

# Water Treatment



## FLOW METERS DI MPO 02



The magnetic field excitation is a programmable rectangular wave with low frequency. It increases the stability of flow measurement and has low consumption.

DI MPO 02 uses a 16-bit microprocessor, fast processing and high accuracy.

Dual direction measurement function:

- Forward direction flow-rate
- Reverse direction flow-rate

Multifunction intelligent transmitter has self-test and self-diagnosis function. EEPROM can save the setting and the counters when power off.

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## Technical characteristics

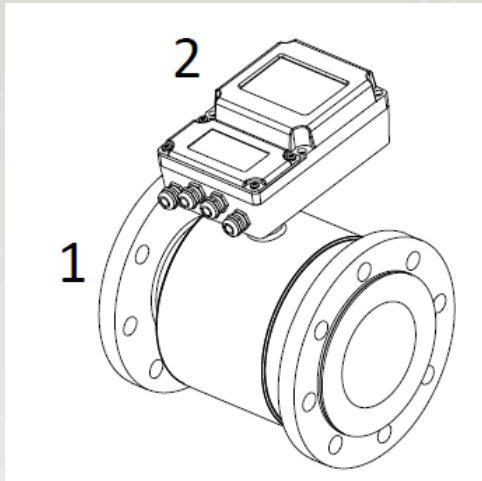
- **Flow Rate Range:** DI MPO 02 is able to process signals from fluids with flow rates of up to 10m / s in both directions (bidirectional meter).
- **Sensor range:** DN10 ÷ DN1000
- **Sensor material:** SS321
- **Housing material:** Aluminium
- **Electrodes material:** SS316L - Hastelloy C - Titanium - Tantalum - Platinum
- **Measure range:** <0,1m<sup>3</sup>/h ÷ >28000m<sup>3</sup>/h
- **Accuracy:** ±0,5% standard; ±0,2% optional
- **Repeatability:** ±0,1%
- **Fluid conductivity:** >5µS/cm.
- **Power supply:** 85÷265Vac, 24Vdc, 12Vdc.
- **Consumption:** 6W, max. 8W.
- **Ambient Temperature Limits**
  - Remote version operating temperature:  
RUBBER -10 ÷ +80°C; PTFE -40 ÷ +150°C
  - Compact version operating temperature:  
RUBBER -10 ÷ +80°C; PTFE -40 ÷ +100°C
- **Storage temperature:** -40÷85°C
- **Communication protocol:** ModBus or Hart (opt.)
- **Output:** 4÷20mA: 0÷750 ohm load.
- **Frequency output:** 0,1÷5000 Hz
- **Pulse output:** 24Vdc pull up open collector or galvanically isolated open collector (opt.)
- **Current Source:** Transmitter can be commanded to supply a specific test current between 4.0 and 20.0 mA.
- **Frequency Source:** Transmitter can be commanded to supply a specific test frequency between 0.1 and 5000 Hz
- **Start-up Time:** 0.5 seconds.
- Low Flow Cutoff Adjustable between 0.0 and 9.9%Q<sub>max</sub>. Below selected value, output is driven to the zero flow rate signal level.
- **Humidity Limits:** 0-100% RH to 150 °F (65 °C), not condensing.
- **Damping Adjustable** between 0.1 and 99 seconds.
- Compact version IP rating IP66, converter provided with transparent protection cover
- Remote version IP rating sensor IP67, IP68 (optional) converter IP66 provided with transparent protection cover
- 85 ÷ 265 Vac o 12; 24 Vdc power supply

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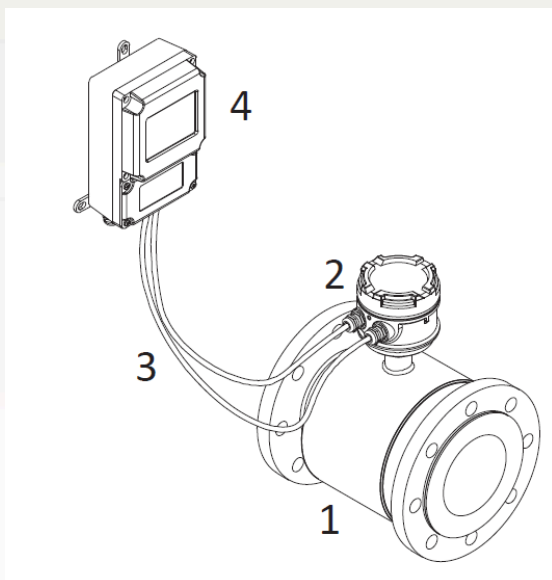
2 available versions

- Compact version



- 1- Sensor
- 2- Converter

- Separate version



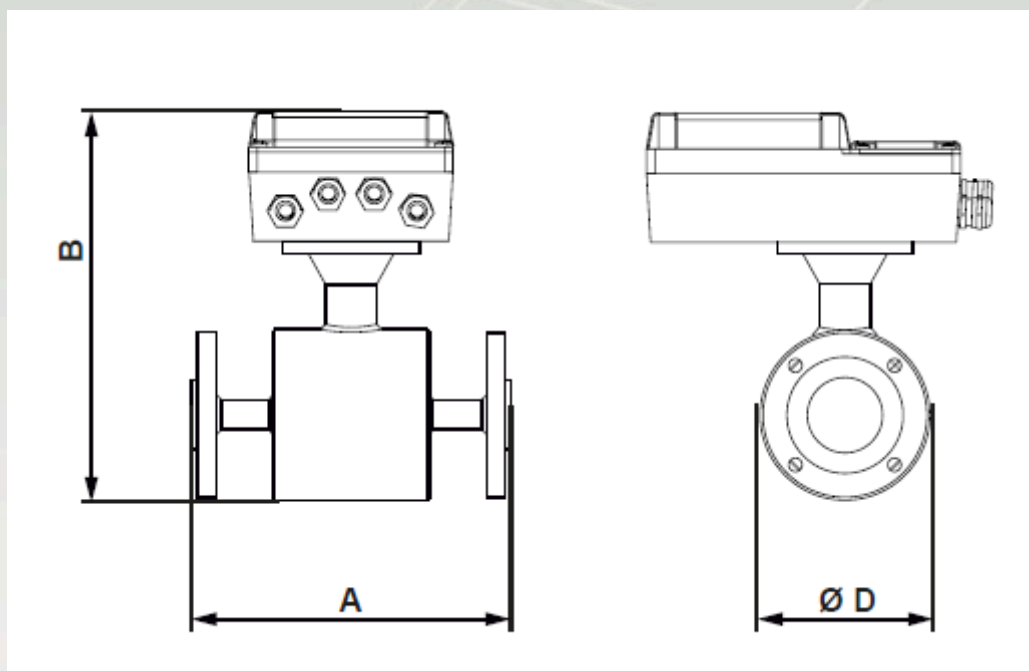
- 1- Sensor
- 2- Conexion case
- 3- Connection cables
- 4- Converter wall mounting

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## Dimensional drawings

Compact version DN 10 ÷ DN80 PN16 - PN40

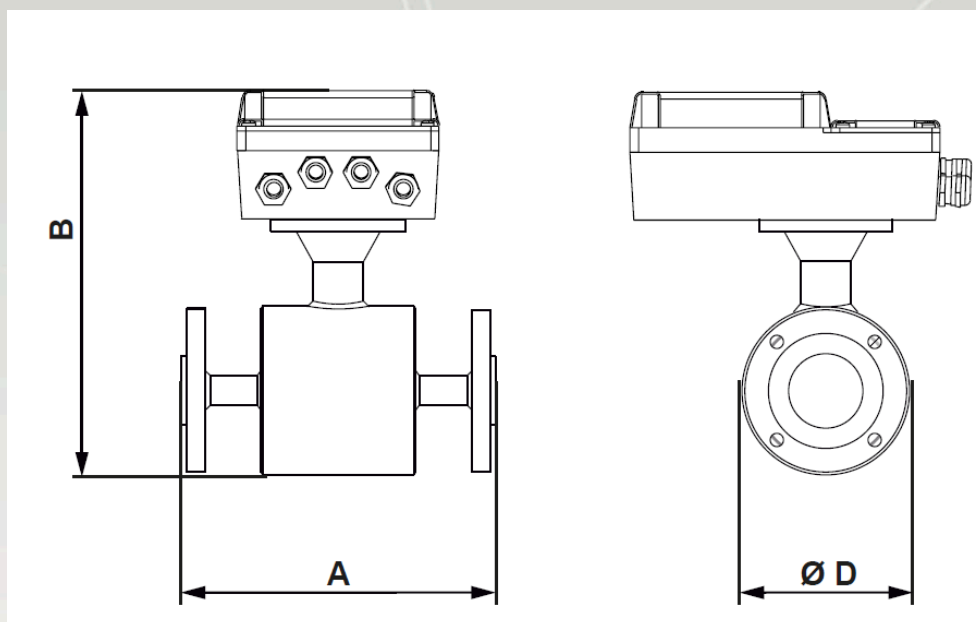


| DN<br>(mm) | A<br>(mm) | PN16 - PN 40 |            |
|------------|-----------|--------------|------------|
|            |           | B<br>(mm)    | ØD<br>(mm) |
| 10         | 200       | 235          | 90         |
| 15         |           | 235          | 95         |
| 20         |           | 240          | 105        |
| 25         |           | 240          | 115        |
| 32         |           | 251          | 140        |
| 40         |           | 270          | 150        |
| 50         |           | 280          | 165        |
| 65         |           | 298          | 185        |
| 80         |           | 315          | 200        |

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## Dimensional drawings

Compact version DN 100 ÷ DN1000 PN10 - PN16 - PN40



| DN<br>(mm) | A<br>(mm) | PN 10     |            | PN 16     |            | PN 40     |            |
|------------|-----------|-----------|------------|-----------|------------|-----------|------------|
|            |           | B<br>(mm) | øD<br>(mm) | B<br>(mm) | øD<br>(mm) | B<br>(mm) | øD<br>(mm) |
| 100        | 250       | -         | -          | 400       | 220        | 347       | 235        |
| 125        | 250       | -         | -          | 420       | 250        | 372       | 270        |
| 150        | 300       | -         | -          | 460       | 285        | 405       | 300        |
| 200        | 350       | 457       | 340        | 457       | 340        | -         | -          |
| 250        | 450       | 507       | 395        | 512       | 405        | -         | -          |
| 300        | 500       | 557       | 445        | 557       | 460        | -         | -          |
| 350        | 550       | 607       | 505        | 615       | 520        | -         | -          |
| 400        | 600       | 667       | 565        | 675       | 580        | -         | -          |
| 450        | 600       | 717       | 615        | 730       | 640        | -         | -          |
| 500        | 600       | 767       | 670        | 787       | 715        | -         | -          |
| 600        | 600       | 867       | 780        | -         | -          | -         | -          |
| 700        | 700       | 867       | 895        | -         | -          | -         | -          |
| 800        | 800       | 1102      | 1015       | -         | -          | -         | -          |
| 900        | 900       | 1207      | 1115       | -         | -          | -         | -          |
| 1000       | 1000      | 1297      | 1230       | -         | -          | -         | -          |

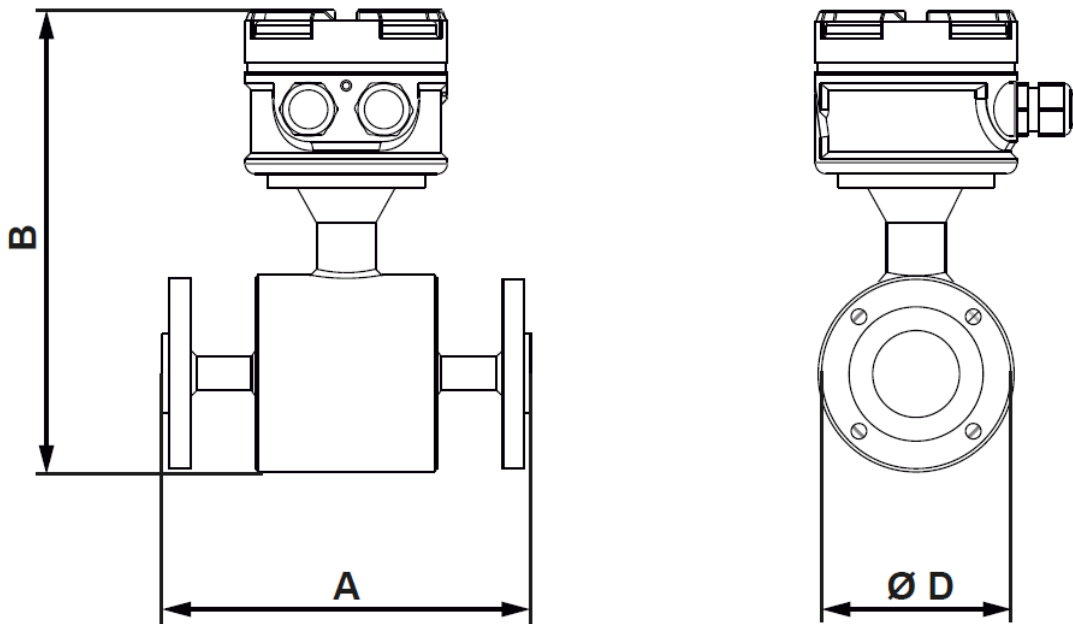


# Water Treatment



## Dimensional drawings

Separate version DN 10 ÷ DN25 PN16 - PN40



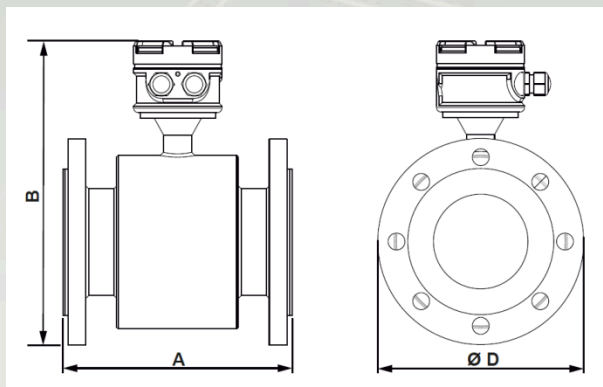
| DN<br>(mm) | A<br>(mm) | PN 16 - PN 40 |            |
|------------|-----------|---------------|------------|
|            |           | B<br>(mm)     | ØD<br>(mm) |
| 10         | 200       | 235           | 90         |
| 15         |           | 235           | 95         |
| 20         |           | 240           | 105        |
| 25         |           | 240           | 115        |

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## Dimensional drawings

Separate version DN 32 ÷ DN1000 PN10 - PN16 - PN 40



| DN<br>(mm) | A<br>(mm) | PN 10     |            | PN 16     |            | PN 40     |            |
|------------|-----------|-----------|------------|-----------|------------|-----------|------------|
|            |           | B<br>(mm) | øD<br>(mm) | B<br>(mm) | øD<br>(mm) | B<br>(mm) | øD<br>(mm) |
| 32         | 200       | -         | -          | 251       | 140        | 254       | 140        |
| 40         | 200       | -         | -          | 270       | 150        | 270       | 150        |
| 50         | 200       | -         | -          | 280       | 165        | 280       | 165        |
| 65         | 200       | -         | -          | 298       | 185        | 298       | 185        |
| 80         | 200       | -         | -          | 315       | 200        | 315       | 200        |
| 100        | 250       | -         | -          | 333       | 220        | 343       | 235        |
| 125        | 250       | -         | -          | 358       | 250        | 368       | 270        |
| 150        | 300       | -         | -          | 393       | 285        | 400       | 300        |
| 200        | 350       | 450       | 340        | 450       | 340        | 468       | 375        |
| 250        | 450       | 505       | 395        | 510       | 405        | 533       | 450        |
| 300        | 500       | 550       | 445        | 558       | 460        | 586       | 515        |
| 350        | 550       | 605       | 505        | 613       | 520        | 643       | 580        |
| 400        | 600       | 665       | 565        | 673       | 580        | 713       | 660        |
| 450        | 600       | 715       | 615        | 728       | 640        | 751       | 685        |
| 500        | 600       | 765       | 670        | 785       | 715        | 805       | 755        |
| 600        | 600       | 870       | 780        | 900       | 840        | 810       | 890        |
| 700        | 700       | 987       | 895        | 995       | 910        | -         | -          |
| 800        | 800       | 1100      | 1015       | 1105      | 1025       | -         | -          |
| 900        | 900       | 1202      | 1115       | 1207      | 1125       | -         | -          |
| 1000       | 1000      | 1293      | 1230       | 1306      | 1255       | -         | -          |