



PRODUCT CATALOGUE

BALLOMAX® BALL VALVES
FOR GAS AND FUEL APPLICATIONS

BROEN
VALVE TECHNOLOGIES





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BROEN

– quality and experience

Certificates
and references

BROEN OIL & GAS has an ISO 9001 certificate. Quality Management System in Broen complies with ISO 3834-2, PED 97/23/EC and API 6D, which includes all production and customer service processes, i.e. the emergence of a product concept, drawings, raw materials, production process and product testing procedures, conditioning, packaging and transporting products, employee training, concluding trade agreements, technical documentation, maintenance and analysing guarantee claims.



References

Gaz System (Poland)
PGNiG (Poland)
Gazprom (Russia)
Rosneft (Russia)
Lukoil (Russia)

Mobile Gas (USA)
Lockheed Martin (USA)
Ukrnafta (Ukraine)
MOL (Hungary)
SSP (Slovakia)

Lotos (Poland)
Orlen (Poland)
Gaspol (Poland)
Lukoil (Kaliningrad - Russia)
Intergaz (Latvia)
Latvijas Propana Gaze (Latvia)

* Full reference list can be forwarded on request.



ABOUT US

BROEN Group was established in 1948. Nowadays, it is one of the world's biggest producers of ball valves. BROEN Group includes 5 production plants in Europe, Russia, and North America. The company has its branches and exports its products to over 50 countries. BROEN belongs to Aalberts Industries industrial group. It specialises in providing a wide range of technologically advanced products and systems to many industrial branches. Aalberts Industries consists of over 140 companies all over the world.

BROEN SA is a producer of ball valves and valves under trademarks DZT and BALLOMAX. The main office of the company is located in Dzierżoniów, in Wałbrzych Special Economic Zone, Subzone Dzierżoniów. The history of BROEN SA dates back to 1993, when the production of DZT valves with a diameter of DN 15 to DN 100 started in Mechanical

Treatment Plant in Bystrzyca Górna in Świdnica, which was a part of the Lower Silesia Thermal Energy Supply Company. In 1997, a capital company BROEN-DZT S.A. was established and the newly created company moved to Dzierżoniów. On the 1st January 2006 the company was renamed into BROEN Spółka Akcyjna, completing its integration with BROEN Group.

BROEN OIL & GAS, formerly ZAWGAZ, which has over 30 years of experience in designing, producing, delivering and service of ball valves for the oil and gas industries, joined the BROEN Group in 2008. It expanded the portfolio of the BROEN Group by ball valves intended for the following media: natural gas, fuels and oils up to DN900 diameter. The BROEN Oil & Gas production plant is located in Rogoźno Wlkp.



BALLOMAX®
 block / short
 ball valves
 with full bore
 for fuels

BALLOMAX® ball valves are characterized by modern and safe structure which does not need additional attendance. BALLOMAX® valves undergo 100% quality control (acc. to PN-EN 12266:2012). The ball and spindle are made from corrosion-resistant steel. Dual seal protection based on O-rings has been used on the spindle. The valves are equipped with antistatic protection by default. BALLOMAX® valves have a two-year warranty.

Using the valve

fuels, oils, oil derivatives (after technical consultation)

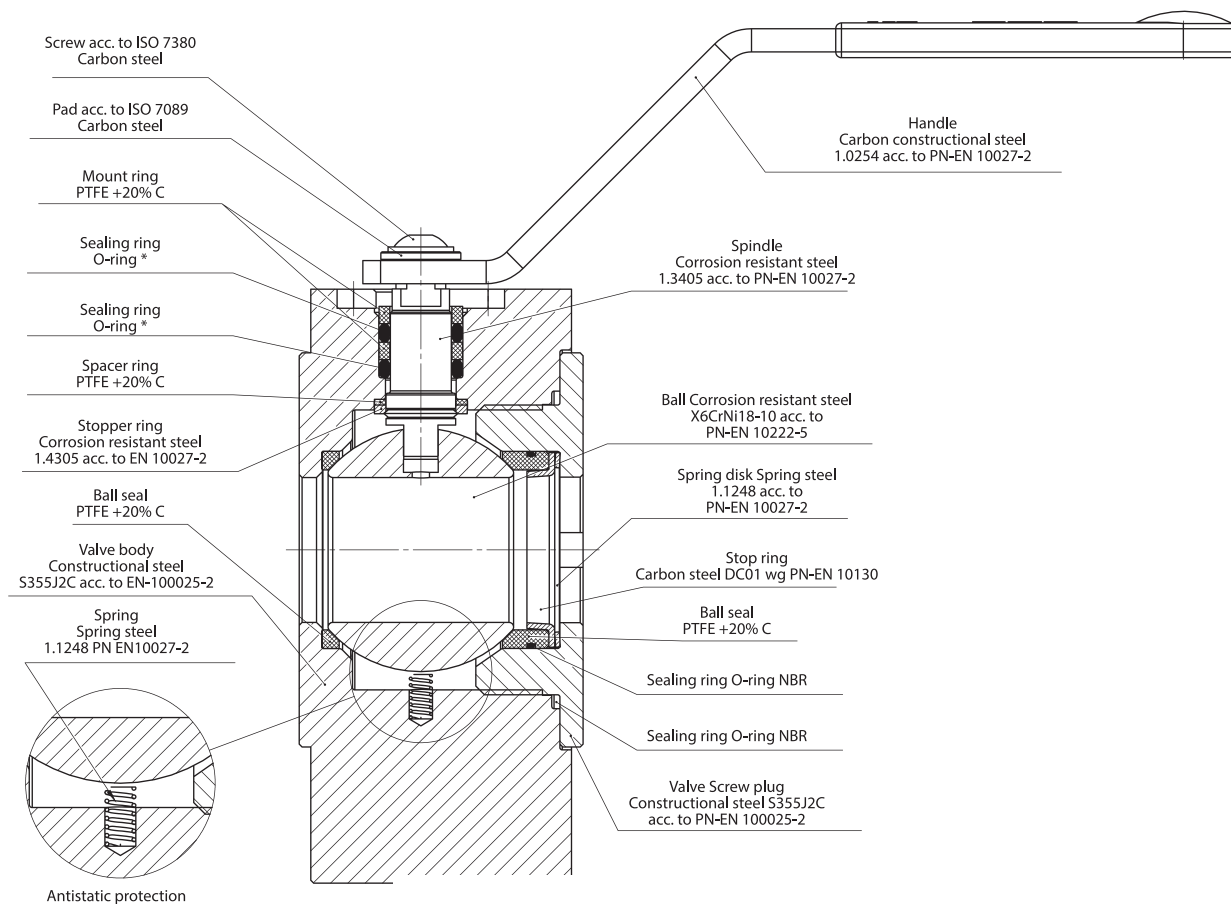
Production range

DN 15-DN 200

Temperature range

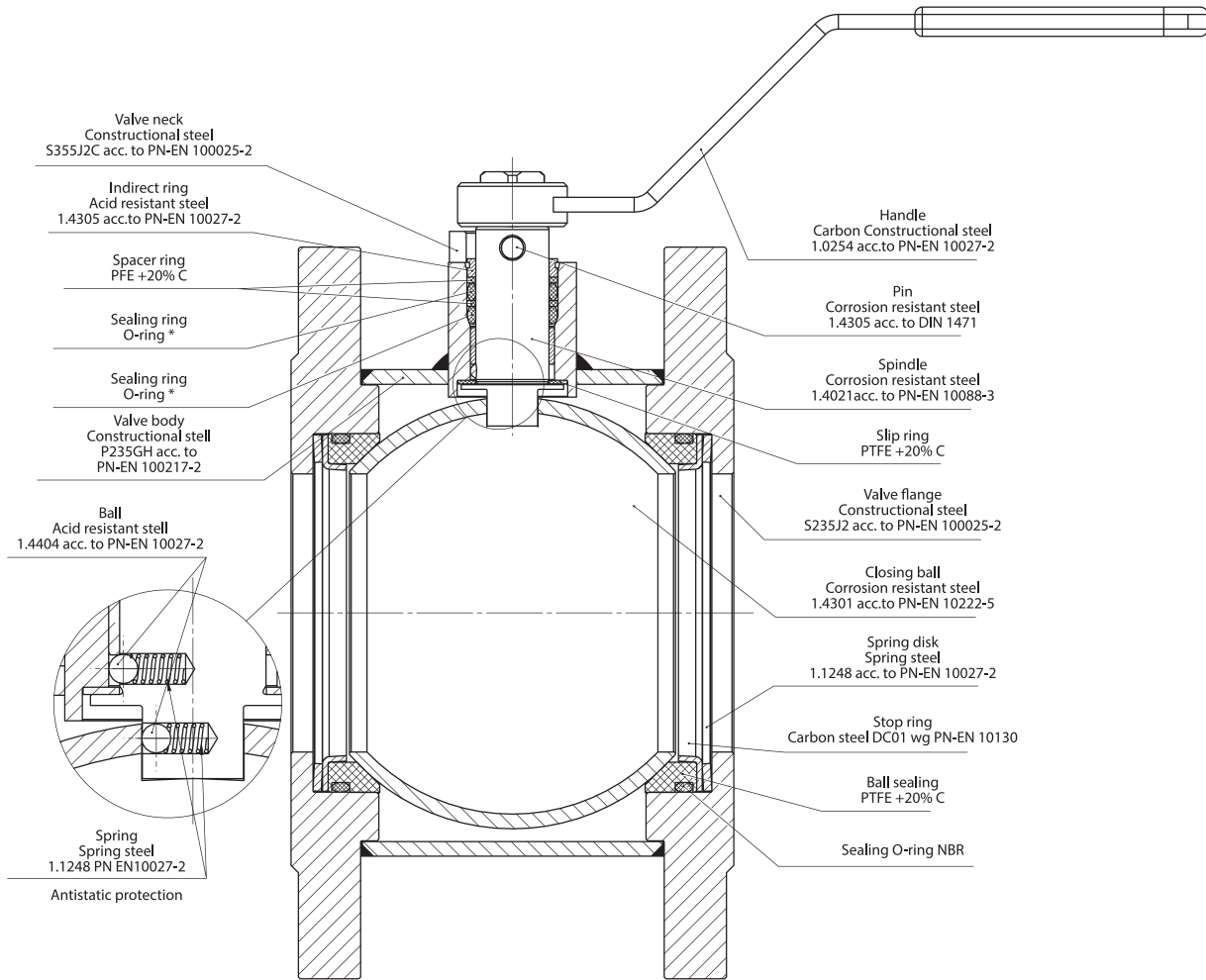
- 30°C +80°C (standard); optional: - 40°C +80°C

BALLOMAX® ball valves for fuel applications



* O-rings - NBR or FKM (depending on the medium)

BALLOMAX® ball valves for fuel applications



*O-rings - NBR or FKM (depending on the medium)

Technical information

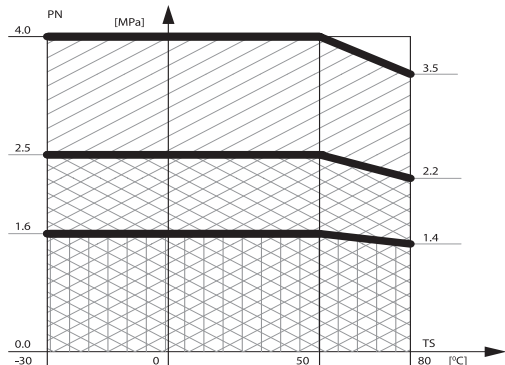
Flow coefficient - Kvs and resistance coefficient (local losses) - ζ for full bore valves

DN [mm]	15	20	25	32	40	50
Kvs [m ³ /h]	32	57	81	133	229	295
ζ	0,079	0,078	0,094	0,078	0,115	0,115

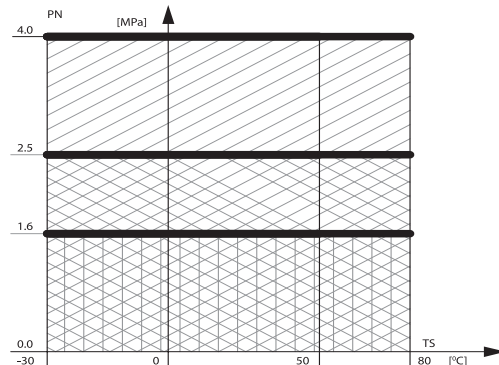
DN [mm]	65	80	100	125	150	200
Kvs [m ³ /h]	498	754	1159	1841	2652	5720
ζ	0,115	0,115	0,115	0,115	0,115	0,078

Graphs of the relation between maximum acceptable pressure and temperature

"PN—TS" graph
Flanged valves for fuel installation
Flanges acc. to 1092-1:2007, mat. group "1E1"



"PN—TS" graph
Valves for fuel installation, without flange



Product range

BALLOMAX® block ball valves with handle DN 15-32, PN 16/25/40

	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
	15	16/25/40	1310340015WZ	15	40	95	65	14	4	140	46	85	1,8
	20	16/25/40	1310340020WZ	20	46	105	75	14	4	140	50	88	2,5
	25	16/25/40	1310340025WZ	25	49	115	85	14	4	140	54	93	3,2
	32	16/25/40	1310340032WZ	32	62	140	100	18	4	167	71	109	5,5

BALLOMAX® block ball valves with ISO-flange acc. to PN-EN ISO 5211 DN 15-32, PN 16/25/40

	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	d/s [mm]	h [mm]	H [mm]	M [mm]	conn. flange	[kg]
	15	16/25/40	1310340015WZ 90	15	40	95	65	14	4	14-Oct	10	68	23	F5	1,9
	20	16/25/40	1310340020WZ 90	20	46	105	75	14	4	14-Oct	10	71	23	F5	2,6
	25	16/25/40	1310340025WZ 90	25	49	115	85	14	4	14-Oct	10	76	23	F5	3,3
	32	16/25/40	1310340032WZ 90	32	62	140	100	18	4	16-Nov	10	91	23	F5	5,9

BALLOMAX® short ball valves without handle DN 40-80, PN 16

	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	Øk [mm]	H1 [mm]	H2 [mm]	[kg]
	40	16	1310316040WZ	39	77	76	150	110	18	4	11	70	87	4,3
	50	16	1310316050WZ	49	86	89	165	125	18	4	11	77	94	5,6
	65	16	1310316065WZ	63	106	114	185	145	18	8	14	88	113	7,6
	80	16	1310316080WZ	76	121	133	200	160	18	8	14	96	121	9,2

BALLOMAX® short ball valve with handle DN 40-80, PN 16

	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
	40	16	1310316040WZ 01	39	77	76	150	110	18	4	177	70	127	4,5
	50	16	1310316050WZ 01	49	86	89	165	125	18	4	177	77	134	5,7
	65	16	1310316065WZ 01	63	106	114	185	145	18	8	190	88	158	8
	80	16	1310316080WZ 01	76	121	133	200	160	18	8	190	96	166	9,6

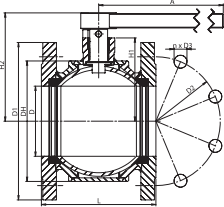
BALLOMAX® short ball valve with ISO-flange acc. to PN-EN ISO 5211 DN 40-80, PN 16

	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	Øk [mm]	h [mm]	H [mm]	M [mm]	conn. flange	[kg]
	40	16	1310316040WZ 90	39	77	150	110	18	4	11	11,5	100	52	F5	4,6
	50	16	1310316050WZ 90	49	86	165	125	18	4	11	11,5	108	53	F5	5,9
	65	16	1310316065WZ 90	63	106	185	145	18	8	14	15,5	118	50	F5	7,9
	80	16	1310316080WZ 90	76	121	200	160	18	8	14	15,5	125	49	F5	9,5

BALLOMAX® short ball valve without handle DN 100-150, PN 16

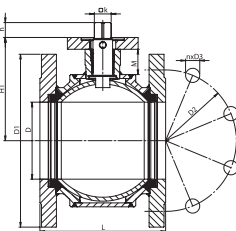
	DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	Øk [mm]	H1 [mm]	H2 [mm]	[kg]
	100	16	1310316100WZ	98	160	168	220	180	18	8	17	117	151	14,6
	125	16	1310316125WZ	125	186	219	250	210	18	8	17	147	183	22,6
	150	16	1310316150WZ	150	236	267	285	240	22	8	22	167,5	203,5	35,2

BALLOMAX® short ball valve with handle DN 100-150, PN 16



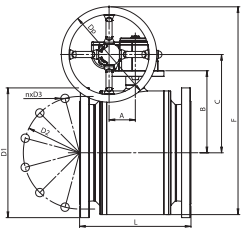
DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
100	16	1310316100WZ 01	98	160	168	220	180	18	8	500	117	151	16
125	16	1310316125WZ 01	125	186	219	250	210	18	8	500	147	183	24,1
150	16	1310316150WZ 01	150	236	267	285	240	22	8	600	168	204	37,2

BALLOMAX® short ball valve with ISO-flange acc. to PN-EN ISO 5211 DN 100-200, PN 16



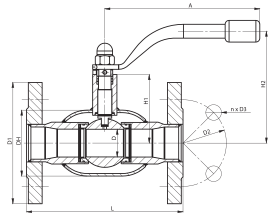
DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	k [mm]	h [mm]	H1 [mm]	M [mm]	conn. flange	[kg]
100	16	1310316100WZ 90	98	160	220	180	18	8	17	22	128	34	F7	15
125	16	1310316125WZ 90	125	186	270	220	18	8	17	20	163	39	F12	24,4
150	16	1310316150WZ 90	150	236	285	240	22	8	22	21	203	35	F12	36,9
200	16	1310316200WZ 90	195	292	340	295	22	12	22	21	237	40	F12	93,5

BALLOMAX® short ball valve with gear DN 100-200, PN 16



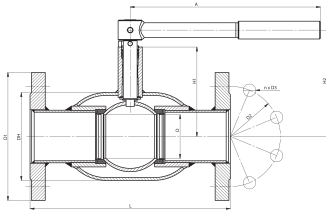
DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
100	16	1310316100WZ 99	98	160	220	180	18	8	160	53	132	165	329	F7
125	16	1310316125WZ 99	125	186	270	220	18	8	250	69	162	205	439	F12
150	16	1310316150WZ 99	150	236	285	240	22	8	250	69	182	225	484	F12
200	16	1310316200WZ 99	195	292	340	295	22	12	250	69	215	258	545	F12

BALLOMAX® full bore, flanged ball valve for fuels, with handle DN 15-50, PN 16/25/40



DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
15	16/25/40	8310340015	15	130	42	95	65	14	4	140	68	116	1,9
20	16/25/40	8310340020	20	150	51	105	75	14	4	140	73	120	2,7
25	16/25/40	8310340025	25	160	57	115	85	14	4	140	77	124	3,5
32	16/25/40	8310340032	32	180	76	140	100	18	4	180	79	129	5,5
40	16/25/40	8310340040	39	200	89	150	110	18	4	180	86	135	6,8
50	16/25	8310325050	49	230	108	165	125	18	4	275	120	144	9,3

BALLOMAX® full bore, flanged ball valves for fuels, with handle DN 65-150, PN 16/25



DN	PN	Catalogue no. FUEL	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
65	25	8310325065L270	63	270	127	185	145	18	8	275	130	154	13,0
65	25	8310325065	63	290	127	185	145	18	8	275	130	154	13,2
80	16/25	8310325080	78	280	152	200	160	18	8	365	160	193	18,6
100	16	8310316100	98	300	178	220	180	18	8	365	180	218	21,4
100	25	8310325100	98	300	178	235	190	22	8	365	180	218	24,5
125	16	8310316125	122	325	219	250	210	18	8	650	200	242	35,0
125	25	8310325125	122	325	219	270	220	26	8	650	200	242	40,5
150	16	8310316150 010	146	350	267	285	240	22	8	900	290	326	44,0
150	25	8310325150 010	146	350	267	300	250	26	8	900	290	326	50,1



BALLOMAX®
block / short
ball valves
with full bore
for gas

BALLOMAX® ball valves are characterized by modern and safe structure which does not need additional attendance. BALLOMAX® valves undergo 100% quality control (acc. to PN-EN 12266:2012). The ball and spindle are made from corrosion-resistant steel. Dual seal protection based on O-rings has been used on the spindle. BALLOMAX® valves have a two-year warranty.

Using the valve

gas networks (media group 1 - natural gas, GZII, coke oven gas, biogas, air); other media available on request

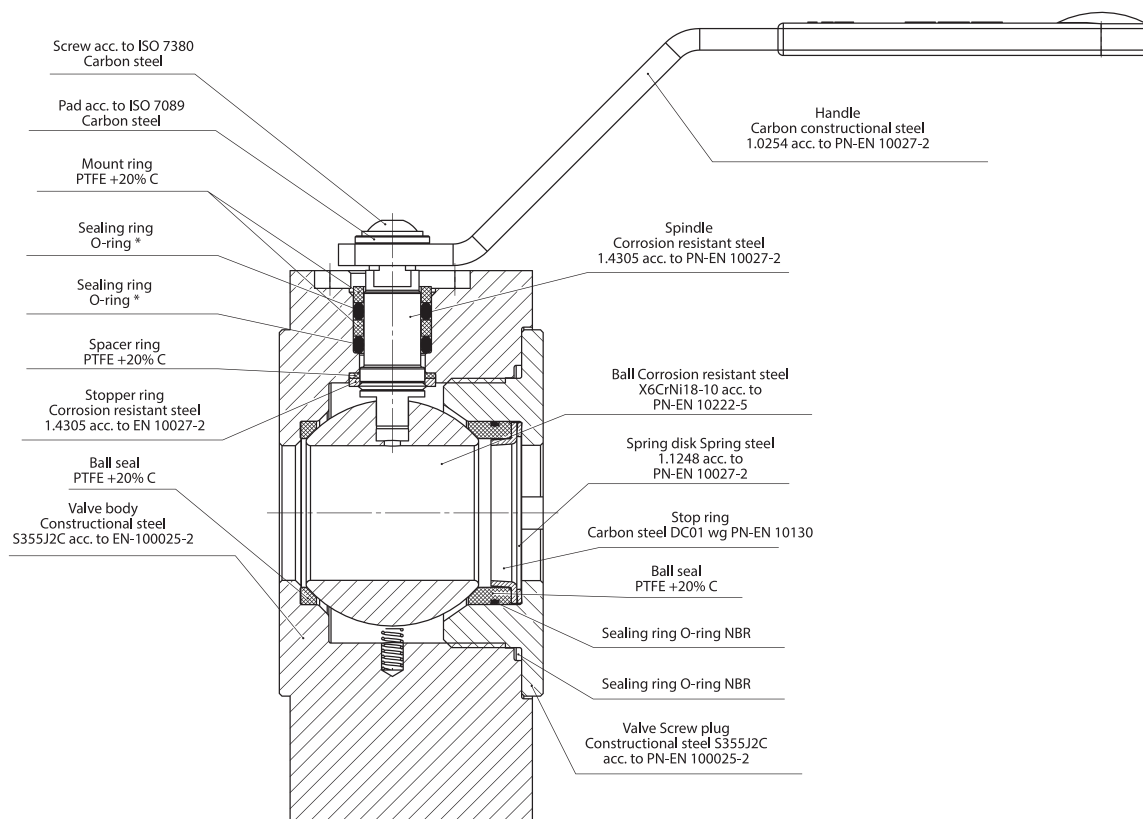
Production range

DN 15 - DN 200

Temperature range

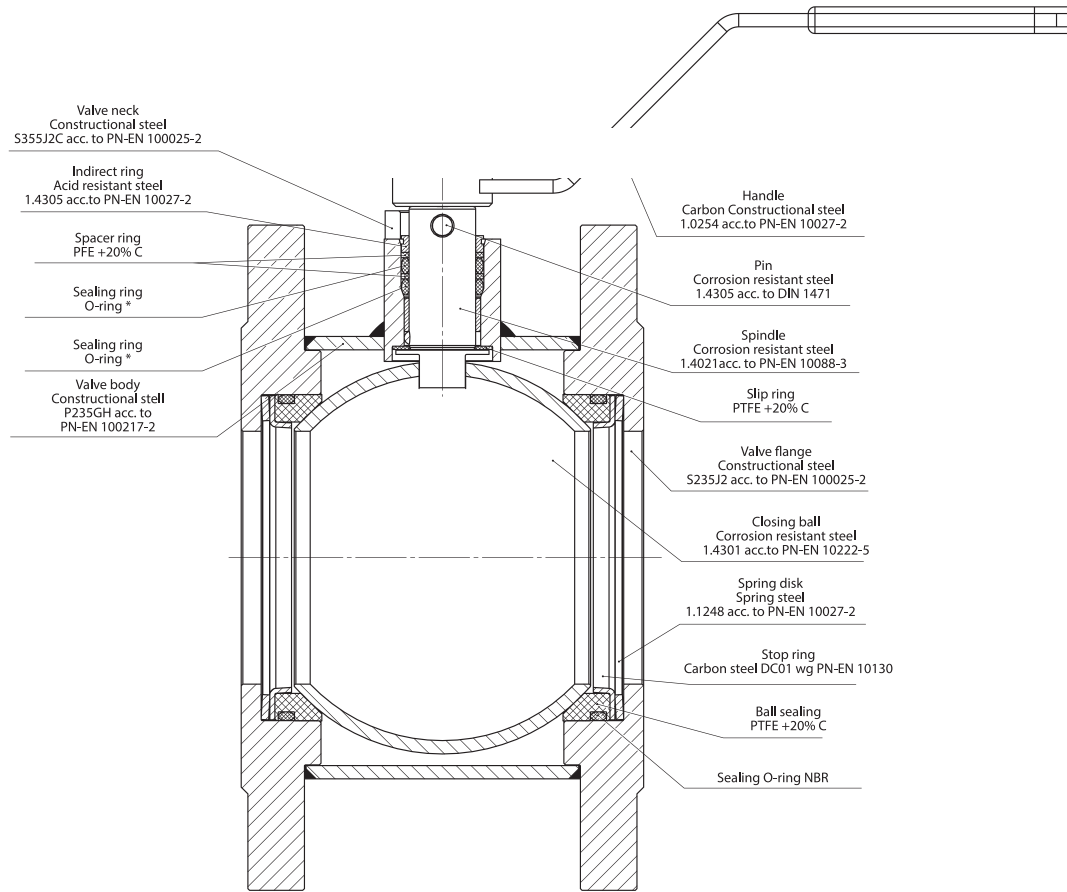
- 30°C +80°C (standard); optional: - 40°C +80°C

BALLOMAX® ball valves for gas applications



* O-rings - NBR or FKM (depending on the medium)

BALLOMAX® ball valves for gas applications



* O-rings - NBR or FKM (depending on the medium)

Technical information

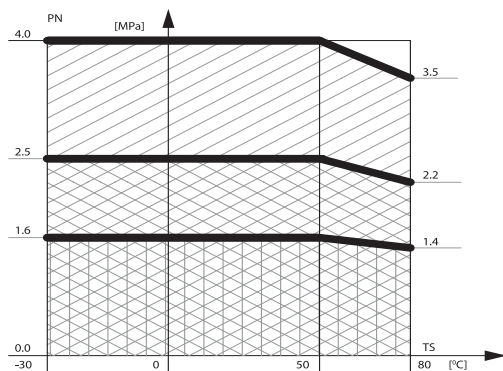
Flow coefficient - Kvs and resistance coefficient (local losses) - ζ for full bore valves

DN [mm]	15	20	25	32	40	50
Kvs [m ³ /h]	32	57	81	133	229	295
ζ	0,079	0,078	0,094	0,078	0,115	0,115

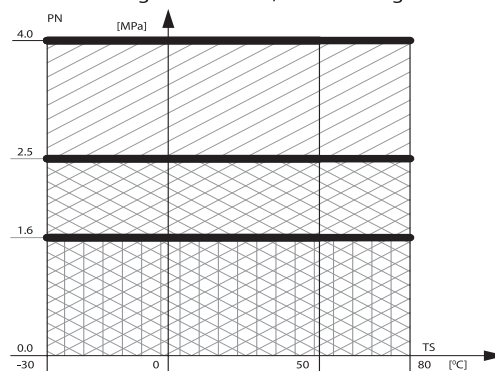
DN [mm]	65	80	100	125	150	200
Kvs [m ³ /h]	498	754	1159	1841	2652	5720
ζ	0,115	0,115	0,115	0,115	0,115	0,078

Graphs of the relation between maximum acceptable pressure and temperature

"PN—TS" graph
Flanged valves for gas installation
Flanges acc. to 1092-1:2007, mat. group "1E1"

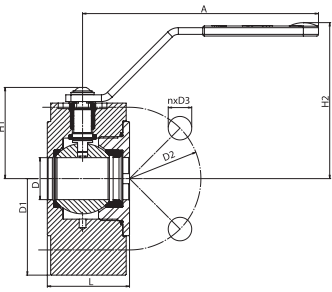


"PN—TS" graph
Valves for gas installation, without flange



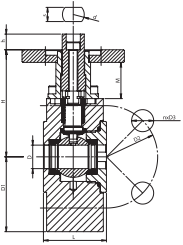
Product range

BALLOMAX® block ball valves with handle DN 15 – 32, PN 16/25/40



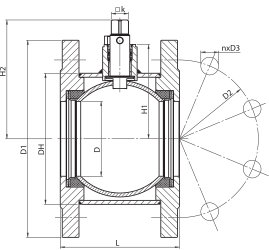
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
15	16/25/40	8410340015WZ	15	40	95	65	14	4	140	46	85	1,8
20	16/25/40	8410340020WZ	20	46	105	75	14	4	140	50	88	2,5
25	16/25/40	8410340025WZ	25	49	115	85	14	4	140	54	93	3,2
32	16/25/40	8410340032WZ	32	62	140	100	18	4	167	71	109	5,5

BALLOMAX® block ball valves with ISO-flange acc. PN-EN ISO 5211 DN 15-32, PN 16/25/40



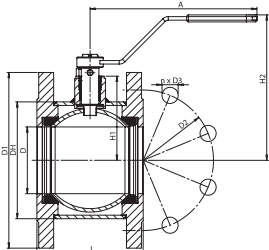
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	d/s [mm]	h [mm]	H [mm]	M [mm]	conn. flange	[kg]
15	16/25/40	8410340015WZ 90	15	40	95	65	14	4	14/10	10	68	23	F5	1,9
20	16/25/40	8410340020WZ 90	20	46	105	75	14	4	14/10	10	71	23	F5	2,6
25	16/25/40	8410340025WZ 90	25	49	115	85	14	4	14/10	10	76	23	F5	3,3
32	16/25/40	8410340032WZ 90	32	62	140	100	18	4	16/11	10	91	23	F5	5,9

BALLOMAX® short ball valves without handle DN 40-80, PN 16



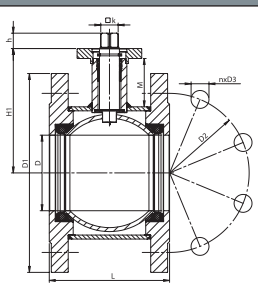
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	k [mm]	H1 [mm]	H2 [mm]	[kg]
40	16	8410316040WZ	39	77	76	150	110	18	4	11	70	87	4,3
50	16	8410316050WZ	49	86	89	165	125	18	4	11	77	94	5,6
65	16	8410316065WZ	63	106	114	185	145	18	8	14	88	113	7,6
80	16	8410316080WZ	76	121	133	200	160	18	8	14	96	121	9,2

BALLOMAX® short ball valve with handle DN 40-80, PN 16



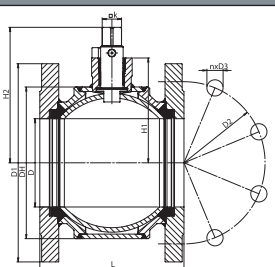
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
40	16	8410316040WZ 01	39	77	76	150	110	18	4	177	70	127	4,5
50	16	8410316050WZ 01	49	86	89	165	125	18	4	177	77	134	5,7
65	16	8410316065WZ 01	63	106	114	185	145	18	8	190	88	158	8,0
80	16	8410316080WZ 01	76	121	133	200	160	18	8	190	96	166	9,6

BALLOMAX® short ball valves with ISO-flange acc. to PN-EN ISO 5211 DN 40-80, PN 16



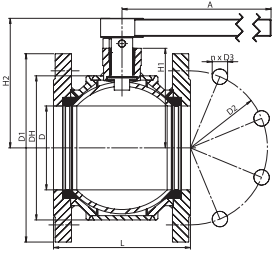
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	k [mm]	h [mm]	H [mm]	M [mm]	conn. flange	[kg]
40	16	8410316040WZ 90	39	77	150	110	18	4	11	11.5	100	52	F5	4,6
50	16	8410316050WZ 90	49	86	165	125	18	4	11	11.5	108	53	F5	5,9
65	16	8410316065WZ 90	63	106	185	145	18	8	14	15.5	118	50	F5	7,9
80	16	8410316080WZ 90	76	121	200	160	18	8	14	15.5	125	49	F5	9,5

BALLOMAX® short ball valves without handle DN 100-150, PN 16



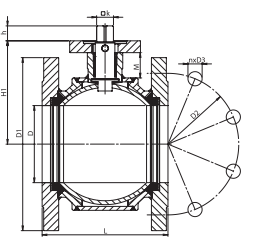
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	k [mm]	H1 [mm]	H2 [mm]	[kg]
100	16	8410316100WZ	98	160	168	220	180	18	8	17	117,0	151,0	14,6
125	16	8410316125WZ	125	186	219	250	210	18	8	17	147,0	183,0	22,6
150	16	8410316150WZ	150	236	267	285	240	22	8	22	167,5	203,5	35,2

BALLOMAX® short ball valves with handle DN 100-150, PN 16



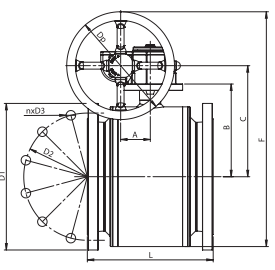
DN	PN	Catalogue no. GAS	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
100	16	8410316100WZ 01	98	160	168	220	180	18	8	500	117	151	16,0
125	16	8410316125WZ 01	125	186	219	250	210	18	8	500	147	183	24,1
150	16	8410316150WZ 01	150	236	267	285	240	22	8	600	168	204	37,2

BALLOMAX® short ball valve with ISO-flange acc. to PN-EN ISO 5211 DN 100-200, PN 16



DN	PN	Catalogue no. GAS	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	k [mm]	h [mm]	H [mm]	M [mm]	conn. flange	[kg]
100	16	8410316100WZ 90	98	160	220	180	18	8	17	22	128	34	F7	15,0
125	16	8410316125WZ 90	125	186	270	220	18	8	17	20	163	39	F12	24,4
150	16	8410316150WZ 90	150	236	285	240	22	8	22	21	203	35	F12	36,9
200	16	8410316200WZ 90	195	292	340	295	22	12	22	21	237	40	F12	93,5

BALLOMAX® short ball valves with gear DN 100-200, PN 16



DN	PN	Catalogue no. GAS	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
100	16	8410316100WZ 99	98	160	220	180	18	8	160	53	132	165	329	F7
125	16	8410316125WZ 99	125	186	270	220	18	8	250	69	162	205	439	F12
150	16	8410316150WZ 99	150	236	285	240	22	8	250	69	182	225	484	F12
200	16	8410316200WZ 99	195	292	340	295	22	12	250	69	215	258	545	F12



BALLOMAX®

ball valves
with full bore
for gas

BALLOMAX® ball valves are characterized by modern and safe structure which does not need additional attendance. BALLOMAX® valves undergo 100% quality control (acc. to PN-EN 12266:2012). The ball and spindle are made from corrosion-resistant steel. Dual seal protection based on O-rings with NBR has been used on the spindle. The valves are equipped with antistatic protection by default. BALLOMAX® valves have a two-year warranty.

Using the valve

gas networks (media group 1 - natural gas, GZII, coke oven gas, biogas, air); other media available on request

Production range

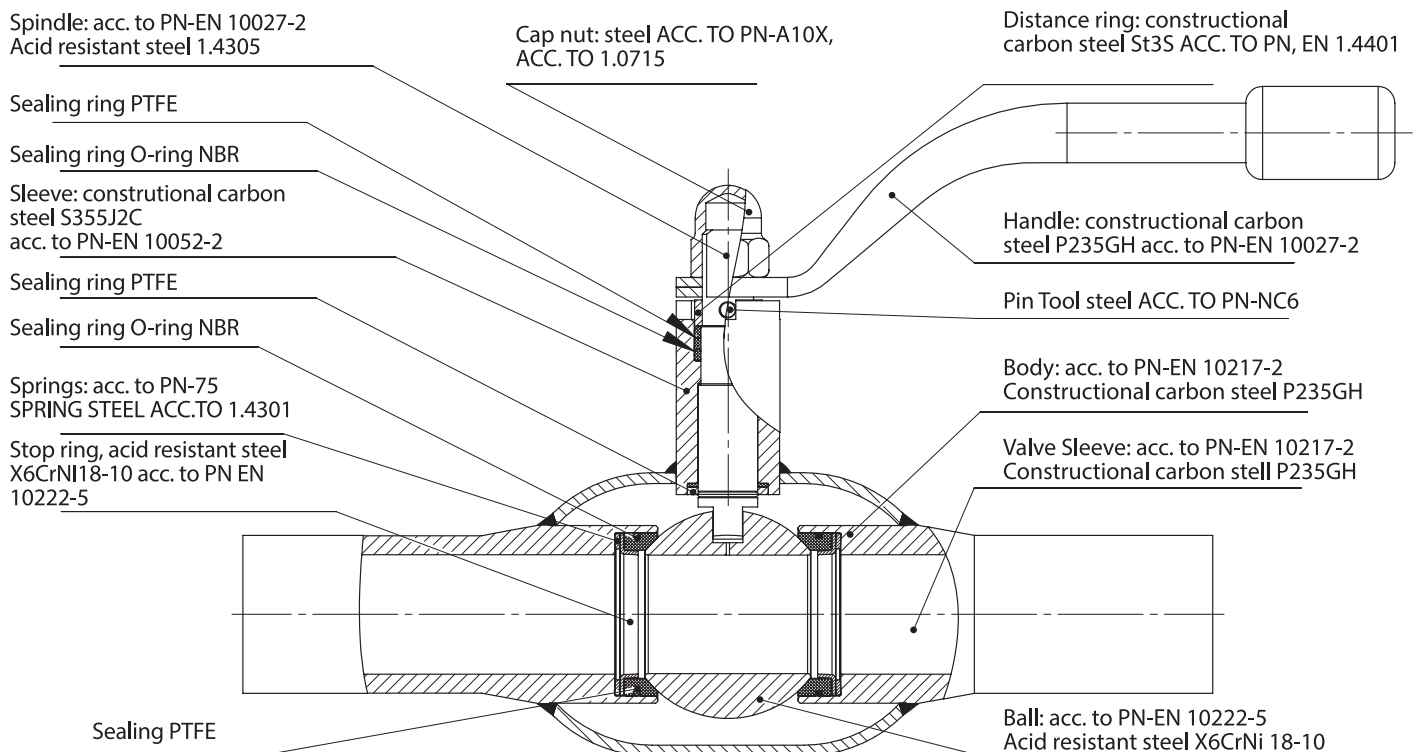
DN10-DN400

Temperature range

- 30°C +80°C (standard); optional: - 40°C +80°C

Available options:

Antistatic protection for DN 200 in flange version



Technical information

Flow coefficient - Kvs and resistance coefficient (local losses) - ζ for full bore valves

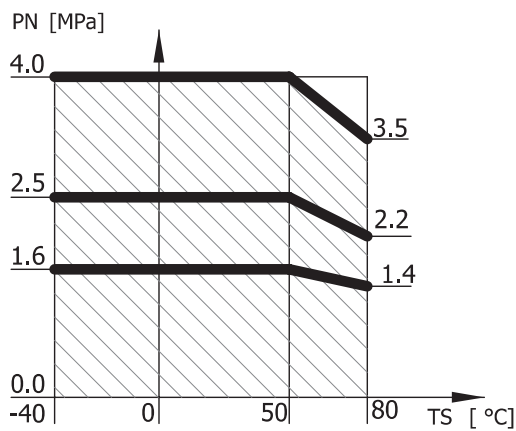
DN [mm]	15	20	25	32	40	50
Kvs [m ³ /h]	32	57	81	133	229	295
ζ	0,079	0,078	0,094	0,078	0,115	0,115

DN [mm]	65	80	100	125	150	200
Kvs [m ³ /h]	498	754	1159	1841	2652	5720
ζ	0,115	0,115	0,115	0,115	0,115	0,078

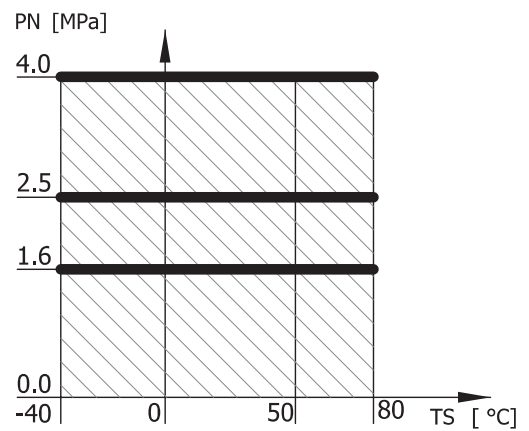
DN [mm]	250	300	350	400
Kvs [m ³ /h]	14790	22040	25400	36350
ζ	0,068	0,057	0,057	0,043

Graphs of the relation between maximum acceptable pressure and temperature

"PN—TS" graph
 Flanged valves for gas installation
 Flanges acc.to1092-1:2007, mat. group "1E1"



"PN—TS" graph
 Valves for gas installation, without flange



Product range

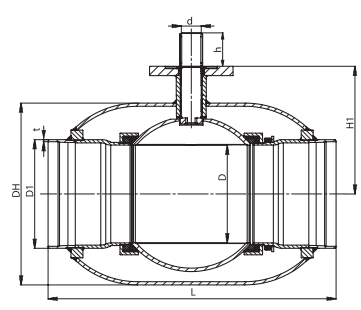
BALLOMAX® ball valves, full bore with butt-weld ends, with handle, DN 15-50, PN 16/25/40

	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	15	16/25/40	8410240015	15	210	42	21,3	2,0	140	68	116	0,8
	20	16/25/40	8410240020	20	230	51	26,9	2,0	140	73	120	1,1
	25	16/25/40	8410240025	25	230	57	33,7	2,6	140	77	124	1,6
	32	16/25/40	8410240032	32	260	76	42,4	2,6	180	79	129	2,4
	40	16/25/40	8410240040	39	260	89	48,3	2,6	180	86	135	3,2
	50	16/25	8410225050	49	300	108	60,3	2,9	275	120	144	4,0

BALLOMAX® ball valves, full bore with with butt-weld ends, with handle DN 65-150, PN 16/25

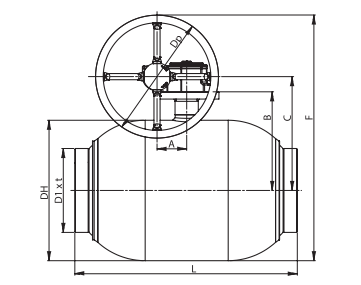
	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	65	16/25	8410225065	63	360	127	76,1	2,9	275	130	154	5,9
	80	16/25	8410225080	78	370	152	88,9	3,2	365	160	193	10,5
	100	16/25	8410225100	98	390	178	114,3	3,6	365	180	218	14,5
	125	16/25	8410225125	122	390	219	139,7	3,6	650	200	242	23,0
	150	16/25	8110225150 010	146	390	267	168,3	4,0	900	290	326	29,0

BALLOMAX® ball valves, full bore with butt-weld ends, with ISO-flange acc. to PN-EN-ISO 5211, DN 80-400, PN 16/25



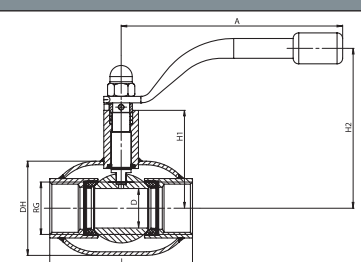
DN	PN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	t [mm]	DH [mm]	H1 [mm]	d [mm]	h [mm]	conn. flange	[kg]
80	16/25	8110225080B	78	370	88,9	3,2	152	212	24	30	F07	11,0
100	16/25	8110225100B	98	390	114,3	3,6	178	221	24	40	F07	14,3
125	16/25	8110225125B	122	390	139,7	3,6	219	245	30	50	F10	24,1
150	16/25	8110225150B	146	390	168,3	4,0	267	289	30	60	F12	29,7
200	16/25	8110225200B	195	390	219,1	8,8	323	253	45	66	F14	63,2
250	16/25	5410225250B	245	724	273,0	5,0	457	321	50	84	F16	128,4
300	16/25	5410225300B	305	924	323,9	5,6	508	356	60	100	F16	214,1
350	16/25	5410225350B	305	924	355,6	5,6	508	356	60	100	F16	213,0
400	16/25	5410225400B	380	1123	406,4	6,3	660	459	80	112	F30	505,7

BALLOMAX® ball valves, full bore with butt-weld ends, with gear DN 80-400



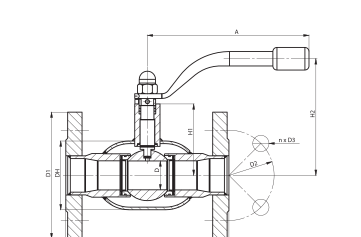
DN	PN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	t [mm]	DH [mm]	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
80	16/25	8110225080 900	78	370	88,9	3,2	152	125	53	212	246	385	F07
100	16/25	8110225100 900	98	390	114,3	3,6	178	160	53	221	255	424	F07
125	16/25	8110225125 900	122	390	139,7	3,6	219	250	69	245	287	522	F10
150	16/25	8110225150 900	146	390	168,3	4,0	267	250	69	289	331	590	F12
200	16/25	8110225200 900	195	390	219,1	8,8	323	400	84	253	298	660	F14
250	16/25	5410225250 900	245	724	273,0	5,0	457	400	97	321	371	800	F16
300	16/25	5410225300 900	305	924	323,9	5,6	508	400	138	356	410	864	F16
350	16/25	5410225350 900	305	924	355,6	5,6	508	400	138	356	410	864	F16
400	16/25	5410225400 900	380	1123	406,4	6,3	660	600	180	459	523	1152	F30

BALLOMAX® ball valves, full bore with threaded ends DN 15-50, PN 16/25/40



DN	PN	Catalogue no.	D [mm]	L [mm]	RG [cal]	DH [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
15	16/25/40	8410040015	15	85	1/2"	42	140	68	116	0,7
20	16/25/40	8410040020	20	95	3/4"	51	140	73	120	0,9
25	16/25/40	8410040025	25	100	1"	57	140	77	124	1,2
32	16/25/40	8410040032	32	115	1 1/4"	76	180	79	129	1,9
40	16/25/40	8410040040	39	125	1 1/2"	89	180	86	135	2,8
50	16/25	8410025050	49	155	2"	108	275	120	144	3,2

BALLOMAX® ball valves, full bore with flanged ends, with handle, DN 15-50, PN 16/25/40



DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
15	16/25/40	8410340015	15	130	42	95	65	14	4	140	68	116	1,9
20	16/25/40	8410340020	20	150	51	105	75	14	4	140	73	120	2,7
25	16/25/40	8410340025	25	160	57	115	85	14	4	140	77	124	3,5
32	16/25/40	8410340032	32	180	76	140	100	18	4	180	79	129	5,5
40	16/25/40	8410340040	39	200	89	150	110	18	4	180	86	135	6,8
50	16/25	8410325050	49	230	108	165	125	18	4	275	120	144	9,3

BALLOMAX® ball valves, full bore with flanged ends, with handle , DN 65-150, PN 16/25

	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
	65	25	8410325065L270	63	270	127	185	145	18	8	275	130	154	13,0
	65	25	8410325065	63	290	127	185	145	18	8	275	130	154	13,2
	80	16/25	8410325080	78	280	152	200	160	18	8	365	160	193	18,6
	100	16	8410316100	98	300	178	220	180	18	8	365	180	218	21,4
	100	25	8410325100	98	300	178	235	190	22	8	365	180	218	24,5
	125	16	8410316125	122	325	219	250	210	18	8	650	200	242	35,0
	125	25	8410325125	122	325	219	270	220	26	8	650	200	242	40,5
	150	16	8110316150 010	146	350	267	285	240	22	8	900	290	326	44,0
	150	25	8110325150 010	146	350	267	300	250	26	8	900	290	326	50,1

BALLOMAX® ball valves, full bore with flanged ends, with ISO-flange acc. to PN-EN-ISO 5211, DN 80-400, PN 16/25

	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	H1 [mm]	d [mm]	h [mm]	conn. flange	[kg]
	80	16/25	8110325080B	78	280	152	200	160	18	8	212	24	30	F07	18,6
	100	16	8110316100B	98	300	178	220	180	18	8	221	24	40	F07	21,3
	100	25	8110325100B	98	300	178	235	190	22	8	221	24	40	F07	24,5
	125	16	8110316125B	122	325	219	250	210	18	8	245	30	50	F10	34,6
	125	25	8110325125B	122	325	219	270	220	26	8	245	30	50	F10	39,4
	150	16	8110316150B	146	350	267	285	240	22	8	289	30	60	F12	41,4
	150	25	8110325150B	146	350	267	300	250	26	8	289	30	60	F12	47,7
	200	16	8110316200B	195	400	323	340	295	22	12	253	45	66	F14	80,0
	200	25	8110325200B	195	400	323	360	310	26	12	253	45	66	F14	83,0
	250	16	5410316250B	245	750	457	405	355	26	12	321	50	84	F16	155,2
	250	25	5410325250B	245	750	457	425	370	30	12	321	50	84	F16	168,6
	300	16	5410316300B	305	950	508	460	410	26	12	356	60	100	F16	250,7
	300	25	5410325300B	305	950	508	485	430	30	16	356	60	100	F16	267,3
	350	16	5410316350B	305	950	508	520	470	26	16	356	60	100	F16	266,2
	350	25	5410325350B	305	950	508	555	490	33	16	356	60	100	F16	296,6
	400	16	5410316400B	380	1150	660	580	525	30	16	459	80	112	F30	577,5
	400	25	5410325400B	380	1150	660	620	550	36	16	459	80	112	F30	620,9

BALLOMAX® ball valves, full bore with flanged ends, with gear DN 80-400, PN 16/25

	DN	PN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	DH [mm]	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
	80	16/25	8110325080 900	78	280	200	160	18	8	152	125	53	212	246	385	F07
	100	16	8110316100 900	98	300	220	180	18	8	178	160	53	221	255	424	F07
	100	25	8110325100 900	98	300	235	190	22	8	178	160	53	221	255	424	F07
	125	16	8110316125 900	122	325	250	210	18	8	219	250	69	245	287	522	F10
	125	25	8110325125 900	122	325	270	220	26	8	219	250	69	245	287	522	F10
	150	16	8110316150 900	146	350	285	240	22	8	267	250	69	289	331	590	F12
	150	25	8110325150 900	146	350	300	250	26	8	267	250	69	289	331	590	F12
	200	16	8110316200 900	195	400	340	295	22	12	323	400	84	253	298	660	F14
	200	25	8110325200 900	195	400	360	310	26	12	323	400	84	253	298	660	F14
	250	16	5410316250 900	245	750	405	355	26	12	457	400	97	321	371	800	F16
	250	25	5410325250 900	245	750	425	370	30	12	457	400	97	321	371	800	F16
	300	16	5410316300 900	305	950	460	410	26	12	508	400	138	356	410	864	F16
	300	25	5410325300 900	305	950	485	430	30	16	508	400	138	356	410	864	F16
	350	16	5410316350 900	305	950	520	470	26	16	508	400	138	356	410	864	F16
	350	25	5410325350 900	305	950	555	490	33	16	508	400	138	356	410	864	F16
	400	16	5410316400 900	380	1150	580	525	30	16	660	600	180	459	523	1152	F30
	400	25	5410325400 900	380	1150	620	550	36	16	660	600	180	459	523	1152	F30



BALLOMAX®

ball valves with
reduced bore
for gas

BALLOMAX® ball valves are characterized by modern and safe structure which does not need additional attendance. BALLOMAX® valves undergo 100% quality control (acc. to PN-EN 12266:2012). The ball and spindle are made from corrosion-resistant steel. Dual seal protection based on O-rings with NBR has been used on the spindle. BALLOMAX® valves have a two-year warranty.

Using the valve

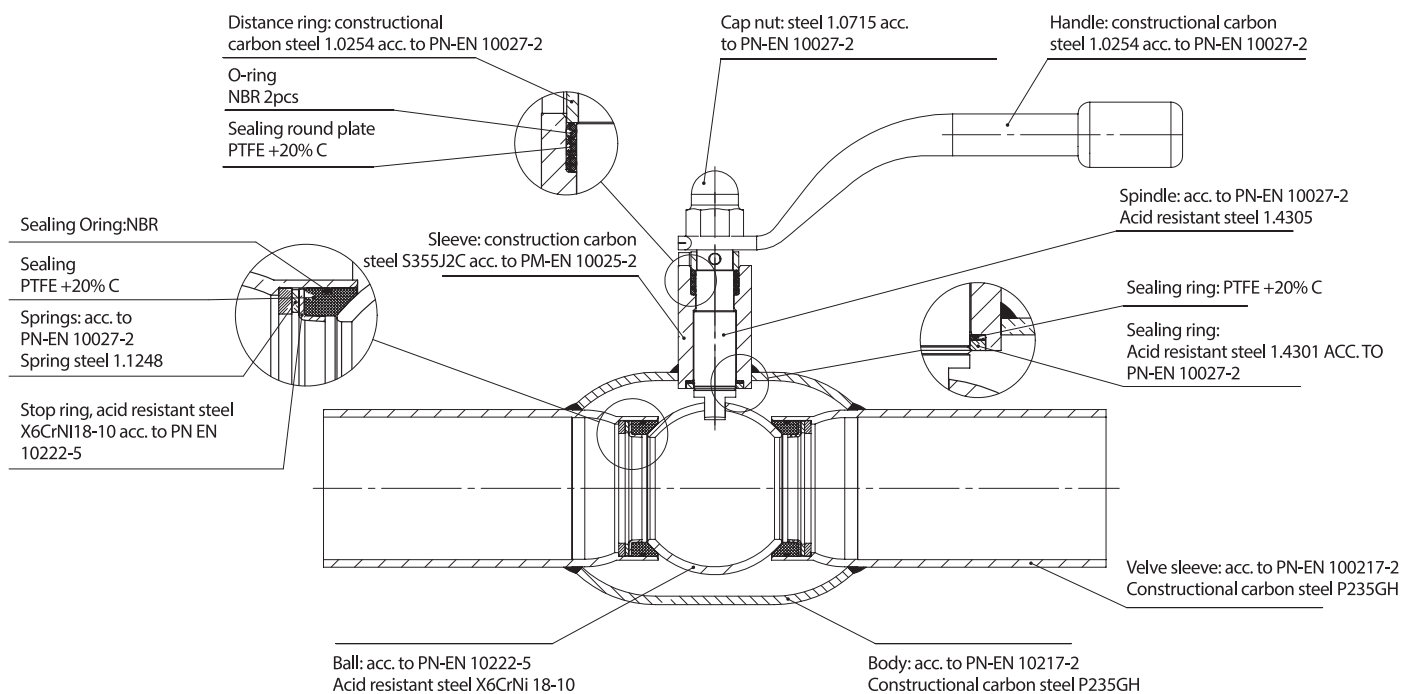
gas networks (media group 1 - natural gas, GZII, coke oven gas, biogas, air)

Production range

DN10-DN500

Temperature range

- 30°C +80°C (standard); optional: - 40°C +80°C



Technical information

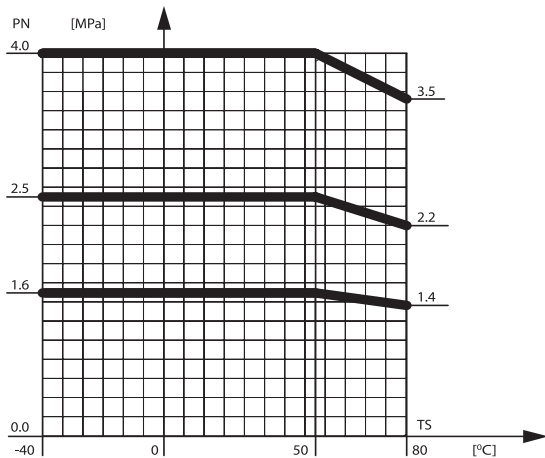
Flow coefficient - Kvs and resistance coefficient (local losses) - ζ

DN [mm]	10	15	20	25	32	40	50	65	80
Kvs [m ³ /h]	7	7	15	27	40	69	110	168	288
Ax10 ⁻⁴	0,79	0,79	1,77	3,14	4,90	8,04	12,56	19,63	33,18
ζ	0,32	0,44	0,41	0,37	0,33	0,40	0,40	0,39	0,36

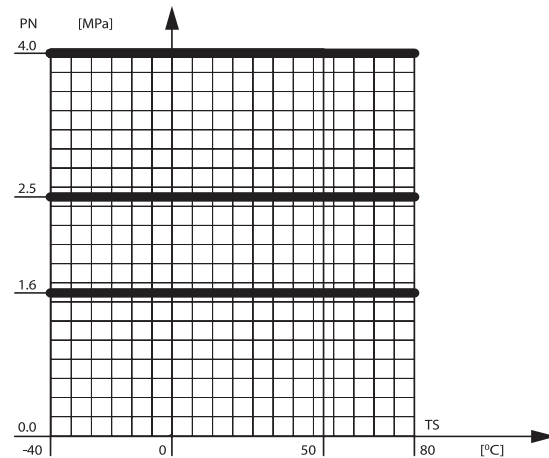
DN [mm]	100	125	150	200	250	300	350	400	500
Kvs [m ³ /h]	417	699	1046	1500	2770	4620	7250	10540	11780
Ax10 ⁻⁴	50,27	78,54	122,72	176,71	314,16	490,87	706,86	962,11	1256,63
ζ	0,32	0,33	0,32	0,35	0,33	0,29	0,24	0,22	0,21

Graphs of the relation between maximum acceptable pressure and temperature

"PN—TS" graph
Flanged valves for gas installation
Flanges acc.to 1092-1:2007, mat. group "1E1"



"PN—TS" graph
Valves for gas installation, without flange



Product range

BALLOMAX® ball valves with butt-weld ends, with handle DN 10-50, PN 16/25/40

	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	10	16/25/40	7110240010	10	210	38	17,2	1,8	140	69	116	0,8
	15	16/25/40	7110240015	10	210	38	21,3	2,0	140	69	116	0,8
	20	16/25/40	7410240020	15	230	42	26,9	2,3	140	68	116	0,9
	25	16/25/40	7410240025	20	230	51	33,7	2,6	140	73	120	1,1
	32	16/25/40	7410240032	25	260	57	42,4	2,6	140	77	124	1,4
	40	16/25/40	7410240040	32	260	76	48,3	2,6	180	79	129	2,1
	50	16/25/40	7410240050	40	300	89	60,3	2,9	180	86	135	2,7

BALLOMAX® ball valves with butt-weld ends, with handle DN 65-200, PN 16/25

	DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	65	16/25	7410225065	49	360	108	76,1	2,9	275	120	144	4,5
	80	16/25	7410225080	63	370	127	88,9	3,2	275	130	154	6,0
	100	16/25	7410225100	78	390	152	114,3	3,6	365	160	193	9,7
	125	16/25	7410225125	98	390	178	139,7	3,6	365	180	218	13,4
	150	16/25	7410225150	122	390	219	168,3	4,0	650	200	242	25,0
	200	16/25	7110225200 010	146	390	267	219,1	4,5	900	290	326	40,0

BALLOMAX® ball valves with butt-weld ends, with ISO-flange acc. to PN-EN ISO 5211, DN 100-500, PN 16/25

DN	PN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	D2 [mm]	H1 [mm]	h [mm]	d [mm]	t [mm]	conn. flange	[kg]
100	16/25	7110225100B	78	390	114,3	3,6	152	212	24	30	F07	9,7
125	16/25	7110225125B	98	390	139,7	3,6	178	221	24	40	F07	14,3
150	16/25	7110225150B	122	390	168,3	4,0	219	245	30	50	F10	26,0
200	16/25	7110225200B	146	390	219,1	4,5	267	289	30	60	F12	43,4
250	16/25	5010225250B	195	626	273,0	5,0	356	265	45	67	F14	71,7
300	16/25	5010225300B	245	724	323,9	5,6	457	321	50	84	F16	119,2
350	16/25	5010225350B	245	825	355,6	5,6	457	321	50	84	F16	133,0
400	16/25	5010225400B	305	924	406,4	6,3	508	356	60	100	F16	196,5
500	16/25	5010225500B	380	1123	508,0	6,3	660	459	80	112	F30	398,0

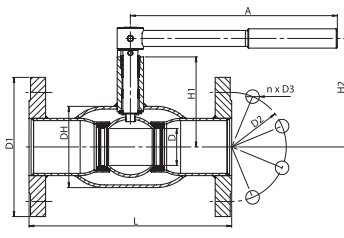
BALLOMAX® ball valves with butt-weld ends, with gear DN 100-500, PN 16/25

DN	PN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	t [mm]	DH [mm]	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
100	16/25	7110225100 900	78	390	114,3	3,6	152	125	53	212	246	385	F07
125	16/25	7110225125 900	98	390	139,7	3,6	178	160	53	221	255	424	F07
150	16/25	7110225150 900	122	390	168,3	4,0	219	250	69	245	287	522	F10
200	16/25	7110225200 900	146	390	219,1	4,5	267	250	69	289	331	590	F12
250	16/25	5010225250 900	198	626	273,0	5,0	356	400	84	265	310	688	F14
300	16/25	5010225300 900	245	724	323,9	5,6	457	400	97	321	371	800	F16
350	16/25	5010225350 900	245	825	355,6	5,6	457	400	97	321	371	800	F16
400	16/25	5010225400 900	305	924	406,4	6,3	508	400	138	356	410	864	F16
500	16/25	5010225500 900	380	1123	508,0	6,3	660	600	180	459	523	1152	F30

BALLOMAX® ball valves with flanged ends, with handle DN 15-50, PN 16/25/40

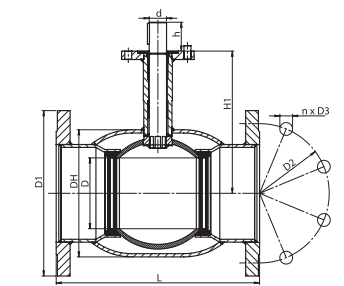
DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
15	16/25/40	7110340015	10	130	38	95	65	14	4	140	69	116	1,5
20	16/25/40	7410340020	15	150	42	105	75	14	4	140	68	116	2,9
25	16/25/40	7410340025	20	160	51	115	85	14	4	140	73	120	3,5
32	16/25/40	7410340032	25	180	57	140	100	18	4	140	77	124	4,8
40	16/25/40	7410340040	32	200	76	150	110	18	4	180	79	129	6,2
50	16/25/40	7410340050	40	230	89	165	125	18	4	180	86	135	8,2

BALLOMAX® ball valves with flanged ends, with handle DN 65-200, PN 16/25



DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	A [mm]	H1 [mm]	H2 [mm]	[kg]
65	16/25	7410325065L70	49	270	108	185	145	18	8	275	120	144	9,9
65	16/25	7410325065	49	290	108	185	145	18	8	275	120	144	10,0
80	16/25	7410325080	63	280	127	200	160	18	8	275	130	154	13,2
100	16	7410316100	78	300	152	220	180	18	8	365	160	193	18,3
100	25	7410325100	78	300	152	235	190	22	8	365	160	193	19,2
125	16	7410316125	98	325	178	250	210	18	8	365	180	218	24,4
125	25	7410325125	98	325	178	270	220	26	8	365	180	218	27,8
150	16	7410316150	122	350	219	285	240	22	8	650	200	242	35,2
150	25	7410325150	122	350	219	300	250	26	8	650	200	242	39,7
200	16	7110316200 010	146	400	267	340	295	22	12	900	290	326	58,0
200	25	7110325200 010	146	400	267	360	310	26	12	900	290	326	63,5

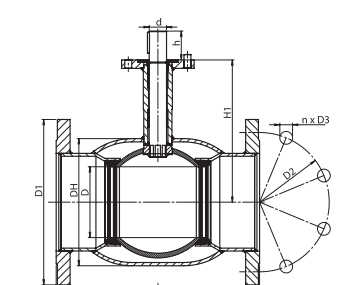
BALLOMAX® ball valves with flanged ends, with ISO-flange acc. to PN-EN ISO 5211, DN 100-500, PN 16



DN	PN	Catalogue no.	D1 [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	H1 [mm]	d [mm]	h [mm]	conn. flange	[kg]
100	16	7110316100B	78	300	152	220	180	18	8	212	24	30	F07	18,0
125	16	7110316125B	98	325	178	250	210	18	8	221	24	40	F07	25,1
150	16	7110316150B	122	350	219	285	240	22	8	245	30	50	F10	38,2
200	16	7110316200B	146	400	267	340	295	22	12	289	30	60	F12	61,7
250	16	5010316250B	195	650	356	405	355	26	12	265	45	67	F14	104,4
300	16	5010316300B	245	750	457	460	410	26	12	321	50	84	F16	157,2
350	16	5010316350B	245	850	457	520	470	26	16	321	50	84	F16	235,0
400	16	5010316400B	305	950	508	580	525	30	16	356	60	100	F16	275,0
500	16	5010316500B	380	1150	660	715	650	33	20	459	80	112	F30	447,1

* ball valves bigger then DN500 available on request.

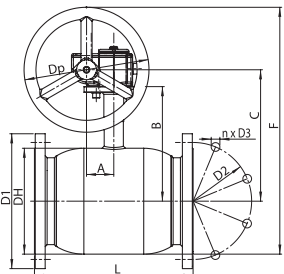
BALLOMAX® ball valves with flanged ends, with ISO-flange acc. to PN-EN ISO 5211, DN 100-500, PN 25



DN	PN	Catalogue no.	D [mm]	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	H1 [mm]	d [mm]	h [mm]	conn. flange	[kg]
100	25	7110325100B	78	300	152	235	190	22	8	212	24	30	F07	18,0
125	25	7110325125B	98	325	178	270	220	26	8	221	24	40	F07	25,1
150	25	7110325150B	122	350	219	300	250	26	8	245	30	50	F10	38,2
200	25	7110325200B	146	400	267	360	310	26	12	289	30	60	F12	61,7
250	25	5010325250B	195	650	356	425	370	30	12	265	45	67	F14	119,1
300	25	5010325300B	245	750	457	485	430	30	16	321	50	84	F16	172,4
350	25	5010325350B	245	850	457	555	490	33	16	321	50	84	F16	262,6
400	25	5010325400B	305	950	508	620	550	36	16	356	60	100	F16	318,8
500	25	5010325500B	380	1150	660	730	660	36	20	459	80	112	F30	470,1

* ball valves bigger then DN500 available on request.

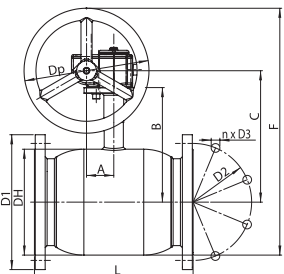
BALLOMAX® ball valves with flanged ends, with gear DN 100-500, PN 16



DN	DN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	DH [mm]	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
100	16	7110316100 900	78	300	220	180	18	8	152	125	53	212	246	385	F07
125	16	7110316125 900	98	325	250	210	18	8	178	160	53	221	255	424	F07
150	16	7110316150 900	122	350	285	240	22	8	219	250	69	245	287	522	F10
200	16	7110316200 900	146	400	340	295	22	12	267	250	69	289	331	590	F12
250	16	5010316250 900	195	650	405	355	26	12	356	400	84	265	310	688	F14
300	16	5010316300 900	245	750	460	410	26	12	457	400	97	321	371	800	F16
350	16	5010316350 900	245	850	520	470	26	16	457	400	97	321	371	800	F16
400	16	5010316400 900	305	950	580	525	30	16	508	400	138	356	410	864	F16
500	16	5010316500 900	380	1150	715	650	33	20	660	600	180	459	523	1152	F30

* ball valves bigger then DN500 available on request.

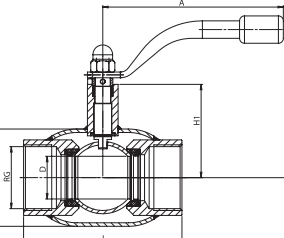
BALLOMAX® ball valves with flanged ends, with gear DN 100-500, PN 25



DN	DN	Catalogue no.	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	n	DH [mm]	Dp [mm]	A [mm]	B [mm]	C [mm]	F [mm]	conn. flange
100	25	7110325100 900	78	300	235	190	22	8	152	125	53	212	246	385	F07
125	25	7110325125 900	98	325	270	220	26	8	178	160	53	221	255	424	F07
150	25	7110325150 900	122	350	300	250	26	8	219	250	69	245	287	522	F10
200	25	7110325200 900	146	400	360	310	26	12	267	250	69	289	331	590	F12
250	25	5010325250 900	195	650	425	370	30	12	356	400	84	265	310	688	F14
300	25	5010325300 900	245	750	485	430	30	16	457	400	97	321	371	800	F16
350	25	5010325350 900	245	850	555	490	33	16	457	400	97	321	371	800	F16
400	25	5010325400 900	305	950	620	550	36	16	508	400	138	356	410	864	F16
500	25	5010325500 900	380	1150	730	660	36	20	660	600	180	459	523	1152	F30

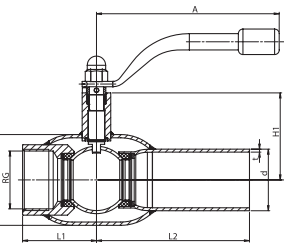
* ball valves bigger then DN500 available on request.

BALLOMAX® ball valves with threaded ends DN 10-50, PN 16/25/40



DN	PN	Catalogue no.	D [mm]	L [mm]	RG [mm]	RH [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
10	16/25/40	7110040010	10	65	3/8"	38	140	69	116	0,6
15	16/25/40	7110040015	10	65	1/2"	38	140	69	116	0,6
20	16/25/40	7410040020	15	75	3/4"	42	140	68	116	0,7
25	16/25/40	7410040025	20	90	1"	51	140	73	120	0,9
32	16/25/40	7410040032	25	105	1 1/4"	57	140	77	124	1,2
40	16/25/40	7410040040	32	120	1 1/2"	76	180	79	129	1,9
50	16/25/40	7410040050	39	145	2"	89	180	86	135	2,8

BALLOMAX® ball valves with threaded and butt-weld ends, DN 10-50, PN 16/25/40



DN	PN	Catalogue no.	D [mm]	L1 [mm]	L2 [mm]	DH [mm]	RG [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
10	16/25/40	7110140010	10	33	105	38	3/8"	17,2	1,8	140	69	116	0,7
15	16/25/40	7110140015	10	33	105	38	1/2"	21,3	2,0	140	69	116	0,7
20	16/25/40	7410140020	15	38	115	42	3/4"	26,9	2,3	140	68	116	0,8
25	16/25/40	7410140025	20	45	115	51	1"	33,7	2,6	140	73	120	1,0
32	16/25/40	7410140032	25	53	130	57	1 1/4"	42,4	2,6	140	77	124	1,3
40	16/25/40	7410140040	32	60	130	76	1 1/2"	48,3	2,6	180	79	129	2,0
50	16/25/40	7410140050	39	73	150	89	2"	60,3	2,9	180	86	135	2,7



Accessories BALLOMAX® ball valves

Handles for BALLOMAX® ball valves DN10-200

	Diameter for ball valves with reduced bore	Diameter for ball valves with full bore	Catalogue no.	L
	10-32	10-25	66460010 000	140
	40-50	32-40	66460040 000	180
	65-80	50-65	66460065 000	275
	100-125	80-100	66464100 000	365
	100-125	80-100	*66461100 000	365
	150	125	66464150 000	650
	150	125	*66461150 000	650
	200	150	66461200 000	900

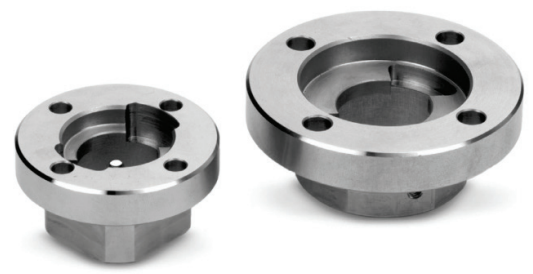
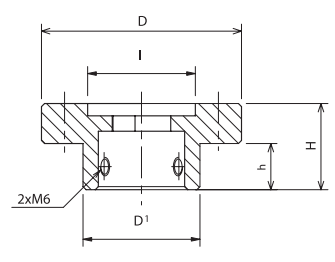
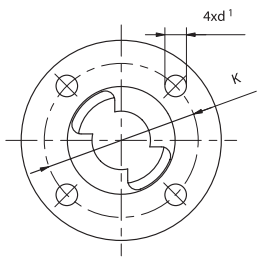
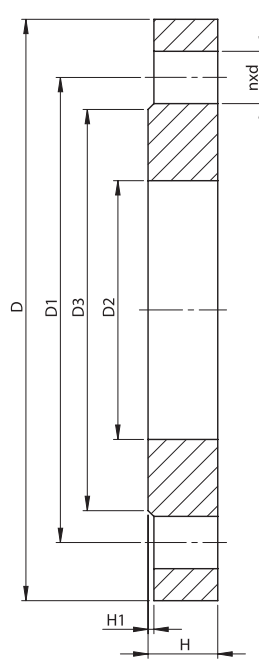
*- handle for ball valve with ISO flange

Handles „T“ for BALLOMAX® ball valves DN 10-50

	Diameter for ball valves with reduced bore	Diameter for ball valves with full bore	Catalogue no.	L	B
	Blue				
	10-32	10-25	66050010 003	85	34
	40-50	32-40	66050040 003	120	44
	Red				
	10-32	10-25	66050010 004	85	34
	40-50	32-40	66050040 004	120	44
	Yellow				
	10-32	10-25	66050010 000	85	34
	40-50	32-40	66050040 000	120	44

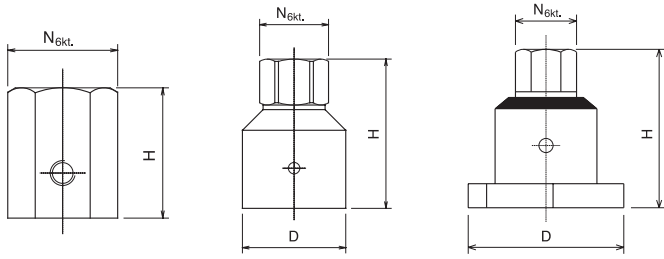
Flat flanges acc. to PN-EN 1092-1:2007, DN 15-200, PN 16/25/40

Diameter of ball valves with reduced bore	PN	Catalogue no.	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	n	d
15	40	0150330	95	65	22,0	45	14	2	4	14
20	40	0200330	105	75	27,5	58	16	2	4	14
25	40	0250330	115	85	34,5	68	16	2	4	14
32	40	0320330	140	100	43,5	78	18	2	4	18
40	40	0400330	150	110	49,5	88	18	2	4	18
50	40	0500330	165	125	61,5	102	20	2	4	18
65	25	0650330	185	145	77,5	122	22	2	8	18
80	25	0800330	200	160	90,5	138	24	2	8	18
100	16	1000330	220	180	116,0	158	22	2	8	18
100	25	1000335	235	190	116,0	162	26	2	8	22
125	16	1250330	250	210	141,5	188	22	2	8	18
125	25	1250335	270	220	141,5	188	28	2	8	26
150	16	1500330	285	240	170,5	212	24	2	8	22
150	25	1500335	300	250	170,5	218	30	2	8	26
200	16	2000330	340	295	221,5	268	27	2	12	22
200	25	2000335	360	310	221,5	278	37	2	12	26



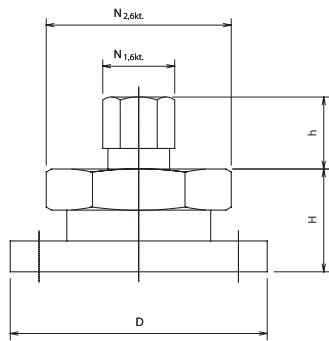
ISO adapters for ball valves DN 10-100

Diameter for ball valves with reduced bore	Diameter for ball valves with full bore	Catalogue no.	ISO Flange	D [mm]	D1 [mm]	H [mm]	h [mm]	I [mm]	K [mm]	d1 [mm]
10-32	10-25	203240	F05	65	34	28	15	35	50	7
40-50	32-40	208240	F05	65	38	28	15	35	50	7
65-80	50-65	167240	F05	65	47	33	20	35	50	7
100	80	169240	F07	90	57	35	20	55	70	9



HEX adapters for ball valves DN 10-150

Diameter for ball valves with reduced bore	Diameter for ball valves with full bore	Catalogue no.	D [mm]	H [mm]	N hex [mm]
10-32	10-25	66160010	-	26	19
40-50	32-40	66160040	2	26	19
65-80	50-65	66160065	28	52	19
100	80	66164100	45	63	27
125	100	66161125	80	75	27
150	125	66161150	112	85	27



ISO - HEX adapters for ball valves DN 125-300

Diameter for ball valves with reduced bore	Diameter for ball valves with full bore	Catalogue no.	ISO flange	D [mm]	H [mm]	h [mm]	N1 hex [mm]	N2 hex [mm]
125	100	66261100 050	F07	90	45	30	27	60
125	100	66261100 060	F07	90	45	30	27	70
125	100	66261100 080	F07	90	45	30	27	90
150	125	66261150 050	F10	125	50	35	27	60
150	125	66261150 060	F10	125	50	35	27	70
150	125	66261150 080	F10	125	50	35	27	90
200	150	66261200 050	F12	150	60	35	27	60
200	150	66261200 060	F12	150	60	35	27	70
200	150	66261200 080	F12	150	60	35	27	90
250	200	66261250 070	F14	175	87	52	50	90
300	250	66261300 070	F16	210	160	40	50	90

BROEN

General information about BALLOMAX[®] type AH ball valves

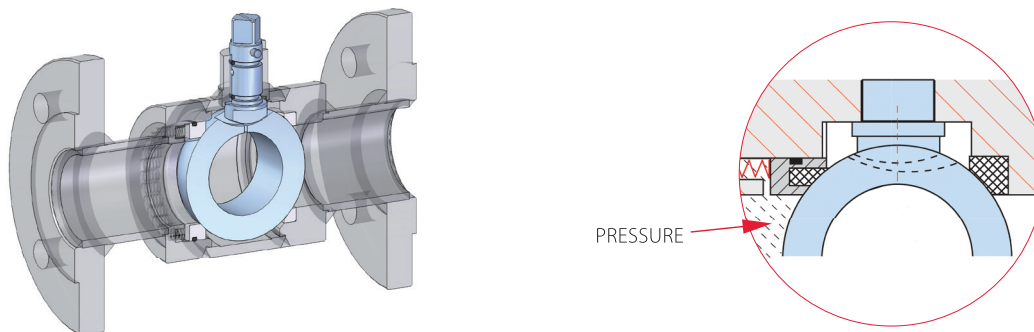
Main design features of ball valves

Linear and volumetric compensation for floating ball design

The linear and volumetric compensation system prevents the buildup of excessive pressure in the cavity, which may result from external environment temperature increase.

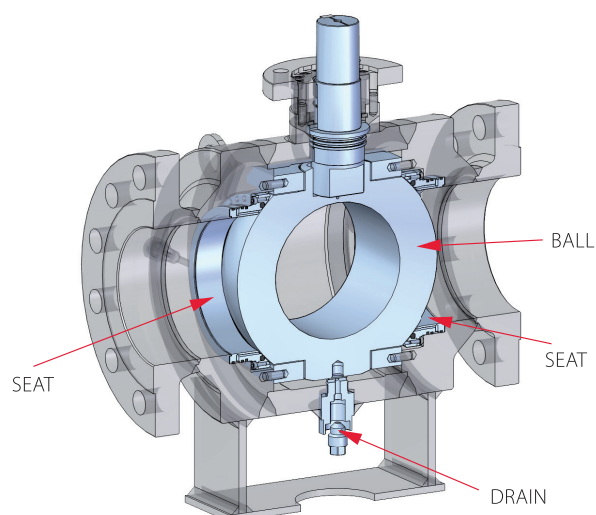
The phenomenon may cause higher opening torque, the valve keeping full tightness for a short time, or worse, the ball getting stuck between the seat.

The linear and volumetric compensation is a standard solution for all our floating ball type products and is most effective in case of LPG and other liquid media.



DBB „Double block and bleed“

The DBB system ensures the simultaneous upstream and downstream sealing, while also permitting the release of the overpressure in the cavity, in both, fully open and fully closed position. The drain allows the pressure in the cavity to be released manually. This enables the replacement of the upper stem sealing, as well as the tightness of the valve to be checked, without the need to shut down the pipeline.



BROEN

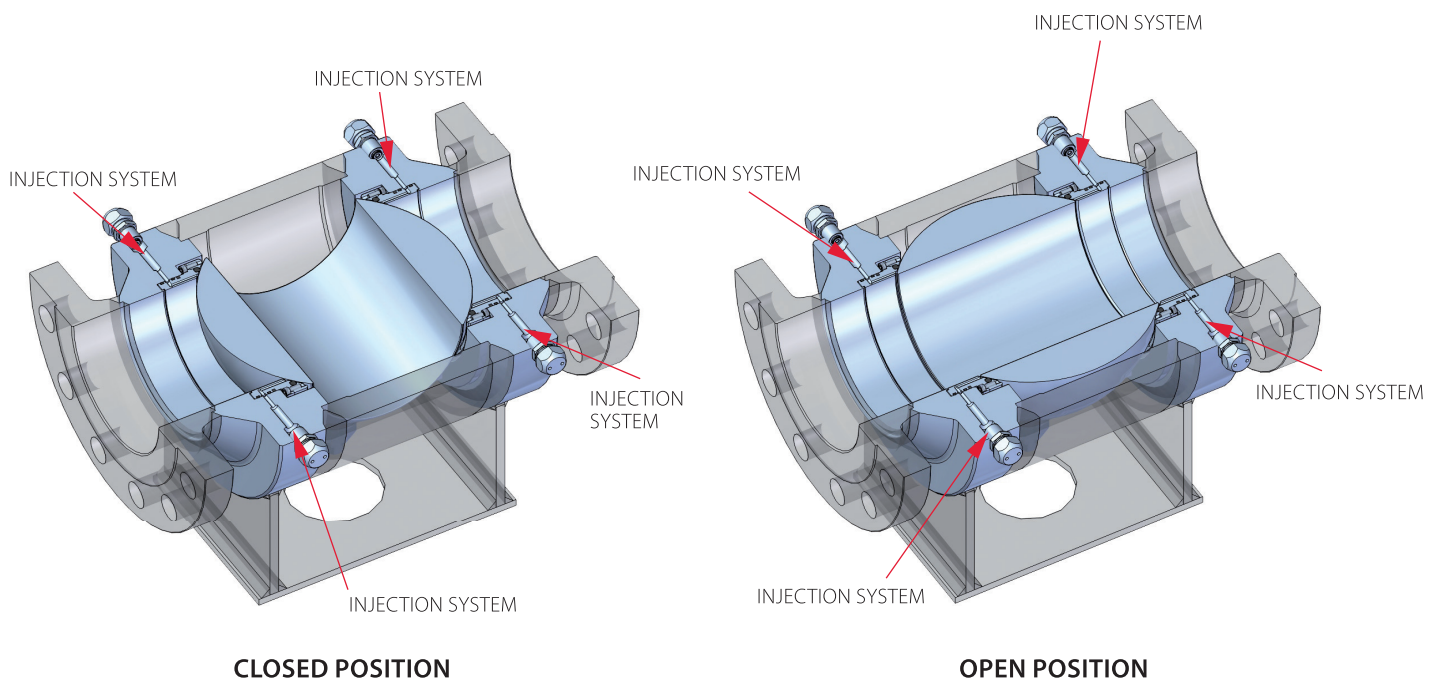
General information
about BALLOMAX[®]
type AH ball valves

Main design
features
of ball valves

Injection system

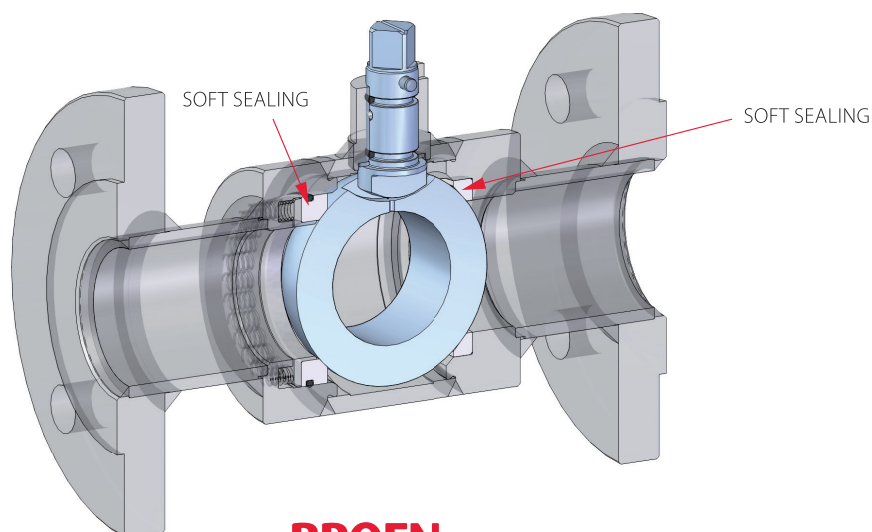
Injection system allows to regenerate in case of damage resulting from normal wear or from media contamination, by injecting a sealant, or, to clean the valve by injecting a flushing agent.

It also facilitates the operation of the valve after a long a period of inoperability.



Soft sealing system

The sealing materials are selected according to application requirements and are based on a customer's technical specification.



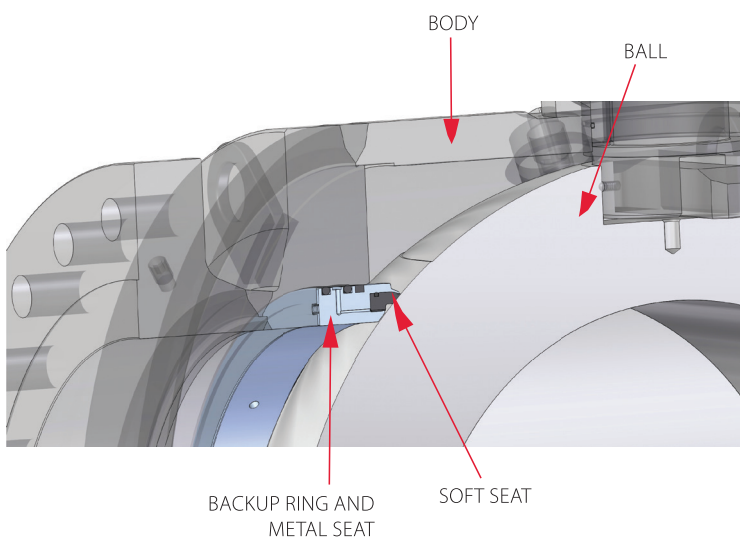
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General information
about BALLOMAX[®]
type AH ball valves

Main design
features
of ball valves

Primary metal secondary soft sealing system (PMSS)

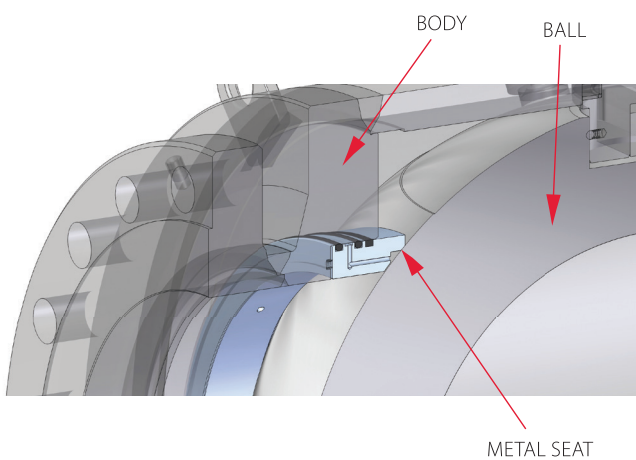
The first sealing concerns the metal surface, while the second concerns the soft sealing, guaranteeing the tightness of the valve. The PMSS type sealing is applied to the valves with trunnion mounted ball.



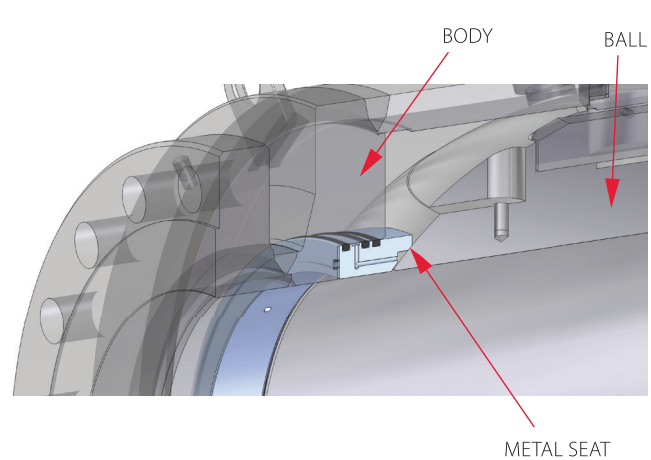
Metal – Metal sealing system

The cooperating metal sealing surface are covered with special coating, which allows for long, effective and defect-free operation and sealing.

CLOSED POSITION



OPEN POSITION



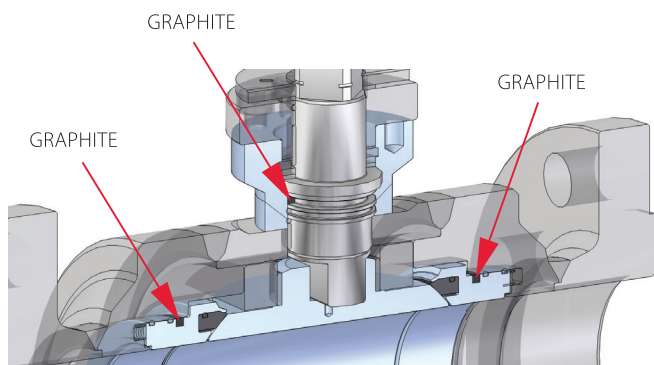
BROEN

General information
about BALLOMAX[®]
type AH ball valves

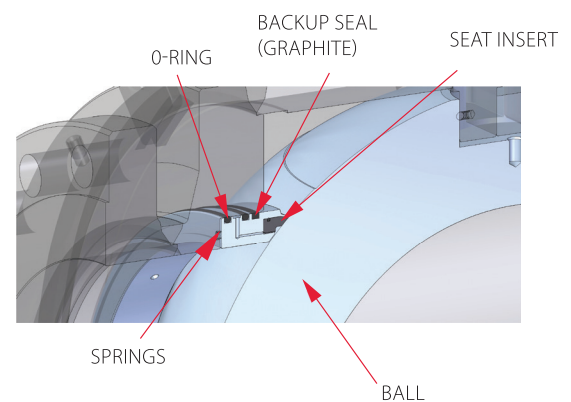
Main design
features
of ball valves

Fire safe

The fire safe solution is based on Metal / Metal and Graphite sealing elements.

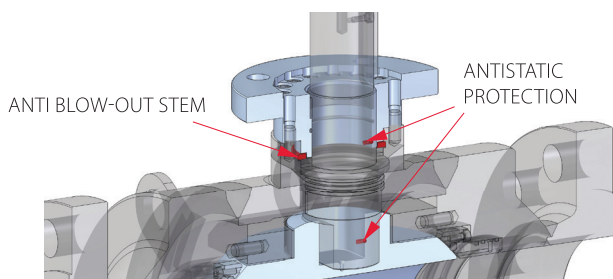


BEFORE FIRE

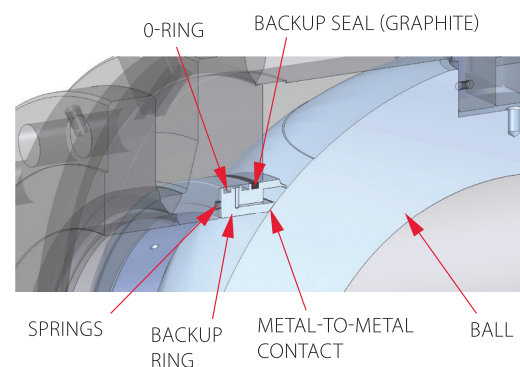


Antistatic protection and anti blow-out stem design

The antistatic design protects against static electric discharge. The anti blow-out stem design prevents the stem from blowing out after disassembly of the stem sealing top cover while the valve is under pressure.

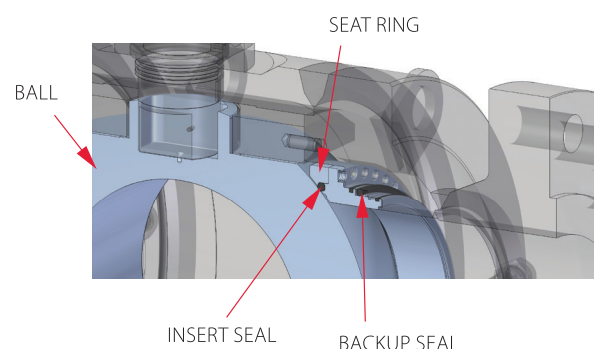
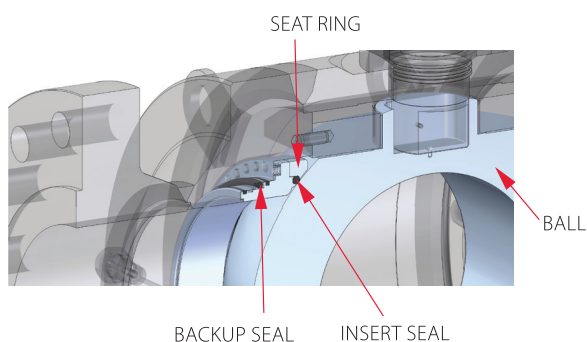


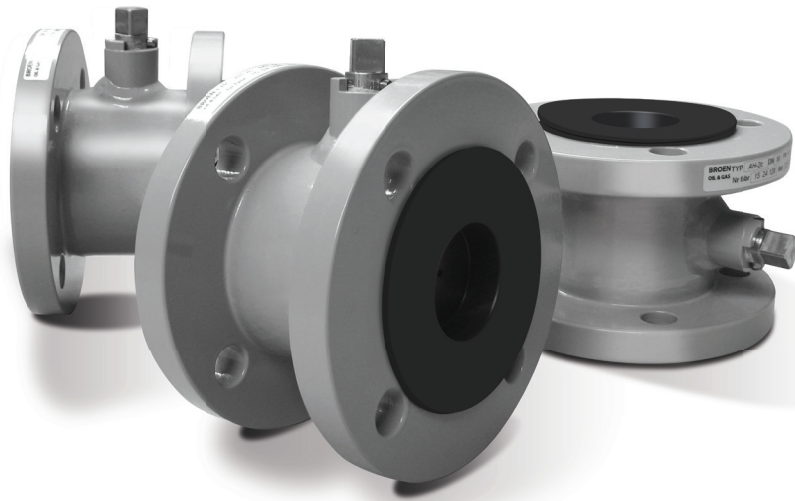
AFTER FIRE



Double piston effect sealing system (DPE) - only for gas medium

Both seals in the valve with DPE actively participate in the internal sealing of the valve. The body cavity pressure activates sealing on the downstream side which provides double sealing prior to cavity pressure relief taking place.





BALLOMAX[®] type AH ball valves with full bore, PN 16-40

AH ball valves are designed to meet the requirements of our most demanding customers. Due to wide range of default equipment and a lot of available options, AH type valves may be used on every stage of producing and delivering natural gas and other media. The structure of the valve guarantees full safety and very long utilisation period also when used with easily incapacitating media such as liquid LPG.

Using the valve

natural gas, air, LPG, fuels, Jet fuel and other on request

Production range

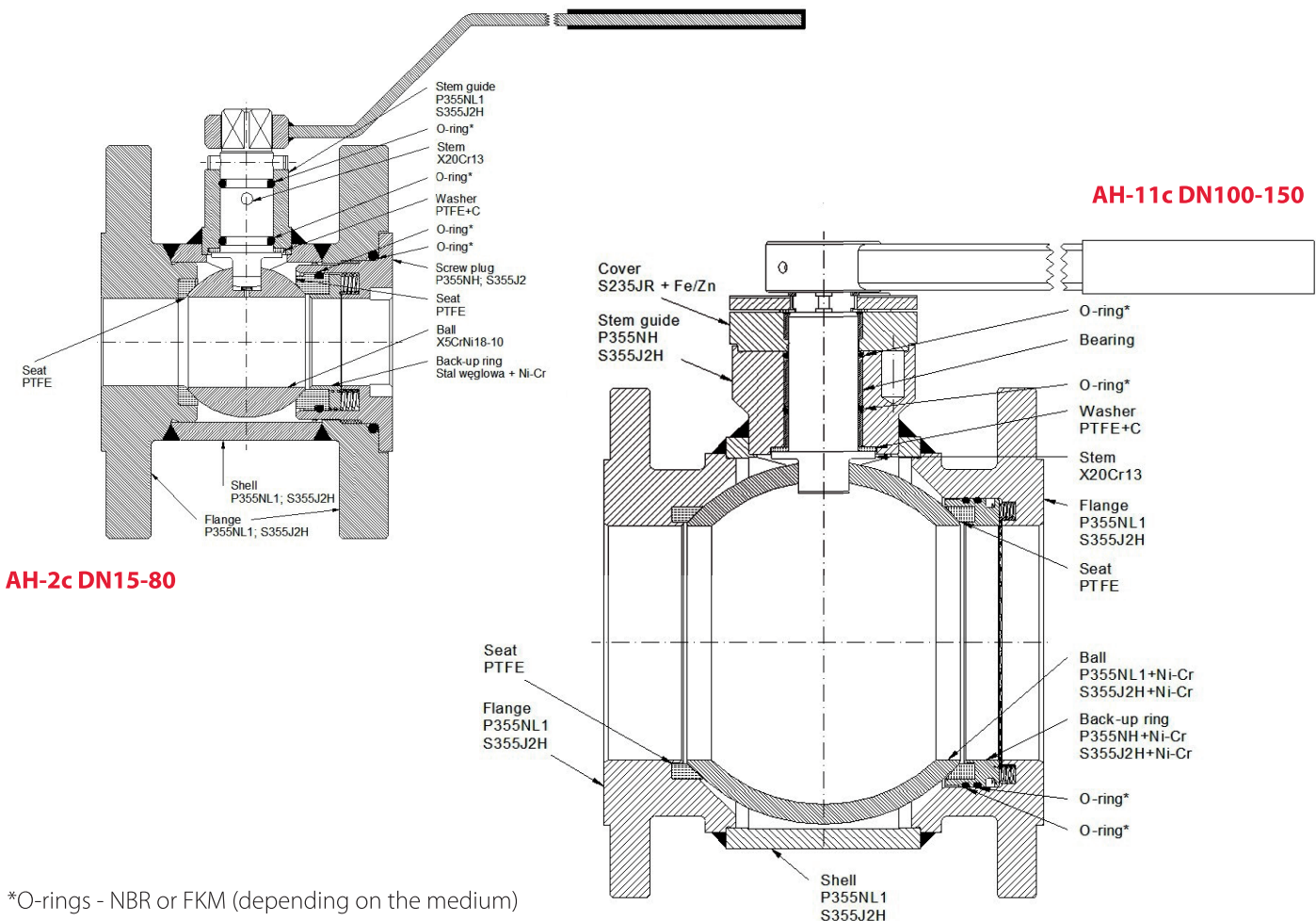
DN 15 – DN 900

Temperature range

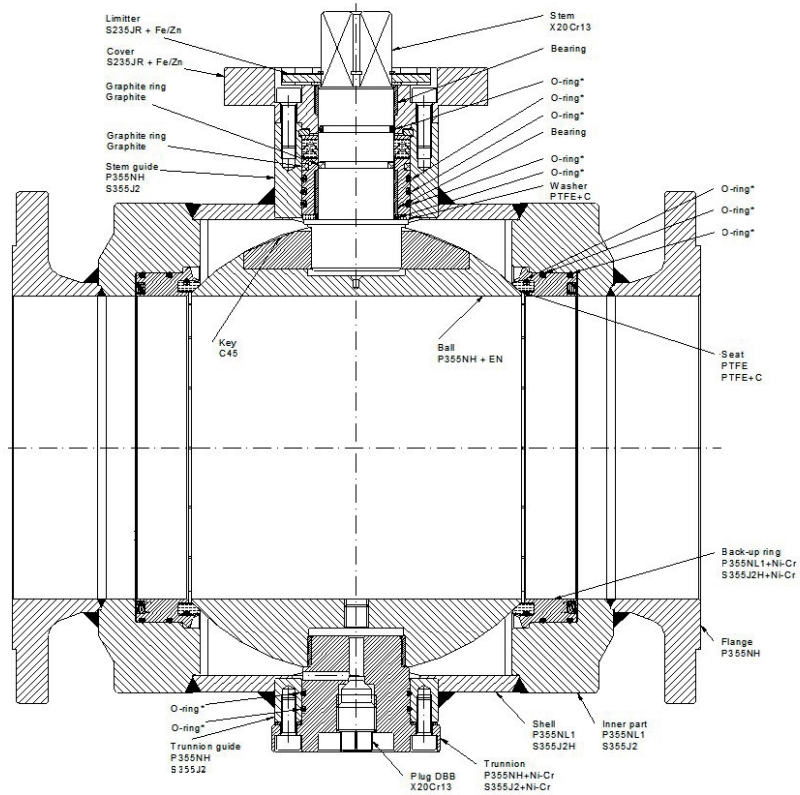
- 40°C +100°C (standard); optional: - 20°C +150°C, -10°C +200°C, -60°C +100°C

Available options:

flange and installation length according to API 6D (CL 150; CL 300)



*O-rings - NBR or FKM (depending on the medium)



AH-14c DN200-800

*O-rings - NBR or FKM (depending on the medium)

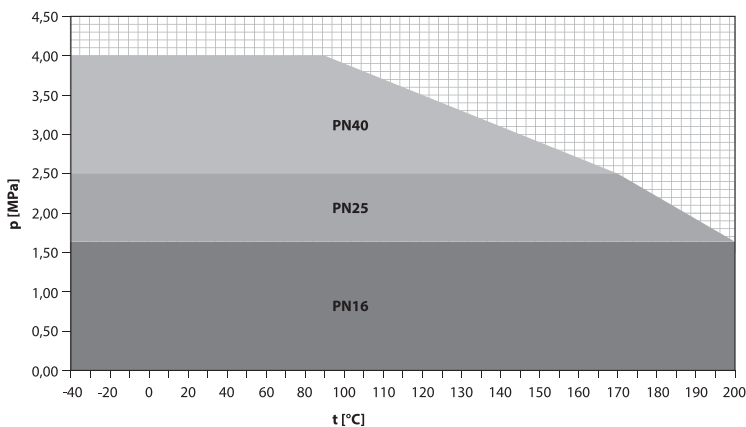
Technical information

Flow coefficient - Kvs and resistance coefficient (local losses) - ζ for full bore valves

KV values										
DN [-]	15	20	25	32	40	50	65	80	100	125
Δp [bar]	1	1	1	1	1	1	1	1	1	1
Kvs [m ³ /h]	28	53	83	129	213	353	639	1045	1788	2794
ζ [-][m ³ /h]	0,1	0,09	0,09	0,1	0,09	0,09	0,07	0,06	0,05	0,05

KV values										
DN [-]	150	200	250	300	350	400	500	600	700	800
Δp [bar]	1	1	1	1	1	1	1	1	1	1
Kvs [m ³ /h]	4498	9234	14429	20777	28280	36937,44	57714,74	101787,6	138544,2	180955,7
ζ [-][m ³ /h]	0,04	0,03	0,03	0,03	0,03	0,03	0,03	0,02	0,02	0,02

Graphs of the relation between maximum acceptable pressure and temperature for ball valves PN16; PN25; PN40



Product range

AH-2c ball valves with butt-weld ends with handle DN15-25 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	B1 [mm]	B2 [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	15	16/25/40	3/A015WW5012	3/A015WW5014	15	130	21	29	21,3	3,2	120	4	74	1
	20	16/25/40	3/A020WW5013	3/A020WW5016	20	150	23,5	32	26,9	3,6	120	4	77	1,5
	25	16/25/40	3/A025WW5011	3/A025WW5014	25	160	30	40	35	5	155	4	101	2,5

On request: connection flange for actuator, fire safe

AH-2c ball valves with butt-weld ends with handle DN32-80 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	32	16/25/40	3/A032WW5005	3/A032WW5002	32	270	70	42,4	4	170	26	122	4
	40	16/25/40	3/A040WW5005	3/A040WW5002	40	190	80	48,3	3,6	170	25	126	4,5
	50	16/25/40	3/A050WW5005	3/A050WW5002	50	216	95	60,3	4	170	25	134	4,5
	65	16/25/40	3/A065WW5005	3/A065WW5002	64	241	117,5	76,1	5	250	36	161	9
	80	16/25/40	3/A080WW5005	3/A080WW5002	78	283	140	88,9	5,6	250	34	164	12

On request: connection flange for actuator, fire safe

AH-12c ball valves with butt-weld ends with handle DN100-150 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	H1 [mm]	H2 [mm]	[kg]
	100	16/25/40	3/A100WW5004	3/A100WW5002	101	305	177,8	114,3	5,6	500	54	173	28
	125	16/25/40	3/A125WW5004	3/A125WW5002	126	600	219,1	139,7	6,3	500	66	206	51
	150	16/25/40	3/A150WW5008	3/A150WW5019	152	457	273	168,3	7,1	800	70	305	79

On request: connection flange for actuator, fire safe, trunnion mounted ball, DBB, injection, PMSS, Metal-Metal sealing

AH-15c ball valves with butt-weld ends, with gear DN200-350 PN16/25/40

Work temp. -40°C +100°C, trunnion mounted ball, full bore, DBB, fire safe, compensation system, antistatic protection, PMSS

	DN	PN [bar]	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	B [mm]	C [mm]	H [mm]	F [mm]	Dp [mm]	conn. flange	[kg]
	200	16	3/A200WW3011	3/A200WW3012	202	521	323,9	219,1	8,8	97	253	303	202	605	300	F14	155
	200	25/40	3/A200WW5014	3/A200WW5015	202	521	323,9	219,1	8,8	97	253	303	202	705	500	F14	156
	250	16	3/A250WW3005	3/A250WW3006	253	559	406,4	273	10	97	315	365	360	825	300	F16	260
	250	25	3/A250WW4005	3/A250WW4006	253	559	406,4	273	10	97	315	365	360	875	400	F16	261
	250	40	3/A250WW5006	3/A250WW5002	253	559	406,4	273	10	97	315	365	360	975	600	F16	262
	300	16	3/A300WW3006	3/A300WW3007	304	635	508	323,9	10	97	356	406	400	956	400	F16	435
	300	25	3/A300WW4005	3/A300WW4006	304	635	508	323,9	10	97	356	406	400	1006	500	F16	436
	300	40	3/A300WW5006	3/A300WW5002	304	635	508	323,9	10	138	356	411	400	1056	600	F16	450
	350	16	3/A350WW3004	3/A350WW3005	336	762	558	355,6	11	97	378	428	421	1049	500	F16	579
	350	25	3/A350WW4005	3/A350WW4006	336	762	558	355,6	11	97	378	428	421	1149	700	F16	581
	350	40	3/A350WW5006	3/A350WW5002	336	762	558	355,6	11	138	378	433	421	1149	700	F16	596

On request: injection system, base, Metal-Metal sealing up to DN300, connection flange acc. to PN-EN ISO 521

AH-15c ball valves with butt-weld ends, with gear DN400-800 PN16/25/40

Work temp. -40°C +100°C, trunnion mounted ball, full bore, DBB, fire safe, compensation system, antistatic protection, PMSS, injection system

	DN	PN [bar]	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	d [mm]	t [mm]	A [mm]	B [mm]	C [mm]	H [mm]	F [mm]	Dp [mm]	conn. flange	[kg]
	400	16	3/A400WW3004	3/A400WW3005	386	838	660	406,4	12,5	138	433	488	480	1163	500	F25	935
	400	25	3/A400WW4008	3/A400WW4009	386	838	660	406,4	12,5	138	433	488	480	1263	700	F25	937
	400	40	3/A400WW5005	3/A400WW5006	386	838	660	406,4	12,5	138	433	488	480	1113	400	F25	943
	500	16	3/A500WW3006	3/A500WW3011	488	991	813	508	12,5	180	561	624,5	570	1344,5	300	F30	1670
	500	25	3/A500WW4009	3/A500WW4011	488	991	813	508	12,5	180	561	624,5	570	1394,5	400	F30	1671
	500	40	3/A500WW5003	3/A500WW5006	488	991	813	508	12,5	180	561	624,5	570	1444,5	500	F30	1672
	600	16/25/40	3/A600WW5003	3/A600WW5008	588	1143	988	610	12,5	253	654	739	682	1671	500	F30	2770
	700	16/25	3/A700WW4003	3/A700WW4008	684	1346	1126	711	14,2	253	806	891	790	1931	500	F35	4325
	700	40	3/A700WW5003	3/A700WW5007	684	1346	1126	711	14,2	253	806	891	790	1981	600	F35	4327
	800	16/25	3/A800WW4002	3/A800WW4009	780	1524	1300	813	16	253	890	975	900	2125	500	F35	6342
	800	40	3/A800WW5002	3/A800WW5006	780	1524	1300	813	16	253	890	975	900	2175	600	F35	6343

On request: connection flange acc. to PN-EN ISO 5211

AH-2c ball valve with threaded ends, with handle DN15-25 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	B1 [mm]	B2 [mm]	RG	A [mm]	H1 [mm]	H2 [mm]	[kg]
	15	16/25/40	3/A015GG5010	3/A015GG5012	15	100	21	29	1/2"	120	4	74	0,8
	20	16/25/40	3/A020GG5012	3/A020GG5014	20	110	23	32	3/4"	120	4	77	1,2
	25	16/25/40	3/A025GG5010	3/A025GG5012	25	135	30	40	1"	155	4	101	2

On request: connection flange for actuator, fire safe, connection with thread NPT

AH-2c ball valves with threaded ends with handle DN32-80 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	RG	A [mm]	H1 [mm]	H2 [mm]	[kg]
	32	16/25/40	3/A032GG5005	3/A032GG5002	32	150	70	1 1/4"	170	26	122	4,1
	40	16/25/40	3/A040GG5005	3/A040GG5002	40	160	80	1 1/2"	170	25	126	4,8
	50	16/25/40	3/A050GG5005	3/A050GG5002	50	160	95	2"	170	25	134	6,2
	65	16/25/40	3/A065GG5005	3/A065GG5002	64	210	117,5	2 1/2"	250	36	161	10,6
	80	16/25/40	3/A080GG5005	3/A080GG5002	78	240	140	3"	250	34	164	14

On request: connection flange for actuator, fire safe, connection with thread NPT

AH-2c ball valves with flanged ends with handle DN15-25 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	B1 [mm]	B2 [mm]	D [mm]	D2 [mm]	A [mm]	H1 [mm]	H2 [mm]	n	d [mm]
	15	16/25/40	3/A015FF5015	3/A015FF5009	15	130	21	29	95	65	120	4	74	4	14
	20	16/25/40	3/A020FF5012	3/A020FF5008	20	150	23,5	32	105	75	120	4	77	4	14
	25	16/25/40	3/A025FF5021	3/A025FF5013	25	160	30	40	115	85	155	4	101	4	14

On request: connection flange for actuator, fire safe

AH-2c ball valves with flanged ends with handle DN32-80 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

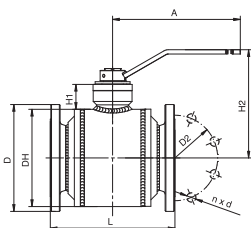
	DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	D [mm]	D2 [mm]	A [mm]	H1 [mm]	H2 [mm]	n	d [mm]	[kg]
	32	16/25/40	3/A032FF5005	3/A032FF5009	32	104	70	140	100	170	26	122	4	18	6
	40	16/25/40	3/A040FF5005	3/A040FF5009	40	106	80	150	110	170	25	126	4	18	7
	50	16/25/40	3/A050FF5005	3/A050FF5014	50	108	95	165	125	170	25	134	4	18	8
	65	16/25/40	3/A065FF5005	3/A065FF5013	64	112	117,5	185	145	250	36	161	8	18	11
	80	16/25/40	3/A080FF5005	3/A080FF5011	78	140	140	200	160	250	34	164	8	18	15

On request: connection flange for actuator, fire safe

AH-11c ball valves with flanged ends, with handle DN100-150 PN16/25/40

Work temp. -40°C +100°C, floating ball, full bore, compensation system, antistatic protection

DN	PN	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	D [mm]	D2 [mm]	A [mm]	H1 [mm]	H2 [mm]	n	d [mm]	[kg]
100	16	3/A100FF3004	3/A100FF3002	101	190	177,8	220	180	500	54	173	8	18	28
100	25/40	3/A100FF5004	3/A100FF5015	101	190	177,8	235	190	500	54	173	8	22	29
125	16	3/A125FF3004	3/A125FF3002	126	325	219,1	250	210	500	66	206	8	18	51
125	25/40	3/A125FF5004	3/A125FF5002	126	325	219,1	270	220	500	66	206	8	26	53
150	16	3/A150FF3004	3/A150FF3020	152	350	273	285	240	800	70	305	8	22	79
150	25/40	3/A150FF5004	3/A150FF5002	152	350	273	300	250	800	70	305	8	26	82

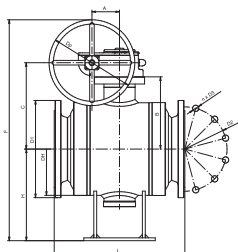


On request: connection flange for actuator, fire safe, trunnion mounted ball, DBB, injection system, PMSS, Metal-Metal sealing

AH-14c ball valves with flanged ends, with gear DN200-350 PN16/25/40

Work temp. -40°C +100°C, trunnion mounted ball, full bore, DBB, fire safe, compensation system, antistatic protection, PMSS

DN	PN [bar]	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	n	D3 [mm]	A [mm]	B [mm]	C [mm]	H [mm]	F [mm]	Dp [mm]	conn. flange	[kg]
200	16	3/A200KK3014	3/A200KK3020	202	457	323,9	340	295	12	22	97	253	303	202	605	300	F14	175
200	25	3/A200KK4018	3/A200KK4019	202	457	323,9	360	310	12	26	97	253	303	202	705	500	F14	181
200	40	3/A200KK5014	3/A200KK5011	202	457	323,9	375	320	12	30	97	253	303	202	705	500	F14	188
250	16	3/A250KK3004	3/A250KK3002	253	533	406,4	405	355	12	26	97	315	365	360	825	300	F16	283
250	25	3/A250KK4004	3/A250KK4002	253	533	406,4	425	370	12	30	97	315	365	360	875	400	F16	296
250	40	3/A250KK5004	3/A250KK5002	253	533	406,4	450	385	12	33	97	315	365	360	975	600	F16	316
300	16	3/A300KK3004	3/A300KK3002	304	610	508	460	410	12	26	97	356	406	400	956	400	F16	468
300	25	3/A300KK4004	3/A300KK4002	304	610	508	485	430	16	30	97	356	406	400	1006	500	F16	484
300	40	3/A300KK5004	3/A300KK5012	304	610	508	515	450	16	33	138	356	411	400	1056	600	F16	525
350	16	3/A350KK3004	3/A350KK3002	336	686	558	520	470	16	26	97	378	428	421	1049	500	F16	610
350	25	3/A350KK4004	3/A350KK4002	336	686	558	555	490	16	33	97	378	428	421	1149	700	F16	640
350	40	3/A350KK5004	3/A350KK5002	336	686	558	580	510	16	36	138	378	433	421	1149	700	F16	670

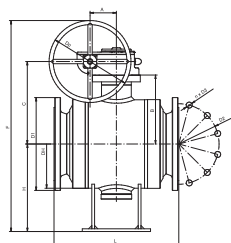


On request: injection system, base, Metal-Metal sealing, connection flange acc. to PN-EN ISO 5211

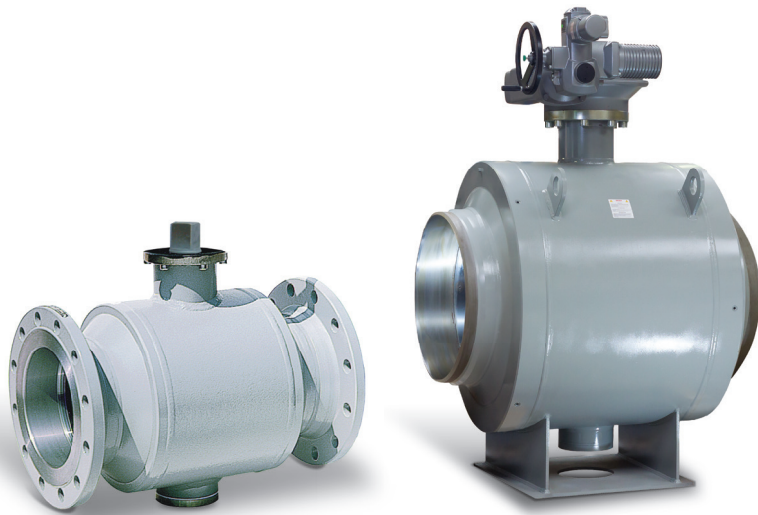
AH-14c ball valves with flanged ends, with gear DN400-800 PN16/25/40

Work temp. -40°C +100°C, trunnion mounted ball, full bore, DBB, fire safe, compensation system, antistatic protection, PMSS, injection system

DN	PN [bar]	Catalogue no. GAS	Catalogue no. LPG	bore diameter of ball	L [mm]	DH [mm]	D1 [mm]	D2 [mm]	n	D3 [mm]	A [mm]	B [mm]	C [mm]	H [mm]	F [mm]	Dp [mm]	conn. flange	[kg]
400	16	3/A400FF3006	3/A400FF3007	386	762	660	580	525	16	30	138	433	488	480	1163	500	F25	987
400	25	3/A400FF4006	3/A400FF4007	386	762	660	620	550	16	36	138	433	488	480	1263	700	F25	1019
400	40	3/A400FF5007	3/A400FF5008	386	762	660	660	585	16	39	138	433	488	480	1113	400	F25	1072
500	16	3/A500FF3008	3/A500FF3011	488	914	813	715	650	20	33	180	561	625	570	1345	300	F30	1750
500	25	3/A500FF4007	3/A500FF4011	488	914	813	730	660	20	36	180	561	625	570	1395	400	F30	1792
500	40	3/A500FF5002	3/A500FF5006	488	914	813	755	670	20	42	180	561	625	570	1445	500	F30	1832
600	16	3/A600FF3006	3/A600FF3009	588	1067	988	840	770	20	36	253	654	739	682	1671	500	F30	2708
600	25	3/A600FF4006	3/A600FF4009	588	1067	988	845	770	20	39	253	654	739	682	1671	500	F30	2837
600	40	3/A600FF5003	3/A600FF5006	588	1067	988	890	795	20	48	253	654	739	682	1671	500	F30	3087
700	16	3/A700FF3002	3/A700FF3005	684	1245	1126	910	840	24	36	253	806	891	790	1931	500	F35	4431
700	25	3/A700FF4002	3/A700FF4005	684	1245	1126	960	875	24	42	253	806	891	790	1931	500	F35	4513
700	40	3/A700FF5002	3/A700FF5005	684	1245	1126	995	900	24	48	253	806	891	790	1981	600	F35	4625
800	16	3/A800FF3002	3/A800FF3005	780	1372	1300	1025	950	24	39	253	890	975	900	2125	500	F35	5577
800	25	3/A800FF4001	3/A800FF4005	780	1372	1300	1085	990	24	48	253	890	975	900	2125	500	F35	6657
800	40	3/A800FF5001	3/A800FF5004	780	1372	1300	1140	1030	24	56	253	890	975	900	2175	600	F35	6493



On request: connection flange acc. to PN-EN ISO 5211



BALLOMAX[®]
 type AH
 ball valves
 with full bore,
 for PN 63-100

PN63–PN100 high pressure ball valves are designed to meet the requirements of our most demanding customers. Materials for the production of the valves are chosen according to the medium, customer’s requirements and operating conditions. Due to wide range of default equipment and a lot of available options, AH valves may be used on every stage of producing and delivering natural gas and other media. The structure of the valve guarantees full safety and very long utilisation period.

Using the valve

natural gas, other gas mixtures, fuels, oils, others

Production range

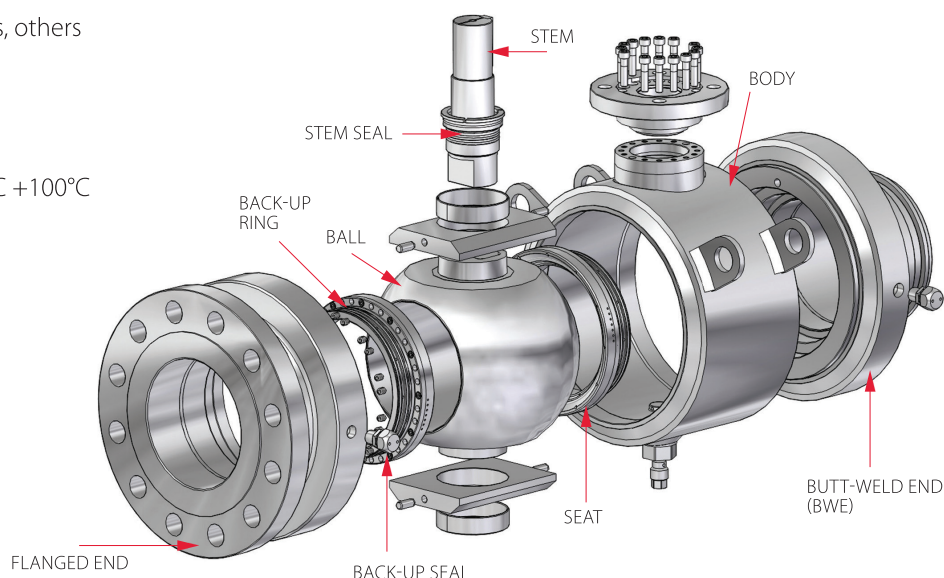
DN15-DN700

Temperature range

- 40°C +100°C (standard); optional: - 60°C +100°C

Available options:

flange and installation length according to API 6D (CL 400; CL 600)



Materials

DN	BODY	FLANGED END	BUTT-WELD END (BWE)	BALL	STEM	BACK-UP RING	SEAT	BACK-UP SEAL	STEM SEAL
15	P355NH; P355NL1; S355J2; S355J2H		P355NH; P355NL1; S355J2; S355J2H	X5CrNi18-10 (AISI 304)		CS + Ni-Cr SS	PTFE + C		
20									
25									
32									
40									
50									
65	P355NH; P355NL1; P355QH; S355J2			S355J2 + EN A350 LF2 + EN	X20Cr13 (AISI 420)			HNBR; EPDM; FKM; GRAPHITE	HNBR; EPDM; FKM; GRAPHITE
80									
100									
150									
200									
250									
300	A350LF2; P355NH; P355QH		P355NH; P355NL1; S355J2; S355J2H	A350 LF2 + EN		CS + Ni-Cr CS + EN	HNBR		
350									
400									
500									
600									
700									

Ballomax® type AH ball valves – PN 63

Dimensions [mm]

DN	d	F	t	DBB	IS	L			B	I	D1	T
						FxF	WxW	GxG				
15	15	X	-	-	-	130,0	165,0	100,0	44,0	21,0	21,3	2,9
20	20	X	-	-	-	150,0	190,0	110,0	47,0	24,0	26,9	3,2
25	25	X	-	-	-	160,0	216,0	135,0	60,0	30,0	35,0	4,5
32	32	X	-	-	-	180,0	229,0	-	83,0	38,0	44,5	5,0
40	40	X	-	-	-	200,0	241,0	-	87,0	45,0	51,0	5,0
50	50	X	-	-	-	230,0	292,0	-	121,0	53,0	60,3	5,0
		-	X	X								
65	64	X	-	-	-	290,0	330,0	-	132,0	67,0	76,1	7,1
		-	X	X								
80	78	-	X	X	OPTION	310,0	356,0	-	143,0	124,0	88,9	6,3
100	101	-	X	X	OPTION	350,0	432,0	-	169,0	141,0	114,3	7,1
150	152	-	X	X	X	450,0	559,0	-	228,0	190,0	168,3	8,0
200	202	-	X	X	X	597,0	660,0	-	290,0	350,0	219,1	8,8
250	253	-	X	X	X	673,0	787,0	-	328,0	430,0	273,0	10,0
300	304	-	X	X	X	762,0	838,0	-	395,0	470,0	323,9	10,0
350	335	-	X	X	X	826,0	889,0	-	416,0	490,0	355,6	12,5
400	387	-	X	X	X	902,0	991,0	-	488,0	528,0	406,4	14,2
500	489	-	X	X	X	1054,0	1194,0	-	607,0	602,0	508,0	16,0
600	589	-	X	X	X	1232,0	1232,0	-	722,0	795,0	610,0	16,0
700	684	-	X	X	X	1397,0	1397,0	-	796,0	880,0	711,0	17,5

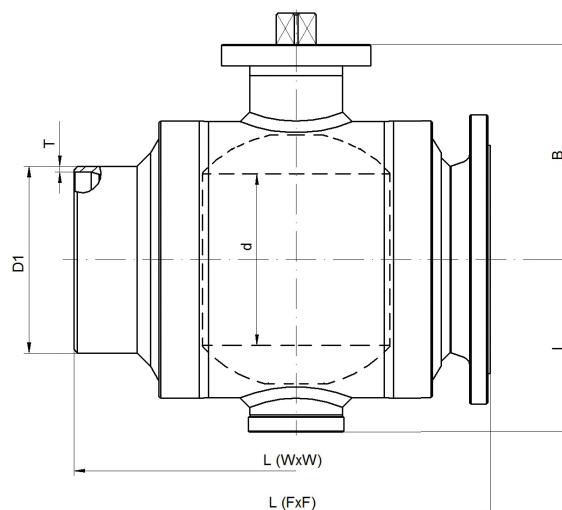
Weight [kg]

DN	FxF	WxW	GxG
	PN 63	PN 63	PN 63
15	3,5	1,4	1,2
20	5,5	2,0	1,6
25	7,8	3,7	3,1
32	9,4	5,8	-
40	12,6	7,9	-
50	15,7	10,6	-
	16,2	19,0	-
65	21,1	14,3	-
	21,8	15,0	-
80	35,0	25,0	-
100	60,0	48,0	-
150	143,0	116,0	-
200	368,0	318,0	-
250	591,0	512,0	-
300	917,0	854,0	-
350	1177,0	1052,0	-
400	1522,0	1369,0	-
500	2583,0	2476,0	-
600	3723,0	3132,0	-
700	5398,0	4608,0	-

Additional comments:

Flange dimension acc. to EN 1092-1
 Flanges standard sealing surface: B2 acc. to EN 1092-1
 Butt-weld ends acc. to EN 12627
 Dimensions D1 and T to agree
 Threaded end acc. to ISO 228-1 or ASME B1.20.1

X = Available
 F = Floating ball
 t = Trunnion mounted ball
 DBB = Double Block and Bleed
 IS = Injection System
 FxF = Flanged ends
 WxW = But-weld ends
 GxG = Threaded ends



Ballomax® type AH ball valves – PN 100

Dimensions [mm]

DN	d	F	t	DBB	IS	L			B	I	D1	T
						FxF	WxW	GxG				
15	15	X	-	-	-	130,0	165,0	100,0	44,0	21,0	21,3	2,9
20	20	X	-	-	-	150,0	190,0	110,0	47,0	24,0	26,9	3,2
25	25	X	-	-	-	160,0	216,0	135,0	60,0	30,0	35,0	4,5
32	32	X	-	-	-	180,0	229,0	-	83,0	38,0	44,5	5,0
40	40	X	-	-	-	200,0	241,0	-	87,0	45,0	51,0	5,0
50	50	X	-	-	-	230,0	292,0	-	121,0	53,0	60,3	5,0
		-	X	X								
65	64	X	-	-	-	290,0	330,0	-	132,0	67,0	76,1	7,1
		-	X	X								
80	78	-	X	X	OPTION	310,0	356,0	-	143,0	124,0	88,9	6,3
100	101	-	X	X	OPTION	350,0	432,0	-	169,0	141,0	114,3	7,1
150	152	-	X	X	X	450,0	559,0	-	228,0	190,0	168,3	8,0
200	202	-	X	X	X	660,0	660,0	-	290,0	350,0	219,1	8,8
250	253	-	X	X	X	787,0	787,0	-	328,0	430,0	273,0	10,0
300	304	-	X	X	X	838,0	838,0	-	395,0	470,0	323,9	10,0
350	335	-	X	X	X	889,0	889,0	-	416,0	490,0	355,6	12,5
400	387	-	X	X	X	991,0	991,0	-	488,0	528,0	406,4	14,2
500	489	-	X	X	X	1194,0	1194,0	-	607,0	602,0	508,0	16,0
600	589	-	X	X	X	1397,0	1397,0	-	722,0	795,0	610,0	16,0
700	684	-	X	X	X	1549,0	1549,0	-	796,0	880,0	711,0	17,5

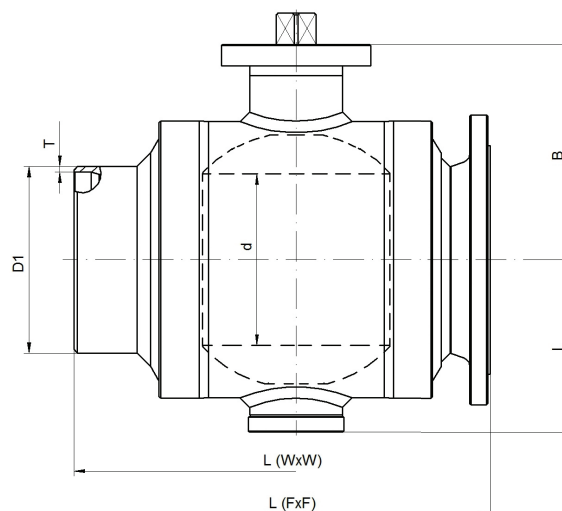
Weight [kg]

DN	FxF	WxW	GxG
	PN 100	PN 100	PN 100
15	3,5	1,4	1,2
20	5,5	2,0	1,6
25	7,8	3,7	3,1
32	9,4	5,8	-
40	12,6	7,9	-
50	16,9	10,6	-
	17,5	19,0	-
65	22,8	14,3	-
	23,6	15,0	-
80	37,0	25,0	-
100	66,0	48,0	-
150	152,0	116,0	-
200	390,0	318,0	-
250	665,0	512,0	-
300	1043,0	854,0	-
350	1302,0	1052,0	-
400	1853,0	1565,0	-
500	3339,0	2863,0	-
600	4216,0	3132,0	-
700	5910,0	4608,0	-

Additional comments:

Flange dimension acc. to EN 1092-1
 Flanges standard sealing surface: B2 acc to EN 1092-1
 Butt-weld ends acc. to EN 12627
 Dimensions D1 and T to agree
 Threaded end acc. to ISO 228-1 or ASME B1.20.1

X = Available
 F = Floating ball
 t = Trunnion mounted ball
 DBB = Double Block and Bleed
 IS = Injection System
 FxF = Flanged ends
 WxW = Butt-weld ends
 GxG = Threaded ends





Accessories BALLOMAX® type AH ball valves

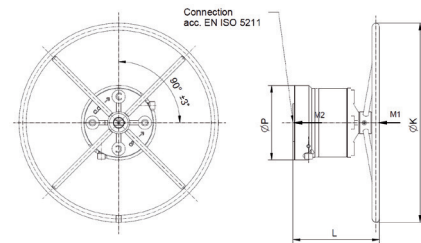
Planetary gear

The planetary gear, a product of BROEN Oil & Gas, is used for manual actuation of ball valve and is substantially reduces the effort required for the operation.

The Open/Closed, end positions are enforced by bumpers which are set during the installation of the gear on the valve and are then protected against further changes to the initial settings.

The PO-27 planetary gear is a non-self-locking, two stage planetary gear, using cylindrical lubricated gears.

The planetary gear can also be installed on top of stem extension columns, or between the valve and the respective columns, thereby enabling the actuation of valves being installed on underground piping systems.



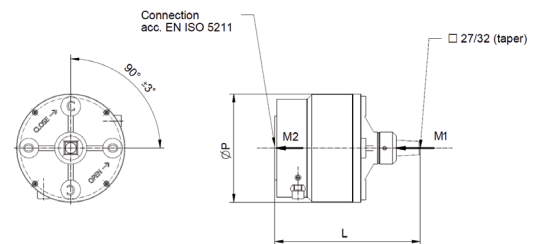
Dimensions [mm]

Type of gear	Transmission	M1 [Nm]	M2 [Nm]	L [mm]	ØK [mm]	ØP [mm]	Max. pressure exercised on the wheel 1 hand	Connection acc. to ISO5211	Housing for the stem and its depth [mm x mm]	~ Weight [kg]
PO-27/100	1:27	100	2000	~200	450	170	460	F12 F14	22 x 35 lub 27 x 40 lub 36 x 50	18
PO-27/200	1:27	200	4000	~270	650	220	660	F14 F16	36 x 60 lub Ø60 x 80 with insert 18 x 11	37,3
PO-27/300	1:27	290	6000	~300	800	300	720	F25	Ø72 x 110 with insert 20 x 12	54,5

M1 – inlet torque

M2 – outlet torque

Ambient temperature [°C]: -40 ÷ +150



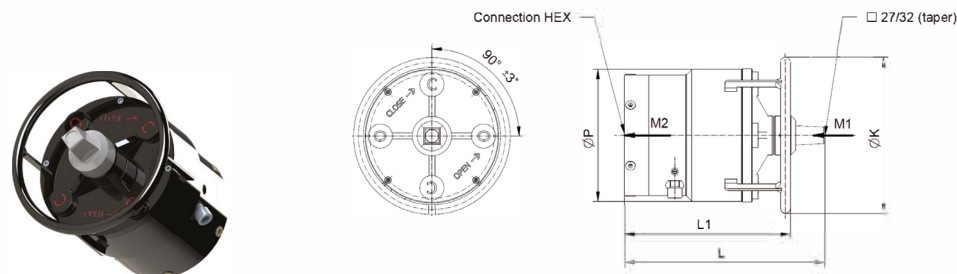
Dimensions [mm]

Type of gear	Transmission	M1 [Nm]	M2 [Nm]	L [mm]	ØP [mm]	Connection acc. to ISO 5211	Housing for the stem and its depth [mm x mm]	~ Weight [kg]
PO-27/100/SQ	1:27	100	2000	~230	157	F12 F14	22 x 35 lub 27 x 40 lub 36 x 50	16
PO-27/200/SQ	1:27	200	4000	~290	220	F14 F16	36 x 60 lub Ø60 x 80 with insert 18 x 11	35
PO-27/300/SQ	1:27	290	6000	~320	220	F25	Ø72 x 110 with insert 20 x 12	52

M1 – inlet torque

M2 – outlet torque

Ambient temperature [°C]: -40 ÷ +150



Dimensions [mm]

Type of gear	Transmission	M1 [Nm]	M2 [Nm]	L [mm]	L1 [mm]	ØP [mm]	ØK [mm]	HEX1 x HEX2 connection	~ Weight [kg]
PO-27/100/HEX	1:27	50 lub 100	1000 lub 2000	~270	~224	157	185	27 x 70 50 x 91	22
PO-27/200/HEX	1:27	290	6000	~330	~274	220	258	50 x 91	44

M1 – inlet torque

M2 – outlet torque

Ambient temperature [°C]: -40 ÷ +150

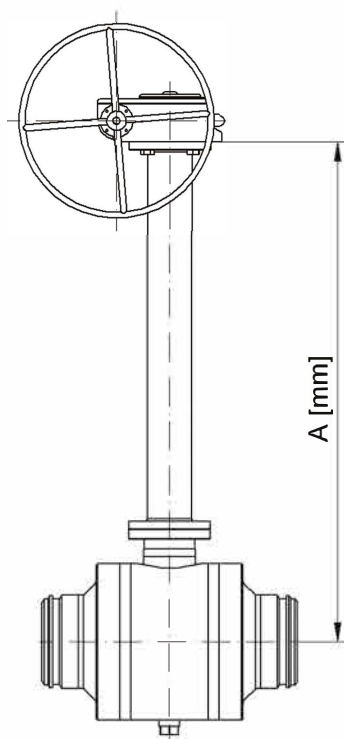
Columns

The stem extension columns are made according to the BROEN Oil & Gas standard, or to a customer requested height.

Rigid telescope type stem extensions are also available.

A lever, planetary or other type of gear or any other drive type (electric, pneumatic, hydraulic etc.) can be installed on top of the column. A planetary gear can also be installed directly on the valve, beneath the column.

The height of stem extension column is counted from the valve axis to top of the the column (size „A“). This dimension should be included in the request for a quotation and in the purchase order.



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