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SIA "International Center for Quality Certification - ICQC" Reģ. Nr.LV40103539825 Skolas iela 63-19, Jūrmala, LV-2016, Latvija



(1) EU-TYPE EXAMINATION CERTIFICATE

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres Directive 2014/34/EU
- (3) EU-Type Examination Certificate Number: ICQC 20 ATEX 0433 Issue: 0
- (4) Equipment: **Dew point transmitter HyPro**
- (5) Manufacturer: SPA Vympel LLC
- (6) Address: 143530, Moscow region, Istra district, Dedovsk, School passage, 11, Russia
- (7) This equipment and any acceptable variation, also documents which are specified in the schedule to this certificate.
- (8) The certification body ICQC, Notified body No. 2549 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
 - The examination and test results are recorded in confidential report no 433/2020/08/ATEX
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-11:2012
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. These are not covered by the certificate
- (12) The marking of the equipment or protective system shall include the following:

(Ex) II

II 2G Ex ib IIC T6 Gb -40°C ≤Ta≤+70°C

Head of Certification Body:



Sergey Kovalev

Date of issue: 08 December, 2020 Jurmala, Latvia

(13) SCHEDULE

(14) to EU-TYPE EXAMINATION CERTIFICATE: ICQC 20 ATEX 0433

Issue: 0

(15) Description of Equipment:

The dew point transmitter HyPro (hereinafter -transmitter) is an automatic sorption hygrometer designed to control the gas dew point temperature at the gas metering stations and in technological processes which require the monitoring of gas quality parameters.

The transmitter consists of a sorption-capacitive sensor, a housing, a connector (socket type C) for external cable connection, cable gland and PCB with electronic components located inside the housing. The dew point temperature is measured by a sorption-capacitive sensor and based on the dependence of the dielectric constant of the moisture-sensitive layer placed between two electrodes, one of which is moisture permeable to environmental influences. The sensor is mounted on the housing of the transmitter and closed by a cap, which ensures its protection against mechanical damage and free access of the analyzed medium.

The dew point transmitter HyPro does not have an indication of the measured values. The measured values are transmitted via a passive analog circuit 4 ... 20 mA to an external display unit (not in the scope of this certificate) or to any other external telecommunication systems. Communication with the external display unit is provided by cables connected to the connector on the end of the transducer.

Technical characteristics:

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Parameter	Value	
Ingress Protection code(IP)	IP66 / IP67	
Output signal	4 – 20 mA	
Rated supply voltage	DC 2027V	
Power consumption	0,5 W	
Ambient temperature	$-40^{\circ}\text{C} \le \text{Ta} \le +70^{\circ}\text{C}$	
Maximum input parameters of intrinsically safe electrical circuits:		
– input voltage U _i	DC 30 V	
- input currentl _i	100 mA	
- input power P _i (linear characteristic)	750 mW	
- internal capacitance C _i	22 nF	
- internal inductance L _i	2 μΗ	

The HyPro dew point transmitter must only be connected to equipment with a type of protection "intrinsically safe electrical circuit" that has an explosion protection level (EPL) not lower than the transmitter's EPL, and its intrinsically safe parameters, taking into account the electrical parameters of the communication line, cannot violate intrinsic safety.

Routine tests:

None.

(16) Descriptive Documents:

VMPL2.848.016 RE – Dew point transmitter HyPro. Operation manual. The drawings are listed in Evaluation report No. 433/2020/08/ATEX

1	Issue/Date	Evaluation report	Comment
8	Issue 0 from 08.12.2020	433/2020/08/ATEX	The release of the prime certificate.

(17) Specific conditions of use:

None.

(18) Essential Health and Safety Requirements:

Met by compliance with the standards mentioned in clause (9).