

Technical description

Ball valves are designed and manufactured to ensure maximum durability and reliability. Ball valves of this design can be applied at presence of firm particles up to 30µm in a working medium. There is a constructional gap between the ball and seat and so there is a possibility of its adjustment during operation.

Application

The ball valves are intended for gaseous and liquid media, e.g. air, propane-butane, city gas, petrol, diesel, water, non-aggressive vapours, gases and liquid. The design of the control valve does not allow full closing of the operating medium flow.

Basic standards for design

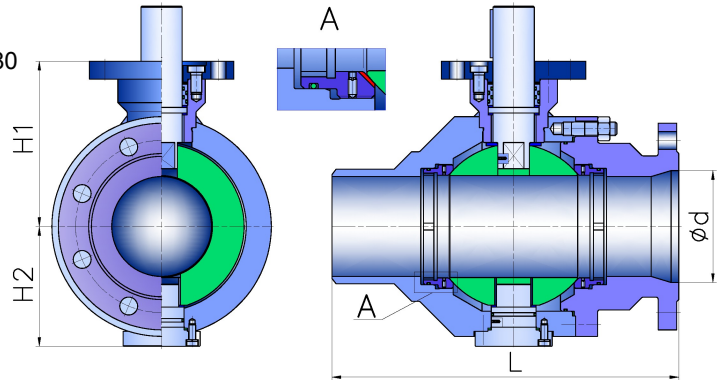
- Building length.....EN 558-1, EN 12982
- Flange dimension.....EN 1092-1, GOST 12815-80
- Dimension of the welding-on ends.EN 12627
- Testing.....EN 12266-1
- Pressure-temperature dependence.....EN 12516-1
- Top flange dimension.....EN ISO 5211

Control method

By hand lever, gearbox, electric actuator, electric actuator with gearbox, pneumatic actuator

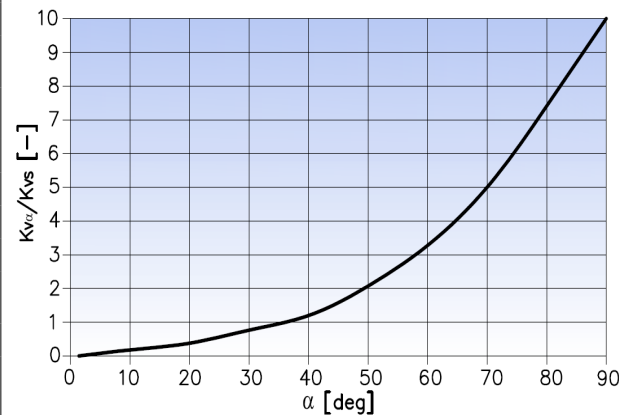
Connection into piping

Flanged, welding-on



MATERIAL SPECIFICATION

Designation	Material				
Body	A350 LF2	A105	1.4541	1.4401	1.4404
Bonnet	A350 LF2	A105	1.4541	1.4401	1.4404
Ball	X12Cr13 + Cr (ENP)	X12Cr13 + Cr (ENP)	1.4541 + Cr (ENP)	1.4401 + Cr (ENP)	1.4404 + Cr (ENP)
Seat	A350 LF2 + STL	A105 + STL	1.4541	1.4401	1.4404
Upper Stem	X12Cr13	X12Cr13	1.4541	1.4401	1.4404
Bottom stem	X12Cr13	X12Cr13	1.4541	1.4401	1.4404
Bottom cover	A350 LF2	A105	1.4541	1.4401	1.4404
Flange	A350 LF2	A105	1.4541	1.4401	1.4404
Bolt	25CrMo4, A2-70	КП 8.8	A2 - 70	A2 - 70	A2 - 70
Nut	A2 - 70	КП 8	A2 - 70	A2 - 70	A2 - 70
Gasket	Graphite				
O-ring	NBR, HNBR, EPDM, VITON, VITON GLT				



Dimensions according to DIN standards – Flanged (RF)

DN	Kvs m ³ /h	PN 25						PN 40						PN 63						PN 100					
		L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)
25	65	160	28	101	68	F07	5	160	28	101	68	F07	5	160	28	101	68	F07	14	160	28	101	68	F07	18
50	320	230	54	119	107	F07	19	230	54	119	107	F07	18	230	54	119	107	F07	30	230	52	119	107	F07	36
65	570	290	70	170	110	F10	28	290	70	170	110	F10	25	290	69	170	110	F10	42	290	66	170	110	F10 / F12	52
80	850	310	82	215	118	F12	32	310	82	215	118	F12	30	310	80	215	118	F12	55	310	78	215	118	F12	72
100	1420	350	107	218	153	F12	53	350	107	218	153	F12	95	350	100	218	153	F12	86	350	101	218	153	F12 / F14	104
125	2020	400	131	229	170	F14	79	400	131	229	170	F14	120	400	125	229	170	F14	154	400	124	229	170	F14 / F16	162
150	3400	450	159	266	190	F16	100	450	159	266	193	F16	200	450	150	266	193	F16	225	450	149	266	193	F16 / F25	238
200	6075	550	207	312	210	F25	172	550	207	312	210	F25	246	550	203	312	210	F25	354	550	194	312	210	F25	448
250	10600	650	259	475	270	F30	284	650	259	475	270	F30	308	650	253	475	270	F30	604	650	241	475	270	F30	660
300	16800	750	308	510	340	F30	494	750	308	510	340	F30	512	750	299	510	340	F30	830	750	288	510	340	F30	1070

Dimensions according to DIN standards – Welding-on (BW)

DN	Kvs m ³ /h	PN 25						PN 40						PN 63						PN 100					
		L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)
25	65	270	28,5	101	68	F07	5	270	28,5	101	68	F07	5	270	28,5	101	68	F07	14	270	27,9	101	68	F07	18
50	320	300	54,5	119	107	F07	19	300	54,5	119	107	F07	18	300	52,3	119	107	F07	30	300	51,3	119	107	F07	36
65	570	360	70,3	170	110	F10	28	360	70,3	170	110	F10	25	360	68,1	170	110	F10	42	360	66,1	170	110	F10 / F12	52
80	850	390	82,5	215	118	F12	32	390	82,5	215	118	F12	30	390	79,9	215	118	F12	55	390	77,7	215	118	F12	72
100	1420	450	107,1	218	153	F12	53	450	107,1	218	153	F12	95	450	105,3	218	153	F12	86	450	100,3	218	153	F12 / F14	104
125	2020	525	131,7	229	170	F14	79	525	131,7	229	170	F14	120	525	127,8	229	170	F14	154	525	123,7	229	170	F14 / F16	162
150	3400	600	159,3	266	190	F16	100	600	159,3	266	193	F16	200	600	155,7	266	193	F16	225	600	148,3	266	193	F16 / F25	238
200	6075	600	206,5	312	210	F25	172	600	206,5	312	210	F25	246	600	204,9	312	210	F25	354	600	194,1	312	210	F25	448
250	10600	730	258,5	475	270	F30	284	730	258,8	475	270	F30	308	730	255,4	475	270	F30	604	730	241	475	270	F30	660
300	16800	850	307,9	510	340	F30	494	850	307,9	510	340	F30	512	850	301,9	510	340	F30	830	850	278,9	510	340	F30	1070

Dimensions according to GOST - Flanged

DN	Kvs m ³ /h	PN 25						PN 40						PN 63						PN 100					
		L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)	L	d	H1	H2	EN ISO 5211	(kg)
25	65	210	25	101	68	F07	5	210	25	101	68	F07	5	210	25	101	68	F07	14	210	25	101	68	F07	18
50	320	230	49	119	107	F07	19	230	48	119	107	F07	18	230	47	119	107	F07	30	230	45	119	107	F07	36
65	570	290	66	170	110	F10	28	290	66	170	110	F10	25	290	64	170	110	F10	42	290	62	170	110	F10 / F12	52
80	850	310	78	215	118	F12	32	310	78	215	118	F12	30	310	77	215	118	F12	55	310	75	215	118	F12	72
100	1420	350	96	218	153	F12	53	350	96	218	153	F12	95	350	94	218	153	F12	86	350	92	218	153	F12 / F14	104
125	2020	400	121	229	170	F14	79	400	120	229	170	F14	120	400	118	229	170	F14	154	400	112	229	170	F14 / F16	162
150	3400	480	146	266	190	F16	100	480	145	266	193	F16	200	480	142	266	193	F16	225	480	136	266	193	F16 / F25	238
200	6075	550	202	312	210	F25	172	550	200	312	210	F25	246	550	198	312	210	F25	354	550	190	312	210	F25	448
250	10600	650	254	475	270	F30	284	650	252	475	270	F30	308	650	246	475	270	F30	604	650	236	475	270	F30	660
300	16800	750	303	510	340	F30	494	750	301	510	340	F30	512	750	294	510	340	F30	830	750	284	510	340	F30	1070

Type designation
K86 XYZ RST – M PN / A
K86 – Valve type – Control Ball Valve

X – Body design

- 2....Two pieces
- 3....Three pieces

Y – Seat execution

- 9....Metal to metal

Z – Control stem sealing method

- 1....Dynamic, Static - 2 x O - ring
- 2.... Dynamic - 2xO-ring, Static-2xO-ring + Graphite
- 3....Fire safe: Dynamic - 2 x O - ring + Graphite packing,
Static - O - ring + Graphite
- 4....V-shaped PTFE O-rings
- 5....Graphite packing

R – Flow direction

- 1....Straight, full flow
- 2....Straight, reduced flow

PN – Nominal pressure

S – Connection into piping

- 1....Flanged
- 2....Welding-on
- 3....Combined

T – Control method

- 1....By hand lever
- 2....Hand wheel with gearbox
- 3....Electric actuator
- 4....Electric actuator with gearbox
- 5....Pneumatic actuator
- 9....Without control, bare shaft

M – Body material

- 0....Stainless steel
- 2....Alloy steel
- 4....Carbon steel

A – Special execution

- AS....Antistatic design