

# Exhaust compensators

by Belman Production A/S



**Belman designs and manufactures exhaust compensators - for every conceivable situation.**

## Application

At generators, engines, gas- and exhaust systems.

## Properties

The exhaust compensator is resistant towards pressure (as standard up to 2,5 bar) and absorbs axial and lateral movements.  
Steel quality: W.1.4571 (V4A).

## Advantages

- Impenetrable to gas and resistant towards corrosion and temperature.
- Absorb vibrations and oscillations.

## Exhaust compensators delivered by Belman Production A/S



### Installed in a ship

DN 125 - DN 1700 mm installed at the turbo-charger for absorption of axial and lateral movements.

Built-in length: 170 - 590 mm  
Medium: Gas and seawater  
Design temperature: 32 - 680°C  
Design pressure: 0,1- 9 bar



### Exhaust system

Exhaust compensator, DN 1400 mm, installed at a chemical plant.

Built-in length: 2330 mm  
Medium: Exhaust  
Design temperature: 20-240°C  
Design pressure: 0-4 bar



### Exhaust compensator with a large diameter

Exhaust compensator DN 3100 mm.

Built-in length: 790 mm  
Medium: Exhaust  
Design temperature: 600°C  
Design pressure: 0,2 bar  
Axial movements: +/- 20 mm  
Lateral movements: +/- 15 mm



### Exhaust compensator (rectangular)

Exhaust compensator 1118 x 2235 mm with internal stiffeners. In this way the compensator is resistant towards the vacuum, it is exposed to. This compensator is installed on the steam turbine exhaust duct on a ship.

Medium: Exhaust  
Design temperature: 200°C  
Design pressure: Full vacuum to 1,4 bar  
Axial movement: +/- 16 mm  
Lateral movement: +/- 5 mm



### Customized solution

These customized DN 125 mm compensators are installed at the exhaust in an engine.

Built-in length: 253 mm  
Medium: Exhaust  
Design temperature: 550°C  
Design pressure: 0,5 bar  
Axial movement: +/- 20 mm

### Installation on ships

Exhaust compensators DN 150 - DN 450 mm for absorption of axial movement.

Built-in length: 200 mm - 400 mm  
Medium: Exhaust  
Design temperature: 500°C  
Design pressure: 2,5 bar

