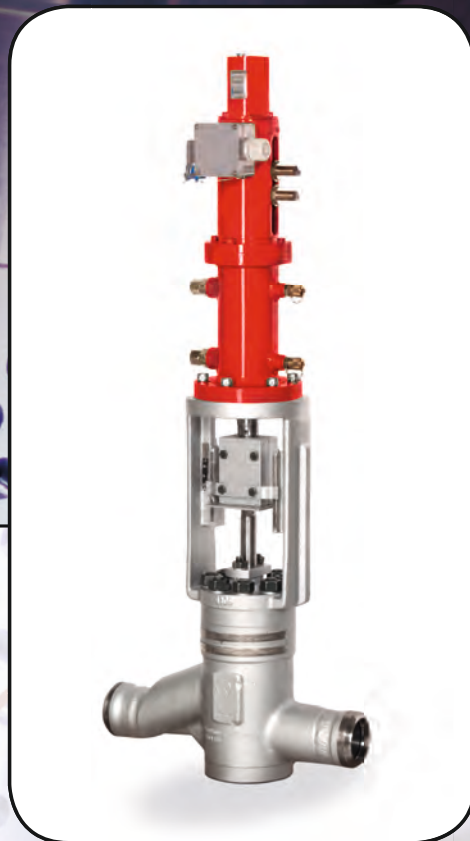


WELLAND & TUXHORN AG

ARMATUREN- UND MASCHINENFABRIK



Control Valves Typ RVG
for Power Stations and Industrial Plants

Type RVG

Function - just as you like

Optimal designed control valves increase availability of the whole plant

The processes of steam generation and steam consumption are subject to precisely defined operating parameters. These processes are controlled by control elements which receive signals and commands from the instrumentation and control technology.

These control elements are flow control valves, i.e. they regulate the mass flow rate required at the point of consumption. The maximum possible pressure differential determines the required number of pressure-reduction stages. Through a precise calculation of the cross sections of flow, the desired reduction in pressure is achieved. An almost 100% implementation of these theoretical values is achieved through the manufacture of precision drilled cylinders. Before the start of manufacture, the various hole diameters are determined with the aid of a computer program which also takes into consideration both the calculated cross section of flow and the desired opening characteristic. This therefore guarantees the necessary flow characteristics. In the case of single-stage pressure reduction, the spindle with control edge (1) regulates the mass flow through the drilled cylinder (2). In the case of two-stage pressure reduction, the spindle has an extension in the form of a drilled cylinder (3) with corresponding, drilled cross section.

An extension to the seat (4) in the form of a drilled cylinder, and the undrilled extension of the spindle with drilled throttle body, controls the three-stage pressure reduction.

At our works, each seat is ground in with the spindle, by hand. This guarantees the best possible seal. The design of the

components allows convenient servicing and, with easily replaceable internal parts, erosion and local cavitation are prevented.

This means that you also benefit from the reduced-costs of economical maintenance. Due to the high demands placed upon them, these valves are made from forged steel using a drop-forging process, i.e. they are suitable for high-pressure applications.

For extremely high differential pressures we also manufacture to special order, versions with 4 to 10 stages. Please contact us to discuss your requirements with our engineers and technicians.

Areas of Application

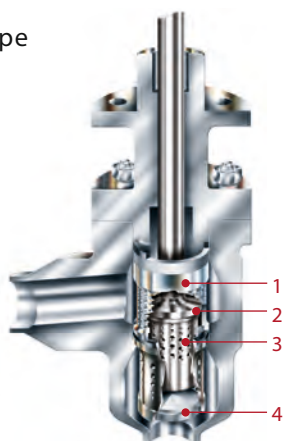
In Power Stations:

- At the boiler as injection valves together with the injection unit (HP and cold reheat line side)
- At HP-Bypass-Stations as cooling water control valves
- At LP-Bypass-Stations as cooling water control valves
- As level control valves for tanks and vessels

In the Industry:

- At steam converting stations and atomizing steam coolers
- as cooling water control valves
- As pressure and flow control valves in the chemical and petrochemical industry
- As level control valves for tanks and vessels

Angle Type



Globe Type





Variability

Actuator selection:
electric, hydraulic,
pneumatic

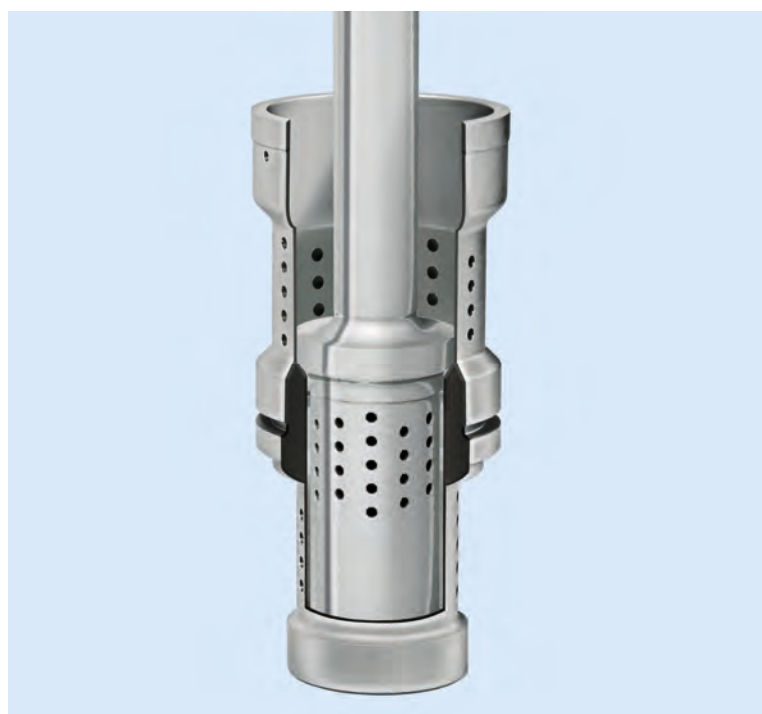


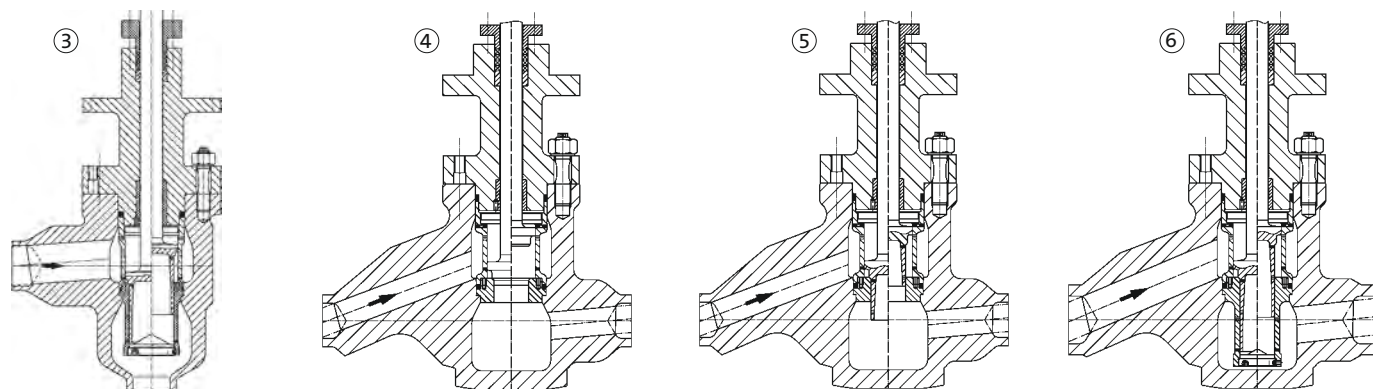
Technical engineering at the highest level

Precise manufactured throttle cylinders provide almost
100 % implementation

High availability

- multistage pressure drop
- adapted for the operating conditions
- no cavitation
- low noise level
- no vibrations
- long lifetime
- precise characteristics
- convenient servicing in the field due to suitable design and easily replacable internal parts





pe – for water and steam

7457									7458						35671							
8	10	12	15	20	25	32	40	50	40	50	65	80	80	90	110							
15	15	20	20	25	25	35	35	35	35	50	50	60	75	75	75							
0,45	0,9	1,2	1,8	4,1	6,9	10,5	14	25	32	25	30	36	43	53	56	70	87	120	95	130	130	165
0,15	0,3	0,4	0,6	1,4	2,4	3,8	5,6	10	12,8	10	12,8	15,7	17,7	22,6	22,6	29	38,2	50	38,2	56,7	56,7	72
25	25-40	25-40	25-50	25-50	25-50	25-65	32-65	40	50-65	65-100	65	80-100	65-100	80-100	80	100	100	125-150	100	125-150	125	150
1"	1"-1,5"	1"-1,5"	1"-2"	1"-2"	1"-2,5"	1,25"-2,5"	1,5"	2"-2,5"	2,5"	2,5"-4"	2,5"	3"-4"	3"-4"	3"-4"	3"	4"	4"	(5")-6"	4"	(5")-6"	(5")	6"
400	400	400	400	400	400	400	400	400	400	400	400	400	400	250	250	160	400	400	400	400	400	250
2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	1500#	1500#	1500#	2500#	2500#	2500#	2500#	1500#	1500#

pe – for water and steam, for steam with reduced kV-values

7457									7458						35671					
8	10	12	15	20	25	32	40	50	40	50	65	80	80	90	100	110	120			
15	15	20	20	25	25	35	35	35	35	50	50	60	75	75	75	75	75			
0,32	0,63	0,85	1,2	2,9	5,2	8	13	22	13	22	34	43	56	54	60	76	92	111	128	
0,15	0,3	0,4	0,6	1,4	2,4	3,8	6,2	10,6	6,2	10,6	17,7	22,6	29	29,6	29,6	38,6	48,9	58	70	
25	25-40	25-40	25-50	25-50	25-65*	32-65*	40-65*	50-65*	65-100	65-100	65-100	80	100	100	125-150*	100-150*	125-150*	125-150*	150	
1"	1"-1,5"	1"-1,5"	1"-2"	1"-2"	1"-2,5"	1,25"-2,5"	1,5"-2,5"	2,5"	2,5"-4"	2,5"-4"	2,5"-4"	3"	4"	4"	(5")-6"	4"-6"	(5")-6"	(5")-6"	6"	
400	400	400	400	400	400/250*	400/250*	400/250*	400/250*	160	160	160	160	160	400	400/320*	400/320*	400/320*	250	250	
2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	1500#	2500#	2500#	2500#	2500#	1500#	2500#	1500#

pe – only for water

7457									7458						35671					
8	10	12	15	20	25	32	40	40	50	65	80	80	90	100	110	120				
15	15	20	20	25	25	35	35	35	50	50	50	75	75	75	75	75				
0,27	0,54	0,72	1	2,5	5,2	7	11	11	18	30	48	49	48	52	66	81	97	114		
0,15	0,3	0,4	0,6	1,4	2,4	3,8	6,2	6,2	10,6	17,7	22,6	29	29,6	29,6	38,6	48,9	58	70		
25	25-40	25-40	25-50	25-50	25-65*	32-65*	40-65*	65-100*	65-100*	65-100*	80	100	100	125-150*	100-150*	125-150*	125-150*	150		
1"	1"-1,5"	1"-1,5"	1"-2"	1"-2"	1"-2,5"	1,25"-2,5"	1,5"-2,5"	2,5"-4"	2,5"-4"	2,5"-4"	3"	4"	4"	(5")-6"	4"-6"	(5")-6"	(5")-6"	6"		
400	400	400	400	400	400/250*	400/250*	400/250*	400/160*	400/160*	400/160*	250	160	400	400/320*	400/320*	400/320*	250	250		
2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	2500#	1500#	1500#	2500#	2500#	2500#	2500#	1500#	1500#		

* This nominal diameter is available only for this nominal pressure () unusual size

¹ Technical alteration reserved.

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Made In Germany

You will get a top product made by German valve specialists

Our Philosophy

As Westphalian traditional company for over 100 years we count on the values of this down-to-earth region: durability, reliability, and diligence. Thus, the development and production of Welland & Tuxhorn is governed by maximum precision, quality of workmanship and a high level of reliability.

Our Quality

The constantly high product quality is the result of a reasoned concept: We have implemented a multitude of quality assurance measures: Beginning with the continuous checking of drawings and manufacturing, followed by strict material inspections, surface crack detection, radiographic testing and ultrasonic testing, and ending with final pressure and tightness tests, supported by corresponding docu-

mentation. We fulfil all regulations according to DIN, EN, VdTÜV, AD-2000, TRD and also foreign regulations and standards as ASME, ANSI, IBR, and RTN. Our quality assurance system is approved according to the following regulations: DIN EN ISO 9001: 2000, Guide line 97/23 EG (PED), KTA 1401 und ASME. Our control valves have been tested and approved by all well-known acceptance authorities, such as TÜV, German Lloyd, Brit. Lloyd, Lloyd's Register of Shipping and Norske Veritas.

Our Service

After delivery, an experienced team of service engineers will be ready to provide assistance during the start-up period, or to carry out routine inspections. Since our overhauling department is integrated in the manufacturing department, these findings will be incorporated into new design innovations.