

Safety first!

Sealing systems suitable for general applications



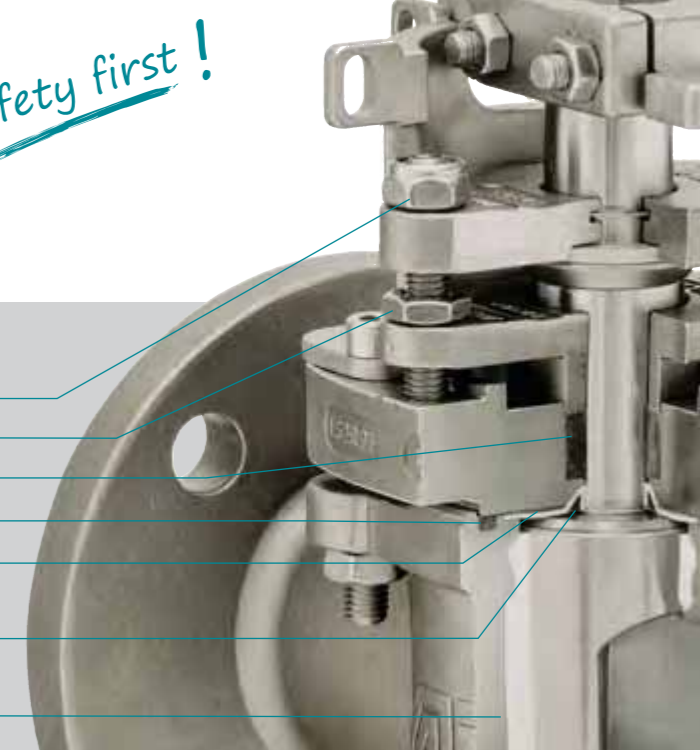
Sealing system STD

- plug adjustment
- thrust collar
- cover sealing
- stainless diaphragm
- **Secondary sealing:** V-diaphragm, delta thrust collar
- **Primary sealing:** PTFE-sleeve

More safety for severe applications

Sealing system FSN / CASN

- plug adjustment
- stuffing box adjustment
- **Tertiary sealing:** triple safety stem packing
- cover sealing
- stainless diaphragm
- **Secondary sealing:** V-diaphragm and delta thrust collar
- **Primary sealing:** PTFE-sleeve



Type / Application	Sealing materials			
	V-diaphragm	Delta collar	Cover sealing	Packing
Type STD - T _{max} 230°C Standard sealing for general applications	PTFE	PTFE	PTFE	-
Type FS - T _{max} 230°C Fire-Safe-sealing (API 607) with additional graphite packing	PTFE	graphite	graphite/metal	graphite
Type CA - T _{max} 230°C Chemistry sealing with additional PTFE packing for fugitive media	PTFE	PTFE	PTFE	PTFE

The PTFE sleeve has a decisive influence on the maximum operating temperature. Material selection according to PT-diagram.

Type / Application	Sealing materials			
	V-diaphragm	Delta collar	Cover sealing	Packing
Type FSN - T _{max} 280°C Fire-Safe safety sealing (API 607) for fluctuating temperatures with triple safety stem packing (graphite)	PTFE	graphite	graphite/metal	3x graphite
Type CASN - T _{max} 230°C Chemistry safety sealing for fluctuating temperatures with triple safety stem packing (PTFE)	PTFE	PTFE	PTFE	3x PTFE
Type FSN-SL - T _{max} 280°C Fire-Safe safety sealing (API 607) like type FSN, but with disk springs for self-adjusting pressure	PTFE	graphite	graphite/metal	3x graphite
Type CASN-SL - T _{max} 230°C Chemistry safety sealing like type CASN, but with disk springs for self-adjusting pressure	PTFE	PTFE	PTFE	3x PTFE

The PTFE sleeve has a decisive influence on the maximum operating temperature. Material selection according to PT-diagram.

Sealing system FS / CA

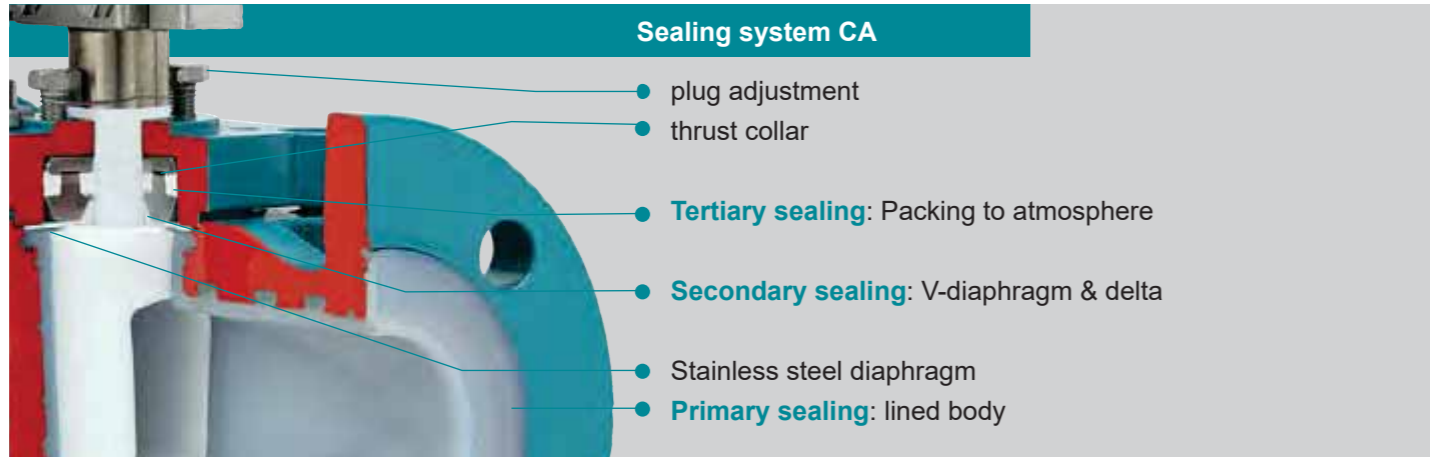
- Plug and packing adjustable together
- **Tertiary sealing:** Packing to atmosphere
- Sealing materials for Fire-Safe (**Type FS**) and chemical applications (**Type CA**) acc. to table

Sealing system FSN-SL / CASN-SL

- O-rings in the cover and on the shaft protects the springs against corrosion
- with desk springs for self-adjusting pressure (life-loaded)
- Sealing materials acc. to table for Fire-Safe (**Type FSN-SL**) and chemical applications (**Type CASN-SL**)



Safety first!

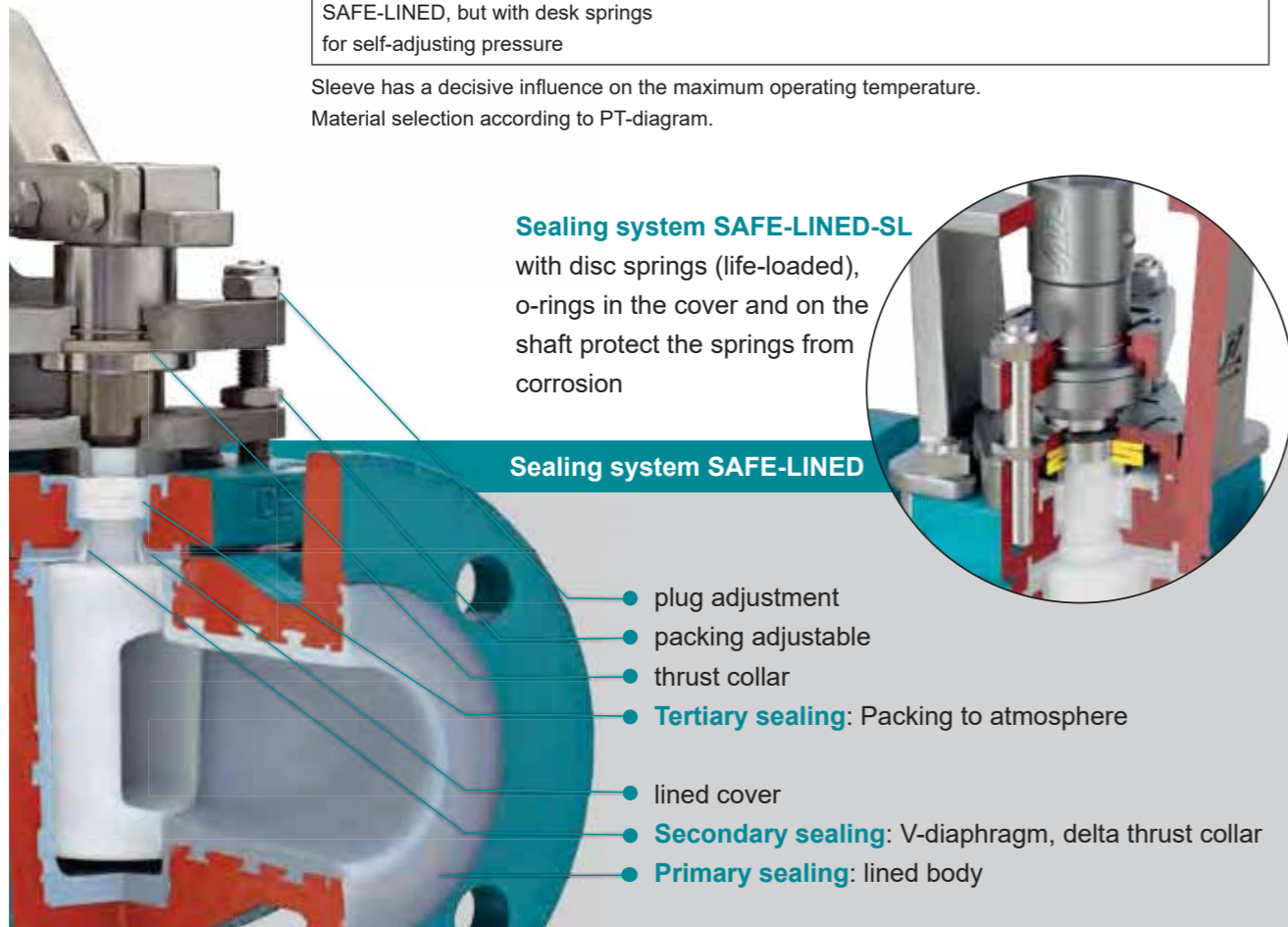


Sealing system CA

- plug adjustment
- thrust collar
- **Tertiary sealing:** Packing to atmosphere
- **Secondary sealing:** V-diaphragm & delta
- Stainless steel diaphragm
- **Primary sealing:** lined body

Type / Application	Sealing materials			
	V-diaphragm	Delta collar	Cover sealing	Packing
Type CA - T _{max} 210°C Chemistry sealing with additional PTFE packing for fugitive media	PTFE	PTFE	PTFE	---
Type SAFE-LINED - T _{max} 210°C Chemistry safety sealing for fluctuating temperatures with triple safety stem packing (PTFE)	PTFE	PTFE	PTFE	3x PTFE
Type SAFE-LINED-SL - T _{max} 210°C Chemistry safety sealing like type SAFE-LINED, but with desk springs for self-adjusting pressure	PTFE	PTFE	PTFE	3x PTFE

Sleeve has a decisive influence on the maximum operating temperature. Material selection according to PT-diagram.



Sealing system SAFE-LINED

- plug adjustment
- packing adjustable
- thrust collar
- **Tertiary sealing:** Packing to atmosphere
- lined cover
- **Secondary sealing:** V-diaphragm, delta thrust collar
- **Primary sealing:** lined body

Chevron packing (option)

- increases the contact pressure (when pressure builds up on the safety stem packing)
- for toxic and fugitive media
- high wear resistance



Chlorine / gas applications (option)

- approved for chlorine applications
- ideal for media with changing state of aggregate (e.g. liquid to gas, vice versa)
- vacuum capable



Detection ports (option)

- detection ports for early recognition of potential leakages
- sniffing at sealing surfaces to atmosphere

