TS2000-CP

ELECTROMAGNETIC FLOW METER - SWITCH

ELECTRONET

For Chemical and Pharma applications

			
FLANGED CONNECTION	**THREADED CONNECTION**	**SMS UNION CONNECTION**	**TRI-COLVER CONNECTION**

Features

- Compact Flow Meter
- Suitable for Conductive Liquids
- Typical Accuracy of ± 0.5% of M.V.
- Protection Class: IP-68
- Suitable for line sizes ranging from 08 NB to 100 NB
- Local LCD Display for Real-time Flow Monitoring
- Robust SS-316 Construction ensure durability and resistance to corrosion

Description

Electronet Series TS2000-CP is an advanced full bore-type electromagnetic flow meter designed for precise and cost-effective flow measurement in pipelines ranging from 08 NB to 100 NB. Engineered with SS-316L electrodes, PTFE or PEEK insulation, which ensures excellent corrosion resistance and long-term durability. Process connection of flow meter can have Flanged, Threaded, SMS Union & Tri-colver connection. Sensor probe and electronics have an IP-68 protection class, offering reliable performance even in submerged applications. This high-precision instrument delivers consistent and accurate flow measurement, making it an optimal choice for demanding process control environments.

Technical Specifications

Performance Characteristics	
Measuring principle	Electromagnetic flow measurement
Media	Liquid (Conductive)
Conductivity	> 5 µS/cm
Viscosity	200 cp max
Line Size	08 NB to 100 NB
Accuracy	± 0.5% of M.V.
Process Conditions	
Response Time	1 Sec
Display	Backlight LCD - 6 Digit for Flow Rate, 8 Digit for Flow Totalizer
Process temperature	200°C max
Process pressure	16 kg/cm²
Process Connection	
Mounting Type	Inline Horizontal / Vertical
Process Connection	Flanged / Threaded / SMS Union / Tri-clover
Ambient conditions	
Temperature	20°C to [illegible]C
Humidity	5 to 95% non-condensing
Output Signal	
Output 1	4 to 20mA
Output 2	Pulse - Open Collector Type (Optional)
Alarm or Relay Output	1 Relay Output (Optional)
Communication Output	RS-485 MODBUS RTU (Optional)
Protection Class	
Electronic Protection	Weather Proof IP-68
Sensor/Flow Tube Protection	Weather Proof IP-68
Electrical Connection	
Connector	M12 Connector
Power supply	
Voltage supply range	18-30 V DC
Power consumption	< 5 VA
Material of Construction	
Electrode Materials	SS-316L
Wetted Parts	SS-316
Sensor Assembly	SS-316
Electronics Enclosure	SS-316

Assembly Overview

Flanged Connection

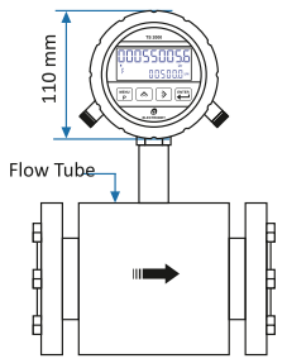

Fig. 1 Front View

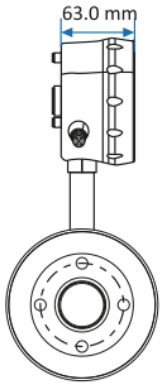

Fig. 2 Side View

SMS Union Connection

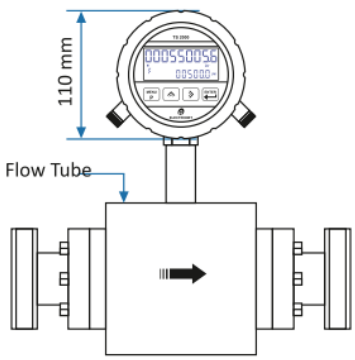

Fig. 3 Front View

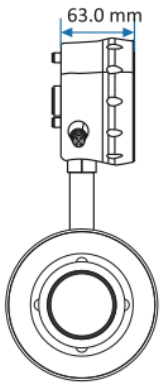

Fig. 4 Side View

Threaded Connection

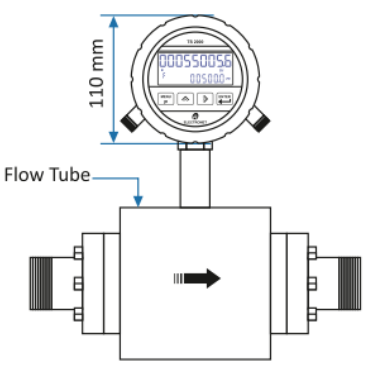

Fig. 5 Front View

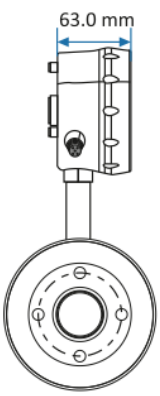

Fig. 6 Side View

Tri-clover Connection

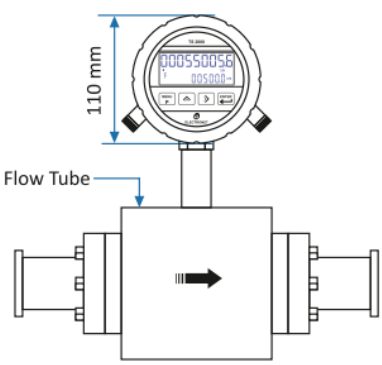

Fig. 7 Front View

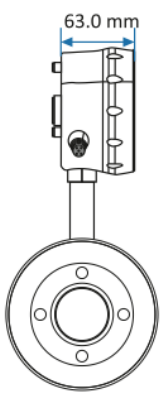

Fig. 8 Side View

Connection Details

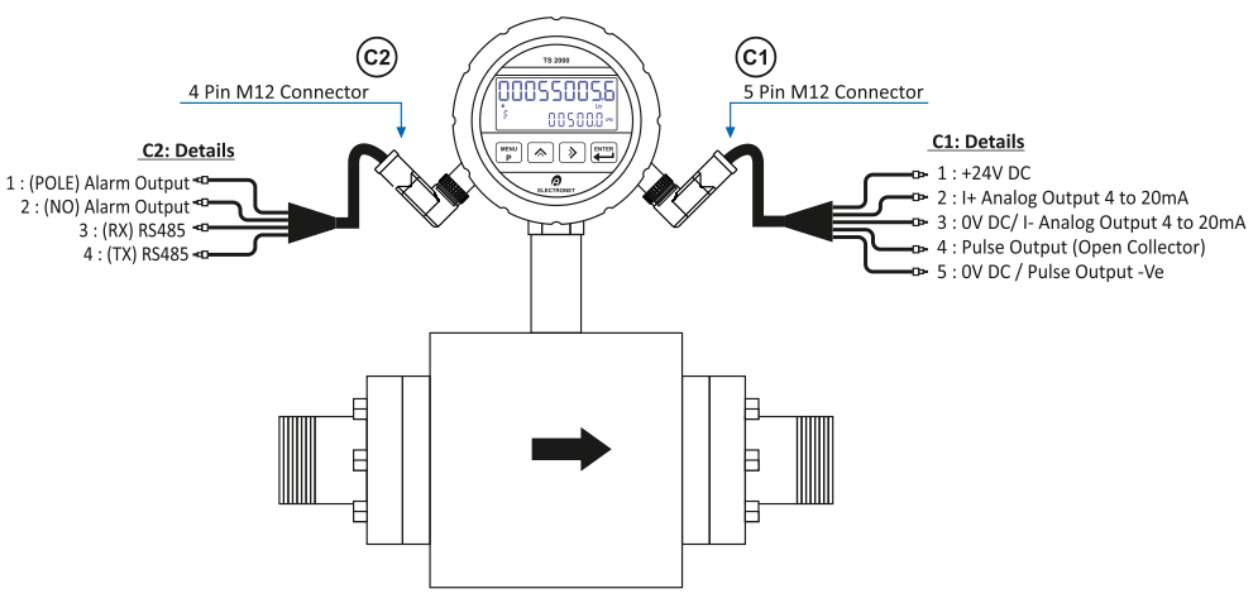

Fig. 9 Front View

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Line Size		Flange To Flange Distance	Flow Range (m^3/Hr)			
Inch	NB		Velocity 0.3m/s	Velocity 2.5m/s	Velocity 6m/s	Velocity 10m/s
¼"	8	160 (Threaded Connection)	0.07	0.45	1.7	1.81
3/8"	10	160 (Threaded Connection)	0.11	0.71	1.09	2.83
½"	15	200	0.19	1.59	3.81	6.36
¾"	20	200	0.34	2.83	6.785	11.31
1"	25	200	0.53	4.42	10.602	17.67
1¼"	32	200	0.87	7.24	17.371	28.95
1½"	40	200	1.36	11.31	27.143	45.24
2"	50	200	2.12	17.67	42.4115	70.69
2½"	65	200	3.58	29.86	71.675	119.46
3"	80	200	5.43	45.24	108.573	180.96
4"	100	250	8.48	70.69	169.646	282.74

Note : Flange to flange distance (FD) Tolerance : 1) 1/4"(8NB) to 4"(100NB) : +/-3mm

- All dimensions are in 'mm'
- For dimensions of line size above 100NB, please consult factory.
- Typical mounting dimensions are for reference only.
- Wet Calibrated at IEC/ISO/EN17025 Accredited Calibration Rig.
- Flow meter should be selected with the help of Nomograph (recommended full scale velocity).

Ordering Information of Transmitter

Sample Order Code: TS 2000 CP-TX-A1-B1-C1

Parameter		Code	Value
TX	Transmitter Electronics	TX	TS2000-CP
A	Alarm / Relay Output	A1	One Relay Output
		AX	NA
B	Communication Output	B1	RS-485 (only In Case of 24 VDC Supply)
		BX	NA
C	Pulse Output	C1	Open Collector Pulse output
		CX	NA

Note:
- Due to our continuous product revisions, design specification and model numbers are subject to change without notice.
- Accuracy defined at Lab Conditions.
- For other requirement please consult factory.
- This product is meant for laboratory/Process application only & not for custody transfer application.

Ordering Information of Flow Tube

Sample Order Code: TS 2000 CP-FT08-N1-O1-P1-Q1

Parameter		Code	Value	Code	Value
FT	Flow Tube	FT 08	08NB	FT 40	40NB
		FT 10	10NB	FT 50	50NB
		FT 15	15NB	FT 65	65NB
		FT 20	20NB	FT 80	80NB
		FT 25	25NB	FT 100	100NB
		FT 32	32NB		
N	Electronics Location	N1	Integral (local)		
		N2	Remote (Max 5 mtr)		
O	Process Connection	O1	Threaded (15 to 50 NB)		
		O2	Flanged (08 To 100 NB)		
		O3	Triclover (15 to 100 NB)		
		O4	SMS Union (25 to 100 NB)		
P	Lining Material	P1	PEEK		
		P2	PFA		
		P3	PTFE		
		P4	Ceramic		
Q	Electrode Material	Q1	SS316L		
		Q2	Hastelloy C		
		Q3	Platinium		
		Q4	Tentalum		

ELECTRONET EQUIPMENTS PVT. LTD.

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