

Cross-Over-Valve and -Combination for Safety Valves

- **Durable** due to free of cavity design and protected sealing surfaces
- **Reliable** during continuous operation and cross-over process
- **Flow-optimized** with full cross section

Safety first !



Type SAVA2-SOLO
without backflow

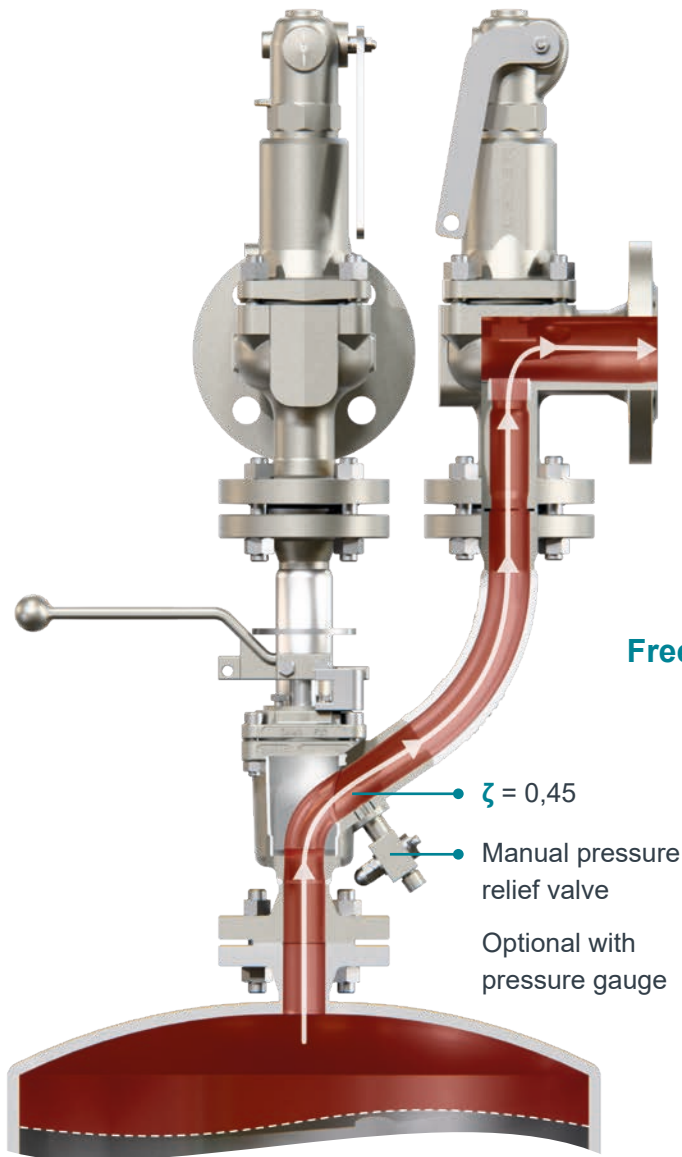


Type SAVA2-COMBI
with backflow

TYPE SAVA2-SOLO

Cross-Over Valve for Safety Valves

Vent to atmosphere (without backflow of blow-off media capacity)

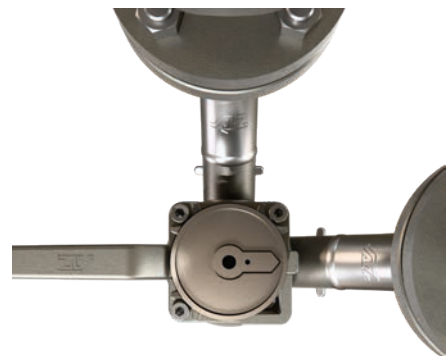
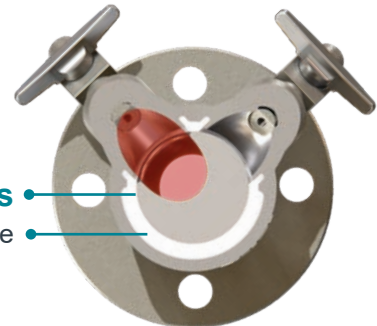


Perfect vessel protection!

Design characteristics

- Full-flow, round bore cross section
- **Max. 3 % Pressure loss**
 - No Safety valve float
- Valve sealing surfaces permanently protected from media by PTFE-Sleeve
- Error-proof operation
- Same flow coefficient – regardless of the flow path

Free of cavities
PTFE-Sleeve



Actuation

- Lever or gearbox
- Clearly visible position indicator
- Coded shaft connection (incorrect assembly prevented)

Safety first!

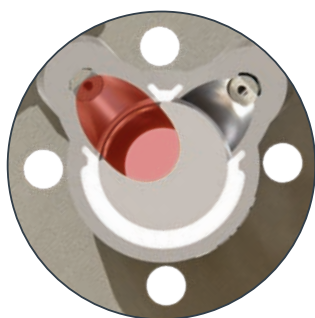


More info online!

Cross-Over action for 3-Way Plug Valve SAVA2

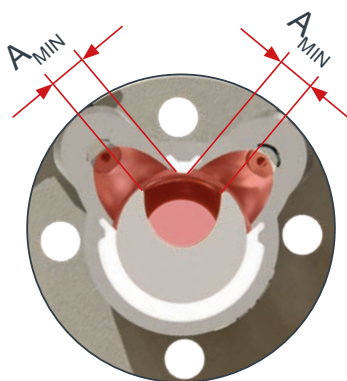
Pos. 1

Safety valve 1



$$\zeta = 0,45$$

Cross-over
action— guaranteed
by A_{MIN}

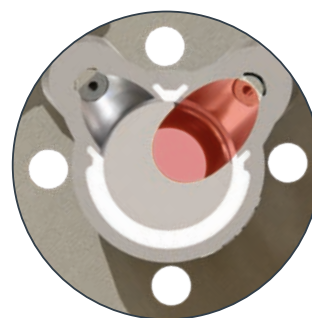


**Least cross section A_{MIN}
during the cross-over phase**
($A_{\text{MIN}} \times 2 = 0,65 \times A$)

- Full round bore
- Good drag coefficient
 $\zeta = 0,85$

Pos.2

Safety valve 2



$$\zeta = 0,45$$

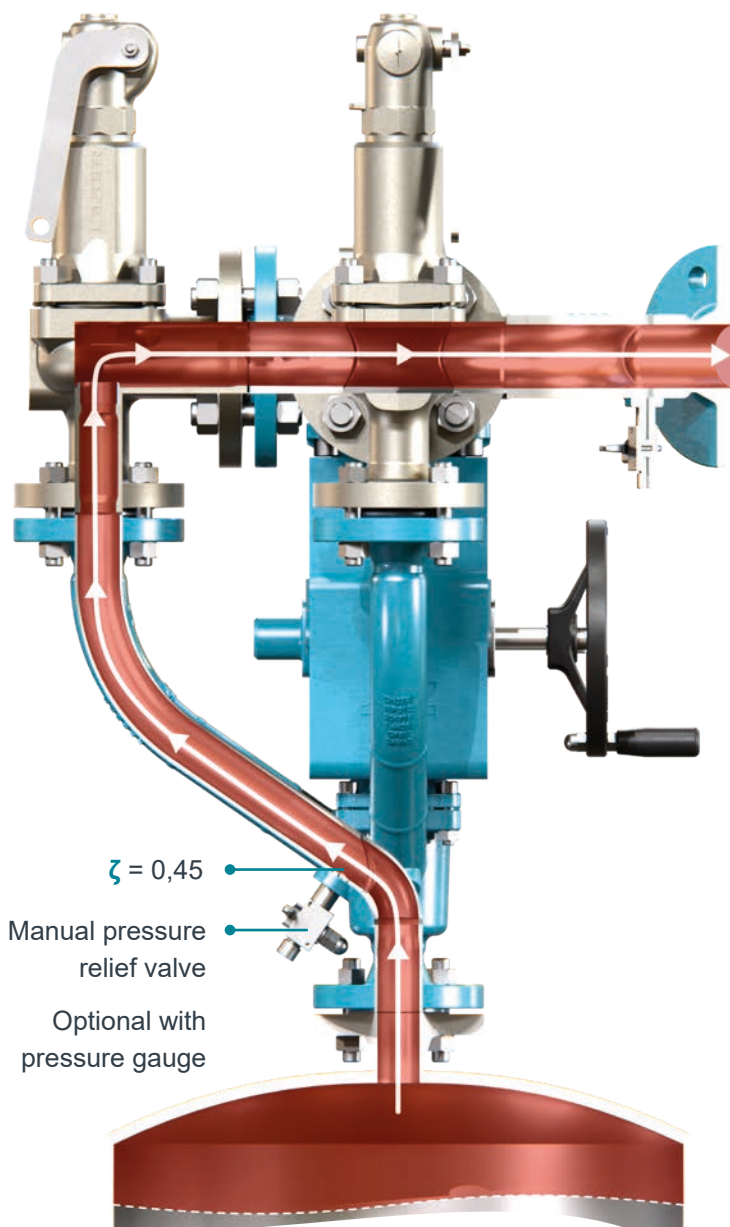
Why Choose an Cross-Over Safety Valve from AZ?

- 100% safety during continuous operation
- Vessel protection during the cross-over action
- Safety valve maintenance without interrupting operation
- DN 25E–600E, PN 10–100 / NPS 1E–24E, Class 150–600

TYPE SAVA2-COMBI

Cross-Over Combination for Safety Valves and handling of toxic media

With backflow of toxic blow-off media



Design characteristics

- Full-flow, round bore cross section
- **Max. 3 % Pressure loss**
 - No Safety valve float
- Valve sealing surfaces permanently protected from media by PTFE-Sleeve
- Free of cavities
- Error-proof operation
- Same flow coefficient – regardless of the flow path selected



Actuation

- One gearbox
 - no complex linkage required
- Safe Synchronized operation through a fixed shaft connection (no Chain!)
- Clearly visible position indicator
- Coded shaft connection (incorrect assembly prevented)

Safety first!



More info online!

Cross-Over action for 3-way and 4-way Plug Valve SAVA2

Pos. 1

Safety valve 1

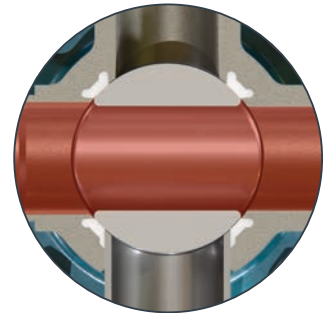
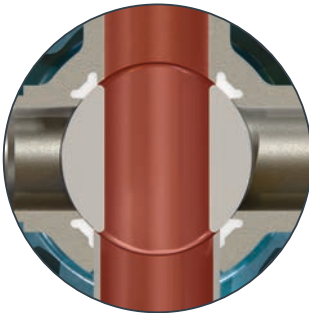
Cross-over

action – guaranteed
by A_{MIN}

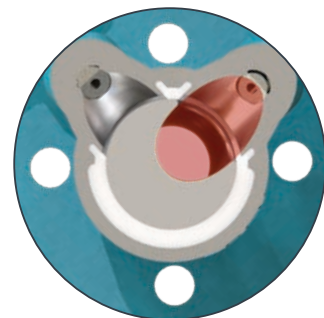
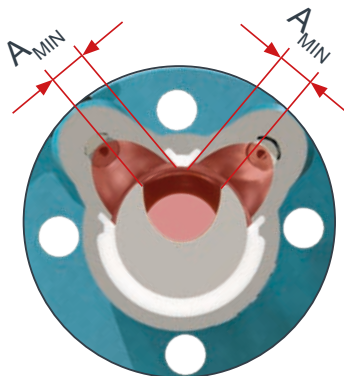
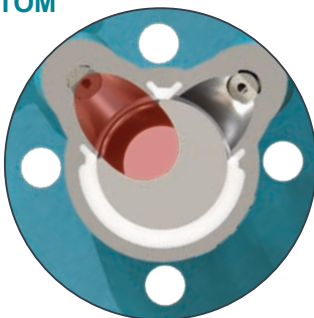
Pos.2

Safety valve 2

4-way
Plug Valve
TOP



3-way
Plug Valve
BOTTOM



$$\zeta = 0,45$$

Least cross section A_{MIN}
during the cross-over phase
($A_{MIN} \times 2 = 0,65 \times A$)

- Full round bore
- Good drag coefficient
 $\zeta = 0,85$

$$\zeta = 0,45$$

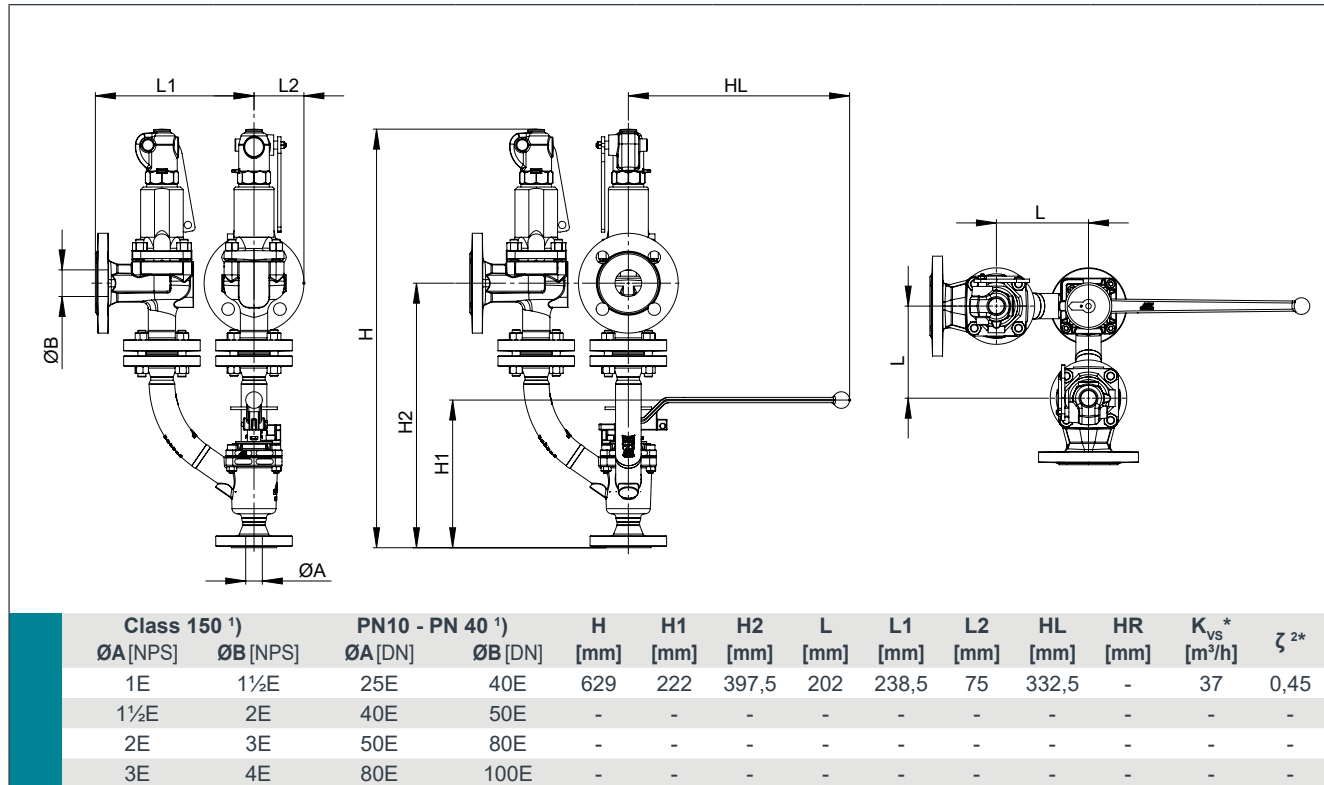
Areas of application

- Petrochemicals
- Chemical industry
- Oil and gas industry
- Nuclear industry
- Refrigeration
- Industrial gases
- Pharmaceutical industry

TECHNICAL DATA

Cross-Over Combination for Safety Valves

SAVA2-SOLO



Larger nominal sizes and material combinations on request

¹⁾ Dimensions acc. to ASME B16.5 / 16.10 - DIN EN 1092-1 / 558 for type ISO-EXTRA / EXTRA

²⁾ Values refer to the lower valve (F-3-S-90°)

* Flow rates were determined using flow simulation (VDI/VDE 2173 K_v value $\pm 10\%$) with water (20°C) at a pressure drop of 1 bar.
Opening angle and flow values may vary due to manufacturing tolerances.

Special dimensions on request

Gearbox available from DN40E / NPS 1½E



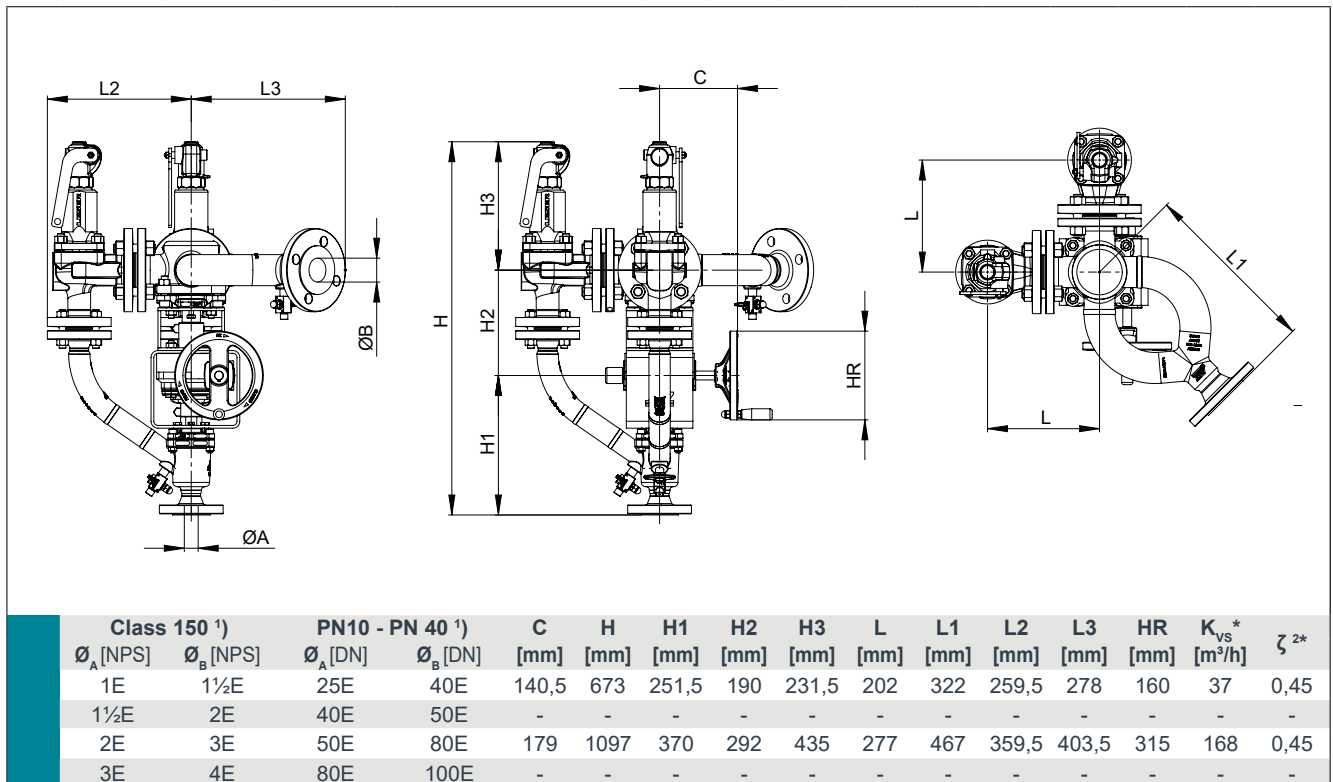
PT diagram, sealing systems,
material selection: see
catalogue part **ENGINEERING**

Safety first!



More info online!

SAVA2-COMBI



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PT diagram, sealing systems,
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catalogue part **ENGINEERING**

Product Range

Safety first!

Plug Valves with PTFE-sleeve

- two-way and multi-way valves

HIGH PERFORMANCE valves

- for processes with demanding requirements

Valves with PFA/ FEP lining

- full safety for operator and environment

Sampling systems

- pressure-less, representative, specific, safe and reliable

Control plug valves

- precise equal percentage or linear control

Piping accessories

- metallic or with PFA / FEP lining

Actuation

- aligned, verified and tested components

Special solutions

- customized solutions

