

# Control Valves

## Series 2000

Heavy Duty valve 2 way



### Technical data

Size (DN)	DN 15 — 200
Pressure rating	PN16, PN40 ANSI 300
Connections	Flanges UNI/DIN PN16, PN40 Flanges ANSI 300
Type sealing	Metallic (Class IV - V), Soft (Class VI)
Characteristic Action	Equalpercentage (eqp%) Pneumatic with diaphragm (supply max 3,5 bar)
Temperature	from -196 to +350 °C

### Description

The Series 2000 “Heavy Duty” control valve offers superior performance in nearly all types in liquid and gaseous services within a wide temperature range. Due to the modular body construction the valves can easily be upgraded to special applications. The Series 2000 is the industry choice for a reliable and tough control valve. All Burocco valves are delivered after testing and calibration and ready for a long utilize, without maintenance.

### Options

- ⇒ Characteristic linear
- ⇒ Soft seal
- ⇒ High temperature extension (finned bonnet)
- ⇒ Extension (- 60 / - 100 °C)
- ⇒ Cryogenic extension (- 196 °C)
- ⇒ Bellows seal (double wall PN16, triple wall PN40)
- ⇒ Flanges can be drilled to ANSI 150 but  
with face to face and rating according to DIN
- ⇒ Full stainless steel actuator for corrosive environment
- ⇒ 3-way (mixing or diverting) valves (see brochure 2003)
- ⇒ Low Noise
- ⇒ Stroke limiter
- ⇒ Handwheel for emergency operation
- ⇒ Valve positioners
- ⇒ Limit switches
- ⇒ Position feedback
- ⇒ Airset
- ⇒ Electric linear actuators  
(230 V AC, 110/115 V AC, 24 V AC/DC)

### Flow rate coefficient (CV)

DN	CV					
	4	2,5 - 1,5	1 - 0,5	0,3 - 0,1	-	-
15	4	2,5 - 1,5	1 - 0,5	0,3 - 0,1	-	-
20	7	4	2,5 - 1,5	1 - 0,5	0,3 - 0,1	-
25	12	7	4	2,5 - 1,5	1 - 0,5	0,3 - 0,1
32	18	12	7	4	2,5 - 1,5	1 - 0,5
40	28	18	12	7	4	2,5 - 1,5
50	48	28	18	12	7	4
65	72	48	28	18	-	-
80	105	72	48	28	-	-
100	160	105	72	48	28	-
125	210	160	105	72	-	-
150	300	210	160	105	-	-
200	600	300	210			

# Control Valves

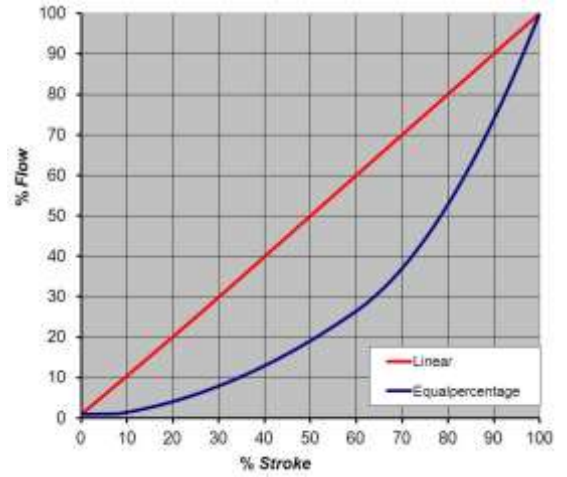
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Heavy Duty valve 2 way



Materials	
Valve body*	Nodular cast iron GGG 40 (PN16) Carbon steel ASTM A216WCB Stainless steel ASTM CF8M
Trim (plug - seat)	316L / 17-4PH / 316L+Stellite / Hastelloy / Monel
Stem	316L / Hastelloy / Monel
Packing	PTFE, PTFE/CG, graphite, special
Body gasket	SIL C4500, SLS 100C, PTFE, special
Acuator	FE (epoxy varnish) Stainless steel
Yoke	GGG 40 (epoxy varnish) Stainless steel

Control characteristic

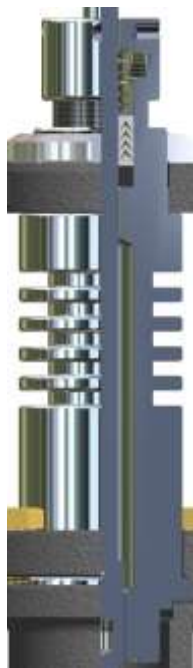


\* Special body material on request

### Bonnet specifications (temperatures limit employment )



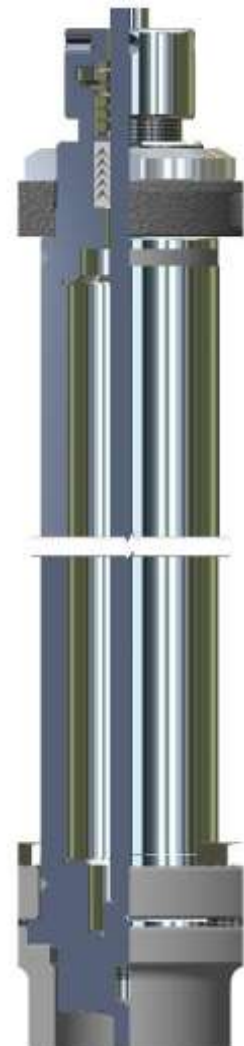
Standar (-30°C / +250 °C)



Finned (-30°C / +350 °C)



Bellows (-100°C / +350 °C)



Criogenic (-196°C / +180 °C)

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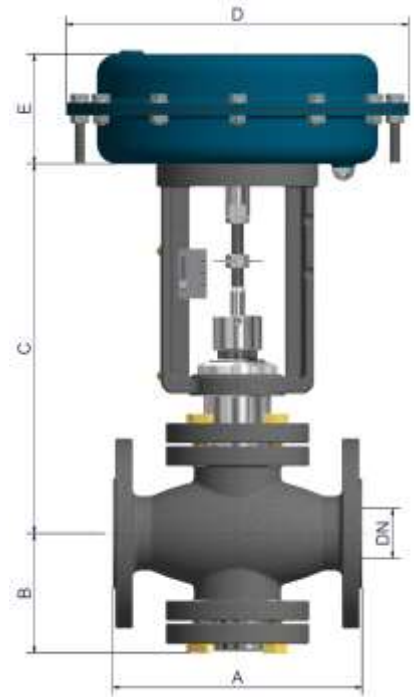
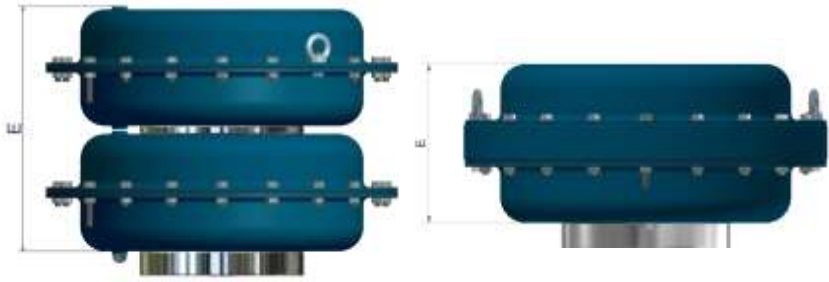
## Series 2000

Heavy Duty valve 2 way



Dimensions (mm) and weight (kg) serie 2000 - UNI/DIN PN16/40 ANSI 150

Special actuator double for DN100/150      Actuator S.430 HP



Actuator S430	S430HP DN150	S430 DOUBLE DN150	S.430 DN100 DOUBLE
E	200	390	270
Indicative weight only actuator	40	70	45

### Dimensions

DN	A	B	C						D	E
			Standard	-60 °C (extension)	-100 °C (extension)	-200 °C (criogenic)	High.Temp. (finned)	Bellows		
15	130	96	297	359	434	729	382	403	205 / 275	88 / 100
20	150	96	297	359	434	729	382	403	205 / 275	88 / 100
25	160	96	297	359	434	729	382	403	205 / 275	88 / 100
32	180	96	297	359	434	729	382	403	275 / 340	100 / 135
40	200	96	297	359	434	729	382	403	275 / 340	100 / 135
50	230	100	297	359	434	729	382	403	275 / 340	100 / 135
65	290	137	333	395	470	765	418	439	340 / 430	135
80	310	137	333	395	470	765	418	439	340 / 430	135
100	350	159	350	412	487	782	435	456	430	135
125	400	233	495	-	642	990	642	737	430 / 430HP	160 / 200
150	480	233	495	-	642	990	642	737	430 / 430HP	160 / 200
200	600	295	670	On request	On request	On request	On request	On request	600	380

### Indicative weight\*

DN	15	20	25	32	40	50	65	80	100	125	150	200
kg	17 / 20	18 / 21	19 / 22	24 / 30	25 / 31	31 / 37	55 / 61	59 / 65	80	130	185 / 193	430

Extra weight with bonnet extension				
DN	-60 / -100 °C	-200 °C	High Temp.	Bellows
15-50	+ 2	+ 3,5	+ 1	+ 1,5
65-100	+ 2	+ 4	+ 3	+ 2
125-150	+ 5	+ 15	+ 10	-
200	On request	On request	On request	On request

\* without positioner, airset or other accessories

KLINGER reserves the right to make improvements without prior notice 12/16

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## Series 2000

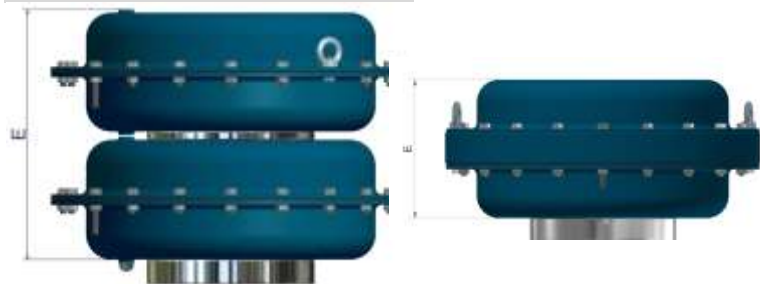
Heavy Duty valve 2 way



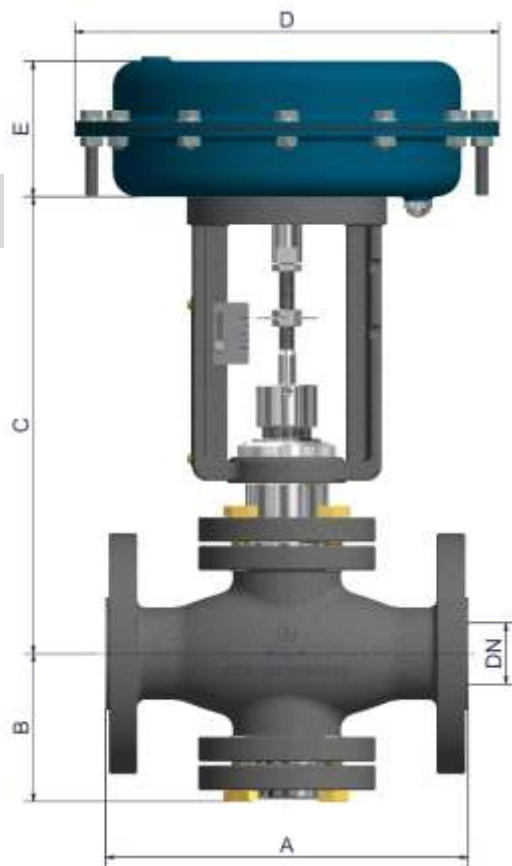
### Dimensions (mm) and weight (kg) serie 2000 - ANSI 300

Special actuator double for DN125/150

Actuator S.430 HP



Actuator S430	S430HP DN150	S430 DOUBLE DN150	S.430 DN100 DOUBLE
E	200	390	270
Indicative weight only actuator	40	70	45



### Dimensions

DN	A	B	C						D	E
			Standard	-60 °C	-100 °C	-200 °C	High.Temp.	Bellows		
25	197	96	297	359	434	729	382	403	205 / 275	88 / 100
40	235	96	297	359	434	729	382	403	275 / 340	100 / 135
50	267	100	297	359	434	729	382	403	275 / 340	100 / 135
80	318	137	333	395	470	765	418	439	340 / 430	135
100	368	159	350	412	487	782	435	456	430	135
150	473	233	495	-	642	990	642	737	430 / 430 <sub>HP</sub>	160 / 200
200	568	295	670	On request	On request	On request	On request	On request	600	380

### Indicative weight\*

DN	25	40	50	80	100	150	200
kg	19 / 22	25 / 31	32 / 38	60 / 66	82	195 / 203	440

### Extra weight with bonnet extension

DN	-60 / -100 °C	-200 °C	High Temp.	Bellows
25-50	+ 2	+ 3,5	+ 1	+ 1,5
80-100	+ 2	+ 4	+ 3	+ 2
150	+ 5	+ 15	+ 10	On request
200	On request	On request	On request	On request

\* without positioner, airset or other accessories