

Pmag

Electromagnetic Flowmeter



Features:

- Compact digital system, for conductive liquids ($>5\mu\text{S}/\text{cm}$), even with low suspended solid content.
- Measurement range: from 0.2m³/h to 30000m³/h
- Typical measurement accuracy: $\pm 0.5\%$
- Power supply 85÷265VAC or 24VDC

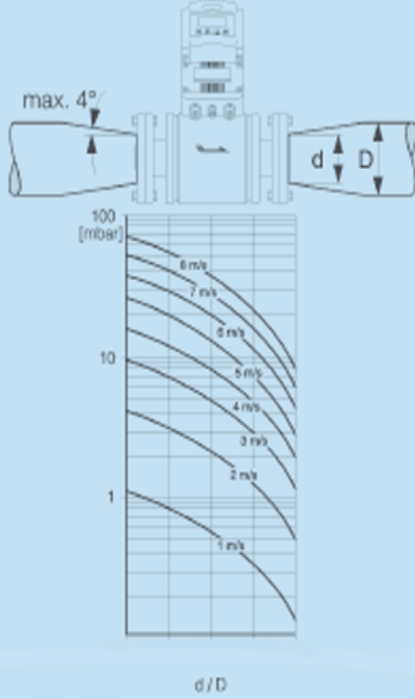
A complete magnetic flowmeter system consists of two components, the Pmag microprocessor-based integral mount magnetic flowmeter transmitter and a flowtube. The flowtube is installed in-line with process piping, either vertically or horizontally. Coils located on opposite sides of the flowtube create a magnetic field, and conductive liquid moving through the magnetic field generates a voltage that is detected by two electrodes. The transmitter controls the generation of the magnetic field and senses the voltage detected by the electrodes. Based on the sensed voltage, the transmitter calculates a flow rate and produces analog and frequency output signals proportional to this flow rate.

Features

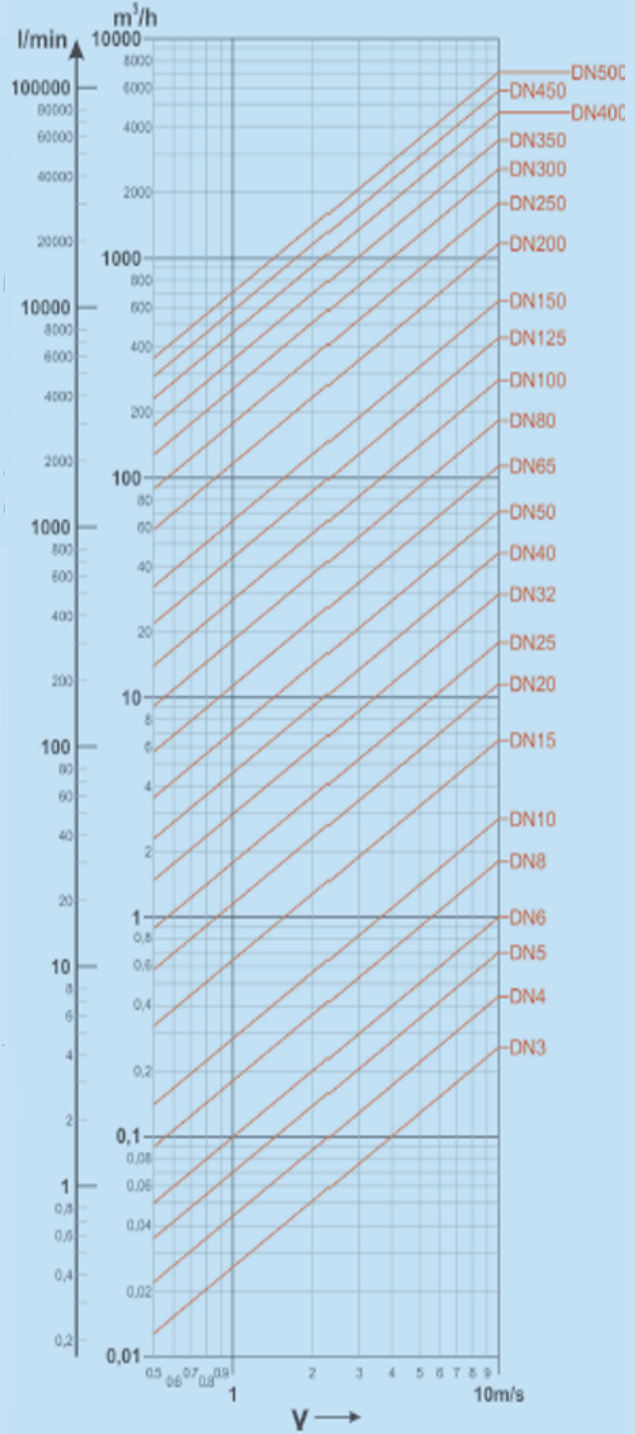
- Pipe dimension range: DN10 - DN1000.
- Measure range: 0.2m³/h - 30000m³/h.
- Fluid conductivity: >5μS/cm.
- Sensor material: Stainless Steel 321.
- Lining materials: PTFE from DN10 to DN32, rubber from DN40 to DN1000.
- Housing material: epoxy painted aluminum.
- Electrodes materials: SS316, Hastelloy C.
- Remote version operating temperature: <80°C.
- Compact version operating temperature: -20 - 75°C.
- Accuracy: ± 0.5%.
- Repeatability: ± 0,1%.
- Analog output: 4 - 20mA, max. load 750Ω.
- Communication protocol: Modbus (opt.).
- Digital output: 0 - 5000Hz Pulse with the ability to set the pulse width, output High or Low status.
- Pulse output: 24VDC pull-up.
- IP rating compact version: IP67 with 4 cable glands M16 x 1.5 for elect. connection.
- IP rating remote version: IP67/IP68 only pipe (opt.).
- Capable of processing signals from fluids that are traveling between 0 - 10m/s .
for both forward and reverse flow in all flowtube sizes.
- Power Supply 85 - 265VAC or 24VDC depending on the model.
- Consumption typical 6W, max. 8W.
- Ambient temperature limits operating: -20 - 75°C (-4 - 167°F), Storage: -40 - 85°C (-40 -185°F).
- Reverse flow instantaneous and totalized reverse flow measure.
- Start-up time 0.5 seconds from zero flow.
- Low flow cut-off adjustable between 0.0 and 9.9% Q_{max}. Below selected value, output is driven to the zero flow rate signal level.
- Humidity limits 0 - 100% RH at 65 °C (150 °F), non condensing.
- Damping adjustable between 0.1 and 99 seconds.

Flow Tables

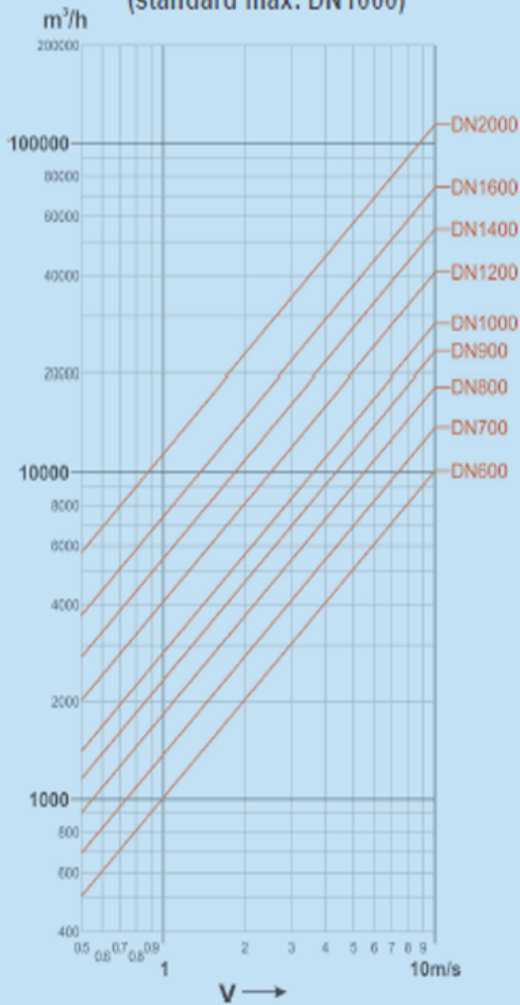
Load losses



Flow range from DN3 to DN500 (DN10 min. standard)



Flow range from DN600 to DN2000 (standard max. DN1000)



Order Codes

Part No.	Description
Pmag	Electromagnetic Flow Measuring System for measuring the flow of conductive fluids in
Version	
F	Remote - 5m. standard cable length, additional cable £7.00 per Metre.
Y	Compact
DN Flange / Max. Pressure / Lining	
0010B2	DN10 / 4,0MPa / PTFE
0010E2	DN10 / 1,6MPa / PTFE
0015B2	DN15 / 4,0MPa / PTFE
0015E2	DN15 / 1,6MPa / PTFE
0020B2	DN20 / 4,0MPa / PTFE
0020E2	DN20 / 1,6MPa / PTFE
0025B2	DN25 / 4,0MPa / PTFE
0025E2	DN25 / 1,6MPa / PTFE
0032B2	DN32 / 4,0MPa / PTFE
0032E2	DN32 / 1,6MPa / PTFE
0040B1	DN40 / 4,0MPa / Rubber
0040E1	DN40 / 1,6MPa / Rubber
0050B1	DN50 / 4,0MPa / Rubber
0050E1	DN50 / 1,6MPa / Rubber
0065B1	DN65 / 4,0MPa / Rubber
0065E1	DN65 / 1,6MPa / Rubber
0080B1	DN80 / 4,0MPa / Rubber
0080E1	DN80 / 1,6MPa / Rubber
0100B1	DN100 / 4,0MPa / Rubber
0100E1	DN100 / 1,6MPa / Rubber
0125B1	DN125 / 4,0MPa / Rubber
0125E1	DN125 / 1,6MPa / Rubber
0150B1	DN150 / 4,0MPa / Rubber
0150E1	DN150 / 1,6MPa / Rubber
0200C1	DN200 / 1,0MPa / Rubber
0200E1	DN200 / 1,6MPa / Rubber
0250C1	DN250 / 1,0MPa / Rubber
0250E1	DN250 / 1,6MPa / Rubber
0300C1	DN300 / 1,0MPa / Rubber
0300E1	DN300 / 1,6MPa / Rubber
0350C1	DN350 / 1,0MPa / Rubber
0350E1	DN350 / 1,6MPa / Rubber
0400C1	DN400 / 1,0MPa / Rubber
0400E1	DN400 / 1,6MPa / Rubber
0450C1	DN450 / 1,0MPa / Rubber
0450E1	DN450 / 1,6MPa / Rubber
0500C1	DN500 / 1,0MPa / Rubber
0500E1	DN500 / 1,6MPa / Rubber
0600C1	DN600 / 1,0MPa / Rubber
0700C1	DN700 / 1,0MPa / Rubber
0800C1	DN800 / 1,0MPa / Rubber
0900C1	DN900 / 1,0MPa / Rubber
1000C1	DN1000 / 1,0MPa / Rubber
Process Connection	
B	DIN (UNI 2223) Flange
D	ANSI Flange (Price on application)
Electrode Material	
1	Stainless steel
3	Hastelloy C
Power Supply	
A	85-265vAC 50-60Hz
B	24vDC
Accessory	
0	None
Output	
A	4-20mA + Pulse output
C	4-20mA + Pulse output + HART
E	4-20mA + Pulse output + MODBUS RTU
Protection Degree	
1	IP67
2	IP68



These products comply with current European Directives

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