



## High Performance Fluid Handling

GESTRA Control Valves with ZK Radial Stage Nozzle®  
for Power Station and Plant Engineering

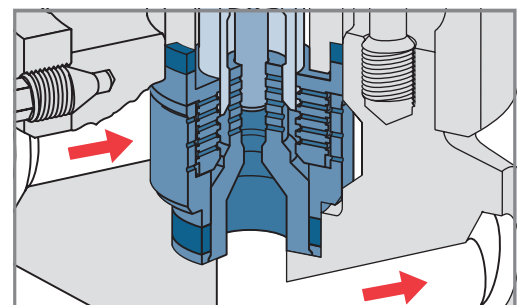
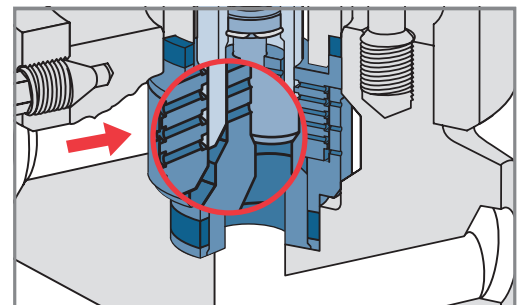
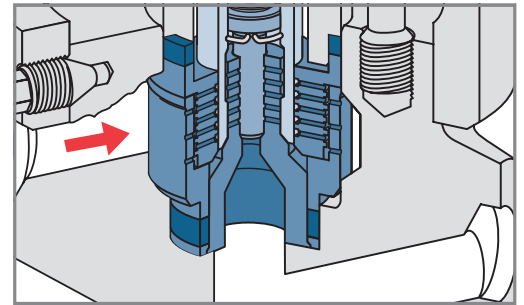
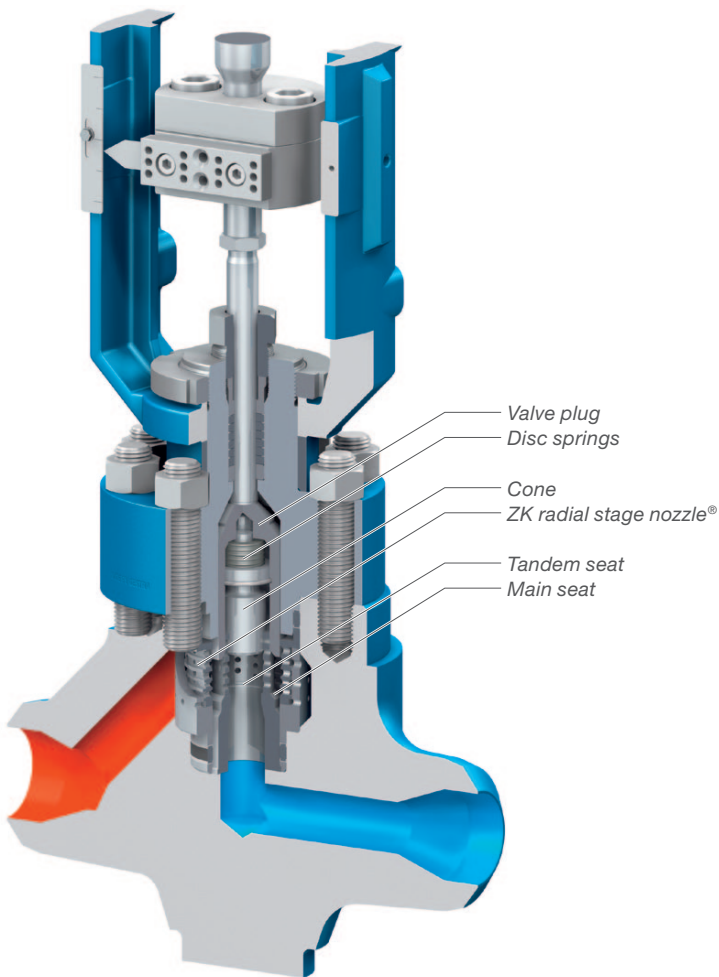


Engineering steam performance

# ZK 313 Control Valve

with tandem seat and ZK radial stage nozzle®

GESTRA control valves with ZK radial stage nozzle® prove their excellence in tough conditions in water and steam circuits. These control valves seal tightly and are therefore the first choice for overcoming leakage and wear problems. The multi-stage pressure reduction and specially designed interior valve parts ensure maximum reliability and a long service life.

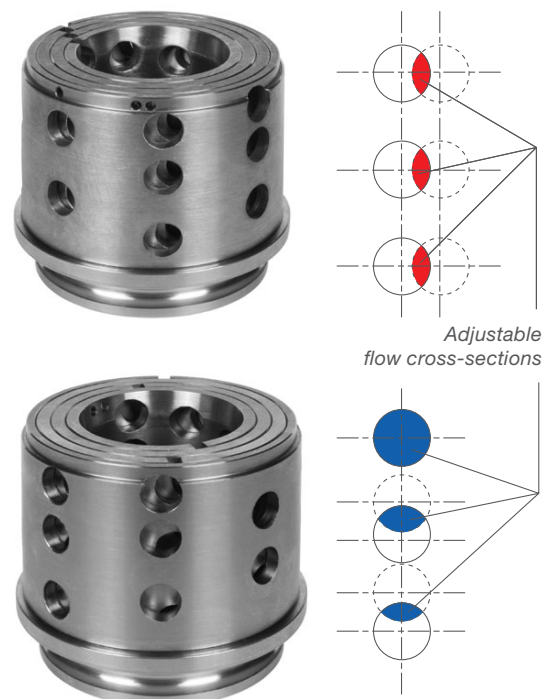
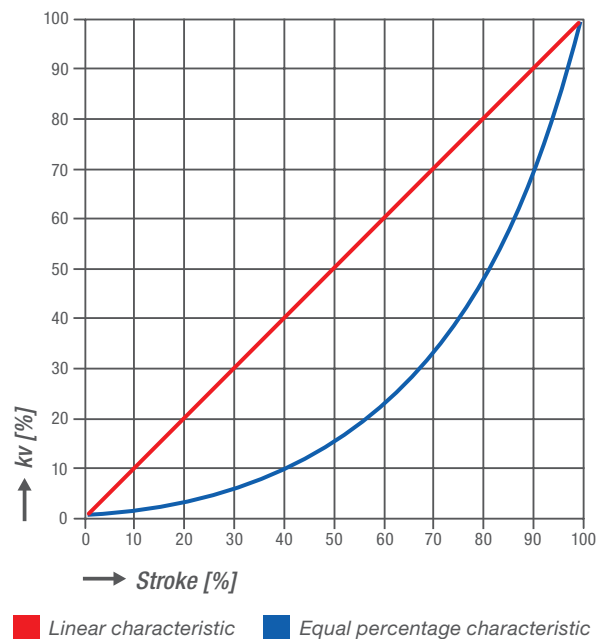
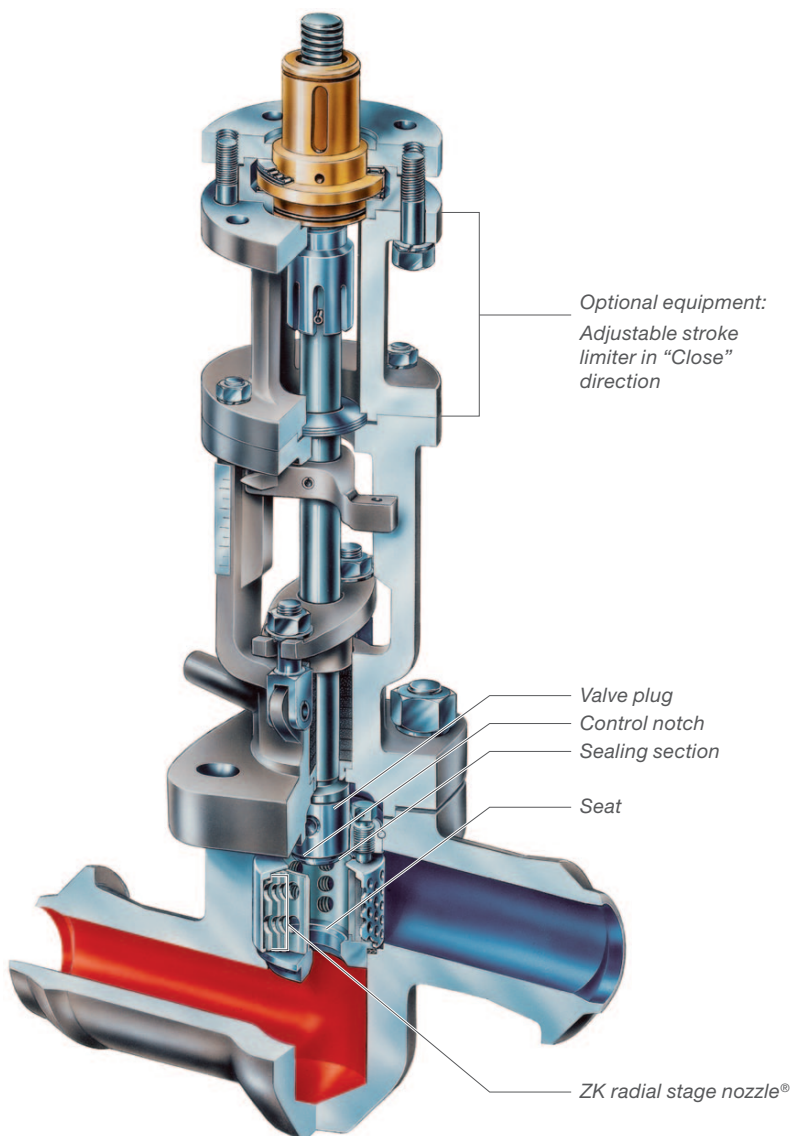


## Special features

- No loss of energy due to leakage
- Less system downtime
- Increased productivity
- Safe operation (suitable for SIL 2 and 3)
- Just one valve for closing and controlling
- Low noise

# ZK 29 Control Valve

## with adjustable ZK radial stage nozzle®



### Special features

- No loss of energy due to leakage
- Reduced system downtime
- Increased productivity
- Safe operation due to SIL 2 and SIL 3 rating
- Just one valve for closing and controlling
- Adjustable Kvs values and characteristics ensure high flexibility
- Low noise

# Market and usage

These valves are used in power plants and high-pressure steam and water systems in refineries, the chemicals industry, and in industry in general. Some typical uses are:

- Steam control systems for > 30 bar
- Injected water control systems in steam coolers
- Feedwater control systems
- Draining and heating steam turbines, boilers and steam pipe systems
- Continuous blowdown in steam boilers

## Technical data

### ZK 313 with tandem seat and ZK radial stage nozzle®

|                                    |  |
|------------------------------------|--|
| <b>Pressure rating</b>             | PN 630 and CI 2500   |
| <b>Nominal sizes</b>               | DN 25 – DN 150   |
| <b>Max. differential pressure</b>  | 300 bar and 370 bar  |
| <b>Max. operating temperatures</b> | 620 °C   |
| <b>Kvs values</b>                  | 1.0 m³/h to 17 m³/h  |
| <b>Forged materials</b>            | 1.0460/A105<br>1.5415<br>1.7383/F22<br>1.4903/F91  |
| <b>Body design</b>                 | Straight through, angle, Z-pattern   |
| <b>Connections</b>                 | Butt-weld ends<br>Socket-weld ends<br>Flanged end DIN/ASME   |
| <b>Types of actuation</b>          | Handwheel<br>Pneumatic diaphragm actuator<br>Electric rotary actuator<br>Electric linear actuator<br>Hydraulic cylinder<br>Lever with part-turn actuator |
| <b>Leakage rates</b>               | A to EN 12266-1<br>Class VI to ANSI FCI 70-2-2006  |

### ZK 29 with adjustable ZK radial stage nozzle®

|                                       |  |
|---------------------------------------|--|
| <b>Pressure rating</b>                | PN 160 and CI 900  |
| <b>Nominal sizes</b>                  | DN 25 – DN 150   |
| <b>Max. differential pressure</b>     | 100 bar  |
| <b>Max. operating temperatures</b>    | 550 °C   |
| <b>Kvs values</b>                     | 0.7 m³/h to 130 m³/h   |
| <b>Forged material (DN 25 and 50)</b> | 1.7335/F12   |
| <b>Cast material (DN 80-150)</b>      | 1.7357/WC6   |
| <b>Body design</b>                    | Straight through, angle  |
| <b>Connections</b>                    | Butt-weld ends<br>Socket-weld ends<br>Flanged end DIN/ASME   |
| <b>Types of actuation</b>             | Handwheel<br>Pneumatic diaphragm actuator<br>Electric rotary actuator<br>Electric linear actuator<br>Hydraulic cylinder<br>Lever with/without part-turn actuator |
| <b>Leakage rates</b>                  | A to EN 12266-1<br>Class VI to ANSI FCI 70-2-2006  |

#### GESTRA AG

Münchener Str. 77 · 28215 Bremen · Germany Tel. +49 421 3503-0 info@de.gestra.com  
P. O. Box 10 54 60 · 28054 Bremen · Germany Fax +49 421 3503-393 www.gestra.com

819647-00/06-2018gw (808999-00) · © 2018 · GESTRA AG · Bremen · Printed in Germany · Subject to technical modifications

