

# ARIES DN15/20

## SINGLE-JET METER

**DIEHL**  
Metering



### APPLICATION

ARIES is a single jet water meter specifically designed for submetering market. It is characterised by its accurate metering capability, its ruggedness and versatility. Developed within the framework of the MID, ARIES complies with the European regulations and holds sanitary conformity certificates.

Modular, ARIES can be fitted at any time with an IZAR clip-on module, converting it into a communicating meter ready for mobile or fixed (radio/wired) network reading.

### FEATURES

- ▶ DN 15 / 20
- ▶  $Q_3 = 1.6 \text{ m}^3/\text{h}$  and  $Q_3 = 2.5 \text{ m}^3/\text{h}$  (DN 15) /  $Q_3 = 4 \text{ m}^3/\text{h}$  (DN 20)
- ▶ MID and OIML approvals up to R = 125H and R = 63V
- ▶ Starting flow rate : 6 l/h (DN 15) / 12 l/h (DN 20)
- ▶ Brass and composite body
- ▶ Integrated plastic inlet filter
- ▶ Cold and hot water

# ARIES DN15/20

## SINGLE-JET METER

### METROLOGICAL DATA

Nominal diameter	DN	mm	15	15	15	15	20
Length	L	mm	80	110	110	110	130
Permanent flow rate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	1.6	2.5	2.5	4
Body			brass	brass	brass	composite	brass
R standard*	Q <sub>3</sub> /Q <sub>1</sub>		80H-40V	125H-50V	125H-63V	125H-63V	125H-63V
Starting flow rate horizontal		l/h	12	6	6	8.45	12
Minimum flow rate horizontal	Q <sub>1</sub>	l/h	31	12.8	20	25	32
Transitional flow rate horizontal	Q <sub>2</sub>	l/h	50	20.5	32	40	51.2
Minimum flow rate vertical	Q <sub>1</sub>	l/h	61.5	32	39.7	39.7	63.5
Transitional flow rate vertical	Q <sub>2</sub>	l/h	100	51.2	63.5	63.5	101.6
Overload flow rate	Q <sub>4</sub>	m <sup>3</sup> /h	3.125	2	3.125	3.125	5
Pressure loss at Q <sub>3</sub>		bar	0.56	0.59	0.59	0.62	0.57
Pressure loss at Q <sub>4</sub>		bar	0.88	0.92	0.93	0.96	0.89
Kv (deltaP=Q <sup>2</sup> /Kv <sup>2</sup> )			3.34	2.09	3.24	3.2	5.30

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

### APPROVAL

ARIES DN15/20	
MID approval	LNE-30014   B2 type
Standards	ISO 4064-1-2014   OIML R49-1-2013
Sanitary conformity	ACS   AoC DEU   Belgaqua   OTH   PZH   WRAS

### 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 components with the following substances in a concentration of more than 0.1% weight by weight (w/w):

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

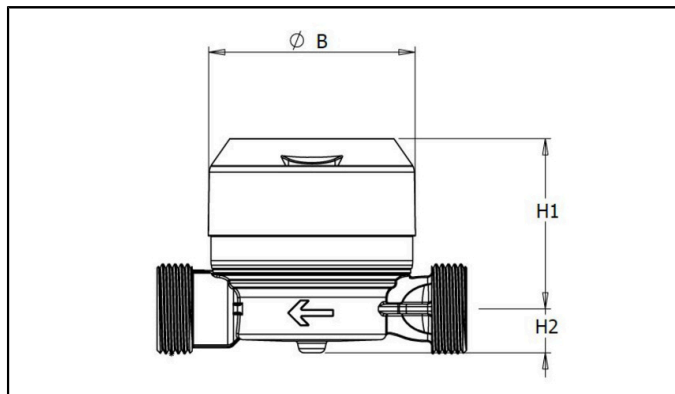
### TEMPERATURE AND PRESSURE

ARIES DN15/20	
Water temperature	°C +0.1 ... +50 / +0.1 ... +90
Ambient operating temperature	°C +1 ... +55
Storage temperature	°C -10 ... +55
Nominal pressure	PN bar 16

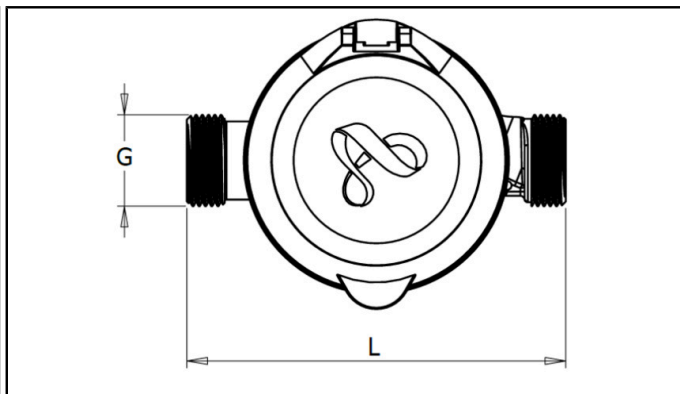
# ARIES DN15/20

## SINGLE-JET METER

### DIMENSIONS



Side view

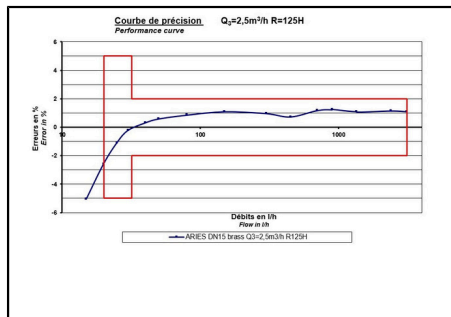


Top view

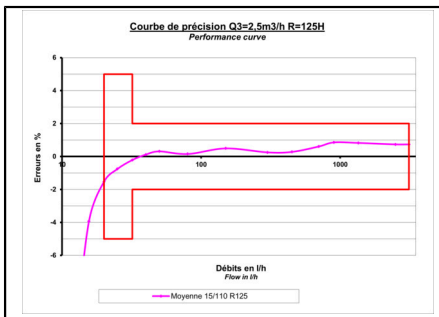
Nominal diameter	DN	mm	15	15	15	15	20
Length	L	mm	80	110	110	110	130
Permanent flow rate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	1.6	2.5	2.5	4
Body			brass	brass	brass	composite	brass
Diameter	Ø B	mm	73	73	73	73	73
Height	H1	mm	64	64	64	64	63
Height	H2	mm	15	15	15	18	17
Thread connections	G	inch	¾"	¾"	¾"	¾"	1"
Weight - plastic register		kg	0.31	0.38	0.38	0.23	0.51

\* 7/8" version also available in option

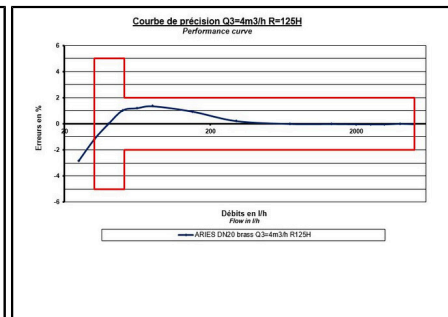
### PRECISION CURVE - HORIZONTAL



DN15 brass - Q3=2.5 R=125H



DN15 comp - Q3=2.5 R=125H



DN20 brass - Q3=4 R=125H

This technology doesn't require straight length.

### OPTION

- ▶ Glass-metal register (only for cold water meter)
- ▶ Tamper proof ring
- ▶ Non-return valve that entirely fits into the body
- ▶ Cover