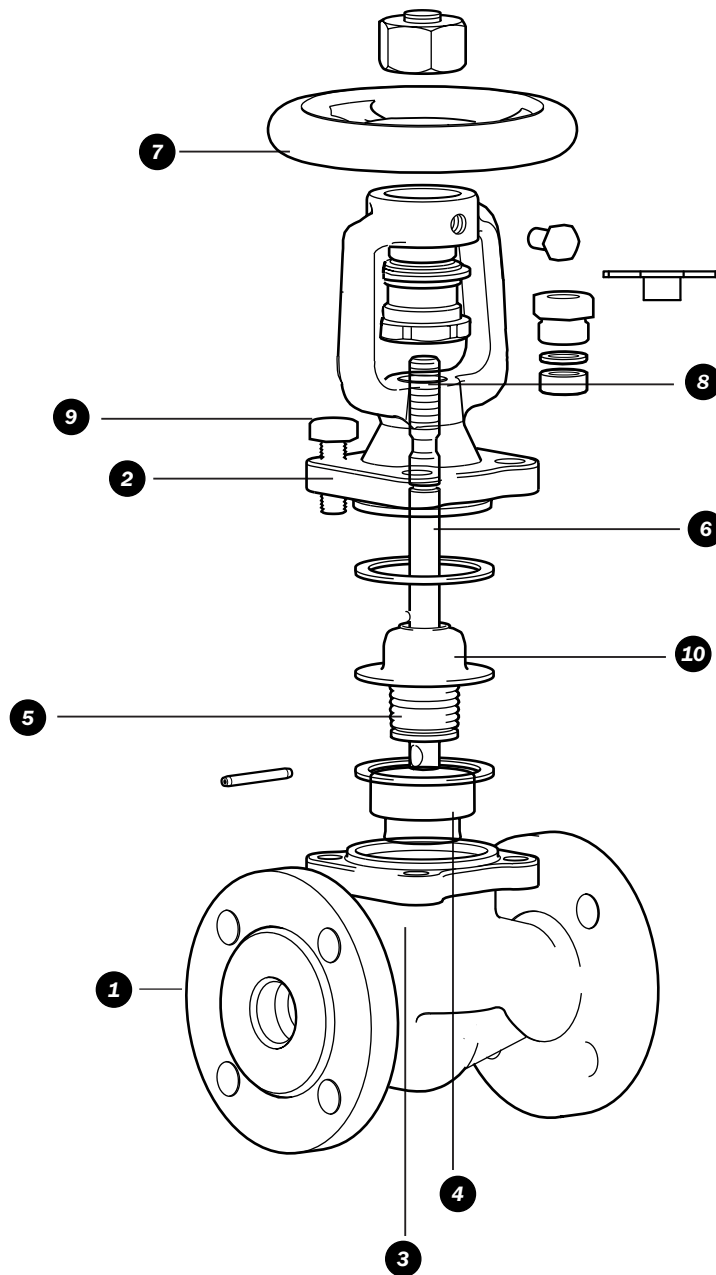




Description

1. Double wall bellows seal as standard
2. Plug with marginal seat
3. Flat lubricating nipple
4. Locking device, countersunk
5. Secondary sealing: gland packing
6. Non-rising handwheel
7. Non-rotation lock for each nominal diameter
8. External stem thread
9. Stem with roll hardened thread

Selection of possible applications

Industry, Powerstations, Flue gas purification plant, processing technology, gas supply, vapour facilities, recycling facilities, vacuum facilities, hot water, heating technology, district heating, thermal oil applications, general plant manufacturing, etc. (other applications on request)

Selection of possible flow media

Steam, gases, hot water, thermal fluids, hot oil, process water, vacuum facilities, ammonia etc. (other flow media on request)

Available options:

Material and type		Valve trim					Bellows	
		Standard flat disc	Throttling plug and locking device	Balancing disc	R-PTFE soft seat standard disc	R-PTFE soft seat throttling plug	Single ply	Twin ply
Ductile iron	BSV1	✓					✓	
	BSV1T		✓					✓
	BSV1 RPTFE				✓		✓	
	BSV1T RPTFE					✓		✓
Cast steel	BSV2	✓					✓	
	BSV2T	✓	✓					✓
	BSV2 RPTFE		✓		✓		✓	✓
	BSV2T RPTFE					✓		✓
Stainless steel	BSV3	✓		✓				✓
	BSV3T		✓		✓			✓
	BSV3 RPTFE							✓
	BSV3T RPTFE					✓		✓

Materials for the BSV1, BSV2, BSV3

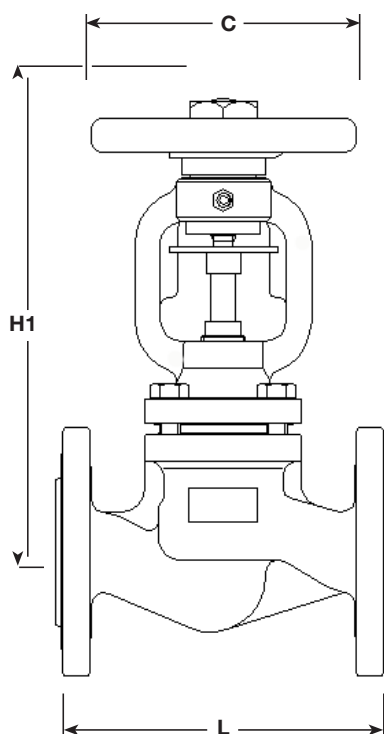
Materials							
Component	BSV1	BSV2	BSV3	Component	BSV1	BSV2	BSV3
1.Body	ASTMA536	ASTM A216-WCB	ASTM A351 CF8M	7.Handle wheel	Pressed steel BS 1449 CR4		
2.Bonnet	ASTMA536	ASTM A276-316		8.Stem packing	Graphite		
3.Seat	Stainless steel AISI 420			9.Studs nuts bolts	Steel ASTM A 193 B7		
4.Disc	Metal	ASTM A351-CF8M/A276-316		10.Body gasket	Graphite laminated with stainless steel insert		
	Soft seat	Disc	ASTM A351-CF8M/A276-316	11.Locking screw	Stainless Steel 304		
	Soft seat	Insert	R-PTFE 25% carbon filled				
5.Bellows	ASTM A182-316						
6.Stem	ASTM A182-316						

Kv values - all options

Size	DN15 (½")	DN20 (¾")	DN25 (1")	DN32 (1¼")	DN40 (1½")	DN50 (2")	DN65 (2½")	DN80 (3")	DN100 (4")	DN125 (5")	DN150 (6")	DN200 (8")	DN250 (10")	DN300 (12")
K _v	4	7	12	19	30	47	77	120	193	288	410	725	1 145	1505

For conversion: C_v (UK) = K_v x 0.963

C_v (US) = K_v x 1.156



Dimensions/weights:

(approximate) in mm and kg

Size	L			H1	C	Weight		
	PN	ASME 150	ASME 300			BSV1	BSV2	BSV3
DN15	130	108	152	205	125	4	4	4
DN20	150	117	178	205	125	4	5	5
DN25	160	127	203	217	125	5	6	6
DN32	180	-	-	217	125	7	8	8
DN40	200	165	229	243	200	10	11	11
DN50	230	203	267	243	200	12	14	14
DN65	290	-	-	263	200	16	19	19
DN80	310	241	317	287	200	21	26	26
DN100	350	292	356	383	315	36	44	44
DN125	400	-	-	416	315	52	64	62
DN150	480	445	445	450	315	75	88	98
DN200	600	-	559	622	500	145	180	192
DN250	730	-	-	763	500	180	225	238
DN300	850	-	805	775	520	256	282	288

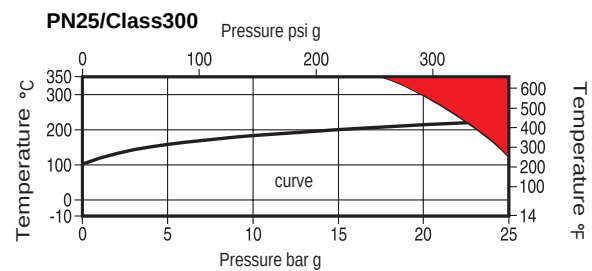
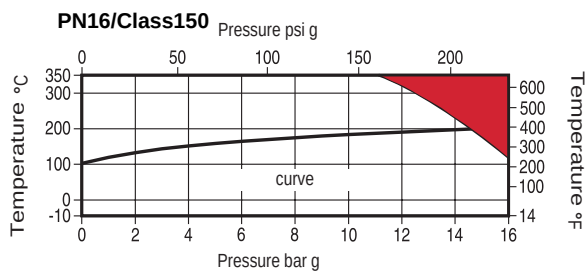
QUALITY CONTROL:

The QC Department is responsible for all aspects of quality, from receiving of material to control of machining processes, welding, nondestructive examination, assembly, pressure testing, cleaning, painting and packaging.

BSVT Flowdata

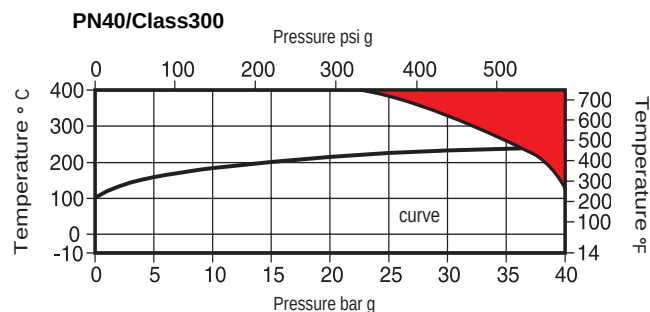
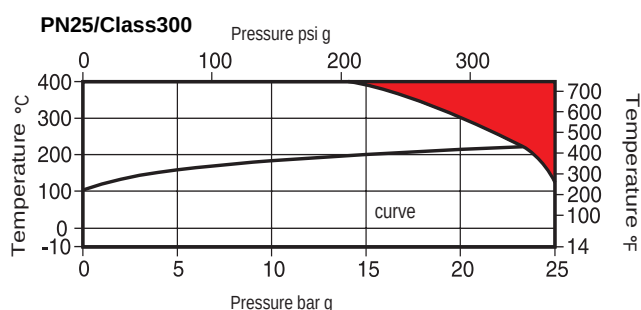
Size	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Turns	kv values for given handwheel rotations Water at 20C													
0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0.5	1.2	1.2	1.4	2.2	4.4	4.1	5.6	10.4	12.0	21	28	66	110	145
1	1.7	1.7	2.0	3.7	5.0	5.0	7.0	11.5	14.3	23	30	81	140	170
1.5	2.7	2.9	2.9	5.0	5.5	6.0	9.2	13.6	24.5	26	33	97	150	202
2	3.6	4.0	4.6	7.9	7.6	7.2	11.6	16.3	34.1	42	46	111	165	235
2.5	4.4	5.3	6.4	10.6	11.0	9.7	12.4	18.5	59.6	67	65	149	190	260
3	5.4	6.6	8.5	13.8	14.7	14.1	13.0	21.1	86.2	94	90	199	225	281
4			10.6	17.0	22.6	24.4	25.2	24.5	123.0	140	152	302	330	350
4.5			11.2	18.3	24.4	29.4	32.5	29.0	139.0	181	177	355	451	375
5			11.9	19.6	27.2	37.0	43.6	39.1	164.1	185	216	403	460	490
6					28.9	46.2	60.2	61.0	179.0	220	264	455	600	632
6.5					29.1	47.0	63.0	69.0	186.0	230	288	480	641	665
6.7					29.3	47.2	64.3	73.0		235	293	487	656	686
7							65.9	78.0		241	305	495	678	698
8							71.2	90.0		259	337	507	738	752
8.5							74.6	92.0			348	522	760	780
9.5								99.0			369		793	815
10								101.6					805	834
10.7													827	868

BSV1 Temperature and Pressure limits



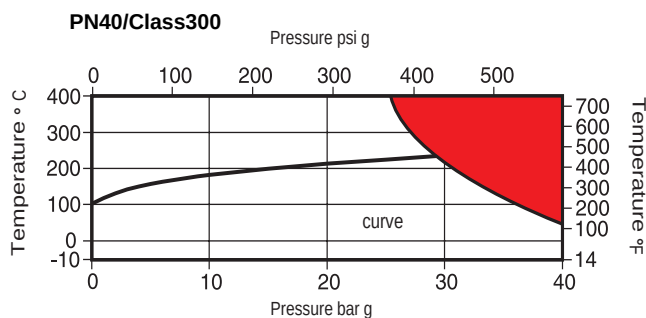
Body design conditions			PN16/Class150	PN25/Class300
PMA-Maximum allowable pressure			16 bar g (232 psi g)	25 bar g (362.5 psi g)
TMA-Maximum allowable temperature			350°C (662°F)	350°C (662°F)
TMI-Minimum allowable temperature			-10°C (14°F)	-10°C (14°F)
PMO - Maximum operating pressure for saturated steam service			14.7 bar g (213.15 psi g)	22.3 bar g (323.35 psi g)
TMO- Maximum operating temperature	Soft seat		230°C (446°F)	230°C (446°F)
	Metal seat		350°C (662°F)	350°C (662°F)

BSV2 Temperature and Pressure limits



Body design conditions		PN25/Class300	PN40/Class300
PMA-Maximum allowable pressure		25 bar g (362.5 psi g)	40 bar g (580 psi g)
TMA-Maximum allowable temperature		400°C (752°F)	400°C (752°F)
TMi-Minimum allowable temperature		-10°C (14°F)	-10°C (14°F)
PMO - Maximum operating pressure for saturated steam service		23.2 bar g (336.4 psi g)	36.1 bar g (523.45 psi g)
TMO- Maximum operating temperature	Soft seat	230°C (446°F)	230°C (446°F)
	Metal seat	400°C (752°F)	400°C (752°F)

BSV3 Temperature and Pressure limits



Body design conditions		PN40/Class300
PMA-Maximum allowable pressure		40 bar g (580 psi g)
TMA-Maximum allowable temperature		400 °C (752 °F)
TMi-Minimum allowable temperature		-10 °C (14 °F)
PMO - Maximum operating pressure for saturated steam service		29.8 bar g (432.1 psi g)
TMO- Maximum operating temperature	Soft seat	230 °C (446 °F)
	Metal seat	400 °C (752 °F)