



TYPE APPROVAL CERTIFICATE
No. MAC095120PU

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 & DESPONIA plus
<i>Applicant</i>	INTERAPP VALCOM S.A. C/Almenara s/n, Carretera Nacional A-1 Km 31.1 (Pol. Ind. Sur) 28750 San Agustin del Guadalix, Madrid Spain
<i>Manufacturer</i>	INTERAPP VALCOM S.A.
<i>Place of manufacture</i>	C/Almenara s/n, Carretera Nacional A-1 Km 31.1 (Pol. Ind. Sur) 28750 San Agustin del Guadalix, Madrid Spain
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules
<i>Reference documents</i>	RINA TYPE APPROVAL SYSTEM

Issued in **BUSAN** on **September 16, 2020**. This Certificate is valid until **September 15, 2025**




RINA Services S.p.A.
Young-Kwang Kim

This certificate consists of this page and 1 enclosure

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Technical characteristics

- Butterfly valve : Wafer, Lug and Flanged type (elastomer lined, soft seated)

	TYPE	SIZE
DESPONIA	D1 Wafer	DN 25/32 to 1000 mm
	D3 Lug (threaded holes)	DN 25 to 600 mm
	D4 Flanged	DN150 to 1600 mm
DESPONIA plus	DP1 Wafer	DN 25/32 to 600 mm
	D3 Lug	DN 25/32 to 600 mm

- Max. working pressure : 16 / 20 bar
- Temperature range : -40 °C ~ 200 °C according to material

Materials/Components

- Body:
 - Cast iron EN-GJL-250
 - Nodular cast iron EN-GJS-400
 - Cast steel 1.0619
 - Stainless steel 1.4408
- Disc:
 - Nodular cast iron EN-GJS-400
 - Stainless steel W.No. 1.4408, or ASTM A351 CF8M
 - Stainless steel W.No. 1.4588
 - Carbon steel W.No. 1.0552 / GS52.3
 - AlBronze ASTM B148 C95800 / G-CuAl10Ni
 - Special steel HASTELLOY ASTM A494 CW-12MW
- Lining/Seat:
 - EPDM (ord., White and EW), Nitrile (ord. and White), Silicone, Hypalon, Viton

Fields of application

- These valves may be used in systems for :
 - Sea and Fresh Water Cooling, Water Ballast, Bilge (see certificate) and Sanitary.

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Reference documents

• **DESPONIA(Wafer, Lug, Flanged) drawings**

1. DN0032 : DI.DE0032, 6415, 7018, 7019, 7099, 7100, 7122, 7175, 7254, 7326, 7327, 7408, 7539, 8310
2. DN0040 : DI.DE0040, 6416, 7004, 7005, 7102, 7103, 7123, 7175, 7255, 7327, 7330, 7409, 7579, 8309, 8369
3. DN0050 : DI.DE0050, 6417, 7021, 7022, 7104, 7105, 7124, 7177, 7256, 7333, 7334, 7410, 7, 7699, 8308, 8368
4. DN0065 : DI.DE0065, 6418, 7024, 7025, 7106, 7125, 7177, 7257, 7334, 7335, 7411, 7583, 8307, 8367
5. DN0080 : DI.DE0080, 6045, 6419, 7026, 7027, 7108, 7109, 7126, 7177, 7258, 7334, 7339, 7412, 7568, 7585, 7799, 7800, 8306
6. DN0100 : DI.DE0100, D1K0100-278, 6046, 6420, 7028, 7029, 7110, 7111, 7127, 7259, 7342, 7343, 7413, 7589, 7712, 8102, 8304, 8305
7. DN0125 : DI.DE-125-003, D1K0125-278, 6421, 7030, 7031, 7112, 7128, 7181, 7260, 7346, 7347, 7414, 7591, 8303, 8365
8. DN0150 : DI.D150-002, 6047, 6120, 6258, 6422, 6452, 6453, 6497, 7032, 7033, 7114, 7115, 7129, 7181, 7347, 7350, 7415, 7593, 7951, 8103, 8302, 8325, 8326
9. DN0200 : DI.DE0200, D1K0200-278, 6048, 6119, 6259, 6423, 6456, 6457, 6498, 7034, 7035, 7116, 7117, 7130, 7131, 7183, 7354, 7355, 7416, 7417, 7595, 8035, 8104, 8299, 8300, 8327, 8328
10. DN0250 : 4993, 6049, 6118, 6260, 6424, 6458, 6459, 6449, 7036, 7037, 7118, 7119, 7132, 7184, 7221, 7358, 7359, 7597, 7767, 8000, 8001, 8105, 8134, 8295, 8296, 8297, 8298, 8329, 8330
11. DN0300 : D1K0300-278, 4994, 6117, 6260, 6425, 6460, 6461, 6500, 7038, 7039, 7120, 7121, 7133, 7184, 7222, 7361, 7363, 7569, 7599, 8002, 8003, 8293, 8294, 8331, 8332, 8364
12. DN0350 : DI.DE0350.4C-2.5-SA, 4995, 6103, 6116, 6165, 6168, 6169, 6227, 6260, 6426, 6462, 6463, 6501, 6543, 6544, 7717, 8225, 8226, 8292, 8333, 8799
13. DN 0400 : DI.DE0400.4C-2.5 & 6-SA, 4996, 6051, 6068, 6115, 6131, 6166, 6167, 6228, 6261, 6427, 6464, 6465, 6502, 6545, 6546, 7546, 7718, 7768, 7952, 8227, 8228, 8290, 8291, 8334, 8798
14. DN0450 : DE0450, 4768, 4836, 4867, 6114, 6142, 6143, 6230, 6231, 6275, 6276, 6277, 6326, 6351, 6354, 6367, 6428, 6492, 6493, 6536, 7492, 7493, 7946, 8286, 8287, 8288, 8289, 8312, 8313, 8317, 8318, 8341
15. DN0500 : DE0500, EVK-00088 & 00041-4, 4726, 4762, 4766, 4774, 5024, 6113, 6175, 6176, 6238, 6239, 6240, 6263, 6268, 6269, 6429, 6531, 7505, 7525, 7574, 7949, 7987, 8068, 8284, 8285, 8314, 8319, 8373
16. DN0600 : DE0600, EVK-00089 & 00042-4, 4823, 6112, 6179, 6180, 6270, 6271, 6272, 6283, 6286, 6287, 6336, 6337, 6371, 6430, 6532, 7074, 7075, 7506, 7556, 7573, 7694, 7700, 7991, 7995, 8030, 8106, 8211, 8262, 8263, 8264, 8315, 8316, 8320, 8321, 8342, 8430, 8431
17. DN0700 : DE0700, BO.D41200-G, 4829, 4830, 4831, 5025, 6111, 6194, 6195, 6288, 6289, 6290, 6320, 6321, 6322, 6323, 6373, 6431, 7228, 7523, 7524, 7601, 7992
18. DN0750 : 6432, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822
19. DN0800 : 4518, 4802, 4803, 5102, 6052, 6054, 6059, 6079, 6099, 6106, 6107, 6108, 6109, 6110, 6121, 6122, 6123, 6124, 6125, 6126, 6127, 6128, 6129, 6130, 6241, 6242, 6243, 6278, 6279, 6280, 6433, 7993, 8357, 8358, 8359, 8360, 8710

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20. DN0900 : DE0900, 4784, 4785, 4788, 5086, 6020, 6039, 6074, 6075, 6077, 6078, 6080, 6081, 6082, 6083, 6133, 6134, 6135, 6136, 6137, 6138, 6196, 6197, 6244, 6255, 6262, 6315, 6316, 6317, 6318, 6434, 6538, 7827
21. DN1000 : DE1000, 4792, 4793, 4794, 5087, 6205, 6206, 6292, 6294, 6299, 6309, 6311, 6312, 6313, 6388, 6435, 6454, 6484
22. DN1100 : TSD41100, 6223, 6224, 6331, 6332, 6399, 6436
23. DN1200 : Prot1200-A/B/C/D, 4815, 4816, 5088, 6151, 6152, 6153, 6154, 6156, 6157, 6158, 6159, 6160, 6208, 6209, 6325, 6327, 6328, 6329, 6400, 6437, 8752
24. DN1400 : 4518, 4638, 6210, 6211, 6401, 6438, 6450, 6451, 6486, 6603, 7572, 7623, 7624, 7625, 7714, 7719, 7720, 7784, 7916, 8119, 8247, 8753
25. DN1600 : 4068, 6161, 6213, 6214, 6402, 6439, 6448, 6449, 7571, 7721, 7722, 8007

- **DESPONIA plus drawings**

1. DP1 Wafer : DP1032.41+2, DP1040.41+2, DP1050.41+2, DP1065.41+2, DP1080.41+2, DP1125.41+2, DP1150.41+2, DP1200.41+2, DP1300.41+2, DP1350.41+2, DP1400.41+2, DP1500, DP1500._2, DP1500._3
2. DP3 Lug : DP3050.41+2_3 & A, DP3065.41+2_3 & A, DP3080.41+2_3 & A, DP3100.41+2_3 & A, DP3125.41+2_3 & A, DP3150.41+2_3 & A, DP3200.41+2_2, 3 & A, DP3250.41+2_2, 3 & A, DP3350.41+2_2, 3 & A, DP3400.41+2_2, 3 & A

- Catalogue InterApp "Desponia" 1443
- Structural analysis of bodies of butterfly valves
- DNV test report MAD 03-004 dated 14/02/2003

Acceptance conditions / 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 95°C
 - EPDM White 95°C
 - EPDM EW 120°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



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Remarks

- 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 RINA Rules.
- 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.
- This certificate cancels and replaces the previous one No MAC309614CS dated 20/01/2015.



BUSAN September 16, 2020

A handwritten signature in black ink, appearing to be 'U. G.', is written below the date.