

An aerial photograph of an industrial facility, likely a shipyard or manufacturing plant, with various large buildings and parking lots. A white rectangular text box is overlaid on the center of the image, featuring a green vertical bar on its left side and a green horizontal bar at its bottom. The text is centered within the white box.

PNEUMATIC FENDERS

FOR SHIP PROTECTION

SAMPLE NVK-3

Dimensions 2000 x 3600



SAMPLE NVK-3

Designed for ship protection from impulse bulk shocks when docked and their usual parking in the open sea.

Dimensions	2000x3600
Mass	850 kg
Operating Internal pressure	80-100 kPa
Pressure perceived under 50% compression	1100 kN
Churning of water	up to 7 balls
The temperature of the environment	-40 C up to +45 C



SAMPLE NVK-3

Design of the pneumatic mooring fender NVK-3

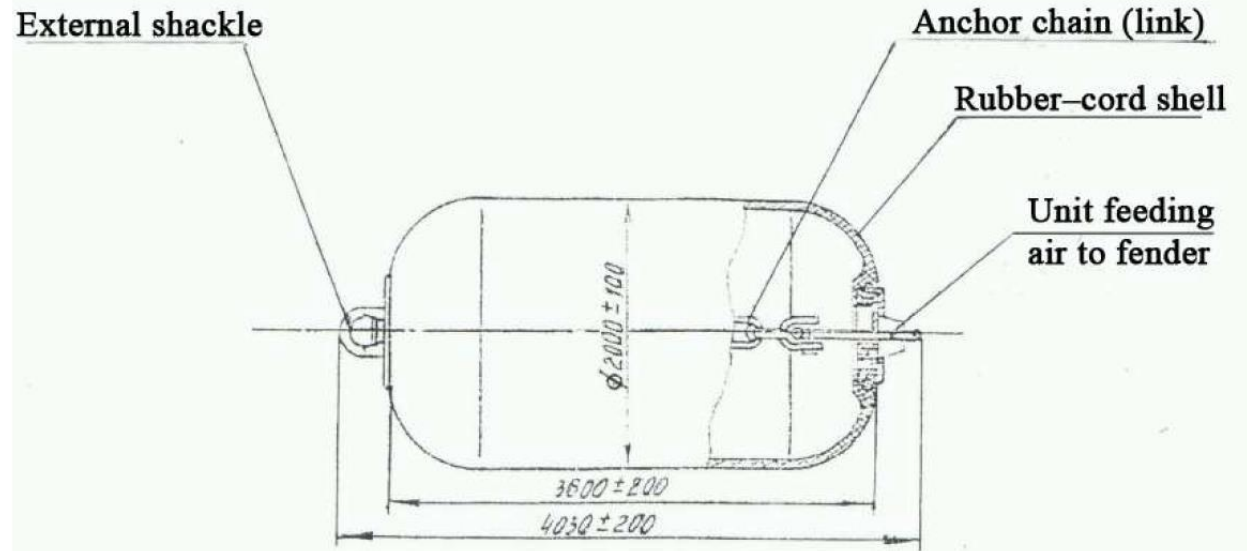


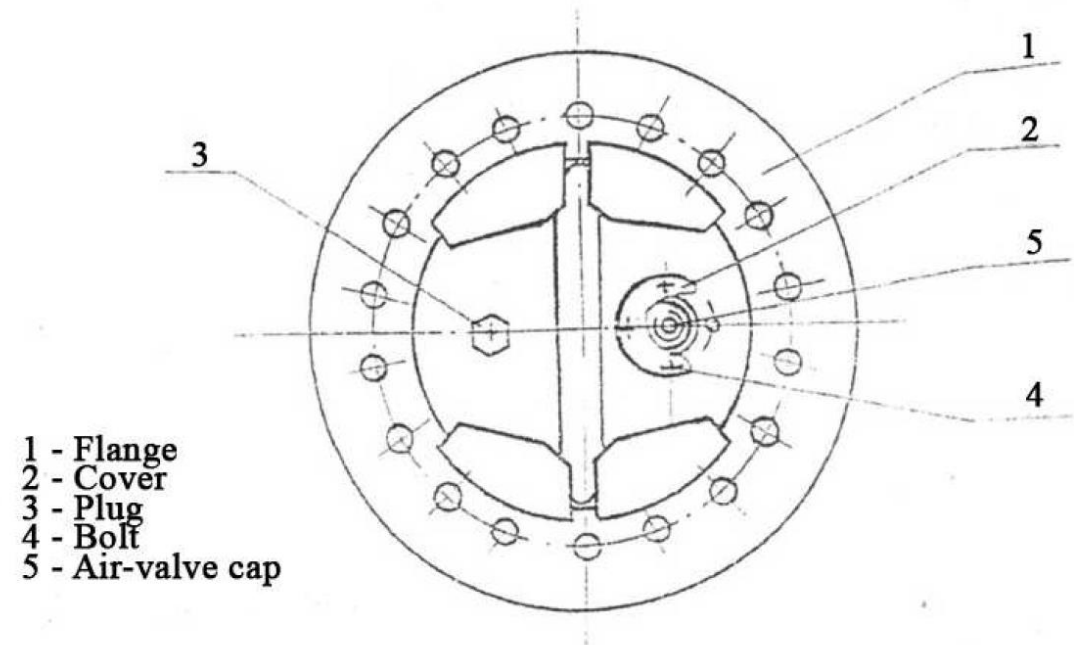
Figure 1

PURPOSE AND DESIGN OF THE PNEUMATIC FENDER

Design of the pneumatic mooring fender NVK-3

Pneumatic fenders are intended for protecting fishing, factory and transport vessels mooring into each other under offshore conditions, with sea disturbance of up to seven points, and the ambient temperature of -40°C up to $+45^{\circ}\text{C}$. During mooring operations, the fenders are afloat or suspended between the boards of the mooring vessels and protect them, and their deck superstructures from dynamic shocks and lean-ons. The energy of vessels mooring into each other is absorbed by the deformation of the fenders and the changes in their internal pressures. The fender represents a cylinder-shaped rubber-cord shell, having spherical ends with covers installed thereon, ensuring sealing of the shell and supporting parts intended for fender suspension and air-filling.

Figure 1 shows the design of the pneumatic fender.



PNEUMATIC FENDERS

Model	Dimension	Weight assembled with out ballast	Internal working pressure	Energy absorption wall no less	Perceived stress at a 50% compressive stress is not less	Open sea, max. sea state	Ambient average temperature	Average lifespan
	mm	kg	kPa	kJ	kN	Points	°C	Years
NVK-3	2000 x 3600	1000	80-100	420	1100	7	-40 / +45	7
NVK-7	1600 x 4500	1000	100	450	1100	5	-30 / +60	7
NVK-8	1300 x 4500	760	70-80	200	500	6	-40 / +40	5



MODUS UG

HAMBURG

GERMANY

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