

# OPTIFLUX 4300W

ELECTROMAGNETIC FLOW SENSOR

**DIEHL**  
Metering



## APPLICATION

OPTIFLUX 4300 is an electromagnetic flow meter designed for measuring the flow of hot and cold water. Its electromagnetic technology gives it many advantages : no moving parts (no mechanical wear), high measuring dynamics, low pressure drop, low start-up flow and insensitivity to suspended particles. It can also be used for glycol water measurement (without MID approval).

## FEATURES

- ▶ Measures all conductive liquids with conductivity > 20  $\mu\text{S}/\text{cm}$
- ▶ MID class 2 approval (only for water)
- ▶ Full range from DN 25 mm to DN 300 mm
- ▶ Compatible with pulse input computers
- ▶ Temperature range from +0°C to +180°C in separate version
- ▶ Analogue output by default
- ▶ Other optional communication bus

# OPTIFLUX 4300W

## ELECTROMAGNETIC FLOW SENSOR

### GENERAL

| OPTIFLUX 4300W             |  |
|----------------------------|--|
| Application                | heating / cooling   Heat transfer fluid with conductivity > 20 $\mu\text{S}/\text{cm}$ |
| Approval                   | MID (DE-13-MI004-PTB005) only for water  |
| Ambient class              | MID class E2 + M2  |
| Ambient temperature        | $^{\circ}\text{C}$ -40 ... +65 $^{\circ}\text{C}$                                      |
| Power supply               | 100 ... 230 VAC   50 ... 60 Hz   |
| Mounting position          | all positions  |
| Protection class           | IP 67  |
| Interface                  | pulse output ; analogue output   |
| Digital outputs (optional) | fieldbus, Modbus RTU, Profibus, PROFINET   |

### TEMPERATURE RANGE

| OPTIFLUX 4300W                                |                               |
|---|-------------------------------|
| Temperature range compact version             | $^{\circ}\text{C}$ 0 ... +140 |
| Temperature range separated converter version | $^{\circ}\text{C}$ 0 ... +180 |

### BASIC FEATURES

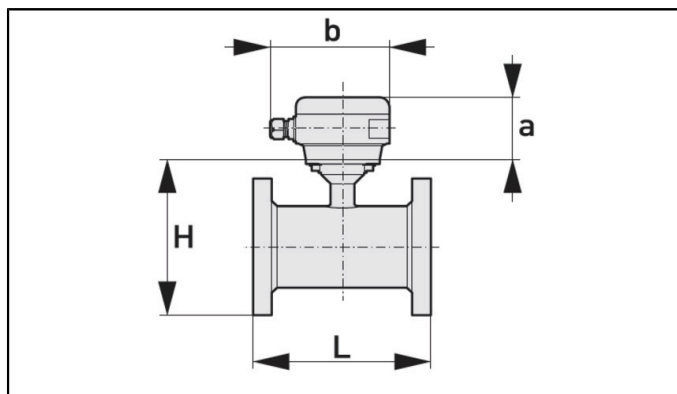
| Nominal flowrate         | $Q_p$ | $\text{m}^3/\text{h}$ | 16   | 40  | 100 | 250   | 400 |
|--------------------------|-------|-----------------------|------|-----|-----|-------|-----|
| Nominal diameter         | DN    | mm                    | 25   | 50  | 65  | 100   | 125 |
| Length                   | L     | mm                    | 150  | 200 | 200 | 250   | 250 |
| Minimum flow rate        | $Q_i$ | $\text{m}^3/\text{h}$ | 0.08 | 0.2 | 0.5 | 1.25  | 4   |
| Maximum flow rate        | $Q_s$ | $\text{m}^3/\text{h}$ | 20   | 50  | 125 | 312.5 | 500 |
| Default nominal pressure | PN    | bar                   | 40   | 40  | 16  | 16    | 16  |
| Pulse weight             |       | l/pulse               | 1    | 1   | 10  | 10    | 100 |
| Analog output at 20 mA   |       | $\text{m}^3/\text{h}$ | 20   | 50  | 125 | 312.5 | 500 |

| Nominal flowrate         | $Q_p$ | $\text{m}^3/\text{h}$ | 400 | 1000 | 1600 | 2500 |
|--------------------------|-------|-----------------------|-----|------|------|------|
| Nominal diameter         | DN    | mm                    | 150 | 200  | 250  | 300  |
| Length                   | L     | mm                    | 300 | 350  | 400  | 500  |
| Minimum flow rate        | $Q_i$ | $\text{m}^3/\text{h}$ | 4   | 10   | 16   | 25   |
| Maximum flow rate        | $Q_s$ | $\text{m}^3/\text{h}$ | 500 | 1250 | 2000 | 3125 |
| Default nominal pressure | PN    | bar                   | 16  | 16   | 16   | 16   |
| Pulse weight             |       | l/pulse               | 100 | 100  | 100  | 100  |
| Analog output at 20 mA   |       | $\text{m}^3/\text{h}$ | 500 | 1250 | 2000 | 3125 |

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## DIMENSIONS



Separate version, wall mounting of the IFC 300 display

|                          |       |                   |     |     |     |     |     |
|--------------------------|-------|-------------------|-----|-----|-----|-----|-----|
| Nominal flowrate         | $Q_p$ | m <sup>3</sup> /h | 16  | 40  | 100 | 250 | 400 |
| Nominal diameter         | DN    | mm                | 25  | 50  | 65  | 100 | 125 |
| Length                   | L     | mm                | 150 | 200 | 200 | 250 | 250 |
| Height                   | H+A   | mm                | 228 | 253 | 288 | 325 | 354 |
| Flanges nominal pressure |       | bar               | 40  | 40  | 16  | 16  | 16  |
| Flange diameter          |       | mm                | 115 | 165 | 185 | 220 | 250 |
| Number of screwholes     |       |                   | 4   | 4   | 4   | 8   | 8   |
| Weight                   |       | kg                | 4   | 9   | 9   | 15  | 19  |

|                          |       |                   |     |      |      |      |  |
|--------------------------|-------|-------------------|-----|------|------|------|--|
| Nominal flowrate         | $Q_p$ | m <sup>3</sup> /h | 400 | 1000 | 1600 | 2500 |  |
| Nominal diameter         | DN    | mm                | 150 | 200  | 250  | 300  |  |
| Length                   | L     | mm                | 300 | 350  | 450  | 500  |  |
| Height                   | H+A   | mm                | 388 | 449  | 496  | 546  |  |
| Flanges nominal pressure |       | bar               | 16  | 16   | 16   | 16   |  |
| Flange diameter          |       | mm                | 285 | 340  | 395  | 445  |  |
| Number of screwholes     |       |                   | 8   | 12   | 12   | 12   |  |
| Weight                   |       | kg                | 58  | 78   | 111  | 130  |  |