

Control Valves

Series 3000

Low Flow Valves

Technical data

Size (DN) DN 10—50 (1/4" - 2")
 Pressure rating UNI/DIN PN16-100, ANSI 150-600# Connections
 Flanges UNI PN16-100; Flanges ANSI 150-600#
 Threaded G, NPT; Welded BW, SW; Clamp
 Type sealing Soft (Class VI), metallic (Class IV - V - VI)
 Characteristic Equalpercentage (eqp%)
 Action Pneumatic with diaphragm (supply max 3 bar)
 Temperature -196 to +350 C

Description

Burocco Series 3000 "low flow" control valves are designed for precise controlling. The body is manufactured from bar stock stainless steel or special alloys and is easily adapted to meet application requirements. Cryogenic, high temperature or bellows sealed designs are available and can be delivered with very short delivery times. All Burocco valves are delivered as tested units and ready for a long lasting, maintenance free operation.

Low Cv values down to 0.01 with reproducible trim characteristics.

Options

- ⇒ Characteristic linear
- ⇒ High temperature extension (finned bonnet)
- ⇒ Extension (- 100°C)
- ⇒ Cryogenic extension (- 196 C)
- ⇒ Bellows seal (double wall PN16, triple wall PN40)
- ⇒ Full stainless steel actuator for corrosive environment
- ⇒ 3-way (mixing or diverting) valves (see brochure 3003)
- ⇒ Special alloys for body: Hastelloy, Duplex, Monel
- ⇒ Special rating PN160/250
- ⇒ Stroke limiter
- ⇒ Handwheel for emergency operation
- ⇒ Valve positioners
- ⇒ Limit switches
- ⇒ Position feedback
- ⇒ Airset
- ⇒ Electric linear actuators (230 V AC, 24 V AC/DC)
- ⇒ Hand operating (manual)
- ⇒ Pneumatic with piston actuator (service ON/OFF)



Flow rate coefficient (CV)

DN	¼" (10)	½"(15)	¾"(20)	1" (25)	1½" (40)	2" (50)
CV	-	-	-	-	-	48
	-	-	-	-	28	28
	-	-	-	-	18	18
	-	-	-	12	12	12
	-	-	7	7	7	7
	-	4	4	4	4	4
	2,5	2,5	2,5	2,5	2,5	2,5
	2	2	2	2	2	2
	1,5	1,5	1,5	1,5	1,5	1,5
	1	1	1	1		
	0,8	0,8	0,8	0,8		
	0,5	0,5	0,5	0,5		
	0,3	0,3	0,3	0,3		
	0,2	0,2	0,2	0,2		
	0,1	0,1	0,1	0,1		
	0,08	0,08	0,08	0,08		
	0,06	0,06	0,06	0,06		
	0,05	0,05	0,05	0,05		
	0,03	0,03	0,03	0,03		
	0,02	0,02	0,02	0,02		
0,01	0,01	0,01	0,01			

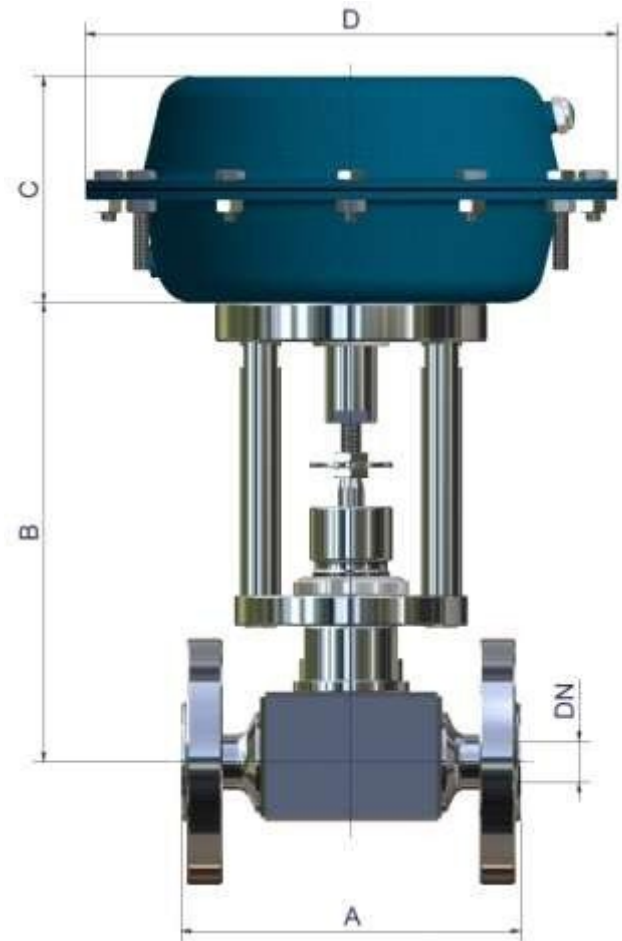
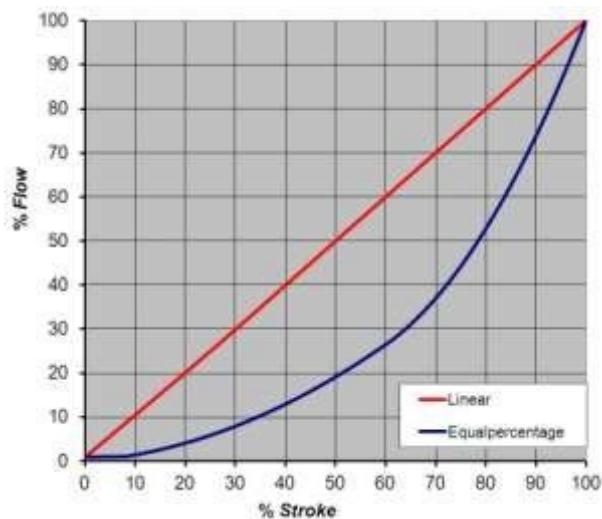
Control Valves

Series 3000

Low Flow Valves

Materials	
Valve body	316L
Trim (plug - seat)	316L / 17-4PH / 316L+Stellite / Hastelloy / Duplex / Monel
Steam	316L / Hastelloy / Duplex / Monel
Packing	PTFE, PTFE+'OR' FPM, special
Body gasket	PTFE, SIL C4500, special
Acuator	FE (epoxy varnish), stainless steel
Yoke	Stainless steel

Control characteristic



Dimensions Series 3000 face-to-face (mm)

DN	A Flanged valves					A Threaded / welding valves			
	DIN PN		ANSI CLASS			DN	G / NPT Female	BW	SW
	16-40	63-100	150	300	600				
15	130	210	178	190	203	¼" - ½"	112	124	124
20	150	230	181	194	206	¾"	142	145	142
25	160	230	184	197	210	1"	142	155	142
40	200	260	222	235	251	1 ½"	190	194	190
50	230	300	254	267	286	2"	190	224	190

Control Valves

Series 3000

Low Flow Valves

End connections

Flanges UNI/DIN - ANSI



Threaded GAS - NPT



Welded BW



Welded SW



Clamp ISO



DIN 11851 (male)



DIN 11851 (female)



Special (on request)

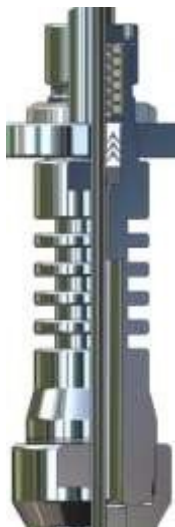
Bonnet specifications (temperatures limit employment)



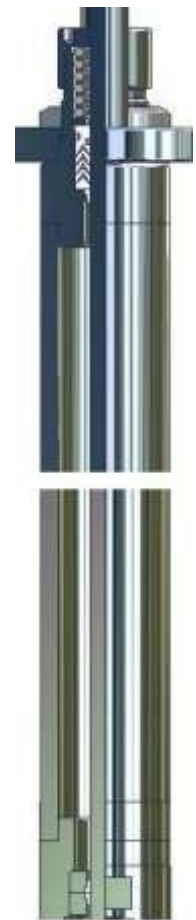
Standars (-30°C / +250 °C)



Bellows (-100°C / +250 °C)



Finned (-30°C / +350 °C)



Cryogenic (-196°C / +180 °C)

Control Valves

Series 3000

Low Flow Valves

Dimensions Series 3000 (mm)

B at different bonnet designs						
DN		Standard	-100 °C (extension)	-200 °C (criogenic)	High Temp. (finned)	Bellows
15	¼" - ½"	180	305	660	305	300
20	¾"	190	310	665	310	305
25	1"	190	310	665	310	305
40	1 ½"	220	on request	on request	on request	405
50	2"	220	on request	on request	on request	405

Weight Series 3000 (kg) flanged valves (without actuator)

DN	Weight with standard bonnet					Extra weight with bonnet extension			
	PN16-40	PN63-100	ANSI 150	ANSI 300	ANSI 600	-100 °C	-200 °C	High Temp.	Bellows
15	5	6,5	5	5,5	6	+ 1	+ 3	+ 1	+ 1,5
20	7,5	8,5	7,5	7,5	8,5	+ 1	+ 3	+ 1	+ 1,5
25	8,5	9,5	8	8,5	9,5	+ 1	+ 3	+ 1	+ 1,5
40	15,5	on request	on request	on request	on request	on request	on request	on request	+ 3
50	18	on request	on request	on request	on request	on request	on request	on request	+ 3

Weight Series 3000 (kg) threaded, welded valves

DN	Weight with standard bonnet (without actuator)	Extra weight with bonnet extension			
		-100 °C	-200 °C	High Temp.	Bellows
¼" - ½"	3,5	+ 1	+ 3	+ 1	+ 1,5
¾"	5,5	+ 1	+ 3	+ 1	+ 1,5
1"	6	+ 1	+ 3	+ 1	+ 1,5
1 ½"	12	on request	on request	on request	+ 3
2"	13,5	on request	on request	on request	+ 3

Dimensions (mm) and weight (kg) Actuators

Actuator	C	D	Air connection	Weight (kg)
S-200	90	205	1/8" GAS FF	2,5
S-275	100	275	1/4" GAS FF	6
S-340	135	340	1/4" GAS FF	13
S-430	140	430	1/4" GAS FF	17