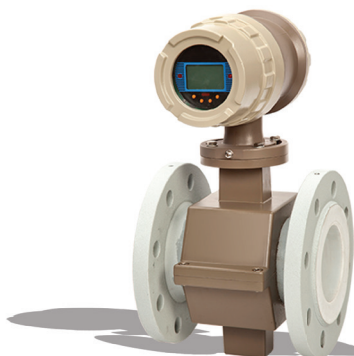


TRANTECH TRANMAG - ELECTROMAGNETIC FLOW METER

TTEMF-B Series



TTEMF-T Series



TTEMF-B series
(Wall mount display)



Description

The Trantech electromagnetic flow meter is one of the most flexible and universal flow measurement systems available. It is a volumetric flow meter which does not have any moving parts and is ideal for waste water applications or any dirty liquid which is conductive or water based. Magnetic flow meters are ideal for applications with low pressure drop and where low maintenance is required.

Operating principle

Following Faraday's law of magnetic induction, a voltage is induced by a conductor moving through a magnetic field. The electromagnetic measuring principle uses the flowing medium as 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.

Technical Data

Certification	ISO9001:2008; CE
Diameter	PTFE: DN6 - DN600
	Hard Rubber: DN50 - DN2200
Flow Direction	Positive ; Negative
Repeatability Error	± 0.1%
Accuracy	± 0.5% of rate
Medium Temperature	Hard rubber liner: -20...+60°C
	High-temp rubber liner: -20...+90°C
	PTFE liner: -20...+120°C
	High-temp PTFE liner: -20...+160°C
	PFA: -20...+180°C
Nominal Working Pressure	DN10 - DN25 ≤ 4.0Mpa
	DN32 - DN150 ≤ 1.6Mpa
	DN200 - DN600 ≤ 1.0Mpa
	DN700 - DN2200 ≤ 0.6Mpa
Velocity	0.3 - 10m/s
Ambient Temperature	-20...+60°C
Relative Humidity	5% - 95%
Consumed Power	<20W



Diameter		Flow Rate (m ³ /h)		
		V=0.3m/s	V=6m/s	V=10m/s
mm	inch	min	Calibrated	Max
6	1/4"	0.0306	0.611	1.018
10	3/8"	0.0849	1.696	2.827
15	1/2"	0.1909	3.817	6.362
20	3/4"	0.3393	6.786	11.31
25	1"	0.5301	10.60	17.67
32	1-1/4"	0.8686	17.37	28.95
40	1-1/2"	1.357	27.14	45.24
50	2"	2.121	42.14	70.69
65	2-1/2"	3.584	71.68	119.5
80	3"	5.429	108.6	181.0
100	4"	8.482	169.6	282.7
125	5"	13.25	265.1	441.8
150	6"	19.09	381.7	636.2
200	8"	33.39	678.6	1131
250	10"	53.01	1060	1767
300	12"	76.34	1527	2545
350	14"	103.9	2078	3465
400	16"	135.7	2714	4524
450	18"	171.8	3435	5726
500	20"	212.1	4241	7069
600	24"	305.4	6107	10179
700	28"	415.6	8310	13850
800	32"	542.9	10860	18100
900	36"	662.8	13740	22900
1000	40"	848.2	16962	28270



Model	Suffix Code											Description
TTEMF	1	2	3	4	5	6	7	8	9	10	11	Electromagnetic Flowmeter
Type	B											B type
	T											T type (DN15 - DN100 only)
Diameter	xxxx											Example 0006: DN6; 0015: DN15 0100: DN100; 2200: DN2200
Structure	S											Compact Type with local display
	L											Remote Type; 10 meters cable default
Electrode Material	M											SS316L
	T											Titanium
	D											Titanium
	H											Hastelloy Alloy C
	P											Platinum-Iridium
Signal Output	0											No Output
	1											4-20mA / Pulse
Liner Material	X											Hard Rubber
	P											Propylene Oxide
	F											PTFE
	A											PFA
Power Supply	-0											110-240Vac
	-1											24V DC (20-36V DC)
	-2											Battery Power Supply
Communication	0											No communication
	1											Modbus RS485
	2											HART
	3											GPRS
	4											Profibus DP
Sensor Grounding	0											No Grounding
	1											Grounding Ring
	2											Grounding Electrode
Connection	DXX											D16: DIN PN16 Flange; D25: DIN PN25 Flange...
	AXX											A15: ANSI150# Flange; A30: ANSI 300# Flange...
	JXX											J10: JIS 10K Flange; J20: JIS 20K Flange...
	XXX											On Request
Body Material	CS											Carbon Steel
	S4											Stainless Steel 304
	S6											Stainless Steel 316

Example:

Model Code: TTEMF 1 2 3 4 5 6 7 8 9 10 11
 B 0150 S M 1 F -0 1 2 A15 CS

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|--------------------------------------|----------------------------|---------------------------------|--------------------------|
| 1 B: B Type | 4 M: SS316L electrode | 7 0: 110-240Vac power supply | 10 A15: Flange ANSI 150# |
| 2 0150: DN150 | 5 1: 4-20mA / Pulse output | 8 1: Modbus RS485 Communication | 11 CS: Carbon steel body |
| 3 S: Compact type with local display | 6 F: PTFE liner | 9 2: Grounding electrode | |