

# ARIES IS

## SINGLE-JET METER

**DIEHL**  
Metering



### APPLICATION

ARIES IS is a single jet water meter specifically designed for submetering market. It is characterised by its accurate metering capability, its ruggedness and versatility.

Its integrated radio module enables remote reading of the index and alarms of the meter in mobile mode (walk-by) or fixed network.

Developed within the framework of the MID, ARIES IS complies with the European regulations and holds sanitary conformity certificates.

### FEATURES

- ▶ DN 15
- ▶ Q3=2.5 m<sup>3</sup>/h
- ▶ MID approval up to R=125H and R=63V
- ▶ Starting flow rate: 6 l/h
- ▶ Brass body
- ▶ Cold and hot water
- ▶ IZAR integrated 868 MHz and 434 MHz radio, PRIOS protocol
- ▶ Battery lifetime up to 10 years
- ▶ IP54: not suitable for wet environment

# ARIES IS

## SINGLE-JET METER

### METROLOGICAL DATA

| Nominal diameter                               | DN                             | mm                | 15      | 15       |
|------------------------------------------------|--------------------------------|-------------------|---------|----------|
| Length                                         | L                              | mm                | 80      | 110      |
| Nominal flowrate                               | Q <sub>3</sub>                 | m <sup>3</sup> /h | 2.5     | 2.5      |
| Body                                           |                                |                   | brass   | brass    |
| R standard*                                    | Q <sub>3</sub> /Q <sub>1</sub> |                   | 80H-40V | 125H-63V |
| Starting flowrate horizontal                   |                                | l/h               | 12      | 6        |
| Minimum flowrate horizontal                    | Q <sub>1</sub>                 | l/h               | 31      | 20       |
| Transition flowrate horizontal                 | Q <sub>2</sub>                 | l/h               | 50      | 32       |
| Minimum flowrate vertical                      | Q <sub>1</sub>                 | l/h               | 61.5    | 39.7     |
| Transition flowrate vertical                   | Q <sub>2</sub>                 | l/h               | 100     | 63.5     |
| Maximum flowrate                               | Q <sub>4</sub>                 | m <sup>3</sup> /h | 3.125   | 3.125    |
| Head loss at Q <sub>3</sub>                    |                                | bar               | 0.56    | 0.59     |
| Head loss at Q <sub>4</sub>                    |                                | bar               | 0.88    | 0.93     |
| Kvs (deltaP=Q <sup>2</sup> /Kvs <sup>2</sup> ) |                                |                   | 3.34    | 3.25     |

\* other values on request - H=horizontal installation position / V=vertical installation position

### APPROVAL

| ARIES IS            |                                |
|---------------------|--------------------------------|
| MID approval        | LNE-30014   B2 type            |
| Sanitary conformity | ACS   WRAS   PZH               |
| Standards           | ISO 4064   EN 14154   OIML R49 |

### REACH

Information pursuant to Article 33 (1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006:

This product series contains articles with the following substances in a concentration of more than 0.1% weight by weight (w/w):

- Lead (CAS no.: 7439-92-1)

### TEMPERATURE AND PRESSURE

| ARIES IS                      |                                |
|-------------------------------|--------------------------------|
| Water temperature             | °C +0.1 ... +50   +0.1 ... +90 |
| Operating ambient temperature | °C +1 ... +55                  |
| Storage temperature           | °C -10 ... +55                 |
| Nominal pressure              | bar 16                         |
| Degree of protection          | IP 54                          |

### TECHNICAL DATA IZAR INTEGRATED RADIO

| ARIES IS                 |                                                                     |
|--------------------------|---------------------------------------------------------------------|
| Communication protocol   | PRIOS                                                               |
| Frequency                | MHz 868.95 (R3 mode) and 434.47 (R3 mode)**                         |
| Sending interval         | Every 32 seconds                                                    |
| Standards                | EN 300 220, CE, RED directive, EN 13757-3/-4                        |
| Transmission power       | mW 16                                                               |
| Transmission mode        | Unidirectional                                                      |
| Radio range              | Up to 500 m depending on the environment                            |
| Power supply             | 3 V lithium battery                                                 |
| Typical battery lifetime | Up to 10 years*                                                     |
| Integrated functions     | Current index   Historical index value   Remaining battery lifetime |
| Alarms management        | Leak detection   Meter stopped   Overflow   Underflow   Backflow    |

\*Under standard conditions of use and temperature. Theoretical lifetime, not guaranteed.

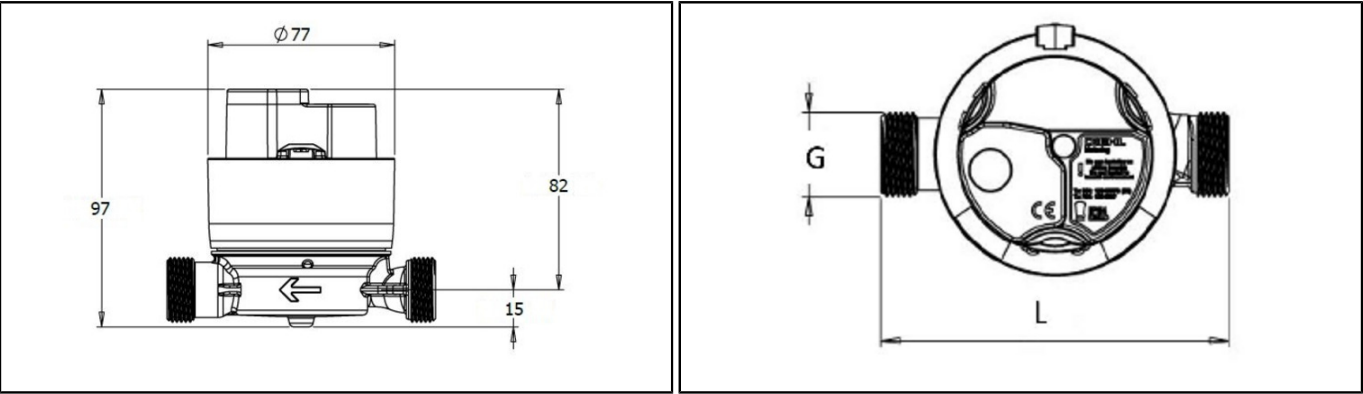
\*\*434 MHz available for DN15/110 Q3=2.5. Other variants on demand.

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Subject to technical adjustments.

# ARIES IS

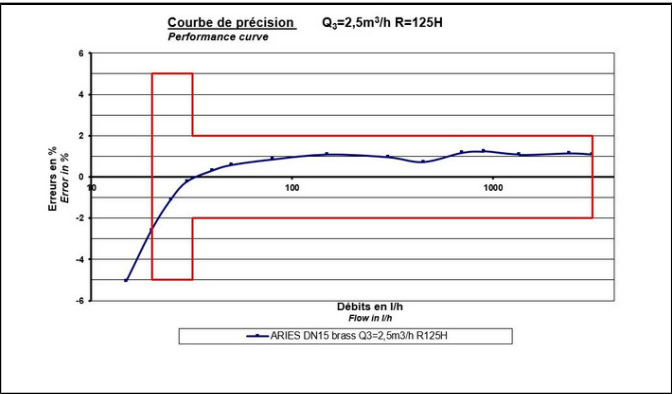
## SINGLE-JET METER

### DIMENSIONS



| Nominal diameter   | DN             | mm                | 15    | 15    |
|--------------------|----------------|-------------------|-------|-------|
| Length             | L              | mm                | 80    | 110   |
| Nominal flowrate   | Q <sub>3</sub> | m <sup>3</sup> /h | 2.5   | 2.5   |
| Body               |                |                   | brass | brass |
| Width              |                | mm                | 77    | 77    |
| Height             |                | mm                | 97    | 97    |
| Thread connections | G              | inch              | 3/4"  | 3/4"  |
| Weight             |                | kg                | 0.37  | 0.45  |

### PRECISION CURVE



DN15 brass - Q3=2.5 R=125H

This technology doesn't require straight length.

### OPTIONS

- Tamper-proof ring
- Non-return valve that entirely fits into the body