

Single Seat Control Valve

Control Valve

Exact process control

The multi-purpose applicable single-seat control valves made by KIESELMANN are available both in linear and equal-percentage version. The fittings are based upon the hygienic and proven concept of the KIESELMANN KI-DS valves and that's why they are suitable for sensitive production fields of the food and beverage industry.

The modular design with the large nominal width range of between DN 25 and DN 125 and the functionally graded flow coefficients offers a maximum degree of flexibility and the right valve for each application.

Of course, all usual connection variants can be adapted. Whether the control characteristic is linear or of equal percentage, whether the seal is soft or metallic, KIESELMANN control valves guarantee a safe and exact process control at any time.

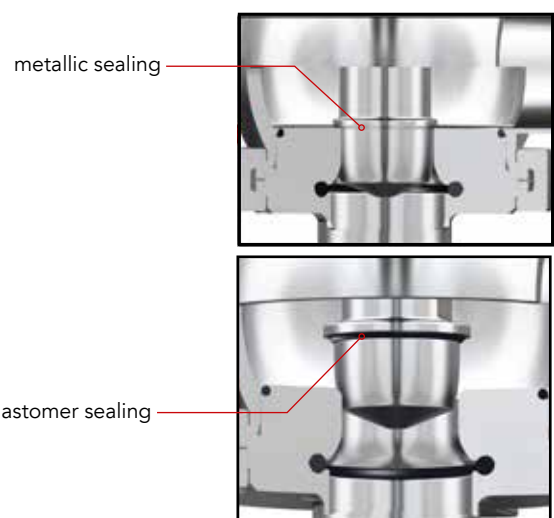
Advantages for your plant

- ▶ Flexible replaceable seat concept thanks to clamp connection
- ▶ Linear or equal-percentage control
- ▶ Easy adaptation

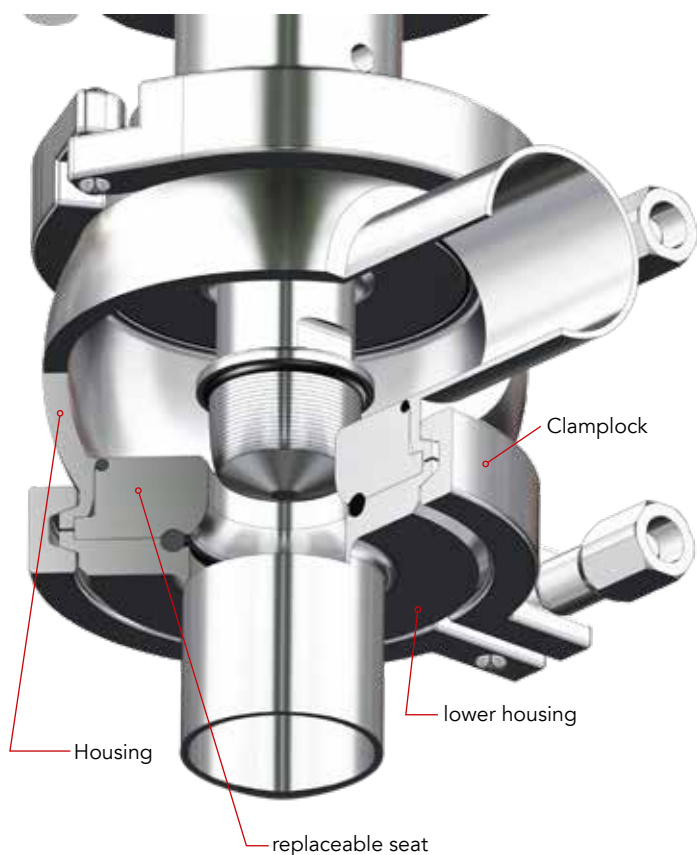


Flexible owing to replaceable seat concept

The essential function feature of this valve series is the hygienically designed replaceable seat concept. It allows in a very simple way the adaptation to changing process conditions, without having to carry out complex modification measures. The plug and seat can be replaced and re-assembled with very little effort. Thus it is possible, for instance, to retrofit the soft or metallic sealing variants without any problems.



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GENERAL DATA

Series:	51xx
Size:	DN 25–125
Pressure step:	PN 16
Permissible temp. of media:	0°–100° C
Cleaning (CIP):	85° C
Sterilisation (SIP):	140° C
Shape characteristics:	linear, equal percentage
Position ratio:	50:1
Shape of housing:	Angular shape, T shape, Y shape. Further connection shapes are available upon request..
Housing connections:	Welding end EN 10357, Serie A DIN 11866, Reihe C Flange connection DIN 11853-2 DIN 11864-2 Clamp connection DIN 11853-3 DIN 11864-3 Further connection shapes are available upon request.
Pipe classes:	Metric to EN 10357 OD to DIN 11866 series C
Surfaces:	In contact with product: Ra ≤ 0,8 µm housing electro-polished
Shape of plug:	Parabolic plug
Seat seal:	Soft or metallic
Leakage classes	
soft seal:	FCI 70-2, Class VI
metal seal:	FCI 70-2, Class IV (0,01% of K _{V5})
Spindle seal:	EPDM, HNBR, FKM, FDA, regulation (EC) 1935/2004
Actuator options:	Piston actuator, diaphragm actuator, manual transmission

K_V-Values and respective nominal widths

K _V	0.4	1.0	1.6	2.5	4	7	10	18	26	40	52	68	85	100	120	160			
C _V	0.5	1.2	1.9	2.9	4.7	8.1	12	21	30	47	60	79	99	120	140	186			
Seat-Ø [mm]	6		12			22		31		46		60		72		95		120	
Piston [mm]	20								27										
DN	NPS*	● - Standard programme ○ - upon request																	
25	1"	●	●	●	●	●	●	●											
40	1 ½"				●	●	●	●	●										
50	2"						●	●	●	●									
65	2 ½"							●	●	●	●	●							
80	3"								●	●	○	●	●	●					
100	4"									●	○	●	○	●	●				
125	-														●	○			●

* Special size acc. to DIN 11866. series C

