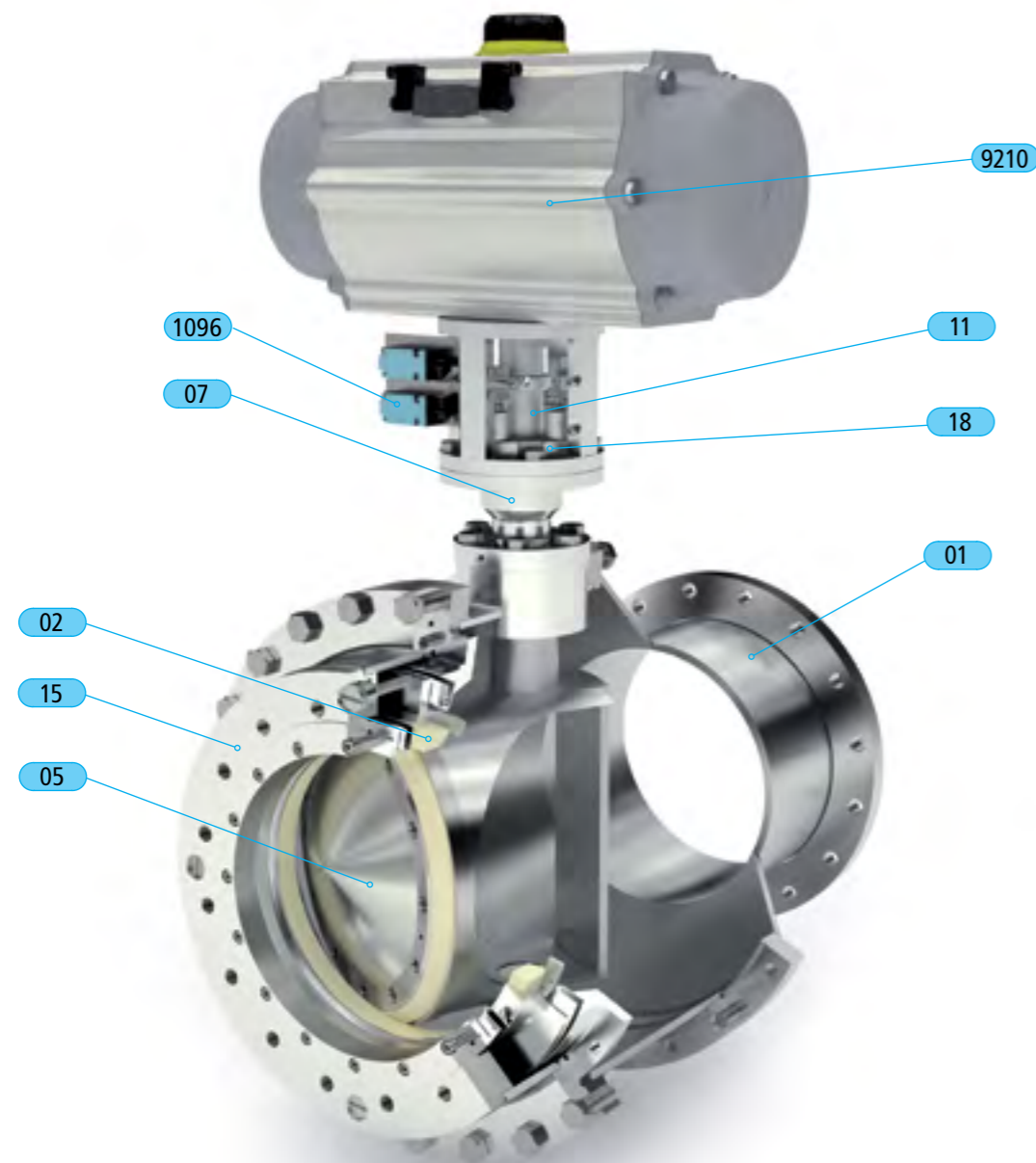


# SEGMENTED BALL VALVE

## MATERIALS / MATERIAL OPTIONS:



Part description	Materials	Material options
01 Housing	1.4301	1.4571 – P250GH
02 Seat ring actuation assembly	Al <sub>2</sub> O <sub>3</sub> / 1.4301	SSiC / 1.4301
05 Segmented ball	Al <sub>2</sub> O <sub>3</sub> / 1.4301	SSiC / 1.4301
07 Packing housing	1.4301	1.4571 – P250GH
11 Stem shaft	1.4462	
15 Flange	1.4301	1.4571 – P250GH
18 Stuffing box gland	1.4301	1.4571 – P250GH
Packages	Chemstar 6226/L	Compression gland packing
Seals	Viton / PTFE	Graphite
Bearing bushes	DU bushing	
Screws / nuts	A2-/ A4-70	
9210 Drive unit	Pneumatic drive unit	Electric drive unit
1096 Seat contact pressure control unit	Mechanical switch	Inductive switch

## FUNCTION:

The segmented ball valve operates with a controllable sealing system (differential compensator) that is pressed against the actuator (segmented ball), dependent on its position ("CLOSED" and "OPEN"), and which can be raised during the actuation movement.

The elastomer-free seal of the moving sealing system permits temperatures of up to 450 °C / 842 °F. The seat can be made from ceramic (Al<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub>, SSiC), metallic and soft-sealing materials.

### Advantages

- Non-wearing and friction-free rotary motion of the actuator
- Non-wearing and seamlessly fitting axial motion of the sealing system
- Optimised material selection and combination in the sealing system, taking into account the respective operating conditions
- No mechanical loading of the system during the rotary motion

### Activation of the sealing system

The control of the differential compensator takes place in 2 stages  
 Switch (1) applies primary pressure to the compensator at 10° before the end position in order to press the seat lightly against the segmented ball (scraping).  
 Switch (2) applies pressure to the compensator in the end position of the seat in order to press the seat tightly against the segmented ball.

## NOMINAL DIAMETER RANGE:

Middle housing DN 150 to DN 400 / 6" to 16"  
 Flange connections DN 150 to DN 600 / 6" to 24"

## PRESSURE RANGE:

up to PN 10 / ANSI class 150  
 optional up to PN 64 / ANSI class 400  
 other pressure ranges possible on request

## OVERALL LENGTH:

according to EN 558-1 Series 1+ 27  
 Special installation lengths / vessel adaptations

## OPTIONS:

all metallic materials for the housing design in accordance with German Technical Instructions on Air Quality Control (TA-Luft)

## TEMPERATURE RANGE:

Standard: -10 °C to +180 °C / -14 °F to +356 °F  
 maximum temperature up to 450 °C / 842 °F

## TYPICAL APPLICATION AREAS:

### Filling valves:

- Inlet and discharge valves
- Pipe valves with large nominal diameters

### Replacement:

for valves with inflatable seals made from elastomers at high operating temperatures and wear requirements

### Operating media:

Dust, ash, flue ash, dry and moist residues in pneumatic conveyance, slag discharge