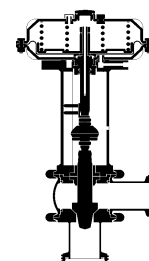


Technical Data Sheet

BIOVENT® Hygienic Control Valve



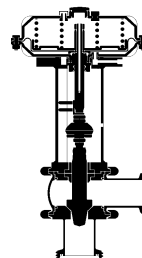
TD_391

General data

Series	391		
Nominal diameter (DN)	15 – 150 / OD1" – OD6" / IPS2" – IPS6"		
Nominal pressure (PN)	10 – 16 (other nominal pressures on request)		
Housing designs	Angle type	L	Parabolic plug
	Globe style	BO	Parabolic plug
	Globe style	BM	Parabolic plug, double guiding
	3-step	BP	3-step plug (P3)
	3-way	M-WM	Flow mixer
	3-way	T-WM	Flow divider
Body material	Material no. 1.4404 (all body components blasted and post-treated)		
Body connections	Thread connections, welded ends, flanged connections, clamp connections, aseptic flange connections (other connections on request)		
Piping classes	Metric in accordance with DIN 11850 Inch OD in accordance with ISO2037/BS 4825 Part 1 Inch IPS in accordance with Schedule 5		
Surfaces	Surfaces that come into contact with the product $Ra \leq 0.8 \mu m$, IPS $Ra \leq 1,2 \mu m$, matt-blasted outer surface		
Plug characteristic	Standard: equal percentage or linear		
Rangeability	40:1		
Seat leakage	Metal sealing: class IV (0.01% of kvs) Soft sealing: class VI		
Plug	Material no. 1.4571 (superfinished; guide surfaces also finish rolled)		
Seat	Material no. 1.4404		
Stem seal	EPDM sealing rings; temperature range: -40 to +135°C; FDA compliant. Resistance: 2 to 5% resistance to alkaline solutions and acids up to +85°C. Other materials (FKM, FFKM, HNBR etc.) available on request.		
Options	Sterile lock, optimum CIP conditions		
Certificate	Factory certificate in accordance with EN 10204-2.2		

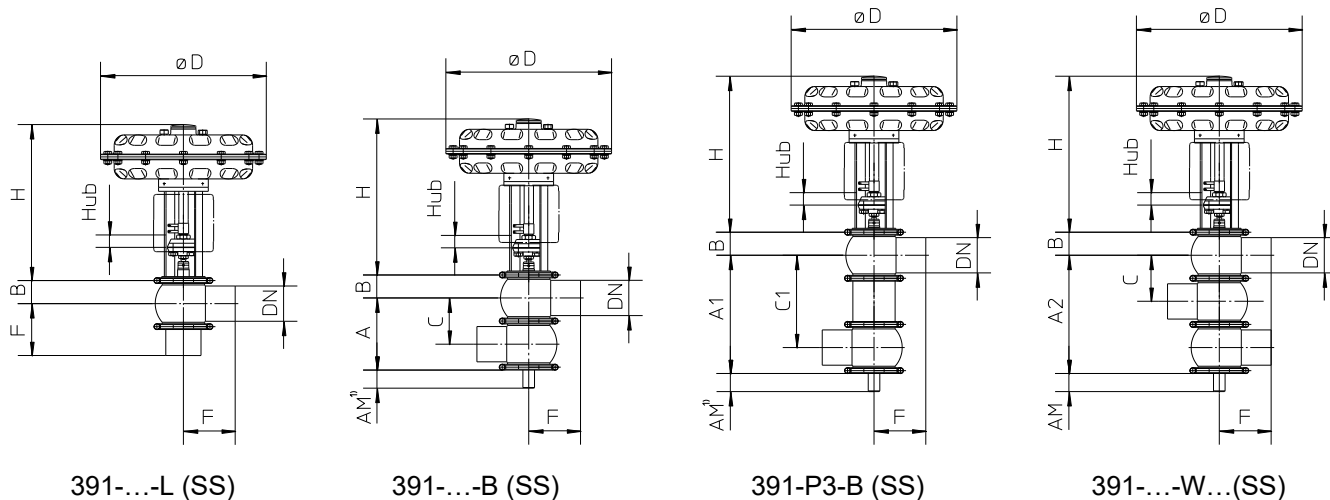
Technical Data Sheet

BIOVENT® Hygienic Control Valve



TD_391

Weight and dimensions



DN	Actuator	Stroke	ØD	H	B	F	A	A1	A2	AM ¹⁾	C	C1	Weight ²⁾
25	MFI-20	20	270	325	25	90	87	102	137	30	50	65	13,5
40	MFI-20	20	270	325	31	90	109	157	171	30	62	114	23,0
50	MFI-20	20	270	325	37	90	126	186	200	30	74	134	23,0
65	MFI-30 MFIII-30	30	270 400	355 387	48	125	154	234	250	40	96	171	23,0 38,0
80	MFI-30 MFIII-30	30	270 400	355 387	55,5	125	175	251	286	40	111	186	24,0 39,0
100	MFI-30 MFIII-30	30	270 400	355 387	65	125	205	295	335	40	130	215	27,0 42,0
125	MFIII-60	60	400	510	77,5	150	245	415	400	70	155	325	61,0
150	MFIII-60	60	400	510	77,5	150	245	415	400	70	155	325	61,0

SS = welded ends for piping compliant to DIN 11850

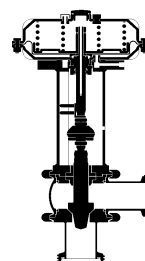
¹⁾ Dimension AM with double guide only.

²⁾ Weights refer to 391-P1-L angle valves with actuator without positioner.

With integrated ARCA positioners type 826 and 827A (standard); other positioners available on request.

Technical Data Sheet

BIOVENT® Hygienic Control Valve



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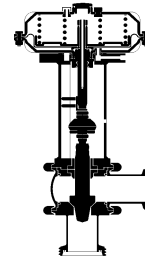
Maximum permissible differential pressures Δ (delta) p (bar), flow against the closing direction of the plug.

						DN	25	25	25	40	40	50	65	80	100	100	125	150	150
	DN	Actuator	Min. actuating pressure (ba)	No. of springs	Actuating force (kN)	V-ring ØN (mm)	17	17	29	29	36	46	54	68	77	96	105	121	143
						Seat Ø (mm)	11	16	19	24	32	37	48	62	73	90	96	115	135
						kv (m³/h)	2,5	4,0	7	11	18	26	43	68	100	150	260	260	380
Function: air to open – spring to close	25 to 50	MFI-20	2,0	3	2,4		25				23,5	16,9							
			3,5	6	4,8		25												
	65 to 100	MFI-30	2,0	3	2,4						20	16,9	9,1	4,7	3				
			3,5	6	4,8		20						12,6	8,7					
	65 to 100	MFIII-30	2,0	3	5						20		13,3	9,2					
			3,5	6	10						20								
			4,2	9	13						20								
			4,9	12	16						20								
	125 to 150	MFIII-60	2,0	3	5									9,2	5,6	4,5	3	2	
			3,5	6	10									10			7,8	5,5	
			4,1	9	12									10			9,8	6,9	
			4,8	12	14									10				8,2	
Function: air to close – spring to open	25 to 50	MFI-20	3,5	3	4,8		25												
			4,5		9,6		25												
			6,0		14,4		25												
	65 to 100	MFI-30	3,0	3	4,8						20		12,6	8,7					
			4,5		9,6						20								
			6,0		14,4						20								
	65 to 100	MFIII-30	3,0	3	10,8						20								
			4,5		21,6						20								
			6,0		32,4						20								
	125 to 150	MFIII-60	3,0	3	10,8									10			8,6	6	
			4,5		21,6									10					
			6,0		32,4									10					

Further KVS values available on request.

The differential pressures listed do not apply to valves with V-ring sealing element.

Technical Data Sheet BIOVENT® Hygienic Control Valve



TD_391

Type codes

	39	1	-P M T	1 3	-L B W T E C A	O M
Series						
1 = hygienic design						
P = parabolic plug						
M = mixer						
T = divider						
1 = 1-stage						
3 = 3-stage						
Does not apply to mixer and divider						
Housing design L						
Housing design B						
Housing design W						
Housing design T						
Housing design E						
Housing design C						
Housing design A						
O = removable floor panel without guide						
M = removable floor panel with guide						

Possible housing designs (all other housing designs on request):

