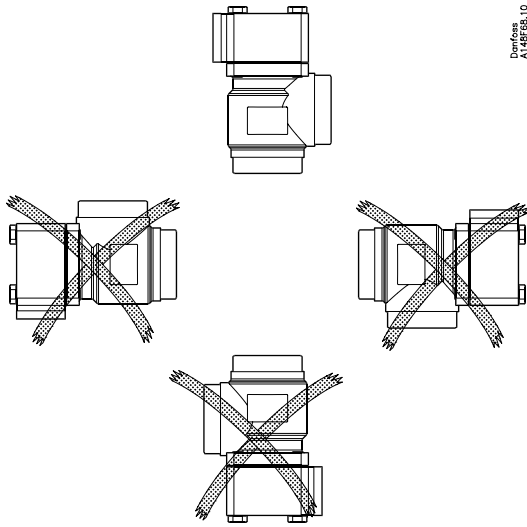
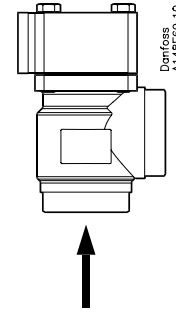


Installation



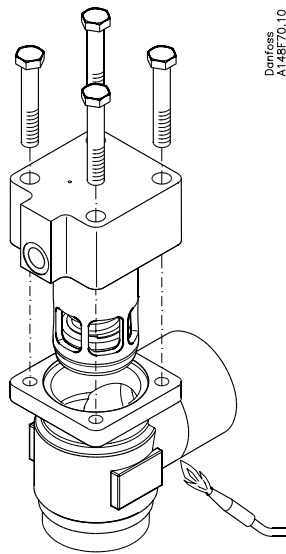
Danfoss
A148F68,10

Fig. 1



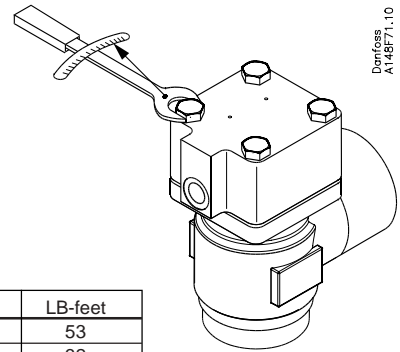
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A148F69,10

Fig. 2



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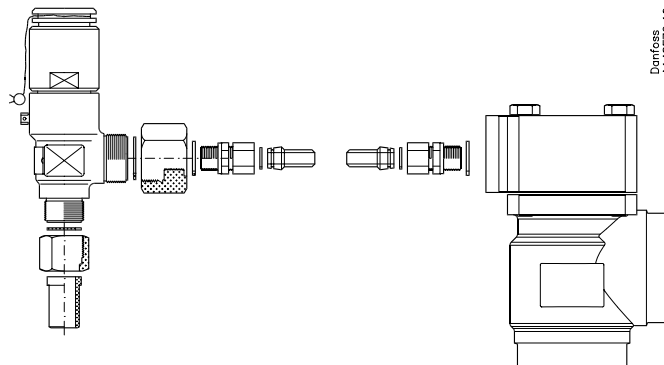
Fig. 3



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	Nm	LB-feet
POV 1050	75	53
POV 40	44	32
POV 2150	44	32

Fig. 4



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Fig. 5

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

POV: $-50/+150^{\circ}\text{C}$ ($-58/+302^{\circ}\text{F}$)

Pressure range

The valves are designed for a max. working pressure of 40 bar g (580 psi g).

Installation

The POV pilot operated safety valve is used in conjunction with the BSV back pressure independent safety valve and is specifically designed for protecting compressors against excessive pressure (fig. 5).

See technical leaflet for further installation instructions.

The valve should be installed with the spring housing upwards (fig. 1). By mounting of the valve it is important to avoid the influence of thermic and dynamic stress (vibrations).

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.

Recommended flow direction

The valve should be installed with the flow towards the valve cone as indicated by the arrow on fig. 2.

Flow in the opposite direction is not acceptable.

Welding

The top should be removed before welding (fig. 3) to prevent damage to the O-rings between the valve body and top, as well as the teflon gasket in the valve seat. Do not use high-speed tools for dismantling and reassembling. Be sure that grease on bolts is intact before reassembling. Only materials and welding methods compatible with the valve housing material must be welded to the valve housing. The valve should be cleaned internally to remove welding debris on completion of welding and before the valve is reassembled.

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

Removing the top can be omitted provided that:

The temperature in the area between the valve body and top as well as in the area between the seat and the teflon cone during welding does not exceed $+150^{\circ}\text{C}/+302^{\circ}\text{F}$. This temperature depends on the welding method as well as on any cooling of the valve body during the welding itself (cooling can be ensured by, for example, wrapping a wet cloth around the valve body). Make sure that no dirt, welding debris etc. get into the valve during the welding procedure.

Be careful not to damage the teflon cone ring.

The valve housing must be free from stresses (external loads) after installation.

Assembly

Remove welding debris and any dirt from pipes and valve body before assembly.

Tightening

Tighten the top with a torque wrench to the values indicated in the table (fig. 4). Do not use high-speed tools for dismantling and reassembling. Be sure that grease on bolts is intact before reassembling.

Colours and identification

Precise identification of the valve is made via the ID label on the top, as well as by the stamping on the valve body. The external surface of the valve housing must be prevented against corrosion with a suitable protective coating after installation and assembly.

Protection of the ID label when painting the valve is recommended.

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

Pilot operated internal safety valve

Type POV 40, 1050 and 2150

Nominal bore	DN 40 - 80 mm. (1½ - 3 in.)	
Classified for	Fluid Group I (all refrigerants (toxic, nontoxic, flammable and nonflammable)). For further details / restrictions - see Installation Instruction.	
Temperature range	POV 40, 1050 and 2150	-50°C/+150°C (-58°F/+302°F)
Restrictions	POV 40, 1050 and 2150	Only for use in conjunction with BSV 8
Maximum allowable working pressure	POV 40, 1050 and 2150	40 bar (580 psi) -50°C/+150°C (-58°F/+302°F)

Conformity and Assessment Procedure Followed

Category	II	
Module	D1	
Certificate ID	D1: 07 202 0511 Z 0009/1/H-0002	
Nominal bore	Standard applications	DN 40 - 80 mm. (1½ - 3 in.)

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

References of other Technical Standards and Specifications used

prEN 12284 prEN 13136
AD-2000 Merkblatt DIN 3158

Authorised Person for the Manufacturer within the European Community

Name: Morten Steen Hansen **Title:** Production Manager

Signature: Morten Steen Hansen **Date:** 03/11/2003