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STAINLESS STEEL LPG FLOW METER(CE-143)

WE HAVE COME UP WITH RELIABLE LPG FLOW METERS. THE LPG FLOW METERS THAT WE OFFER ARE MANUFACTURED WITH THE USE OF BEST QUALITY COMPONENTS THAT IMPART STRENGTH AND ENDURANCE. OUR LPG FLOW METERS PROVIDE ACCURATE READINGS OF THE FLOW WITH AN ABSOLUTE EASE. OUR LPG FLOW METERS ARE SOPHISTICATED AND WORK WITH UTMOST PRECISION. THE RS485 COMMUNICATIONS STANDARD IS USED BY MEASUREMENT SYSTEMS PICKOFF SENSOR BASED DATA ACQUISITION MODULES AND MANY INDUSTRIAL CONTROL DEVICES.

PRINCIPLE OF OPERATION LPG FLOW METERS

- THE OPERATION OF THE INTERNATIONAL LPG TURBINE METER IS BASED ON THE MEASUREMENT OF THE VELOCITY OF LPG LIQUID.
- THE FLOWING LPG LIQUID IS ACCELERATED AND CONDITIONED BY THE METER’S STRAIGHTENING SECTION. THE STRAIGHTENING VANES PREPARE THE LPG LIQUID FLOW PROFILE BY REMOVING UNDESIRE SWIRL, TURBULENCE AND ASYMMETRY BEFORE THE LPG LIQUID FLOWS TO THE TURBINE WHEEL.
- THE DYNAMIC FORCES OF THE FLOWING FLUID CAUSE THE ROTOR TO ROTATE. THE TURBINE WHEEL IS MOUNTED ON THE MAIN SHAFT, WITH SPECIAL HIGH PRECISION, LOW FRICTION BALL BEARINGS.
- THE TURBINE WHEEL HAS HELICAL BLADES THAT HAVE A KNOWN ANGLE RELATIVE TO THE LPG LIQUID FLOW. THE CONDITIONED AND ACCELERATED LPG LIQUID DRIVES THE TURBINE WHEEL WITH AN ANGULAR VELOCITY THAT IS PROPORTIONAL WITH THE GAS VELOCITY.
- THE ROTATING TURBINE WHEEL DRIVES THE INDEX HEAD WITH THE EIGHT DIGIT MECHANICAL COUNTER VIA SHAFTS AND GEARS.
- THE VOLUME AND FLOW RATE CAN ALSO BE INDICATED ELECTRONICALLY. A PROXIMITY PROBE GENERATES A SIGNAL AT EACH PASSING BLADE OF THE TURBINE WHEEL. WITH THE DEVICE-SPECIFIC K-FACTOR AND THE NUMBER OF PULSES, THE PASSED VOLUME CAN BE CALCULATED. WITH THE MEASURED FREQUENCY THE FLOW RATE CAN BE DETERMINED.
- THE ROTATING TURBINE WHEEL CAN ALSO GENERATE PULSES DIRECTLY BY PROXIMITY SENSORS THAT CREATE A PULSE FOR EACH PASSING TURBINE BLADE. BY ACCUMULATING THE PULSES THE TOTAL PASSED VOLUME AND GAS FLOW RATE CAN BE CALCULATED.



TECHNICAL DATA:

MATERIAL OF CONSTRUCTION:

ENCLOSURE: S.S-304/S.S-316

ROTOR: S.S-304 / S.S - 316

SHAFT: HARD STAINLESS STEEL-316 WITH CARBON BUSH

ACCURACY (STANDARD INSTALLATION POSITION) : +/- 0.5 OR 1% FSD

REPEATABILITY: 0.1%

MAXIMUM WORKING PRESSURE: 6 MPa

FLUID & AMBIENT TEMPERATURE: -20 TO 120 °C

1) PULSE OUTPUT SENSOR:

POWER VOLTAGE: 12 V DC

OUTPUT: HIGH ELECTRIC LEVEL: HIGH THAN 8 VDC(INPUT VOLTAGE 12 VDC)

LOW ELECTRIC LEVEL: LOWER THAN 0.8 VDC(INPUT VOLTAGE 12 VDC)

OUTPUT SIGNAL: NPN OPEN CONNECTOR

CONNECTION: THREAD (M/F) OR FLANGE

2) BATTERY OPERATED METER :

POWER VOLTAGE: 3.3 V 10AH LITHIUM BATTERIES CAN BE USED MORE THAN 5 YEARS IN A ROW.

DISPLAY MODE:

DOUBLE ROW LIQUID CRYSTAL DISPLAY (LCD), AS FOLLOWS:

L XXX. X FOUR INSTANTANEOUS FLOW (M3 / H) OR L/H

XX. XXXXXX EIGHT CUMULATIVE FLOW (M3)

CUMULATIVE FLOW: AUTOMATICALLY EXPAND THE DISPLAY PRECISION, THE CUMULATIVE FLOW VALUES CAN BE RESET.

POWER-FAIL PROTECTION: INSTRUMENT COEFFICIENT, THE TOTAL FLOW VALUES TEN YEARS IS NOT LOST WHEN POWER SUPPLY DROP.

3) DISPLAY WITH 4 TO 20 mA OUTPUT

POWER VOLTAGE: 24 V DC

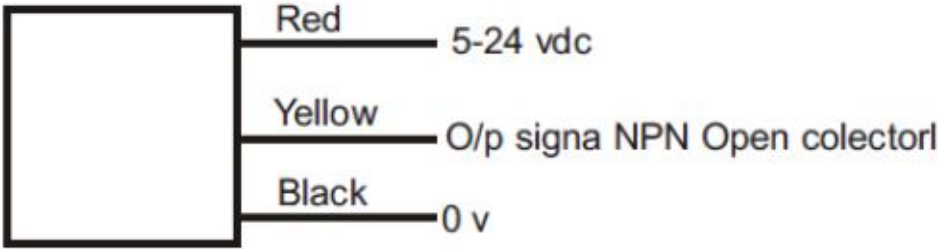
OUTPUT SIGNAL: 4 TO 20 mA



MODEL WISE TECHNICAL DATA

MODEL NO	LINE SIZE	FLOW RANGE
CE-TFS-004	04 MM	40~400 L/H
CE-TFS-012	012 MM	600~6000 L/H
CE-TFS-025	025 MM	1000~10000 L/H
CE-TFS-040	040 MM	2000~20000 L/H
CE-TFS-050	050 MM	4000~40000 L/H
CE-TFS-080	080 MM	10000~100000 L/H
CE-TFS-100	100 MM	20000~200000 L/H
CE-TFS-150	150 MM	30000~300000 L/H
CE-TFS-150	150 MM	80000~800000 L/H

ELECTRIC CONNECTION :



CALIBRATION PROCESS :

*CALIBRATED EACH FLOW SENSOR WITH THREE PRESSURE POINT : 0.5, 4 AND 25 BAR ,

*ALL PRESSURE CALCULATE PULSE/LITTER AT : 25%, 50%, 75% AND 100% FLOW RATE

*CALIBRATED WITH PURE WATER

Application:

S.S. BODY AND ROTOR : FLOW MEASUREMENTS OF PHARMACEUTICAL DRUG, FOOD OIL, WATER AND ALL APPLICATION