

TYPE APPROVAL CERTIFICATE
No. MAC460709CS



This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	BUTTERFLY VALVES
<i>Type</i>	DESPONIA
<i>Applicant</i>	INTERAPP ITALIANA SRL VIA GRAMSCI, 18 20016 PERO (MI) (MI) ITALY
<i>Manufacturer</i>	INTERAPP VALCOM S.A.
<i>Place of manufacture</i>	CALDERON DE LA BARCA 12 14 POLIGONO INDUSTRIAL 28860 PARACUELLOS MADRID SPAIN
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules 2009
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in **Genoa** on **November 6, 2009**. *This Certificate is valid until* **November 5, 2014**


RINA
Francesco Sciacca

This certificate consists of this page and 1 enclosure



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DESPONIA

Reference documents

VALCOM drawings:

D1032S2000-01-rev1, D1040S2001-E, D1050S2001-E, D1065S2001-E, D1080S2001-E, D1100S2001-E, D1125S2001-E, D1150S2001-E, D1200S2001-E, D1250S2001-E/rev1, D1300S2001-E/rev3, D1350S02001-E/rev1, D10400-E, EVK-00234-3/rev1, EVK-00153-3/rev1, EVK-00265-3/rev1, EVK-00171-3/rev1, B0-B0750-10, EVK-00269-3/rev1, EVK-00078-3/rev1, B1000-10-3/rev1, EVK-00298-03/rev1.

- Catalogue InterApp "Desponia" 0225
- Structural analysis of bodies of butterfly valves
- DNV test report MAD 03-004 dated 14/02/2003
- DNV Type Approval certificate No.P-11418 dated 21/03/2003

Technical characteristics

Butterfly valves:

Wafer, Lug and Flanged type (elastomer lined, soft seated)

Type	Valve type	Valve size
D1	Wafer	DN25/32 to 700 mm
D3	Lug (threaded holes)	DN25 to 400 mm
D4	Flanged	DN150 to 1200 mm

Pressure range:

-DN25 to 400 mm: 2.5 / 6 / 10 / 16 bar (as per InterApp "Desponia" 0225 catalogue)

-DN450 to 1200 mm : 2.5 / 6 / 10 bar (as per InterApp "Desponia" 0225 catalogue)

Temperature range: dependant on seat material, see certificate.

Fields of application

These valves may be used in systems for:

Sea and Fresh Water Cooling, Water Ballast, Bilge (see certificate) and Sanitary.



Limitation of use

The use of grey cast iron and nodular cast iron valves is to comply with the conditions as stated in Table 4 of the Part C Chapter 1 Section 10 of the RINA Rules.

Maximum working temperatures dependant on material in lining and seat:

-EPDM	90°C
-EPDM White	90°C
-EPDM EW	130°C
-Nitrile (ord.and White)	100°C
-Silicone	150°C
-Hyapalon	125°C
-Viton	170°C

Valves having EPDM (ord.,White and EW) lining are not to be used for bilge service.

-It is intended that the max output torque from actuators must not exceed the limit at which the spindle or disc can be damaged if the disc is restrained in any position.

-The present type approval does not include neither any operating gear for remote control of the valves nor any verification of fire resistance capability.

-The acceptance of each valve on board ships and other units classed with RINA is subject to outcome of testing as per RINA Rules which is to be referred to the piping classes (II or III) and where the valve itself will be installed (e.g. ship side).

-The body of each valve is to be hydrostatically tested to 1.5 times the design pressure. For valves intended to be fitted on sea chests and on the ship's side below the load waterline are to be tested to a pressure not less than 5 bar.

-These valves can be used in bilge suction line when fitted in connection with a non-return valve. Special consideration will be given to the use of butterfly valves in the bilge systems of passenger ships.

-For shipside services, the valve is to be bolted to the shipside connection in such a way that the section of pipe immediately inboard of the valve can be removed, should this be necessary and it should be prevented that the disc could project outside the shell plating when the valve is in open position.

-Each valve is to be also in compliance with the applicable requirements in Para. 2.7 and 2.8 of Part C Chapter 1 Section 10 of the RINA Rules.

Materials/Components

Material:

Body:

Cast iron GG-25 DIN 1691

Nodular cast iron GGG-40/40.3 DIN 1693



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Disc:

Nodular cast iron GGG-40/40.3 DIN 1693

Stainless steel W.No. 1.4408 DIN ((14408)), or ASTM A351M CF-8M

Carbon steel W.No. 1.0619 DIN 17245, ASTM A216M WCA/WCB

AlBronze W.No. 1.714 acc. ASTM B148-958

Special steel "URANUS B6", acc. DIN 14539

Special steel "HASTELLOY C", acc. DIN 24686

Lining/Seat:

EPDM (ord., White and EW), Nitrile (ord. and White), Silicone, Hypalon, Viton

Remarks

For traceability to this Type Approval each valve is at least to be marked with:

- Manufacturer' s name or trade mark
- Type designation
- Size
- Max. design pressure

The valve installation on board is to be made in accordance with the Manufacturer instructions and to the satisfaction of the RINA Surveyor.

Genoa 06/11/2009

