

SECTION 3

Steel ball valves

Full bore

BROEN
BALLOMAX®

Designed to last

www.broen.com

Steel ball valve - DN 40 - 50, PN 40

Type **BBM60241** / **BBM62241** - Full bore

Weld × Weld

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

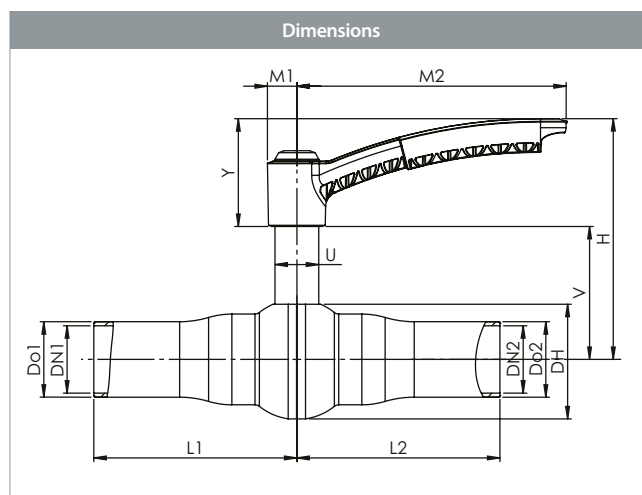
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

ISO-flange can be mounted on request.



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M1	M2
40	8600240040 010	40	230	2.00	130.0	130.0	48.3	48.3	43.1	43.1	73.4	85.1	154.1	28	68.9	18.9	172.4
50	8600240050 010	50	298	2.98	150.0	150.0	60.3	60.3	54.5	54.5	90.0	93.7	162.7	28	68.9	18.9	172.4

FLOWOPTIMIZED

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M1	M2
40	8620240040 010	40	266	2.04	130.0	130.0	48.3	48.3	43.1	43.1	73.4	85.1	154.1	28	68.9	18.9	172.4
50	8620240050 010	50	345	3.04	150.0	150.0	60.3	60.3	54.5	54.5	90.0	93.7	162.7	28	68.9	18.9	172.4

Steel ball valve - DN 40 - 50, PN 40

Type **BBM602241** / **BBM62241** - **Full bore**



Technical drawing		Material description	
	1	Handle	Fibreglass reinforced composite - PA6 GF30
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 - EN10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 - EN10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 / EN 10130
	11	Housing	Carbon steel - P235GH / EN 10216-2
	12	Stem guide	P265GH / EN 10273
	13	Friction ring	PTFE 20% carbon
	14	Spacer ring	PTFE 20% carbon
	15	Locking washer	Distaloy HP+0,3%C
	16	Locking nut	Steel

**The product shown is flowoptimized*

Accessories	BROEN No.	Dimension	Description
	954245	DN 40 - 50	ISO-flange.

Steel ball valve - DN 40 - 50, PN 40

Type **BBM60244 / BBM62244** - **Full bore**

Weld x Weld with BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

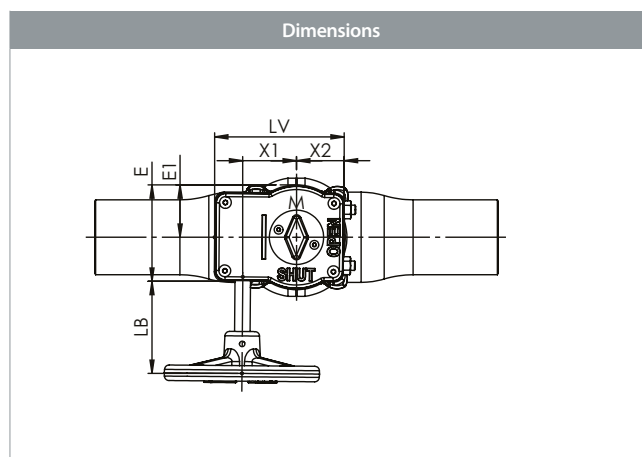
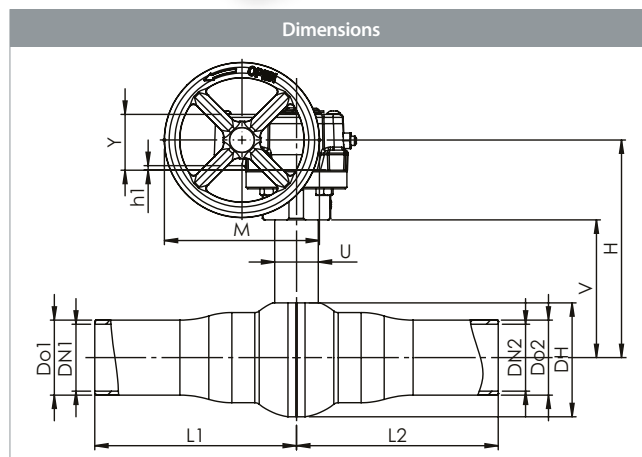
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M	h1
40	8600240040 480	40	230	3.31	130	130	48.3	48.3	43.1	43.1	73.4	88.9	140.4	28	36	100	3
50	8600240050 480	50	298	4.29	150	150	60.3	60.3	54.5	54.5	90.0	97.3	148.8	28	36	100	3

FLOWOPTIMIZED

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M	h1
40	8620240040 480	40	266	3.35	130	130	48.3	48.3	43.1	43.1	73.4	88.9	140.4	28	36	100	3
50	8620240050 480	50	345	4.35	150	150	60.3	60.3	54.5	54.5	90.0	97.3	148.8	28	36	100	3

Steel ball valve - DN 40 - 50, PN 40

Type **BBM602244 / BBM62244** - **Full bore**



Technical drawing		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 - EN 10130
	11	Housing	Carbon steel - P235GH - EN 10216-2
	12	Stem guide	P265GH - EN 10273
	13	Friction ring	PTFE 20% carbon
	14	Spacer ring	PTFE 20% carbon
	15	Stem-Gearbox adapter	Steel - S355J2 / EN 10025-2
	16	Gearbox	Cast Iron
	17	Screw	Steel
	18	Parallel key	Steel

**The product shown is flowoptimized*

All dimensions in mm

LB	E	E1	X1	X2	LV
59.2	62.5	33.8	34.4	30.8	83.5
59.2	62.5	33.8	34.4	30.8	83.5

All dimensions in mm

LB	E	E1	X1	X2	LV
59.2	62.5	33.8	34.4	30.8	83.5
59.2	62.5	33.8	34.4	30.8	83.5

Steel ball valve - DN 15 - 50, PN 25

Type **BBM 12031** - Full bore

Female × Female with high or low stem

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

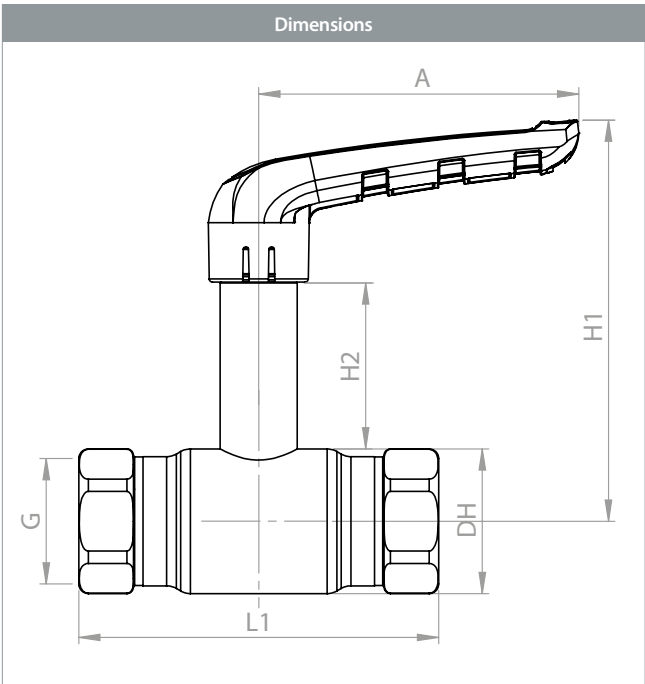
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

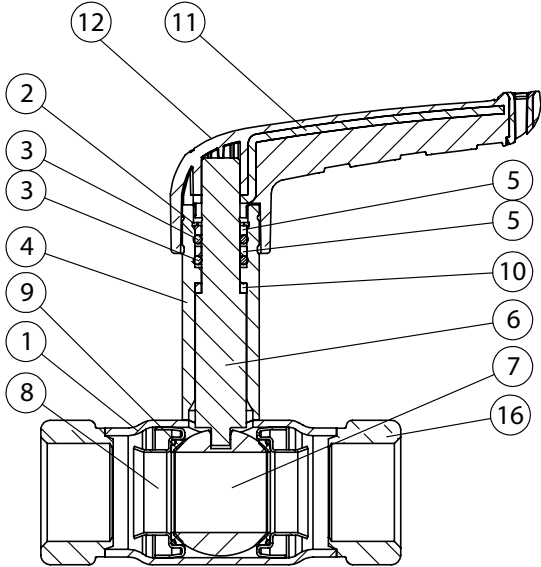


						All dimensions in mm					
						G	DH	L1	H1	H2	A
HIGH	15	1015002031-2101	15	28	0.35	½"	Ø30.0	94	108	55	75
	20	1020002031-2101	20	46	0.47	¾"	Ø38.0	104	111	54	75
	25	1025002031-2101	25	74	0.80	1"	Ø45.0	112	125	52	100
	32	1032002031-2101	32	111	1.21	1¼"	Ø56.5	134	131	52	100
	40	1040002031-2101	40	183	1.83	1½"	Ø68.0	156	156	63	120
	50	1050002031-2101	50	308	3.09	2"	Ø85.0	192	165	63	120
						All dimensions in mm					
						G	DH	L1	H1	H2	A
LOW	15	1015002030-2101	15	28	0.27	½"	Ø30.0	94	68	15	75
	20	1020002030-2101	20	46	0.39	¾"	Ø38.0	104	69	11	75
	25	1025002030-2101	25	74	0.67	1"	Ø45.0	112	87	14	100

Steel ball valve - DN 15 - 50, PN 25

Type BBM 12031 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	16	Female	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type **BBM 12031** - Full bore

Female × Female with high stem and gearhandle

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

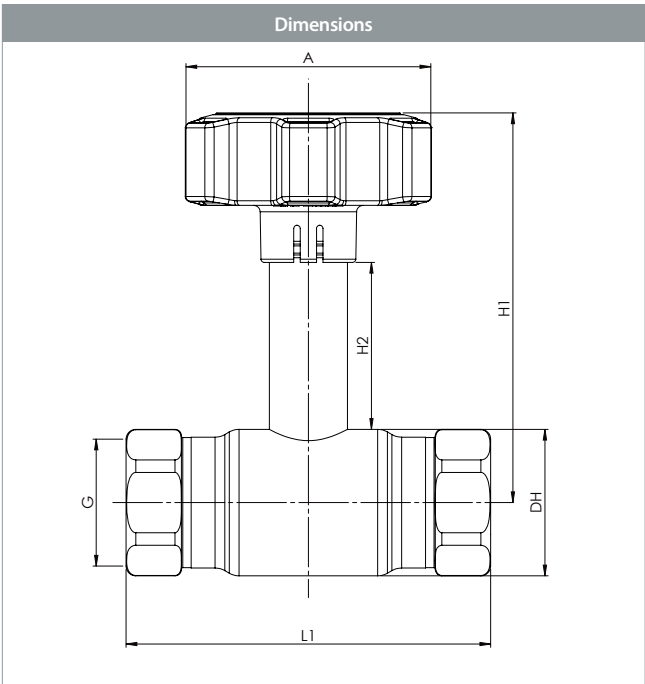
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The gearhandle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



						All dimensions in mm					
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	L1	H1	H2	A
HIGH	15	1015002031-2201	15	28	0,40	½"	Ø30.0	94	108	55	59
	20	1020002031-2201	20	46	0,52	¾"	Ø38.0	104	111	54	59
	25	1025002031-2201	25	74	0,85	1"	Ø45.0	112	125	52	81
	32	1032002031-2201	32	111	1,26	1¼"	Ø56.5	134	131	52	81
	40	1040002031-2201	40	183	1,88	1½"	Ø68.0	156	156	63	108
	50	1050002031-2201	50	308	3,14	2"	Ø85.0	192	165	63	108

Steel ball valve - DN 15 - 50, PN 25

Type BBM 12031 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	16	Female	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1
	17	Gearhandle	Fibreglass reinforced composite - PA66

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13001 - Full bore

Weld × Weld with high or low stem

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

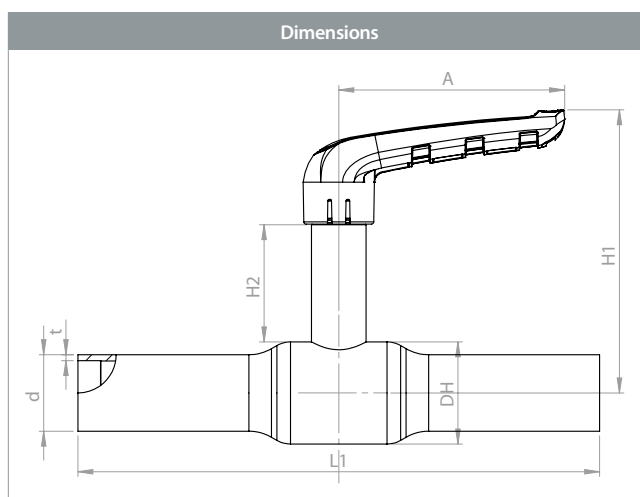
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



						Alle dimensioner i mm						
	DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L1	H1	H2	A
HIGH	15	1015003001-2101	15	28	0.22	Ø30.0	21.3	2.0	210	108	55	75
	20	1020003001-2101	20	46	0.58	Ø38.0	26.9	2.3	230	111	54	75
	25	1025003001-2101	25	74	0.91	Ø45.0	33.7	2.6	230	125	52	100
	32	1032003001-2101	32	111	1.30	Ø56.5	42.4	2.6	260	131	52	100
	40	1040003001-2101	40	183	1.86	Ø68.0	48.3	2.6	260	156	63	120
	50	1050003001-2101	50	308	3.00	Ø85.0	60.3	2.9	290	165	63	120
						All dimensions in mm						
	DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L1	H1	H2	A
LOW	15	1015003000-2101	15	28	0.14	Ø30.0	21.3	2.0	210	66	15	75
	20	1020003000-2101	20	46	0.50	Ø38.0	26.9	2.3	230	68	11	75
	25	1025003000-2101	25	74	0.78	Ø45.0	33.7	2.6	230	87	14	100

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13001 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI316 / EN 1.4401
	7	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13001 - Full bore

Weld x Weld with high stem and gearhandle

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

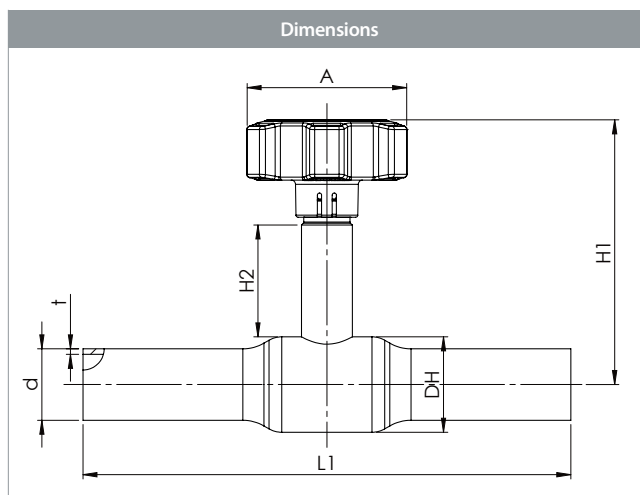
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The gearhandle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					Alle dimensioner i mm							
	DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L1	H1	H2	A
HIGH	15	1015003001-2201	15	28	0,27	Ø30.0	21.3	2.0	210	108	55	59
	20	1020003001-2201	20	46	0,63	Ø38.0	26.9	2.3	230	111	54	59
	25	1025003001-2201	25	74	0,96	Ø45.0	33.7	2.6	230	125	52	81
	32	1032003001-2201	32	111	1,35	Ø56.5	42.4	2.6	260	131	52	81
	40	1040003001-2201	40	183	1,91	Ø68.0	48.3	2.6	260	156	63	108
	50	1050003001-2201	50	308	3,05	Ø85.0	60.3	2.9	290	165	63	108

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13001 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	17	Gearhandle	Fibreglass reinforced composite - PA66

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13601 - Full bore

Female x Weld with high or low stem

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

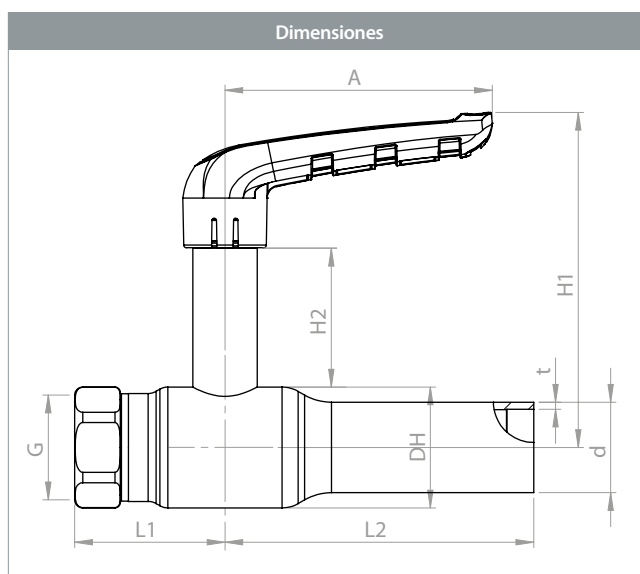
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

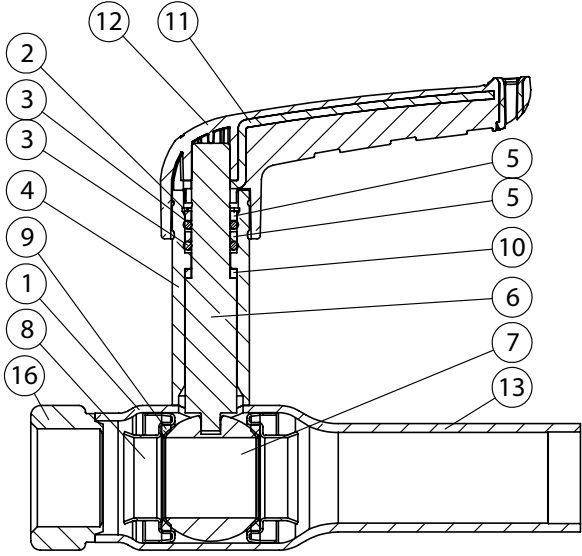


						All dimensions in mm								
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A
HIGH	15	1015003601-2101	15	28	0.38	½"	Ø30.0	21.3	2.0	40	105	108	55	75
	20	1020003601-2101	20	46	0.56	¾"	Ø38.0	26.9	2.3	52	115	111	54	75
	25	1025003601-2101	25	74	0.86	1"	Ø45.0	33.7	2.6	56	115	125	52	100
	32	1032003601-2101	32	111	1.27	1¼"	Ø56.5	42.4	2.6	67	130	131	52	100
	40	1040003601-2101	40	183	1.90	1½"	Ø68.0	48.3	2.6	78	134	156	63	120
	50	1050003601-2101	50	308	3.09	2"	Ø85.0	60.3	2.9	96	145	165	63	120
						Alle dimensioner i mm								
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A
LOW	15	1015003600-2101	15	28	0.30	½"	Ø30.0	21.3	2.0	40	105	66	15	75
	20	1020003600-2101	20	46	0.48	¾"	Ø38.0	26.9	2.3	52	115	68	11	75
	25	1025003600-2101	25	74	0.73	1"	Ø45.0	33.7	2.6	56	115	87	14	100

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13601 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	13	Weld	Steel - P235GH / 1.0345 / EN 10217-2
	16	Female	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13601 - Full bore

Female x Weld with high stem and gearhandle

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

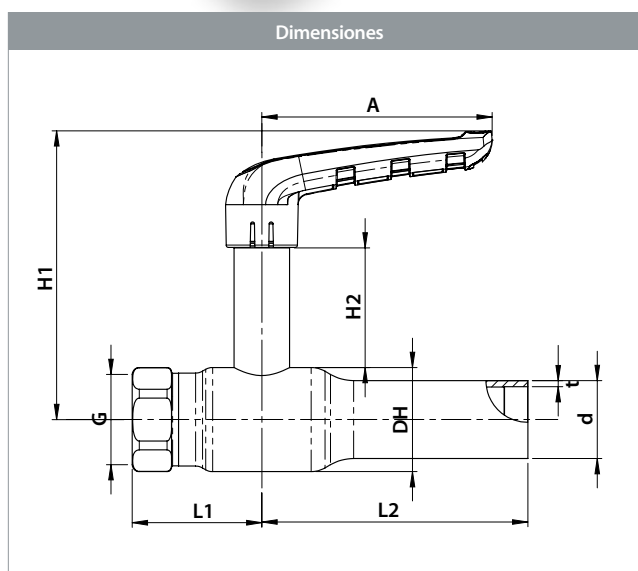
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The gearhandle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



						All dimensions in mm								
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A
HIGH	15	1015003601-2201	15	28	0,43	½"	Ø30.0	21,3	2	40	105	108	55	59
	20	1020003601-2201	20	46	0,61	¾"	Ø38.0	26,9	2,3	52	115	111	54	59
	25	1025003601-2201	25	74	0,91	1"	Ø45.0	33,7	2,6	56	115	125	52	81
	32	1032003601-2201	32	111	1,32	1¼"	Ø56.5	42,4	2,6	67	130	131	52	81
	40	1040003601-2201	40	183	1,95	1½"	Ø68.0	48,3	2,6	78	134	156	63	108
	50	1050003601-2201	50	308	3,14	2"	Ø85.0	60,3	2,9	96	145	165	63	108

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13601 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	13	Weld	Steel - P235GH / 1.0345 / EN 10217-2
	17	Gearhandle	Fibreglass reinforced composite - PA66

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13701 - Full bore

Male × Weld with high stem

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

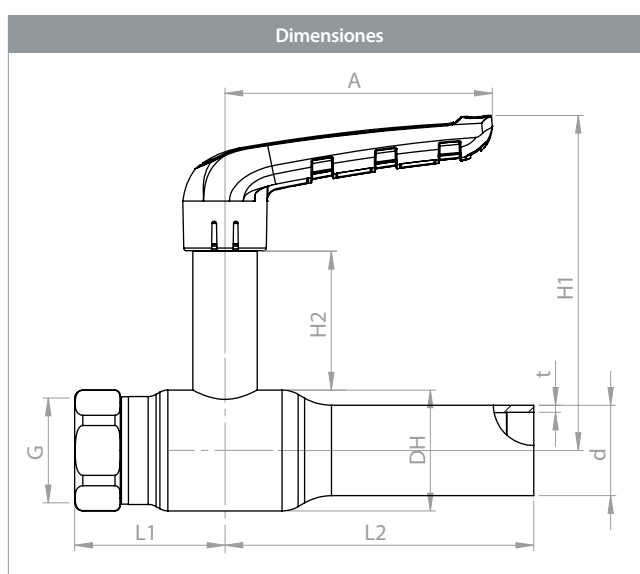
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



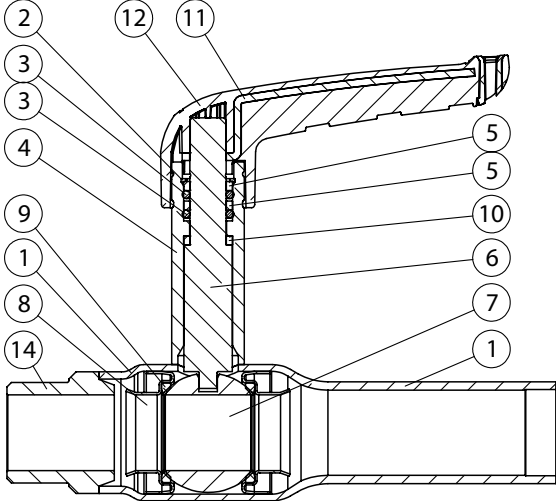
					All dimensions in mm									
DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A	
15	1015003701-2101	15	28	0.38	½"	Ø30.0	21.3	2.0	40	105	108	55	75	
20	1020003701-2101	20	46	0.52	¾"	Ø38.0	26.9	2.3	52	115	111	54	75	
25	1025003701-2101	25	74	0.87	1"	Ø45.0	33.7	2.6	56	115	125	52	100	
32	1032003701-2101	32	111	1.30	1¼"	Ø56.5	42.4	2.6	67	130	131	52	100	
40	1040003701-2101	40	183	1.93	1½"	Ø68.0	48.3	2.6	78	134	156	63	120	
50	1050003701-2101	50	308	3.18	2"	Ø85.0	60.3	2.9	96	145	165	63	120	

HIGH

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13701 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	14	Male	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13701 - Full bore

Male x Weld with high stem and gearhandle

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

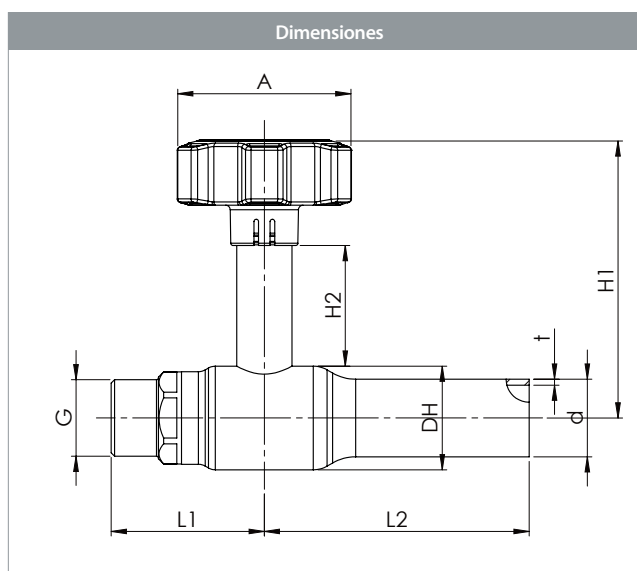
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The gearhandle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



						All dimensions in mm								
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A
HIGH	15	1015003701-2201	15	28	0,43	½"	Ø30.0	21,3	2	40	105	108	55	59
	20	1020003701-2201	20	46	0,57	¾"	Ø38.0	26,9	2,3	52	115	111	54	59
	25	1025003701-2201	25	74	0,82	1"	Ø45.0	33,7	2,6	56	115	125	52	81
	32	1032003701-2201	32	111	1,35	1¼"	Ø56.5	42,4	2,6	67	130	131	52	81
	40	1040003701-2201	40	183	1,98	1½"	Ø68.0	48,3	2,6	78	134	156	63	108
	50	1050003701-2201	50	308	3,23	2"	Ø85.0	60,3	2,9	96	145	165	63	108

Steel ball valve - DN 15 - 50, PN 25

Type BBM 13701 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	14	Male	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1
	17	Gearhandle	Fibreglass reinforced composite - PA66

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 25, PN 25

Type BBM 13701S - Full bore

Male x Weld with high stem and cap and chain

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

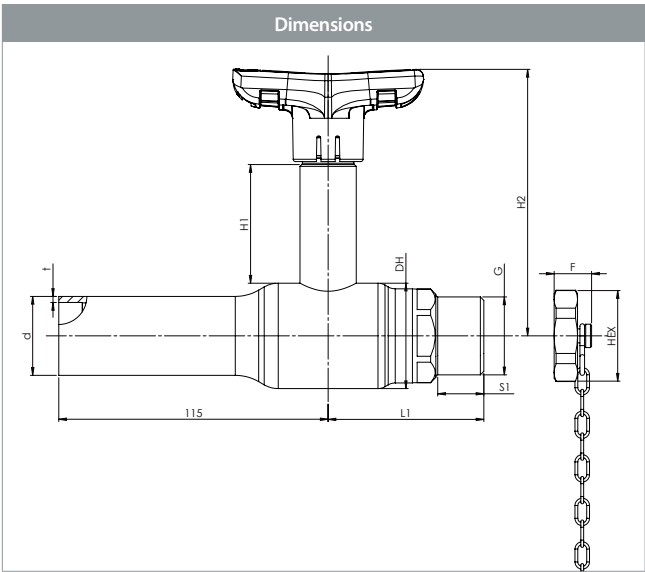
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



HIGH						All dimensions in mm									
	DN	BROEN No.	Bore	Kvs	net Weight kg	G	DH	d	t	L1	L2	H1	H2	A	HEX
	15	1015003711-S000	15	28	0,55	G3/4"A	30	21,3	2,0	58,5	105,5	104	55	75	30
	20	1020003701-S001	20	46	0,65	G3/4"A	38	26,9	2,4	56	115	106,5	54	75	30
	25	1025003701-S002	25	74	1,1	G1"A	45	33,7	2,6	66,5	115	114	52	100	36

Steel ball valve - DN 15 - 25, PN 25

Type BBM 13701S - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	14	Male	Steel - P235GH / 1.0345 / EN 10217-2 / ISO 228-1
	33	Cap and chain	

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type **BBM 14001** - Full bore

Flange × Weld

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

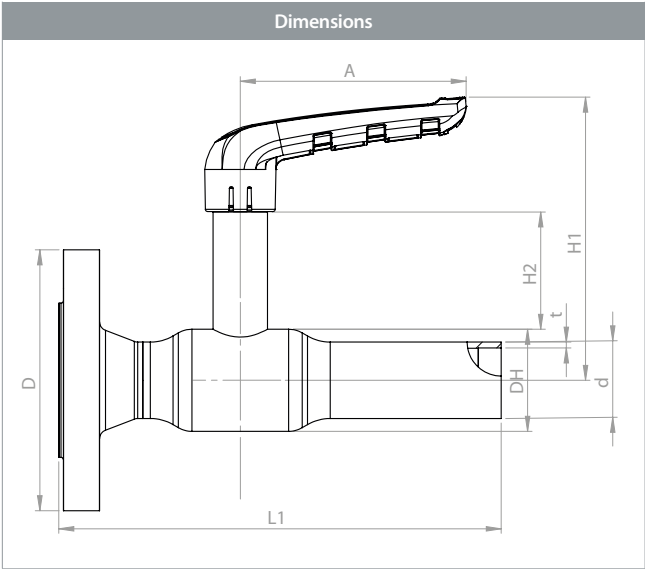
All BROEN BALLOMAX® valves are powder coated in black.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



HIGH						All dimensions in mm							
	DN	BROEN No.	Bore	Kvs	net Weight kg	D	DH	d	t	L	H1	H2	A
	15	1015004001-2101	15	28	1.07	95	Ø30.0	21.3	2.0	170	108	55	75
	20	1020004001-2101	20	46	1.49	105	Ø38.0	26.9	2.3	190	111	54	75
	25	1025004001-2101	25	74	2.04	115	Ø45.0	33.7	2.6	195	125	52	100
	32	1032004001-2101	32	111	2.85	140	Ø56.5	42.4	2.6	220	131	52	100
	40	1040004001-2101	40	183	3.64	150	Ø68.0	48.3	2.6	230	156	63	120
	50	1050004001-2101	50	308	5.42	165	Ø85.0	60.3	2.9	260	165	63	120

Steel ball valve - DN 15 - 50, PN 25

Type BBM 14001 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	13	Weld	Steel - P235GH / 1.0345 / EN 10217-2
	15	Flange	Steel - S355J2 / 1.0345 / EN 10273 / ISO 1092-1

**DN 32 -50 has hollow ball*

Steel ball valve - DN 15 - 50, PN 25

Type **BBM 15001** - Full bore

Flange × Flange

Steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

All BROEN BALLOMAX® valves are powder coated in black.

Operation

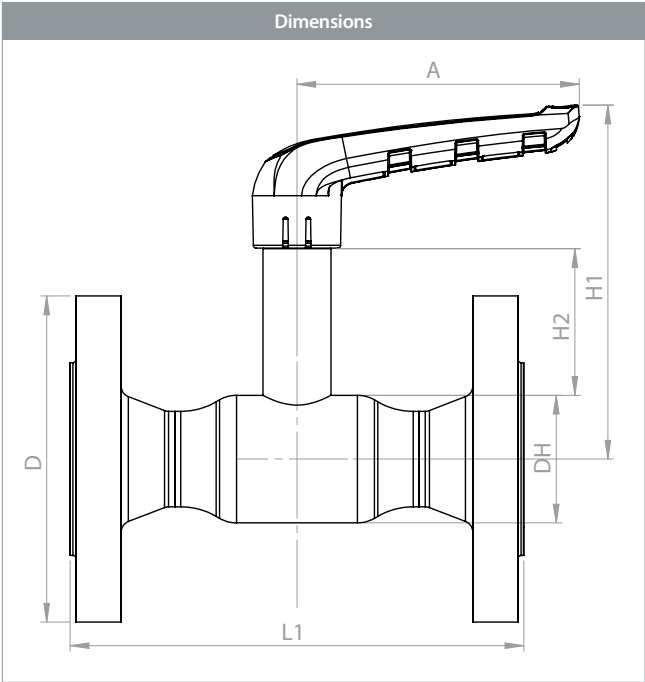
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



						All dimensions in mm					
	DN	BROEN No.	Bore	Kvs	net Weight kg	D	DH	L1	H1	H2	A
HIGH	15	1015005001-2101	15	28	1.72	95	Ø30.0	130	108	55	75
	20	1020005001-2101	20	46	2.40	105	Ø38.0	150	111	54	75
	25	1025005001-2101	25	74	3.16	115	Ø45.0	160	125	52	100
	32	1032005001-2101	32	111	4.40	140	Ø56.5	180	131	52	100
	40	1040005001-2101	40	183	5.43	150	Ø68.0	200	156	63	120
	50	1050005001-2101	50	308	7.82	165	Ø85.0	230	165	63	120

Steel ball valve - DN 15 - 50, PN 25

Type BBM 15001 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Lock ring	Steel
	3	O-ring	EPDM70
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10217-2
	5	Ring	PTFE 20% carbon
	6	Stem	Stainless steel - AISI 316 / EN 1.4401
	7	Ball*	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	8	Spring supporting	Stainless steel - AISI 304 / EN 1.4401
	9	Seal	PTFE
	10	Friction ring	PTFE 20% carbon
	11	Handle core	Galvanized steel
	12	Handle surface	Fibreglass reinforced composite - PA66
	15	Flange	Steel - S355J2 / 1.0345 / EN 10273 / ISO 1092-1

**DN 32 -50 has hollow ball*

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60251 / BBM62251** - **Full bore**

Weld × Weld

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

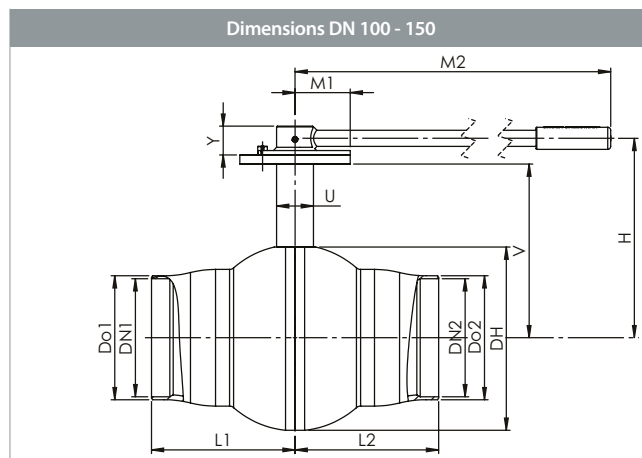
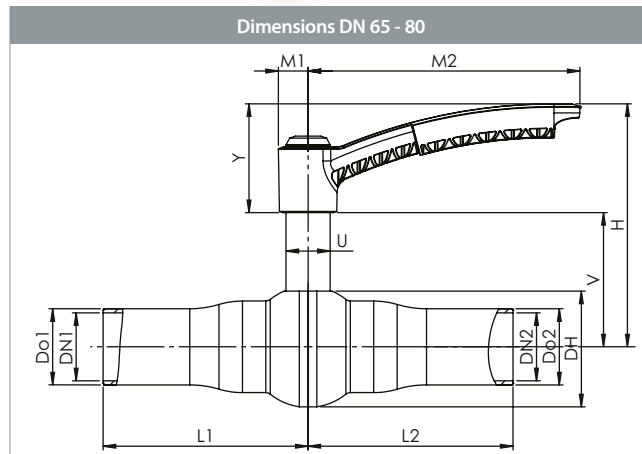
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

ISO-flange can be mounted on request. We recommend to add a BROEN-Gear for DN 100 - 150.



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M1	M2
65	8600225065 010	65	501	4.23	150.0	150.0	76.1	76.1	70.3	70.3	110.5	118.9	207.9	32	89	20.8	310.9
80	8600225080 010	80	755	5.97	150.0	150.0	88.9	88.9	82.5	82.5	137.1	132.5	221.5	32	89	20.8	310.9
100	8600225100 010	100	1167	10.63	162.5	162.5	114.3	114.3	107.1	107.1	168.1	172.7	207.7	40	39	45.0	365.0
125	8600225125 010	125	1848	17.07	195.0	195.0	139.7	139.7	132.5	132.5	206.4	191.8	226.8	45	39	62.5	650.0
150	8600225150 010	150	2664	24.48	195.0	195.0	168.3	168.3	160.3	160.3	248.8	235.8	270.8	50	39	75.0	900.4

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M1	M2
65	8620225065 010	65	578	4.34	150.0	150.0	76.1	76.1	70.3	70.3	110.5	118.9	207.9	32	89	20.8	310.9
80	8620225080 010	80	842	6.14	150.0	150.0	88.9	88.9	82.5	82.5	137.1	132.5	221.5	32	89	20.8	310.9
100	8620225100 010	100	1271	10.89	162.5	162.5	114.3	114.3	107.1	107.1	168.1	172.7	207.7	40	39	45.0	365.0
125	8620225125 010	125	1963	17.47	195.0	195.0	139.7	139.7	132.5	132.5	206.4	191.8	226.8	45	39	62.5	650.0
150	8620225150 010	150	2856	25.04	195.0	195.0	168.3	168.3	160.3	160.3	248.8	235.8	270.8	50	39	75.0	900.4

Steel ball valve - DN 65 - 150, PN 25

Type BBM602251 / BBM62251 - **Full bore**



Technical drawing DN 65 - 80		Material description	
	1	Handle	Fibreglass reinforced composite - PA6 GF30
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 - EN10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 - EN10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 / EN 10130
	11	Housing	Carbon steel - P235GH / EN 10216-2
	12	Stem guide	P265GH / EN 10273
	13	Friction ring	PTFE 20% carbon
	14	Spacer ring	PTFE 20% carbon
	15	Locking washer	Distaloy HP+0,3%C
	16	Locking nut	Steel

Technical drawing DN 100 - 150		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 / EN 10130
	11	Housing	Carbon steel - P235GH / EN 10216-2
	12	Stem guide	P265GH / EN 10273
	13	Friction ring	PTFE 20% carbon
	14	Spacer ring	PTFE 20% carbon
	15	Pin	Steel
	16	Handle	Carbon Steel
	17	Socket set screw	Steel

*The product shown is flow optimized

Accessories	BROEN No.	Dimension	Description
	600584	DN 100	BROEN-gear.
	600585	DN 125	
	600586	DN 150	
	958245	DN 65 - 80	ISO-flange.

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60254 / BBM62254** - **Full bore**

Weld × Weld with BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

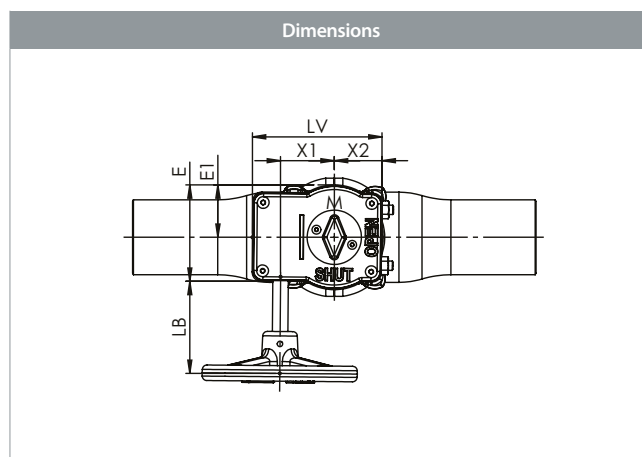
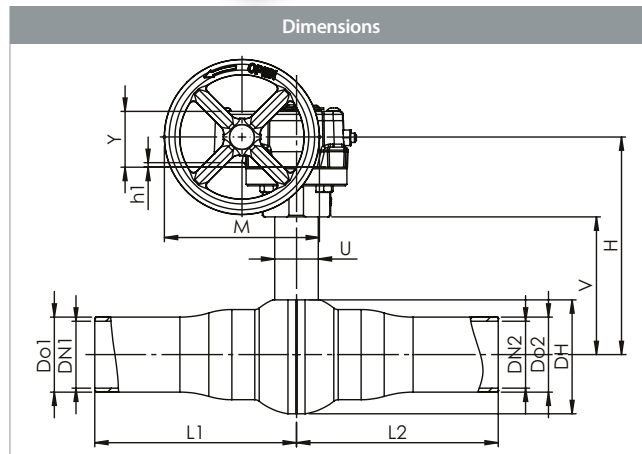
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M	h1
65	8600225065 480	65	501	6.01	150.0	150.0	76.1	76.1	70.3	70.3	110.5	123.9	177.4	32	39.5	100	2
80	8600225080 480	80	755	7.82	150.0	150.0	88.9	88.9	82.5	82.5	137.1	137.5	191.0	32	39.5	200	2
100	8600225100 480	100	1167	12.73	162.5	162.5	114.3	114.3	107.1	107.1	168.1	172.7	212.7	40	50.0	200	2
125	8600225125 480	125	1848	20.89	195.0	195.0	139.7	139.7	132.5	132.5	206.4	191.8	237.8	45	62.0	300	2
150	8600225150 480	150	2664	27.39	195.0	195.0	168.3	168.3	160.3	160.3	248.8	235.8	281.8	50	62.0	350	2

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Do1	Do2	DN1	DN2	DH	V	H	U	Y	M	h1
65	8620225065 480	65	578	6.11	150.0	150.0	76.1	76.1	70.3	70.3	110.5	123.9	177.4	32	39.5	100	2
80	8620225080 480	80	842	7.99	150.0	150.0	88.9	88.9	82.5	82.5	137.1	137.5	191.0	32	39.5	200	2
100	8620225100 480	100	1271	12.99	162.5	162.5	114.3	114.3	107.1	107.1	168.1	172.7	212.7	40	50.0	200	2
125	8620225125 480	125	1963	21.29	195.0	195.0	139.7	139.7	132.5	132.5	206.4	191.8	237.8	45	62.0	300	2
150	8620225150 480	150	2856	27.99	195.0	195.0	168.3	168.3	160.3	160.3	248.8	235.8	281.8	50	62.0	350	2

Steel ball valve - DN 65 - 150, PN 25

Type **BBM602254 / BBM62254** - **Full bore**



Technical drawing		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 - EN 10130
	11	Housing	Carbon steel - P235GH - EN 10216-2
	12	Stem guide	P265GH - EN 10273
	13	Friction ring	PTFE 20% carbon
	14	Spacer ring	PTFE 20% carbon
	15	Stem-Gearbox adapter	Steel - S355J2 / EN 10025-2
	16	Gearbox	Cast Iron
	17	Screw	Steel
	18	Parallel key	Steel

*The product shown is flowoptimized

All dimensions in mm

LB	E	E1	X1	X2	LV
73.1	73.9	39.9	41.3	37.9	99.9
105.1	73.9	39.9	41.3	27.9	99.9
112.9	96.7	53.6	55.0	48.1	131.2
178.6	118.7	67.4	69.8	59.4	162.7
181.1	118.7	67.4	68.8	59.4	162.7

All dimensions in mm

LB	E	E1	X1	X2	LV
73.1	73.9	39.9	41.3	37.9	99.9
105.1	73.9	39.9	41.3	27.9	99.9
112.9	96.7	53.6	55.0	48.1	131.2
178.6	118.7	67.4	69.8	59.4	162.7
181.1	118.7	67.4	68.8	59.4	162.7

Steel ball valve - DN 200 - 400, PN 25

Type 86202 / 86002 - Full bore

Weld × Weld with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

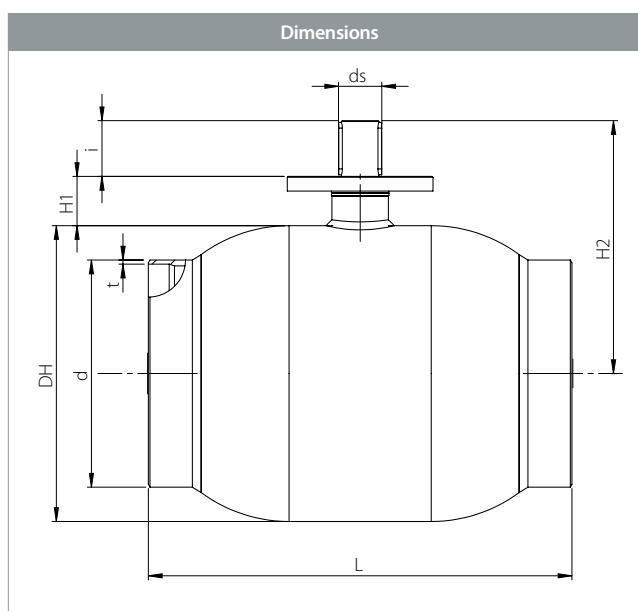
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L	H1	H2	ds	i	ISO
200	8620225200 000	200	9200	82.1	356	219.1	6.3	533	60.2	304	45	67	F14
250	8620225250 000	250	13500	135.4	457	273.0	5.6	650	69.2	382	50	84	F16
300	8600225300 000	305	21600	249.7	508	323.9	5.6	819	82.5	437	60	100	F16
400	8600225400 000	400	35000	463.6	660	406.4	6.3	991	105.0	547	80	112	F30

Steel ball valve - DN 200 - 400, PN 25

Type 86202 / 86002 - Full bore



Technical drawing		Material description	
	1	Weld end	Steel - P235GH / 1.0345 / EN 10217-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	10	Neck ring	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	29	Key	Steel
	30	Circlip	Steel
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	49	Bearing	PTFE coated steel
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 25

Type 86202 / 86002 - Full bore

Weld x Weld with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

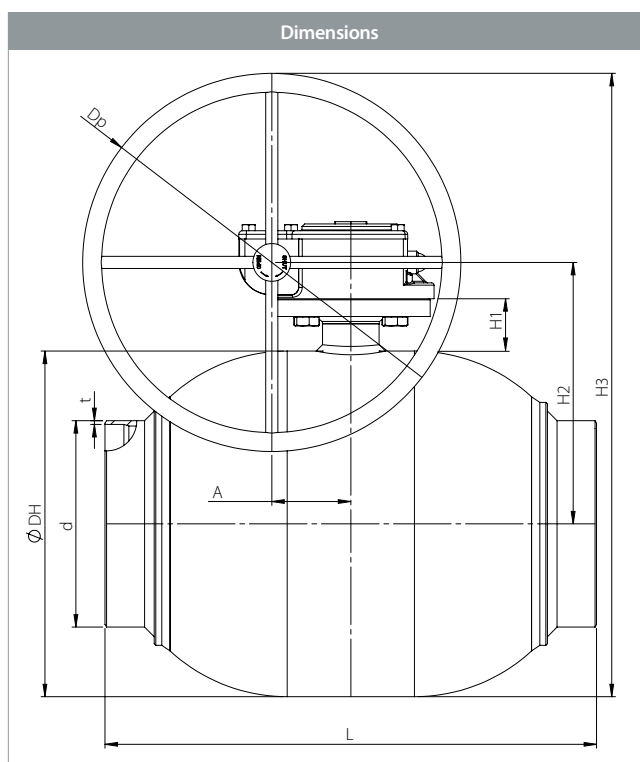
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L	H1	H2	H3	Dp	A
200	8620225200 480	200	9200	84.2	356	219.1	6.3	533	60.2	275	500.0	450	68.8
250	8620225250 480	250	13500	140.3	457	273.0	5.6	650	69.2	346	596.0	500	104.5
300	8600225300 480	305	21600	258.1	508	323.9	5.6	819	82.5	387	566.5	350	130.0
400	8600225400 480	400	35000	531.7	660	406.4	6.3	991	105.0	494	719.0	450	182.0

Steel ball valve - DN 200 - 400, PN 25

Type 86202 / 86002 - Full bore



Technical drawing		Material description	
	1	Weld end	Steel - P235GH / 1.0345 / EN 10217-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Steel ball valve - DN 200 - 400, PN 25

Type 86212 / 86012 - Full bore

Weld x Weld with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

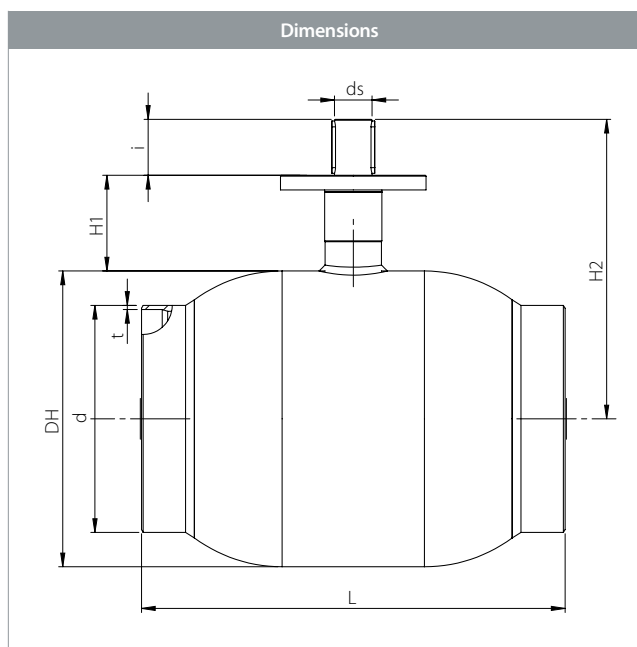
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L	H1	H2	ds	i	ISO
200	8623225200 000	200	9200	82.7	356	219.1	5.0	533	115	365.0	45	67	F14
250	8623225250 000	250	13500	135.8	457	273.0	5.0	650	130	442.5	50	84	F16
300	8603225300 000	300	21600	253.1	508	323.9	5.6	819	155	506.5	60	100	F16
400	8603225400 000	400	35000	469.9	660	406.4	6.3	991	180	622.4	80	112	F30

Steel ball valve - DN 200 - 400, PN 25

Type 86212 / 86012 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	4	Friction ring	Gunmetal
	5	Bearing	PTFE coated steel
	6	O-ring	AFLAS
	7	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	8	Disc	Steel - S235JR / EN 10025-2
	9	Stem	Stainless steel - 1.4307 / EN 10088-3
	12	Weld end	Steel - P265GH / EN10216-2
	13	Bottom end	Steel - P235GH / EN10217-2
	15	O-ring	EPDM70
	16	Seat	PTFE 20% Carbon
	17	Back-up ring	Steel - S355J2H / EN 10210-1&2
	18	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	19	Locking ring	Steel
	20	Back-up ring	PTFE 20% Carbon
	21	Parallel key	Steel
	22	O-ring	VITON
	24	ISO-flange	P235GH / 1.0038 / EN 10028-2
	25	O-ring	EPDM
	26	Weld end	Steel - P235GH / EN 10217-2

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 25

Type 86212 / 86012 - Full bore

Weld × Weld with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

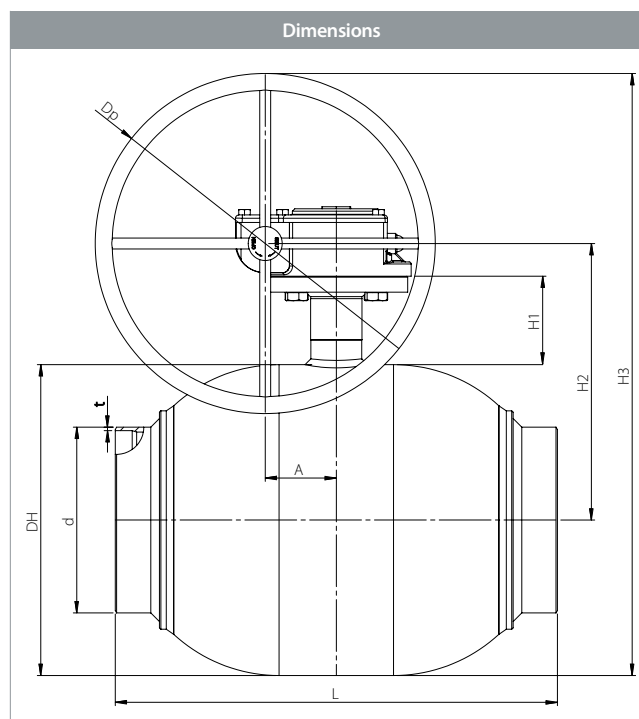
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	d	t	L	H1	H2	H3	Dp	A
200	8623225200 480	200	9200	85.8	356	219.1	5.0	533	115	330	555	450	68.8
250	8623225250 480	250	13500	142.4	457	273.0	5.0	650	130	407	657	500	104.5
300	8603225300 480	300	21600	261.5	508	323.9	5.6	819	155	460	640	350	130.0
400	8603225400 480	400	35000	538.0	660	406.4	6.3	991	180	569	794	450	182.0

Steel ball valve - DN 200 - 400, PN 25

Type 86212 / 86012 - Full bore



Technical drawing		Material description	
	1	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	2	Stem guide	Steel - S235JR / EN 10025-2
	6	O-ring	AFLAS
	7	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	9	Stem	Stainless steel - 1.4307 / EN 10088-3
	12	Weld end	Steel - P265GH / EN10216-2
	13	Bottom end	Steel - P235GH / EN10217-2
	15	O-ring	EPDM70
	16	Seat	PTFE 20% Carbon
	17	Back-up ring	Steel - S355J2H / EN 10210-1&2
	18	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	24	ISO-flange	Steel - P235GH / 1.0038 / EN 10028-2
	26	Weld end	Steel - P235GH / EN 10217-2

Steel ball valve - DN 20 - 50, PN 40

Type 94104 - Full bore

Flange × Weld

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

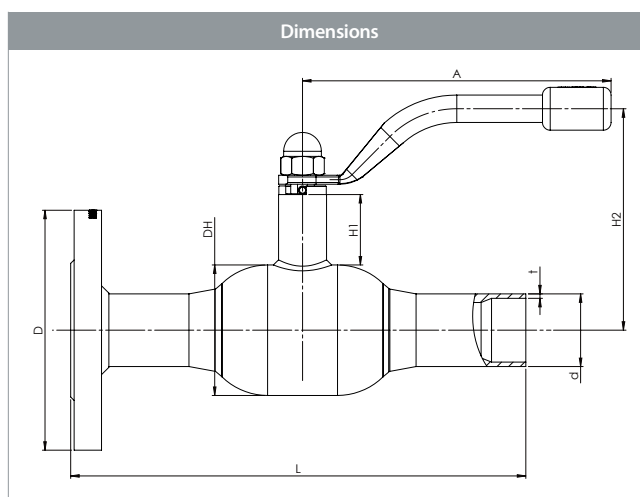
Eco-friendly protection finish against corrosion.

Operation

The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

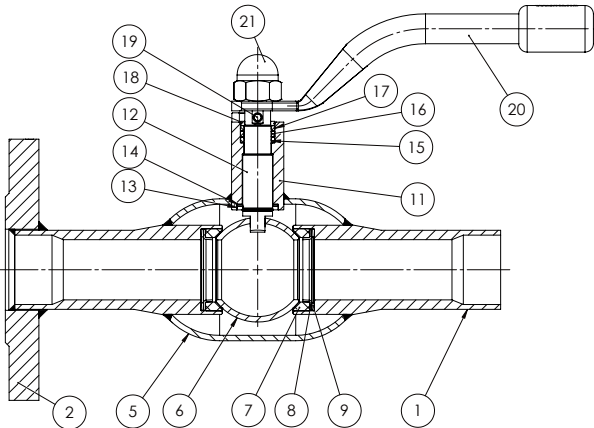


					All dimensions in mm							
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	d	t	L	H1	H2	A
20	94104020S312400	20	57	2.4	51	105	26.9	2.0	235	47.2	119.5	140
25	94104025S312500	25	81	2.4	57	115	33.7	2.6	235	48.0	124.0	140
32	94104032S312600	32	133	4.1	76	140	42.4	2.6	265	41.0	127.0	140
40	94104040S312700	40	229	4.9	89	150	48.3	2.6	265	41.1	133.0	180
50	94104050S312800	50	295	6.8	108	165	60.3	2.9	306	66.0	145.0	180

Steel ball valve - DN 20 - 50, PN 40

Type 94104 - Full bore



Technical drawing	Material description		
	1	Weld end	Steel - P235GH / 1.0345 / EN 10217-2
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	8	Back-up ring	Steel - DC01 / 1.0330 / EN 10130
	9	Disc spring	Steel - C75S / 1.1248 / EN 10132-4
	11	Stem guide	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	13	Stem washer	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	14	Friction washer	PTFE 20% Carbon
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	18	Intermediate ring	Stainless steel - AISI303 / 1.4305 / EN 10088-3
	19	Pin	Steel - hardenat
	20	Handle	Steel
	21	Cap nut	Steel - galvanized

Accessories	BROEN No.	Dimension	Description
	66050010 000 - yellow	DN 20 - 25	T-handles in three different colors - yellow, blue and red. Factory fitted T-handle on request.
	66050010 003 - blue		
	66050010 004 - red		
	66050040 000 - yellow	DN 32 - 40	
	66050040 003 - blue		
	66050040 004 - red		
	203245	DN 20 - 25	ISO-flange.
	208245	DN 32 - 40	
	167245	DN 50	
	66160010 000	DN 20 - 25	Hexagon for insertion key.
	66160040 000	DN 32 - 40	
	66160065 000	DN 50	

Steel ball valve - DN 65 - 100, PN 25

Type 94104 - Full bore

Flange × Weld

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

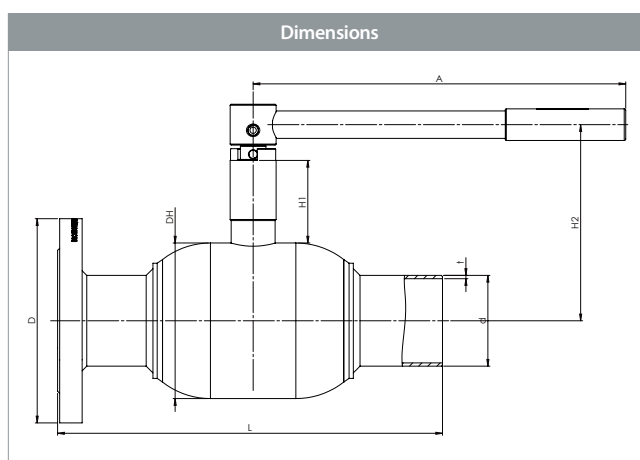
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

Larger dimensions DN 125 - 400, on request.



					All dimensions in mm							
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	d	t	L	H1	H2	A
65	94104065S617800	65	498	9.8	127	185	76.1	2.9	366.0	66	155	275
80	94104080S344400	80	754	15.2	152	200	88.9	3.2	377.5	81	192	365
100	94104100S617900	100	1159	19.9	178	235	114.3	3.6	397.5	91	218	365

Steel ball valve - DN 65 - 100, PN 25

Type 94104 - Full bore



Technical drawing		Material description	
	1	Weld end	Steel - P235GH / 1.0345 / EN 10217-2
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	8	Back-up ring	Steel - DC01 / 1.0330 / EN 10130
	9	Disc spring	Steel - C75S / 1.1248 / EN 10132-4
	11	Stem guide	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	13	Stem washer	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	14	Friction washer	PTFE 20% Carbon
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	18	Intermediate ring	Stainless steel - AISI303 / 1.4305 / EN 10088-3
	19	Pin	Steel - hardenat
	20	Handle	Steel
	22	Bearing	Steel - PTFE

Accessories	BROEN No.	Dimension	Description
	167245	DN 65	ISO-flange.
	169245	DN 80	
	66160065 000	DN 65	Hexagon for insertion key.
	66164100 000	DN 80	
	66161100 000	DN 100	

Steel ball valve - DN 65 - 100, PN 16

Type 94104 - Full bore

Flange × Weld

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

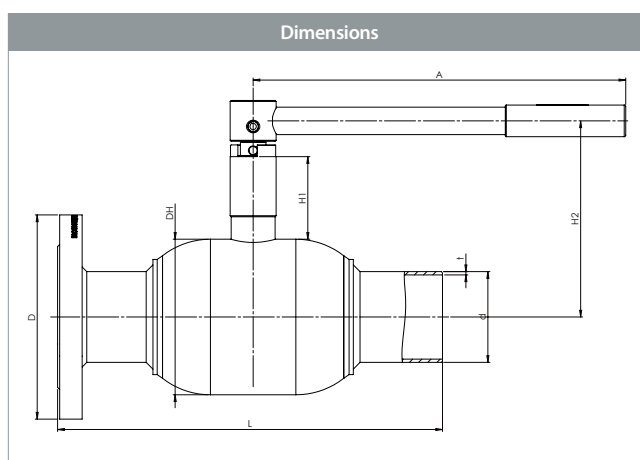
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

Larger dimensions DN 125 - 400, on request.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm							
					DH	D	d	t	L	H1	H2	A
65	94104065S312900	65	498	9.8	127	185	76.1	2.9	366.0	66	155	275
80	94104080S313000	80	754	14.6	152	200	88.9	3.2	377.5	81	192	365
100	94104100S313100	100	1159	18.3	178	220	114.3	3.6	397.5	91	218	365

Steel ball valve - DN 65 - 100, PN 16

Type 94104 - Full bore



Technical drawing		Material description	
	1	Weld end	Steel - P235GH / 1.0345 / EN 10217-2
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	8	Back-up ring	Steel - DC01 / 1.0330 / EN 10130
	9	Disc spring	Steel - C75S / 1.1248 / EN 10132-4
	11	Stem guide	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	13	Stem washer	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	14	Friction washer	PTFE 20% Carbon
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	18	Intermediate ring	Stainless steel - AISI303 / 1.4305 / EN 10088-3
	19	Pin	Steel - hardenit
	20	Handle	Steel
	22	Bearing	Steel - PTFE

Accessories	BROEN No.	Dimension	Description
	167245	DN 65	ISO-flange.
	169245	DN 80	
	66160065 000	DN 65	Hexagon for insertion key.
	66164100 000	DN 80	
	66161100 000	DN 100	

Steel ball valve - DN 15 - 32, PN 40

Type 94103 - Full bore

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

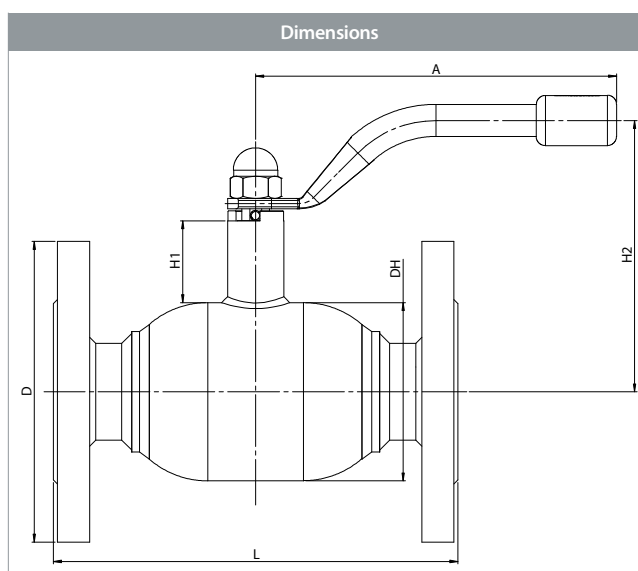
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

Other lengths and special flanges available on request.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm					
					DH	D	L	H1	H2	A
15	9410340015 010	15	32	1.9	42	95	130	47	115	140
20	9410340020 010	20	57	2.7	51	105	150	47	120	140
25	9410340025 010	25	81	3.5	57	115	160	48	124	140
32	9410340032 010	32	133	5.5	76	140	180	41	127	180

Steel ball valve - DN 15 - 32, PN 40

Type 94103 - Full bore



Technical drawing		Material description	
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	8	Back-up ring	Steel - DC01 / 1.0330 / EN 10130
	10	Neck ring	Steel - S355J2+N / 1.0570 / EN 10025-2
	11	Stem guide	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	13	Stem washer	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	14	Friction washer	PTFE 20% Carbon
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	18	Intermediate ring	Stainless steel - AISI303 / 1.4305 / EN 10088-3
	19	Pin	Steel - hardenit
	20	Handle	Steel
	21	Cap nut	Steel - galvanized
	34	Middle bush	Steel - P235GH / 1.0345 / EN 10217-2

Accessories	BROEN No.	Dimension	Description
	66050010 000 - yellow	DN 20 - 25	T-handles in three different colors - yellow, blue and red. Factory fitted T-handle on request.
	66050010 003 - blue		
	66050010 004 - red		
	66050040 000 - yellow	DN 32 - 40	
	66050040 003 - blue		
	66050040 004 - red		
	203245	DN 20 - 25	ISO-flange.
	208245	DN 32	
	66160010 000	DN 20 - 25	Hexagon for insertion key.
	66160040 000	DN 32	

Special model: Minimum length - Flange x Flange - DN 15 - 32:

DN	Standard length - mm	Minimum length - mm
15	130	On request
20	150	118
25	160	130
32	180	135

Steel ball valve - DN 40 - 50, PN 40

Type **BBM60441 / BBM62441** - **Full bore**

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

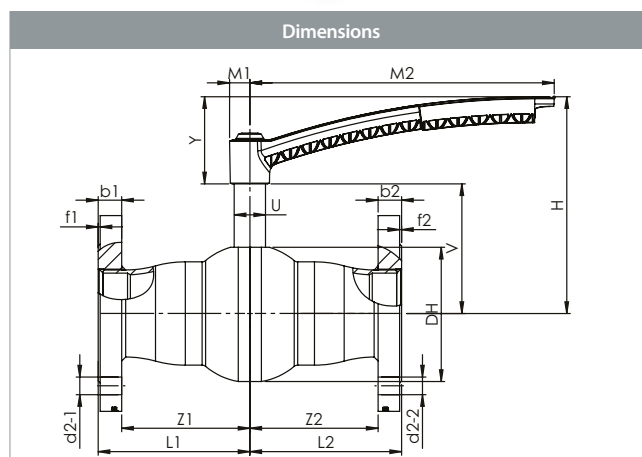
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

ISO-flange available on request.



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
40	8600440040 010	40	230	5.51	100	100	82	82	18	18	18	18	2	2	73.4	85.1	154.1
50	8600440050 010	50	298	7.53	115	115	95	95	18	18	20	20	2	2	90.0	93.7	162.7

FLOWOPTIMIZED

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
40	8620440040 010	40	266	5.56	100	100	82	82	18	18	18	18	2	2	73.4	85.1	154.1
50	8620440050 010	50	345	7.59	115	115	95	95	18	18	20	20	2	2	90.0	93.7	162.7

Steel ball valve - DN 40 - 50, PN 40

Type BBM60441 / BBM62441 - Full bore



Technical drawing		Material description	
	1	Handle	Fibreglass reinforced composite - PA6 GF30
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Flange	Steel - S355J2H / EN 10210-2
	7	Neck ring	Steel - R St37-2 / DIN 17100
	8	Disc spring	Steel / EN 10132-4
	9	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	10	Seat	PTFE 20% carbon
	11	Support ring	Steel - DC01 / EN 10130
	12	Housing	Carbon steel - P235GH / EN 10216-2
	13	Stem guide	Steel - P265GH / EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Locking washer	Distaloy HP+0,3%C
	17	Locking nut	Steel

*The product shown is flowoptimized

Accessories	BROEN No.	Dimension	Description
	954245	DN 40 - 50	ISO-flange.

All dimensions in mm

U	Y	M1	M2
28	69	18,9	172,4
28	69	18,9	172,4

All dimensions in mm

U	Y	M1	M2
28	69	18,9	172,4
28	69	18,9	172,4

Steel ball valve - DN 40 - 50, PN 40

Type **BBM60444 / BBM62444** - **Full bore**

Flange × Flange with BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

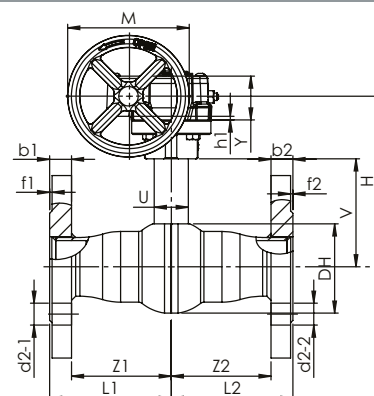
Eco-friendly protection finish against corrosion.

Approvals and certificates

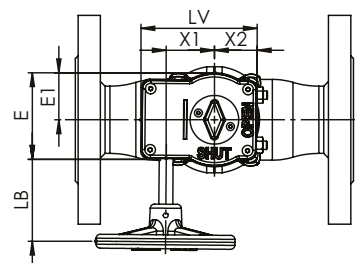
BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



Dimensions



Dimensions



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
40	8600440040 480	40	230	6,82	100	100	82	82	18	18	18	18	2	2	73,4	88,7	140,2
50	8600440050 480	50	298	8,84	115	115	95	95	18	18	20	20	2	2	90,0	97,3	148,8

FLOWOPTIMIZED

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
40	8620440040 480	40	266	6,86	100	100	82	82	18	18	18	18	2	2	73,4	88,7	140,2
50	8620440050 480	50	345	8,90	115	115	95	95	18	18	20	20	2	2	90,0	97,3	148,8

Steel ball valve - DN 40 - 50, PN 40

Type BBM60444 / BBM62444 - Full bore



Technical drawing		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 - EN 10130
	11	Flange	Steel - S355J2H / EN 10210-2
	12	Housing	Carbon steel - P235GH - EN 10216-2
	13	Stem guide	P265GH - EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Stem-Gearbox adapter	Steel - S355J2 / EN 10025-2
	17	Gearbox	Cast Iron
	18	Screw	Steel
	19	Parallel key	Steel

*The product shown is flowoptimized

All dimensions in mm

U	Y	h1	M	LB	E	E1	X1	X2	LV
28	36	3	100	59,2	62,5	33,8	34,4	30,8	83,5
28	36	3	100	59,2	62,5	33,8	34,4	30,8	83,5

All dimensions in mm

U	Y	h1	M	LB	E	E1	X1	X2	LV
28	36	3	100	59,2	62,5	33,8	34,4	30,8	83,5
28	36	3	100	59,2	62,5	33,8	34,4	30,8	83,5

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60451 / BBM62451** - **Full bore**

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

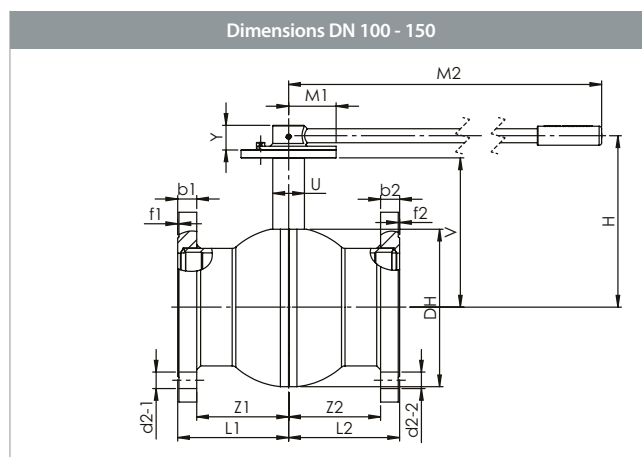
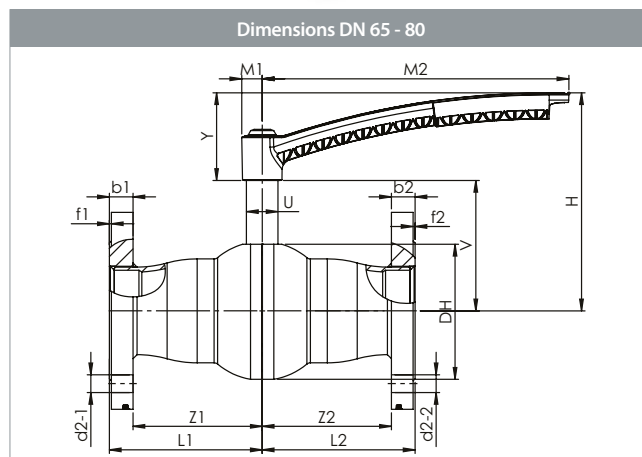
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear for DN 100 - 150. Other lengths and special flanges available on request.



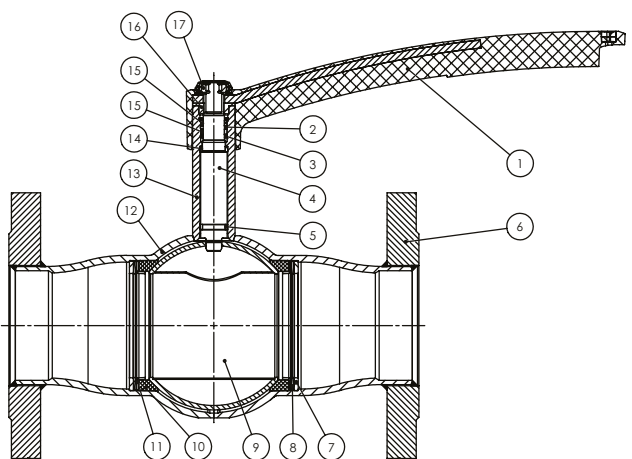
					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8600425065 010	65	501	10.58	145.0	145.0	123.0	123.0	18	18	22	22	2	2	110.5	118.9	207.9
80	8600425080 010	80	755	14.13	155.0	155.0	131.0	131.0	18	18	24	24	2	2	137.1	132.5	221.5
100	8600425100 010	100	1167	22.12	175.0	175.0	149.0	149.0	22	22	26	26	2	2	168.1	172.7	207.7
125	8600425125 010	125	1848	30.25	162.5	162.5	134.5	134.5	26	26	28	28	2	2	206.4	191.8	226.8
150	8600425150 010	150	2664	41.13	175.0	175.0	145.0	145.0	26	26	30	30	2	2	248.8	235.8	270.8

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8620425065 010	65	578	10.68	145.0	145.0	123.0	123.0	18	18	22	22	2	2	110.5	118.9	207.9
80	8620425080 010	80	842	14.30	155.0	155.0	131.0	131.0	18	18	24	24	2	2	137.1	132.5	221.5
100	8620425100 010	100	1271	22.38	175.0	175.0	149.0	149.0	22	22	26	26	2	2	168.1	172.7	207.7
125	8620425125 010	125	1963	30.65	162.5	162.5	134.5	134.5	26	26	28	28	2	2	206.4	191.8	226.8
150	8620425150 010	150	2856	41.72	175.0	175.0	145.0	145.0	26	26	30	30	2	2	248.8	235.8	270.8

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60451 / BBM62451 - Full bore**



Technical drawing 65 - 80	Material description		
	1	Handle	Fibreglass reinforced composite - PA6 GF30
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Flange	Steel - S355J2H / EN 10210-2
	7	Neck ring	Steel - R St37-2 / DIN 17100
	8	Disc spring	Steel / EN 10132-4
	9	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	10	Seat	PTFE 20% carbon
	11	Support ring	Steel - DC01 / EN 10130
	12	Housing	Carbon steel - P235GH / EN 10216-2
	13	Stem guide	Steel - P265GH / EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Locking washer	Distaloy HP+0,3%C
	17	Locking nut	Steel

Technical drawing DN 100 - 150		Material description		
Technical drawing of a ball valve assembly for DN 100 - 150. The drawing shows a cross-section of the valve body and internal components. The main drawing is labeled with numbers 1 through 18. An inset drawing shows a detail of the handle assembly, labeled with number 18.		1	ISO flange	Steel - S355J2+A / EN 10025-2
		2	O-ring	FKM70
		3	O-ring	EPDM70
		4	Stem	Stainless steel ASTM420 / 1.4021 / EN 10088-3
		5	Friction ring	PTFE 20% carbon
		6	Flange	Steel - S355J2H / EN 10210-2
		7	Neck ring	Steel - R St37-2 / DIN 17100
		8	Disc spring	Steel / EN 10132-4
		9	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
		10	Seat	PTFE 20% carbon
		11	Support ring	Steel - DC01 / EN 10130
		12	Housing	Carbon steel - P235GH / EN 10216-2
		13	Stem guide	P265GH / EN 10273
		14	Friction ring	PTFE 20% carbon
		15	Spacer ring	PTFE 20% carbon
		16	Pin	Steel
		17	Handle	Carbon Steel
		18	Socket set screw	Steel

*The product shown is flowoptimized

All dimensions in mm			
U	Y	M1	M2
32	89	20.8	310.9
32	89	20.8	310.9
40	39	45.0	365.0
45	39	62.5	650.0
50	39	75.0	900.4

All dimensions in mm			
U	Y	M1	M2
32	89	20.8	310.9
32	89	20.8	310.9
40	39	45.0	365.0
45	39	62.5	650.0
50	39	75.0	900.4

Accessories	BROEN No.	Dimension	Description
	600584	DN 100	BROEN-gear.
	600585	DN 125	
	600586	DN 150	
	958245	DN 65 - 80	ISO-flange.

Special model: Minimum length - Flange x Flange. Only applicable for variants without optimized flow.

DN	Standard length - mm	Minimum length - mm
65	290	270
80	310	280
100	350	300

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60454 / BBM62454** - **Full bore**

Flange × Flange with BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

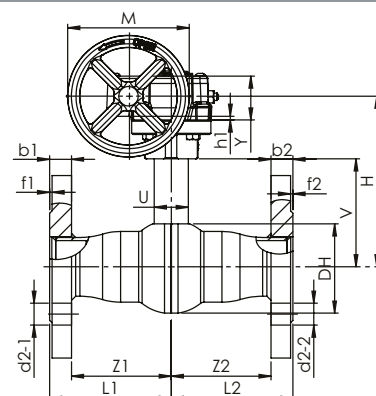
BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

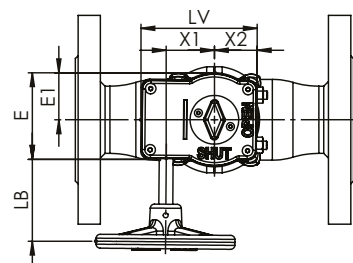
Other lengths available on request.



Dimensions



Dimensions



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8600425065 480	65	501	12.35	145.0	145.0	123.0	123.0	18	18	22	22	2	2	110.5	123.9	177.4
80	8600425080 480	80	755	15.98	155.0	155.0	131.0	131.0	18	18	24	24	2	2	137.1	137.5	191.0
100	8600425100 480	100	1167	24.22	175.0	175.0	149.0	149.0	22	22	26	26	2	2	168.1	172.7	212.7
125	8600425125 480	125	1848	34.07	162.5	162.5	134.5	134.5	26	26	28	28	2	2	206.4	191.8	237.8
150	8600425150 480	150	2664	44.08	175.0	175.0	145.0	145.0	26	26	30	30	2	2	248.8	235.8	281.8

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8620425065 480	65	578	12.46	145.0	145.0	123.0	123.0	18	18	22	22	2	2	110.5	123.9	177.4
80	8620425080 480	80	842	16.15	155.0	155.0	131.0	131.0	18	18	24	24	2	2	137.1	137.5	191.0
100	8620425100 480	100	1271	24.48	175.0	175.0	149.0	149.0	22	22	26	26	2	2	168.1	172.7	212.7
125	8620425125 480	125	1963	34.47	162.5	162.5	134.5	134.5	26	26	28	28	2	2	206.4	191.8	237.8
150	8620425150 480	150	2856	44.68	175.0	175.0	145.0	145.0	26	26	30	30	2	2	248.8	235.8	281.8

Steel ball valve - DN 65 - 150, PN 25

Type **BBM60454 / BBM62454** - **Full bore**



Technical drawing		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 - EN 10130
	11	Flange	Steel - S355J2H / EN 10210-2
	12	Housing	Carbon steel - P235GH - EN 10216-2
	13	Stem guide	P265GH - EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Stem-Gearbox adapter	Steel - S355J2 / EN 10025-2
	17	Gearbox	Cast Iron
	18	Screw	Steel
	19	Parallel key	Steel

*The product shown is flowoptimized

Special model: Minimum length - Flange × Flange. Only applicable for variants without optimized flow.

DN	Standard length - mm	Minimum length - mm
65	290	135
80	310	140
100	350	150

All dimensions in mm									
U	Y	h1	M	LB	E	E1	X1	X2	LV
32	39.5	2	100	73.1	73.9	39.9	41.3	37.9	99.9
32	39.5	2	200	105.1	73.9	39.9	41.3	37.9	99.9
40	50.0	2	200	112.9	96.7	53.6	55.0	48.1	131.2
45	62.0	2	300	178.6	118.7	67.4	69.8	59.4	162.7
50	62.0	2	350	181.1	118.7	67.4	68.8	59.4	162.7

All dimensions in mm									
U	Y	h1	M	LB	E	E1	X1	X2	LV
32	39.5	2	100	73.1	73.9	39.9	41.3	37.9	99.9
32	39.5	2	200	105.1	73.9	39.9	41.3	37.9	99.9
40	50.0	2	200	112.9	96.7	53.6	55.0	48.1	131.2
45	62.0	2	300	178.6	118.7	67.4	69.8	59.4	162.7
50	62.0	2	350	181.1	118.7	67.4	68.8	59.4	162.7

Steel ball valve - DN 200 - 400, PN 25

Type 86204 / 86004 - Full bore

Flange × Flange with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

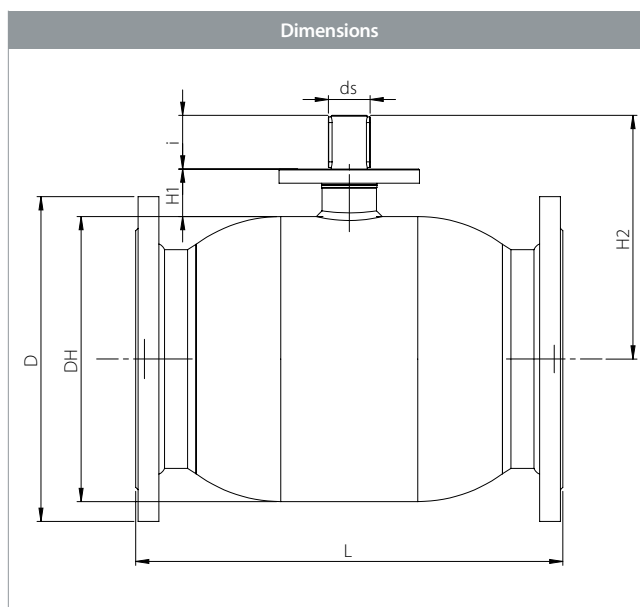
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm								
					DH	D	t	L	H1	H2	ds	i	ISO
200	8620425200 000	200	9200	101.4	356	340	-	550	60.2	304	45	67	F14
250	8620425250 000	250	13500	161.8	457	405	-	673	69.2	382	50	84	F16
300	8600425300 000	305	21600	284.8	508	460	-	850	82.5	437	60	100	F16
400	8600425400 000	400	35000	572.5	660	620	-	1016	105.0	547	80	112	F30

Steel ball valve - DN 200 - 400, PN 25

Type 86204 / 86004 - Full bore



Technical drawing		Material description	
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	10	Neck ring	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	29	Key	Steel
	30	Circlip	Steel
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	49	Bearing	PTFE coated steel
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 25

Type 86204 / 86004 - Full bore

Flange × Flange with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

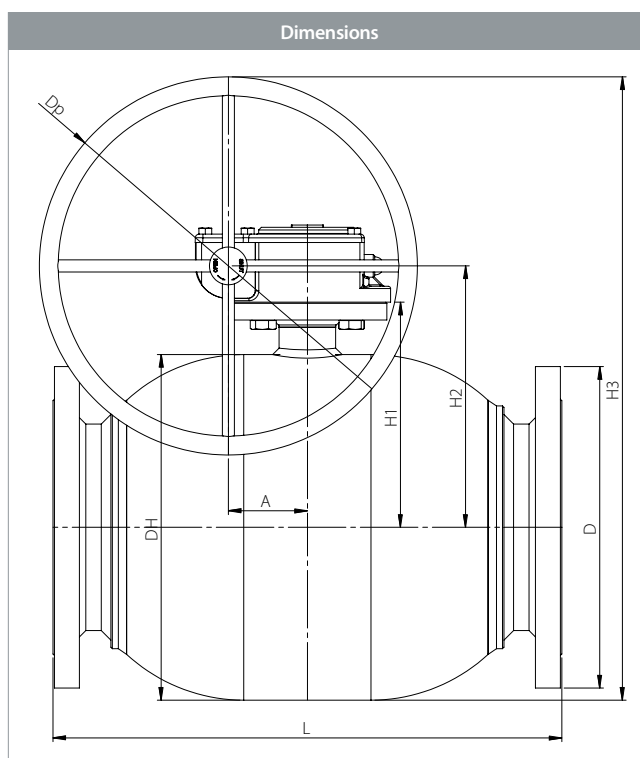
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	t	L	H1	H2	H3	Dp	A
200	8620425200 480	200	9200	103.5	356	340	-	550	60.2	275	500,0	450	68.8
250	8620425250 480	250	13500	166.8	457	405	-	673	69.2	346	596,0	500	104.5
300	8600425300 480	305	21600	293.2	457	460	-	850	82.5	346	566,5	350	130.0
400	8600425400 480	400	35000	640.6	508	620	-	1016	105.0	387	719,0	450	182.0

Steel ball valve - DN 200 - 400, PN 25

Type 86204 / 86004 - Full bore



Technical drawing		Material description	
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Steel ball valve - DN 200 - 400, PN 25

Tyyppi 86214 / 86014 - Full bore

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

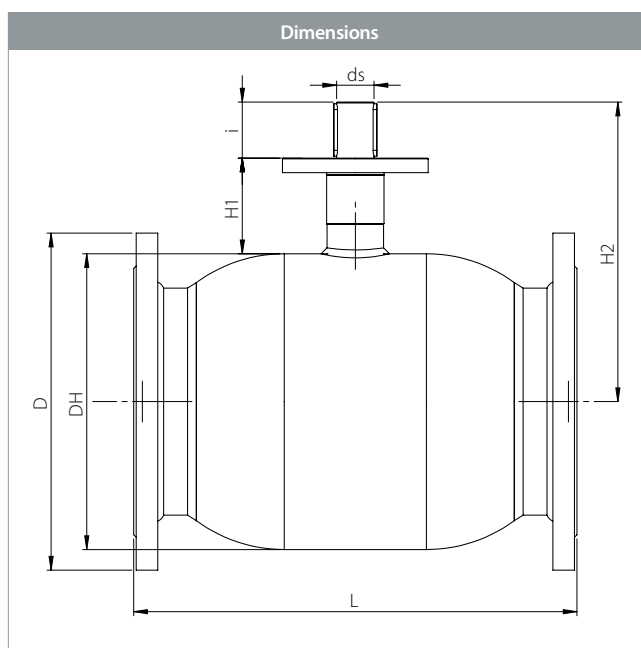
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm							
					DH	D	L	H1	H2	ds	i	ISO
200	8623425200 000	200	9200	101.9	356	355.6	550	115	360	45	67	F14
250	8623425250 000	250	13500	163.9	457	405.0	673	130	386	50	84	F16
300	8603425300 000	300	21600	288.2	508	460.0	850	155	507	60	100	F16
400	8603425400 000	400	35000	578.8	660	620.0	1016	180	527	80	112	F30

Steel ball valve - DN 200 - 400, PN 25

Type 86214 / 86014 - Full bore



Technical drawing		Material description	
	1	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	3	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	5	Bearing	PTFE coated steel
	6	Friction ring	Gunmetal
	7	O-ring	AFLAS
	8	Stem	Stainless steel - ASTM 420 / 1.4021 / EN 10088-3
	9	Disc	Steel - S235JR / EN 10025-2
	10	Bottom end	Steel - P265GH / EN 10216-2
	11	Back-up ring	Steel - S355J2H / EN 10210-1
	12	Seat	PTFE 20% Carbon
	13	O-ring	EPDM70
	14	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	15	Back-up ring	PTFE 20% Carbon
	16	Parallel Key	Steel
	17	O-ring	VITON
	18	ISO-flange	Steel - P235GH / 1.0038 / EN 10028-2
	19	Locking ring	Steel
	21	O-ring	EPDM
	22	Weld end	Steel - P235GH / EN 10217-2
	24	Flange	Steel - P265GH / 1.0038 / EN 10028-2

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 25

Type 86214 / 86014 - **Full bore**

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

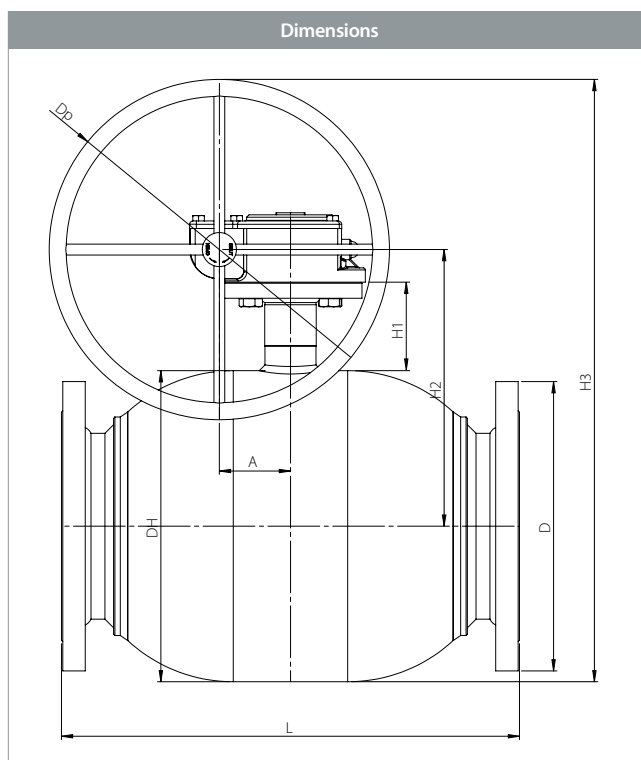
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm							
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	L	H1	H2	H3	Dp	A
200	8623425200 480	200	9200	105.0	356	355.6	550	115	330	555	450	68.8
250	8623425250 480	250	13500	168.9	457	405.0	673	130	407	657	500	104.5
300	8603425300 480	300	21600	296.6	457	460.0	850	155	464	639	350	130.0
400	8603425400 480	400	35000	646.9	508	620.0	1016	180	569	794	450	182.0

Steel ball valve - DN 200 - 400, PN 25

Type 86214 / 86014 - Full bore



Technical drawing		Material description	
	1	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	3	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	6	Friction ring	Gunmetal
	7	O-ring	AFLAS
	8	Stem	Stainless steel - ASTM 420 / 1.4021 / EN 10088-3
	10	Bottom end	Steel - P265GH / EN 10216-2
	11	Back-up ring	Steel - S355J2H / EN 10210-1
	12	Seat	PTFE 20% Carbon
	13	O-ring	EPDM70
	14	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	18	ISO-flange	Steel - P235GH / 1.0038 / EN 10028-2
	22	Weld end	Steel - P235GH / EN 10217-2
	24	Flange	Steel - P265GH / 1.0038 / EN 10028-2

Steel ball valve - DN 65 - 125, PN 16

Type **BBM60461** / **BBM62461** - Full bore

Flange × Flange

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

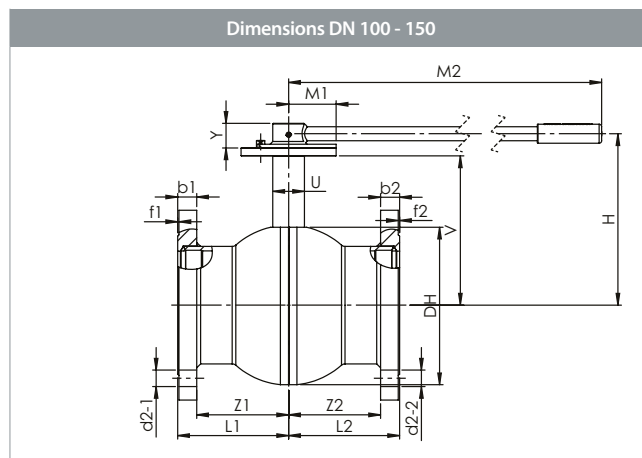
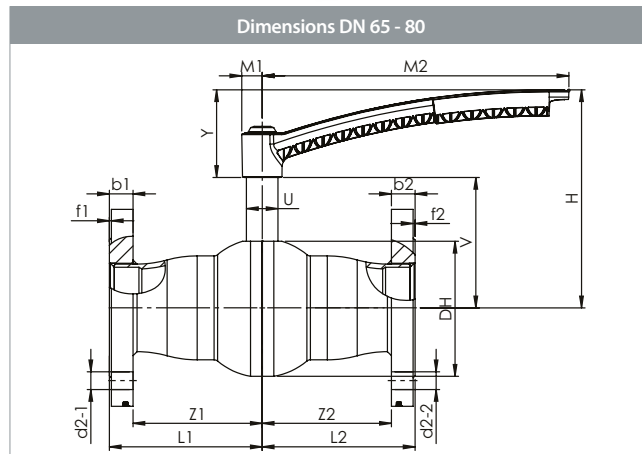
The standard handle is 180 degrees adjustable.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear for DN 100 - 150. Other lengths and special flanges available on request.



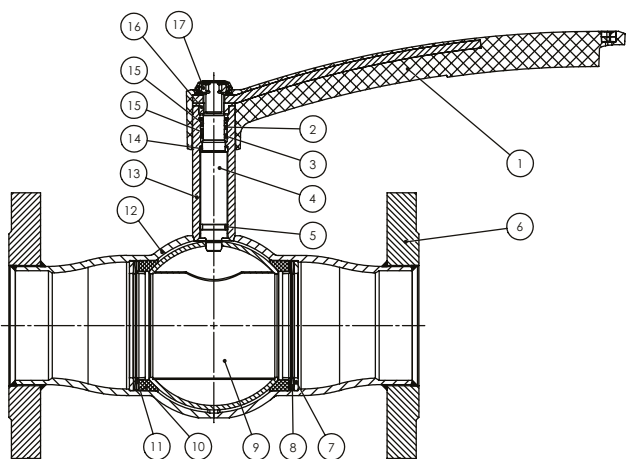
					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8600416065 010	65	501	10.23	145.0	145.0	125.0	125.0	18	18	20	20	2	2	110.5	118.9	207.9
80	8600416080 010	80	755	12.72	155.0	155.0	135.0	135.0	18	18	20	20	2	2	137.1	132.5	221.5
100	8600416100 010	100	1167	18.87	175.0	175.0	153.0	153.0	18	18	22	22	2	2	168.1	172.7	207.7
125	8600416125 010	125	1848	25.18	162.5	162.5	140.5	140.5	18	18	22	22	2	2	206.4	191.8	226.8
150	8600416150 010	150	2664	35.46	175.0	175.0	151.0	151.0	22	22	24	24	2	2	248.8	235.8	270.8

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8620416065 010	65	578	10.34	145.0	145.0	125.0	125.0	18	18	20	20	2	2	110.5	118.9	207.9
80	8620416080 010	80	842	12.89	155.0	155.0	135.0	135.0	18	18	20	20	2	2	137.1	132.5	221.5
100	8620416100 010	100	1271	19.13	175.0	175.0	153.0	153.0	18	18	22	22	2	2	168.1	172.7	207.7
125	8620416125 010	125	1963	25.57	162.5	162.5	140.5	140.5	18	18	22	22	2	2	206.4	191.8	226.8
150	8620416150 010	150	2856	36.06	175.0	175.0	151.0	151.0	22	22	24	24	2	2	248.8	235.8	270.8

Steel ball valve - DN 65 - 125, PN 16

Type **BBM60461 / BBM62461 - Full bore**



Technical drawing 65 - 80	Material description		
	1	Handle	Fibreglass reinforced composite - PA6 GF30
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Flange	Steel - S355J2H / EN 10210-2
	7	Neck ring	Steel - R St37-2 / DIN 17100
	8	Disc spring	Steel / EN 10132-4
	9	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	10	Seat	PTFE 20% carbon
	11	Support ring	Steel - DC01 / EN 10130
	12	Housing	Carbon steel - P235GH / EN 10216-2
	13	Stem guide	Steel - P265GH / EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Locking washer	Distaloy HP+0,3%C
	17	Locking nut	Steel

Technical drawing DN 100 - 150		Material description		
		1	ISO flange	Steel - S355J2+A / EN 10025-2
		2	O-ring	FKM70
		3	O-ring	EPDM70
		4	Stem	Stainless steel ASTM420 / 1.4021 / EN 10088-3
		5	Friction ring	PTFE 20% carbon
		6	Flange	Steel - S355J2H / EN 10210-2
		7	Neck ring	Steel - R St37-2 / DIN 17100
		8	Disc spring	Steel / EN 10132-4
		9	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
		10	Seat	PTFE 20% carbon
		11	Support ring	Steel - DC01 / EN 10130
		12	Housing	Carbon steel - P235GH / EN 10216-2
		13	Stem guide	P265GH / EN 10273
		14	Friction ring	PTFE 20% carbon
		15	Spacer ring	PTFE 20% carbon
		16	Pin	Steel
		17	Handle	Carbon Steel
		18	Socket set screw	Steel

*The product shown is flowoptimized

All dimensions in mm			
U	Y	M1	M2
32	89	20.8	310.9
32	89	20.8	310.9
40	39	45.0	365.0
45	39	62.5	650.0
50	39	75.0	900.4

All dimensions in mm			
U	Y	M1	M2
32	89	20.8	310.9
32	89	20.8	310.9
40	39	45.0	365.0
45	39	62.5	650.0
50	39	75.0	900.4

Accessories	BROEN No.	Dimension	Description
	600584	DN 100	BROEN-gear.
	600585	DN 125	
	600586	DN 150	
	958245	DN 65 - 80	ISO-flange.

Special model: Minimum length - Flange x Flange. Only applicable for variants without optimized flow.

DN	Standard length - mm	Minimum length - mm
65	290	270
80	310	280
100	350	300

Steel ball valve - DN 65 - 150, PN 16

Type **BBM60464 / BBM62464** - **Full bore**

Flange × Flange with BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

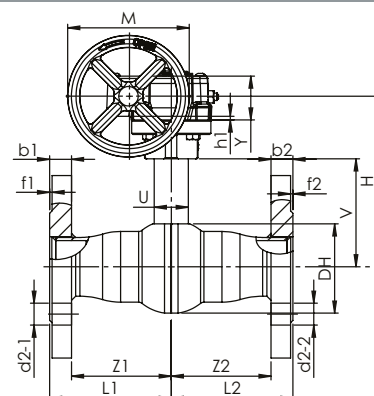
BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

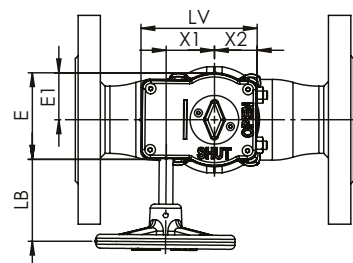
Other lengths available on request.



Dimensions



Dimensions



					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8600416065 480	65	501	12.00	145.0	145.0	125.0	125.0	18	18	20	20	2	2	110.5	123.9	177.4
80	8600416080 480	80	755	14.57	155.0	155.0	135.0	135.0	18	18	20	20	2	2	137.1	137.5	191.0
100	8600416100 480	100	1167	20.96	175.0	175.0	153.0	153.0	18	18	22	22	2	2	168.1	172.7	212.7
125	8600416125 480	125	1848	29.00	162.5	162.5	140.5	140.5	18	18	22	22	2	2	206.4	191.8	237.8
150	8600416150 480	150	2664	38.41	175.0	175.0	151.0	151.0	22	22	24	24	2	2	248.8	235.8	281.8

					All dimensions in mm												
DN	BROEN No.	Bore	Kvs	net Weight kg	L1	L2	Z1	Z2	d2-1	d2-2	b1	b2	f1	f2	DH	V	H
65	8620416065 480	65	578	12.11	145.0	145.0	125.0	125.0	18	18	20	20	2	2	110.5	123.9	177.4
80	8620416080 480	80	842	14.74	155.0	155.0	135.0	135.0	18	18	20	20	2	2	137.1	137.5	191.0
100	8620416100 480	100	1271	21.23	175.0	175.0	153.0	153.0	18	18	22	22	2	2	168.1	172.7	212.7
125	8620416125 480	125	1963	29.40	162.5	162.5	140.5	140.5	18	18	22	22	2	2	206.4	191.8	237.8
150	8620416150 480	150	2856	39.01	175.0	175.0	151.0	151.0	22	22	24	24	2	2	248.8	235.8	281.8

Steel ball valve - DN 65 - 150, PN 16

Type BBM60461 / BBM62464 - Full bore



Technical drawing		Material description	
	1	ISO flange	Steel - S355J2+A / EN 10025-2
	2	O-ring	FKM70
	3	O-ring	EPDM70
	4	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	5	Friction ring	PTFE 20% carbon
	6	Neck ring	Steel - R St37-2 / DIN 17100
	7	Disc spring	Steel / EN 10132-4
	8	Ball*	Stainless steel - AISI304 / 1.4301 / EN 10088-3
	9	Seat	PTFE 20% carbon
	10	Support ring	Steel - DC01 - EN 10130
	11	Flange	Steel - S355J2H / EN 10210-2
	12	Housing	Carbon steel - P235GH - EN 10216-2
	13	Stem guide	P265GH - EN 10273
	14	Friction ring	PTFE 20% carbon
	15	Spacer ring	PTFE 20% carbon
	16	Stem-Gearbox adapter	Steel - S355J2 / EN 10025-2
	17	Gearbox	Cast Iron
	18	Screw	Steel
	19	Parallel key	Steel

*The product shown is flowoptimized

Special model: Minimum length - Flange × Flange. Only applicable for variants without optimized flow.

DN	Standard length - mm	Minimum length - mm
65	290	135
80	310	140
100	350	150

All dimensions in mm									
U	Y	h1	M	LB	E	E1	X1	X2	LV
32	39.5	2	100	73.1	73.9	39.9	41.3	37.9	99.9
32	39.5	2	200	105.1	73.9	39.9	41.3	37.9	99.9
40	50.0	2	200	112.9	96.7	53.6	55.0	48.1	131.2
45	62.0	2	300	178.6	118.7	67.4	69.8	59.4	162.7
50	62.0	2	350	181.1	118.7	67.4	68.8	59.4	162.7

All dimensions in mm									
U	Y	h1	M	LB	E	E1	X1	X2	LV
32	39.5	2	100	73.1	73.9	39.9	41.3	37.9	99.9
32	39.5	2	200	105.1	73.9	39.9	41.3	37.9	99.9
40	50.0	2	200	112.9	96.7	53.6	55.0	48.1	131.2
45	62.0	2	300	178.6	118.7	67.4	69.8	59.4	162.7
50	62.0	2	350	181.1	118.7	67.4	68.8	59.4	162.7

Steel ball valve - DN 200 - 400, PN 16

Type 86204 / 86004 - Full bore

Flange × Flange with low stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

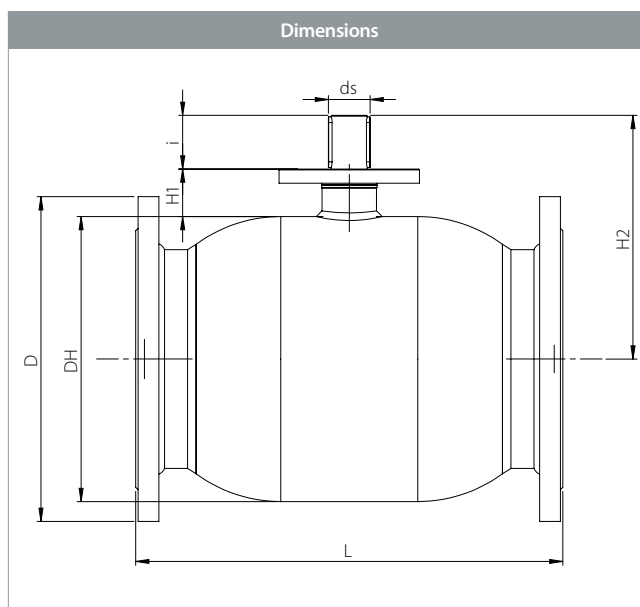
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	t	L	H1	H2	ds	i	ISO
200	8620416200 000	200	9200	101.4	356	340	-	550	60.2	304	45	67	F14
250	8620416250 000	250	13500	161.8	457	405	-	673	69.2	382	50	84	F16
300	8600416300 000	305	21600	284.8	508	460	-	850	82.5	437	60	100	F16
400	8600416400 000	400	35000	572.5	660	620	-	1016	105.0	547	80	112	F30

Steel ball valve - DN 200 - 400, PN 16

Type 86204 / 86004 - Full bore



Technical drawing		Material description	
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	10	Neck ring	Steel - S355J2+N / 1.0570 / EN 10025-2
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	16	Back-up ring	PTFE 20% Carbon
	17	O-ring	Rubber - FPM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	29	Key	Steel
	30	Circlip	Steel
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	49	Bearing	PTFE coated steel
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 16

Type 86204 / 86004 - Full bore

Flange × Flange with low stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

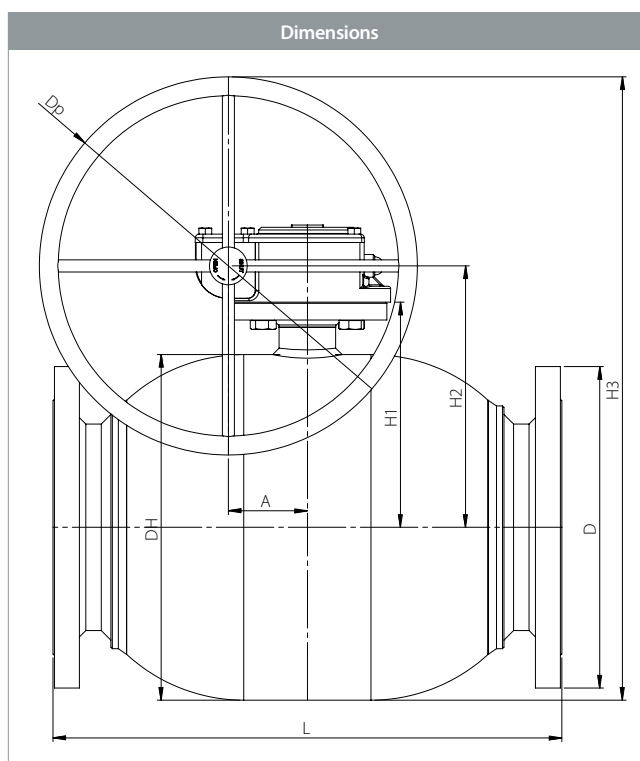
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm								
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	t	L	H1	H2	H3	Dp	A
200	8620416200 480	200	9200	103.5	356	340	-	550	60.2	275	500.0	450	68.8
250	8620416250 480	250	13500	166.8	457	405	-	673	69.2	346	596.0	500	104.5
300	8600416300 480	305	21600	293.2	457	460	-	850	82.5	346	566.5	350	130.0
400	8600416400 480	400	35000	640.6	508	620	-	1016	105.0	387	719.0	450	182.0

Steel ball valve - DN 200 - 400, PN 16

Type 86204 / 86004 - Full bore



Technical drawing		Material description	
	2	Flange	Steel - P265GH / 1.0038 / EN 10028-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	12	Stem	Stainless steel - ASTM420 / 1.4021 / EN 10088-3
	15	O-ring	EPDM70
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	EPDM70
	48	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	50	Friction ring	Gunmetal
	51	Bottom end	Steel - S355J2H - EN 10210
	52	Back-up ring	Steel - S355J2H - EN 10210
	53	Springs	Stainless steel - AISI304 / 1.4301 / EN 10088-3

Steel ball valve - DN 200 - 400, PN 16

Type 86214 / 86014 - Full bore

Flange × Flange with high stem

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Operation

The following operating devices are available on request:

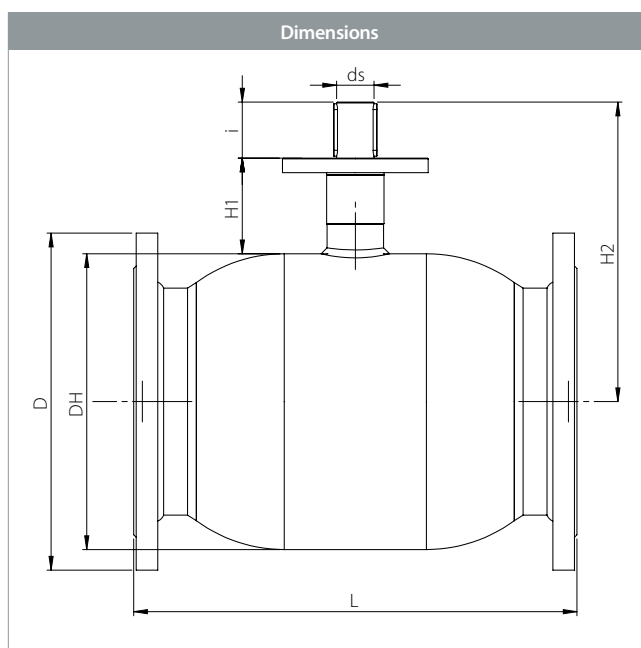
- BROEN-Gear.
- Electric actuator.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.

Notice

We recommend to add a BROEN-Gear.



					All dimensions in mm							
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	L	H1	H2	ds	i	ISO
200	8623416200 000	200	9200	101.9	356	355.6	550	115	360	45	67	F14
250	8623416250 000	250	13500	163.9	457	405.0	673	130	386	50	84	F16
300	8603416300 000	300	21600	288.2	508	460.0	850	155	507	60	100	F16
400	8603416400 000	400	35000	578.8	660	620.0	1016	180	527	80	112	F30

Steel ball valve - DN 200 - 400, PN 16

Type 86214 / 86014 - Full bore



Technical drawing		Material description	
	1	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	3	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	5	Bearing	PTFE coated steel
	6	Friction ring	Gunmetal
	7	O-ring	AFLAS
	8	Stem	Stainless steel - ASTM 420 / 1.4021 / EN 10088-3
	9	Disc	Steel - S235JR / EN 10025-2
	10	Bottom end	Steel - P265GH / EN 10216-2
	11	Back-up ring	Steel - S355J2H / EN 10210-1
	12	Seat	PTFE 20% Carbon
	13	O-ring	EPDM70
	14	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	15	Back-up ring	PTFE 20% Carbon
	16	Parallel Key	Steel
	17	O-ring	VITON
	18	ISO-flange	Steel - P235GH / 1.0038 / EN 10028-2
	19	Locking ring	Steel
	21	O-ring	EPDM
	22	Weld end	Steel - P235GH / EN 10217-2
	24	Flange	Steel - P265GH / 1.0038 / EN 10028-2

Accessories	BROEN No.	Dimension	Description
	600587	DN 200	BROEN-Gear.
	600588	DN 250	
	600589	DN 300	
	600590	DN 400	

Steel ball valve - DN 200 - 400, PN 16

Type 86214 / 86014 - Full bore

Flange × Flange with high stem and BROEN-Gear

Fully welded steel ball valve.

Materials

See next page.

Applications

Isolating valve for heating systems, district heating, cooling and industrial purpose.

Media

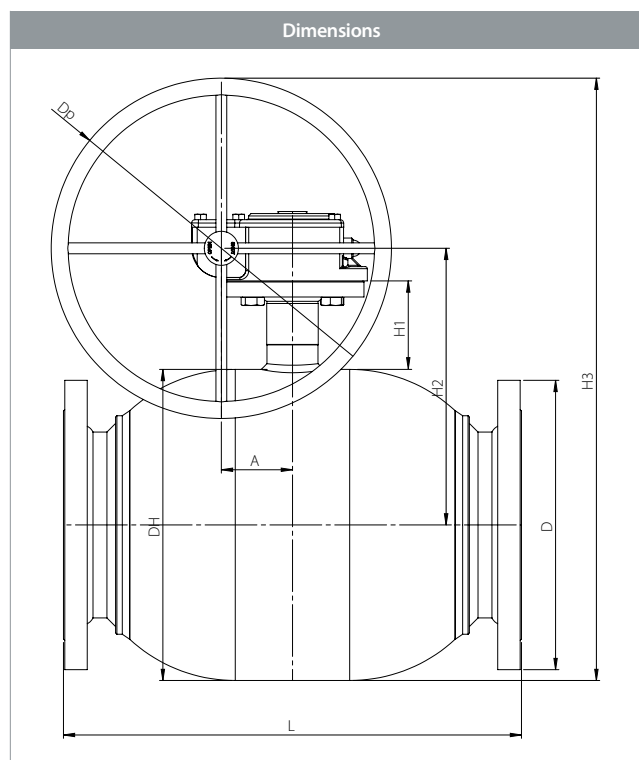
Water, air and other media not decomposing the steel. Not suitable for steam. If in doubt, please contact BROEN BALLOMAX® Sales Department.

Surface treatment

Eco-friendly protection finish against corrosion.

Approvals and certificates

BROEN is certified according to ISO 9001 and environmentally certified according to ISO 14001. BROEN BALLOMAX® is approved according to the requirements of Pressure Equipment Directive (PED). All ball valves as from DN 50 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm							
DN	BROEN No.	Bore	Kvs	net Weight kg	DH	D	L	H1	H2	H3	Dp	A
200	8623416200 480	200	9200	105.0	356	355.6	550	115	330	555	450	68.8
250	8623416250 480	250	13500	168.9	457	405.0	673	130	407	657	500	104.5
300	8603416300 480	300	21600	296.6	457	460.0	850	155	464	639	350	130.0
400	8603416400 480	400	35000	646.9	508	620.0	1016	180	569	794	450	182.0

Steel ball valve - DN 200 - 400, PN 16

Type 86214 / 86014 - Full bore



Technical drawing		Material description	
	1	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	3	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	4	Stem guide	Steel - P235GH / 1.0345 / EN 10216-2
	6	Friction ring	Gunmetal
	7	O-ring	AFLAS
	8	Stem	Stainless steel - ASTM 420 / 1.4021 / EN 10088-3
	10	Bottom end	Steel - P265GH / EN 10216-2
	11	Back-up ring	Steel - S355J2H / EN 10210-1
	12	Seat ring	PTFE 20% Carbon
	13	O-ring	EPDM70
	14	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	18	ISO-flange	Steel - P235GH / 1.0038 / EN 10028-2
	22	Weld end	Steel - P235GH / EN 10217-2
	24	Flange	Steel - P265GH / 1.0038 / EN 10028-2

L-Handle, DN 15 - 50

Type 90... - Full bore

With red and blue clips



DN	BROEN No.	L - mm
15 - 20	9015500002	75
25 - 32	9032500002	100
40 - 50	9040500001	120

T-handle, DN 15 - 32

Type 90... - Full bore

With red and blue clips



DN	BROEN No.	L - mm
15 - 20	9015550022	70
25 - 32	9032550002	81

Gear-Handle, DN 15 - 50

Type 90... - Full bore

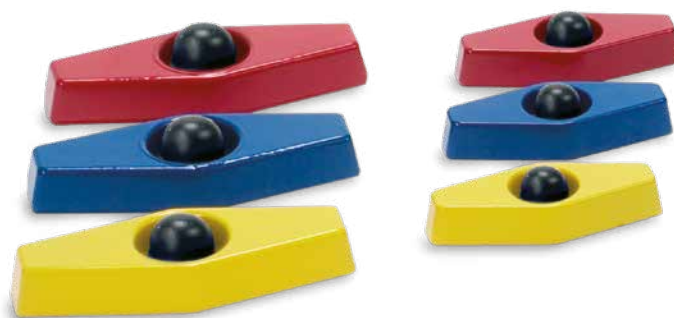
With red and blue clips



DN	BROEN No.	L - mm
15 - 20	9015560009	59
25 - 32	9032560009	81
40 - 50	9040560009	108

T-handle - DN 15 - 40

Type 66050 - Full bore



DN	BROEN No.	Color	L - mm	B - mm
15 - 25	66050010 000	Yellow	85	34
15 - 25	66050010 003	Blue	85	34
15 - 25	66050010 004	Red	85	34
32 - 40	66050040 000	Yellow	120	44
32 - 40	66050040 003	Blue	120	44
32 - 40	66050040 004	Red	120	44

Handle - DN 15 - 150

Type 66060 / 66064 / 66061 - Full bore



DN	BROEN No.	L - mm
15 - 25	66060010	140
32 - 40	66060040	180
50 - 65	66060065	275
80	66064100	365
100	66061100	365
125	66061150	650
150	66061200	900

ISO-flanges, mounting kit - DN 15 - 80

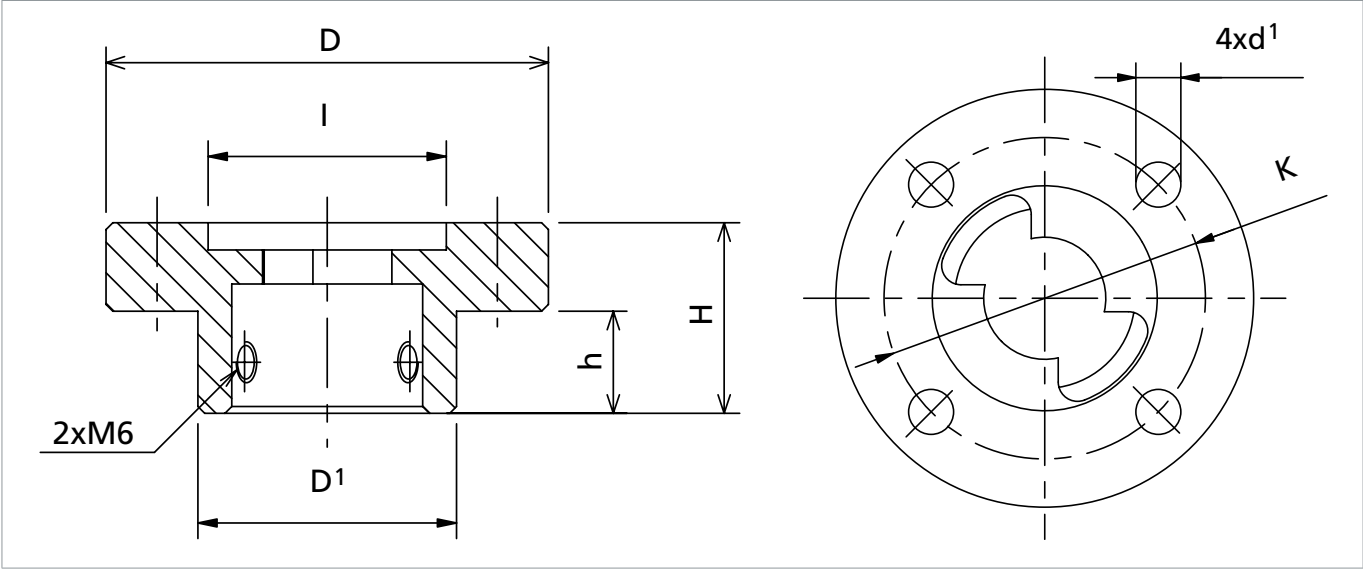
Type 203... / 208... / 167... / 169... - Full bore

ISO-flanges, mounting kit

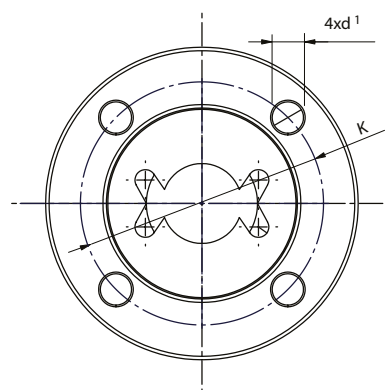
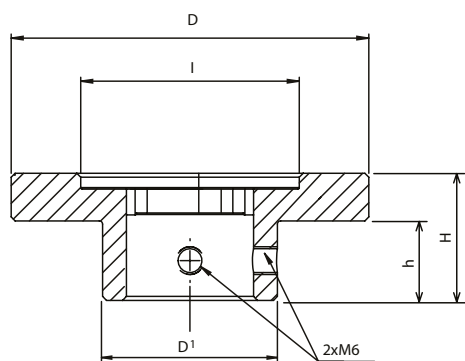
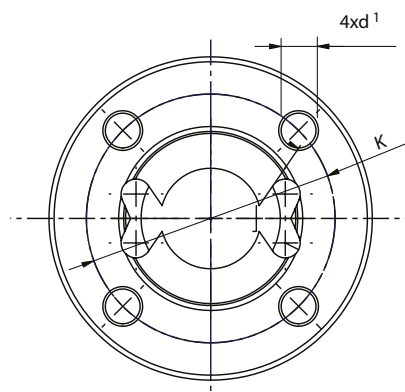
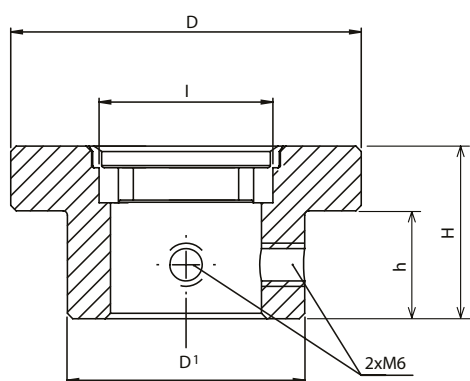
Mounting flange for later mounting of gear / actuator.
No mounting facing downwards.



Dimensions



DN	BROEN No.	ISO-flange	All dimensions in mm						
			D	D'	H	h	I	K	d'
15 - 25	203245	F05	65	34	28	15	35	50	7
32 - 40	208245	F05	65	38	28	15	35	50	7
50 - 65	167245	F05	65	47	33	20	35	50	7
80	169245	F07	90	57	35	20	55	70	9



Hexagon for insertion key - DN 15 - 125

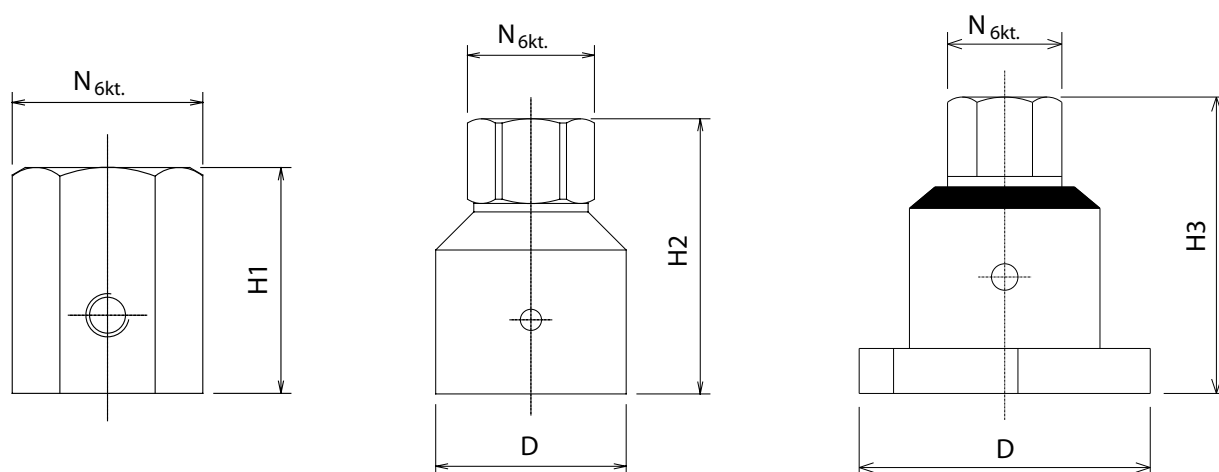
Type 66160 / 66164 / 66161 - Full bore

Hexagon for insertions key

To make thread end of spindle to hexagon.



Dimensions



		All dimensions in mm				
DN	BROEN No.	D	H1	H2	H3	N hex.
15 - 25	66160010 000	-	26	-	-	19
32 - 40	66160040 000	-	26	-	-	19
50 - 65	66160065 000	28	-	52	-	19
80	66164100 000	45	-	65	-	27
100	66161100 000	80	-	-	75	27
125	66161150 000	112	-	-	85	27

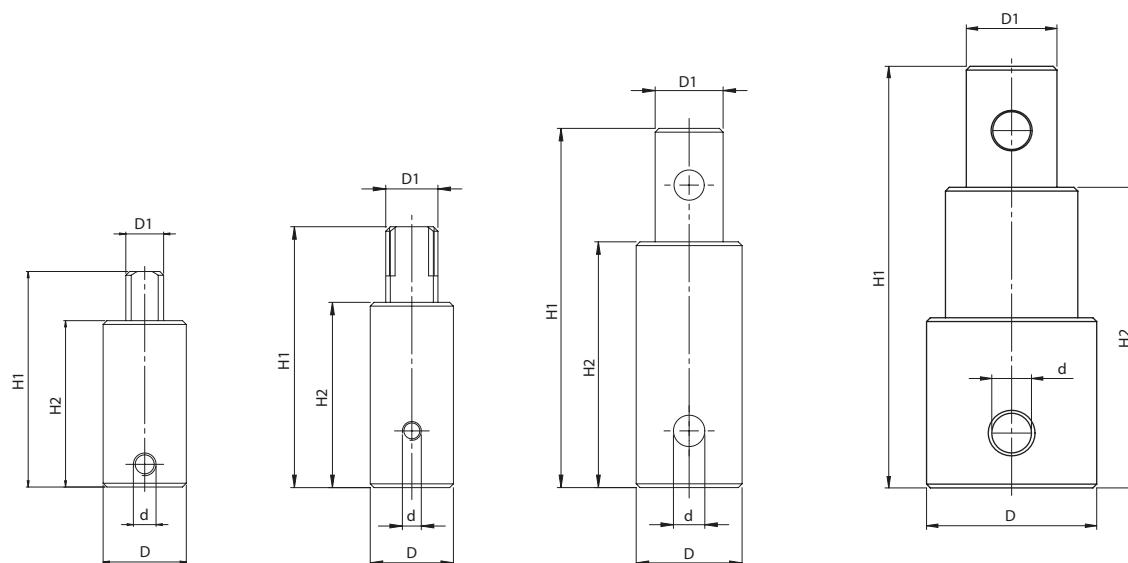
Spindle extension - DN 15 - 100

Type 084... / 251... - Full bore

Spindle extension for type 94 valves



Dimensions



		All dimensions in mm				
DN	BROEN No.	D	H1	H2	d	D1
15 - 25	084600	22	57.0	44.0	-	10
32 - 40	084500	22	69.0	49.0	-	14
50 - 65	084800	28	95.0	65.0	8.3	18
80 - 100	251300	45	111.5	79.5	10.5	24

BROEN BALLOMAX® Repair set - DN 10 - 500



DN	BROEN No.	Type
10 - 32	600040	60-61-64
40 - 50	600041	60-61-64
65 - 80	600042	60-64
65 - 80	600043	61
100	600044	60-64
100	600045	61
125	600046	64
150	600048	64
150 - 200	600049	61
250	600050	40
300 - 350	600051	40
400	600052	40
450 - 500	600053	40
250	600568	85
300 - 350	600600	85
400	600601	85
500	600602	85
15 - 20	600940	12031,13001,13601,13701,13701S,14001,15001
25 - 32	600941	12031,13001,13601,13701,13701S,14001,15001
40 - 50	600942	12031,13001,13601,13701,13701S,14001,15001
50 - 65	601625	BBM 602, BBM 622, BBM 604, BBM624
80 - 100	601626	BBM 602, BBM 622, BBM 604, BBM624
125 - 150	601627	BBM 602, BBM 622, BBM 604, BBM624

BROEN-Gear - DN 100 - 400

Type 600... - Full bore

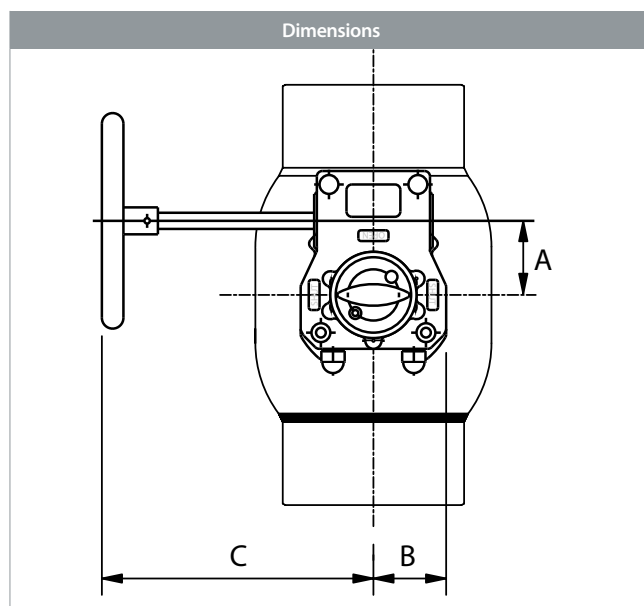
BROEN-Gear

Hand-operated gearbox.

BROEN-Gear is a strong high quality hand-operated gearbox. The hand wheel is ergonomically designed.

Operating torque

Operating torque of handwheel (Nm) - see below table.

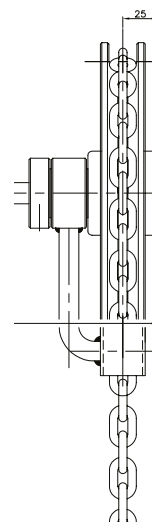


DN	BROEN No.	Weight - kg*	All dimensions in mm				
			A	B	C	Nm	Hand wheel
100	600584	2,5	41,3	40,0	145	300	200
125	600585	7,8	68,8	67,5	240	1200	300
150	600586	8,6	68,8	67,5	245	1200	350
200	600587	9,5	68,8	67,5	275	1200	450
250	600588	26,0	104,5	110,0	346	3250	500
300	600589	42,0	130,0	142,5	387	7000	350
400	600590	67,9	182,0	185,0	470	17000	450

* Weight gearbox with hand wheel.

BROEN-Gear with chain - DN 40 - 300

Type CW... - Full bore



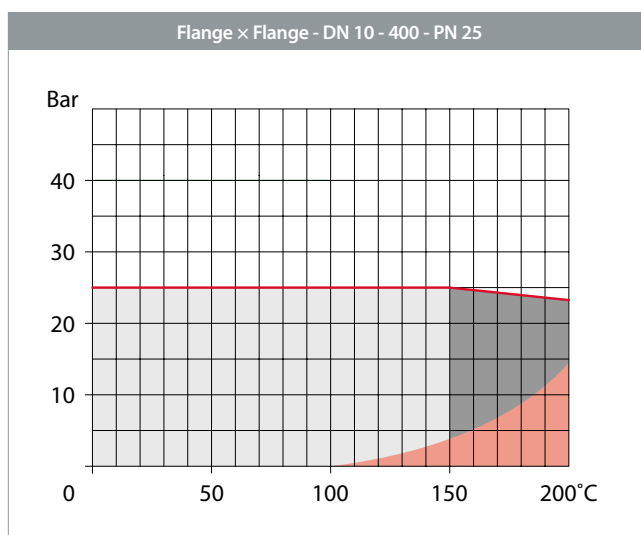
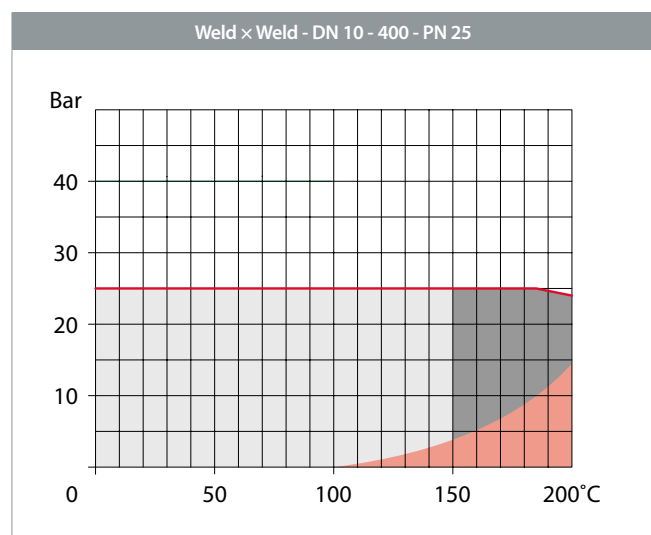
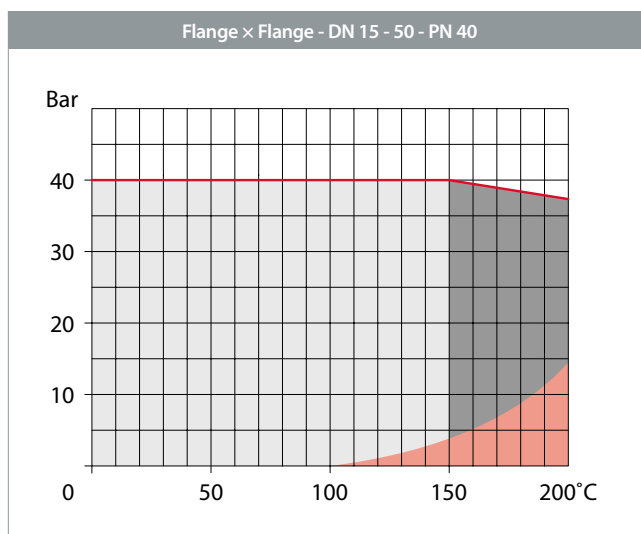
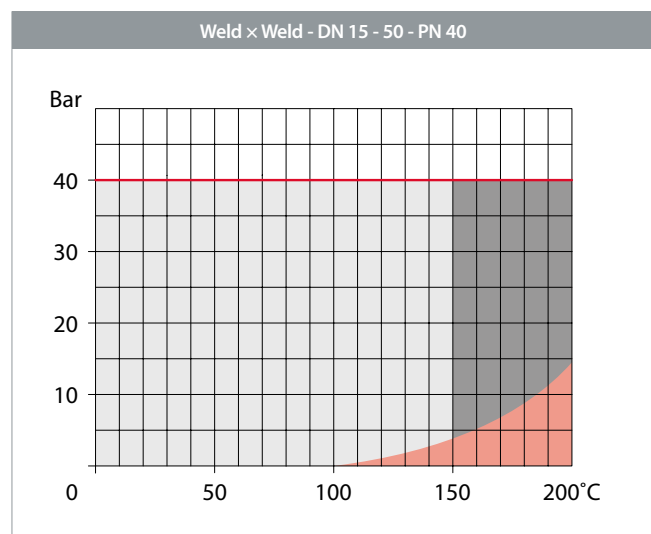
	Size	BROEN No.
	Ø15	CW 135
	Ø20	CW 215
	Ø25	CW 335
Accessory:		
Gear chain	1 meter - ZP chain (+ Splitlink)	
Gear chain	1 meter - SS chain (+ Splitlink)	

BROEN manual gear, mounting and adjustment are customers responsibility. Possible to operate with chain, for gear mounted high above ground.
 Galvanized chain, price per meter.

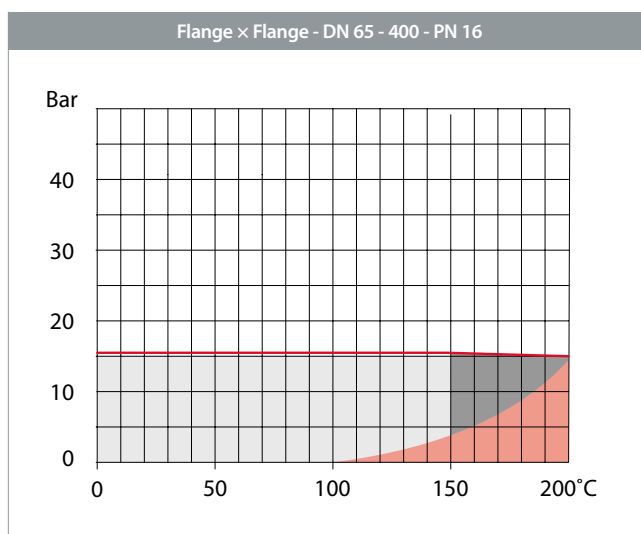
NOTICE: The length is the total length, not the height above ground of the gear.

Pressure and temperature graph - DN 15 - 400 - PN 40/25/16

Full bore



- Normal working area
- Short-term working area
- Steam area
(see high temperature valves
- section 8)



Pressure drop graph - DN 15 - 400

Full bore

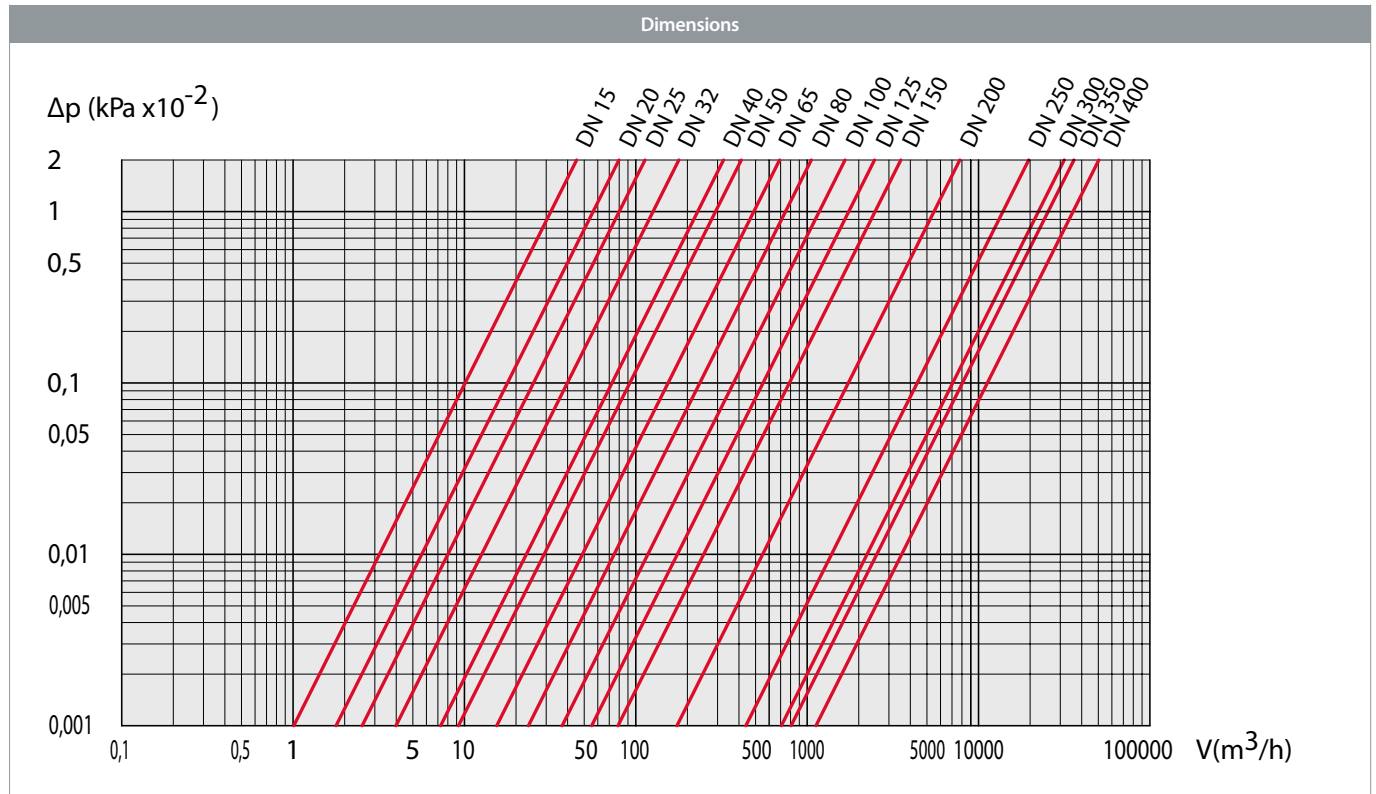
Pressure drop graph

Ball valve in fully open position.

Medium: water density in 1000 kg/m³

Definitions

Kvs: M³ water per hour at pressure drop 1 bar.



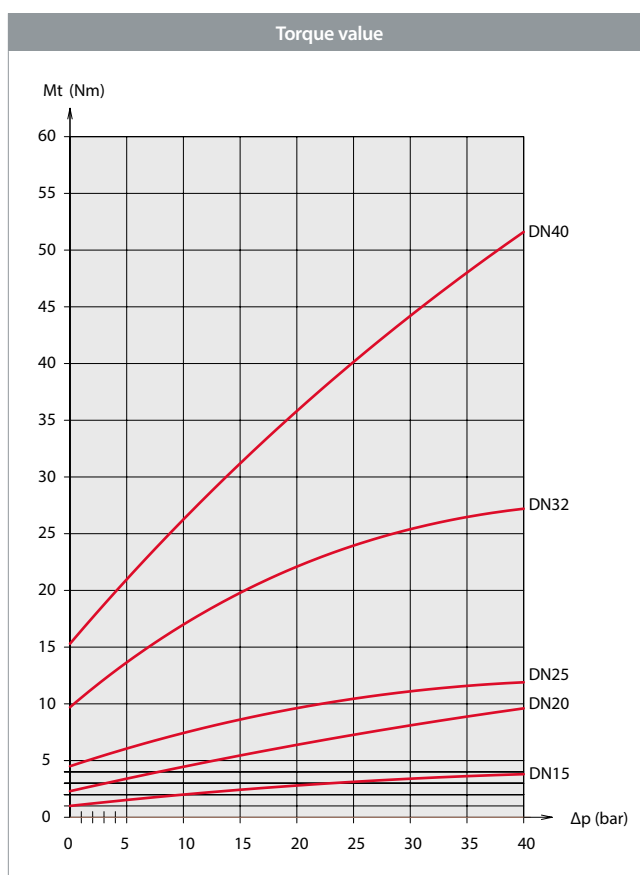
Operating torque - DN 15 - 40, PN 40

Full bore

Operating torque

The torque stated is for guidance only; it has been obtained by measuring on new ball valves. The torque is to be understood as the pull-off torque applicable for a closed, but recently activated ball valve.

The value stated may rise to a factor of 1.5 after a long period of inactivity.



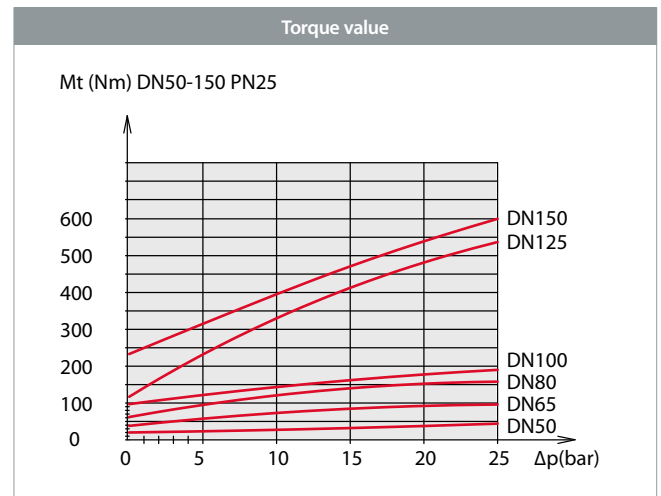
Operating torque - DN 50 - 400, PN 25

Full bore

Operating torque

The torque stated is for guidance only; it has been obtained by measuring on new ball valves. The torque is to be understood as the pull-off torque applicable for a closed, but recently activated ball valve.

The value stated may rise to a factor of 1.5 after a long period of inactivity.



Torque Nm

The value stated may rise to a factor of 2 after a long period of inactivity.

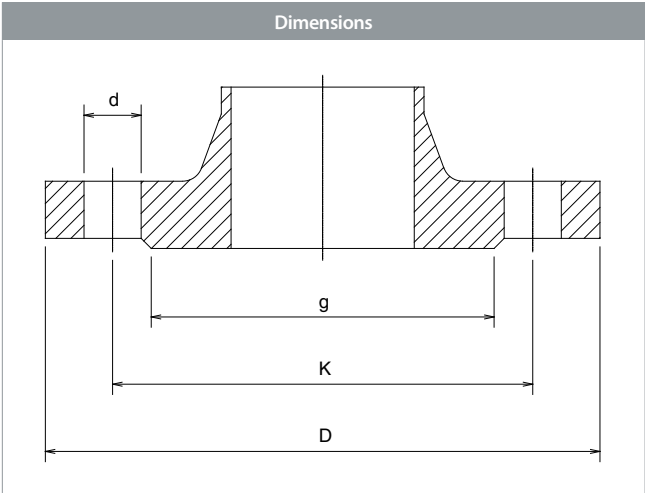
Torque Nm				
FB	DN 200	DN 250	DN 300	DN 400
Δ16 bar	570	1460	2670	5665
Δ25 bar	610	1620	3325	6205

Connecting flange - DN 15 - 50, PN 40

EN 1092-1 - Full bore

Description

Flangestandard.



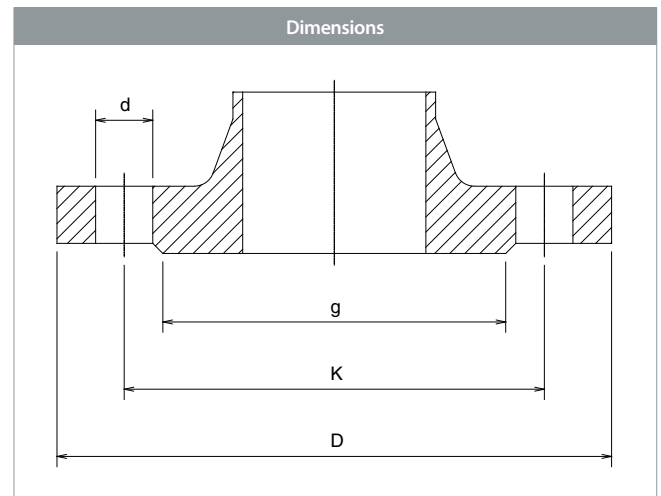
	All dimensions in mm				
DN	D	K	g	d	No. of bolt holes
15	95	65	45	14	4
20	105	75	58	14	4
25	115	85	68	14	4
32	140	100	78	18	4
40	150	110	88	18	4
50	165	125	102	18	4

Connecting flange - DN 15 - 400, PN 25

EN 1092-1 - **Full bore**

Description

Flangestandard.



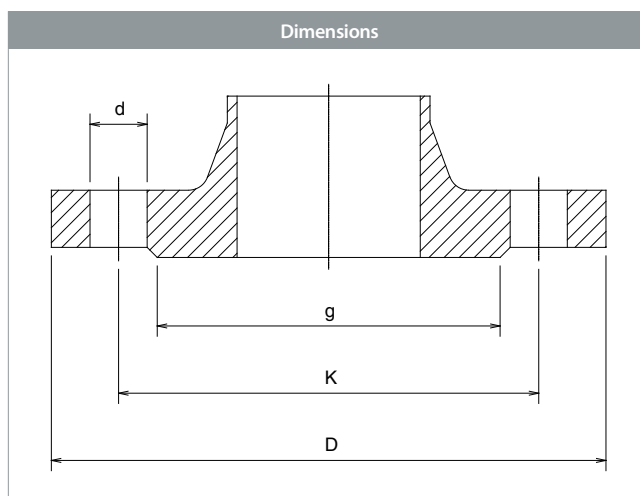
DN	All dimensions in mm				No. of bolt holes
	D	K	g	d	
15	95	65	45	14	4
20	105	75	58	14	4
25	115	85	68	14	4
32	140	100	78	18	4
40	150	110	88	18	4
50	165	125	102	18	4
65	185	145	122	18	8
80	200	160	138	18	8
100	235	190	162	22	8
125	270	220	188	26	8
150	300	250	218	26	8
200	360	310	278	26	12
250	425	370	335	30	12
300	485	430	395	30	16
350	555	490	450	33	16
400	620	550	505	36	16

Connecting flange - DN 15 - 400, PN 16

EN 1092-1 - **Full bore**

Description

Flangestandard.



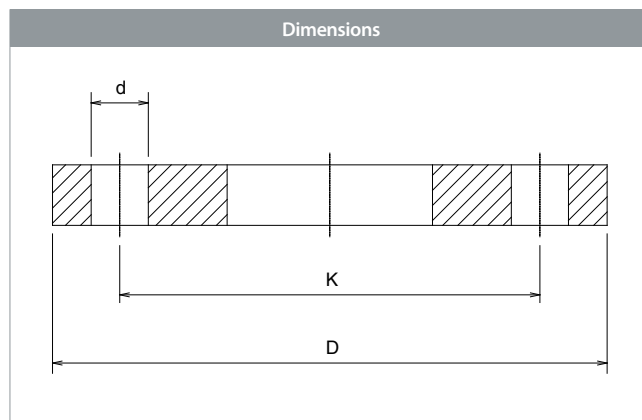
DN	All dimensions in mm				No. of bolt holes
	D	K	g	d	
15	95	65	45	14	4
20	105	75	58	14	4
25	115	85	68	14	4
32	140	100	78	18	4
40	150	110	88	18	4
50	165	125	102	18	4
65	185	145	122	18	4
80	200	160	138	18	8
100	220	180	158	18	8
125	250	210	188	18	8
150	285	240	212	22	8
200	340	295	268	22	12
250	405	355	320	26	12
300	460	410	378	26	12
350	520	470	438	26	16
400	580	525	490	30	16

Connecting flange - DN 15 - 400, PN 10

EN 1092-1 - **Full bore**

Description

Flangestandard.

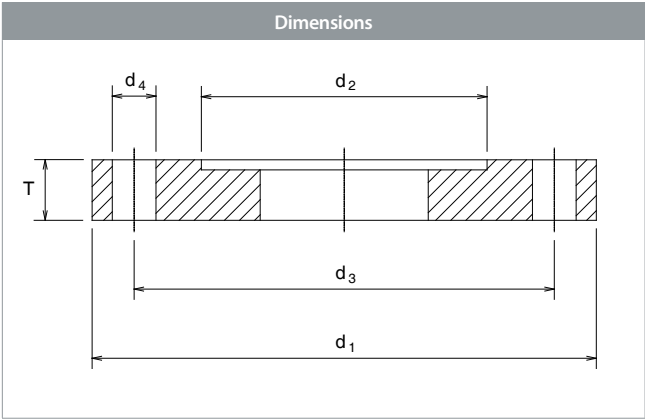


	All dimensions in mm			
DN	D	K	d	No. of bolt holes
15	95	65	14	4
20	105	75	14	4
25	115	85	14	4
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8
125	250	210	18	8
150	285	240	22	8
200	340	295	22	8
250	395	350	22	12
300	445	400	22	12
350	505	460	22	16
400	565	515	26	16

Valve actuator attachment - DN 65 - 400, PN 10

ISO 5210 / ISO 5211 - **Full bore**

Description
ISO-flange for gear.



		All dimensions in mm					
To be used with DN	Flange type	T	d_1	d_2	d_3	d_4	No. of bolt holes
65 - 80	F05	12.5	65	35	50	7	4
100 - 125	F07	13.5	90	55	70	9	4
150	F10	14.5	125	70	102	11	4
200	F12	14.5	150	85	125	13	4
250	F14	17.6	175	100	140	17	4
300	F16	23.5	210	130	165	21	4
350	F16	23.5	210	130	165	21	4
400	F25	27.5	300	200	254	17	8