# measuringSYSTEMS

MA-Di<sub>2</sub>

Article-No. 42118-4211-XXX



# YOUR ADVANTAGES

- + Easy detection of compressed air consumption before consumer load
- + Quick sensor exchange, causing only brief disconnection thanks to the safety measuring armature
- + Manual leakage stop, possible through application of the shut-off function in the measurement system (e.g. for shutdown or maintenance work) automatic actuator available as an option
- + Red-green alternation display for clear marking of good areas
- + Multi sensor operation possible (multiple measuring point interfaces can be operated with a portable sensor unit)

# PRODUCT FINDER

#### Your industrial sector?

General industrial applications.

#### What is to be measured?

Consumption volume flow with quick-break sensor exchange.

### MEASURING POINT INTERFACE

#### Measuring armature

Material: brass

Nominal pressure: -1 to 16 bar

**Pipe connection:**ISO- female thread

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#### SENSOR UNIT WITHOUT APPLICATOR

#### Direct-i, with 1,44" colour display

Sensor: i-flow

measuring range 0,3 to 100 m/s

temperature -10 to 60°C **Material sensor probe:** plastic

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MEDIUM										
Compressed air	Nitrogen	CO <sub>2</sub>	Oxygen	Helium	Argon					
x					,					

NOMINAL WIDTH												
DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	> DN 200
х	Χ	Х	Χ	Х	Χ							



## **TECHNICAL DATA**

#### Measuring point interface

Brass safety measuring armature with PB + CO®lock blind plug

#### Sensor without applicator

Sensor i₂ volume flow, pressure and temperature sensor with integrated 1.44 "colour display

Factory calibration and calibration certificate (5-point), ISO 50001 compliant

Measuring range: 0.5 to 160 m/s, volume flow depending on the nominal width (see nominal width data sheet)

Measuring range pressure: -1 to 16 bar, resolution: 0.05 bar, accuracy: 0.032 bar

Measuring range temperature: -10 ... 60  $^{\circ}$  C, resolution: 0.2  $^{\circ}$  C, accuracy:  $\pm$  0.5 K.

Pressure resistance: 16 bar

1.44 "colour display 128 x 128 pixels, 2x LED; yellow

Display: m<sup>3</sup>/h, l/min, ft<sup>3</sup>/h, ft<sup>3</sup>/min, m/s, ft/s (volume flow); °C, °F (temperature); kPa, bar, psi (pressure)

Totalizer (l or m³)

Response time to: 0.1 sec.

Switch-on delay: 1 sec.

Supply voltage: DC 24 V (18 - 30 V), current consumption: <80 mA (with display)

Bus-Schnittstelle: IO-Link (im Sensor), M-Bus (optional), Modbus RTU (optional), Profibus, (TCP / IP) as an external bus module

2x measuring output (analog): 4 - 20 mA, linear for instantaneous display over the entire measuring range

Temperature range: ambient temperature 0 to 60  $^{\circ}$  C; Medium temperature -10 to 60  $^{\circ}$  C; Storage temperature -20 to 85  $^{\circ}$  C

Humidity of the gas: non-condensing

Short circuit protection and reverse polarity protected

#### Material

Nickel-plated brass (measuring armature), ceramic glass passivated, Makrolon, PEEK, polyester, Viton (sensor)

Protection class: IP65, IP67

## CALIBRATION SERVICE FOR YOUR SENSOR

Safeguard the measuring quality and, with this, the implementation of **ISO 9001** and **ISO 50001** through an annual recalibration – as a one-time service or as a cost-efficient subscription and with a free-of-charge immersion sensor, delivered free customer's address – to minimize the downtime.

Feel free to contact us for further information.

# MEASURING TECHNIQUE

