

[1] **EU - TYPE EXAMINATION CERTIFICATE**  
[2] **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**  
**Directive 2014/34/EU**

[3] EU – Type Examination Certificate Number ACE24ATEX016X Rev00  
[4] Product DTBZ11-21 Flameproof hydraulic valve electromagnet  
[5] Manufacturer Hebei Shangtai Heli Hydraulic Components Co., Ltd.  
[6] Address Production Workshop 1#, No. 2 Liye Street, Cangzhou High-tech Zone, Hebei Province, 061019, P.R.China.

[7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.  
[8] Advanced Consulting and Engineering Iberia SL (A.C.&E. Iberia S.L.), Notified body Accreditation nº: NB3024 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and 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 the confidential Report nº. EX\_EXD005\_24\_24-1713  
[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
EN IEC 60079-0:2018 : Explosive atmospheres — Part 0: Equipment — General requirements  
EN 60079-1:2014: Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures ‘d’

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the point 17 of This certificate.

[11] This EU – Type Examination Certificate relates only to the design and construction of the specified product. 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:



I M2 Ex db I Mb;  
II 2G Ex db IIC T6 Gb

*This Declaration of conformity may only be reproduced in its entirety and without any change, including schedules.*  
Date: 23/12/2024



**Advanced Consulting and Engineering  
Iberia SL**  
Notified Body No NB3024

Matteo Marconi, CEO

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[13]

## SCHEDULE

[14]

EU-Type Examination Certificate No: ACE24ATEX016X Rev00

[15]

### Description of equipment

DTBZ11-21 Flameproof hydraulic valve electromagnet has one "d" chamber, the "d" chamber is composed of a shell and a cover. The material of the shell is DT4 iron, and the material of the cover is 20# steel . The solenoid coil is completely encapsulated with epoxy resin. The seals of the housing are made of nitrile rubber. Wire connector is installed in the "d" chamber. There is an M22×1.5 cable entry on the cover for the installation of explosion-proof cable glands.

Both external and internal earthings are provided. The degree of protection of the enclosure is IP65, according to IEC 60079-0 and IEC 60529.

And the suitable application location for it as below: This flameproof hydraulic valve electromagnet is Group I equipment; for Group I protection, it is Mb;

For gas is zone 1 and zone 2, this Flameproof hydraulic valve electromagnet for gas group, it is IIC; for gas protection, it is Gb.

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[13] **SCHEDULE**

[14] EU – Type Examination Certificate No: ACE24ATEX016X Rev00

[16] Test documents are listed in the test report nº  
EX\_EXD005\_24\_24-1713

[17] Special conditions for safe use  
 1. End user shall use certified cable gland suitable type of protection for final installation purpose;  
 2. Use screws with yield strength  $\geq 640\text{MPa}$ ;  
 3. WARNING–DO NOT OPEN WHEN ENERGIZED.

[18] Essential Health and Safety Requirements  
Are fulfilled by the harmonized standard

[19] Documents and technical datasheets:

Title	Object	Revision	Date
DTBZ11-21 Flameproof hydraulic valve electromagnet User Manual	/	V1.0	2024.07
General assembly drawing	DTBZ1121.0	V1.0	2024.7.12
Nameplate	DTBZ1121.0-0	V1.0	2024.7.12
Coil	DTBZ1121.1	V1.0	2024.7.12
Coil brace	DTBZ1121.1-1	V1.0	2024.7.12
Porcelain core tube assembly	DTBZ1121.2	V1.0	2024.7.12
Armature	DTBZ1121.2.1	V1.0	2024.7.12
Armature	DTBZ1121.2.1-1	V1.0	2024.7.12
Push rod	DTBZ1121.2.1-2	V1.0	2024.7.12
Iron core	DTBZ1121.2.2	V1.0	2024.7.12
Magnetic isolation sheet	DTBZ1121.2.3	V1.0	2024.7.12
Magnetic shield	DTBZ1121.2.4	V1.0	2024.7.12
Shell	DTBZ1121.3	V1.0	2024.7.12
Cover piece suit	DTBZ1121.4	V1.0	2024.7.12
Cover piece	DTBZ1121.4.1-1	V1.0	2024.7.12
Fairlead	DTBZ1121.4.1-2	V1.0	2024.7.12
Ground flag	DTBZ1121.4.2	V1.0	2024.7.12
Clamp nut	DTBZ1121.4.5	V1.0	2024.7.12
Wire connector	DTBZ1121.5	V1.0	2024.7.12
O-RING	GB/T3452.1-92	V1.0	2024.7.12

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Technical Document of Epoxy Resin	ST-03	Rev. A	2024.7.20
Technical Document of Nitrile Rubber	ST-01	Rev. A	2024.7.20
Technical Document of DT4 iron	ST-02	Rev. A	2024.7.20
Technical Document of 20# Steel	ST-04	Rev. A	2024.7.20

The documents above-mentioned are strictly confidential and they are of only use of authorities.  
A copy of the documents are saved by A.C.&E. Iberia S.L.

[20] Declaration of conformity History

Number of certificate	Rev.	Comments	Date
ACE24ATEX016X	00	First emission	23/12/2024

Date: 23/12/2024



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