IEP | ENERGY PETROLEUM INSTITUTE

IEP ATEX

Supplement No: 1

(1) EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

(3) EU – Type Examination Certificate Number: **IEP 17 ATEX 0511X**

(4) Product: **Pneumatic Actuators, Type GP, GC, GN, GU, GV, AP, AC, AN, AU, AV**

(5) Firm Name: **Vastaş Valf Armatür Sanayi Ticaret A.Ş.**

(6) Firm Address: **Organize Sanayi Bölgesi 2. Cad. No: 20-22 Çerkezköy/ Tekirdağ, Türkiye**

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

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of 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 Report Nr: IEP.Rp.Ex.10-1108-1 date 03.11.2020.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with ;

EN ISO 80079-36:2016, EN ISO 80079-37:2016, EN IEC 60079-0:2018

(10) If the sign " X " is placed after the certificate number, it indicates that the product is subject to Specified Conditions of Safe 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 equipment or protective system shall include the following:

Ex **II ½G Ex IIC T4 Ga/Gb , II 2D Ex IIIC T125 °C Db**
II ½G Ex h IIC T4 Ga/Gb , II 2D Ex h IIIC T125 °C Db

ENERGY PETROLEUM INSTITUTE IEP ATEX NB 2284 INSPECTION AND CERTIFICATION

Responsible Person :

Nurettin Terzioglu
Head of Certification Body

Date of Issue : 12.11.2020

IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Sti.
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(13) Schedule

(14) Certificate Nr: **IEP 17 ATEX 0511X**

(15) Description of Equipment;

Pneumatic actuators are a valve actuator which is designed to be used for automatic operation of line valves, and operates using pneumatic pressure.

Pneumatic actuators can even operate full-automatic way in all weather conditions where nobody and no electric power exist.

Various types are available depending on operating conditions.

Scotch yoke mechanism converts linear motion which comes from pneumatic cylinder to rotary motion required for valve operation.

Pneumatic actuators consist of mechanical and electrical equipment. Some types of solenoid valves work with the opening and closing system. Temperature and pressure sensors are used in pneumatic actuators. If the control boxes are mounted on the actuator, Electrical control boxes must comply with the ATEX Directive.

The energetic restraint barriers must be used for the pressure and temperature sensors.

Technical Parameters:

Type	: GP, GC, GN, GU, GV, AP, AC, AN, AU, AV
Working Temperature	: -29 to +80 °C
Pressure	: 5 to 10 bar
Size	: NGJ, NG0, … , NG7
Torque	: 400 ~ 600000 Nm

IEP 17 ATEX 0511X (X Means): It must be assembled according to the manual. It must be installed by authorized personnel. Their maintenance should be done by authorized personnel according to the standard and user manual. The certificate becomes invalid in case of unapproved part replacement

(16) List of Documentation:

- Pneumatic actuators user manual : 73 pages, dated 20.12.2016
- Component Lists : Part – 5 dated 09.08.2016
- Additional Component Lists : Part – 5 dated 29.09.2020
- Mounting Pictures and Technical Drawings : Part – 4 6 pages
- Additional Mounting Pictures and Technical Drawings : Part – 4 3 pages
- Certificates and Test Reports : Part – 5/ 7 91 pages
- Additional Certificates and Test Reports : Part – 5/ 7 30 pages
- Risk assessment reports, dated 18.04.2016 and additional risk report 4 page, dated 01.10.2020
- Operating and performance test reports, dated 03.11.2015, additional 9 page, dated 01.10.2020
- Cleaning, painting and inspection test report, dated 12.02.2016
- Pressure Analyses, dated 23.09.2016
- Final and inspection report, dated 21.05.2014
- Radiographic examination report, dated 19.01.2016

Responsible Person :

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Head of Certification Body

ENERGY PETROLEUM INSTITUTE IEP ATEX NB 2284 INSPECTION AND CERTIFICATION

(17) Certificate Nr: **IEP 17 ATEX 0511X**

(18) Technical Details: **Product Code**

Actuator Type				Control Type					
-----	20	50	100	A	C	L	A	X	(Linear actuator)
NG0	08	S	C:00	G	P	C	A	Z	(Quarter turn actuator)

EXTRAS
- X: Others (Handwhell etc.)
- R: Regulator
- Z: Reservoir
- P: Partial Stroke Test
- E: Electro Hydraulic

CONTROL UNIT
- A: No Additional
- B: LB (Pneumatic Line Break System)
- E: ESD (Pressure Controlled Emergency Shut Down System)
- C: ESD + LB
- D: DPS (Differential Pressure Switch)
- F: DPS + ESD
- L: LLB (Liquid Line Break System)
- G: ESD + LLB
- H: High Pressure ESD
- K: High & Low Pressure ESD
- M: CVLD (Control Voltage Loss Detector)
- N: DPS + ESD + CVLD
- O: Intelligent On-Off Controller
- P: LB + CVLD
- X: Others

CONTROL TYPE
- L: Local Control
- R: Remote Control
- C: Local & Remote Control

POWER SUPPLY
- P: Double Acting Pneumatic
- C: Spring Return Air Fail Close
- N: Spring Return Air Fail Open
- U:Spring Return Air Fail close & Tandem Hydraulic
- V: Spring Return Air Fail Open & Tandem Hydraulic

ROTATION
- G: Quarter Turn Actuator
- A: Linear Actuator

CAPSULE SIZE (Only Quarter Turn Spring Return)
C:00, C:01, C:02, C:10, C:11, C:12, C:20…

STROKE (mm) (Only linear)
1.. 50.. 100.. 1000…

CYLINDER QTY. (Only Quarter Turn)
- S: Single
- D: Double

THRUST (kN) (Only linear)
1.. 50.. 100.. 1000…

NOMINAL CYLINDER I.D. (cm)
Pneumatic: 08, 10, 12, 14, 16, 20, 22, 25, 28, 30, 32, 34, 36, 40, 42, 45, 48, 50…

SCOTCH YOKE FIGURE (Only Quarter Turn)
NGJ, NG0, NG1, NG2, NG3, NG4, NG6, NG7

Responsible Person :

Nurettin Terzioglu
Head of Certification Body

(19) Certificate Nr: **IEP 17 ATEX 0511X**

(20) Essential Health and Safety Requirements:

20.1 Are included in standards, which are mentioned in clause (9) of this certificate. The products were approved in accordance with above mentioned standards and manufacturer's instruction.

20.2 At the installation and the operation of the pneumatic actuators has to be observed manufacturer's manual 73 pages dated 20.12.2016. (New version dated 06.10.2020)

(21) Drawings;

Drawing Nr	Drawing Name	Date
Vst-03	Label	11.01.2017
PNG1-100-7020/25-6R0	Scotch Yoke Assembly-D-A Hydraulic	15.04.2016
VA-ACT-SC-01-5R0	Spring Capsule	21.04.2015
VA-ACT-PC-01-5R0	Single Acting Pneumatic Cylinder	21.04.2015
VA-ACT-PC-02-5R0	Double Acting Pneumatic Cylinder	09.07.2015
PGST-200-032-001-6R0	Gas Strage Tank	16.03.2016
PSP-15745-01-6R0	1 " Quick Exhaust	15.03.2016
PGP-100-01-6R1	Datasheet-1	21.12.2016
PGC-100-01-6R1	Datasheet-2	17.11.2016
PGN-100-01-6R1	Datasheet-3	17.11.2016
Vst-03	Label	06.11.2020
PGU-100-01-6R1	Datasheet-4	29.09.2020
PGV-100-01-6R1	Datasheet-5	29.09.2020

Certificate History

Supplement N°	Supplement Date	Summary Description of Variation
01	12.11.2020	-New type addition: GU, GV, AP, AC, AN, AU, AV type -Standard update: New EN ISO 80079-36 and 37, EN IEC 60079-0 -Directive change: New 2014/34/EU
00	03.04.2017	First issue of certificate

Responsible Person :

Nurettin Terzioglu
Head of Certification Body

Date of Issue : 12.11.2020