



BALLOMAX[®]

DESIGNED TO LAST



SECTION 15

Underground valves - EN 488

Full bore

Steel ball valve, High stress - DN25-150, PN25

Type 97102 - Full bore

Welding × Welding

Fully welded steel ball valve for underground service acc. to EN 488.

Materials

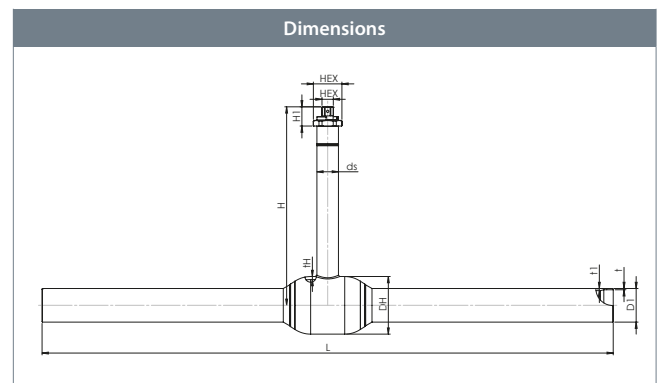
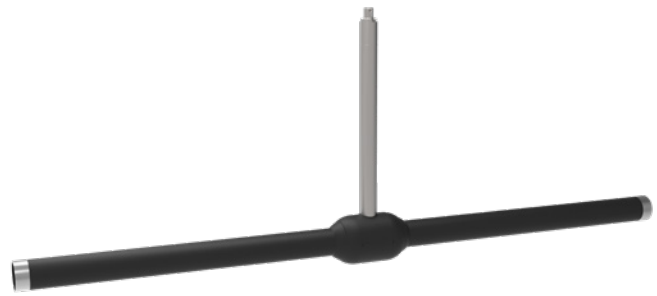
See next page.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					L	H	H1	D1	t	t1	DH	tH	ds	HEX
25	9710225025 000	25	81	7.8	1510	485.0	22.0	33.7	2.6	4.0	57.0	5.6	38.0	19
32	9710225032 000	32	133	9.6	1510	495.0	22.0	42.4	3.2	4.0	76.1	5.6	38.0	19
40	9710225040 000	40	229	13.5	1510	501.0	22.0	48.3	3.2	5.6	88.9	6.3	38.0	19
50	9710225050 000	50	295	17.8	1510	505.0	22.0	60.3	3.2	5.6	108.0	6.3	38.0	19
65	9710225065 000	65	498	20.6	1510	515.0	22.0	76.1	3.2	5.0	127.0	7.1	38.0	19
80	9710225080 000	80	754	31.1	1510	525.0	22.0	88.9	3.2	5.6	152.4	8.0	57.0	27/70
100	9710225100 000	100	1159	44.5	1510	545.0	24.0	114.3	3.6	6.3	177.8	8.0	76.1	27/70
125	9710225125 000	125	1841	56.5	1510	565.0	24.0	139.7	3.6	6.3	219.1	8.0	76.1	27/70
150	9710225150 000	150	2652	78.5	1510	585.0	49.0	168.3	4.0	7.1	267.0	8.8	76.1	50/90

Steel ball valve, High stress - DN25-150, PN25

Type 97102 - Full bore



Technical drawing	Material description		
	1	Welding	Steel - P235GH / 1.0345 / EN 10217-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI 304L / 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
	15	O-ring	Rubber - EPDM70
	16	Back-up ring	PTFE 20% Carbon
	54	Flowguides	Steel
	55	Stem guide	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	56	Stem stop	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	57	Intermediate ring	Stainless steel - AISI 303 / 1.4305 / EN 10088-3
	58	Stop pin	Stainless steel - AISI 303 / 1.4305 / EN 10088-3
59	Bearing	Gunmetal	
60	Stem top	Stainless steel - AISI 303 / 1.4307 / EN 10217-7	

Steel ball valve, High stress - DN200-300, PN25

Type 88242 / 88042 - Full bore

Welding × Welding

Fully welded steel ball valve for underground service acc. to EN 488.

Materials

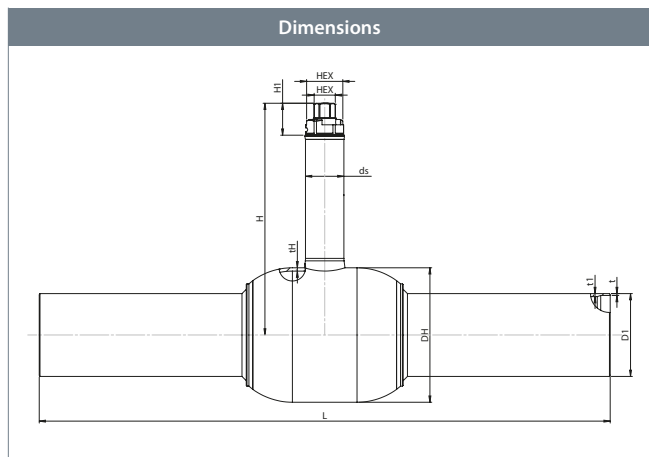
See next page.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					L	H	H1	D1	t	t1	DH	tH	ds	HEX
200	8824225200 070	200	9200	133.5	1510	560	84.5	219.1	5.0	8.0	355.6	8.0	101.6	50/90
250	8824225250 070	250	13500	197.2	1510	610	84.5	273.0	5.0	8.0	457.0	10.0	101.6	50/90
300	8804225300 070	300	21600	322.0	1810	793	84.5	323.9	5.6	8.8	508.0	12.5	133.0	50/90

Steel ball valve, High stress - DN200-300, PN25

Type 88242 / 88042 - Full bore



Technical drawing	Material description		
	1	Welding	Steel - P235GH / 1.0345 / EN 10217-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	15	O-ring	Rubber - EPDM70
	16	Back-up ring	PTFE 20% Carbon
	27	O-ring	Rubber - EPDM70
	51	Bottom end	Steel - S355J2H / EN 10210
	52	Back-up ring	Steel - S355J2H / EN 10210
	53	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	54	Flowguides	Steel
	55	Stem guide	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	56	Stem stop	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	57	Intermediate ring	Stainless steel - AISI 303 / 1.4305 / EN 10088-3
58	Stop pin	Stainless steel - AISI 303 / 1.4305 / EN 10088-3	
59	Bearing	Gunmetal	
60	Stem top	Stainless steel - AISI 303 / 1.4307 / EN 10217-7	

Steel ball valve, High stress - DN125-400, PN25

Type 97102 / 88242 / 88042 - Full bore

Welding × Welding with ISO-flange

Fully welded steel ball valve for underground service acc. to EN 488.

Materials

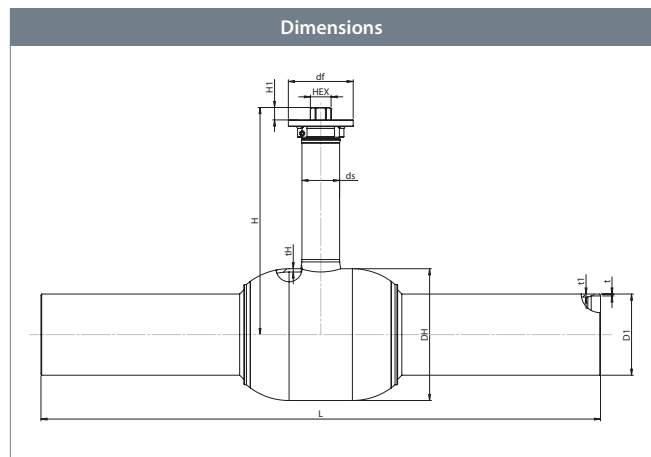
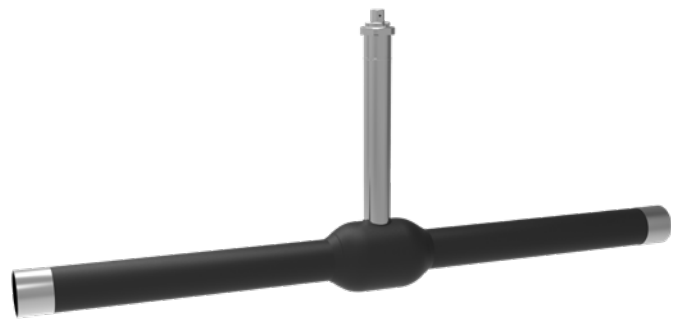
See next page.

Applications

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

Media

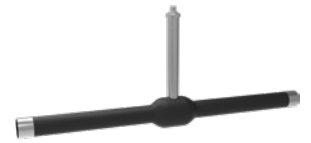
Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.



DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm										
					L	H	H1	D1	t	t1	DH	tH	ds	HEX	ISO
125	9710225125S3426	125	1841	56.1	1510	526	49.5	139.7	3.6	6.3	219.1	8.0	76.1	Ø30	F10
150	9710225150S3427	150	2652	76.8	1510	560	61.0	168.3	4.0	7.1	267.0	8.8	76.1	Ø30	F12
200	8824225200 300	200	9200	138.0	1510	560	32.5	219.1	5.0	8.0	355.6	8.8	101.6	HEX50	F14
250	8824225250 300	250	13500	202.9	1510	610	32.5	273.0	5.0	8.0	457.0	10.0	101.6	HEX50	F16
300	8804225300 300	300	21600	330.2	1810	767	99.0	323.9	5.6	8.8	508.0	12.5	133.0	Ø60	F16
400	8804225400 300	400		531.0	1810	790	109.0	406.4	6.3	10.0	660.0	12.5	219.1	Ø80	F30

Steel ball valve, High stress - DN125-400, PN25

Type 97102 / 88242 / 88042 - Full bore



Technical drawing	Material description		
	1	Welding	Steel - P235GH / 1.0345 / EN 10217-2
	5	Valve body	Steel - P235GH / 1.0345 / EN 10217-2
	6	Ball	Stainless steel - AISI 304L / 1.4306 / EN 10217-7
	7	Seat ring	PTFE 20% Carbon
	15	O-ring	Rubber - EPDM70
	16	Back-up ring	PTFE 20% Carbon
	23	ISO-flange	Steel - S235JRG2 / 1.0038 / EN 10025-2
	27	O-ring	Rubber - EPDM70
	51	Bottom end	Steel - S355J2H / EN 10210
	52	Back-up ring	Steel - S355J2H / EN 10210
	53	Springs	Stainless steel - AISI 304 / 1.4301 / EN 10088-3
	54	Flowguides	Steel
	55	Stem guide	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	56	Stem stop	Stainless steel - AISI 304L / 1.4307 / EN 10217-7
	57	Intermediate ring	Stainless steel - AISI 303 / 1.4305 / EN 10088-3
	58	Stop pin	Stainless steel - AISI 303 / 1.4305 / EN 10088-3
59	Bearing	Gunmetal	
60	Stem top	Stainless steel - AISI 303 / 1.4307 / EN 10217-7	

Steel ball valve, High stress, Pre-insulated, class 2 - DN25-400, PN25

Type 97102 - Full bore

Welding × Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

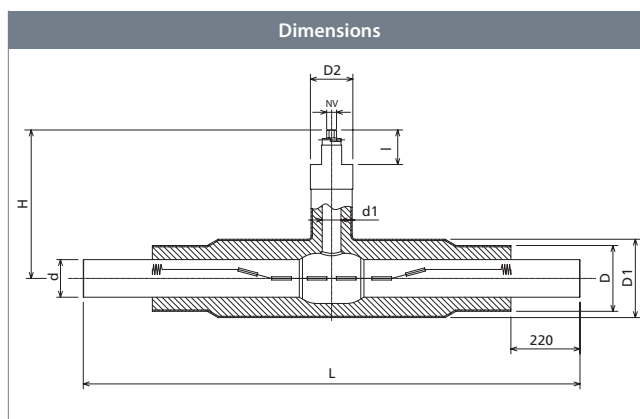
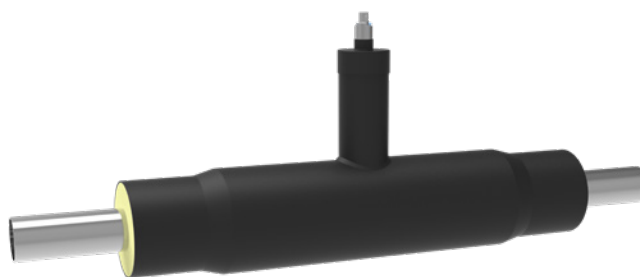
Operation

The following operating devices are available to order:

- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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 DN40 are CE-marked. The 3.1 certificate is available upon request.



Notice

Valves operated with gear for DN80-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.







DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm								
					d	L	H	D	D1	D2	d1	l	Hx
25	9710225025 0090	25	81	12	33.7	1510	485.0	110	140	110	38.0	80	19
32	9710225032 0090	32	133	17	42.4	1510	495.0	125	160	110	38.0	80	19
40	9710225040 0090	40	229	20	48.3	1510	500.0	125	160	110	38.0	80	19
50	9710225050 0090	50	295	24	60.3	1510	505.0	140	180	110	38.0	80	19
65	9710225065 0090	65	498	30	76.1	1510	514.5	160	200	110	38.0	80	19
80*	9710225080 0790	80	754	44	88.9	1510	526.0	180	225	125	57.0	85	27/70
100*	9710225100 0790	100	1159	57	114.3	1510	545.0	225	280	125	76.1	105	27/70
125*	9710225125 0790	125	1841	84	139.7	1510	565.0	250	315	125	76.1	105	27/70
150**	9710225150 0790	150	2652	123	168.3	1510	585.0	280	355	125	76.1	130	50/90
200**	On request												
250**	On request												
300**	On request												
350**	On request												
400**	On request												

Valves *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 2 - DN25-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 2, 1 Service valve - DN40-400, PN25

Type 97102 - Full bore

Welding × Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with one DN40 service valve.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

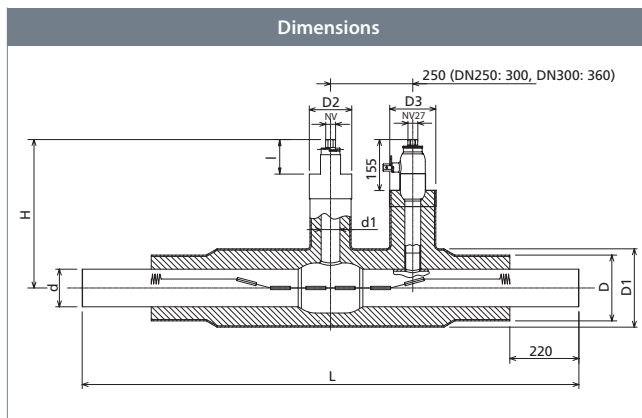
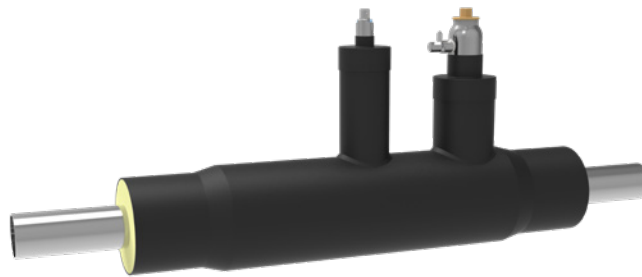
- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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). The 3.1 certificate is available upon request.

Notice

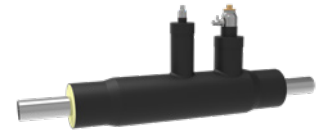
Valves operated with gear for DN80-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.









DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
40	9710225040 0091	40		23	48.3	1510	500.0	125	160	110	140	38.0	80	19
50	9710225050 0091	50		27	60.3	1510	505.0	140	180	110	140	38.0	80	19
65	9710225065 0091	65		33	76.1	1510	514.5	160	200	110	140	38.0	80	19
80*	9710225080 0791	80		48	88.9	1510	526.0	180	225	125	140	57.0	85	27/70
100*	9710225100 0791	100		60	114.3	1510	545.0	225	280	125	140	76.1	105	27/70
125*	9710225125 0791	125		87	139.7	1510	565.0	250	315	125	140	76.1	105	27/70
150**	9710225150 0791	150		125	168.3	1510	585.0	280	355	125	140	76.1	130	50/90
200**	On request													
250**	On request													
300**	On request													
350**	On request													
400**	On request													

Vales *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 2, 1 Service valve - DN40-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 2, 2 Service valves - DN40-400, PN25

Type 97102 - Full bore

Welding x Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN4 88, with two DN40 service valves.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

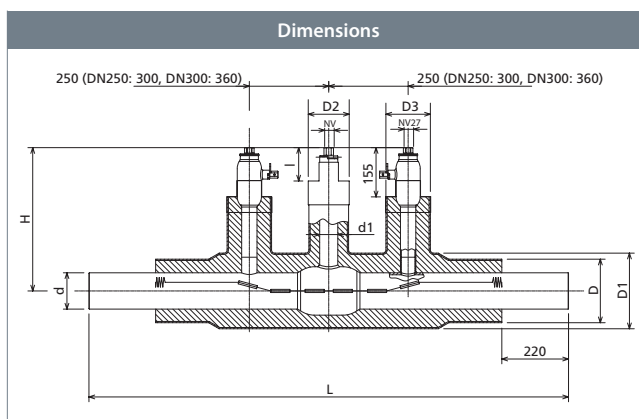
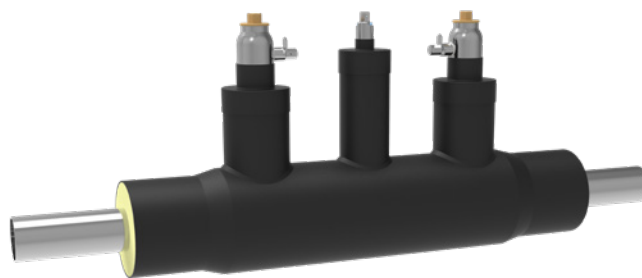
- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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). The 3.1 certificate is available upon request.

Notice

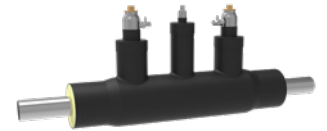
Valves operated with gear for DN80-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.









DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
40	9710225040 0092	40		27	48.3	1510	500.0	125	160	110	140	38.0	80	19
50	9710225050 0092	50		30	60.3	1510	505.0	140	180	110	140	38.0	80	19
65	9710225065 0092	65		36	76.1	1510	514.5	160	200	110	140	38.0	80	19
80*	9710225080 0792	80		51	88.9	1510	526.0	180	225	125	140	57.0	85	27/70
100*	9710225100 0792	100		63	114.3	1510	545.0	225	280	125	140	76.1	105	27/70
125*	9710225125 0792	125		89	139.7	1510	565.0	250	315	125	140	76.1	105	27/70
150**	9710225150 0792	150		125	168.3	1510	585.0	280	355	125	140	76.1	130	50/90
200**	On request													
250**	On request													
300**	On request													
350**	On request													
400**	On request													

Vales *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 2, 2 Service valves - DN40-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 2 - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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 DN40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm								
					d	L	H	D	D1	D2	d1	I	Hx
150	On request												
200	On request												
250	On request												
300	On request												
350	On request												
400	On request												

Steel ball valve, High stress, Pre-insulated, class 2 - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Steel ball valve, High stress, Pre-insulated, class 2, 1 Service valve - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with one DN40 service valve.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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). The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
150	On request													
200	On request													
250	On request													
300	On request													
350	On request													
400	On request													

Steel ball valve, High stress, Pre-insulated, class 2, 1 Service valve - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Steel ball valve, High stress, Pre-insulated, class 2, 2 Service valves - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with two DN40 service valves.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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). The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
150	On request													
200	On request													
250	On request													
300	On request													
350	On request													
400	On request													

Steel ball valve, High stress, Pre-insulated, class 2, 2 Service valves - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Steel ball valve, High stress, Pre-insulated, class 3 - DN25-400, PN25

Type 97102 - Full bore

Welding × Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

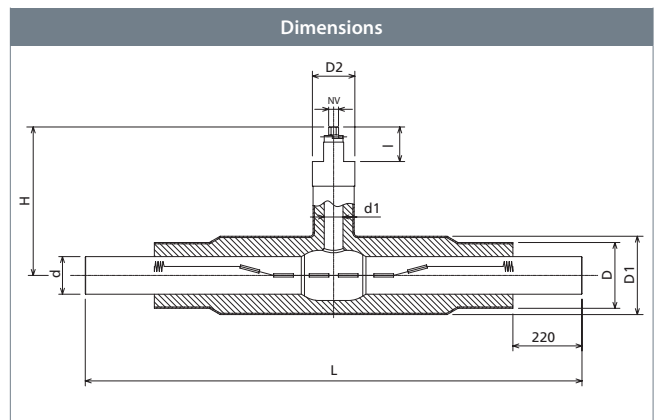
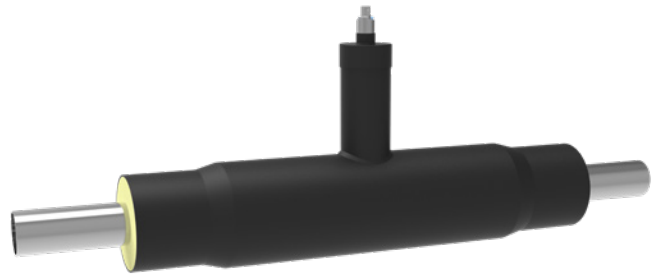
Operation

The following operating devices are available to order:

- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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 DN40 are CE-marked. The 3.1 certificate is available upon request.



Notice

Valves operated with gear for DN80-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.






DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm								
					d	L	H	D	D1	D2	d1	l	Hx
25	9710225025 0070	25		12	33.7	1510	485.0	110	140	110	38.0	80	19
32	9710225032 0070	32		17	42.4	1510	495.0	125	160	110	38.0	80	19
40	9710225040 0070	40		20	48.3	1510	500.0	125	160	110	38.0	80	19
50	9710225050 0070	50		24	60.3	1510	505.0	140	180	110	38.0	80	19
65	9710225065 0070	65		30	76.1	1510	514.5	160	200	110	38.0	80	19
80*	9710225080 0770	80		44	88.9	1510	526.0	180	225	125	57.0	85	27/70
100*	9710225100 0770	100		57	114.3	1510	545.0	225	280	125	76.1	105	27/70
125*	9710225125 0770	125		84	139.7	1510	565.0	250	315	125	76.1	105	27/70
150**	9710225150 0770	150		123	168.3	1510	585.0	280	355	125	76.1	130	50/90
200**	On request												
250**	On request												
300**	On request												
350**	On request												
400**	On request												

Valves *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 3 - DN25-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 3, 1 Service valve - DN40-400, PN25

Type 97102 - Full bore

Welding × Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with one DN40 service valve.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

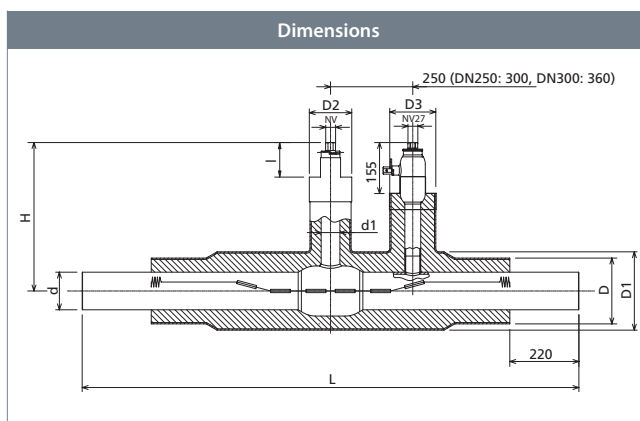
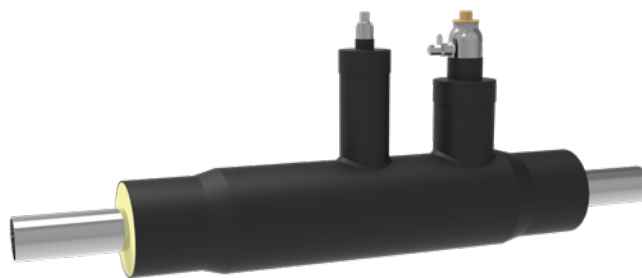
- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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). The 3.1 certificate is available upon request.

Notice

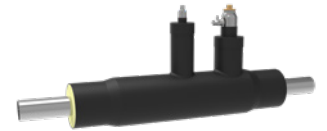
Valves operated with gear for DN150-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.









DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
40	9710225040 0071	40		23	48.3	1510	500.0	125	160	110	140	38.0	80	19
50	9710225050 0071	50		27	60.3	1510	505.0	140	180	110	140	38.0	80	19
65	9710225065 0071	65		33	76.1	1510	514.5	160	200	110	140	38.0	80	19
80*	9710225080 0771	80		48	88.9	1510	526.0	180	225	125	140	57.0	85	27/70
100*	9710225100 0771	100		60	114.3	1510	545.0	225	280	125	140	76.1	105	27/70
125*	9710225125 0771	125		87	139.7	1510	565.0	250	315	125	140	76.1	105	27/70
150**	9710225150 0771	150		125	168.3	1510	585.0	280	355	125	140	76.1	130	50/90
200**	On request													
250**	On request													
300**	On request													
350**	On request													
400**	On request													

Vales *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 3, 1 Service valve - DN40-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel protection tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 3, 2 Service valves - DN40-400, PN25

Type 97102 - Full bore

Welding x Welding

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with two DN40 service valves.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

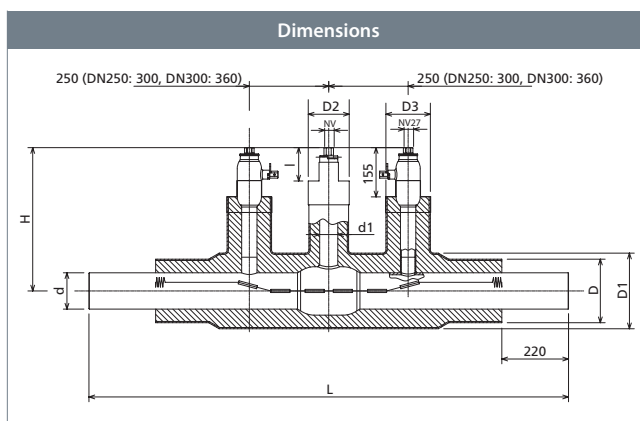
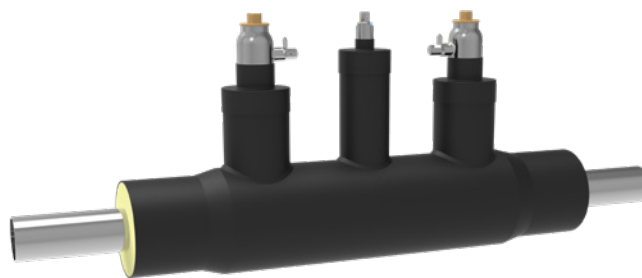
- Universal allen key
- Mobile actuator for DN80-250
- Planetary gear for DN80-350

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). The 3.1 certificate is available upon request.

Notice

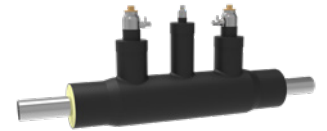
Valves operated with gear for DN150-400. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.









DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
40	9710225040 0072	40		27	48.3	1510	500.0	125	160	110	140	38.0	80	19
50	9710225050 0072	50		30	60.3	1510	505.0	140	180	110	140	38.0	80	19
65	9710225065 0072	65		36	76.1	1510	514.5	160	200	110	140	38.0	80	19
80*	9710225080 0772	80		51	88.9	1510	526.0	180	225	125	140	57.0	85	27/70
100*	9710225100 0772	100		63	114.3	1510	545.0	225	280	125	140	76.1	105	27/70
125*	9710225125 0772	125		89	139.7	1510	565.0	250	315	125	140	76.1	105	27/70
150**	9710225150 0772	150		125	168.3	1510	585.0	280	355	125	140	76.1	130	50/90
200**	On request													
250**	On request													
300**	On request													
350**	On request													
400**	On request													

Vales *can / **should be operated with gearbox.

Steel ball valve, High stress, Pre-insulated, class 3, 2 Service valves - DN40-400, PN25



Type 97102 - Full bore

Accessories	BROEN No.	Dimension	Description
	3723S60		Universal allen key for both isolating and service valves.
	66361100 060	DN80-125	BROEN-Gear - Mobile actuator.
	66361250 070	DN150-250	
	66062020S314200 (0,5 m)	DN25-65	Flex extender - Steel + PVC proction tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062020S314300 (0,5 m)	DN80-125	
	66062150S314000 (0,5 m)	DN80-125	Flex extender - Steel + Stainless steel proction tube - also available in 1,0 mtr and 2,0 mtr - see accessories, can be shortened as needed.
	66062250S314000 (0,5 m)	DN150-250	
	1897S02	DN25-65	Square adaptor plug for mounting on hexagon.
	1903S02	DN80-125	
	500249	DN80-125	BROEN-Gear - Planetary gear.
	3/PP06001KS02	DN150-250	
	3/PP05002KS02	DN300-350	

Steel ball valve, High stress, Pre-insulated, class 3 - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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 DN40 are CE-marked. The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm								
					d	L	H	D	D1	D2	d1	I	Hx
150	On request												
200	On request												
250	On request												
300	On request												
350	On request												
400	On request												

Steel ball valve, High stress, Pre-insulated, class 3 - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Steel ball valve, High stress, Pre-insulated, class 3, 1 Service valve - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with one DN40 service valve.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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). The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
150	On request													
200	On request													
250	On request													
300	On request													
350	On request													
400	On request													

Steel ball valve, High stress, Pre-insulated, class 3, 1 Service valve - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Steel ball valve, High stress, Pre-insulated, class 3, 2 Service valves - DN150-400, PN25

Type - Full bore

Welding × Welding with ISO-flange

Pre-insulated fully welded steel ball valve for underground service acc. to EN 488, with two DN40 service valves.

Materials

See page 15.1 - 2.

Applications

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

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

Operation

The following operating devices are available to order:

- Bevel gear (square)
- Telescopic extender for Bevel gear, only for square
- Bevel gear (HEX)

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). The 3.1 certificate is available upon request.

Notice

Valves operated with gear, see accessories. All pre-insulated ball valves are delivered with alarm wire. Outlet for alarm available on request.

DN	BROEN No.	Bore	Kvs	net Weight kg	All dimensions in mm									
					d	L	H	D	D1	D2	D3	d1	l	Hx
150	On request													
200	On request													
250	On request													
300	On request													
350	On request													
400	On request													

Steel ball valve, High stress, Pre-insulated, class 3, 2 Service valves - DN150-400, PN25

Type - Full bore

Accessories	BROEN No.	Dimension	Description
	600651	DN150	BROEN-Gear - Bevel gear (square).
	600652	DN200	
	600653	DN250	
	600654	DN300-350	
	600655	DN400	
	500114 (L=500-850 cm)	DN200-500	BROEN telescopic extender for Bevel gear, only for square.
	500115 (L=851-1500 cm)	DN200-500	
	500152 (L=1501-2500 cm)	DN200-500	
	600591	DN150	BROEN-Gear - Bevel gear (HEX).
	600592	DN200	
	600593	DN250	
	600594	DN300-350	
	600595	DN400	

Service valve - DN50, PN25

Type 60101 - Full bore

Female x Welding

Service valve for pre-insulated valves and pipes.

Materials

Servicevalve, valvehouse in stainless steel, AISI316 Ti (EN 1.4571), welding end in carbon steel, glassblasted.

Applications

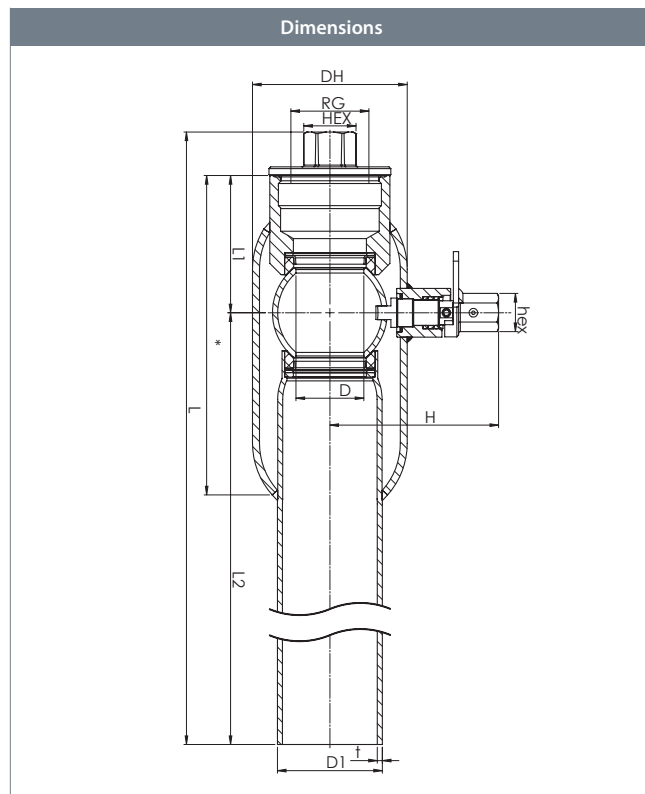
Service valve to be welded on to existing pipe installations.

Media

Water, air and other media not decomposing the steel. If in doubt, please contact BROEN Ballomax® Sales Department.

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 DN40 are CE-marked. The 3.1 certificate is available upon request.



					All dimensions in mm						
DN	BROEN No.	Bore	Kvs	net Weight kg	L	D	d x t	H	G	NV1	NV2
50	60101050S335100	50		7.0	500	108	60.3 x 2.9	135	2"	19	27

Flex extension - DN25-125

Type 66062 - Full bore

Flex extension

Flex extension without back stop for high stress valves.

Materials

Steel and PVC protective pipe.

Applications

The adapter of the inner hexagon part (Stainless steel) will be connected with the stem of the ball valve. The protection tube is made of plastic and will be crimped on to the valve neck.

Notice

All flex extenders can be shortened when needed.



DN	BROEN No.	Length - mm	Nv
25-65	66062020S314200	500	19
25-65	66062020S205900	1000	19
25-65	66062020S306800	2000	19
80-125	66062100S314300	500	27
80-125	66062100S206000	1000	27
80-125	66062100S306700	2000	27

Flex extension - DN25-250

Type 66062 - Full bore

Flex extension

Flex extension with back stop for high stress valves.

Materials

Steel and PVC protective pipe.

Applications

The adapter of the inner hexagon part (Stainless steel) will be connected with the stem of the ball valve. The protection tube consists of hexagonal stainless steel.

Notice

All flex extenders can be shortened when needed.



DN	BROEN No.	Length - mm	Nv
80-125	66062150S314000	500	27/70
80-125	66062150 250	1000	27/70
80-125	66062150 260	2000	27/70
150-250	66062250S314100	500	50/90
150-250	66062250 250	1000	50/90
150-250	66062250 260	2000	50/90

Universal allen key

Type 3723S60 - Reduced bore

Universal allen key

For both isolating and service valves.



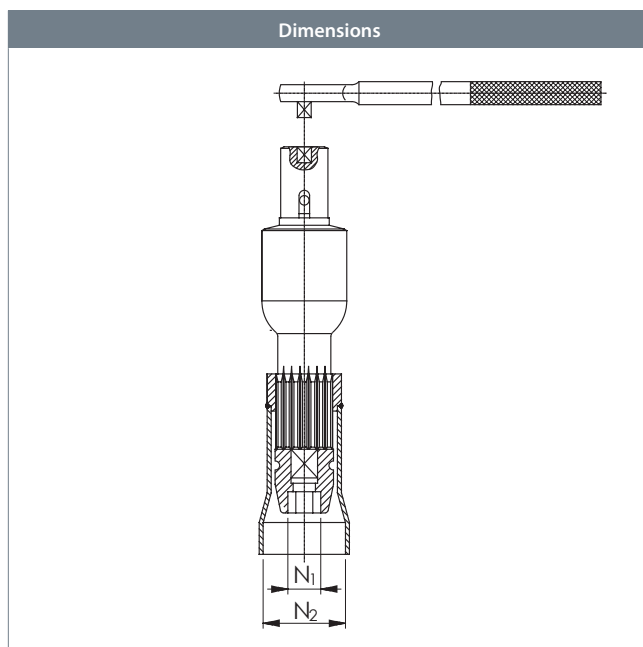
BROEN No.
3723S60

BROEN-Gear, Mobile actuator - DN80-250

Type 66361 - Full bore

BROEN-Gear, Mobile actuator

Can be used together with flexible extension with stainless steel protective pipe.



DN	Type	BROEN No.	N1 - mm	N2 - mm	Max. moment - Nm
80-125	MP II	66361100 060	27	70	800
150-200	MP II	66361250 070	50	90	1800
150-250	MP III	66361400 080	50	90	6000

BROEN-Gear, Planetary gear - DN80-350

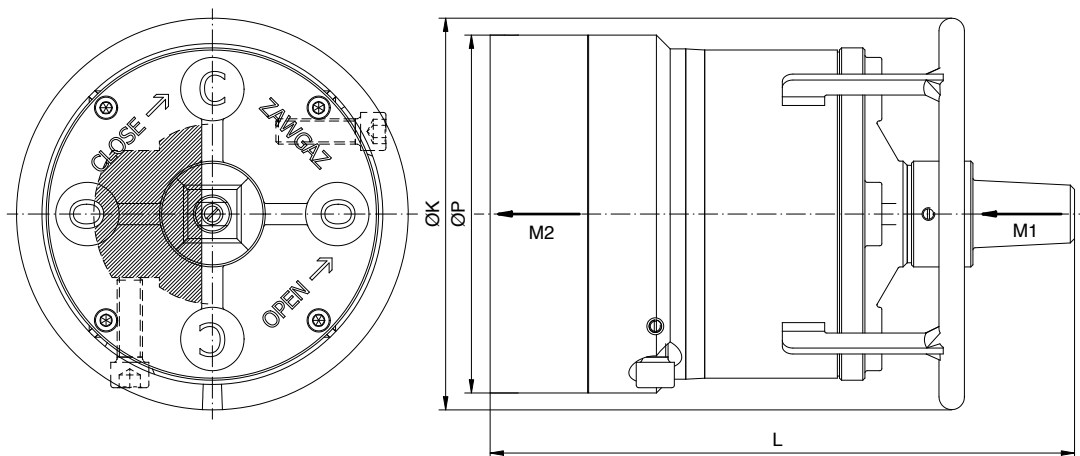
Type 500249 / 3/PP0... - Full bore

BROEN-Gear, Planetary gear

Can be used together with flexible extension with stainless steel protective pipe. * Operated with a SQ key.



Dimensions



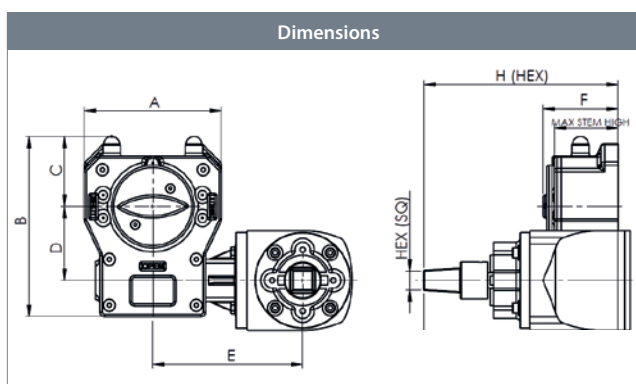
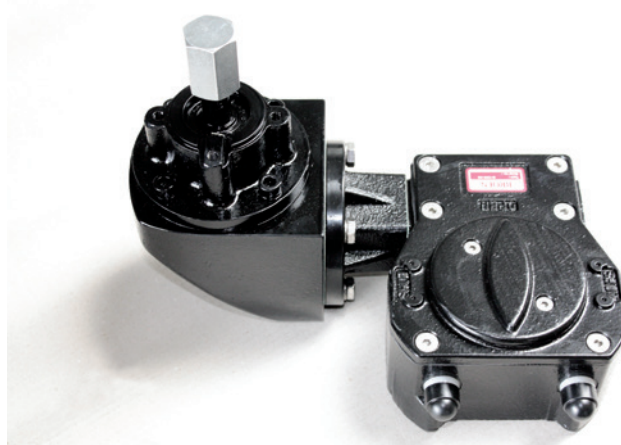
DN	BROEN No.	All dimensions in mm					Square
		M1	M2	L	ØK	ØP	
80-125	500249	50	1000	267	185	169	27/32
150-250	3/PP06001KS02	100	2000	276	185	169	27/32
300-350	3/PP05002KS02	200	6000	331	258	198	27/32

BROEN-Gear, Bevel gear - DN150-400

Type 60059 - Full bore

BROEN-Gear, Bevel gear

BROEN-Gear is a strong high quality bevel-gearbox. The gear is equipped with an angle that makes top operation possible and this makes it well suited for well valves.



DN	BROEN No.	net Weight kg	All dimensions in mm							
			A	B	C	D	E	F	H (HEX)	HEX
150	600591	13.0	138	205	100	71	171	88	217	36
200	600592	17.0	200	242	116	86	181	93	219	36
250	600593	26.0	220	270	122	105	197	102	225	36
300	600594	43.0	285	323	143	130	336	123	323	36
400	600595	68.2	370	408	170	182	388	139	236	36

BROEN-Gear, Bevel gear - DN150-400

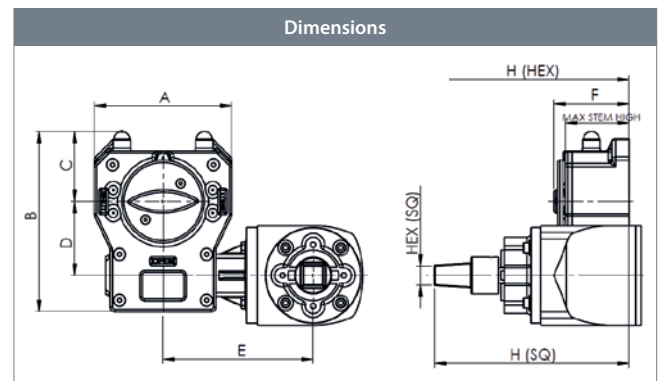
Type 60065 - Full bore

BROEN-Gear, Bevel gear with telescopic extender

BROEN-Gear is a strong high quality bevel-gearbox. The gear is equipped with an angle that makes top operation possible and this makes it well suited for well valves.

If the valve is located very deep in the ground, a telescopic extender can be mounted. This extender is available in three lengths that can be combined with all gear boxes.

Telescopic extender in three sizes:
500-850 mm, 851-1500 mm and 1501-2500 mm.



DN	BROEN No.	net Weight kg	All dimensions in mm							H (SQ)	SQ
			A	B	C	D	E	F			
150	600651	13.0	138	205	100	71	171	88	214.5	27/32	
200	600652	17.0	200	242	116	86	181	93	214.5	27/32	
250	600653	26.0	220	270	122	105	197	102	214.5	27/32	
300	600654	49.5	285	323	143	130	336	123	214.5	27/32	
400	600655	68.2	370	408	170	182	388	139	214.5	27/32	

Telescopic extension for Bevel gear - DN200-500

Type - **Full bore**

Telescopic extension

BROEN telescopic extension for bevel gear, only for gears with SQ operation.



DN	BROEN No.	Lenght - cm	Operation - square
200-500	-	500-850	27/32
200-500	-	851-1500	27/32
200-500	-	1501-2500	27/32

BROEN Ballomax® Repair set - DN25-150

Type 600... - Full bore

BROEN Ballomax® Repair set

Repair set, contains packing set for stem and tools.



DN - HEX with backstop.	BROEN No.
25-65	600262
80	600263
100-125	600264
150	600269

BROEN Ballomax® Repair set - DN150-400

Type 600... - Full bore

BROEN Ballomax® Repair set

Repair set, contains packing set for stem and tools.



DN - ISO-flange	BROEN No.
150	600266
200-250	600265
300	600267
400	600268

Pressure and temperature graph - DN10-500

Full bore

Pressure drop graph - DN15-400

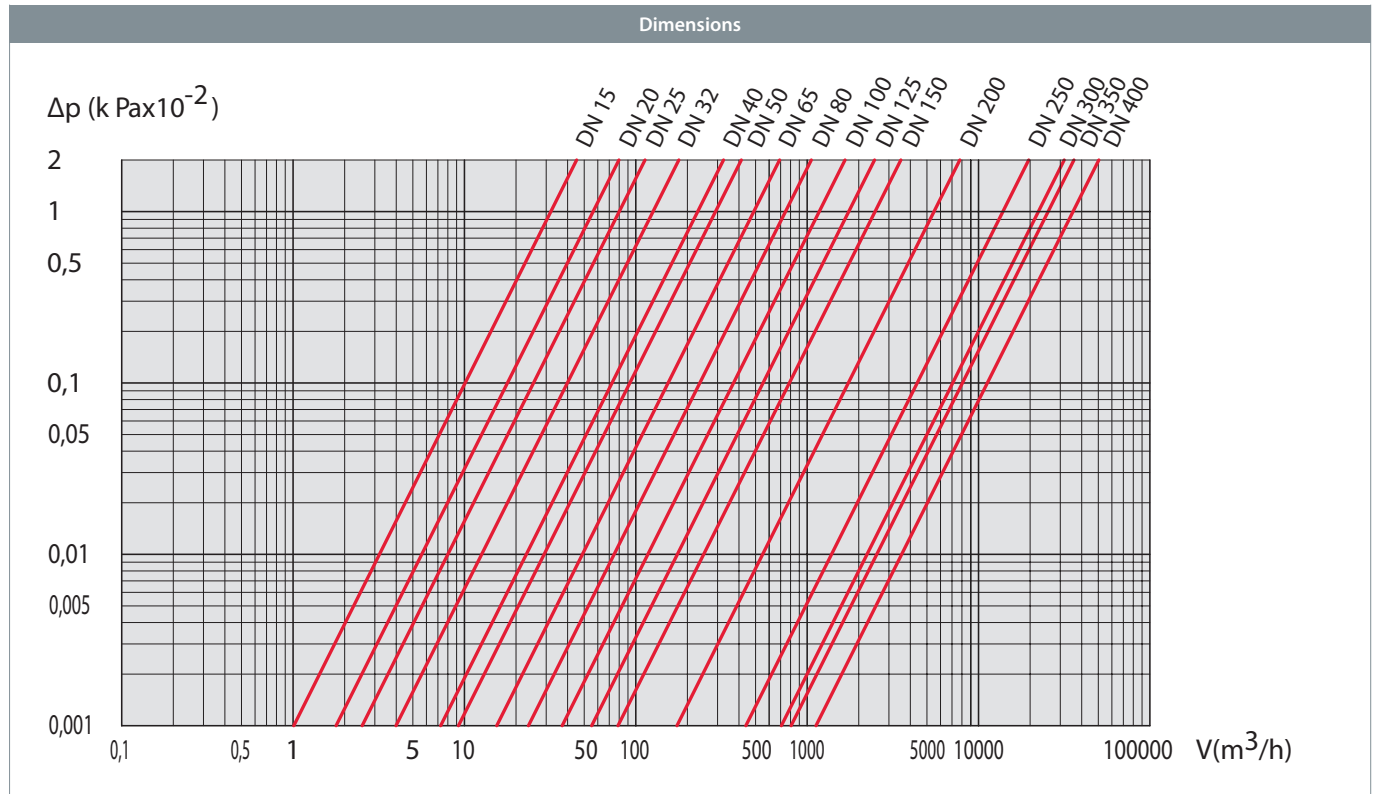
Full bore

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.



DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	400
Kvs	32	57	81	133	229	295	498	754	1159	1841	2652	9200	13500	21600	35000

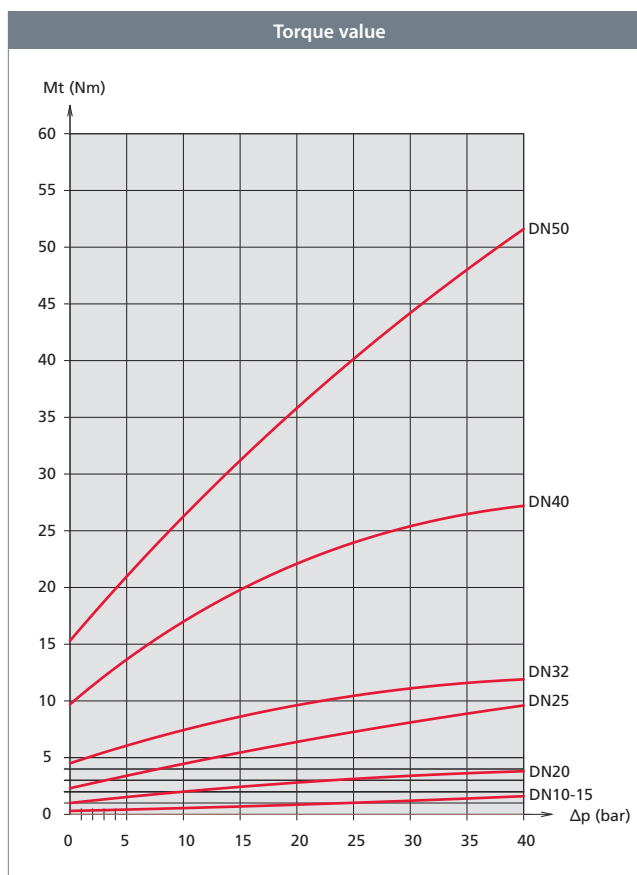
Operating torque - DN10-50, PN40

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 - DN65-500, PN25

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.

