

# Magnetic Inductive Flow Meter/Monitor/Totalizer

for conductive liquids





- Measuring range:0-50 to 0-1200 L/min
- Pressure: max. 10 bar
- Temperature: max. 110°C
- Measuring accuracy: ±1.5% of meas. value
- ◆ Connection:G 3/4 to G 2 1/2 male thread3/4 NPT to 2 1/2 NPT
- Materials:
   PEEK or PVDF-measuring tube Hastelloy C, FPM seal





#### **Description**

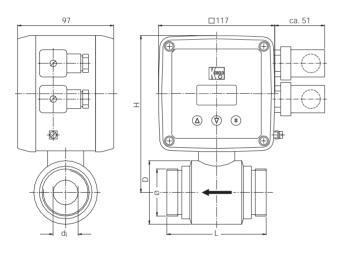
The KOBOLD flow meter model DMI uses the magnetic inductive method of measurement, that is electrical conductive liquids can be measured with negligible pressure losses. A very reasonably-priced flow meter, with no moving parts, has been built with optimal design and the use of plastic. The use of plastics PEEK and PVDF means that the device isideally suited for a wide range of applications in the chemicalindustry.

Typically, model DMI is fitted with an LCD display on which the instantaneous and totalized flow can be read simultaneously. Easy maintenance, no additional pressure loss, small size and negligible weight are the main features of this flow meter.

#### Fields of application

for all electrical conductive liquids.

#### **Abmessungen**



Model	d į	L	D	Ø	Н
DMI02	10	85	53	G 3/4	150
DMI04	15	85	53	G 3/4	150
DMI06	25	100	64	G 1 1/4	159
DMI08	50	130	92	G 2 1/2	175

#### **Technical details**

#### Materials

Tube: PEEK (DN 10-25); PVDF (DN 50)

Electrode material: hastelloy C Grounding electrode: hastelloy C

O-ring seal: FPM, only G thread, front wall Max. pressure: 10 bar (see PT diagram)

Temperature: -10°C to +110°C (see PT diagram)

Electrical conductivity: min. 50 µS/cm

Inlet and outlet

pipe straights: 3 x DN upstream of device (recom.)

2 x DN downstream of device

Accuracy:  $\pm 1.5\%$  of meas. value (Q > 7% of f.s.)

 $\pm 0.105\%$  f.s.  $(Q \le 7\% \text{ of f.s.})$ 

Repeatability: ≤ 0.2% of meas. value

Creep value: adjustable 0-10% of adj. meas. range

(switching hysteresis 1%)

Settling time: 0-99% step change  $\geq 5$  s

adjustable between 5-40 seconds

Protection: IP 65, EN 60529

**Electronics** 

Supply voltage:  $16.8-31.2 V_{DC}$  or  $16.8-26.4 V_{AC}$ 

Rating: < 5 W

Display: LCD, 3 x 7 digit (97 x 32 dots)

instantaneous value & totalizer)

Electrical connection: connector DIN 43650 Pulse output: 0.01/0.1/1/10/100

ut: 0.01/0.1/1/10/100 pulses/litre (gallon) adjustable

Pulse width: min. 20 ms; max. 2550 ms

Pulse frequency: max. 20 Hz

Direction of flow: selectable (menu setting)

Mounting position: any, display 90° rotatable

#### **Output**

DMI-...A...

The optocoupler output can be programmed from the display as a pulse output or alarm output.

DMI-...B...

Additional adjustable current output 0/4 to 20 mA

Max. burden: 600 Ohm



# Ordering code (ordering example: DMI-2002 R20 A 3 0)

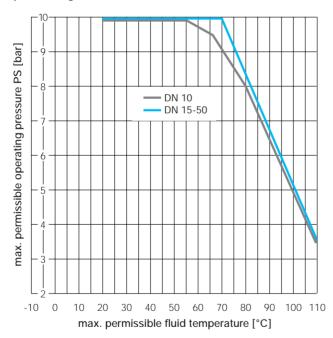
Measuring range (L/min) approx. 0-10 m/s	d <sub>i</sub> Inside Ø (mm)	Order no. (material)	Connection	Output	Supply voltage	Option
050	10	DMI-2002	<b>R20</b> = G 3/4	A= pulse or	3= 24 V <sub>DC</sub> /V <sub>AC</sub>	0= without
		(PEEK)	<b>N20.</b> .= 3/4 NPT	alarm		G=with 3-point
0100	15	DMI-2004	<b>R20</b> = G 3/4	B= pulse or		cal. report
		(PEEK)	<b>N20.</b> .= 3/4 NPT	alarm and		
0300	25	DMI-2006	<b>R32</b> = G 1 1/4	(0) 4-20 mA		
		(PEEK)	<b>N32</b> = 1 1/4 NPT	output		
01200	50	DMI-2508	<b>R65</b> = G 2 1/2			
		(PVDF)	<b>N65</b> = 2 1/2 NPT			

### **Accessories for DMI:**

Ordering code (ordering example: DMI-Z2 R20)

Thread adapter from st. steel	
3/4" to 1" male thread	DMI-Z2 R20
1 1/4" to 1 1/2" male thread	DMI-Z2 R32
2 1/2" to 2 3/4" male thread	DMI-Z2 R65

# p/T-Rating for DMI PVDF DN 10 bis DN 50





# Please refer to our brochure "N2"...



...for Level Measurement