

US BR 473

Ultrasonic flow meter qp 25 - 60 m³/h

US BR 473 is a new ultrasonic flow meter well adapted to the needs of district heating companies.

This flow meter is equipped with an universal interface which allows easiest combination with Itron calculators such as CF51, CF55 or CF800.

The US BR 473 is powered by the connected calculators and therefore it doesn't need an own source of electrical power (e.g. battery).

The flow meter transmits standard pulses with programmable pulse weight in liter/pulse to the connected calculators. For test purposes the meter provides an additional output for HF test pulses.

Applications

- > Heat
- > Cooling / combined (optional version)
- > Horizontal / vertical mounting

Standards

- > MID approval according to 2004/22/EC
- > Class 2 according to EN1434
- > Environmental class C, E1; M1

Benefits

- > Repeatability over time
- > Robustness
- > Reliability

Technical Characteristics

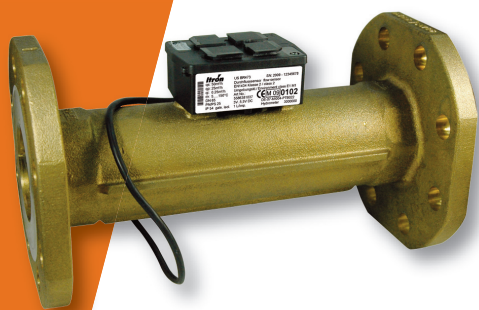
Type		DN65 qp25	DN80 qp40	DN100 qp60
IP Class	IP	54	54	54
Ambient temperature	°C	5 - 55	5 - 55	5 - 55
Stockage temperature	°C	-20 - 60	-20 - 60	-20 - 60
Maximum flow	qs (m ³ /h)	50	80	120
Nominal flow	qp (m ³ /h)	25	40	60
Minimum flow	qi (l/h)	250	400	600
Cut off flow	qc (l/h)	50	80	120
Head loss @ qp	bar	0,075	0,08	0,09
Water temperature	°C	5...150°C	5...150°C	5...150°C
Nominal diameter	DN	65	80	100
Body length	length (mm)	300	300	360
Connections		FL PN25	FL PN25	FL PN25
Cable to calculator	L (m)	5	5	5

Characteristic of pulse output

- > Version: Open collector (Drain)
- > Polarity: non reversible (observe connection diagram)
- > Pulse length: 100 ms ± 10%
- > Max. input voltage: 30V DC
- > Max. input current: 20 mA
- > Max. output frequency: 150 Hz
- > Pulse weight options: see references

Power supply

- > Nominal voltage: 3,0 ... 5,5V DC
- > Average current consumption: < 100 mAh per year
- > Peak current consumption I_{max}: < 10 mA



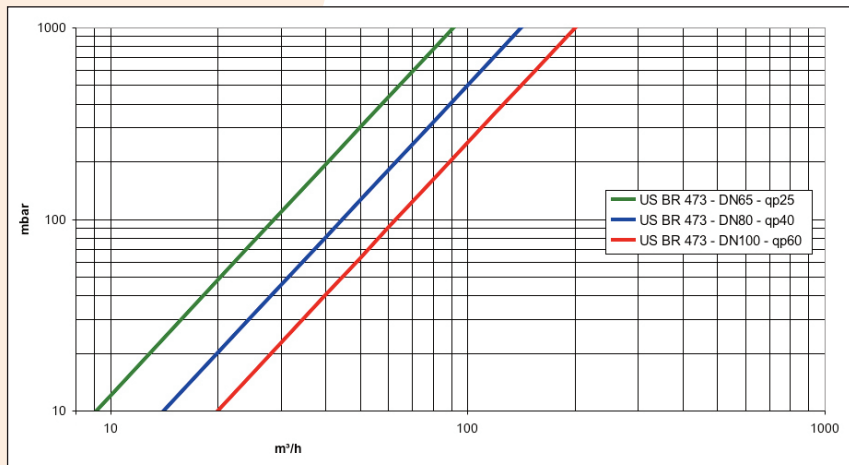
> Key Features

- High accuracy
- Robustness
- Ease of installation
- Power supply by calculator

Dimensions

Type	DN65 qp25	DN80 qp40	DN100 qp60
Body length L ₁ , mm	300	300	360
Length of electronic L ₂ , mm	90	90	90
Width of electronic B, mm	65,5	65,5	65,5
Nominal diameter	65	80	100
Height A, mm	79	86,5	95,5
Height A ₂ , mm	85	92,5	108
Flange diameter D, mm	184	200	235
Bolt circle diameter K, mm	145	160	190
Bolt holes diameter L, mm	18	18	22
Number of holes	8	8	8
Flange dimension F, mm	170	185	216

Head Loss



Electrical connection and power supply

The basic version of BR 473 must be power-supplied by the integrator (CF 51, CF 55 or CF 800) or an external power supply. Compatibility in accordance with the following table

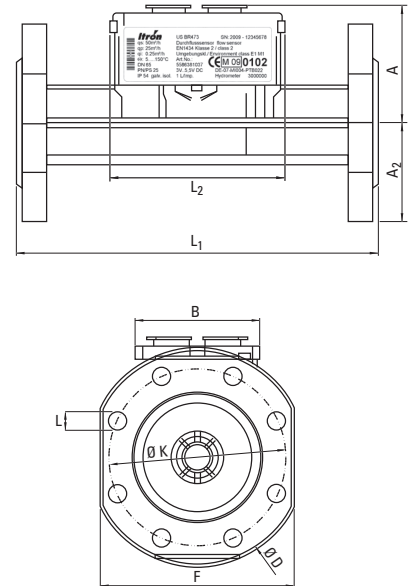
	Compatibility US BR 473 with power supply of calculators			
	Battery small	Battery large	Mains 230V	via M-BUS
CF 51	✓	✓	not allowed	not allowed
CF 55	✓	✓	✓	✓
CF 800	–	–	✓	–
PulseBox	✓	✓	✓	–

About Itron Inc.

Itron Inc. is a leading technology provider to the global energy and water industries. Our company is the world's leading provider of metering, data collection and utility software solutions, with nearly 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water. Our products include electricity, gas and water meters, data collection and communication systems, including automated meter reading (AMR) and advanced metering infrastructure (AMI); meter data management and related software applications; as well as project management, installation, and consulting services. To know more, start here: www.itron.com

For more information, contact your local sales representative or agency.

> Dimensions



> References

Art. No.	DN	qp	pulse weight*
5886 38 14 65	65	25	10l/p
5886 38 17 65	65	25	250l/p
5887 38 14 65	80	40	10l/p
5887 38 17 65	80	40	250l/p
5888 38 14 65	100	60	10l/p
5888 38 17 65	100	60	250l/p

*optional 25l/p or 100l/p available.

Itron

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