

## TYPE APPROVAL CERTIFICATE No. MAC320524XG

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

Description	Metallic pipes
Type	EuroPipe Sanitary Discharge push/fit System
Applicant	BLUCHER METAL A/S
	Pugdalvej 1
	DK-7480 Vildbjerg
	DENMARK
Manufacturer	BLUCHER METAL A/S
Place of manufacture	Pugdalvej 1
	DK-7480 Vildbjerg
	DENMARK
Reference standards	Chap. II-2 of SOLAS 74 Convention, as amended; Part C,
·	Chapter 1, Section 10 of RINA Rules

Issued in	HAMBURG on January 9, 2025.	This Certificate is valid until January 8, 2030
		RINA Services S.p.A. Giuseppe Russo
		Giuseppe Russo

This certificate consists of this page and 1 enclosure

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# Reference documents:

Blucher Marine Product Catalogue 25094 JUNE 2024.

## Materials/Components:

Pipes and fitting of stainless steel AISI 304 or AISI 316L

## **Technical characteristics:**

Pipe dimensions as per the following table:

External Diameter of pipe (mm)	Thickness (mm)
40	1.0
50	1.0
75	1.0
82	1.0
110	1.0
125	1.0
160	1.25
200	1.50

## **Fields of application:**

This system may be used for the following non-pressurized and vacuum piping systems:

- Sanitary discharge systems above freeboard deck and in enclosed spaces below (including machinery rooms),
- Vent pipes for sanitary discharge systems and for central vacuum cleaning system CVC,
- Lines in tanks not forming part of the ship structure,
- Outside drainage (scupper and pipes which are located on weather decks or balconies).

- Food Waste Systems.

## Acceptance conditions:

1. The arrangement of this system is to be in compliance with RINA Rules Part C, Chapter 1, Section 10, Article 8. 2. Pipe penetrations through watertight bulkheads, fire bulkheads or shell plating shall be approved case-by-case. When penetrating a watertight bulkhead, there shall be remotely operated valves secured to each bulkhead. The valves and control system shall be located outside the damage zone of the ship.

3. All pipes shall be retained by clamps or clips against movements in all directions and are to be adequately supported and protected from mechanical damages.

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## **TYPE APPROVAL CERTIFICATE** No. MAC320524XG Enclosure - Page 2 of 2 EuroPipe Sanitary Discharge push/fit System

#### Types

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	signations:		
178	WaterLine channel	830	87,5° Branch
275	WaterLine channel	831	87,5° Double Branch 180°
470	Drain penetration, vertical	832	87,5° Double Branch 90°
471	Drain upper part with side inlets, Tiles, and	834	Rear access branch
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	10 Drain upper part with side inlets, Tiles, and	836	45° Double branch 180°
concre			
472.300 Drain upper part, Tiles and concrete		837	45° Double branch 90°
	10 Drain upper part, Tiles and concrete	838	45° Oblique branch pipe
	20 Drain upper part, Resin floors	839	87,5° Combination Y and 1/8 bend
473	Drain upper part, Vinyl floors	840	Access pipe
474	Drain penetration, vertical	840.001	Access pipe with hook
475	Drain penetration, horizontal	841	Double ring-seal socket
480	Flanged drain penetration (ALU)	842	Sliding ring-seal socket
480.15	50.050 Vacuum drain	843	Expansion socket
485	Flanged drain penetration (ALU)	844	Plug
490	Group pipe penetration	847	Joint clamps
491	Cabin drain	850	Eccentric increaser / Concentric reducer
499	Special pipe/drain penetration with push/fit	854	Pipe with flange
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502	Water trap, removable	855	W.C. connector
503	Water trap, removable	859	System-x Transition adaptor
505	Water trap, bottle	866	Pipe penetration
525	87,5° "P" water trap	867	Toilet penetration for vacuum system
611	Extension pipe	868	Flange penetration
651	MultiLine channel	869.910	Flanged penetration (non-weld)
660	MarineLine channel	869	Adjustment socket
662	MarineLine channel	870	Pipe penetration
670	MarineLine channel	872	Pipe penetraton
672	MarineLine channel	873	Transport pockets
699	Special channels with push/fit connection	874	Goose neck
811	Straight pipe with 1 socket	875	Pipe penetration
812	Straight pipe with 2 socket	876	Level ball valve
820	15°, 22°, 30°, 45°, 68° and 87,5° Bend	878	Flanged pipe penetration (ALU)
821	87,5° Long radius bend	885	Adapter
822	87,5° Bend with access	886	Adapter
825	45° and 87,5° long radius bend	899	Special fitting with push/fit connection

## **Remarks:**

- 1. The installation on board is to be carried out in accordance with the Manufacturer's instructions.
- 2. This Certificate is a revalidation of the previous one no. MAC041623XG.

HAMBURG 09/01/2025

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