



#### **OVERVIEW**

The Smart Electromagnetic Flowmeter Is Of Perfect Performance And Reliability. Based On the Successfully Proven Smart Flow Technology of ITECHFLOW the flowmeter is widely used in industries of petroleum, chemical engineering, iron and steel, food electric power, paper making, water treatment, petro chemistry& medicine etc.

### **FEATURES**

Measurement is independent of fluid density, humidity, temperature, pressure and conductivity. There are no obstacle elements in the conduit, No pressure drop, the requirement of straight pipe is low. The sensor with advanced processing technology is of nice resistance to negative pressure. The liquid crystal display in the converter of smart series Magnetic flowmeter makes it easy to read in the sun or in the dark room. In bad environment parameters can be set up through the infrared ray touch knobs without opening the cover of the converter. The converter has alarm output function of self-diagnosis, empty load test high and low limit of the flow, two-stageflow value, etc. not only apply in generally process test but also in the test of the mineral serosity, paper pulp as well as pastry liquid. High pressure type electromagnetic flow sensor adopting PFA lining technology which is resistant to high pressure and negative pressure is specially applicable in industries of oil, chemistry, etc.

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Model: Lafuma\_ITF\_EMF\_0.5%

Size: DN10.DN3000mm Nominal Pressure: 0.6~4.0MPa

**Accuracy:**  $\pm$  0.5% of the value displayed,  $\pm$ 0.3% or  $\pm$ 0.2% are

optional

**Liner Material:** Teflon, PFA, F46, Neoprene, Polyurethane. **Electrode Type:** General type, Scraper type and Replaceable type.

**Electrode Material:** SS316, Hastelloy B, Hastelloy C, Titanium, Tantalum, Platinum-iridium, stainless steel covered with tungsten.

Medium Temperature Integral type: 10°C +80°C

Remote Type: Neoprene & Polyurethane Liner --- 10°C +80°C

PTFE, PFA, F46 Liner 10°C +160°C

Ambient Temperature: 25°C+60°C

Ambient Humidity: 5.100% RH(relative humidity)

Medium Electrical conductivity: ≥ 5.0 s/cm

Measuring Range: 1500:1, flowrate < 15m/s

 $\textbf{Structure Type:} \ \ \text{Integral type, remote type, submersible type,} \\$ 

ex proof type.

**Protection Class:** IP65, IP68 (optional), IP65 Dustproof and Watertight: IP68 Dustproof and submersible for long (only for remote type)

remote type)

Out put signal: 4-20mA, Puls, RS 485 MODBUS SYSTEM



Remote Type Senser



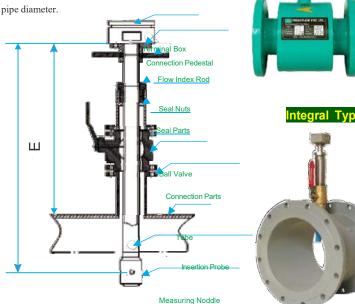
**Remote Converter** 

### SELECTION PRINCIPALS

The measured liquid must be conductivity liquid of serosity of which the conductivity should be more than 50 s/cm the medium should not contain much magnetic matter of air bubbles.

Pressure grade lining material, electrode material and structure type should be selected according to the medium's temperature corrosiveness, abrasion, etc.

Normally the sized of flow meter should be the same as the pipe diameter.



Insertion Type

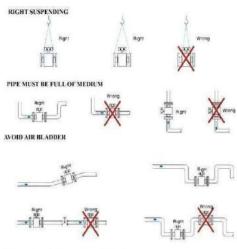
## Table 1: Main performances of the liner materials

Liner Materiral	Main Performances	Applications				
PTEF	The most steadiest material in plastics which is resistant to boiling hydrochloric acid, vitriolandaqua fortis as well as strong alkali and organic impregnants.     Not be perfect in abrasion resistance.	Strong corrosive mediums such as strong acid and alkali				
PFA	Having the same abrasion resistance with PTFE. Having strong ability of load pressure resistance.	Applicable in state of load pressure.				
F46	<ol> <li>Having the same abrasion resistance with PTFE.</li> <li>Resistable for low abrasion.</li> <li>Having strong resistance to load pressure.</li> </ol>	<ol> <li>The same as PTFE.</li> <li>Applicable in mediums of low abrassion.</li> </ol>				
Neoprene	Be of good elasticity, refractivity and abrasion resistance.     Be resistant to low acid, alkali and salt but not for oxidation mediums.	Water, sewage and slurry, mineral serosity of low abrasion.				
Polyurethane	Be of good abrasion resistablity (equal to 10 times of caoutchouc).     Not be perfect in acid/alkali resistance.     Can't be used for water mixed with organic impregnants.	Applicable in mineral serosity. slurry and coal slurry of high abrasion.				

ММ		xxx	х	X	×	×	x	×	Х	×	×	х	×	х
	4.5						7							
nuceso	DN10 to DN 3000													
Size	refer Table 12													
Body	Mild Steel	300	М											
16-50 25 W	SS 304		T											
Material	SS 316		S											
Liner	PTFE			T										
	PFA			E										
	F46			E										
	Neoprene			R										
Material	Polyurathene			P										
Electrode	SS 316 (0Cr18Ni12M	o2Ti)			S									
	Hastalloy B	(7)			В									
	Hastalloy C				Н									
	Titanium				N									
	Platinum Iridium				P									
	Tantalum				T									
Material	SS covered with Tung	stine			K									
Process	MS Flange					M								
	SS 304 Flange					F	7							
	SS 316 Flange					G	7							
	TC end (SS 316)					T	7							
Connection	Wafer end					W	7							
Pressure	6 bar					- 1	В							
	10 bar						N							
	40 bar						Р							
	60 bar						M							
Rating	320 bar						Н							
Flange	# 150								1					
	PN 10 / 16 2													
	PN 40								3					
	TC 40 mm								4					
Class	TC 50 mm								5					
	In Line								-	1				
Mounting	Insertion									2				
	Integral								800	77	1			
	Remote									+	5			
Structure	Integral + Remote									+	2			
	Remote Submersible	Type									4			
	Integral Ex-proof	турс									5			
	Remote Ex-proof										6			
Cable length										-	o <sub>l</sub>	-		
Calibrated ra												_	-	
	220 VAC 50 Hz												-	4
Power													_	1 2
Supply	24 VDC	2011		No.										
	Flow volume 4-20 mA				AND SHAPE OF THE	1000000	904							A
Output	Flow volume 4-20 m/													В
mored #CNDs	Flow volume 4-20 mA						n							С
	Flow volume HART o	utput /	with	comn	nunica	ation								D

Line Size (mm)	Flow Range(m³/h) at 0.3 ~ 10 m/s
10	0.06 ~ 2.00
15	0.20 ~ 6.40
20	0.34 ~ 11.3
25	0.53 ~ 17.7
40	1.40 ~ 45.2
50	2.00 ~ 70.7
65	3.58 ~ 119
80	5.43 ~ 181
100	8.48 ~ 282
150	19.08 ~ 636
200	33.9 ~ 1131
250	53.0 ~ 1767
300	76.3 ~ 2544
350	103.9 ~ 3463
400	135.7 ~ 4524
450	171.7 ~ 5726
500	212.0 ~ 7069
600	305 ~ 10179
700	415 ~ 13854
800	542 ~ 18095
900	687 ~ 22902
1000	848 ~ 28274

### **ITECHFLOW** Installation Diagram



### CAN'T BE INSTALLED AT THE PUMP SIDE



#### STRAIGHT PIPE REQUIREMENT





### Table 2: Main performances of the electrode materials

Electrode Materials	Applications					
0Cr18Ni12M02Ti	Applicable in water, sewage and corrosive mediums. Widely used in industries of petrol, chemistry, carbamide, etc.					
Stainless steel covered with tungsten	Applicable in mediums of no corresive and low abrasion.					
Hastelloy B (HB)	Having strong resistance to hydrochloric acid of any consistence which is below boiling point. Also resistable able against vitriol, phosphate, hydrofluofluoricacid, organic acid etc. which are oxidable acid, alkali and non-oxidable sait.					
Hastelloy C (HC)	BH resistant to oxidable acid such as nitric acid, mixed acid as well as oxidable salt such as Fe+++, Cu++ and segwater.					
Titanium (Ti)	Applicable in seawater, chloride, hypochlorite salt, oxidable acid, organic acid, alkali, etc.					
Tantalum (Ta)	Having strong resistance to corrosive mediums that is similar with glass.  Almost applicable in all chemical mediums except for hydrofluoric acid, oleum and alkali.					
Platinum-tridium	Almost be applicable in all chemical mediums except for aqua fortis, ammonium salt.					

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