Vacuum Breakers and Vacuum Control Valves

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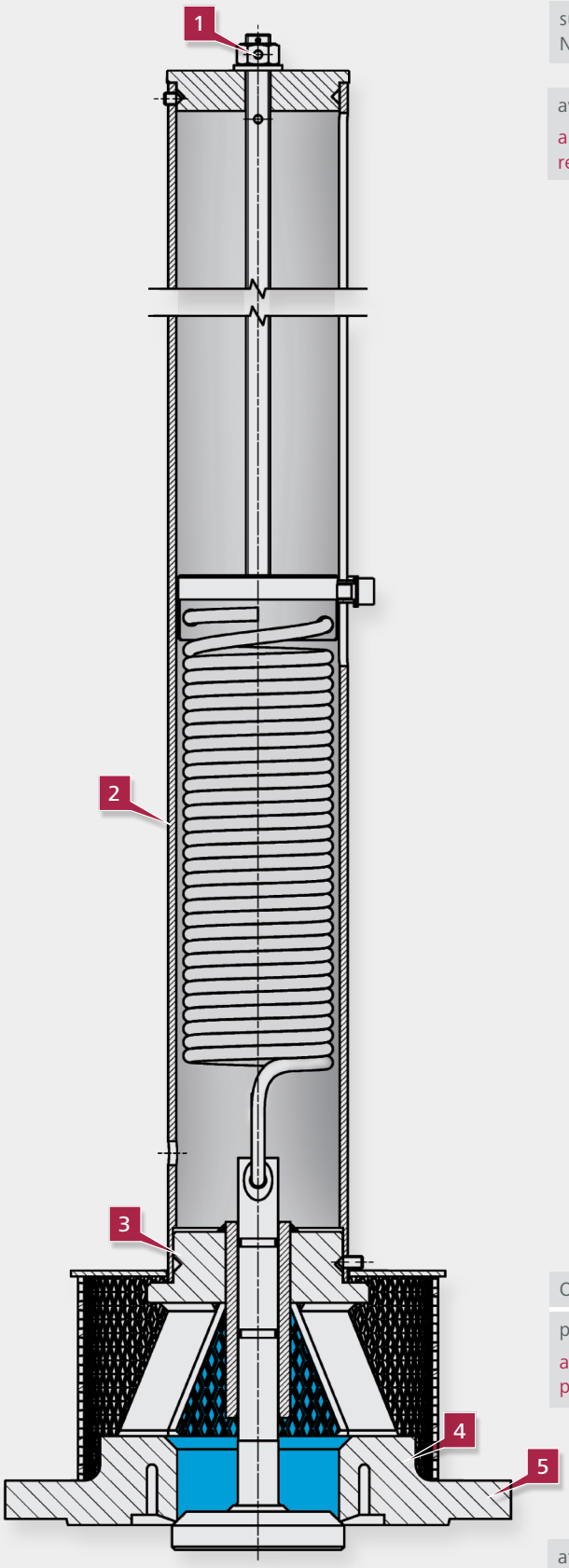
differential pressure to the atmosphere can be set manually 1

suitable for higher pressures 2

a wide variety of connection types: DIN, ANSI or aseptic flanges, weld-on ends ...
no adapters or fitting pieces required 3

supply in accordance with NACE possible 4

available in special materials
also suitable for extreme requirements 5



Option

protection cage
avoids intrusion of foreign particles or sea birds

atmosphere

Vacuum Breaker with Setting Scale VV 34

Vacuum Breaker and Vacuum Control Valve in Action

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Vacuum Breaker with Setting Scale — VV 34

with spring cap (CrNiMo steel) and setting scale | suitable for liquids and gases | body made of CrNiMo steel, flange of steel, CrNiMo steel | available in special materials, e.g. seawater resistant material, NACE compatible | nearly universally usable

DN	20 - 250	PN	6 - 40
G	½ - 2½ A	T	300 °C
P_2	0.05 - 0.95 bar	K_{VS}	1.2 - 388 m^3/h

Vacuum Breaker for the Cooling Water System of a semi-submersible Oil Production Platform

The semi-submersible offshore platform is located 150 km off the Brazilian coast and is considered to be one of the world's biggest platforms. It processes 180,000 barrels of oil and 6,000,000 m^3 of gas per day. The mega-platform is employed for the deep-sea exploitation of an oil reservoir deposited beneath a salt layer having several kilometres of thickness off the South American coast (pre-sál-layer).

The cooling water system of the offshore platform requires pipelines and valves that are suitable for the extreme marine atmosphere of a deepwater oil rig.

A vacuum breaker is commonly installed in the cooling water system to protect the under-pressure range by means of an adjustable element. The body and cone of the Mankenberg VV 34 vacuum breaker are made from Super Duplex 1.4501, whilst the spring cap is made from 1.4571 and the spring from CrNiMo steel (AISI 316). The VV 34 has been designed for a temperature range of -10 °C through to +60 °C. Its outdoor installation required a protective cage to avoid unintended intrusion of foreign particles or sea birds when air is sucked in.