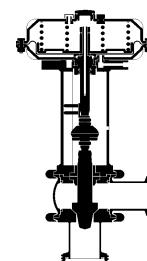


Technical Data Sheet

BIOVENT® Hygienic Control Valve

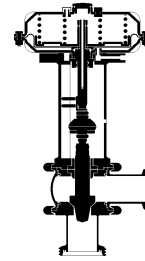


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General data

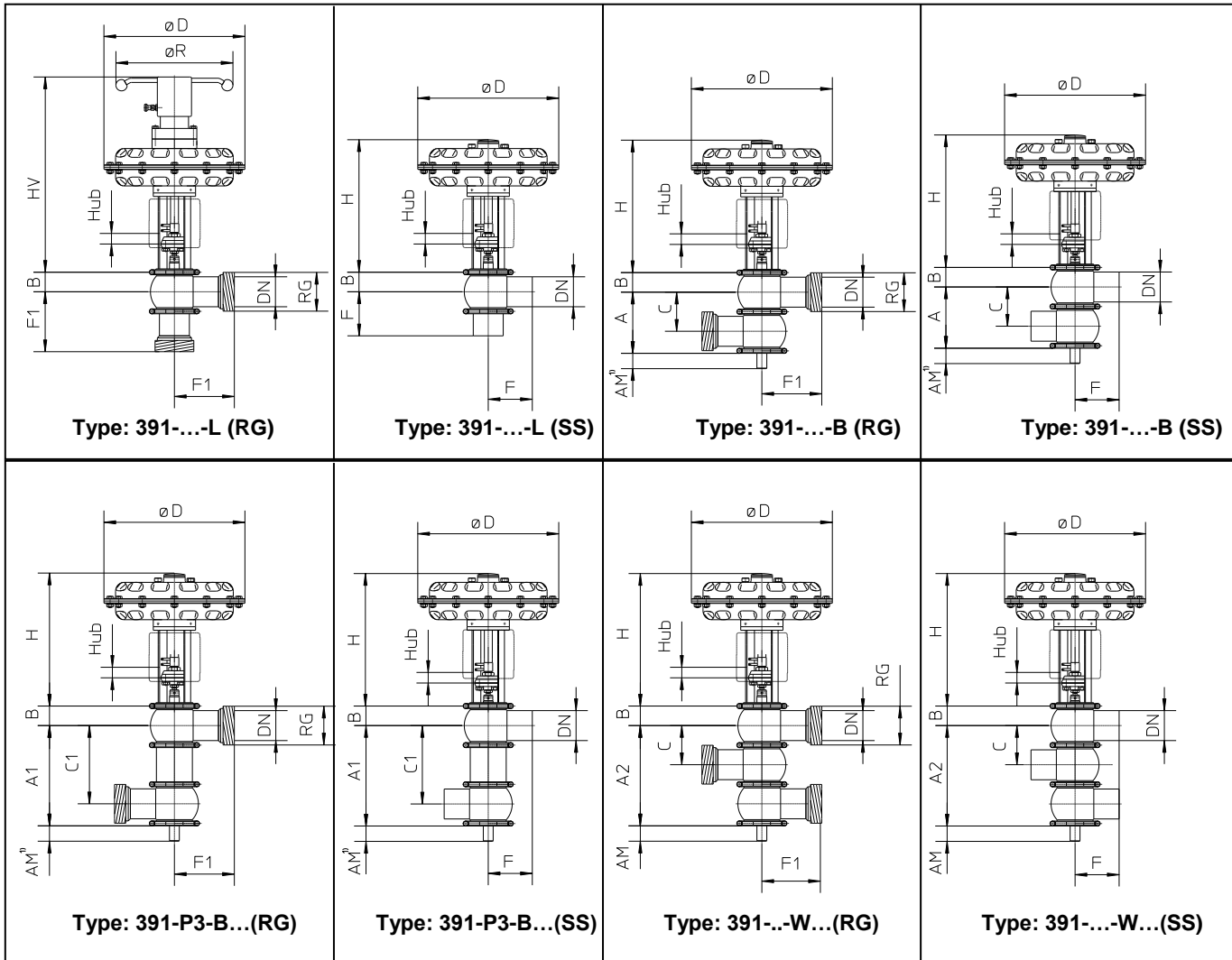
Series	391		
Nominal diameter (DN)	15 – 150		
Nominal pressure (PN)	10 – 25		
Housing designs	Angle type	L	Parabolic plug
	Globe style	BO	Parabolic plug
	Globe style	BM	Parabolic plug, double guiding
	3-step	BM	3-step plug (P3)
	3-way	M-WM	Flow mixer
	3-way	T-WM	Flow divider
Body material	Material no. 1.4404 (all body components blasted and post-treated) Thread connection 1.4301		
Body connections	Thread connections, welded ends, flanged connections, clamp connections, aseptic flange connections (other connections available 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	Wetted Surfaces $R_a \leq 0.8 \mu\text{m}$; 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: -30 to +135°C; FDA compliant Resistance: 2 to 5% resistance to alkaline solutions and acids up to +85°C Other materials (FPM, HNBR etc.) available on request.		
Options	Sterile lock, diaphragm seal Optimum CIP conditions		
Material certificates	Manufacturers final test certificate in accordance with EN 10204-3.1, factory certificate in accordance with EN 10204-2.2		

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Weight and dimensions



SS = welded ends for piping compliant to DIN 11850 / RG = round thread connections compliant to DIN 11851

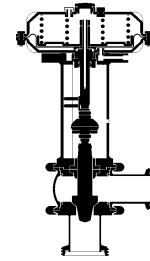
With integrated ARCA positioners type 824 and 827 (standard); other positioners available on request.

DN	Actuator	Stroke	ØD	H	HV	R	B	F	F1	F2	F3	A	A1	A2	AM ₁	C	C1	Weight
25	MFI-20	20	270	325	530	270	25	90	119	58	87	87	102	137	30	50	65	13.5
40	MFI-20	20	270	325	530	270	31	90	123	64	97	109	157	171	30	62	114	23.0
50	MFI-20	20	270	325	530	270	37	90	125	70	105	126	186	200	30	74	134	23.0
65	MFI-30 MFIII-30	30	270 400	355 387	573 651	270 400	48	125	165	83	123	154	234	250	40	96	171	23.0 38.0
80	MFI-30 MFIII-30	30	270 400	355 387	573 651	270 400	55.5	125	170	90.5	135.5	175	251	286	40	111	186	24.0 39.0
100	MFI-30 MFIII-30	30	270 400	355 387	573 651	270 400	65	125	179	100	154	205	295	335	40	130	215	27.0 42.0
125	MFIII-60	60	400	510	888	400	77.5	150	--	112.5	---	245	415	400	70	155	325	61.0

1) Dimension AM with double guide only.

2) Weights refer to 391-P1-L angle valves with round thread connections (excluding DN 125 with welded ends) and actuator without positioner.

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

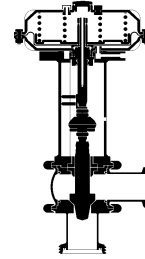
DN						25	32	40	50	65	80	100		125		150
Function: air to open / spring to close	25 to 50	MFI-20	2.0	3	2.4	25		23.5	16.9							
			3.5	6	4.8	25										
	65 to 100	MFI-30	2.7	3	2.4				20	16.9	9.1	4.7	3			
			4.9	6	4.8					20		12.6	8.7			
65 to 100	MFIII-30	2.0	3	5				20		13.3	9.2					
		3.5	6	10				20								
		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						

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

The maximum permissible operating pressure is 10 bar (standard). The maximum permissible operating pressure can be higher, however, depending on the nominal diameter of the piping connection:

DN 25 to DN 50 = 25 bar
 DN 65 to DN 100 = 20 bar
 DN 125 to DN 150 = 10 bar

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Type codes

39	1	-P L M T	1 3	-L B W T E	M O
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- Series**
- 1 = hygienic design
 - P = parabolic plug
 - L = perforated 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
 - M = removable floor panel with guide
 - O = removable floor panel without guide

Possible housing designs

