

METRIC CONVERSIONS:

1 bar = 14.5 psi
°F = (°C* 1.8) + 32

Safety Valves

In normal operating conditions, safety valves must close tightly and open, when pressure increases above the valve safety setting. The valves prevent unsafe overpressure situations and must open and close to keep the line pressure within operation parameters. Hofer safety valves meet these requirements in all respects.

In order to ensure a faultless function, the regulations and rules as per DIN 3320 and AD-Merkblätter have to be followed. Particularly,

- sufficiently large difference of working pressure (recommended working pressure difference up to 20 bar appr. 15%, up to 1,000 bar approx. 10%, more than 1,000 bar approx. 5%)
- clean media
- vertical and vibration-free installation of safety valves. The reaction forces, arising during blow-off, have to be considered during installation

HOFER Safety Valves DN 6:

5.5 to 1,100 bar, -60 to +200° C



TÜV . SV . 99-724 . 6 . D/G α_w . p
Pressure equipment directive
97/23/EC

- classification acc. to AD Merkblatt A2
- type-test approved for vapors & gases
- also suitable for liquids
- exchangeable seat and cone
- various types of seat sealing



Safety valve without
lifting device connection:
female thread

Design:

- spring loaded, closed safety valves,
- type-test approved by VdTÜV.
- with and without lifting device.

Approval:

Setting of the valves is done in the workshop, if requested, witnessed by an authorized Q.C. inspector of TÜV or of any other quality certifying authority, such as Lloyd's, DNV, etc.

Special Uses:

Hofer safety valves can be used for almost all technical gases. For oxygen service however a selection of special materials and a special design is necessary. These have been certified by Bundesanstalt für Materialprüfung (BAM) Berlin. Particular synthetic sealing elements are required for CO₂ operation. Thus we always require operating conditions and type of gas for all inquiries and orders.

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Type 670

set pressure range 100 - 1,100 bar
 seat sealing metal / metal
 working temperature -60 to +200° C
 flow coefficient $w = 0.46$

Type 672

set pressure range 100 - 720 bar
 seat sealing metal / metal
 working temperature -60 to +400° C
 flow coefficient $w = 0.46$

Type 673

set pressure range 5.5 - 50 bar
 seat sealing metal / elastomer
 working temperature -10 to +200° C
 flow coefficient $w = 0.28$

Type 674

set pressure range 50 - 525 bar
 seat sealing metal / PTFE
 working temperature -60 to +200° C
 flow coefficient $w = 0.28$


Connection:
Inlet:
Standard Design:

- HOFER pivot G 1/2 A (fig. 1)
- HOFER block G 1/2 for tube 10 x 2 (fig. 2)

Upon Request:

- HOFER block G 7/8 for tube 14 x 2.5 (fig. 2)
- female thread G 1/2 for HOFER pivot (fig. 3)
- female thread 3/8"-18 NPT (fig. 4)
- male thread 1/2"-14 NPT
- flanges

Outlet:
Standard Design:

- tube fitting DL 18 DIN 2353 (e.g. Ermeto)

Upon Request:

- DILO weld fitting
- flanges
- adapters

Safety valve with lifting device
 connection: male thread

fig. 1	fig. 2	fig. 3	fig. 4
HOFER-pivot	Female thread for HOFER-block	Female thread for HOFER-pivot	female thread NPT

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Safety valve – data sheets

Type 670for pressure up to 1,100 bar
and temperatures from -60 to +200° C**Type 680**for pressure from 1,100 to 4,200 bar and
temperatures from -10 to +50° C**Type 672**for pressure up to 720 bar
and temperatures from -60 to +400° C**Type 651**for pressure from 10 to 1,100 bar design without
type-test approval**Type 673**for pressure from 5.5 to 50 bar with
elastomer sealing**Type 609**rupture disk for pressure from 250 to 4,200 bar
acceptance of setting by TÜV, if requested**Type 674**for pressure from 50 to 525 bar with
PTFE sealing

Chemac Inc. offers a comprehensive HOFER program of high pressure valves, fittings and compressors for technical gases.

Kindly contact us for further information.