

MEF-8700

Marmonix Partially Filled Pipe Electromagnetic Flow Meter

Overview:

Marmonix Partially Filled Pipe Electromagnetic Flow Meter MEF-8700 is a kind of volume flow meter. It was specially designed for partially filled pipe. It can measure liquid volume from 10% level of the pipe to 100% level of the pipe. It's accuracy can reach to 2.5%, very accurate for irrigation and waste water liquid measurement. It use remote LCD display so users can read the flow measurement easily. We also provide solar power supply solution for some remote areas where has no power supply

Application:

Marmonix Partially Filled Pipe Electromagnetic Flow Meter MEF-8700 can measure water, waste water, paper pulp, etc. We use rubber or polyurethane liner on it, so it can measure most of none corrosive liquid. It is mainly used in irrigation, water treatment, etc.

It withstand -20-60 deg C media temperature, and it was very durable and safe.

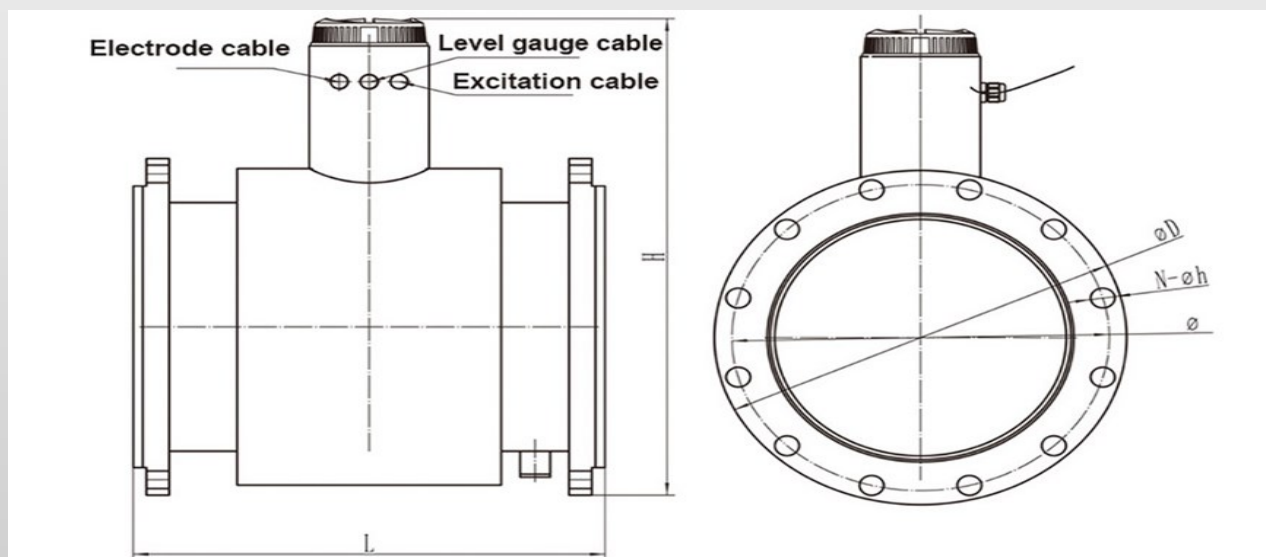
Advantages:

Marmonix Partially Filled Pipe Electromagnetic Flow Meter MEF-8700 can measure partially filled pipe liquid flow, it is very popular in irrigation. It can use solar power supply, this type is very suitable for remote areas where has no industrial power supply. It adopts safe and durable material, service life is longer than normal products. Normally ,it can work at least 5-10 years or longer. And we have already got food grade certificate for its liner so it can be used for drinking water underground water, etc. Many drinking water company use this type in their big size pipeline. We use an accurate mini ultrasonic level meter for its liquid level measurement then the flow meter will record the liquid level and use this parameter to measure liquid flow. This ultrasonic level meter's blind area is very small and its accuracy can reach to $\pm 1\text{mm}$.



SPEIFICATION

Measuring Pipe Size	DN200-DN3000
Connection	Flange
Liner Material	Neoprene/Polyurethane
Electrode Material	SS316, TI, TA, HB, HC
Structure Type	Remote Type
Accuracy	2.5%
Output Signal	Modbus RTU, TTL electrical level
Communication	RS232/RS485
Flow speed range	0.05-10m/s
Protection Class	Converter: IP65 Flow Sensor: IP65(standard), IP68(optional)



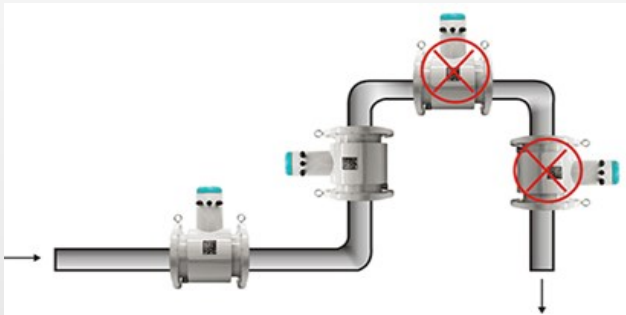
Diameter (mm)	Nominal pressure	L(mm)	H	φA	φK	N-φh
DN200	0.6	400	494	320	280	8-φ18
DN250	0.6	450	561	375	335	12-φ18
DN300	0.6	500	623	440	395	12-φ22
DN350	0.6	550	671	490	445	12-φ22
DN400	0.6	600	708	540	495	16-φ22
DN450	0.6	600	778	595	550	16-φ22
DN500	0.6	600	828	645	600	20-φ22
DN600	0.6	600	934	755	705	20-φ22
DN700	0.6	700	1041	860	810	24-φ26
DN800	0.6	800	1149	975	920	24-φ30
DN900	0.6	900	1249	1075	1020	24-φ30
DN1000	0.6	1000	1359	1175	1120	28-φ30

MODEL SELECTION

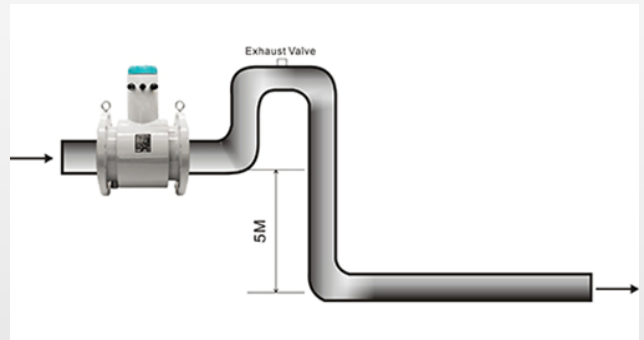
QTLD/F		xxx	x	x	x	x	x	x	x	x	x
Diameter (mm)	DN200-DN1000 three digit number										
Nominal pressure	0.6Mpa		A								
	1.0Mpa		B								
	1.6Mpa		C								
The connection method	The flange type			1							
Liner	neoprene				A						
Electrode materials	316L					A					
	Hastelloy B					B					
	Hastelloy C					C					
	titanium					D					
	tantalum					E					
	Stainless steel coated with tungsten carbide					F					
Structure form	Remote Type						1				
	Remote Type Diving type						2				
The power supply	220VAC 50Hz							E			
	24VDC							G			
	12V							F			
Output/communication	Volume flow 4~20mADC/ pulse								A		
	Volume flow 4~20mADC/RS232C serial communication interface								B		
	Volume flow 4~20mADC/RS485C serial communication interface								C		
	Volume flow HART protocol output								D		
Converter form	square									A	
Special tag											

1-Installation

Partially filled electromagnetic flow meter should be installed correctly to ensure good measurement. Normally we need leave 10D(10 times of diameter) straight pipe distance before partially filled pipe electromagnetic flow meter and 5D behind partially filled pipe electromagnetic flow meter. And try to avoid elbow/valve/pump or other device which will influent the flow speed. If the distance is not enough, then please install flow meter according to follow picture.

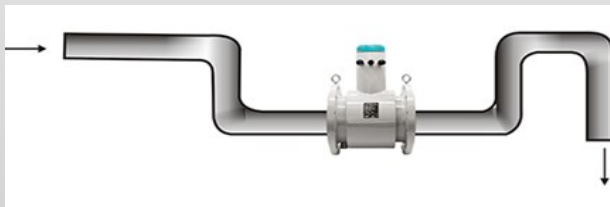


Install at the lowest point and vertical upward direction

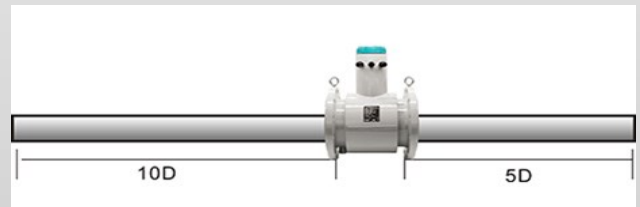


When drop is more than 5m, install exhaust valve at the downstream

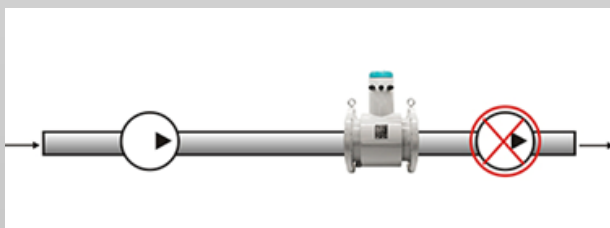
Don't install at the highest point or vertical downward direction



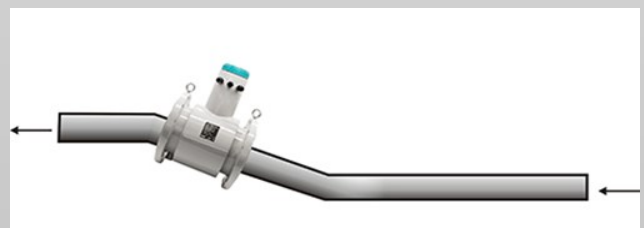
Install at the lowest point when used in open drain pipe



Need 10D of upstream and 5D of downstream



Don't install it at the entrance of pump, install it at the exit of pump



Install at the rising direction

2-Maintenance

Routine maintenance: only need to make periodic visual inspections of the instrument, check the environment around the instrument, remove dust and dirt, ensure that no water and other substances enter, check whether the wiring is in good condition, and check whether there are newly installed strong electromagnetic field equipment or newly installed wires near the instrument Cross-instrument. If the measuring medium easily contaminates the electrode or deposits in the measuring tube wall, it should be cleaned and cleaned regularly.

3-Fault finding

If the meter is found to work abnormally after the flow meter has been put into operation or normal operation for a period of time, the external conditions of the flow meter should be checked first, such as whether the power supply is good, whether the pipeline is leaking or in a state of partial pipe, whether there is any in the pipeline Whether air bubbles, signal cables are damaged, and whether the output signal of the converter (that is, the input circuit of the subsequent instrument) is open. Remember to dismantle and repair the flow meter blindly.

4-Sensor inspection

5-Converter check

