



Marine & Offshore  
Division

Certificate number: 39487/A1 BV

File number: ACM 135/2743/01

Product code: 2080H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**HIDROTEN S.A.**

ALICANTE - SPAIN

*for the type of product*

**THERMOPLASTIC MATERIAL PIPES AND FITTINGS**

Valves and Fittings made of PVC-U or PPFV

**Requirements:**

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- IMO Resolution A.753(18)

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 08 Feb 2021**

**For BUREAU VERITAS,**  
At BV MADRID, on 12 Apr 2016,  
Montserrat Espin



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

#### **PVC-U & PPFV Valves and Fittings**

##### 1.1 Technical Data for valves

Size range	Ø 63 to Ø 140	Ø 160 to Ø 315
Max. Working Pressure	PN 10 bar	PN 6 bar
Max. Working Temperature	0 - 60 °C	0 - 60 °C

##### 1.2 Technical Data for fittings

Size range	Ø 16 to Ø 140	Ø 160 to Ø 315	Ø 400
Max. Working Pressure	PN 16 bar	PN 10 bar	PN 6 bar
Working Temperature	0 - 60 °C	0 - 60 °C	0 - 60 °C

- Fittings: sockets, elbows (45° / 90°), tees, reducers, cap, threaded fittings & flanges

##### 1.3 Raw Material

Fittings	PVC-U & PPFV
Gaskets	EPDM

*When other choices of materials are used per manufacturer's recommendations, the BV agreement is to be obtained.*

### 2. DOCUMENTS AND DRAWINGS

- Manufacturer's catalogue for fittings N° 1,5-M dated 07/2012

- Manufacturer's drawings for valves N° 1-M dated 11/2010

*No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.*

### 3. TEST REPORTS

- Type test carried out on fittings as per EN ISO 1452-3. Test reports N° AT-1109/15, 1615/15.

- Type tests carried out on valves: body pressure test at 1,5 the design pressure and seat leakage test at 1,1 the design pressure. Test report N° AT-0452/15.

### 4. APPLICATION / LIMITATION

4.1 Approved for use in locations and for non-essential applications where no fire endurance and no flame spread characteristics are required according to Pt C, Ch 1, App 3 [2.3.1] of Bureau Veritas Rules or appendix 4 of IMO Resolution A.753 (18) when the abbreviations "O or NA" are specified. For inst. domestic water system (hot/cold, sea and fresh water), chilled and potable water systems, sanitary systems, heating systems and non-essential systems. Further these products are not to be installed in hazardous areas.

4.2 Detailed drawings of piping system for each application on board ships are to be submitted for review of compliance with the BUREAU VERITAS Rules and the applicable regulations.

4.3 Penetration in watertight and fire class divisions is not covered by this approval. The drawing examination is subject to the Society's approval in each case.

4.4 The valves and fittings assembly is to be carried out in accordance with the manufacturer's instructions and the person performing these tasks is to be qualified to the satisfaction of the Society Surveyor.

4.5 The valves and fittings have not been type tested for flame spread, fire endurance, smoke generation, toxicity and external pressure.

4.6 The valves are not to be used as ship side valves according to BUREAU VERITAS Rules in Pt C, Ch1, App 3, [3.7.1].

### 5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **HIDROTEN S.A.** in compliance with the type described in this certificate and in compliance with the requirements stated on the front page of this certificate. This type of product is within the category HBV of BUREAU VERITAS Rule Note NR 320.

5.2 **HIDROTEN S.A.** has to make the necessary arrangements to have its works recognised by BUREAU VERITAS in compliance with the requirements of NR 320 for HBV products.

5.3 Each valve and fitting is to be tested by the manufacturer at a hydrostatic pressure not less than 1.5 times the nominal pressure. Other recognised national or international standard may be accepted for valves and fittings not employing hand lay up techniques. Depending upon the intended application the Society may require the pressure testing of each valve and/or fitting.

5.4 No BUREAU VERITAS product certificate is required.

**Production place**

**HIDROTEN S.A.**

**Pol. Ind. Pla de la Vallonga**

**Calle Agua N°28**

**ALICANTE**

**SPAIN**

**6. MARKING OF PRODUCT**

Valves and fittings shall be marked with at least:

- Manufacturer's name or logo
- Type and size of the product
- Pressure rating
- Design standard
- Raw material

The permanent label for the product shall remain legible under normal handling and installation practices.

**7. OTHERS**

This approval is given with the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fitting and general maintenance of the products and of the conditions of this approval.

*This certificate supersedes the Type Approval Certificate No. 39487/A0 BV issued on 08/02/2016 by the Society.*

**\*\*\* END OF CERTIFICATE \*\*\***