## **LEOMI 581 DATA SHEET**



Design	Inline Thermal Mass Flowmeter				
Function Principle	Heat dissipation technique (calorimetric), primary signal mass flow proportional,				
•	independent of pressure and temperature				
Sensor Details	2 X Pt-100 RTD with ceramic wire-wound sensor element encapsulated in SS-316Ti (1.4571)				
	tube (4-wire Technique)				
Sensor & Body Material	SS-316Ti (DIN1.4571) Sensor & Body SS304 matt finish or Aluminum alloy matt finish				
Fluids	Air & Non-corrosive gases				
Flow velocity range	0.6 – 120 Nm/s (lower or higher upon request)				
	(Reference as per DIN 1343; 0°C/1.01325 bar(a), 0%RH)				
Meter Sizes	DN50(2"); DN65(2 ½"); DN80(3"); DN100(4"); DN150(6")				
Flowrate ranges	As per below table*				
Turndown ratio	100:1				
Accuracy (%)	±3.0% reading (0°C-100°C) at reference calibration conditions.				
Repeatability (%)	±0.5% of reading				
Response time t90	<1.5 secs				
Warming Up Time	5min after switching on				
Operating temperature	0°C to 60°C				
Operating pressure	PN16 (Higher upon request)				
Ambient temperature	-20°C to +60°C				
Installation Position	Horizontal & Vertical orientation				
Steadying Distance	15D upstream, 5D downstream (D = inner diameter of pipe)				
Process connection	Pipe schedule 40; ANSI 150# Flange End (Other upon request)				
Integral Signal Transmitter	Microprocessor based, complete and automatically compensation of temperature				
	conditioned signal drifting & digitally conductivity compensation adjustment of heater over				
	temperature				
Input Power Supply	Isolated 24VDC (STD)				
Power Consumption	< 5 watts				
Display	16 characters X 4 lines LCD backlit illuminated Display				
Display Indication Values	Mass flow and totalizer, volume flow and totalizer, velocity, temperature				
Measuring Unit:	User selectable Kg/hr; SCFM; Nm3/hr or Sm3/hr & process temperature (°C)				
Signal Output	0/4-20 mA DC (Isolated @600Ω) OR 0 -10VDCflowrate proportional;				
	1 NO / NC Relay contact @ 250VAC / 6A. programmable for temperature Or				
	flowrate, opto-coupler impulse output, RS232(ASCI) bi-directional communication				
Ingress Protection	IP65 as per IS-60947/IEC-60529				
Enclosure MOC	Aluminum Die-cast material; Dimension :160mm(W) x 160mm(L) x 91(H)				
Certifications	Electronic Transmitter EMC/EMI compliant as per IEC 61000 standards				
Electrical Connection	Plug-n-play M12, 12 pin male connector IP67 rated with M12 female cable connector with				
5-6	1mtrs loose end cable for input and output				
Software package	Free PC Terminal Software for programming				
Calibration frequency	Recommended to re-calibrate once in 2 years or as per customer ISO audit norms				
Warranty clause	1 year warranty against any manufacturing defects if found from the date of supply				

★\*Table: Pipe sizes & approx. flow rates as per 120Nm/s with DIN 1343 0°C/1.01325 bar(a),0%RH)

mm	DN50(2")	DN65(2½")	DN80(3")	DN100(4")	DN150(6")
Nm³/h	930	1330	2050	3500	8000
SCFM	585	840	1295	2210	5060

Note: Due to continuous development technical specifications may change from time to time

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