



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 configurant on 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
- Built-in datalogger
- No moving parts
- Inovating sensor technology
- Simple calibration
- Easy adaptation various applications and processes
- High performance
- Optional, pressure measurement



OPERATING DATA

Standart Conditions

DIN 1343:1013,25 mbar, 20°C

Temperature Range

-20...60°C ,150°C on request

Accuracy

±1,5 % of reading + ±0.3 %
of full scale
±1,0 % of span for pressure
±2°C of temperature

Measurement Interval

0.1 s

Response Time

<0.2 s

Humidity Working Range

0...100% RH, non-condensing

Enclosure

IP65, IP67 on request

Maximum Pressure

16 bar, 40 bar on request

Display

TFT LCD
Temperature, pressure, rate
and total flow in one screen

Units

m³/h, m³/min, l/min, l/s, ft/min

Flow

cfm, m/s, kg/h, kg/min, g/s, lb/min, lb/h

Pressure

mbar, psi, bar

Temperature

°C, °K

MATERIALS

Electronic Enclosure

Polycarbonate

Gauge Mounting Block

Aluminum or stainless steel

Flange Material

AISI304 or aluminum

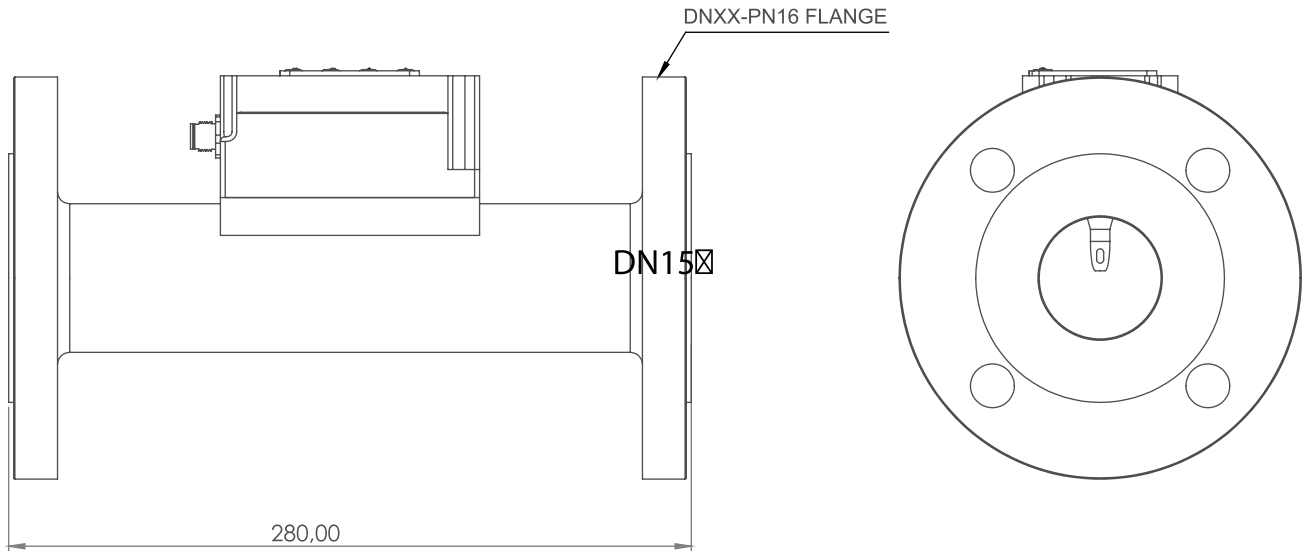
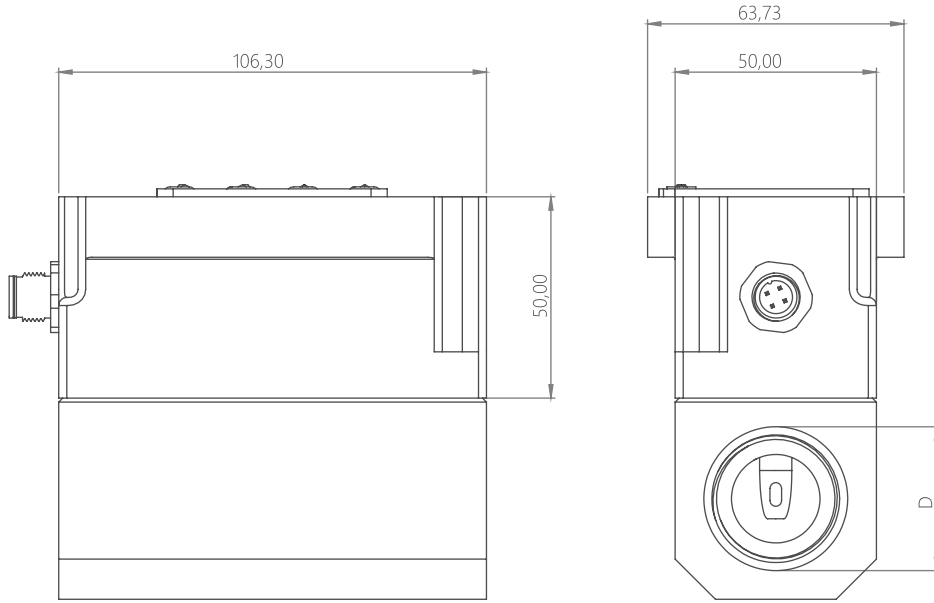
MEASURING RANGES

Velocity

100 Nm/s standart
60 Nm/s, 120 Nm/s, 150 Nm/s on request



TECHNICAL DRAWINGS AND DIMENSIONS



MEASUREMENT RANGE

Size	Low Range (60 Nm/s)	Standart Range (100 Nm/s)	W de 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
DN25	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

Analog Output

4-20 mA RL<500 Ω
0-10 V DC on request

Pulse Output

Consumption meter, pulse length 0.02...2 s

Supply Voltage

12-36 VDC

Electrical Connection

M12x1 plug, 5 poles

Enclosure

IP65

Input Connection

35 mA

Maximum Input Current

70 mA

Datalogger

24 hours storage (On request)

COMMUNICATION

Standart

Modbus RTU (RS485)
HART or other on request



ORDERING

Model	
FTMF	Inline Thermal Mass Flow Sensor

Process Connection	
D	Thread (please specify, G, NPT etc.)
F	DN8 (only threaded)

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	Others on request

Output	
A	4-20 mA
B	0-10 VDC

Display	
Y	Yes

Communication	
N	None
M	RS-485 MODBUS
X	Others on request

Range Type	
L	Low flow range (0.6–60 Nm/s)
S	Standard flow range (1.0–100 Nm/s)
H	High flow range (1.2–120 Nm/s)
U	Ultra high flow range (1.5–150 Nm/s)

Pressure Measurement	
N	None
Y	Yes

Datalogger	
N	None
Y	24 hours storage

