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45
ANNIVERSARY
1973-2018



SBS

PNEUMATIC CONTROL VALVES



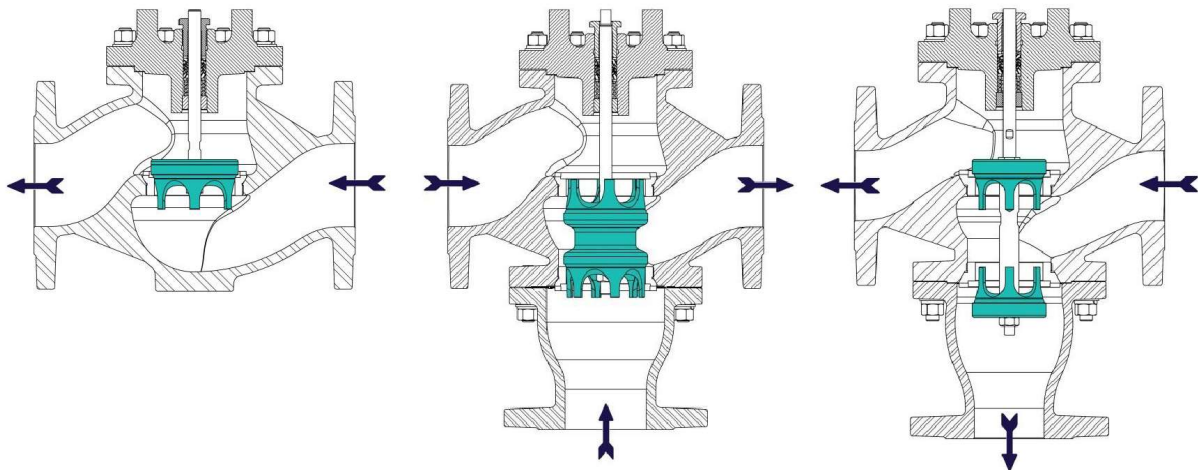
SBS/16 – GLOBE CONTROL VALVE

Multi-spring diaphragm control valve with body in GJL, GJS, WCB, CF8M, CF3M

DN:	from DN 15 (1/2") to DN80 (3")
Connections:	DIN Flanges ANSI Flanges BW - SW BSPP - NPT
Packing:	PTFE / PTFE-GR
Plug Seal:	PEEK Metallic Stellite
Leakage Class:	IV (metal-metal) VI (soft)
Min Fluid T:	down to -40 °C -40 °F
Max Fluid T:	up to +350 °C +662 °F
Max P:	up to 40 bar 580 psi
Characteristic:	Linear - Eq%
Function:	2-Way 3-Way Mixing 3-Way Diverting
Actuator Material:	Polyurethane-painted Fe-P04 Stainless Steel S30400
Actuator Function:	Normally Closed Normally Open
Feeding Pressure:	3÷15 psi 6÷18 psi 6÷30 psi 9÷32 psi 3÷9 psi 9÷15 psi 20÷40 psi
Optionals:	Anti-cavitation trim Noise Reducer Extended Bonnet Bellow Seals Micro-Flow Plug
Instrumentation:	I/P Converter Electro-pneumatic Positioner Digital Positioner Solenoid Valve Lock-Up Valve Filter-Regulator
Certification:	PED 2014/68/EU ATEX 2014/34/EU



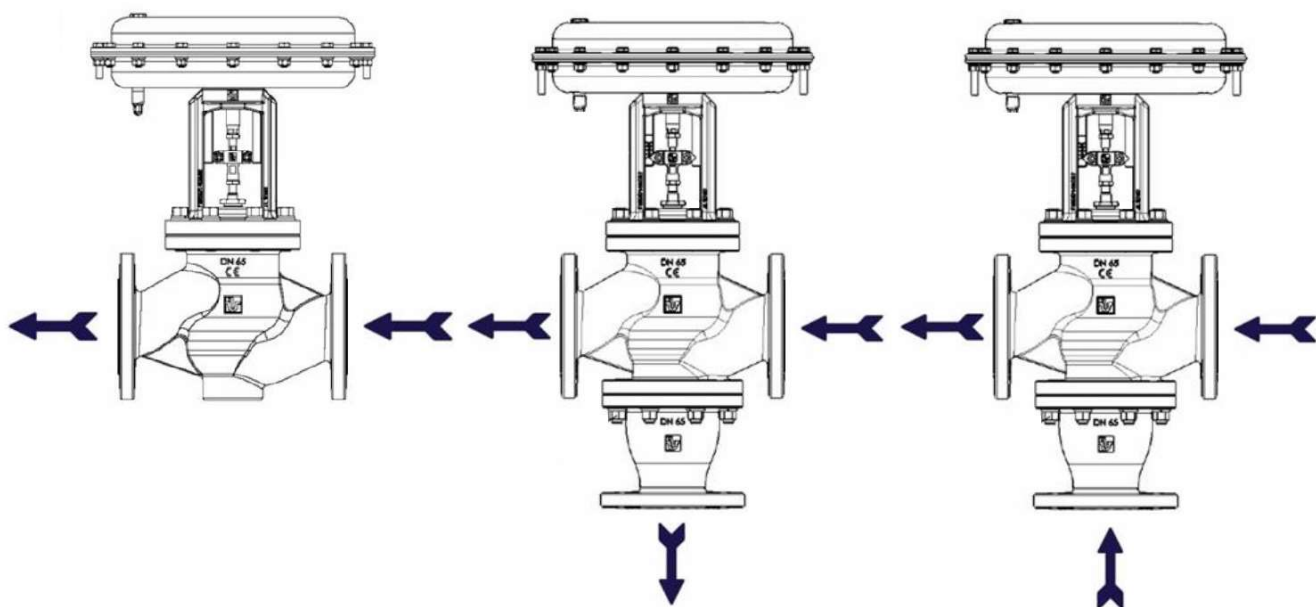
Functions:



2 WAY

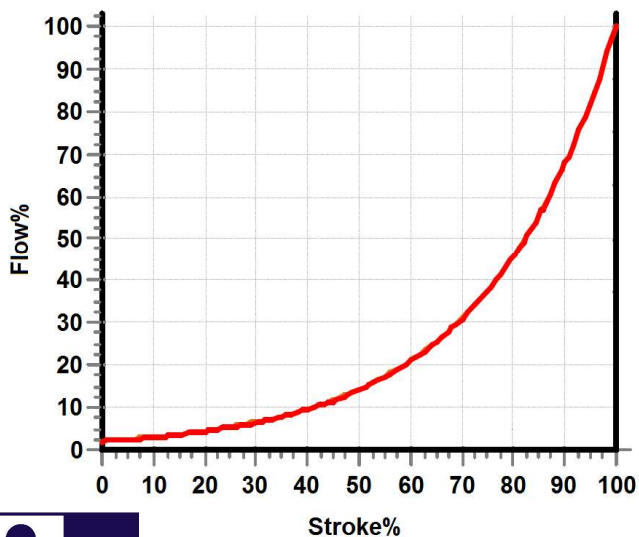
3 WAY - MIXING

3 WAY - DIVERTING

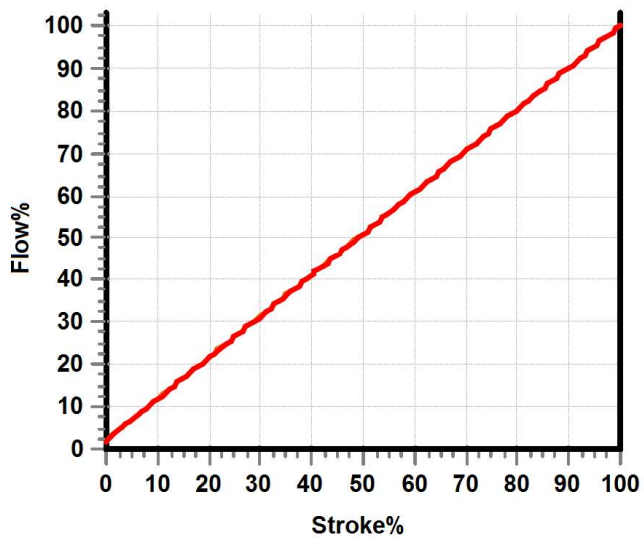


Characteristic Curve:

EQUAL PERCENTAGE



LINEAR



Kv / ΔP Table – SBS/16 – Body GJL250 / GJS500:

DN	Seat Ø [mm]	Kv				Control Signal [psi] →	Max Differential Pressure Δp							←+ ↓	
		Cv		Eq%			Control Signal [barg] →	3÷15	6÷18	6÷30	9÷32	3÷9	9÷15		20÷40
		Linear	Eq%	Stroke [mm]	Max Control P [barg] →			0,2÷1	0,42÷1,26	0,4÷2,1	0,6÷2,24	0,2÷0,6	0,6÷1,0		1,4÷2,8
		15	20					15	20	1	1,26	2,21	2,4		0,8
Serv. Ø _s [mm] ↓	A	B	C	D	R	S	T								
15	3	UR	UR	UR	UR	200	16	16	16	16	16	16	-	1	
		UR	UR	UR	UR	200	16	16	16	16	16	16	-	3	
	15	4,3	N/A	4,5	N/A	200	15	16	16	16	13	16	-	5	
		5,0	N/A	5,2	N/A	275	16	16	16	16	16	16	-	6	
	20	5,0	N/A	5,0	N/A	200	8	16	16	16	7	16	-	101	
		5,8	N/A	5,8	N/A	275	16	16	16	16	16	16	-	102	
20	6	UR	UR	UR	UR	200	16	16	16	16	16	16	-	7	
		UR	UR	UR	UR	275	16	16	16	16	16	16	-	8	
	15	6,0	N/A	4,8	N/A	200	15	16	16	16	13	16	-	9	
		7,1	N/A	5,6	N/A	275	16	16	16	16	16	16	-	10	
	20	8,0	N/A	7,5	N/A	200	8	16	16	16	7	16	-	13	
		9,3	N/A	8,7	N/A	275	16	16	16	16	16	16	-	14	
25	15	5,4	N/A	5,3	N/A	200	15	16	16	16	13	16	-	17	
		6,3	N/A	6,2	N/A	275	16	16	16	16	16	16	-	18	
	20	9,3	N/A	9,1	N/A	200	8	16	16	16	7	16	-	21	
		10,8	N/A	10,6	N/A	275	16	16	16	16	16	16	-	22	
	26	11,8	N/A	11,3	N/A	200	5	10	10	15	5	15	-	25	
		13,7	N/A	13,1	N/A	275	13	16	16	16	12	16	-	26	
32	20	9,6	10,2	9,5	10,5	200	8	16	16	16	7	16	-	29	
		11,2	11,9	11,0	12,2	275	16	16	16	16	16	16	-	30	
	26	14,5	14,9	13,5	15,4	200	5	10	10	15	5	15	-	33	
		16,9	17,3	15,7	17,9	275	13	16	16	16	12	16	-	34	
	31	20,0	18,9	15,2	18,9	200	4	8	8	12	4	12	-	37	
		23,3	22,0	17,7	22,0	275	10	16	16	16	10	16	-	38	
40	26	16,5	18,1	15,6	18,5	200	5	10	10	15	5	15	-	41	
		19,2	21,1	18,1	21,5	275	13	16	16	16	12	16	-	42	
	31	21,9	24,5	19,0	24,7	200	4	8	8	12	4	12	-	45	
		25,5	28,5	22,1	28,7	275	10	16	16	16	10	16	-	46	
	38	26,0	29,3	22,3	28,3	200	2,8	5,5	5,5	8	2,8	8	-	49	
		30,2	34,1	25,9	32,9	275	7	14	14	16	7	16	-	50	
					360	14	16	16	16	14	16	-	51		
					430	15	16	16	16	15	-	-	52		



Kv / ΔP Table – SBS/16 – Body GJL250 / GJS500:

							Max Differential Pressure Δp								
		Kv Cv				Control Signal [psi] →	3÷15	6÷18	6÷30	9÷32	3÷9	9÷15	20÷40		
		Linear		Eq%		Control Signal [barg] →	0,2÷1	0,42÷1,26	0,4÷2,1	0,6÷2,24	0,2÷0,6	0,6÷1,0	1,4÷2,8		
		Stroke [mm]				Max Control P [barg] →	1	1,26	2,21	2,4	0,8	1,2	2,9		
DN	Seat Ø [mm]	15	20	15	20	Serv. Ø _e [mm] ↓	A	B	C	D	R	S	T	←+ ↓	
50	31	22,1	25,1	19,1	25,1	200	4	8	8	12	4	12	-	53	
		25,7	29,2	22,2	29,2	275	10	16	16	16	10	16	-	54	
						360	16	16	16	16	16	16	-	55	
	38	38	27,6	33,3	23,0	32,0	200	2,8	5,5	5,5	8	2,8	8	-	57
			32,1	39,3	26,7	37,2	275	7	14	14	16	7	16	-	58
							360	14	16	16	16	14	16	-	59
							430	15	16	16	16	15	-	-	60
	48	48	38,4	42,4	34,6	44,7	200	1,6	3,2	3,2	4,5	1,6	4,5	-	61
			44,7	49,3	40,2	52,0	275	4	8	8	10,5	4	10,5	-	62
							360	8	16	16	16	8	16	-	63
							430	9,3	16	16	16	9,3	-	-	64
	65	38	27,9	34,1	24,0	33,0	200	2,8	5,5	5,5	8	2,8	8	-	65
32,4			39,7	27,9	38,4	275	7	14	14	16	7	16	-	66	
						360	14	16	16	16	14	16	-	67	
						430	15	16	16	16	15	-	-	68	
48		48	45,5	56,9	42,0	55,0	200	1,6	3,2	3,2	4,5	1,6	4,5	-	70
			52,9	66,2	48,8	64,0	275	4	8	8	10,5	4	10,5	-	71
							360	8	16	16	16	8	16	-	72
							430	9,3	16	16	16	9,3	-	-	73
63		63	61,0	74,8	51,5	63,1	200	1	2	2	2,5	1	2,5	-	75
			70,9	87,0	59,9	73,4	275	2,5	5	5	6,5	2,5	6,5	-	76
							360	5	10	10	13	5	13	-	77
							430	5,5	11	11	16	5,5	-	-	78
						530	7,4	16	14,8	16	-	-	16	79	
80	48	43,2	55,5	41,6	53,5	200	1,6	3,2	3,2	4,5	1,6	4,5	-	80	
		50,2	64,5	48,4	62,2	275	4	8	8	10,5	4	10,5	-	81	
						360	8	16	16	16	8	16	-	82	
						430	9,3	16	16	16	9,3	-	-	83	
	63	63	62,2	76,6	59,9	62,2	200	1	2	2	2,5	1	2,5	-	85
			72,3	89,1	69,5	72,3	275	2,5	5	5	6,5	2,5	6,5	-	86
							360	5	10	10	13	5	13	-	87
							430	5,5	11	11	16	5,5	-	-	88
							530	7,4	16	14,8	16	-	-	16	89
	78	78	61,9	85,8	59,6	77,9	275	1,5	3	3	4	1,5	4	-	91
			72,0	99,8	69,2	90,6	360	3	6	6	8,5	3	8,5	-	92
							430	3,5	7	7	10,5	3,5	-	-	93
						530	4,8	14,2	9,6	13,7	-	-	16	94	



Kv / ΔP Table – SBS/16 – Body A216 WCB / A351 CF8M:

DN	Seat Ø [mm]	Kv Cv				Control Signal [psi] → Control Signal [barg] → Max Control P [barg] → Serv. Ø _e [mm] ↓	Max Differential Pressure Δp							← ↓ +	
		Linear		Eq%			3÷15	6÷18	6÷30	9÷32	3÷9	9÷15	20÷40		
							0,2÷1	0,42÷1,26	0,4÷2,1	0,6÷2,24	0,2÷0,6	0,6÷1,0	1,4÷2,8		
		Stroke [mm]					1	1,26	2,21	2,4	0,8	1,2	2,9		
		15	20	15	20		A	B	C	D	R	S	T		
15	3	UR	UR	UR	UR	200	40	40	40	40	40	40	-	1	
						275	40	40	40	40	40	40	-	3	
	6	UR	UR	UR	UR	200	40	40	40	40	40	40	40	-	4
						275	40	40	40	40	40	40	-	5	
	15	4,3 5,0	N/A	4,5 5,2	N/A	200	15	30	30	39	13	39	-	6	
						275	35	40	40	40	32	40	-	101	
20		5,0 5,8	N/A	5,0 5,8	N/A	200	8	16	16	21	7	21	-	102	
						275	20	40	40	40	18	40	-	103	
360	37	40	40	40	36	40	-	7							
20	6	UR	UR	UR	UR	200	40	40	40	40	40	40	-	8	
						275	40	40	40	40	40	40	-	9	
	15	6,0 7,1	N/A	4,8 5,6	N/A	200	15	30	30	39	13	39	-	10	
						275	35	40	40	40	32	40	-	13	
	20	8,0 9,3	N/A	7,5 8,7	N/A	200	8	16	16	21	7	21	-	14	
						275	20	40	16	40	18	40	-	15	
360	37	40	40	40	36	40	-	17							
25	15	5,4 6,3	N/A	5,3 6,2	N/A	200	15	16	16	16	13	16	-	18	
						275	16	16	16	16	16	16	-	21	
	20	9,3 10,8	N/A	9,1 10,6	N/A	200	8	16	16	21	7	21	-	22	
						275	20	40	16	40	18	40	-	23	
	26	11,8 13,7	N/A	11,3 13,1	N/A	200	5	10	10	15	5	15	-	25	
						275	13	26	26	34	12	34	-	26	
360	25	40	40	40	24	40	-	27							
430	28	40	40	40	28	-	-	28							
32	20	9,6 11,2	10,2 11,9	9,5 11,0	10,5 12,2	200	8	16	16	21	7	21	-	29	
						275	20	40	16	40	18	40	-	30	
						360	37	40	40	40	36	40	-	31	
	26	14,5 16,9	14,9 17,3	13,5 15,7	15,4 17,9	200	5	10	10	15	5	15	-	33	
						275	13	26	26	34	12	34	-	34	
						360	25	40	40	40	24	40	-	35	
	430	28	40	40	40	28	-	-	36						
	31	20,0 23,3	18,9 22,0	15,2 17,7	18,9 22,0	200	4	8	8	12	4	12	-	37	
						275	10	20	20	30	10	30	-	38	
						360	21	40	40	40	20	40	-	39	
	430	23	40	40	40	23	-	-	40						
	40	26	16,5 19,2	18,1 21,1	15,6 18,1	18,5 21,5	200	5	10	10	15	5	15	-	41
275							13	26	26	34	12	34	-	42	
360							25	40	40	40	24	40	-	43	
430							28	40	40	40	28	-	-	44	
31		21,9 25,5	24,5 28,5	19,0 22,1	24,7 28,7	200	4	8	8	12	4	12	-	45	
						275	10	20	20	30	10	30	-	46	
						360	21	40	40	40	20	40	-	47	
						430	23	40	40	40	23	-	-	48	
38		26,0 30,2	29,3 34,1	22,3 25,9	28,3 32,9	200	2,8	5,5	5,5	8	2,8	8	-	49	
						275	7	14	14	20	7	20	-	50	
						360	14	28	28	40	14	40	-	51	
						430	15	30	30	40	15	-	-	52	

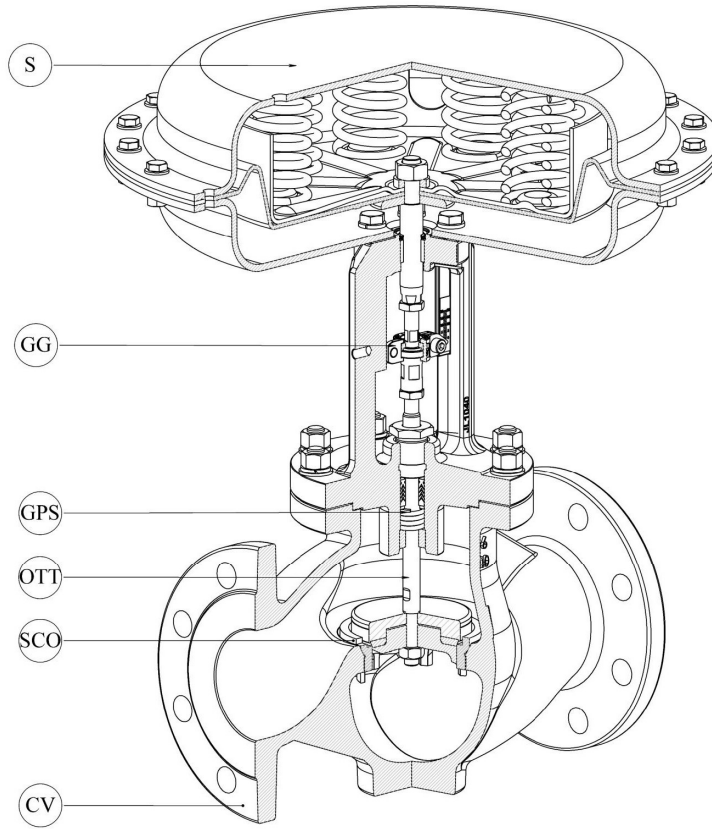


Kv / ΔP Table – SBS/16 – Body A216 WCB / A351 CF8M:

							Max Differential Pressure Δp							
		Kv Cv				Control Signal [psi] →	3÷15	6÷18	6÷30	9÷32	3÷9	9÷15	20÷40	
		Linear		Eq%		Control Signal [barg] →	0,2÷1	0,42÷1,26	0,4÷2,1	0,6÷2,24	0,2÷0,6	0,6÷1,0	1,4÷2,8	
		Stroke [mm]				Max Control P [barg] →	1	1,26	2,21	2,4	0,8	1,2	2,9	
DN	Seat Ø [mm]	15	20	15	20	Serv. Ø _e [mm] ↓	A	B	C	D	R	S	T	← + ↓
50	31	22,1	25,1	19,1	25,1	200	4	8	8	12	4	12	-	53
		25,7	29,2	22,2	29,2	275	10	20	20	30	10	30	-	54
						360	21	40	40	40	20	40	-	55
						430	23	40	40	40	23	-	-	-
	38	27,6	33,3	23,0	32,0	200	2,8	5,5	5,5	8	2,8	8	-	57
		32,1	39,3	26,7	37,2	275	7	14	14	20	7	20	-	58
						360	14	28	28	40	14	40	-	59
						430	15	30	30	40	15	-	-	-
	48	38,4	42,4	34,6	44,7	200	1,6	3,2	3,2	4,5	1,6	4,5	-	61
		44,7	49,3	40,2	52,0	275	4	8	8	10,5	4	10,5	-	62
						360	8	16	16	21	8	21	-	63
						430	9,3	16,8	16,8	24	9,3	-	-	-
65	38	27,9	34,1	24,0	33,0	200	200	2,8	5,5	5,5	8	2,8	-	65
		32,4	39,7	27,9	38,4	275	275	7	14	14	20	7	-	66
						360	360	14	28	28	40	14	-	67
						430	430	15	30	30	40	15	-	68
	48	45,5	56,9	42,0	55,0	200	200	1,6	3,2	3,2	4,5	1,6	-	70
		52,9	66,2	48,8	64,0	275	275	4	8	8	10,5	4	-	71
						360	360	8	16	16	21	8	-	72
						430	430	9,3	16,8	16,8	24	9,3	-	73
	63	61,0	74,8	51,5	63,1	200	1	2	2	2,5	1	2,5	-	75
		70,9	87,0	59,9	73,4	275	2,5	5	5	6,5	2,5	6,5	-	76
						360	5	10	10	13	5	13	-	77
						430	5,5	11	11	16	5,5	-	-	-
80	48	43,2	55,5	41,6	53,5	530	7,4	29,5	29,5	21	-	-	40	79
		50,2	64,5	48,4	62,2	200	200	1,6	3,2	3,2	4,5	1,6	-	80
						275	275	4	8	8	10,5	4	-	81
						360	360	8	16	16	21	8	-	82
	63	62,2	76,6	59,9	62,2	430	430	9,3	16,8	16,8	24	9,3	-	83
		72,3	89,1	69,5	72,3	200	1	2	2	2,5	1	2,5	-	85
						275	2,5	5	5	6,5	2,5	6,5	-	86
						360	5	10	10	13	5	13	-	87
	78	61,9	85,8	59,6	77,9	430	5,5	11	11	16	5,5	-	-	88
		72,0	99,8	69,2	90,6	530	7,4	29,5	29,5	21	-	-	40	89
						275	1,5	3	3	4	1,5	4	-	91
						360	3	6	6	8,5	3	8,5	-	92
				430	3,5	7	7	10,5	3,5	-	-	-	93	
				530	4,8	14,2	9,6	13,7	-	-	-	29,8	94	



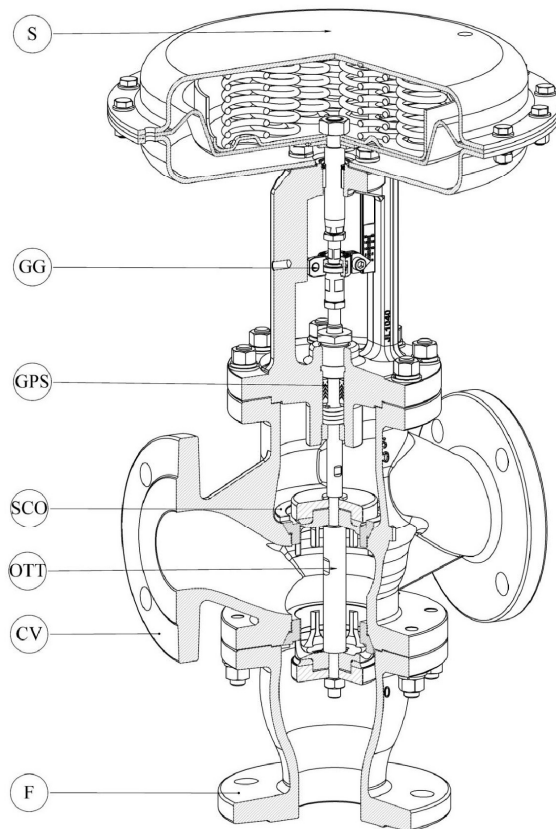
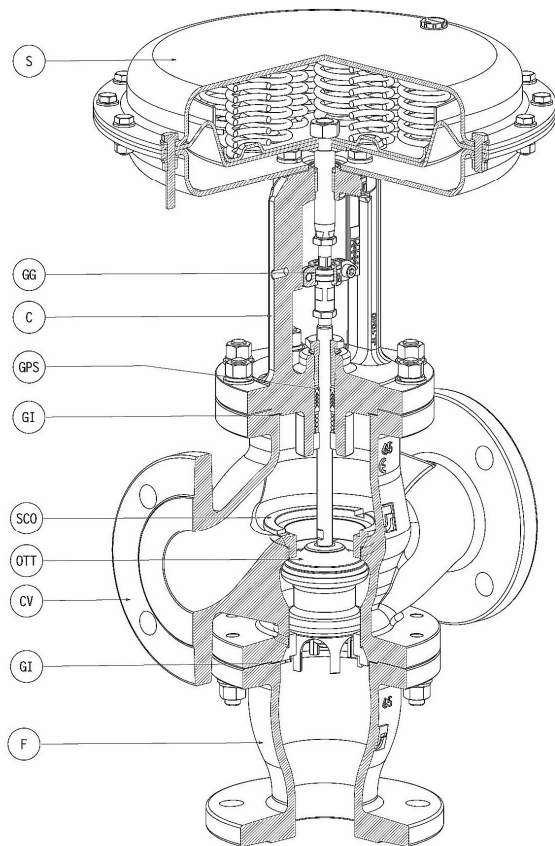
Materials - SBS/16 - 2-Way:



				MATERIAL			
				GJL 250	GJS 500	WCB	CF8M
S	ACTUATOR	S1	Upper Cover	Painted Steel			S30400 Painted Steel*
		M	Membrane	Fabric-Rubber NBR			
		PPM	Spring Plate	Fe-P04 (actuator d.200-275-360-430) Anodised Aluminium (actuator d.530)			
		S2	Spring	Harmonic Steel			
		S3	Lower Cover	Painted Steel			S30400 Painted Steel*
		S4	Actuator Gasket	Expanded Graphite			
		BA	Gasket	NBR			
		BG	Self-Lubricating Bushing	Bronze			
		S6	Washer	Zn-Plated Steel		AISI 304	
		D	Junction Flange	A105			AISI 304
		ST	Actuator Stem	S30400			
		C	Yoke	GJL 250	WCB	A351 CF8M	
		GG	JUNCTION	G	Coupler	A351 CF8	
G1	Spacer Washer			S30400			
G2	Adjusting Screw			S30400			
G4	Indicator			Aluminium			
G5	Lower Adjusting Screw			S30400			
GPS	PACKING	O1	Plug Stem	S30400		S31600	
		P1	Spacer Washer	AISI 304			
		PV	Packing Nut	Zn-Plated Steel AISI 304*			
		PPS	Packing	PTFE + PTFE/GRAPHITE + FPM			
		PM	Packing Spring	Harmonic Steel			
OTT	PLUG PEEK-METALLIC	PI	Upper Plug	S30400		S31600	
		IK	Ketron Insert	KETRON PEEK 1000			
		IO	Metallic Insert	S30400		S31600	
		OD	Lower Stem	S30400		S31600	
		O2	Guide	A305 (CF8 1.4308)			A351 CF8M
		O3	Self-Locking Nut	AISI 304		AISI 316	
BODY		CV	Body	GJL250	GJL500	WCB	A351 CF8M
		GI	Gasket	FASIT400/Reinforced Graphite			
		SCO	Conic Seat	S30400			S31600
		P	Extension	Painted Steel AISI 304*			
		SF	Bellows	S30400 / S31600			
		F	Bottom Flange	GJL250	GJL500	WCB	CF8M
		GSM	Spiral Seal	Graphite + AISI 316			
			Screws	Zn-Plated Steel AISI 304*			



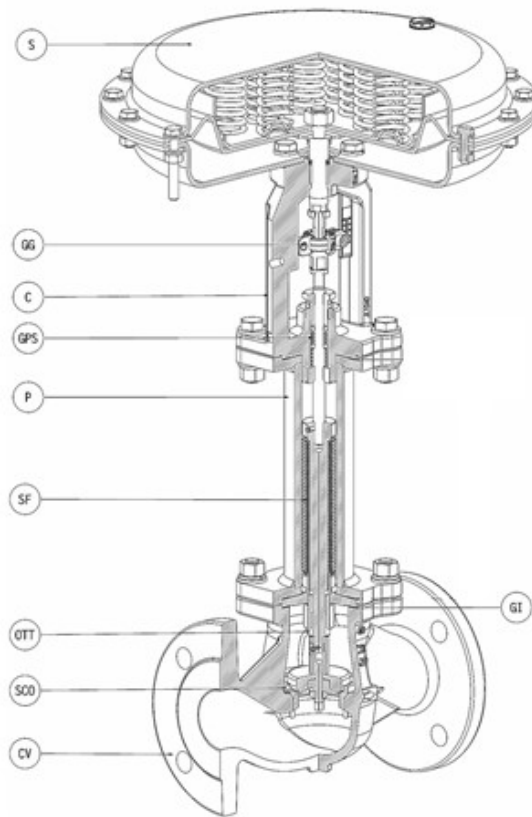
Materials - SBS/16 - 3-Way:



		MATERIAL						
		GJL 250	GJS 500	WCB	CF8M			
S	ACTUATOR	S1	Upper Cover		Painted Steel	S30400 Painted Steel*		
		M	Membrane		Fabric-Rubber NBR			
		PPM	Spring Plate		Fe-P04 (actuator d.200-275-360-430) Anodised Aluminium (actuator d.530)			
		S2	Spring		Harmonic Steel			
		S3	Lower Cover		Painted Steel	S30400 Painted Steel*		
		S4	Actuator Gasket		Expanded Graphite			
		BA	Gasket		NBR			
		BG	Self-Lubricating Bushing		Bronze			
		S6	Washer		Zn-Plated Steel	AISI 304		
		D	Junction Flange		A105	AISI 304		
		ST	Actuator Stem		S30400			
		C	Yoke		GJL 250	WCB	A351 CF8M	
		GG	JUNCTION	G	Coupler		A351 CF8	
G1	Spacer Washer			S30400				
G2	Adjusting Screw			S30400				
G4	Indicator			Aluminium				
G5	Lower Adjusting Screw			S30400				
GPS	PACKING	O1	Plug Stem		S30400	S31600		
		P1	Spacer Washer		AISI 304			
		PV	Packing Nut		Zn-Plated Steel	AISI 304*		
		PPS	Packing		PTFE + PTFE/GRAPHITE + FPM			
		PM	Packing Spring		Harmonic Steel			
OTT	PLUG PEEK-METALLIC	PI	Upper Plug		S30400	S31600		
		IK	Ketron Insert		KETRON PEEK 1000			
		IO	Metallic Insert		S30400	S31600		
		OD	Lower Stem		S30400	S31600		
		O2	Guide		A305 (CF8 1.4308)	A351 CF8M		
BODY		O3	Self-Locking Nut		AISI 304	AISI 316		
		CV	Body		GJL250	GJL500	WCB	A351 CF8M
		GI	Gasket		FASIT400/Reinforced Graphite			
		SCO	Conic Seat		S30400	S31600		
		P	Extension		Painted Steel AISI 304*			
		SF	Bellows		S30400 / S31600			
		F	Bottom Flange		GJL250	GJL500	WCB	CF8M
		GSM	Spiral Seal		Graphite + AISI 316			
		Screws		Zn-Plated Steel AISI 304*			AISI 304	



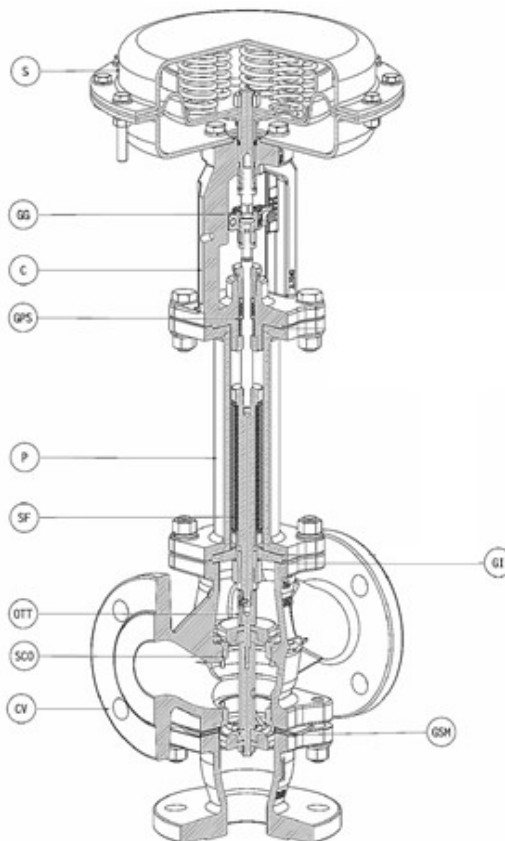
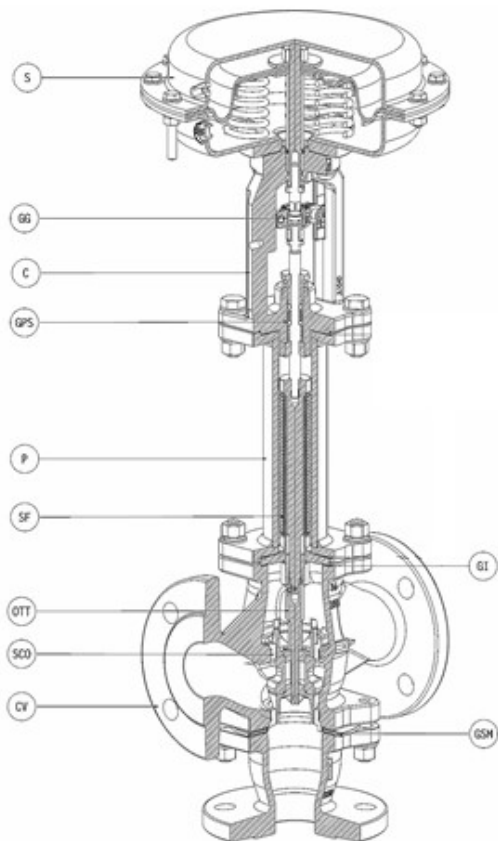
Materials - SBS/16 - 2-Way w/ Bellows:



		MATERIAL					
		GJL 250	GJS 500	WCB	CF8M		
S	ACTUATOR	S1	Upper Cover	Painted Steel		S30400 Painted Steel*	
		M	Membrane	Fabric-Rubber NBR			
		PPM	Spring Plate	Fe-P04 (actuator d.200-275-360-430) Anodised Aluminium (actuator d.530)			
		S2	Spring	Harmonic Steel			
		S3	Lower Cover	Painted Steel		S30400 Painted Steel*	
		S4	Actuator Gasket	Expanded Graphite			
		BA	Gasket	NBR			
		BG	Self-Lubricating Bushing	Bronze			
		S6	Washer	Zn-Plated Steel		AISI 304	
		D	Junction Flange	A105		AISI 304	
		ST	Actuator Stem	S30400			
		C	Yoke	GJL 250		WCB	A351 CF8M
GG	JUNCTION	G	Coupler	A351 CF8			
		G1	Spacer Washer	S30400			
		G2	Adjusting Screw	S30400			
		G4	Indicator	Aluminium			
		G5	Lower Adjusting Screw	S30400			
GPS	PACKING	O1	Plug Stem	S30400		S31600	
		P1	Spacer Washer	AISI 304			
		PV	Packing Nut	Zn-Plated Steel AISI 304*			
		PPS	Packing	PTFE + PTFE/GRAPHITE + FPM			
		PM	Packing Spring	Harmonic Steel			
OTT	PLUG-METALLIC	PI	Upper Plug	S30400		S31600	
		IK	Ketron Insert	KETRON PEEK 1000			
		IO	Metallic Insert	S30400		S31600	
		OD	Lower Stem	S30400		S31600	
		O2	Guide	A305 (CF8 1.4308)		A351 CF8M	
		O3	Self-Locking Nut	AISI 304		AISI 316	
BODY		CV	Body	GJL250	GJL500	WCB	A351 CF8M
		GI	Gasket	FASIT400/Reinforced Graphite			
		SCO	Conic Seat	S30400		S31600	
		P	Extension	Painted Steel AISI 304*			
		SF	Bellows	S30400 / S31600			
		F	Bottom Flange	GJL250	GJL500	WCB	CF8M
		GSM	Spiral Seal	Graphite + AISI 316			
			Screws	Zn-Plated Steel AISI 304*			AISI 304



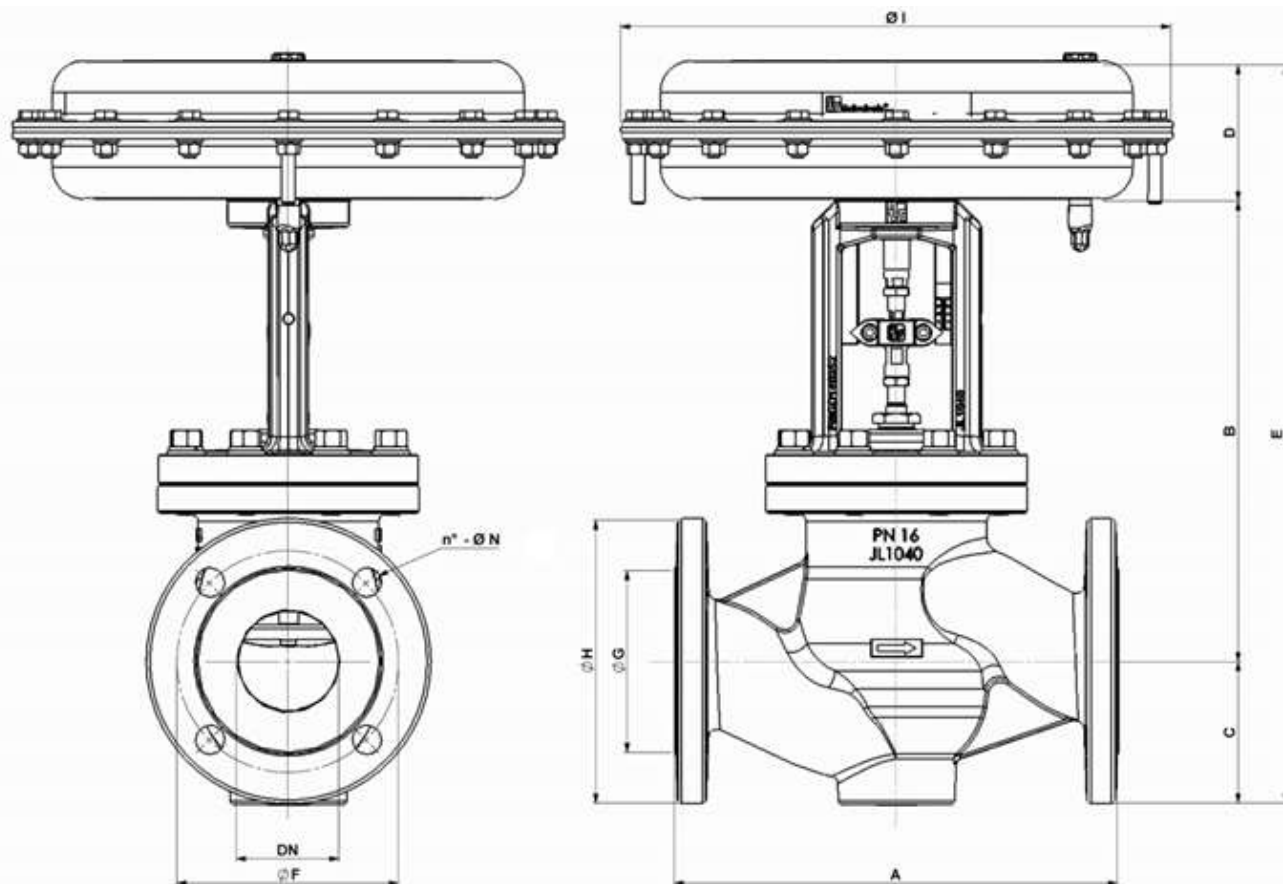
Materials - SBS/16 - 3-Way w/ Bellows:



		MATERIAL					
		GJL 250	GJS 500	WCB	CF8M		
S	ACTUATOR	S1	Upper Cover	Painted Steel		S30400 Painted Steel*	
		M	Membrane	Fabric-Rubber NBR			
		PPM	Spring Plate	Fe-P04 (actuator d.200-275-360-430)			
		S2	Spring	Anodised Aluminium (actuator d.530)			
		S3	Lower Cover	Painted Steel		S30400 Painted Steel*	
		S4	Actuator Gasket	Expanded Graphite			
		BA	Gasket	NBR			
		BG	Self-Lubricating Bushing	Bronze			
		S6	Washer	Zn-Plated Steel		AISI 304	
		D	Junction Flange	A105		AISI 304	
		ST	Actuator Stem	S30400			
		C	Yoke	GJL 250	WCB	A351 CF8M	
		GG	JUNCTION	G	Coupler	A351 CF8	
				G1	Spacer Washer	S30400	
G2	Adjusting Screw			S30400			
G4	Indicator			Aluminium			
G5	Lower Adjusting Screw			S30400			
GPS	PACKING	O1	Plug Stem	S30400	S31600		
		P1	Spacer Washer	AISI 304			
		PV	Packing Nut	Zn-Plated Steel			
				AISI 304*			
		PPS	Packing	PTFE + PTFE/GRAPHITE + FPM			
OTT	PLUG PEEK-METALLIC	PI	Upper Plug	S30400	S31600		
		IK	Ketron Insert	KETRON PEEK 1000			
		IO	Metallic Insert	S30400	S31600		
		OD	Lower Stem	S30400	S31600		
		O2	Guide	A305 (CF8 1.4308)		A351 CF8M	
		O3	Self-Locking Nut	AISI 304		AISI 316	
BODY		CV	Body	GJL250	GJL500	WCB	A351 CF8M
		GI	Gasket	FASIT400/Reinforced Graphite			
		SCO	Conic Seat	S30400		S31600	
		P	Extension	Painted Steel			
				AISI 304*			
		SF	Bellows	S30400 / S31600			
		F	Bottom Flange	GJL250	GJL500	WCB	CF8M
		GSM	Spiral Seal	Graphite + AISI 316			
Screws		Zn-Plated Steel			AISI 304		
		AISI 304*					



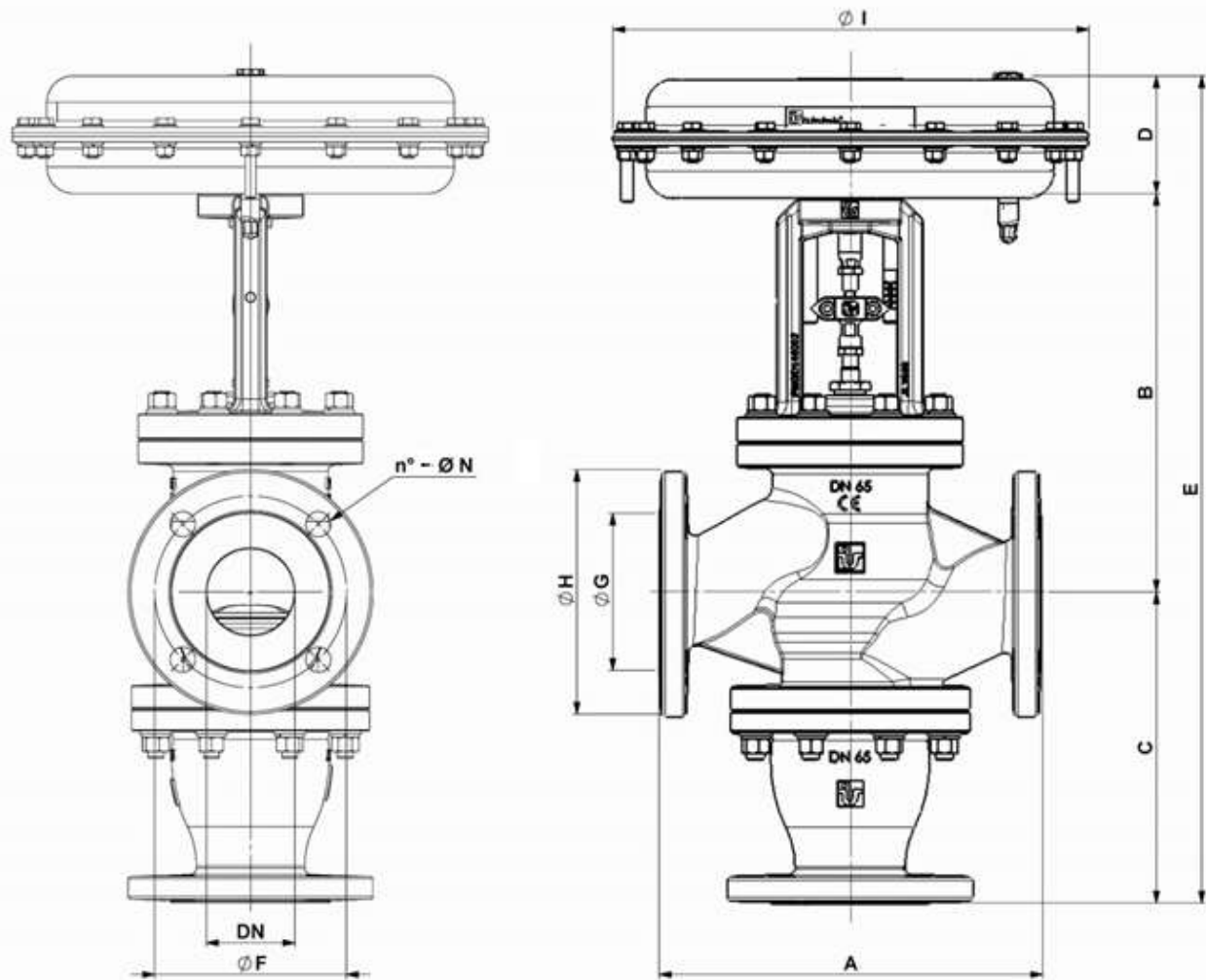
Dimensions - SBS/16 - 2-Way:



DN	A	B		C	D				E								Ø F	Ø G	Ø H	Ø I	Ø N	n° holes
		N.C.	N.O.		200	275 360	430	530	Ø servocomando													
									200		275 360		430		530							
N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.									
15	130	228	238	48	77	89	123	205	353	363	364	374	/	/	/	/	65	45	95	Depending on required ΔP (200-275-360-430-530)	14	4
20	150	228	238	53					358	368	369	379	/	/	/	/	75	58	105			
25	160	228	238	58					363	373	374	384	/	/	/	/	85	65	115			
32	180	251	261	70					398	408	410	420	444	454	526	536	100	76	140			
40	200	249	259	75					401	411	412	422	447	457	529	539	110	84	150			
50	230	247	257	83					407	417	418	428	453	463	535	545	125	99	165			
65	290	302	312	93					468	478	484	494	517	527	599	609	145	118	185			
80	310	299	309	100					476	486	488	498	522	532	604	614	160	132	200			



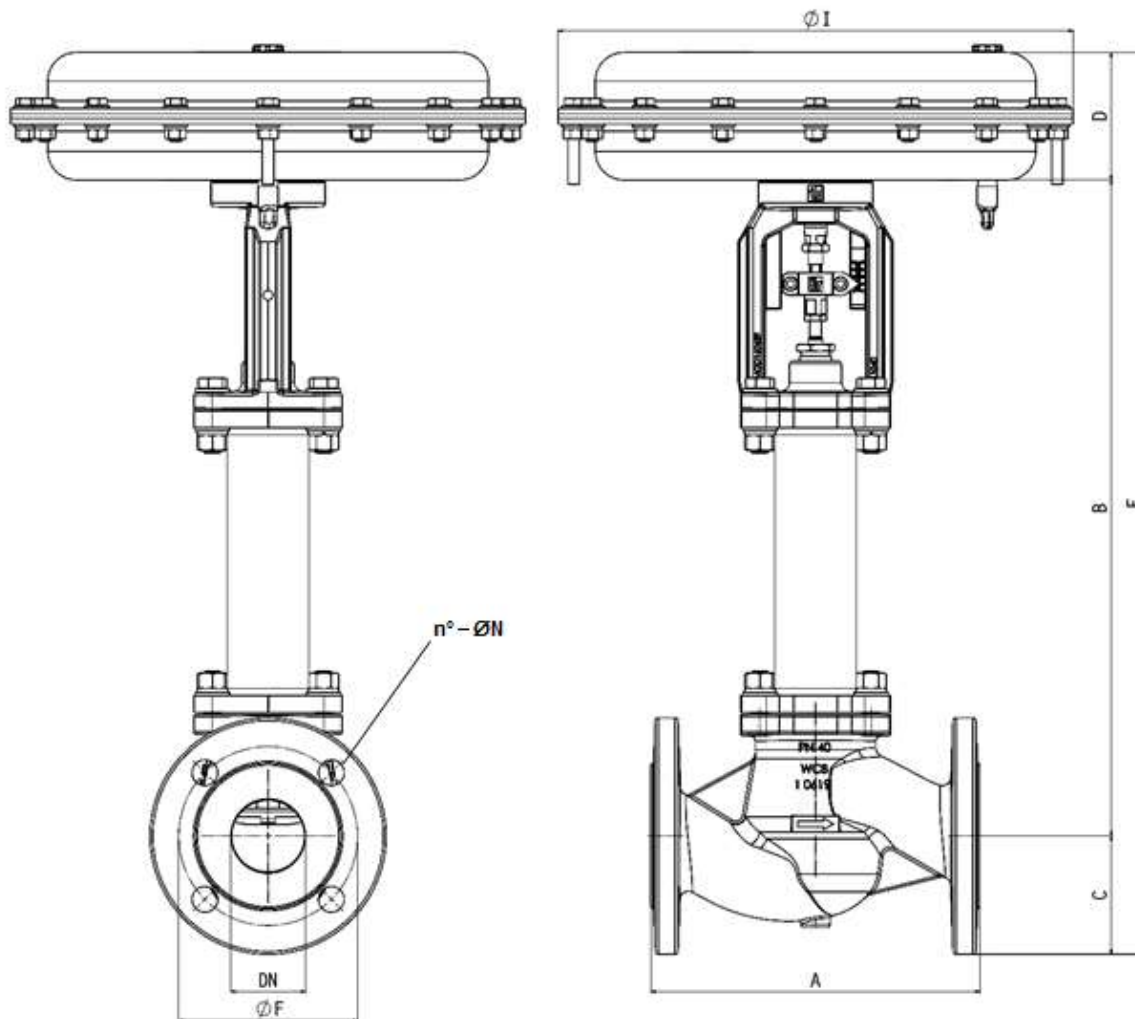
Dimensions - SBS/16 - 3-Way:



	DN	A	B		C	D				E				Ø F	Ø G	Ø H	Ø I	Ø N	n° holes				
			N.C	N.O.		200	275 360	430	530	Ø Actuator													
										200	275 360	430	530										
			N.C	N.O.		N.C	N.O.	N.C	N.O.	N.C	N.O.												
NORM. CLOSED (MIX.) NORM. OPEN (DIVERT.)	15	130	225	235	111	77	89	123	250														
	20	150	225	235	111					413	423	424	434					65	45	95	Depending on required ΔP (200-275-360-430-530)	14	4
	25	160	225	235	125					413	423	424	434					75	58	105			
	32	180	248	258	143					427	437	439	449					85	65	115			
	40	200	246	256	144					468	478	480	490	514	524	526	536	100	76	140			
	50	230	244	254	161					466	476	478	488	512	522	529	539	110	84	150			
	65	290	301	311	236					482	492	493	503	528	538	535	545	125	99	165			
	80	310	299	309	238					614	624	626	636	660	670	599	609	145	118	185			
										614	624	626	636	660	670	604	614	160	132	200			



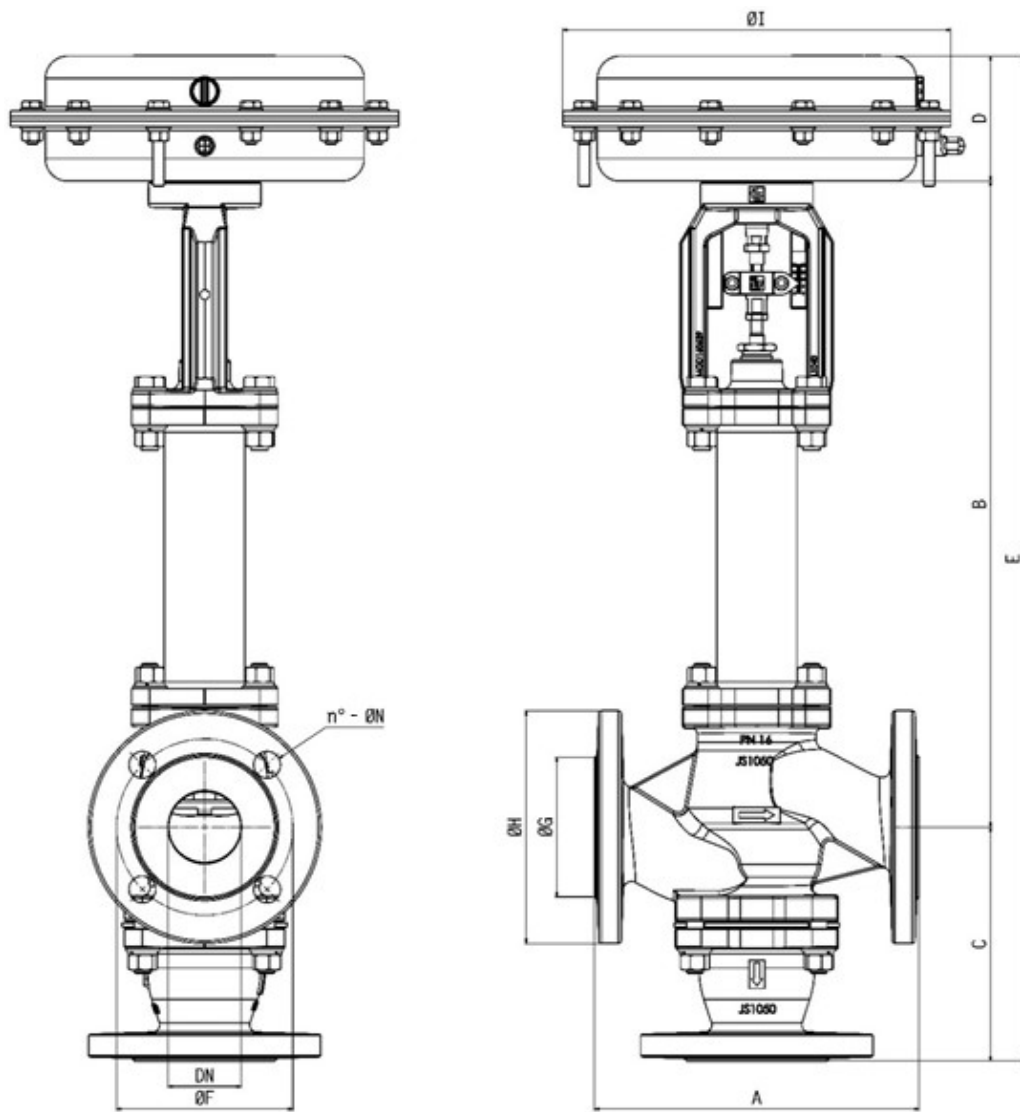
Dimensions - SBS/16 - 2-Way w/ Bellows:



DN	A	B		C	D				E								Ø F	Ø G	Ø H	Ø I	Ø N	n° holes
		N.C.	N.O.		200	275 360	430	530	Ø Actuator													
									200		275 360		430		530							
15	130	443	453	48	77	89	123	205	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	65	45	95	Depending on required Δp (200-275-360-430-530)	14	4
20	150	443	453	53					568	578	580	590	/	/	/	/	75	58	105			
25	160	442	452	58					577	587	589	599	/	/	/	/	85	65	115			
32	180	462	472	70					609	619	621	631	655	665	737	747	100	76	140			
40	200	460	470	75					612	622	624	634	658	668	740	750	110	84	150			
50	230	458	468	83					618	628	630	640	664	674	746	756	125	99	165			
65	290	490	500	93					660	670	672	682	706	716	788	798	145	118	185			
80	310	489	499	100					666	676	678	682	712	722	794	804	160	132	200			



Dimensions – SBS/16 – 3-Way w/ Bellows:



	DN	A	B		C	D				E				Ø F	Ø G	Ø H	Ø I	Ø N	n° holes	
			N.C.	N.O.		200	275 360	430	530	Ø Actuator										
										200		275 360								430
			N.C.	N.O.		N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.							
NORM. CLOSED (MIX.) NORM. OPEN (DIVERT.)	15	130	443	453	116	77	89	123	205	636	646	648	658	/	/	/	/	65	45	95
	20	150	443	453	116					636	646	648	658	/	/	/	/	75	58	105
	25	160	442	452	130					649	659	661	671	/	/	/	/	85	65	115
	32	180	462	472	147					686	696	698	708	732	742	814	824	100	76	140
	40	200	460	470	149					686	696	698	708	732	742	814	824	110	84	150
	50	230	458	468	166					701	711	713	723	747	757	829	839	125	99	165
	65	290	490	500	241					808	818	820	830	854	864	936	846	145	118	185
	80	310	489	499	243					809	819	821	831	855	865	937	947	160	132	200
	Depending on required ΔP (200-275-360-430-530)																	14	4	
Depending on required ΔP (200-275-360-430-530)																	19	4* / 8		
Depending on required ΔP (200-275-360-430-530)																		8		



SBS/18 – GLOBE CONTROL VALVE

Multi-spring diaphragm control valve with body in GJS, WCB, CF3M

DN: from DN 100 (4") to DN250 (10")

Connections: DIN Flanges
ANSI Flanges
BW - SW
BSPP - NPT

Packing: PTFE / PTFE-GR

Plug Seal: PEEK
Metallic
Stellite

Leakage Class: IV (metal-metal)
VI (soft)

Min Fluid T: down to -40 °C -40 °F
Max Fluid T: up to +350 °C +662 °F
Max P: up to 40 bar 580 psi

Characteristic: Linear - Eq%

Actuator Material: Epoxy-Painted FE P04

Function: 2-Way
3-Way Mixing
3-Way Diverting

Feeding Pressure: 3÷15 psi
6÷18 psi
6÷30 psi
9÷32 psi
20÷40 psi

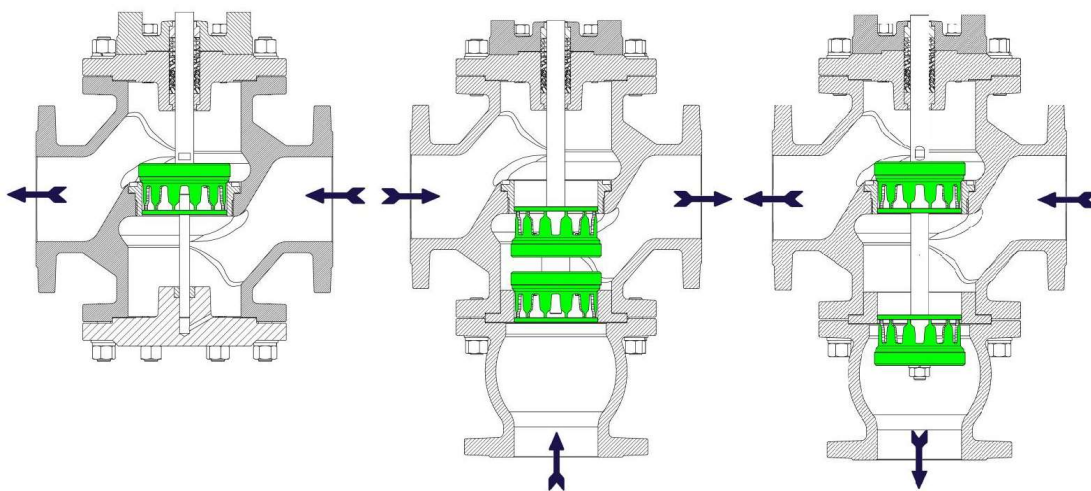
Optionals: Anti-cavitation trim
Noise Reducer
Extended Bonnet
Bellow Seals

Instrumentation: I/P Converter
Electro-pneumatic Positioner
Digital Positioner
Solenoid Valve
Lock-Up Valve
Filter-Regulator

Certification: PED 2014/68/EU
ATEX 2014/34/EU



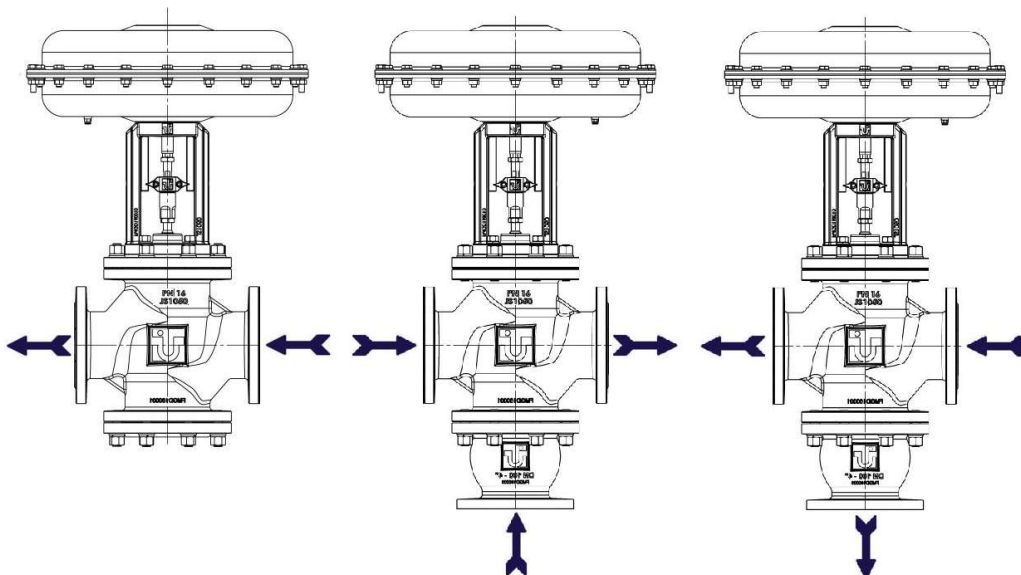
Functions:



2 WAY

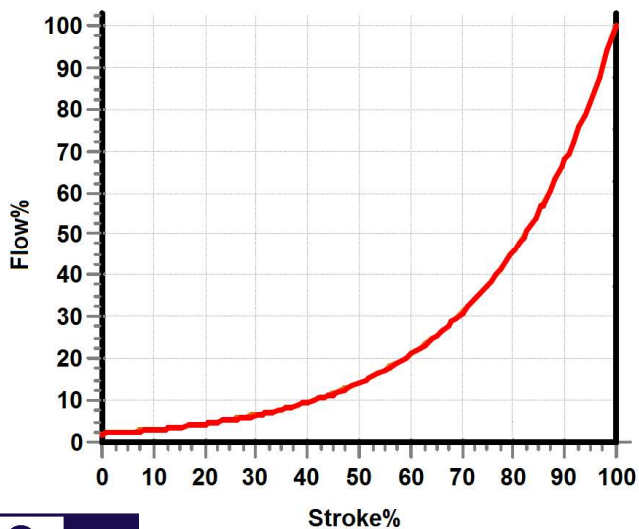
3 WAY - MIXING

3 WAY - DIVERTING

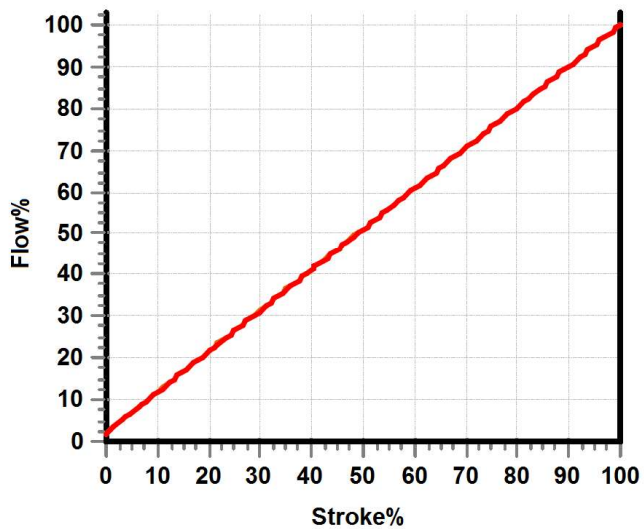


Characteristic Curve:

EQUAL PERCENTAGE



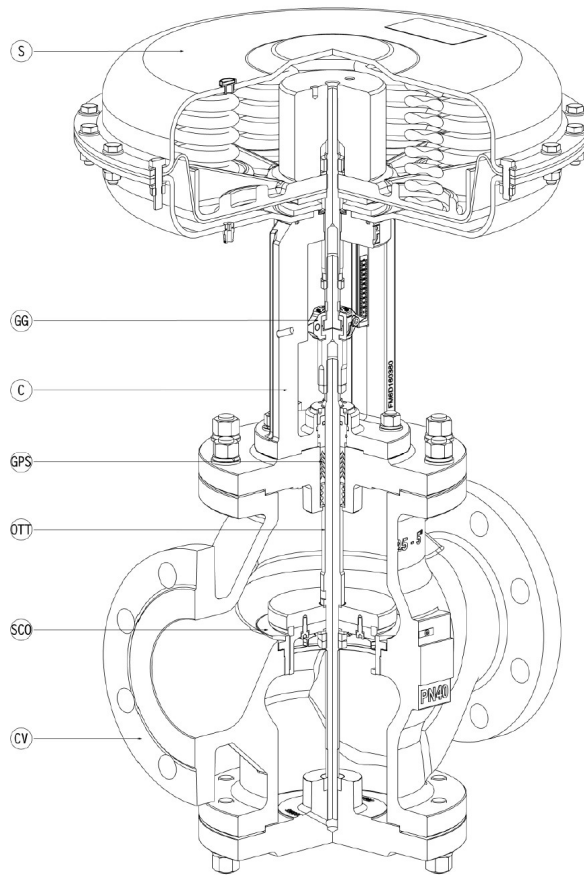
LINEAR



Kv / ΔP Table – SBS/16 – Body GJS500 / WCB / CF3M:

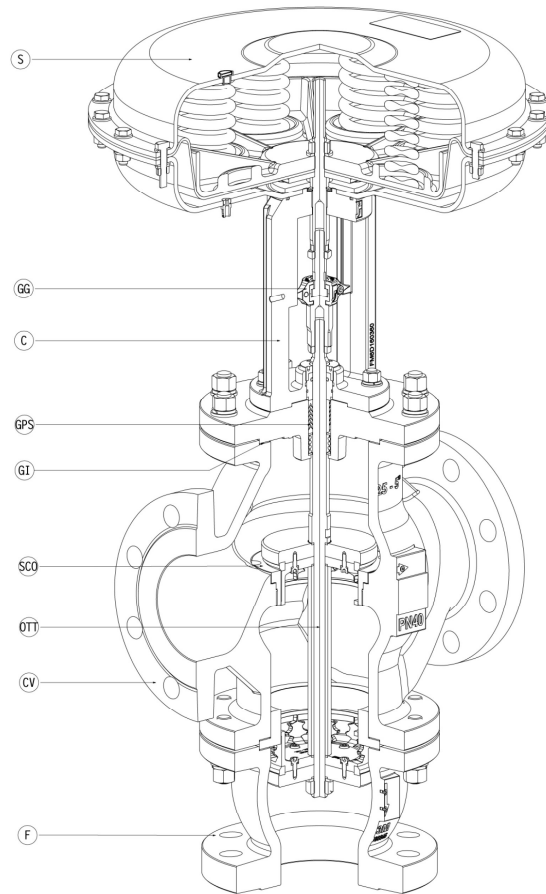
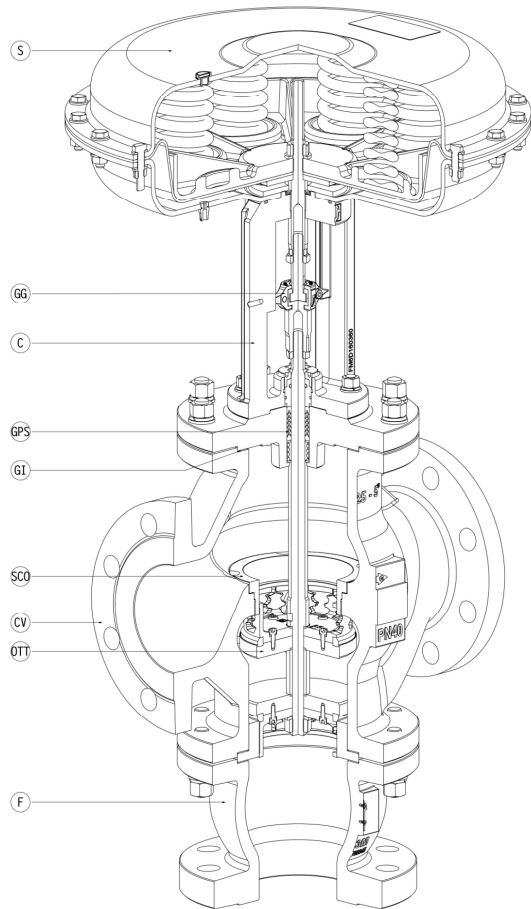
		Kv Cv				Control Signal [psi] →	Max Differential Pressure Δp							
		Linear		Eq%			Control Signal [barg] →	3÷15	6÷18	6÷30	9÷32	20÷40		
		Stroke [mm]						Max Control P [barg] →	1	1,26	2,21	2,4	2,9	
DN	Seat Ø [mm]	30	60	30	60	Serv. Ø _e [mm] ↓	X		Y	Z	K	J	←	+
100	63					530	7,4	14,8	14,8	21	40	1		
	78						4,8	9,6	9,6	13,7	29,8	2		
	100	125 143	155 177	118 135	146 167		2,9	5,9	5,9	6,6	18,1	3		
125	78					530	4,8	9,6	9,6	13,7	29,8	4		
	100						2,9	5,9	5,9	6,6	18,1	5		
	125	215 246	235 268	188 214	221 253		1,9	3,8	3,8	4,2	11,6	6		
150	100					530	2,9	5,9	5,9	6,6	18,1	7		
	125						1,9	3,8	3,8	4,2	11,6	8		
	150	280 321	335 383	262 299	315 360		1,3	2,6	2,6	2,9	8,1	9		
200	125					530	1,9	3,8	3,8	4,2	11,6	10		
	150						1,3	2,6	2,6	2,9	8,1	11		
	200	500 571	610 697	470 537	574 656		0,7	2,6	1,5	1,6	4,5	12		
250	150					530	1,3	2,6	2,6	2,9	8,1	13		
	200						0,7	1,5	1,5	1,6	4,5	14		
	250						0,5	0,9	0,9	1,1	2,9	15		





		Valve-Body Material				
		GJS 500	WCB	CF3M		
S	ACTUATOR	1.1	Upper Cover	Painted Steel		
		1.2	Spring	Harmonic Steel		
		1.3	Lower Cover	Painted Steel		
		1.4	Gasket	NBR		
		1.5	Self-Lubricating Bushing	Polymer		
		1.6	Guiding Bushing	Brass		
		1.7	Diaphragm Counter-Disc	Zn-Plated Steel		
		1.8	End Stroke	ERTALON PA 6-G		
		1.9	Junction Flange	Zn-Plated Steel		
		1.10	Actuator Gasket	VITON		
		1.11	Actuator Stem	S31600L		
		M	Membrane	Fabric-Rubber NBR		
		PPM	Spring Plate	Aluminium (d.530)		
		RA	Air Port	Technopolymer		
C	Yoke	GJS 500	WCB	CF3M		
GG	JUNCTION	2.1	Coupler	A351 CF3M		
		2.2	Spacer Washer	S31600L		
		2.3	Lower Adjusting Screw	S31600L		
		2.5	Adjusting Screw	S31600L		
		D	Nut M16	AISI 304	AISI 316	
GPS	PACKING	3.1	Guiding Bushing	Anti-Corrosion Bronze		
		3.2	Spring	Harmonic Stainless Steel		
		3.3	Spacer Washer	S31600L		
		3.4	Packing	PTFE / Graphite		
		3.5	Packing Screw	S31600L		
		3.6	OR 536	VITON		
		3.7	OR 3150	VITON		
OTT	PLUG	ST	Stem	S31600L		
		GU	Guide	A351 CF3M		
		IK	Ketron Insert	KETRON PEEK 1000		
		PI	Insert Holder	S31600L		
		DO	Spacer Washer	S31600L		
		OG	Metallic Insert	S31600L		
		DA	Self-Locking Nut	S31600L		
Body	CI	Intermediate Body	-	-	-	
	GI	Gasket	FLEXIGRAF FGS3			
	SCO	Conic Seat	A351 CF3M			
	CV	Body	GJS 500	WCB	A351 CF3M	
	F	Bottom Flange	-	-	-	
	-	Screws	Zn-Plated Steel		S31600L	

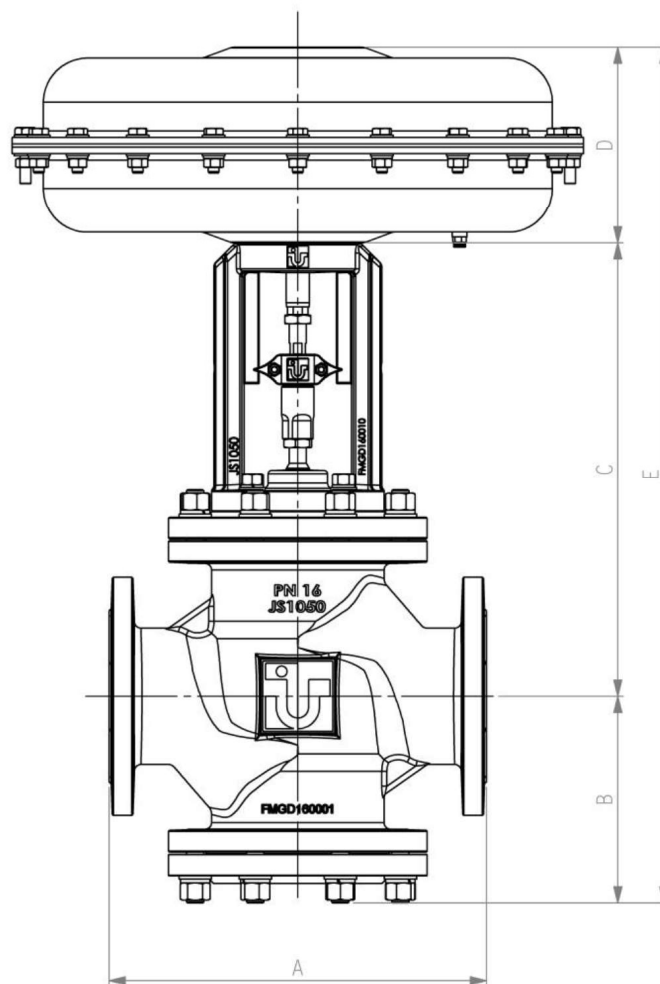
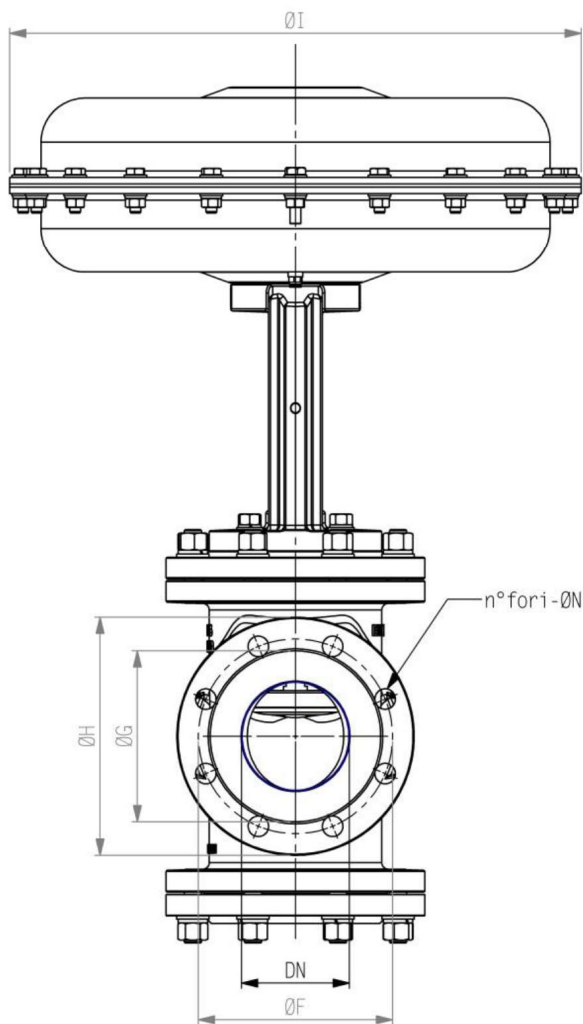




		Valve-Body Material			
		GJS 500	WCB	CF3M	
S	ACTUATOR	1.1	Upper Cover		
		1.2	Spring		
		1.3	Lower Cover		
		1.4	Gasket		
		1.5	Self-Lubricating Bushing		
		1.6	Guiding Bushing		
		1.7	Diaphragm Counter-Disc		
		1.8	End Stroke		
		1.9	Junction Flange		
		1.10	Actuator Gasket		
		1.11	Actuator Stem		
M	Membrane				
PPM	Spring Plate				
RA	Air Port				
C	Yoke				
GG	JUNCTION	2.1	Coupler		
		2.2	Spacer Washer		
		2.3	Lower Adjusting Screw		
		2.5	Adjusting Screw		
		D	Nut M16	AISI 304	AISI 316
GPS	PACKING	3.1	Guiding Bushing		
		3.2	Spring		
		3.3	Spacer Washer		
		3.4	Packing		
		3.5	Packing Screw		
		3.6	OR 536		
		3.7	OR 3150		
OTT	PLUG	ST	Stem		
		GU	Guide		
		IK	Ketrone Insert		
		PI	Insert Holder		
		DO	Spacer Washer		
		OG	Metallic Insert		
Body		DA	Self-Locking Nut		
		CI	Intermediate Body		
		GI	Gasket		
		SCO	Conic Seat		
		CV	Body		
		F	Bottom Flange		
		-	Screws		



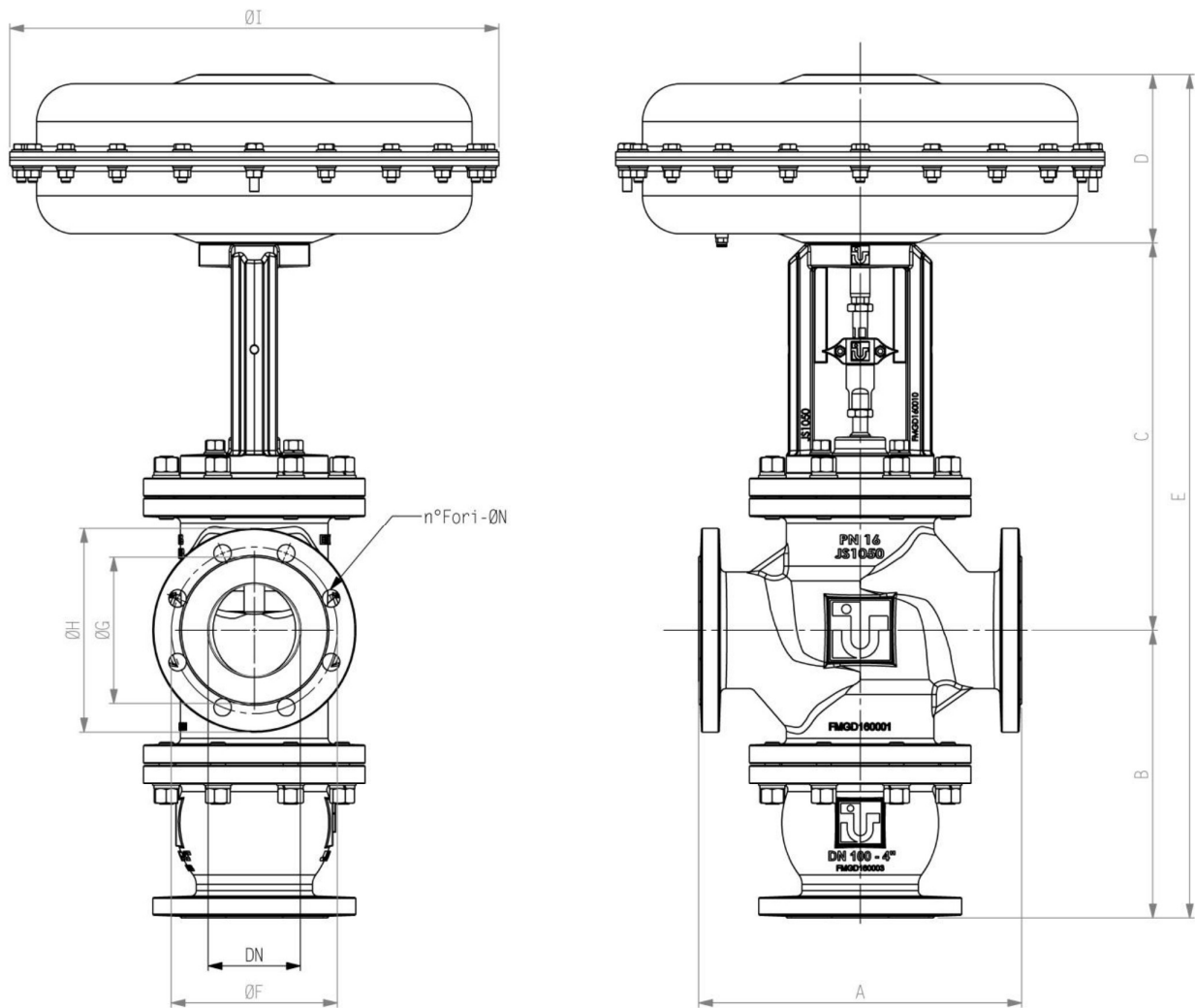
Dimensions - SBS/18 - 2-Way:



DN	A		B	C	D		E		F		G	H		I	N		Nr. holes			
	PN16	PN40			Actuator				PN16	PN40		PN16	PN40		PN16	PN40	PN16	PN40	PN16	PN40
					530	530 s.60	530	530 s.60												
100	350		196	420	173	323	789	939	180	190	162	220	235	530	19	22	8			
125	400	232	459	864			1014	210	220	188	250	270	19		26	8				
150	480	271	493	937			1087	240	250	212	285	300	23		26	8				
200	600	240	561	974			1124	295	320	268	340	375	22		30	12				



Dimensions - SBS/18 - 3-Way:



DN	A		B	C	D		E		F		G	H		I	N		Nr. holes			
	PN16	PN40			Actuator				PN16	PN40		PN16	PN40		PN16	PN40	PN16	PN40	PN16	PN40
					530	530 s.60	530	530 s.60												
100	350	312	420	173	323	905	1055	180	190	162	220	235	530	19	22	8				
125	400	353	459			985	1135	210	220	188	250	270		19	26	8				
150	480	408	493			1075	1225	240	250	212	285	300		23	26	8				
200	600	477	561			1211	1361	295	320	268	340	375		22	30	12				





Double-Head Actuator
Stroke 60mm



Safety Bellows



Body and Actuator in
Stainless Steel



Handwheel



Anti-Cavitation Trim
Silencer



Instrumentation



Pneumatics



Air Consumption – Actuator:

Actuator [mm]	Stroke [mm]	Air Consumption [l]
200	15	0,760
	20	0,870
275	15	1,438
	20	1,639
360	15	2,463
	20	2,809
430	15	3,513
	20	4,008
530	30	7,588
	60	18,265

Pressure-Temperature Rating:

PRESSURE-TEMPERATURE RATING										
Maximum Working Pressure Depending on Temperature										
PN	Material	Name	Temperature (°C)							
			-10	50	100	150	200	250	300	350
16	GJL - 250	cast-iron	16	16	16	16	12,8	11,2	9,6	-
	GJS - 500	spher. cast-iron	16	16	16	16	14,7	13,9	12,8	11,2
	A216 WCB	carbon steel	16	15,8	14,6	14,3	13,8	13,2	12,2	11,7
	AISI 316	stainless steel	16	15,2	13,3	12,2	11,3	10,5	10	9,6
25	A216 WCB	carbon steel	25	24,7	22,9	22,3	21,6	20,6	19,1	18,2
	AISI 316	stainless steel	25	23,7	20,8	19	17,6	16,5	15,6	15
40	A216 WCB	carbon steel	40	39,5	36,6	35,7	34,6	32,9	30,6	29,2
	AISI 316	stainless steel	40	38	33,3	30,4	28,2	26,3	25	24
63	A216 WCB	carbon steel	63	62,2	57,7	56,2	54,5	51,9	48,1	45,9
	AISI 316	stainless steel	63	59,8	52,5	47,9	44,3	41,5	39,3	37,9
100	A216 WCB	carbon steel	100	98,8	91,5	89,2	86,5	82,3	76,4	72,9
	AISI 316	stainless steel	100	95	83,3	76	70,4	65,9	62,4	60,1

ANSI	Material	Name	Temperature (°C)							
			-10	50	100	150	200	250	300	350
150	A216 WCB	carbon steel	20	19	17,9	15,9	13,8	11,8	9,9	8,5
	AISI 316	stainless steel	20	19,2	16,2	14,8	13,4	11,7	9,6	8,6
300	A216 WCB	carbon steel	50	50	46,4	45,2	43,8	41,7	38,7	37
	AISI 316	stainless steel	50	48,1	42,2	38,5	35,7	33,4	31,6	30,5
600	A216 WCB	carbon steel	110	100	92,7	90,4	87,8	83,4	77,4	73,9
	AISI 316	stainless steel	110	96,2	84,4	77	71,3	66,8	63,2	60,9