

## Technische Dokumentation Technical Documentation

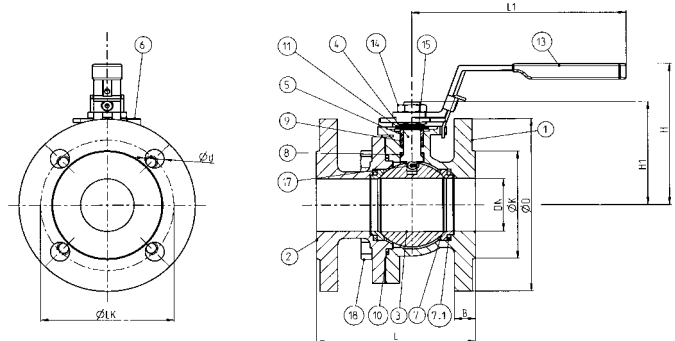


### **XOMOX Ball Valves Type KVA / KVL / KVK**

## XOMOX ball valve, metal seated Type KVA – SME / EME DN 15 – 50 / 150 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 150Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVA-SME	Type KVA-EME
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)boronized	A351 CF8M (1.4408)boronized
4	Stem	1	17-4PH	17-4PH
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	SS316 (1.4571) boronized	SS316 (1.4571) boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	1	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	B8	B8

### Dimensions in mm

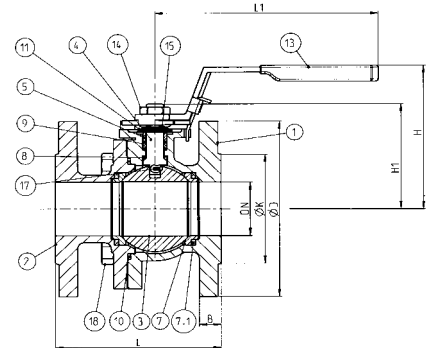
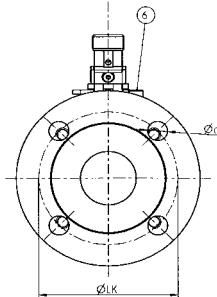
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	108	88,9	35	11.2	60.5	16	83	58	135	F04	1.6	47NM
20	117	98,6	43	11.2	70	16	86	61	135	F04	2.5	47NM
25	127	108	51	11.2	79.5	16	98	73	165	F05	3.1	85NM
40	165	127	73	14.2	98.5	16	119	90	200	F07	5.7	185NM
50	178	152	92	15.9	120.5	19	128	99	200	F07	8.2	185NM

\* Incl. 25% Safety

## XOMOX ball valve, metal seated Type KVA – SME / EME DN 15 – 50 / 300 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 300Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVA-SME	Type KVA-EME
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)boronized	A351 CF8M (1.4408) boronized
4	Stem	1	17-4PH	17-4PH
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	SS316 (1.4571) boronized	SS316 (1.4571) boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	1	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	B8	B8

### Dimensions in mm

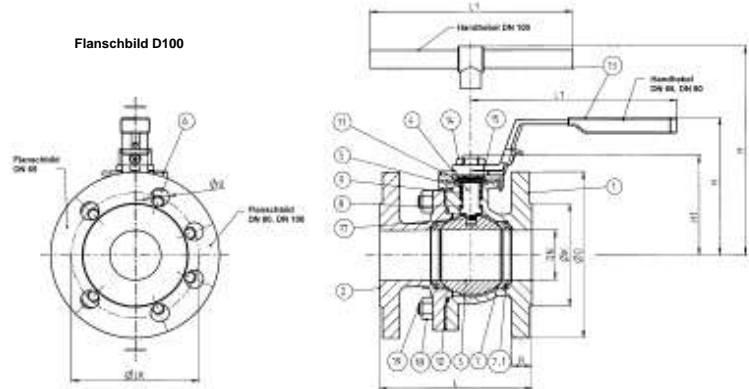
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	140	95	35.1	14.3	66.5	14.3	82	58	135	F04	3	47NM
20	152	117	42.9	15.9	82.5	15.9	86	61	135	F04	3,8	47NM
25	165	124	50.8	17.5	89	17.5	98	73	165	F05	4,3	85NM
40	190	156	73	20.7	114.5	20.7	119	90	200	F07	8,3	185NM
50	216	165	92	22.3	127	22.3	128	99	200	F07	11	185NM

\* Inkl. 25% Safety

## XOMOX ball valve, metal seated Type KVA – SME / EME DN 65 – 100 / 150 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 150Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVA-SME	Type KVA-EME
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)boronized	A351 CF8M (1.4408)boronized
4	Stem	1	17-4PH	17-4PH
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	SS316 (1.4571) boronized	SS316 (1.4571) boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	Gr. 8	Gr. 8
19	Stud bolts	6 (8)*	B8	B8

\*DN100 8-pcs.

### Dimensions in mm

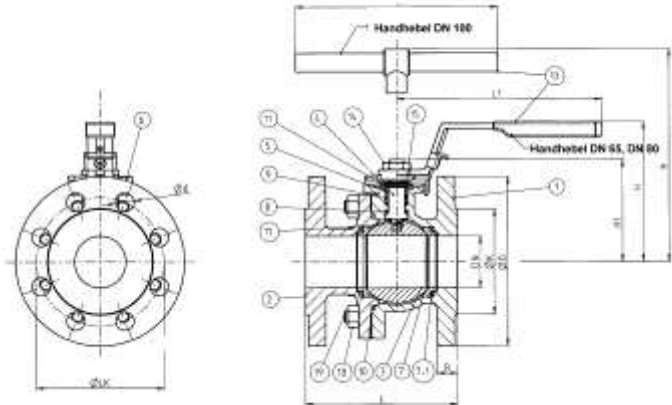
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	190	177.8	104.6	17.5	139.7	19	16	133	250	F10	15	715NM
80	203	190.5	127	19.1	152.4	19	172	144	250	F10	20	770NM
100	229	228.6	157.2	23.9	190.5	19	197	400	228.6	F10	30	1085NM

\* Incl. 25% Safety

## XOMOX ball valve, metal seated Type KVA – SME / EME DN 65 – 100 / 300 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 300Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part description

Pos.	Part description	Qty	Type KVA-SME	Type KVA-EME
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)boronized	A351 CF8M (1.4408)boronized
4	Stem	1	SS 316 (1.4401)	SS 316 (1.4401)
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	SS316 (1.4571) boronized	SS316 (1.4571) boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	Gr. 8	Gr. 8
19	Stud bolts	6 (8)*	B8	B8

\*DN80 & DN100 8-pcs.

### Dimensions in mm

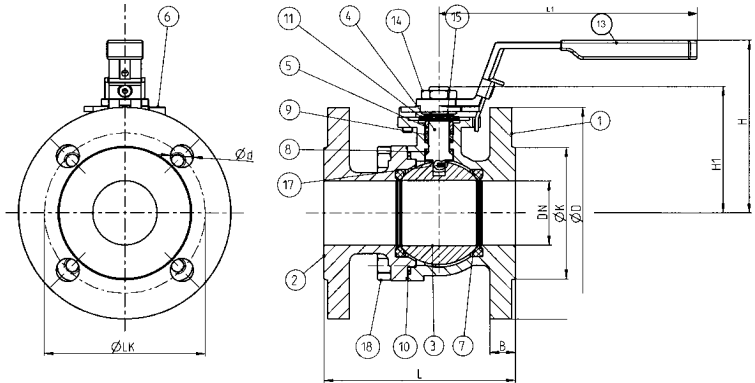
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	241	190	104.6	25.4	149	22	16	133	250	F10	19	715NM
80	283	210	127	28.6	168	22	172	144	250	F10	26	770NM
100	305	254	157.2	31.8	200	22	197	400	228.6	F10	41	1085NM

\*Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVA – STE / ETE DN 15 – 50 / 150 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 150Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVA-STE	Type KVA-ETE
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)	A351 CF8M (1.4408)
4	Stem	1	SS 316 (1.4401)	SS 316 (1.4401)
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	B8	B8

### Dimensions in mm

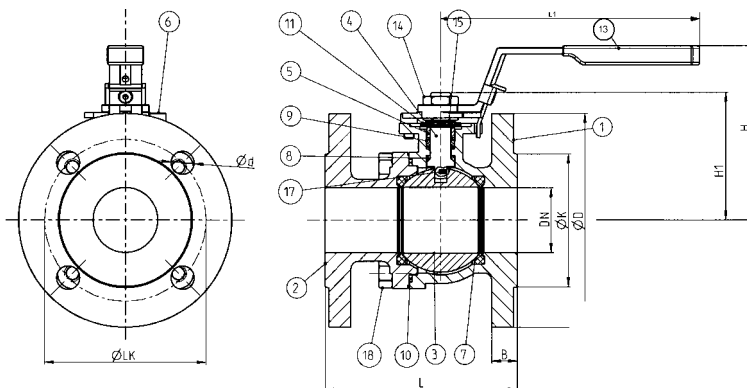
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	108	88.9	35	11.2	60.5	16	83	58	135	F04	1.6	13NM
20	117	98.6	43	11.2	70	16	86	61	135	F04	2.5	13NM
25	127	108	51	11.2	79.5	16	98	73	165	F05	3.1	23NM
40	165	127	73	14.2	98.5	16	119	90	200	F07	5.7	48NM
50	178	152	92	15.9	120.5	19	128	99	200	F07	8.2	48NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVA – STE / ETE DN 15 – 50 / 300 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 300Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVA-STE	Type KVA-ETE
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)	A351 CF8M (1.4408)
4	Stem	1	SS 316 (1.4401)	SS 316 (1.4401)
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	B8	B8

### Dimensions in mm

DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	140	95	35.1	14.3	66.5	14.3	83	58	135	F04	3	13NM
20	152	117	42.9	15.9	82.5	15.9	86	61	135	F04	3.8	13NM
25	165	124	50.8	17.5	89	17.5	98	73	165	F05	4.3	23NM
40	190	156	73	20.7	114.5	20.7	119	90	200	F07	8.3	48NM
50	216	165	92	22.3	127	22.3	128	99	200	F07	11	48NM

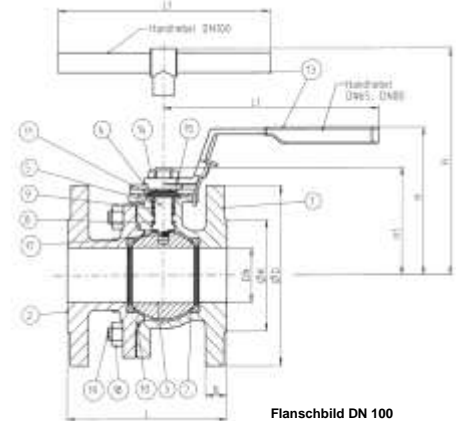
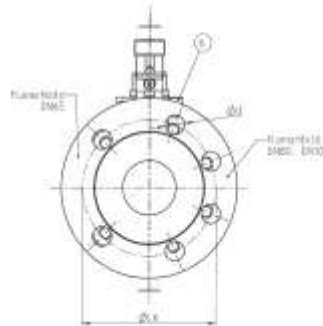
\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVA – STE / ETE DN 65 – 100 / 150 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 150Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly

Flanschbild DN65, DN80



### Part list

Pos.	Part description	Qty	Type KVA-STE	Type KVA-ETE
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)	A351 CF8M (1.4408)
4	Stem	1	SS 316 (1.4401)	SS 316 (1.4401)
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	Gr. 8	Gr. 8
19	Bolts	6 (8)*	B8	B8

\* DN100 8-pcs.

### Dimensions in mm

DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	190	177.8	104.6	17.5	139.7	19	16	133	250	F10	15	185NM
80	203	190.5	127.0	19.1	152.4	19	172	144	250	F10	20	200NM
100	229	228.6	157.2	23.9	190.5	19	197	400	228.6	F10	30	282NM

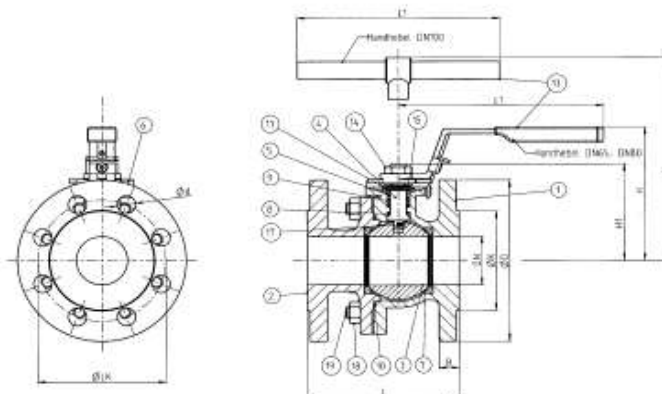
\* Incl. 25% Safety



## XOMOX ball valve, soft seated Type KVA – STE / ETE DN 65 – 100 / 300 Lbs

### Design features

- High quality investment casting body
- Ref. ASME B16.34
- Face to face acc. ASME B16.10 long
- Pressure class: 300Lbs
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Teilebezeichnung	Anzahl	Typ KVA-STE	Typ KVA-ETE
1	Body	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
2	Tail	1	A216 WCB (1.0619)	A351 CF8M (1.4408)
3	Ball	1	A351 CF8M (1.4408)	A351 CF8M (1.4408)
4	Stem	1	SS 316 (1.4401)	SS 316 (1.4401)
5	Pressure gland	1	SS 316 (1.4401)	SS 316 (1.4401)
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	Gr. 8	Gr. 8
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	Gr. 8	Gr. 8
19	Bolts	6 (8)*	B8	B8

\* DN80 & DN100 8-pcs.

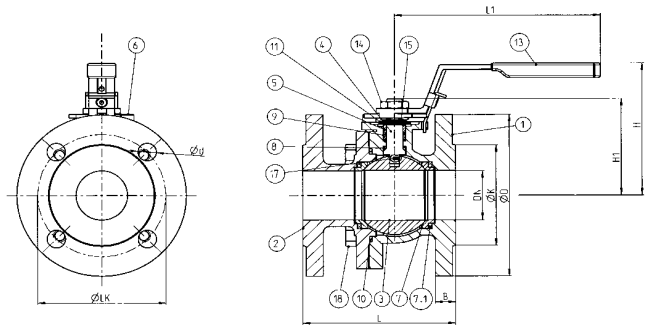
### Dimensions in mm

DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	241	190	104.6	25.4	149	22	16	133	250	F10	19	185NM
80	283	210	127	28.6	168	22	172	144	250	F10	26	200NM
100	305	254	157.2	31.8	200	22	197	400	228.6	F10	41	282NM

\* Incl. 25% Safety

#### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 10 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



#### Part list

Pos.	Part description	Qty	Type KVK-SME	Type KVK-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphit	Graphit
8	Spherical seal	1	Graphit	Graphit
9	Stem packing	1	Graphit	Graphit
10	Body gasket	1	Graphit	Graphit
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	A2-70	A2-70

#### Dimensions in mm

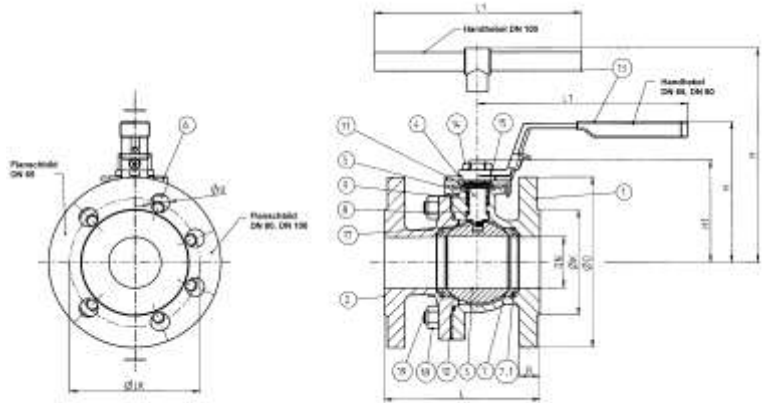
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	115	95	45	16	65	14	83	58	131	F04	2.2	47NM
20	120	105	58	16	75	14	86	61	131	F04	2.8	47NM
25	125	115	68	18	85	14	100	74	166	F05	4.3	85NM
32	130	140	78	18	100	18	104	77	166	F05	5.3	85NM
40	140	150	88	18	110	18	117	90	201	F07	5.2	185NM
50	150	165	102	20	125	18	126	99	201	F07	9.3	185NM

\* Incl. 25% Safety

## XOMOX ball valve, metal seated Type KVK – SME / EME DN 65 – 100 / PN 10 - 16

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 10 -16
- Full port
- Anti blow out S2-stem, TA-Luft approved  
DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVK-SME	Type KVK-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\*DN100 8-pcs

### Dimensions in mm

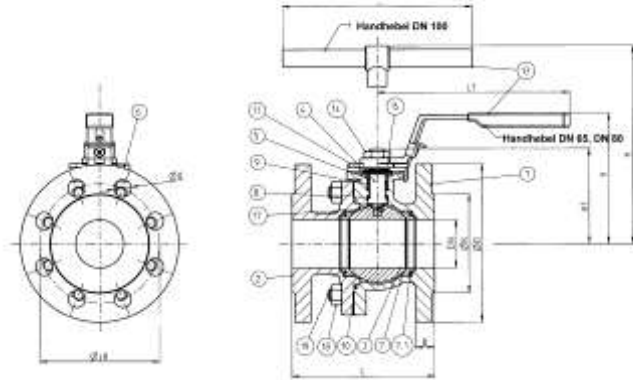
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	170	185	122	18	145	18	161	133	251	F10	15	715NM
80	180	200	138	20	160	18	174	146	251	F10	20	770NM
100	190	220	158	20	180	18	215	--	400	F10	29	1085NM

\* Incl. 25% safety

## XOMOX ball valve, metal seated Type KVK – SME / EME DN 65 – 100 / PN 25 - 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 25 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVK-SME	Type KVK-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\*DN80 & DN100 8-pcs.

### Dimensions in mm

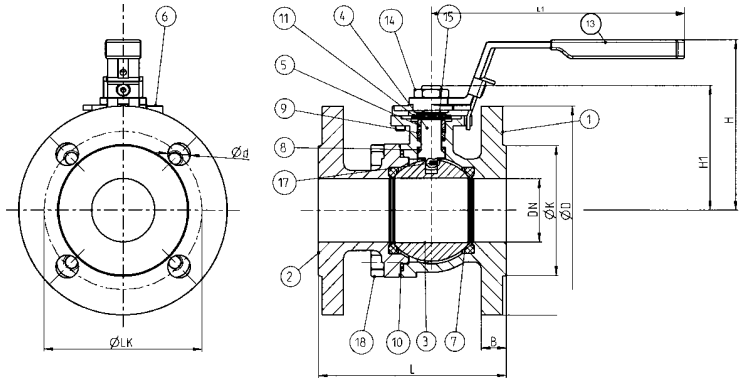
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	170	185	122	22	145	18	161	133	251	F10	16	715NM
80	180	200	138	24	160	18	174	146	251	F10	21	770NM
100	190	220	162	24	190	18	215	--	400	F10	31	1085NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVK – STE / ETE DN 15 – 50 / PN 10 - 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 10 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVK-STE	Type KVK-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	A2-70	A2-70

### Dimensions in mm

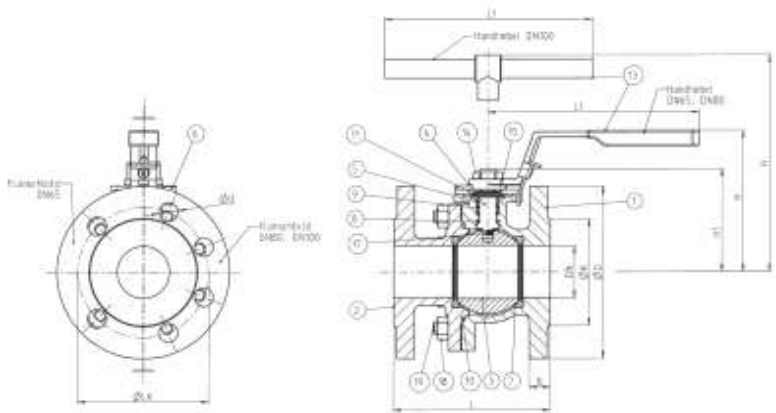
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	115	95	45	16	65	14	83	58	131	F04	2.2	13NM
20	120	105	58	16	75	14	86	61	131	F04	2.8	13NM
25	125	115	68	18	85	14	100	74	166	F05	4.3	23NM
32	130	140	78	18	100	18	104	77	166	F05	5.3	23NM
40	140	150	88	18	110	18	117	90	201	F07	5.2	48NM
50	150	165	102	20	125	18	126	99	201	F07	9.3	48NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVK – STE / ETE DN 65 – 100 / PN 10 - 16

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 10 -16
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVK-STE	Type KVK-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\* DN100 8-pcs.

### Dimensions in mm

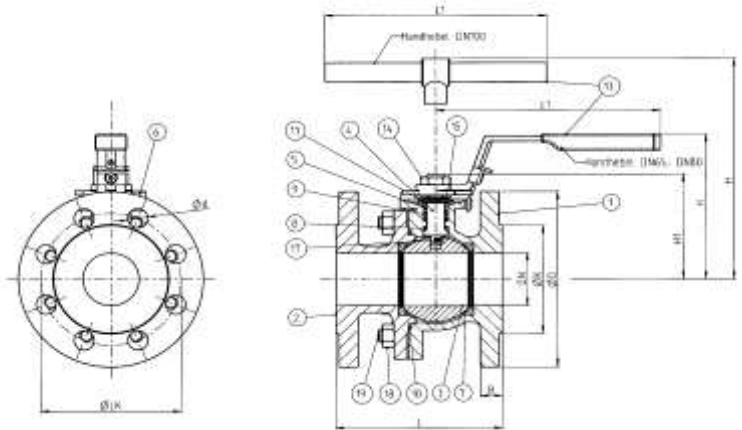
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	170	185	122	18	145	18	161	133	251	F10	15	185NM
80	180	200	138	20	160	18	174	146	251	F10	20	200NM
100	190	220	158	20	180	18	215	--	400	F10	29	282NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVK – STE / ETE DN 65 – 100 / PN 25 – 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 14 (old F4)
- Pressure class: PN 25 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVK-STE	Type KVK-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\* DN100 8-pcs.

### Dimensions in mm

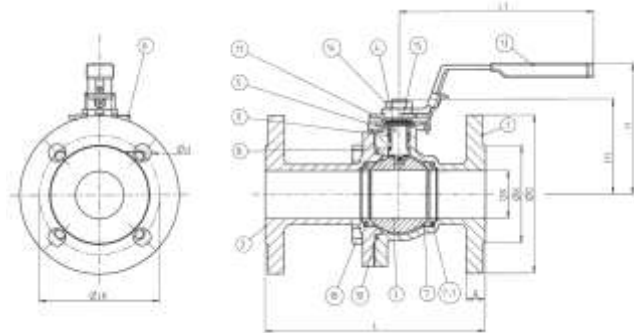
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	170	185	122	22	145	22	161	133	251	F10	16	185NM
80	180	200	138	24	160	24	174	146	251	F10	21	200NM
100	190	220	158	24	190	24	215	--	400	F10	31	282NM

\* Incl. 25% Safety

## XOMOX ball valve, metal seated Type KVL – SME / EME DN 15 – 50 / PN 10 - 40

### Design features

- High quality investment casting body
- DIN ISO 5211 for actuator assembly
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Full port
- Pressure class: PN 10 -40
- Anti blow out S2-stem, TA-Luft approved



### Part list

Pos.	Part description	Qty	Type KVL-SME	Type KVL-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	1	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	A2-70	A2-70

### Dimensions in mm

DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	130	95	45	16	65	14	83	58	131	F04	2.4	47NM
20	150	105	58	16	75	14	86	61	131	F04	3.0	47NM
25	160	115	68	18	85	14	100	74	166	F05	4.3	85NM
32	180	140	78	18	100	18	104	77	166	F05	6.0	85NM
40	200	150	88	18	110	18	117	90	201	F07	6.2	185NM
50	230	165	102	20	125	18	126	99	201	F07	10.0	185NM

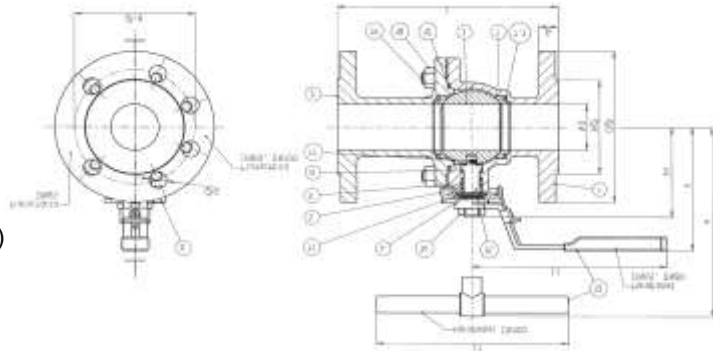
\* Incl. 25% Safety



## XOMOX ball valve, metal seated Type KVL – SME / EME DN 65 – 100 / PN 10 – 16

### Design features

- High quality investment casting body
- DIN ISO 5211 for actuator assembly
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Full port
- Pressure class: PN 10 -16
- Anti blow out S2-stem, TA-Luft approved



### Part list

Pos.	Part description	Qty	Type KVL-SME	Type KVL-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\*DN100 8-pcs.

### Dimensions in mm

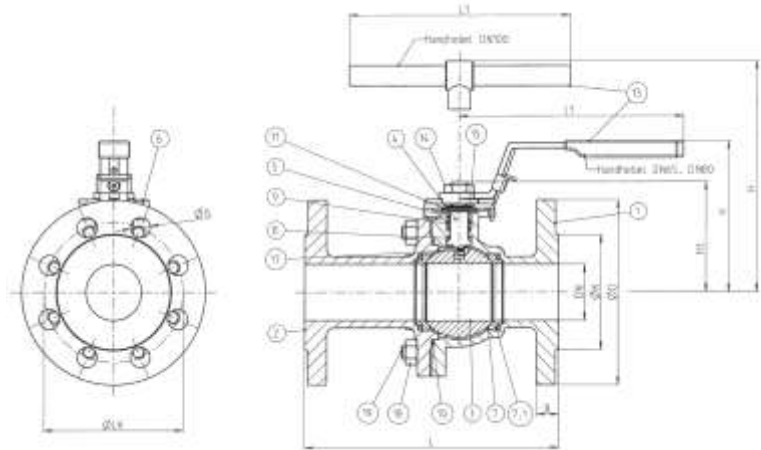
DN	L	ØD	ØK	B	LK	d	H	H1	L1	D1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	290	185	122	18	145	18	161	133	251	22,2	F10	16	715NM
80	310	200	138	20	160	18	174	146	251	22,2	F10	21	770NM
100	350	220	158	20	180	18	215	--	400	28,6	F10	31	1085NM

\* Incl. 25% safety

## XOMOX ball valve, metal seated Type KVL – SME / EME DN 65 – 100 / PN 25 – 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Pressure class: PN 25 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVL-SME	Type KVL-EME
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408 boronized	1.4408 boronized
4	Stem	1	17-4 PH	17-4 PH
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	1.4571 boronized	1.4571 boronized
7.1	Seat support	2	Graphite	Graphite
8	Spherical seal	1	Graphite	Graphite
9	Stem packing	2	Graphite	Graphite
10	Body gasket	1	Graphite	Graphite
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	1	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\*DN80 & DN100 8-pcs.

### Dimensions in mm

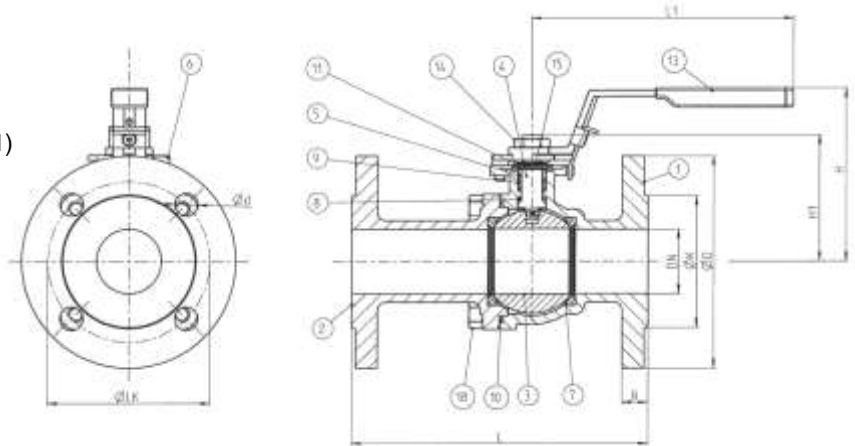
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	290	185	122	22	145	18	161	133	251	F10	18	715NM
80	310	200	138	24	160	18	174	146	251	F10	25	770NM
100	350	220	162	24	190	18	215	--	400	F10	37	1085NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVL – STE / ETE DN 15 – 50 / PN 10 - 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Pressure class: PN 10 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVL-STE	Type KVL-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Bolts	4	A2-70	A2-70

### Dimensions in mm

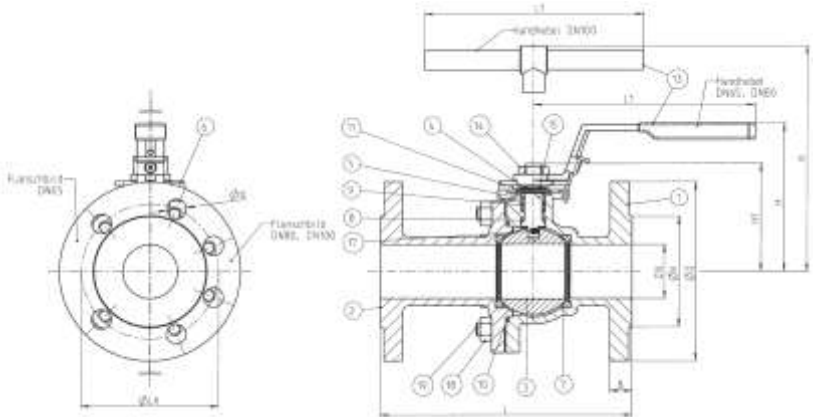
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
15	130	95	45	16	65	14	83	58	131	F04	2.4	13NM
20	150	105	58	16	75	14	86	61	131	F04	3.0	13NM
25	160	115	68	18	85	14	100	74	166	F05	4.3	23NM
32	180	140	78	18	100	18	104	77	166	F05	6.0	23NM
40	200	150	88	18	110	18	117	90	201	F07	6.2	48NM
50	230	165	102	20	125	18	126	99	201	F07	10.0	48NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVL – STE / ETE DN 65 – 100 / PN 10 - 16

### Design feature

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Pressure class: PN 10 -16
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVL-STE	Type KVL-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\* DN100 8-pcs.

### Dimensions in mm

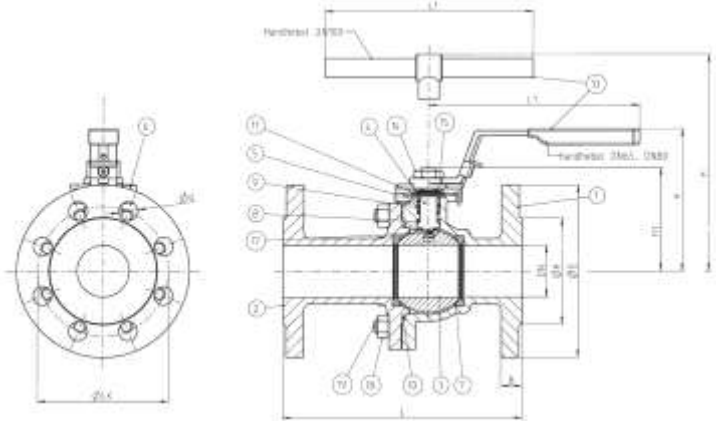
DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	290	185	122	18	145	18	161	133	251	F10	16	185NM
80	310	200	138	20	160	18	174	146	251	F10	21	200NM
100	350	220	158	20	180	18	215	--	400	F10	31	282NM

\* Incl. 25% Safety

## XOMOX ball valve, soft seated Type KVL – STE / ETE DN 65 – 100 / PN 25 - 40

### Design features

- High quality investment casting body
- Face to face acc. DIN EN 558-1 row 1 (old F1)
- Pressure class: PN 25 -40
- Full port
- Anti blow out S2-stem, TA-Luft approved
- DIN ISO 5211 for actuator assembly



### Part list

Pos.	Part description	Qty	Type KVL-STE	Type KVL-ETE
1	Body	1	1.0619	1.4408
2	Tail	1	1.0619	1.4408
3	Ball	1	1.4408	1.4408
4	Stem	1	1.4401	1.4401
5	Pressure gland	1	1.4401	1.4401
6	Stop pin	1	1.4301	1.4301
7	Seats	2	PTFE	PTFE
8	Spherical seal	1	PTFE	PTFE
9	Stem packing	1	PTFE	PTFE
10	Body gasket	1	PTFE	PTFE
11	Lock plate	1	1.4301	1.4301
13	Lever with plastic cover	1	1.4308	1.4308
14	Hexagon nut	2	A2-70	A2-70
15	Belleville washer	2	1.4310	1.4310
17	Antistatic	1	1.4310	1.4310
18	Hexagon nut	6 (8)*	A2-70	A2-70
19	Stud bolt	6 (8)*	A2-70	A2-70

\* DN100 8-pcs.

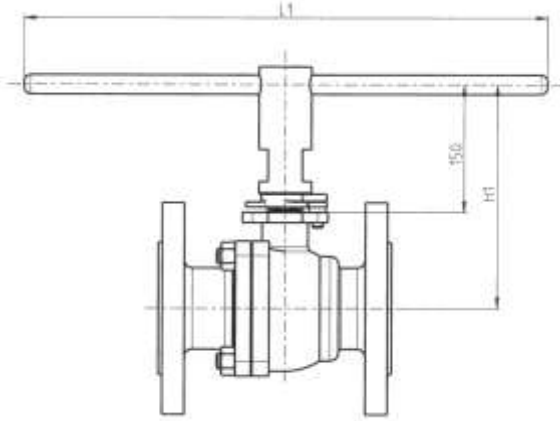
### Dimensions in mm

DN	L	ØD	ØK	B	LK	d	H	H1	L1	DIN ISO 5211	Weight (kg)	Max. torque on Shaft*
65	290	185	122	22	145	22	161	133	251	F10	18	185NM
80	310	200	138	24	160	24	174	146	251	F10	25	200NM
100	350	220	158	24	190	24	215	--	400	F10	37	282NM

\* Incl. 25% Safety

## Data for XOMOX ball valves

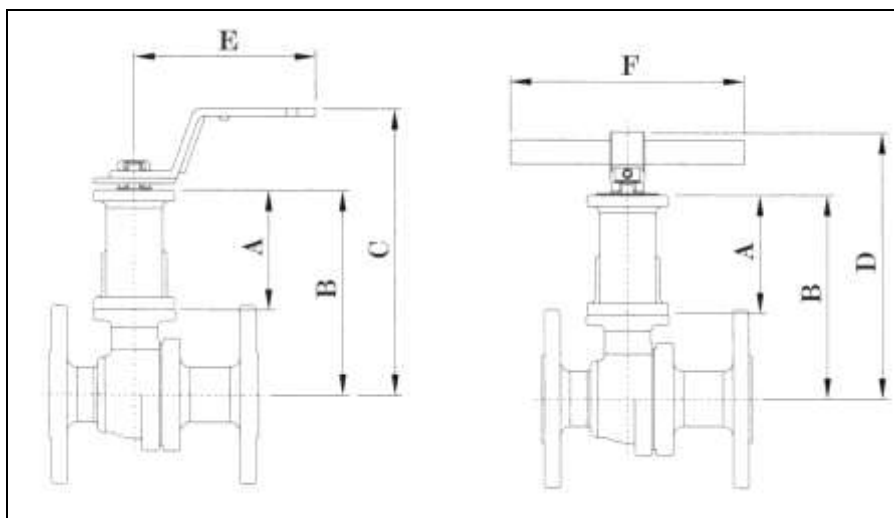
Stem extension with T-lever, mat. SS  
For valve type KVK /KVL /KVA /KK1 /240-70



### Dimension in mm

DN	H1	L1
15	188	250
20	192	250
25	202	350
32	206	350
40	216	350
50	225	350
65	240	400
80	250	400
100	222	400

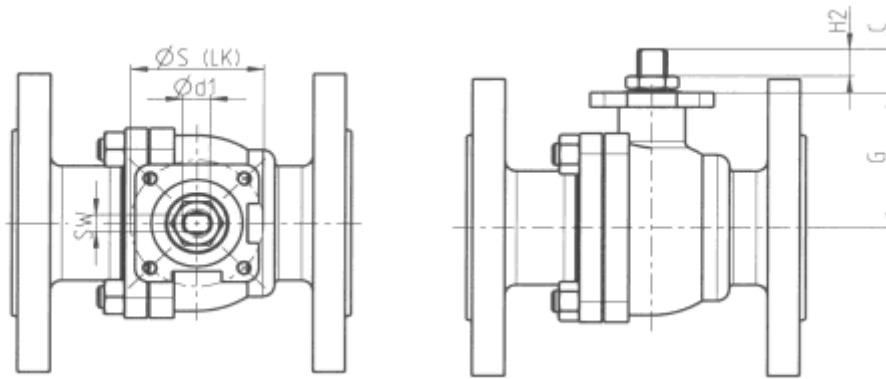
XOMOX ball valve  
Stem extension AELC with SS housing  
For valve type KVK /KVL /KVA /KK1 /240-70



## Dimensions in mm

DN	A	B	C	D	E	F
15	50,0	88,5	137,5	132,5	135	120
20	50,0	92,0	141,0	136,0	135	120
25	74,5	126,0	173,5	168,5	165	160
32	74,5	130,0	177,5	172,5	165	160
40	74,5	140,0	192,5	195,5	200	200
50	74,5	149,0	201,5	204,5	200	200
65	125,5	215,0	288,0	292,5	250	400
80	125,5	225,0	298,0	292,5	250	400
100	125,5	212,5	---	292,5	---	500

XOMOX ball valve  
 ISO-Flange und stem head dimensions  
 For valve Type KVK /KVL /KVA /KK1 / 240-70



## Dimensions in mm

DN	SW	S (LK)	D1	H2	C	G
15	6,3	42	9,7	11,2	18,0	38,5
20	6,3	42	9,7	11,5	17,5	42,0
25	8,0	50	11,2	12,0	20,0	51,5
32	8,0	50	11,2	12,0	20,0	55,5
40	9,5	70	16,0	14,0	23,5	65,5
50	9,5	70	16,0	14,0	23,5	74,5
65	17,0	102	22,3	22,4	41,5	90,0
80	17,0	102	22,3	19,0	41,5	99,9
100	17,0	102	28,6	26,0	47,5	122,

## Tighten torque on body bolts & stem nut for assembly of KVK – KVL - KVA

Valve Size [mm]	Body bolts		Stem nut
	Thread size DIN / ANSI	[NM]	[NM]
15	M8 / 5/16	19	7-9
20	M8 / 5/16	19	7-9
25	M10 / 3/8	39	10-12
32	M10 / 3/8	39	10-12
40	M12 / 1/2	66	14-17
50	M12 / 1/2	66	14-17
65	M12 / 1/2	66	21-24
80	M12 / 1/2	66	21-24
100	M12 / 1/2	66	33-35
100*	M16 / 5/8	164	33-35

\* For PN25-40 & ANSI 300

## Tighten torque for 3-piece ball valves 240-50/70/80

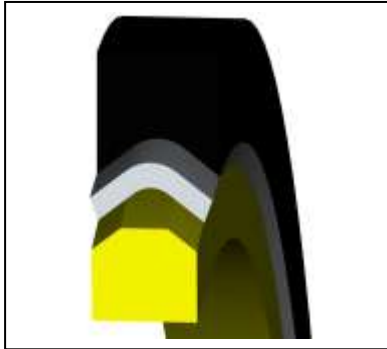
Valve size [mm]	Body Bolts		Stem nut
	Thread size	[NM]	[NM]
8-10	M6	8	6-7
15	M8	19	7-9
20	M8	19	7-9
25	M8	19	10-12
32	M10	39	10-12
40	M10	39	14-17
50	M10	39	14-17
50*	M12	66	21-24
65	M12	66	21-24
80	M16	164	21-24
100	M16	164	33-35

\* Series 80 only

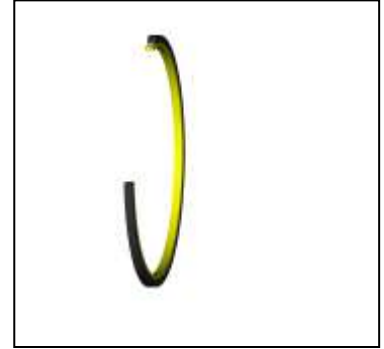
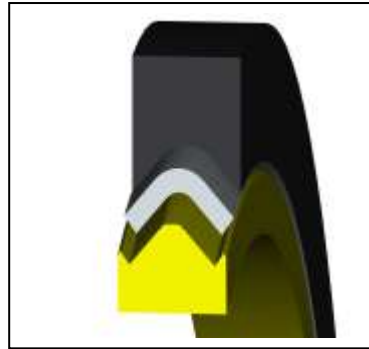


## FIRE SAFE X-Seal Body gasket

Roughly pressed

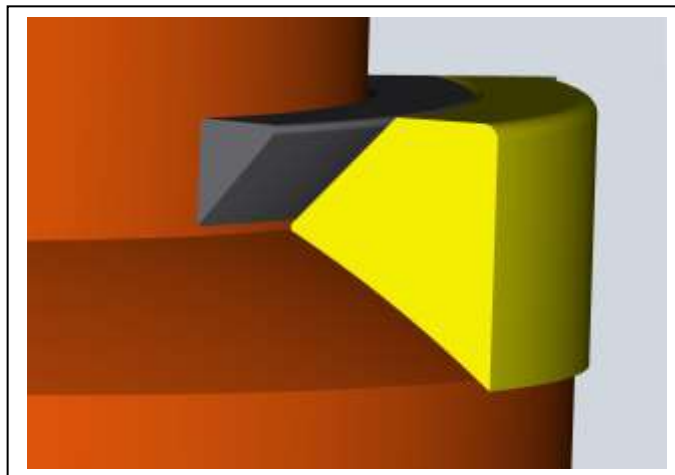


Fully pressed



Graphite outside ring+Metal ring+TFM- inside ring

### Stem seal (spherical seal)



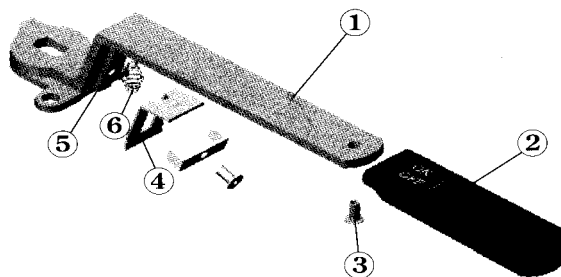
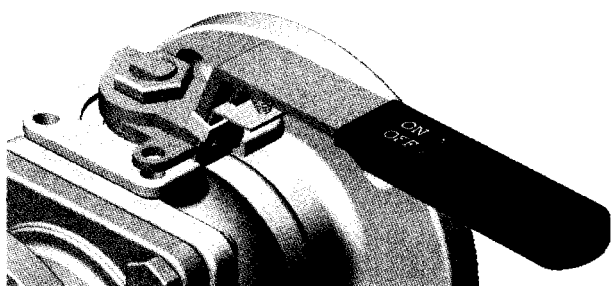
Metallic Delta ring + Teflon®

### Design Benefits

- Fire-tested and chemical resistant sealing  
No contact of graphite parts with flow media
- Maximum tightness to the atmosphere in operating condition and fail case (fire, etc.)
- Low space requirements
- Cost-efficient solution

## Lever with locking device

Standard for KVK / KVL / KVA / KK1 /240-70



- 1) SS304 lever
- 2) Plastic cover to protect the hand during operating
- 3) SS rivet to fix plastic cover on lever
- 4) SS lock plate
- 5) Casted rail for better guiding of lock plate
- 6) SS Spiral spring
- 7) Push the lock plate to delock bevor switching the valve.
- 8) Let the lock plate free to lock the valve.



## Torques for XOMOX ball valves, metal seated

XOMOX Ball Valves , Classes 150, 300, 600, PN10-16 & 25-40  
with floating ball and graphite supported seats  
Valve Breakaway Torque Values - Torque Values, NM

Valve Size Full Port	Seat Material : 1.4571 (316) hard faced / Stem Packing : Graphite										Max. allowable torque on Stem 17-4PH
	Maximum Differential Pressure, Bar (psi)										
	6 (100)	14 (200)	20 (285)	27 (400)	35 (500)	40 (600)	50 (740)	68 (1000)	83 (1200)	100 (1480)	
1/2"	17	18	19	20	21	23					61 NM
3/4"	25	25	27	30	32	35					61 NM
1"	35	40	42	45	48	50					110 NM
1 1/4"	40	45	50	55	60	60					110 NM
1-1/2"	60	70	75	80	85	90					240 NM
2"	75	85	92	100	115	130					240 NM
2 1/2"	120	170	185	200	230	280					930 NM
3"	180	250	290	320							1003 NM
4"	250	450	500	580							1413 NM

### Notes

- 1) Torque values listed above are for clean / clear fluids only. See the torque influence factors below for other services.
- 2) Run torque values can be estimated to be 60% of the breakaway torque values.
- 3) Seating torque values can be estimated to be 90% of the breakaway torque values.

### Influence Factors on Published Torques

- 1) Increase by 15% for dry gas.
- 2) Increase by 35% for fluids with solid or abrasive contents.
- 3) Increase by 50% for pneumatical transport of solid particles.

## Torques for XOMOX ball valves, soft seated

XOMOX Ball Valves , Classes 150, 300, 600, PN10-16 & 25-40

### Valve Breakaway Torque Values - Torque Values, NM

Valve Size Full Port	Seat Material : PTFE / Stem Packing : PTFE										Max. allowable torque on Stem 316
	Maximum Differential Pressure, Bar (psi)										
	6 (100)	14 (200)	20 (285)	27 (400)	35 (500)	40 (600)	50 (740)	68 (1000)	83 (1200)	100 (1480)	
1/2"	7	7	7	7	7	7	7	7	7	7	16 NM
3/4"	9	9	9	9	9	9	9	10	10	11	16 NM
1"	15	15	15	15	15	15	15	15	15	15	29 NM
1 1/4"	18	18	18	18	18	19	20	22	24		29 NM
1-1/2"	27	27	27	27	28	31	34	38	43		62 NM
2"	35	40	43	45	48	50	53				62 NM
2 1/2"	62	68	70	65	72	80	90				240 NM
3"	85	90	102	115	124	140	150				260 NM
4"	150	170	200	220	240	250	280				366 NM

- 1) Torque values listed above are for clean / clear fluids only. See the torque influence factors below for other services.
- 2) Run torque values can be estimated to be 60% of the breakaway torque values.
- 3) Seating torque values can be estimated to be 90% of the breakaway torque values.

### Influence Factors on Published Torques

- 1) Increase by 15% for dry gas.
- 2) Increase by 35% for fluids with solid or abrasive contents.
- 3) Increase by 20% for RPTFE-Seats (glas filled).
- 4) Increase by 25% for carbon & SS filled seats.

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