

**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 0508X**

**(4) Product: Hydraulic Actuators, Type GH, GD, GT, GM, GL, GF, AH, AD, AT, AM, AL, AF**

**(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.10-1105-1 date 24.11.2020.**

**(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:**

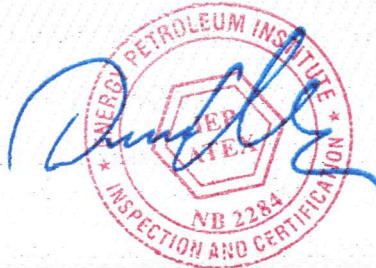


**II ½G Ex IIC T4 Ga/Gb , II 2D Ex IIC T125 °C Db  
II ½G Ex h IIC T4 Ga/Gb , II 2D Ex h IIC T125 °C Db**

**Responsible Person :**

Nurettin Terzioglu  
Head of Certification Body

**Supplement Date of Issue : 04.12.2020**





(13) Schedule

(14) Certificate Nr: **IEP 17 ATEX 0508X**

(15) Description of Equipment;

Hydraulic actuators are valve actuators which are designed to be used for automatic operation of line valves, and operate using hydraulic pressure. It 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 hydraulic cylinder to rotary motion required for valve operation.

Hydraulic Actuators consist of mechanical and electrical equipment. Some types of solenoid valves work with the opening and closing system. Heat and pressure sensors are used in hydraulic 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.

Linear actuators operate the valves that are opening/ closing via linear motion of disc (gate valve, globe valve). Operation provided by cylinder or spring directly. Quarter turn actuators operate the valves that are opening/ closing via axial (quarter turn) motion of disc (ball valve, plug valve). Operation of the valve provided by scotch yoke mechanism.

### Technical Parameters:

Type	: GH, GD, GT, GM, GL, GF, AH, AD, AT, AM, AL, AF
Definition	: AX: Linear Actuator ; GX Quarter Turn Actuator
Working Temperature	: -30 to +80 °C
Pressure	: 350 bar

(16) List of Documentation:

- ◆ Hydraulic actuators user manual : 110 pages, dated 22.12.2016
- ◆ Component Lists : Part – 5 dated 11.05.2016
- ◆ Mounting Pictures and Technical Drawings : Part – 4 6 pages
- ◆ Certificates and Test Reports : Part – 5/ 7 135 pages
- ◆ Risk assessment reports, dated 18.04.2016
- ◆ Operating and performance test reports, dated 09.10.2015
- ◆ Cleaning, painting and inspection test report, dated 12.02.2016
- ◆ Pressure Analyses, dated 23.09.2016

**Responsible Person :**

Nurettin Terzioglu  
Head of Certification Body





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(17) Certificate Nr: **IEP 17 ATEX 0508X**

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

Actuator Type    Control Type

12 07 30    A H L A X (Linear Actuator)

NG0 08 S C:00 G L 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

H: Double Acting Hydraulic

D: Double Acting Hydraulic (Electro Hydraulic)

T: Tandem Air & Manual Hydraulic

M: Manual Hydraulic

L: Spring Return Hydraulic Fail Close

F: Spring Return Hydraulic Fail Open

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: 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, 25, 28, 30, 32...

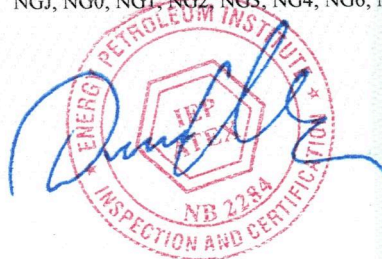
SCOTCH YOKE FIGURE (Only quarter turn)

NGJ, NG0, NG1, NG2, NG3, NG4, NG6, NG7

**Responsible Person :**

Nurettin Terzioglu

Head of Certification Body



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# IEP ENERGY PETROLEUM INSTITUTE

(19) Certificate Nr: **IEP 17 ATEX 0508X**

(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 hydraulic actuators has to be observed manufacturer's manual 110 pages dated 22.12.2016.

(21) Drawings;

Drawing Nr	Drawing Name	Date
Vst-00	Label	05.01.2017
PNG1100-7020/25-6R0	Scotch Yoke Assembly-D-A Hydraulic	15.04.2016
VA-ACT-CNT-05-6R2	Double Acting Hydraulic Cylinder	03.05.2016
VA-ACT-PC-01-5R0	Single Acting Pneumatic Cylinder	15.03.2016
VA-ACT-PC-02-5R0	Double Acting Pneumatic Cylinder	18.03.2016
VA-ACT-SC-01-5R0	Spring Capsule	18.03.2016
PGH-100-01-6R2	Datasheet 1	22.12.2016
PGL-100-01-6R1	Datasheet 2	20.12.2016
PGF-100-01-6R1	Datasheet 3	20.12.2016
PGT-100-00-5R0	Datasheet 4	04.12.2015

## Certificate History

Supplement N°	Supplement Date	Summary Description of Variation
01	04.12.2020	-New type addition: AH, AD, AT, AM, AL, AF type -Standard update: New EN ISO 80079-36 and 37, EN IEC 60079-0
00	03.04.2017	First issue of certificate

Responsible Person :

Nurettin Terzioglu  
Head of Certification Body

Supplement Date of Issue : 04.12.2020

