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# EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 45828X** **Issue 1**

[4] Product: **Flowmeter**

[5] Manufacturer: **Xsens AS**

[6] Address: **Godviksvingene 127  
5179 Godvik  
Norway**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-7: 2015/A1:2018, EN 60079-11: 2012 and EN 60079-18: 2015/A1:2017**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 II 2 (2) G Ex eb ib mb [ib] IIB T3 Gb

Date of issue:  
2021-08-27



Asle Kaastad  
For DNV Product Assurance AS  
The Certificate has been digitally signed.  
See [www.dnv.com/digitalsignatures](http://www.dnv.com/digitalsignatures) for info



[13] **Schedule**

[14] **EU-Type Examination Certificate No:** **Presafe 20 ATEX 45828X** **Issue 1**

[15] **Description of Product**

The product consists of 1 Field Electronics (FE) card and up to 12 transducers. The electronics inside the transducers are encapsulated and mounted inside a stainless-steel main enclosure. The transducers are intrinsically safe and supplied from intrinsically safe outputs on the FE card. The FE card is encapsulated according to the EN 60079-18 standard – Ex “m” and is mounted inside an already certified Ex “e” enclosure. The Ethernet connection J4 shall only be used by XSENS for maintenance, repair and overhaul. The product XACT flowmeter is a flow and fraction measurement equipment – from outside of the pipe.

**Type designation**

F – xZy-pAaHh

F = Flowmeter type. XACT, XRATE, XFUEL

x = Process medium type. G (gas), L (Liquid), M (Mud),

y = Hazardous area location. 1 (zone 1), 2 (zone 2)

p = pipe spec and size

a = number of axial transducers

h = number of helical transducers

**Electrical Data**

Connector	Um:	Ui:	Ii:	Pi:	Ci:	Li:
J6 (Modbus)	13,5V	9V	50mA	450mW	Negligible	Negligible
J8 (Power)	30V	26V	356mA	9,25W	Negligible	Negligible
J11 (pin 1-2 & pin 3-4)		30V	100mA	900mW	Negligible	Negligible
Connector		Uo:	Io:	Po:	Co:	Lo:
J2 & J3 (PT100 Temp Sensor)		13,5V	6mA	21mW	1µF	1mH
J20 & J21 (4-20mA IS device)		13,5V	251mA	848mW	5,2µF	2,21mH
Connector						
J4 (Gigabit Ethernet)	Shall only be used by manufacturer during production, test, repair and overhaul.					
J9	IS earth connection					
J17 (USART)	Shall only be used by manufacturer for setting IP address.					

Un: 24V DC

In: 270mA

**Degrees of protection (IP Code)**

IP66 for enclosure made for external connections.

**Ambient temperature:**

-20°C to +60°C

The pipe surface temperature at installation location shall not exceed +100°C.

**Routine tests**

Dielectric strength test according to clause 7.1 of EN 60079-7: 2015 (500V r.m.s. for 60 seconds).

Each encapsulated FE card shall be inspected visually according to EN 60079-18:2015, and dielectric strength test according to clause 8.2.4 for at least 1 s.

[16] **Report No.:** 259635

[17] **Specific Conditions of Use**

1. When using non-IS power at J6 and/or J8 installation shall be according to sub-clause a, b, c or d of clause 16.2.1 of EN 60079-14, as  $U_m$  is less than 250V.
2. When using non-IS power at J6 and/or J8 transient protection shall be provided set to a level not exceeding 140% of the peak rated voltage value at the supply terminals.
3. For electrical parameters see document XACT-003-000-Pr-941.

[18] **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.



[19] **Drawings and documents**

Number	Title	Rev.	Date
XACT-003-000-Sp-942	Scheduled drawings list for XSENS Flowmeter ATEX/IECEX Zone 1	2.0	13.08.2021

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-06-05	D0003535_01
1	Update to latest EN 60079-0:2018 and EN 60079-18:2015/A1:2017. Add alternative components. Change the enclosure size. Add aluminium enclosure option. Add alternative location and material on drain and bolts.	2021-08-27	259635

END OF CERTIFICATE

