


## EC-Type Examination Certificate Measuring Instrument Directive


**Number: DK-0200-MI004-018**  
Issued by FORCE Certification A/S Denmark  
EC-notified body number 0200

In accordance with The Danish Safety Technology Authority's statutory order no. 436 of 16<sup>th</sup> May 2006 with later amendments which implements the Directive 2004/22/EC of the European Parliament and Council of March 31<sup>st</sup>, 2004 on measuring instruments (MID) and later amendments.

**Issued to:** Itron France  
11 Boulevard Pasteur  
67500 Haguenau  
France

Reference No.: 112-24266.0002  
Type of instrument: Ultrasonic Flowmeter  
Type designation: ITRON US1200  
Valid until: 2017-11-26  
Number of pages: 7, including appendix  
Date of issue: 2012-12-11  
Revision no.: 1 - 2012

Approved by  
  
Michael Møller Nielsen  
Certification Manager

Processed by  
  
Lars Poder  
Examiner

The conformity markings may only be affixed to the above type approved equipment. The manufacturer's Declaration of Conformity may only be issued and the notified body identification number may only be affixed on the instrument when the production/product assessment module (D or F) of the Directive is fully complied with and controlled by a written inspection agreement with a notified body. This EC-type examination certificate may not be reproduced except in full, without written permission by FORCE Certification A/S.

## **Appendix to**

### **EC-Type Examination Certificate**

#### **Measuring Instrument Directive**

**Number: DK-0200-MI004-018**

Issued by FORCE Certification A/S, Denmark  
EC-notified body number 0200

Applied standards and documents:  
EN1434: 2007

Revision: 1 – 2012. New labels and new pictures.

The instruments/measuring systems shall correspond with the following specifications:

Type designation:  
ITRON US1200

Description:  
The Volume meter ITRON US1200 is an ultrasonic flow meter working after the transmission time difference principle.  
The meters consists of a flow sensor and a transmitter.  
The flow sensor has 2 sound tracks.

Technical documentation:  
FORCE Certification A/S.  
File no.: 112-24266.0002, 80.976-226/11, 80.976-213/11, 80.976-190/10, 80.976-172/10, 80.976-116/09 and 80.970.6-0048/06.

### **Technical data**

Instrument tested according to	: EN1434:2007
Software version	: 1.02, 1.04, 1.05, 2.01 or 2.03
Verification tolerance	: $\pm(2+0,02 q_p/q)\%$ , max. $\pm 5\%$
Temperature	: $\theta_{\min} - \theta_{\max}$ 15°C...200°C
Pressure	: PN10, PN16, PN25 & PN40 (bar)
Power supply	: 115 - 230VAC or 3.6VDC battery
Environment class	: E2, M1
Accuracy class	: 2
Climatic class	: -10 - +55°C, condensing, closed
Durability specification	: 10 years

**ITRON US1200 FLOW meter Variants**

Diameter	q <sub>p</sub> [m <sup>3</sup> /h]	q <sub>s</sub> [m <sup>3</sup> /h]
<b>DN50</b>	15	30
<b>DN50</b>	15	45
<b>DN50</b>	30	45
<b>DN65</b>	25	50
<b>DN65</b>	25	72
<b>DN65</b>	50	72
<b>DN80</b>	40	80
<b>DN80</b>	40	120
<b>DN80</b>	80	120
<b>DN100</b>	60	120
<b>DN100</b>	60	180
<b>DN100</b>	120	180
<b>DN125</b>	100	200
<b>DN125</b>	100	280
<b>DN125</b>	200	280
<b>DN150</b>	150	300
<b>DN150</b>	150	420
<b>DN150</b>	300	420
<b>DN200</b>	250	500
<b>DN200</b>	250	700
<b>DN200</b>	500	700
<b>DN250</b>	400	800
<b>DN250</b>	400	1120
<b>DN250</b>	800	1120
<b>DN300</b>	560	1120
<b>DN300</b>	560	1560
<b>DN300</b>	1120	1560
<b>DN350</b>	750	1500
<b>DN350</b>	750	2100
<b>DN350</b>	1500	2100
<b>DN400</b>	950	1900
<b>DN400</b>	950	2660
<b>DN400</b>	1900	2660
<b>DN500</b>	1475	2950
<b>DN500</b>	1475	4130
<b>DN500</b>	2950	4130
<b>DN600</b>	2150	4300
<b>DN600</b>	2150	6020
<b>DN600</b>	4300	6020
<b>DN700</b>	2900	5800
<b>DN700</b>	2900	8120
<b>DN700</b>	5800	8120
<b>DN800</b>	3800	7600
<b>DN800</b>	3800	10640
<b>DN800</b>	7600	10640
<b>DN900</b>	5000	10000
<b>DN900</b>	5000	14000
<b>DN900</b>	10000	14000
<b>DN1000</b>	6000	12000
<b>DN1000</b>	6000	16800
<b>DN1000</b>	12000	16800
<b>DN1200</b>	9000	18000
<b>DN1200</b>	9000	25200
<b>DN1200</b>	18000	25200

 Max. q<sub>p</sub>/q<sub>i</sub> = 100  
 DK-0200-MI004-018

## **Verification**

**Errors:** Maximum permissible errors according to Directive 2004/22/EC of the European Parliament and Council of March 31, 2004 on measuring instruments (MID), Annex MI-004.

**Procedure:** Verification requirements according to EN1434:2007

**Test Points:**

$$q_i \leq q \leq 1.1 q_i$$
$$0.1 q_p \leq q \leq 0.11 q_p$$
$$0.9 q_p \leq q \leq 1.0 q_p$$

The meter shall be verified before becoming operational (initial verification).  
The verification is done with water.

Temperature according to DS/EN 1434-5 Initial verification tests:

Initial verification at temperatures between 15°C and 50°C is approved provided a verification tolerance of max ±1,5% regardless of flow rate is applied.

Verification tolerance, according to DS/EN 1434-5:

When the verification is done the meter is sealed as described under sealing.

## **Sealing**

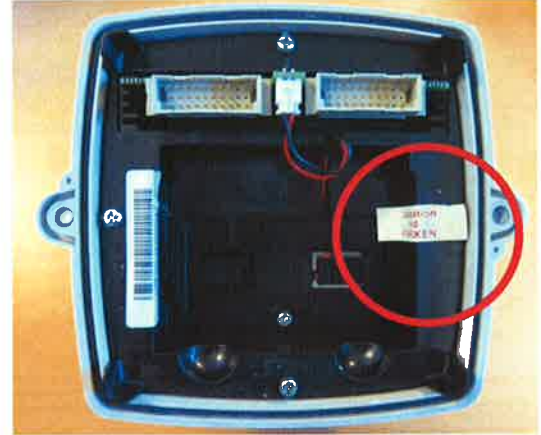
See the following 5 pictures.

Sealing

a) Sealing of electronics



b) Sealing of electronics



c) Sealing of electronics



d) Sealing of sensor



e) Installation sealing



DK-0200-MI004-018

## Installation

The flow sensor can be mounted horizontal or vertical.  
Flow direction marked on the sensor.

The signal transmitter can be fitted compact on the sensor or remotely.

ITRON US1200 ≥ DN80 1.5 meter straight length of pipe before.

## Labeling and inscriptions

Manufacturer, type, year  
Serial no.  
EC-Type examination certificate number  
Tmax and Pmax  
Application temperature range  
Power supply  
Accuracy class  
Software version  
Direction of flow  
Mechanical and electromagnetic environment classes.

### Example

<b>Itron</b>			
US1200		ASE011B9775	
Order No.	7ME3415-XXXXX-XXXX-Z +XXX+XXX+XXX+XXX 123412N123		
Transmitter	7ME3455-XXXXX-XXXX 123412N123		
Sensor	FDK-0B7HXXXX 123412N123		
qs	180 m <sup>3</sup> /h	qi	1.2 m <sup>3</sup> /h
qp	60 m <sup>3</sup> /h		
Pulse Value	250 L/Pulse		
Pulse Width	200 ms		
Cable Length	30 m	SW vers.:	2.03
Cal. Factor	1.0000	Prod. Year	2012
⊕ ambient	-10 .. +55 °C		
Certification No.	DK-0200-MI004-018		
Accuracy Class:	2		
Environmental Class:	E2, M1		
<b>CE M12 0071</b>		Order No. 7ME341 123412N123	
Itron, 67500 Haguenau, France Made in France			

<b>Itron</b>			
US1200			
Sensor	FDK-0B7HXXXX 123412N123	Order No.	7ME3415-XXXXX-XXXX-Z +XXX+XXX+XXX+XXX 123412N123
Dimension	DN 100	Certification No.	DK-0200-MI004-018
Press. Rating	PN40 PT60 bar	Accuracy Class:	2
qs	180 m <sup>3</sup> /h	Environmental Class:	E2, M1
qp	60 m <sup>3</sup> /h		
qi	1.2 m <sup>3</sup> /h		
Cable Length	30 m		
Cal. Factor	1.0000		
⊕ ambient	-10 .. +55 °C		
⊕ water	+15 .. +200 °C		
Prod. Year	2012		
<b>CE M12 0071</b>		<b>CE 0062 EN13480</b>	
Itron, 67500 Haguenau, France Made in France			