

Pressure compensation device “Olex”



1 General information

1.1 Manufacturer contact

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1.2 Principles

Installation and initial operation must only be carried out by qualified tradesmen.

Read installation instructions in their entirety before installing the device. The installation instructions are part of the product.

Advice for qualified tradesmen: The installation instructions have to be handed over to the user of the system respectively the final user.

Advice for final users: The installation instructions have to be kept for later reference.

1.3 Copyright and protective rights

The copyright of these installation instructions remains with the company Oventrop. The contents, drawings and pictures are subject to the commercial protective rights. The installation instructions are confidential.

1.4 General conditions of sales and delivery

Oventrops general conditions of sales and delivery valid at the time of supply are applicable.

2 Basic safety notes

2.1 Normative guidelines

The applicable **standards** and **approved rules of technology** must be observed during installation, initial operation and repair. The relevant regulations relating to the pressure compensation device are:

- **AwSV** (Ordinance on Installations for the Handling of Substances Hazardous to Water)
- **TRWS 791** (Heating Oil Consumption Installations)
- **TRÖL** (Technical Rules Oil Installations)
- **DIN 4755** (Technical Rules Heating Oil Installations)
- **DIN EN 12514-2** (Oil Supply Installations for Oil Burners)

2.2 Correct use

The only design intent of the pressure compensation device “Olex” is the limitation of the pressure increase in closed oil pipe sections.

Any use of pressure compensation device outside the above application will be considered as non-compliant and misuse. Claims of any kind against the manufacturer due to damages caused by incorrect use cannot be accepted. Modifications to the device are not allowed.

2.3 Definition of warnings



CAUTION

Warning symbol and signal are indicating a dangerous situation with low risk which may lead to minor or moderate injury of damage to property if not avoided.

2.4 Personnel qualification

Installation and initial operation must only be carried out by **qualified tradesmen**.

3 Technical description

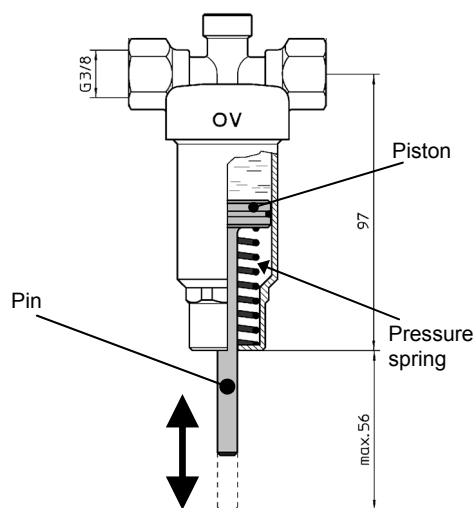
3.1 Construction and functions

If a **non-return check valve** is installed in or at the tank of a heating oil installation, a **pressure compensation device** must also be installed. The reason is that the non-return check valve leads to a closed pipe section if the oil burner is switched off.

Consequently, warming up of the **trapped heating oil** can occur, causing **expansion** and **increase in pressure** of the oil. This may lead to damage of components such as quick-acting isolation devices and anti-siphon devices and also to boiler malfunctions.

The pressure compensation device "Olex" absorbs the expanding heating oil by pushing down a **spring assisted piston**. When the burner starts again, the piston pushes the heating oil back into the suction pipe. The expansion is displayed by an emerging **pin** on the lower side of the device.

Product summary pressure compensating device "Olex"



3.2 Technical data

Item no.	2107003		
Connection	Both ports female thread G3/8, suitable for compressing fittings 6, 8, 10, 12 mm		
Material	Brass		
Dimensions (L x W x D)	118 x 69 x 47 mm		
Operating temperature	0 up to 60 °C		
Opening pressure	approx. 0.3 bar		
Pressure in final position	approx. 1.7 bar		
Test pressure	max. 10 bar		
Working volume	42 cm ³		
Expandable pipe content	max. 730 cm ³ with a temperature increase of 40 °C		
Equivalent max. length for pipes according to DIN EN 1057	mm	m	(m incl. filter*)
	Ø 8 x 1	27.0	(21.5)
	Ø 10 x 1	15.5	(12.5)
	Ø 12 x 1	10.0	(8.0)
The content of other components has to be taken into account!			
* Heating oil filter "Oilpur" DN10 with short filter cup (approx. 150 cm ³)!			
Approved fluids	Light heating oil on mineral oil basis (e.g. according to DIN 51603-1 or DIN V 51603-6)		
	Heating oils with a vegetable oil or FAME proportion of up to 20% , e.g. EL A Bio 20 according to DIN SPEC 51603-6		

3.3 Accessories

Compression fittings "Ofix-Oil" (for copper pipes).

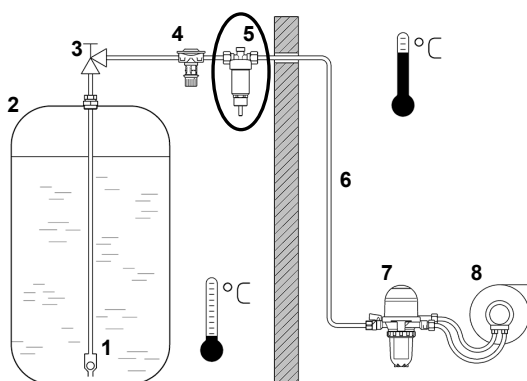
Connection sets 2-fold	Item no.
6 mm	2127050
8 mm	2127051
10 mm	2127052
12 mm	2127053

4 Installation and initial operation

4.1 Information on the installation location

The pressure compensation device "Olex" (5) can be installed at any position of the pipework (6) of the heating oil installation. If possible, it should not be installed more than 3 m below the max. filling height of the tank (2).

Component summary of a heating oil installation



Legend:

1 Non-return check valve	5 Pressure compensation device
2 Oil tank	6 Oil pipe
3 Oil draining device	7 Filter/deaerator combination
4 Anti-siphon device	8 Oil burner

4.2 Installation and initial operation



CAUTION

Risk of injury at sharp edges!

Threads and pipe edges are sharp and may lead to cutting injuries.

→ Wear safety gloves, if required.

- In the case of retrofitting, inactivate the existing heating oil installation and drain the heating oil. Collect the oil and refill it into the tank after installation of the pressure compensating device or dispose of it.
- Remove metal shaving and/or other possible residues at the pipe connections.
- Provide a tension free connection between the pipes and the pressure compensating device. The installation position and flow direction are optional. Please take care to leave enough space for the expansion indicator (pin).
- Check all installation points for leaks.

Subject to technical modifications.
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