

# TYPE APPROVAL CERTIFICATE

## This is to certify:

### That the Ball Valve

with type designation(s)  
**H24-series, Bypass H27-series, H28-series**

Issued to

**Habonim Industrial Valves and Actuators**  
**Kfar Hanassi, Israel**

is found to comply with

**Det Norske Veritas' Rules for Classification of Ships Pt.4, Ch.6 "Piping Systems"**  
**Det Norske Veritas' Standards for Certification 2.9 No. 5-794.40**

## Application :

**May be used in systems conveying: Fresh- and sea water (see certificate), compressed gases.**

Type:	Temperature range:	Max. working press.:	Sizes:
<b>H24-series</b>	<b>-28°C to +260°C [-18°F to +500°F]</b>	<b>Class 2500 (6000 psi, 414 bar)</b>	<b>3/8", 1/2", 3/4", 1", 1 1/4"</b>
<b>Bypass H27-series</b>	<b>-28°C to +260°C [-18°F to +500°F]</b>	<b>Class 2500 (6000 psi, 414 bar)</b>	<b>1 1/2", 2", 2 1/2"</b>
<b>H28-series</b>	<b>-28°C to +260°C [-18°F to +500°F]</b>	<b>Class 2500 (6000 psi, 414 bar)</b>	<b>1 1/2", 2", 2 1/2"</b>

This Certificate is valid until **2017-12-31**.

Issued at **Høvik** on **2014-10-06**

DNV GL local station: **Limassol**

for **DNV GL**

Approval Engineer: **Tom Berg-Nielsen**

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**Marianne Spæren Marveng**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed. If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, then the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million. In this provision the "Society" shall mean DNV GL AS as well as all its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

Certificate No: **P-14961**  
File No: **794.50**  
Job Id: **262.1-016083-1**

## Product description

High pressure ball valves. Manually or actuator operated.

Materials:

Stainless steel, carbon steel and other materials, as specified in manufacturer's catalogues CAT-H27P-106M 10/14 and CAT-H24A-106M 01/14

Sizes:

H24-series: 3/8", 1/2", 3/4", 1", 1 1/4"  
BYPASS H27-series: 1 1/2", 2", 2 1/2"  
H28-series: 1 1/2", 2", 2 1/2"

## Application/Limitation

For elevated temperatures the maximum allowable working pressure shall be reduced according to manufacturer's catalogue.

The valves are not approved for systems having an oxygen content by volume of more than 25%.

H24-series has not been fire tested, and shall not be used for sea water systems or hydrocarbon services where "fire safe" application is required ref. DNV Rules for Ships Pt.4 Ch.1 Sec.3 B500. In sea water systems the H24-series may only be used in tank-cleaning services or other non-essential systems.

The approval does not include actuator and/or other equipment for remote control of the valves.

Each product/delivery is to be accompanied by the following documents:

- manufacturer's product certificate
- Instruction manual/specification sheet.

The valve housing of each valve shall be subjected to a hydrostatic pressure test at minimum 1.5 times the design pressure.

Holding time: 2 min

No leakage is permitted.

The valve assembly shall be subjected to a hydrostatic seat leakage test. The test pressure shall at least be equal to the design pressure. The pressure shall be applied to each end successively, the other end to be open to the atmosphere.


Holding time: 5 min

Acceptable leakage range: Drop tight

## Type Approval documentation

Manufacturer's catalogues CAT-H27P-106M 10/14 and CAT-H24A-106M 01/14  
Manufacturers catalogue H24 Series Installation, Operating & Maintenance"  
Burst test report witnessed by DNV dated 2014-06-25

Drawing No.	Date
20-A28X-666MYB-NPT05	01-07-13
20-H27SER, valve with sae 3000-02	26-06-12
10-AH24X-666MWB-NPT	26-06-13



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## Tests carried out

Burst test

## Marking of product

For traceability to this type approval, each valve is at least to be marked with:

- Manufacturer's name or trade mark
- Type designation
- Size
- Pressure class

## Periodical assessment

For retention of the Type Approval, DNV Surveyor shall perform a survey - every second year and before the expiry date of this certificate to verify that the conditions for the type approval are complied with.

END OF CERTIFICATE