

Installation

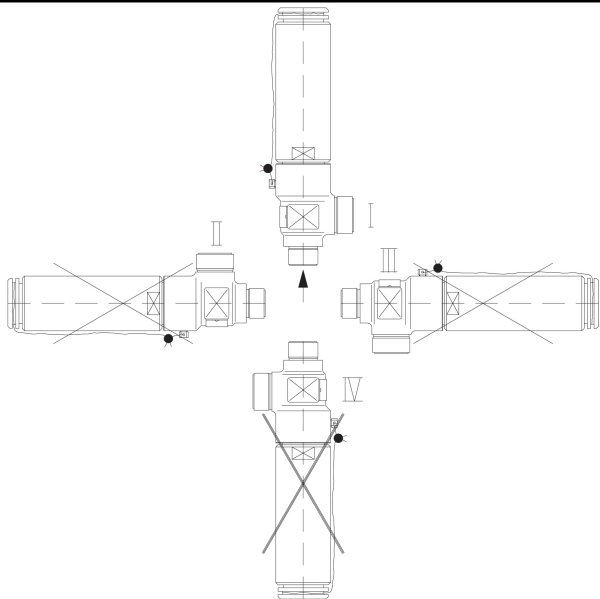


Fig. 1

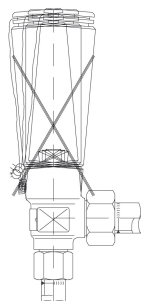


Fig. 2

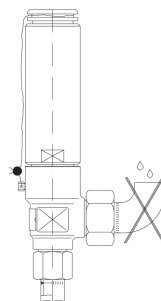


Fig. 3

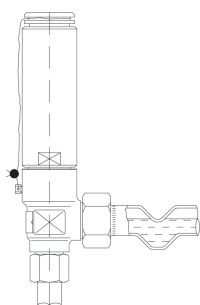


Fig. 4

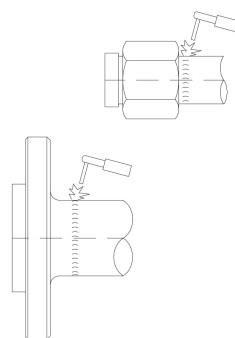


Fig. 5

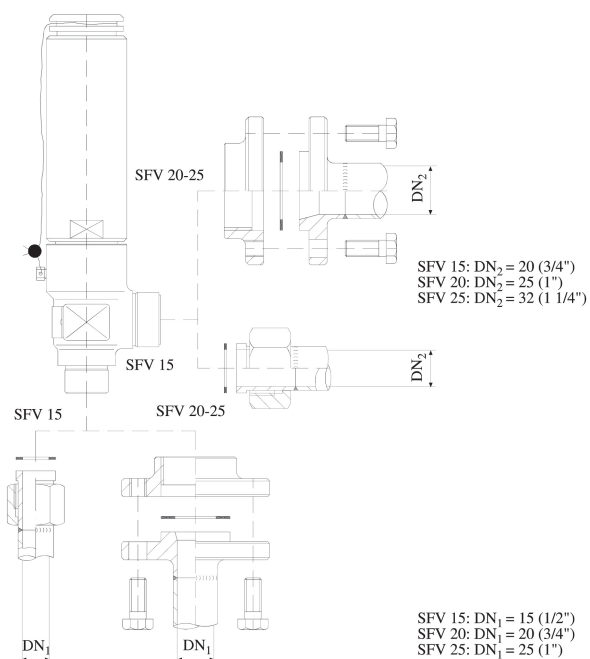


Fig. 6

Installation

Refrigerants

Applicable to all common non-flammable refrigerants, including R717 and non-corrosive gases/liquids dependent on sealing material compatibility. Flammable hydrocarbons are not recommended. The valve is only recommended for use in closed circuits. For further information please contact Danfoss.

Temperature range

SFV 15 - 25: -30/+100°C (-22/+212°F).

Pressure range

The valve is designed for a max. working pressure of 25 bar g (362 psi g). Danfoss Industrial Refrigeration A/S is supplying safety valves adjusted for a certain pressure (indicated on the ID-plate) and sealed. Danfoss Industrial Refrigeration guarantees correct pressure as long as the seal remains unbroken.

Installation

The valve should be installed with the spring housing upwards (fig. 1). By mounting of the safety valve it is important to avoid the influence of thermic and dynamic stress (vibrations) (fig. 2). The outlet pipe of the valve must be designed as to prevent dirt from penetrating into the valve (fig. 3).

For valves with outlet in the open air, an oil filled U-pipe is an efficient protection against the entrance of water and dirt (fig. 4). The valve is designed to withstand a high internal pressure. However, the piping system should be designed to avoid liquid traps and reduce the risk of hydraulic pressure caused by thermal expansion. It must be ensured that the valve is protected from pressure transients like "liquid hammer" in the system.

Welding

If welding fittings are applied, these should be dismantled during the welding process (fig. 5). Only materials and welding methods, compatible with the flange material, must be welded to the flange.

Avoid welding debris and dirt in the threads of the housing and pipes.

Assembly

Remove welding slag and dirt from tubes and housing before the valve is mounted. Mount the valve as shown in fig. 6.

Colours and identification

The valves are Zinc-Chromated in the factory. If further corrosion protection is required, it can be painted. Precise identification of the valve is made via the ID-plate on the valve housing. In cases of doubt, please contact Danfoss. Danfoss accepts no responsibility for errors and omissions. Danfoss Industrial Refrigeration reserves the right to make changes to products and specifications without prior notice.

DECLARATION OF CONFORMITY
The Pressure Equipment Directive 97/23/EC



Name and Address of Manufacturer within the European Community

Danfoss Industrial Refrigeration A/S
Stormosevej 10
PO Box 60
DK-8361 Hasselager
Denmark

Description of Pressure Equipment

Refrigerant safety valve

Type SFV 15, 20 and 25

Nominal bore	13 mm (0,512 in.) for SFV 15 18 mm (0,709 in.) for SFV 20 23 mm (0,906 in.) for SFV 25	
Classified for	Fluid Group I (all refrigerants (toxic, nontoxic, flammable and nonflammable)). For further details / restrictions - see Installation Instruction.	
Temperature range	SFV 15-25	-30°C/+100°C (-22°F/+212°F)
Maximum allowable working pressure	SFV 15-25	10 - 25 bar (143 - 362 psi g) -30°C/+100°C (-22°F/+212°F)

Conformity and Assessment Procedure Followed

Category	IV	
Module	B + D	
Certificate ID	B: 07 202 0511 Z 0078/1/H-0001 D: 07 202 0511 Z 0009/1/H-0001	
Nominal bore	Standard application	13 mm (0,512 in.) for SFV 15 18 mm (0,709 in.) for SFV 20 23 mm (0,906 in.) for SFV 25

Name and Address of the Notified Body which carried out the Inspection

TÜV-Nord e.V.
Grosse Bahnstrasse 31
22525 Hamburg, Germany



Name and Address of the Notified Body monitoring the Manufacturer's Quality Assurance System

TÜV-Nord e.V.
Grosse Bahnstrasse 31
22525 Hamburg, Germany

References of Harmonised Standards used

EN 10222-4

References of other Technical Standards and Specifications used

prEN 12284 prEN 13136

AD-Merkblätter DIN 3158

Authorised Person for the Manufacturer within the European Community

Name: Morten Steen Hansen

Title: Production Manager

Signature:

Morten Steen Hansen

Date: 29/11/2001

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