ELECTRO MAGNETIC FLOW METER

SALIENT FEATURES

1) Indication through LED / LCD.
2) Full bore type.
3) Microprocessor based.
4) Simple & cost effective construction.
5) Provides wide flow ranges.
6) Outstanding accuracy.
7) Operates over wide ranges of temperature & pressure.
8) Easy maintenance as no moving parts.
9) Pulsed DC coil excitation.
10) Flame-proof, IP-65, IIA, IIB CMRI certified housing.

FEMAG-300

DESCRIPTION

FlowStar series FEMAG are micro-controller based full bore type electromagnetic flow transmitter specially used for various industrial applications. These flow transmitters accurately measures the flow rate of conductive liquids & slurries in closed pipes. Due to simple & rigid design the flow transmitter is an obstruction less & maintenance free instrument in place of conventional mechanical flow measuring device. The use of 'Pulsed DC' technology offers highest ability & better measuring accuracy in the form of electrical signal 4 - 20 mA DC linearly proportional to volumetric flow. The instrument is based on Faraday's law of electro-magentic induction. A magnetic field is generated by the instrument in the flow tube. The fluid flowing through this magnetic field generates a voltage that is proportional to the flow velocity. Corresponding electrical output is provided with respect to measuring voltage.

FEMAG-100TX

TECHNICAL SPECIFICATIONS

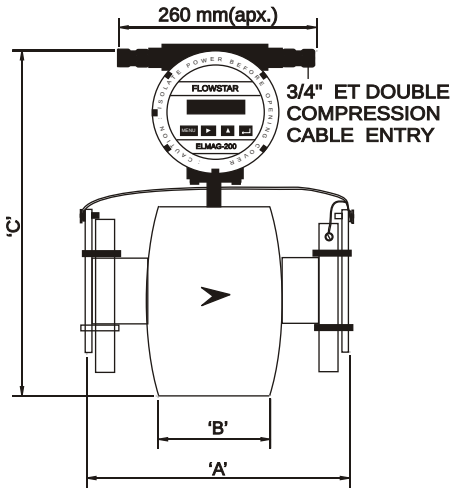
Media	:	Liquids (Clear)
Viscosity	:	200 cp max
Line Size	:	15 NB to 2000 NB.
Excitation	:	Pulsed DC coil
Display	:	1) 16 x 2 LCD
	:	2) 4 digit, 0.3" Red LED for Flow Rate Indication & 8 digit, 0.3" Red LED for Totalised Flow Indication
Type of Output	:	4 to 20 mA DC, Isolated, Pulse, RS 485 communication port
Calibration Range	:	As per requirement (Factory Calibrated)
Accuracy	:	+/- 0.5% F. S.
Linearity	:	+/- 0.5%
Repeatability	:	+/- 1%
Process Temperature	:	150 °C max
Process Pressure	:	10 kg/cm2 max
Material of construction	:	Lining - Neoprene / Rubber / PTFE (Teflon)
	:	Flange - MS / SS
	:	Electrode - SS 316, SS 316 L, Hastalloy "C", Platinum
	:	Wetted Parts - SS 316
	:	Body - MS
Power Supply	:	1) 230 V AC, 50 Hz +/- 10%
	:	2) 24 V DC, External
Power Consumption	:	< 10 VA
Response Time	:	< 100 mSec
Isolation	:	1.4 KV between Input, Output & Power Supply
Temperature Coefficient	:	+/- 0.1% per °C
Transmitter Enclosure	:	Flame-proof, IP-65, IIA, IIB CMRI certified
Dimensions	:	As per chart on rear
Process Connections	:	ASA B 16.5, Flanged
Mounting	:	In-Line (Horizontal or Vertical)
Operating Conditions	:	Temperature 0 to 55 °C / Humidity 5 to 95% non condensing

FEMAG-600

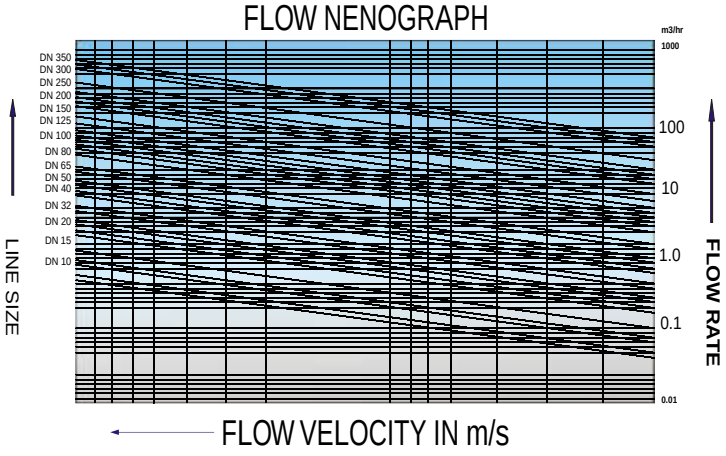
Flowstar Engineering Pvt. Ltd. An ISO 9001:2008 Certified Company
Tel- 91-0129-4069661, 4069662
E-mail: fsepl@flowstar.co.in
Website: www.flowstar.co.in

LINE SIZE SELECTOR CHART WITH RESPECT TO FLOW RANGE

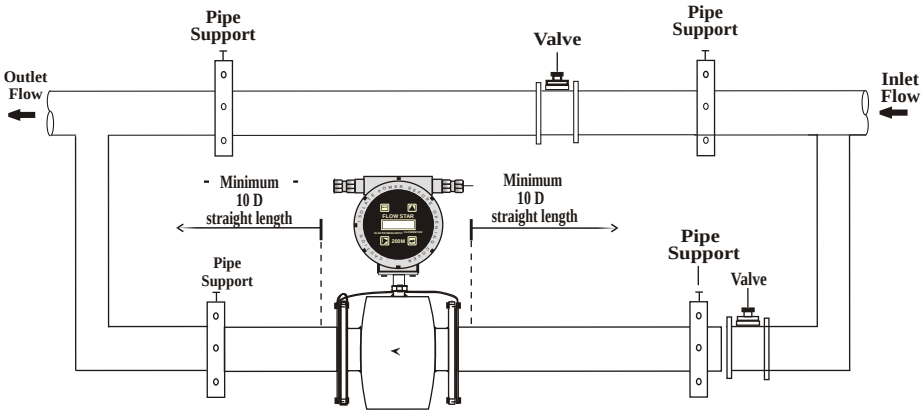
Line Size (NB)	A (mm)	B (mm)	C (mm)	Liquid flow Range (m3 / hr) Velocity 2m/s min	Velocity 6m/s max
15	152	140	290	0 to 1.5	0 to 4.2
20	152	140	290	0 to 2.25	0 to 6.0
25	202	166	316	0 to 3.5	0 to 11
50	202	166	316	0 to 15	0 to 44
65	332	362	233	0 to 30	0 to 70
100	332	362	233	0 to 57	0 to 175
125	450	336	486	0 to 130	0 to 400
200	450	336	486	0 to 200	0 to 625
250	450	433	583	0 to 350	0 to 1000
300	480	511	661	0 to 490	0 to 1500



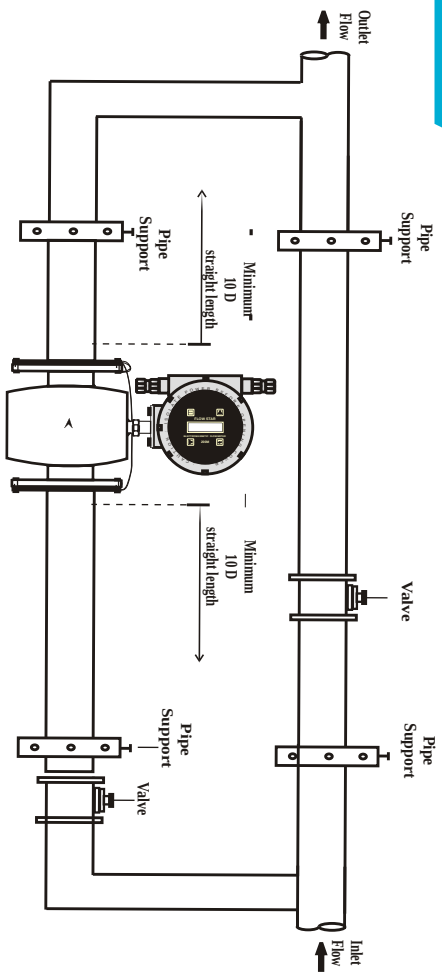
FLOW NENOGRAPH



INSTALLATION DETAILS



B: 1 INSTALLATION IN HORIZONTAL POSITION



B: 2 INSTALLATION IN VERTICAL POSITION

CODIFICATION OF FEMAG

CODE		TYPE OF DISPLAY
01	:	LCD
02	;	LED

CODE		LINING MATERIAL
01	:	Neoprene
02	:	Rubber
03	:	PTFE

CODE		FLANGE MATERIAL
01	:	MS
02	:	SS

CODE		POWER SUPPLY
01	:	230 VAC
02	:	24 V DC

CODE		MOUNTING
01	:	Horizontal
02	;	Vertical

FEMAG - 01 - 02 - 01 - 01 - 01 SAMPLE ORDERING CODE

DETAILS REQUIRED FOR QUOTATION

1. Name of the fluid
2. Operating temperature
3. Operating pressure
4. Operating viscosity/ density
5. Line size and connection detail
6. Measuring range
7. Power supply require
8. Enclosure
9. Mounting i.e horizontal or vertical
10. Material of construction for wetted parts

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