

# Magnetic-Inductive Flow Meter/Monitor/Totalizer for Conductive Liquids



measuring • monitoring • analysing



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#### Description

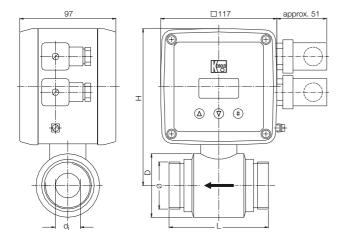
The KOBOLD flow meter model DMI uses the magnetic inductive method of measurement, that is electrical conductive liquids can be measured with negligible pressure losses. A very reasonably-priced flow meter, with no moving parts, has been built with optimal design and the use of plastic. The use of plastics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

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 conductive liquids.

#### Dimensions



Model	di	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 ¼	159
DMI08	50	130	92	G 2 1⁄2	175

#### **Technical details**

Materials			
Tube:	PVDF or PEEK		
Electrode material:	hastelloy C		
Grounding electrode:	hastelloy C		
O-Ring:	FPM, only G-thread, frontal		
Max. pressure:	10 bar (see PT diagram)		
Temperature:	-10°C+110°C (see PT diagram)		
Electr. 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 % f.s.) $\pm$ 0.105 % f.s. (Q $\leq$ 7 % f.s.)		
Repeatability:	$\leq$ 0.2 % of measured value		
Creep value:	adjustable 0-10% of adj. meas. range (switching hysteresis 1%)		
Settling time:	0-99% step change ≥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, LCD, 3 x 7 line (97 x 32 dots) instantaneous value & totalizer)		
Electrical connection:	connector DIN 43650		
Pulse output:	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. load: 600  $\Omega$ 



Meas. range (L/min) app. 010 m/s	d <sub>i</sub> Internal Ø (mm)	Order no. PVDF	Connection	Output	Supply voltage	Option
050	10	<b>DMI-2002</b> (PEEK)	R20= G 3⁄4 N20= 3⁄4 NPT	A= Pulse or alarm B= Pulse or alarm and (0) 4-20 mA output	<b>3.</b> .= 24 V <sub>DC</sub> /V <sub>AC</sub>	0= without G= with 3-point cal. report
0100	15	<b>DMI-2004</b> (PEEK)	R20= G 3⁄4 N20= 3⁄4 NPT			
0300	25	<b>DMI-2006</b> (PEEK)	<b>R32</b> = G 1 <sup>1</sup> /4 <b>N32</b> = 1 <sup>1</sup> /4 NPT			
01200	50	DMI-2508 (PVDF)	R65= G 2 ½ N65= 2 ½ NPT			

#### Order details (example: DMI-2502 R20 A 3 0)

### Accessories for DMI

### Order details (example: DMI-Z2 R20)

Stainless steel thread adapter	
G ¾ to G 1 male thread	DMI-Z2 R20
G 1 1/4 to G 1 1/2 male thread	DMI-Z2 R20
G 2 1⁄2 to G 2 3⁄4 male thread	DMI-Z2 R20

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

