

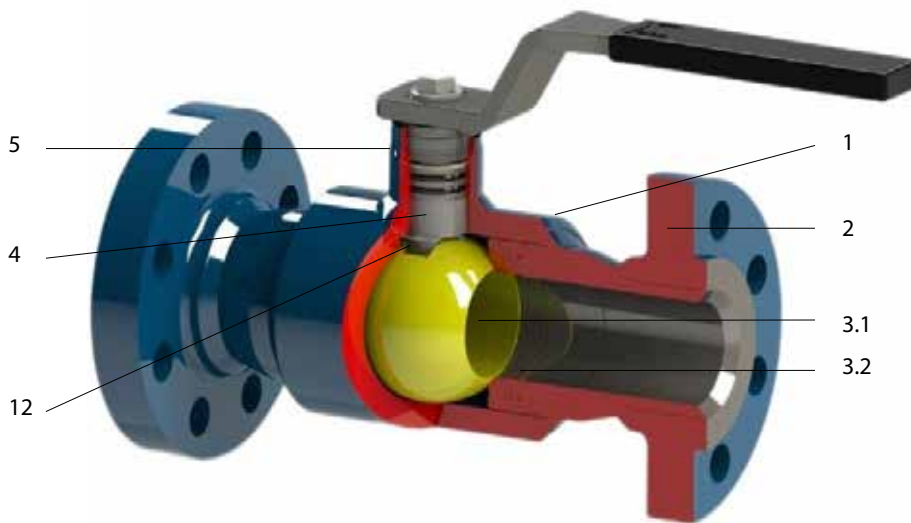
Fully welded ball valves with floating ball

Type K91.2

DN 20-50 PN 16-160
 NPS ¾"-2" Class 150-900
 Tmax: 200 °C
 Design: fabricated

Connection:

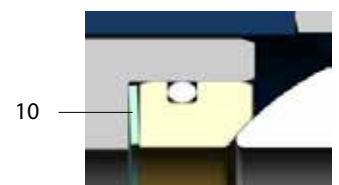
- ⊙ EN 1092-1, ASME B16.5 FLANGED ENDS
- ⊙ EN 12627, ASME B16.25 WELDED ENDS
- ⊙ ASME B16.11 SOCKED WELD



K91.21 Soft seated



K91.22 Metal seated



Material

Position	Part	Material Metal to metal K91.22	Material Soft seated K91.21
1	Body	P355 KV -46°C/27J	
2	Cover	P355 KV -46°C/27J	
3.1	Ball	1.4462+0,15TCC	1.4462
3.2	Seat		TecaPeek
4	Stem	1.4542 (P800) - X5CrNiCVNb16	
5	Flange	P355 KV -46°C/27J	
7	Support plate	-	SS
10	Spring		SS
12	Antistatic		SS
-	O-rings		Viton GLT
-	Seal		GRAPHITE

*full pressure over the whole temperature range

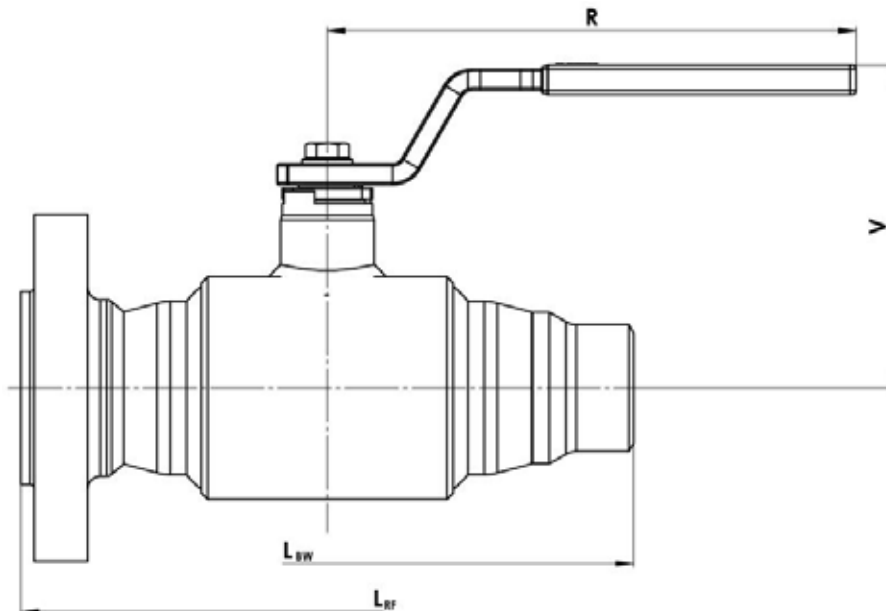
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PN 16-40

DN	L		V	Lever	-kg	
	L _{RF}	L _{BW}		R	RF	BW
20	152	254	108	176	4,1	3
25	165	254	108	176	4,6	3
32	178	305	146	252	8,5	8
40	190	305	146	252	9,2	8
50	216	292	154	252	13,6	11

PN 16-40

DN	L		V	Lever	-kg	
	L _{RF}	L _{BW}		R	RF	BW
20	190	254	108	176	6,1	3
25	216	254	108	176	7,4	3
32	229	305	146	252	11,5	8
40	241	305	146	252	13,5	8
50	292	292	154	252	20	11

PN 160

DN	L		V	Lever	-kg	
	L _{RF}	L _{BW}		R	RF	BW
25	254	254	108	176	6,8	3
40	305	305	146	252	15	8

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Class 150

NPS	L		V	Lever	~kg	
	L _{RF}	L _{BW}		R	RF	BW
¾"	152	254	108	176	3,3	3
1"	165	254	108	176	3,9	3
1 ¼"	178	305	146	252	7,3	8
1 ½"	190	305	146	252	8,2	8
2"	216	292	154	252	12,6	11

Class 300

NPS	L		V	Lever	~kg	
	L _{RF}	L _{BW}		R	RF	BW
¾"	152	254	108	176	4,3	3
1"	165	254	108	176	4,7	3
1 ¼"	178	305	146	252	8,3	8
1 ½"	190	305	146	252	10,2	8
2"	216	292	154	252	13,9	11

Class 600

NPS	L		V	Lever	~kg	
	L _{RF}	L _{BW}		R	RF	BW
¾"	190	254	108	176	4,6	3
1"	216	254	108	176	5,4	3
1 ¼"	229	305	146	252	9,9	8
1 ½"	241	305	146	252	12	8
2"	292	292	154	252	17,5	11

Class 900

NPS	L		V	Lever	~kg	
	L _{RF}	L _{BW}		R	RF	BW
¾"	229	254	108	176	7	3
1"	254	254	108	176	9,3	3
1 ¼"	279	305	146	252	14,3	8
1 ½"	305	305	146	252	17,7	8

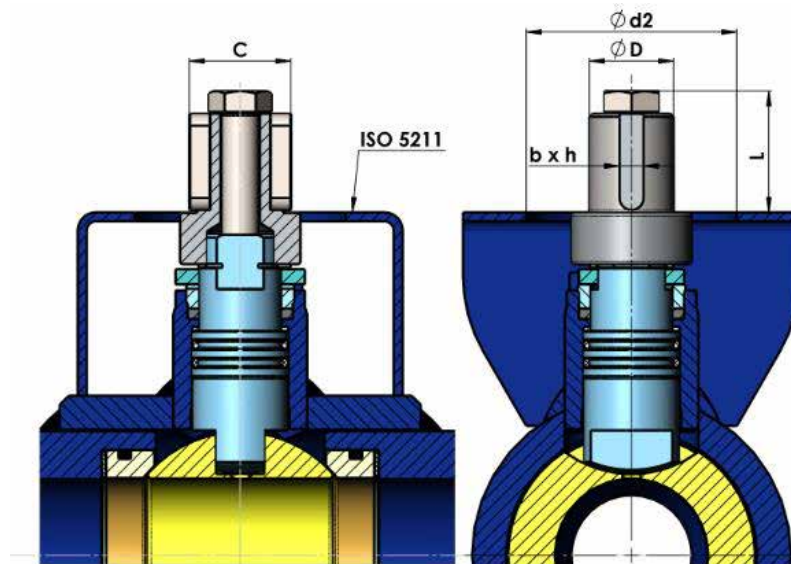
Fully welded ball valves with floating ball

Type K91.2

DN 20-50 PN 16-160
 NPS 3/4"-2" Class 150-900
 Tmax: 200 °C
 Design: fabricated

Connection:

- ⊕ EN 1092-1, ASME B16.5 FLANGED ENDS
- ⊗ EN 12627, ASME B16.25 WELDED ENDS
- ⊙ ASME B16.11 SOCKED WELD



ISO 5211 connection

DN (NPS)	ISO 5211	$\varnothing D$ (h9)	L (+1)	$\varnothing d2$ (+0,2)	key b x h	c
20 (3/4")	F05	18	28	35	6x6	23
25 (1")	F05	18	28	35	6x6	23
32 (1 1/4")	F10	28	39	70	8x7	33,8
40 (1 1/2")	F10	28	39	70	8x7	33,8
50 (2")	F10	28	39	70	8x7	33,8

Other possibilities



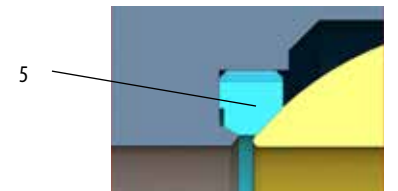
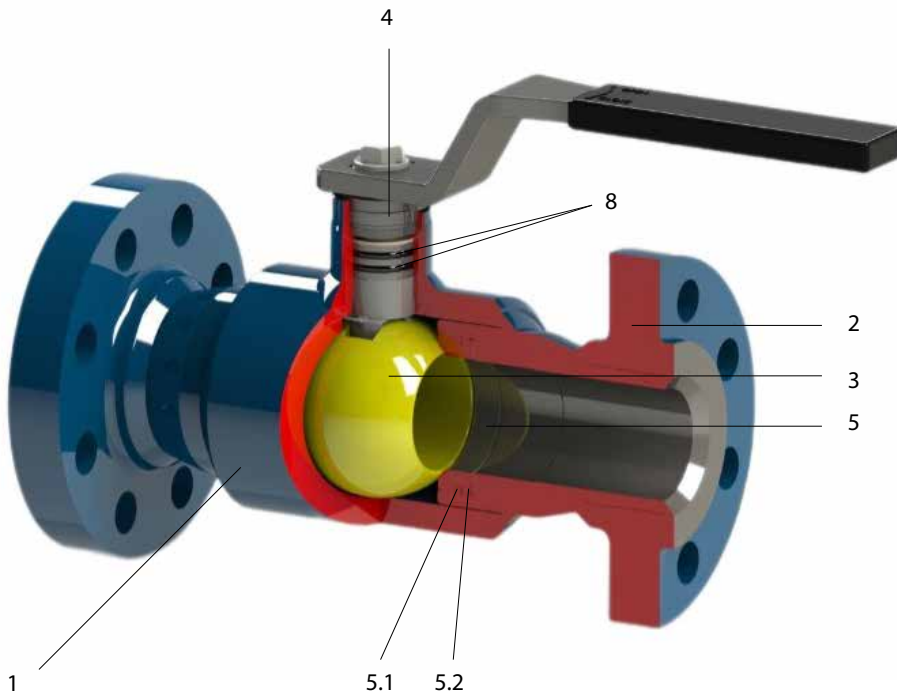
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Type K91.2

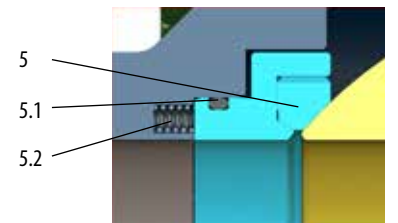
DN 10-65 PN 100-400
 NPS 3/4"-2" Class 600-2500
 Tmax: 200 °C
 Design: forged

Connection:

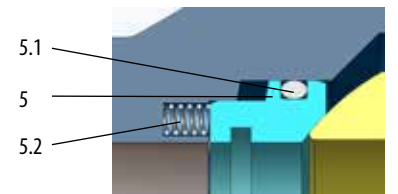
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Soft seat



Soft floating seat



Metal seat

Material

Position	Component	Carbon steel	Stainless steel
		For temperature -46°C - +200°C	Austenitic and martensitic -60 °C - +200 °C
1	Body	A350 LF2, P355	A182 F304 , 1.4541, A182 F316 , 1.4571
2	Cover		
3	Ball	A182 F304, A182 F316, A351 CF8, 13%Cr (for metal to metal + HF)	A182 F316, 1.4571, A351 CF8, 13%Cr (for metal to metal + HF)
4	Stem	1.4571, A182 F316, 1.4542"	
5	Soft seat	filled PTFE, NYLON, PEEK	
5	Metal to metal seat	A182 F304, A182 F316, A351 CF8, 13%Cr + HF	
5,1	Seat seal	HNBR, VITON, GRAPHITE	
5,2	Springs	AISI 302, Inconel X750	Inconel X750
6	Bearings	CS+PTFE, SS+PTFE	SS+PTFE
7	Bolts	A320 L7	A193 B8
8	Nuts	A194 Gr.7	A194 Gr.8
9	Seals	HNBR, VITON, PTFE, GRAPHITE, LIPSEAL	

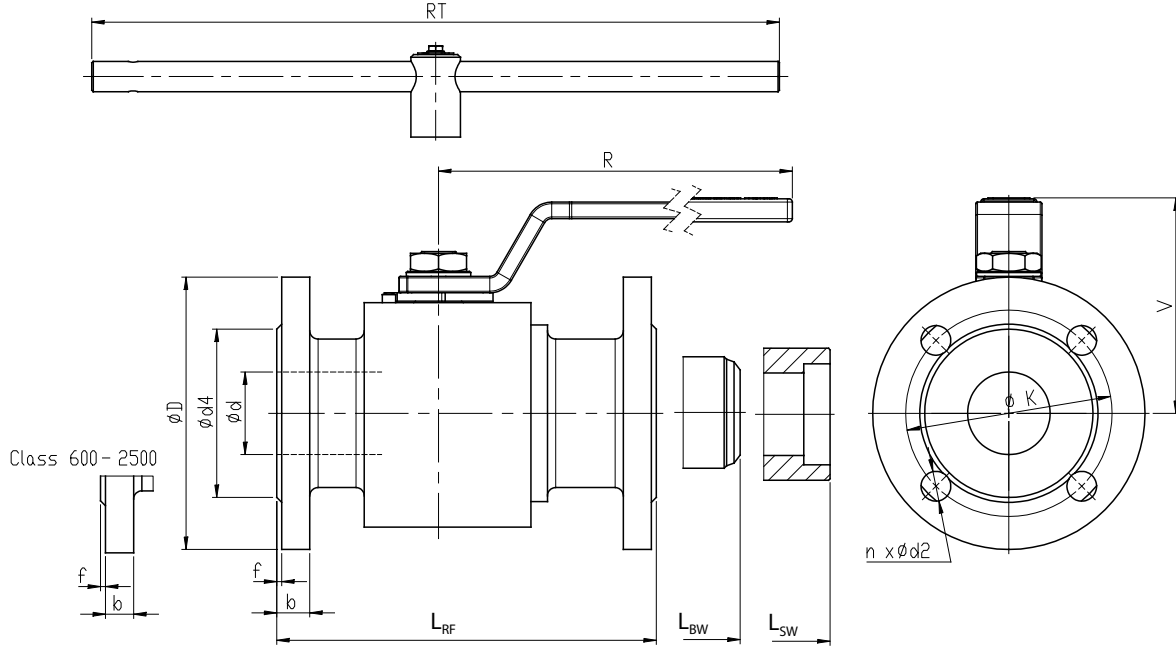
Fully welded ball valves with floating ball

Type K91.2

DN 10-65 PN 100-400
 NPS 3/4"-2" Class 600-2500
 Tmax: 200 °C
 Design: forged

Connection:

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Class 600

NPS	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
2 1/2"	62	190	28,6	149,2	105	7	8 x 22	330	330	202	-	650	58	40

Class 900

NPS	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
2"	50	215	38,1	165,1	92,1	7	8 x 25	368	368	212	-	600	30	21

Class 1500

NPS	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
1/2"	14	120	22,3	82,6	34,9	7	4 x 22	216	216	122	150	-	4,9	2,1
3/4"	20	130	25,4	88,9	42,9		4 x 22	229	229	129	150	-	8,8	3,5
1"	25	150	28,6	101,6	50,8		4 x 25	254	254	132	150	-	11,6	4,6
1 1/4"	30,5	160	28,6	111,1	63,5		4 x 25	279	279	142	350	-	13	5,6
1 1/2"	38	180	31,8	123,8	73		4 x 29	305	305	179	-	600	22	12
2"	50	215	38,1	165,1	92,1		8 x 25	368	368	212	-	600	30	21

Class 2500

NPS	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
1/2"	14	135	30,2	88,9	34,9	7	4 x 22	264	264	120	150	-	15	10
3/4"	20	140	31,8	95,2	42,9		4 x 22	273	273	120	-	400	18	12
1"	25	160	35	108	50,8		4 x 25	308	308	120	-	400	45	15

Fully welded ball valves with floating ball

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Connection:

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- ⊙ ASME B16.11 SOCKED WELD

PN 100

DN	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
65	62	220	30	145	122	3	8 x 26	330	330	202	-	650	58	40

PN 160

DN	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
50	50	195	30	145	102	3	8 x 26	368	292	131	350	-	27	15

PN 250

DN	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
10	10	125	24	85	40	2	4 x 18	264	264	103	150	-	6	10
15	14	130	26	90	45		4 x 18	264	264	120	-	400	7,5	12
25	25	150	28	105	68		4 x 22	254	254	132	150	-	11,3	4,6
32	-	-	-	-	-	3	-	-	279	142	350	-	-	5,6
25	38	185	34	135	88		4 x 26	305	305	179	-	600	22	12
50	50	200	38	150	102		8 x 26	368	368	212	-	600	33	21

PN 320

DN	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
10	10	125	24	85	40	2	4 x 18	264	264	103	150	-	6	10
15	14	130	26	90	45		4 x 18	264	264	120	-	400	7,5	12
25	25	160	34	115	68		4 x 22	308	308	120	-	400	30	15

PN 400

DN	Dimensions of flanges							L		V	Lever		~kg	
	ød	øD	b	øK	ød ₄	f	n x ød ₂	L _{RF}	L _{BW}		R	RT	RF	BW
10	10	125	28	85	40	2	4 x 18	264	264	103	150	-	7	3
15	14	145	30	100	45		4 x 22	264	264	120	-	400	9	3,2
25	25	180	38	130	68		4 x 26	308	308	120	-	400	45	15