

Niezgodka GmbH



Safety-Valve, springloaded

for steam, gases and liquids in closed completion

Type 140

This safety valve is a universally usable valve for nearly any industrial application. Due to its construction and production method, any imaginable material can be used for it to cover any possible use. For example, it may be used in general piping construction, in ships, but also in the pharmaceutical area and in the foodstuffs industry.

The benefit of this safety valve is that entry and exit area are produced of one single piece each.

Approvals:

Pressure equipment directive: 97/23/EG



Declaration of conformity

Type test approval:

VdTÜV-leaflet AD 2000 leaflet A 2

TÜV•SV•XX-1067•do•D/G/F•aw•p

Lloyds Register
GOST-R [RTN]



Technical data:

Material:

Type 140.1:

Type 140.2:

Inlet body / Spring bonnet

1.4104 / 1.4104

1.4404, 1.4571 / 1.4404, 1.4571
(special materials)

Nominal pressure:

PN 300 (to PN 500 for D/G)

Connection size:

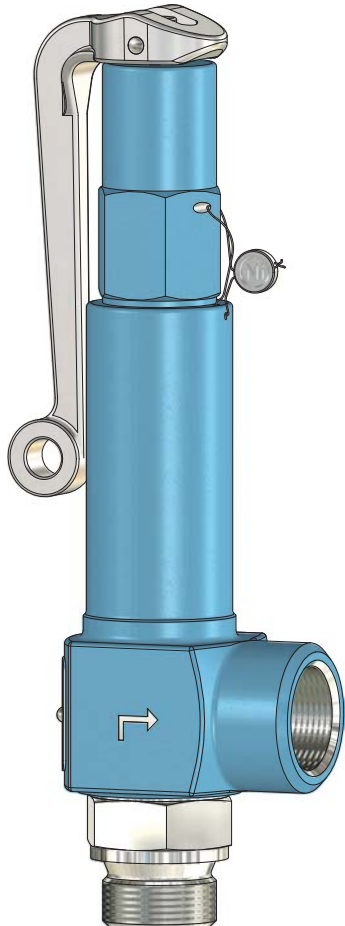
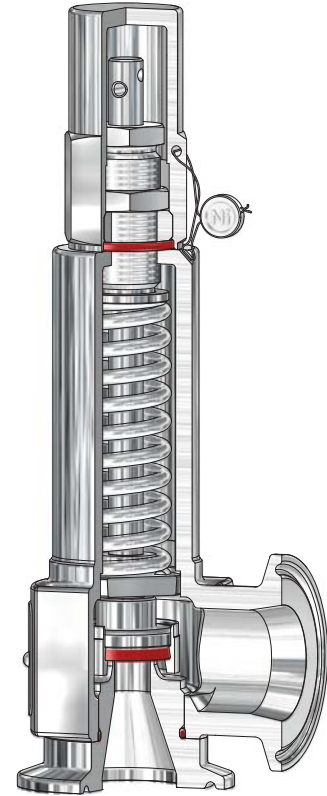
DN 10 - DN 40

Flow media:

Stream, gases and liquids

Temperature ranges:

-200°C to 280°C



Seals:

Metal seals, as well as any common elastomer and thermoplastic for simple industrial uses down to certified seals (FDA / USP) for the foodstuffs industry or special seals (e.g. KALREZ ®) for special media.

Function:

When the pressure before the safety valve reaches the set pressure, the valve commences to lift, i.e. open a little at first to discharge a small amount of fluid. If the pressure continues to rise, it will open further and more fluid is discharged. At a max. pressure increase of 10% (5%), the stroke required for the mass flow to be discharged is reached. When the pressure drops to 10% (compressible fluids / vapours and gases) or 20% (incompressible fluids / liquids) below the set pressure, the valve closes and no fluid escapes anymore.

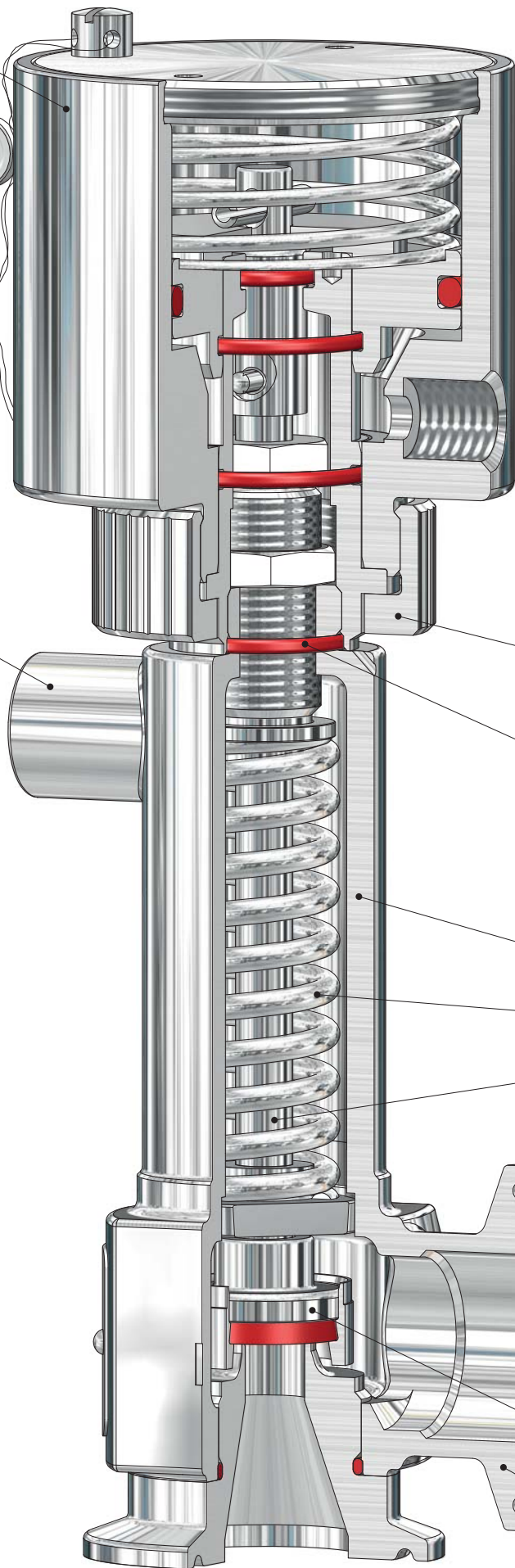
Opening characteristics:

NI safety valves are type-tested safety valves purs. to AD2000-A2 section 3.1:

Safety valves reach the stroke required for the mass flow to be discharged within a pressure increase of no more than 10% after triggering. There are no special requirements to the opening characteristics. Therefore, they are recommended for normal and slow pressure increase and medium mass flows.

Valve head H
(with pneumatic lifting)

Flushing connection



Union nut

O-ring

Spring bonnet

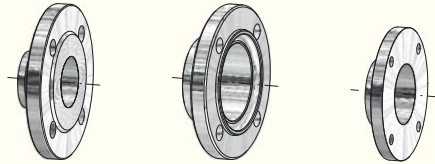
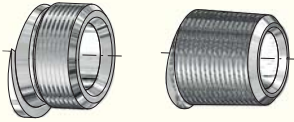
Spring

Spindle

Disc, complete

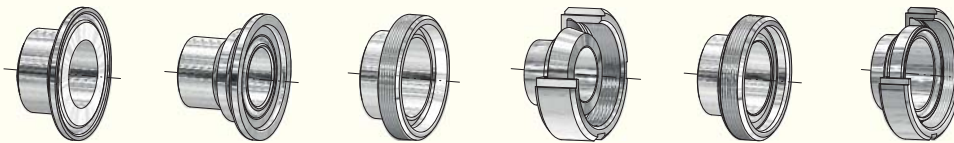
Clamp

Connection types



| | | |
|--|--------------------------|---------------|
| <i>Connection according to pipe standard</i> | <i>Thread connection</i> | |
| | DIN ISO 228 | ASME B 1.20.1 |
| | G | NPT |

| | | |
|--|---|-----------------------|
| <i>Flanges</i> | | |
| DIN 2526 DIN EN 1092-1 | DIN 11864 T2 Type A and B | APV Varivent, etc. |
| DIN 2448 DIN 2458 DIN EN 10220 | DIN 11850 DIN EN ISO 1127 ISO 2037 BS 4825-1 | - |



| | | | |
|--|-----------------------------------|--|---|
| <i>Connection according to pipe standard</i> | <i>Clamp</i> | <i>Threaded / Conical connecting piece</i> | <i>Aspetik male / Female union</i> |
| | DIN, ISO, SMS | DIN 11864 T3 Type A and B | DIN 11851 |
| | DIN 11850 ISO 1127 ISO 2037 | DIN 11866-A DIN 11866-B DIN 11866-C | DIN 11850 |
| | | | DIN 11864 T1 Type A and B |
| | | | DIN 11850 DIN EN ISO 1127 ISO 2037 BS 4825-1 |

Options:

- GB: Medium-contacted surfaces with surface quality Ra = 1,6 µm
- GC: Medium-contacted surfaces with surface quality Ra = 0,8 µm
- GD: Medium-contacted surfaces with surface quality Ra = 0,5 µm
- K0.5: Delta ferrite content = < 0.5% incl. weld seams
- SPA: Flushing connection G 1/4" in the spring bonnet
- VHP: Valve completely hand-polished on the outside