

# MBS series

The standard safety breakaway coupling for marine applications


The MBS series has been specially developed for applications between two hose lines typically found in maritime environment. The innovative design is characterised by its high resistance to lateral forces that can affect the coupling, causing it to release unintentionally.

## Your advantages

- High stability when lateral forces act on the coupling.
- Controlled separation through breaking pins.
- Secure separation when subjected to an axial tensile load.
- Suitable for reeling with hose on drums.
- Releases only when force is applied axial to the coupling.



## Technical data

	MBS20-DN25	MBS35-DN50	MBS60-DN80	MBS75-DN100
<b>Hose nominal diameter</b>	DN 25	DN 50	DN 80	DN 100
<b>Equivalent flow diameter (mm)</b>	20	35	60	75
<b>Maximum allowable pressure PS (bar)</b>	up to 25			
<b>Minimum and maximum allowable temperature TS (°C)*</b>	-40 to +150			
<b>Shut-off</b> double				

\* Seal type may further limit the temperature range.

### Sealing

- Nitrile (NBR)
- Ethylene-Propylene (EPDM)
- Fluorocarbon (FKM)
- Perfluoroelastomer (FFKM)

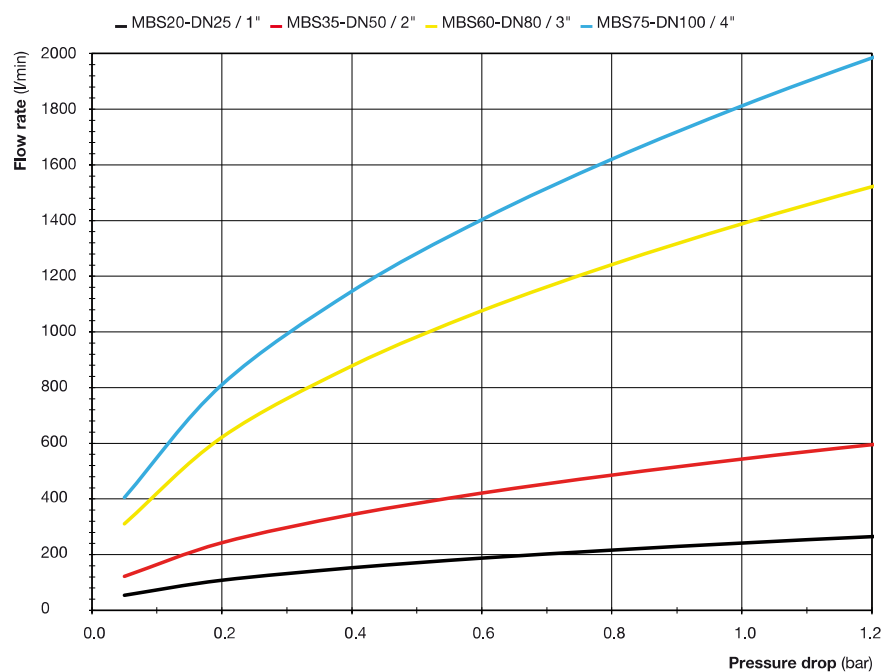
### Connection

- Thread: BSP, NPT
  - Fixed flange: EN 1092-1, ASME B16.5
- Other connections upon request (also via adapters screwed and glued in BSP or NPT thread)

### Construction

- Predominantly stainless steel

## Hydraulic flow rate / pressure drop charts



**Test conditions:**  
Fluid: water 20 °C

## How to build your MBS part number

<b>MBS35-DN50</b>	.	<b>108</b>	.	<b>108</b>	/	<b>IC8</b>	/	<b>JE</b>	/	<b>100</b>
<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>

To build your part number, choose the following elements. All of these are mandatory elements.

### 1 Model

to be chosen ..... page 24

### 2 Connection type on side 1

(can be different from side 2)

to be chosen ..... page 24

### 3 Connection type on side 2

(can be different from side 1)

to be chosen ..... page 24

### 4 Material series (predominantly)

**Code**

- Stainless steel 316 Ti ..... **IC8**

### 5 Type of seal

**Code**

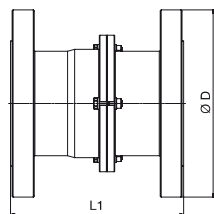
- Nitrile (NBR) ..... JN
- Ethylene-Propylene (EPDM) ..... **JE**
- Fluorocarbon (FPM) ..... JV
- Perfluoroelastomer (FFKM) 6375 ..... JK1

### 6 Release force

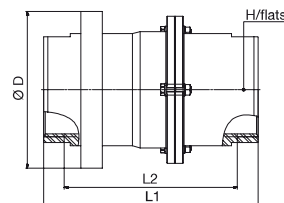
Model	Release forces in kN*	
MBS20-DN25	3.2	7.0
MBS35-DN50	<b>10.0</b>	15.0
MBS60-DN80	20.0	30.0
MBS75-DN100	30.0	44.0
results in:	<b>PN16</b>	<b>PN25</b>

\* Other release forces upon request.

## Part numbers



Flange



Female thread

Model	Description	Connection	Dimensions (mm)				Weight <sup>(1)</sup> (kg)	Part numbers <sup>(2)</sup>
			ØD	L1	L2	H/flats		
<b>MBS20-DN25</b>	Female thread	BSP 1"	77	112.5	92.5	41	1.2	<b>MBS20-DN25.105.105</b>
		NPT 1"	77	140.5	120.2	41	1.4	<b>MBS20-DN25.205.205</b>
	Flanges	EN 1092-1 (PN40 Form B) DN25	115	-	140.5	-	3.4	<b>MBS20-DN25.A54.A54</b>
<b>MBS35-DN50</b>	Female thread	BSP 2"	108	123.5	86.5	70	3	<b>MBS35-DN50.108.108</b>
		NPT 2"	108	143.5	121.4	70	3.3	<b>MBS35-DN50.208.208</b>
	Flanges	EN 1092-1 (PN16 Form B) DN50 <sup>(3)</sup>	165	-	150.5	-	7.6	<b>MBS35-DN50.A37.A37</b>
<b>MBS60-DN80</b>	Female thread	BSP 3"	148	174.5	131.5	100	6.5	<b>MBS60-DN80.10A.10A</b>
		NPT 3"	148	202.5	163.6	100	7.3	<b>MBS60-DN80.20A.20A</b>
	Flanges	ASME B16.5 (150 psi) 3"	190.5	-	176	-	13.5	<b>MBS60-DN80.B1A.B1A</b>
<b>MBS75-DN100</b>	Female thread	BSP 4"	200	202.5	162.5	125	13	<b>MBS75-DN100.10C.10C</b>
		NPT 4"	200	241.5	198.6	125	14.2	<b>MBS75-DN100.20C.20C</b>
	Flanges	ASME B16.5 (150 psi) 4"	228.6	-	259	-	24	<b>MBS75-DN100.B1C.B1C</b>

<sup>(1)</sup> The weight applies with an approximate tolerance of +/-5%.

<sup>(2)</sup> Add the code of options above at the end of the part-number.

<sup>(3)</sup> Compatible to EN 1092-1 (PN 40 Form B) DN50.