

Inline Thermal Mass Flow Sensor

FTMF



OVERVIEW

Operation

The modular and compact FTMF is dedicated for accurate metering and monitoring of compressed air(dry) and technical gases such as O₂, N₂, Ar, Natural gas or CO₂ in DN8 to DN50 pipes.

Application

- Mechanical engineering
- Compress air billing
- Compress air monitoring
- Non corrosive gas measuring
- Other industries

Features

- Easy installation
- Easy configuration and maintenance
- Sensing unit
- TFT graphic multicolor display
- Temperature, rate and total flow data on display at same time
- Wide turn down ratio
- Long term stability
- Compact design
- No moving parts
- Inovating sensor technology
- Simple calibration
- Easy adaptation various applications and processes
- High performance

OPERATING DATA

Standart Conditions	DIN 1343:1013,25 mbar, 0°C
Temperature Range	-20...60°C ,150°C as optional
Accuracy	±0.3 % of full scale
Measurement Interval	0.1 s
Response Time	<0.2 s
Humidity Working Range	0...100% RH, non-condensing
Enclosure	IP65, IP67 as optional
Max. Pressure	16 bar, 40 bar as optional

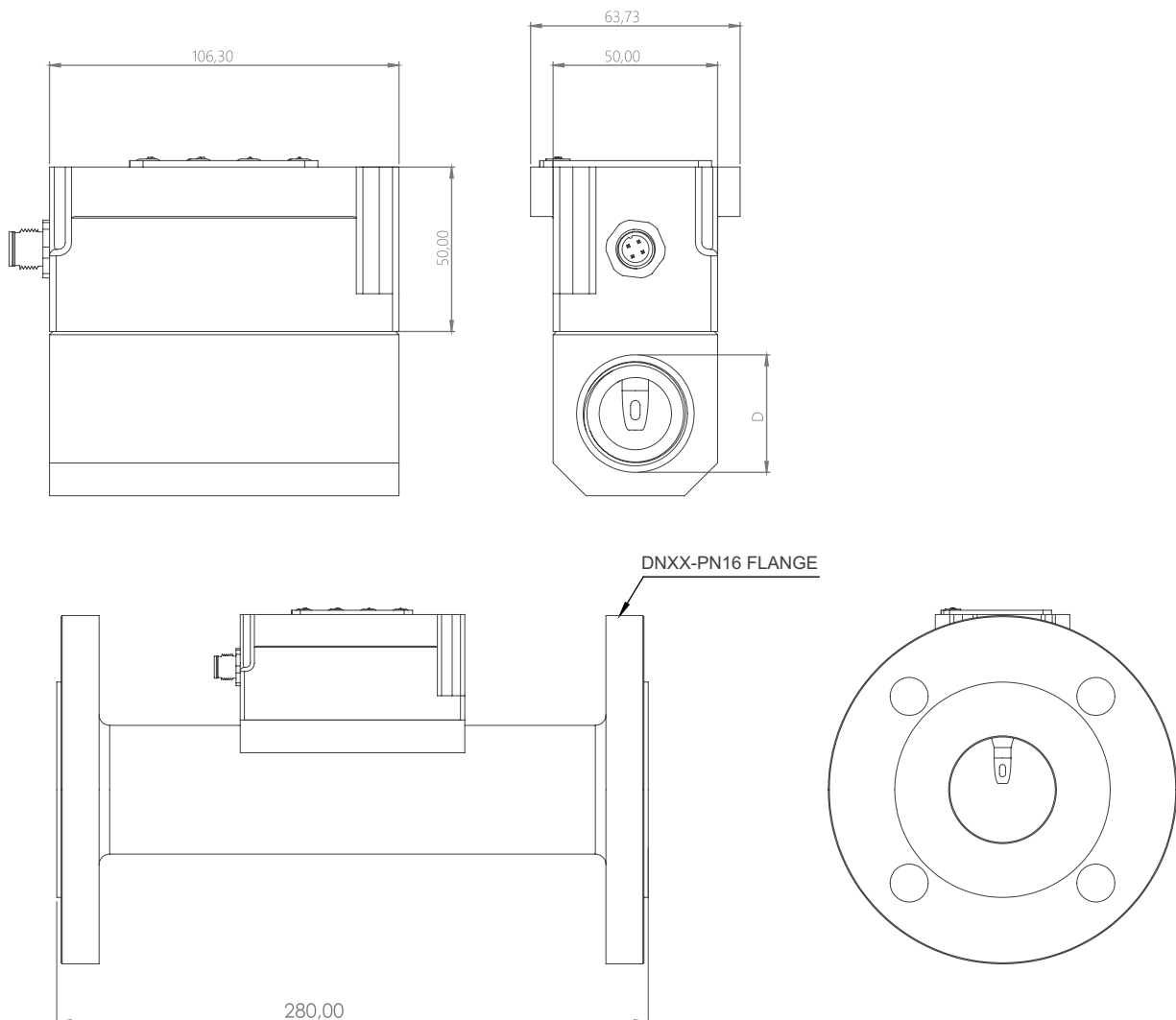
MEASURING RANGES

Velocity	100 Nm/s standart 60 Nm/s, 120 Nm/s as optional
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MATERIALS

Electronic Enclosure	Polycarbonate
Gauge Mounting Block	Aluminium or stainless steel
Gauge Mounting with Flan.	AISI304

TECHNICAL DRAWINGS AND DIMENSIONS



MEASUREMENT RANGE

Size	Low Range (60 Nm/s)	Standart Range (100 Nm/s)	Wide Range (120 Nm/s)
DN15	0,1...38,15 Nm ³ /h	0.17...63,63 Nm ³ /h	0,2...76,3 Nm ³ /h
DN20	0,2...67,85 Nm ³ /h	0,34...127,26 Nm ³ /h	0,4...135,7 Nm ³ /h
DN25	0,3...106 Nm ³ /h	0,51...190,89 Nm ³ /h	0,6...212 Nm ³ /h
DN32	0,45...173,7 Nm ³ /h	0,76...289,73 Nm ³ /h	0,9...347,4 Nm ³ /h
DN40	0,7...271,4 Nm ³ /h	1,17...437,68 Nm ³ /h	1,4...542,8 Nm ³ /h
DN50	1,1...424,1 Nm ³ /h	1,84...707,39 Nm ³ /h	2,2...848,2 Nm ³ /h

ELECTRICAL DATA

Analogue Output	4-20 mA RL<500 Ω
	0-10 V DC as optional
Pulse Output	Consumption meter, pulse length 0.02...2 s
Supply Voltage	12-36 V DC
Electrical Connection	M12x1 plug, 4 poles
Enclosure	IP65
Input Current	35 mA
Max. Input Current	70 mA

COMMUNICATION

Standart	Modbus RTU (RS485) HART or other on request
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ORDERING

FTMF				Inline thermal mass flow sensor	
Process Connection	D			Thread (please specify G, NPT etc.)	
	F			Block-Flanged (please specify DIN, ANSI etc.)	
Size	008		Dn8 (only threaded)		
	015		DN15		
	020		DN20		
	025		DN25		
	032		DN32		
	040		DN40		
	050		DN50		
Medium	A		Air		
	N		Nitrogen		
	CO2		Carbondioxide		
	O2		Oxygen		
	AR		Argon		
	NG		Natural gas		
	XX		Other as optional		
Output	A		4-20 mA		
	B		0-10 V DC		
Display	N		None		
	Y		Yes		
Communication	N		None		
	M		Modbus		
	X		Other as optional		
Range Type	L		Low flow range (60 Nm/s)		
	S		Standart flow range (100 Nm/s)		
	W		High flow range (120 Nm/s)		