

RBR
Ball Valves

40 Series

FLOATING
SPLIT BODY
BALL VALVES



RBR

Specialist in Quality and Reliability since mid sixty's.

RBR was founded in 1964 and it has always been acknowledged worldwide as one of the leading manufactures of high quality and reliability Ball Valves for industrial application.

The **RBR** Ball Valves are successfully installed in many



Chemical, Petrochemical, Oil, Gas, Onshore and Offshore applications.

The keys of the long lasting success of **RBR** are:

- Constant **development** of **RBR** products and performance;

- Continous improvement of **RBR process capability**;
- Focus on the **skills** of **RBR** people.

RBR goals is to meet the expectations of the customers **delivering on time** the best product at a competitive price with an excellent **before and after sales service**.

RBR'S NEWS



RBR Ball Valves are successfully installed on the first Italian Navy air carrier.



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Where we are

RBR headquarter is located 10 km from Central Milan in the area of the new exhibition centre of Milan (Italy), close to Malpensa International Airport, near to all the main motorway and 150-200 km from the 3 most important Italian seaports.



RBR



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RBR
Ball Valves

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Our Team includes our valuable representatives and local distributors in various countries worldwide.

Please don't hesitate to contact our sales department for more information.



FLOATING SPLIT BODY BALL VALVES

STANDARD FEATURES

Split body Floating Ball Valves, 2/3 pcs split bolted body, side entry, full and reduced bore:

- Fire safe certified (BS 6755, API 607 and API 6FA);
- Stem sealing by three gaskets: one graphite seal and two o-rings;
- Antistatic device;
- Lever/Gear Operated;
- Flanges ANSI, UNI and DIN standards available.

FEATURES UPON REQUEST

- BW or SW ends;
- Cryogenic extension bonnet;
- Painting according to customer specification;
- Power assisted control by electric, pneumatic or hydraulic actuators.
- Metal seated valves;
- Transition pieces (pups);
- Locking device.



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PRODUCT RANGE Forged Materials Floating Ball Valves

The full range of the RBR floating ball valves are designed in accordance with the BS5351, B16.10 and B16.5 Standard and verified following the PED Standards.

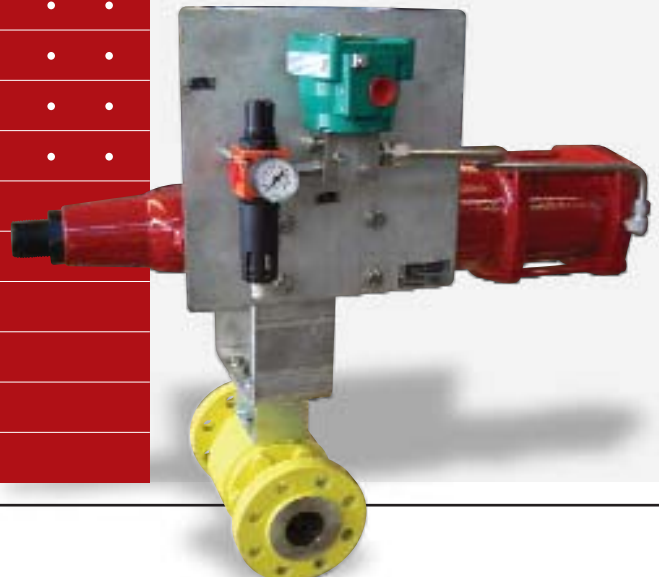
The valves are constructed with forged materials in the various grades of carbon steel, stainless steels and alloys in compliance of the most severe conditions of service. Even meet the demands of SIL3.

A wide range of options, sealing materials and welding overlays are also available upon request. On request RBR ball valves can be supplied accordingly with NACE MR-01-75 Standards.

PRODUCT RANGE Casting Materials Floating Ball Valves

- Cost effective configuration;
- Carbon steel, stainless, steels and alloys for special applications;
- Designed in accordance with the BS5351, B16.10 and B16.5 standards, and verified following the PED standards;
- Antistatic device;
- Fire safe certified;
- Range from 1/2" to 10" both ANSI 150 and 300 class.

SIZE	CLASS					
	150	300	600	900	1500	2500
1/2"	•	•	•	•	•	•
3/4"	•	•	•	•	•	•
1"	•	•	•	•	•	•
1 1/2"	•	•	•	•	•	•
2"	•	•	•	•	•	•
3"	•	•	•	•	•	•
4"	•	•	•	•	•	•
6"	•	•	•	•	•	•
8"	•	•	•	•	•	•
10"	•	•	•	•	•	•



SEALING MATERIALS ON REQUEST

When the standard soft sealing is no longer suitable due to the peculiar combination of pressure, temperature and chemical characteristic of the fluid, different sealing designs and materials are available.

Lip seals: for cryogenic, high temperatures and corrosive applications.

Metal to metal seats (high velocity application of tungsten carbide powder): in case of a flowing media with hard solid particles or elevated temperatures.

WELD OVERLAY

For an additional protection and a longer life in corrosive conditions a wide choice of overlays is available. Depending on the service conditions, the anticorrosive



SEAT

- PTFE (up to 6" max.);
- PTFE Glass or Graphite Filled;
- PCTFE (Kel-F);
- Nylon;
- Peek;

SEAL

- Nitrile;
- Viton A, B, GF, AED, GLT;
- PTFE+Elgiloy.

Peek: suitable for high temperatures (up to 260°C/500° F).

Graphite: suitable for very high temperatures (up to 400°C/750° F).



Engineering Data: Standard Operating Design:

Manual operated Ball Valves are normally supplied with wrench or gear box.

The wrench position parallel to the flow line means the valve is open.

The gear box is always provided with open/close indicator fit up on top of the housing.



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Floating Split Body Ball Valves • 40 Series.



40 SERIES

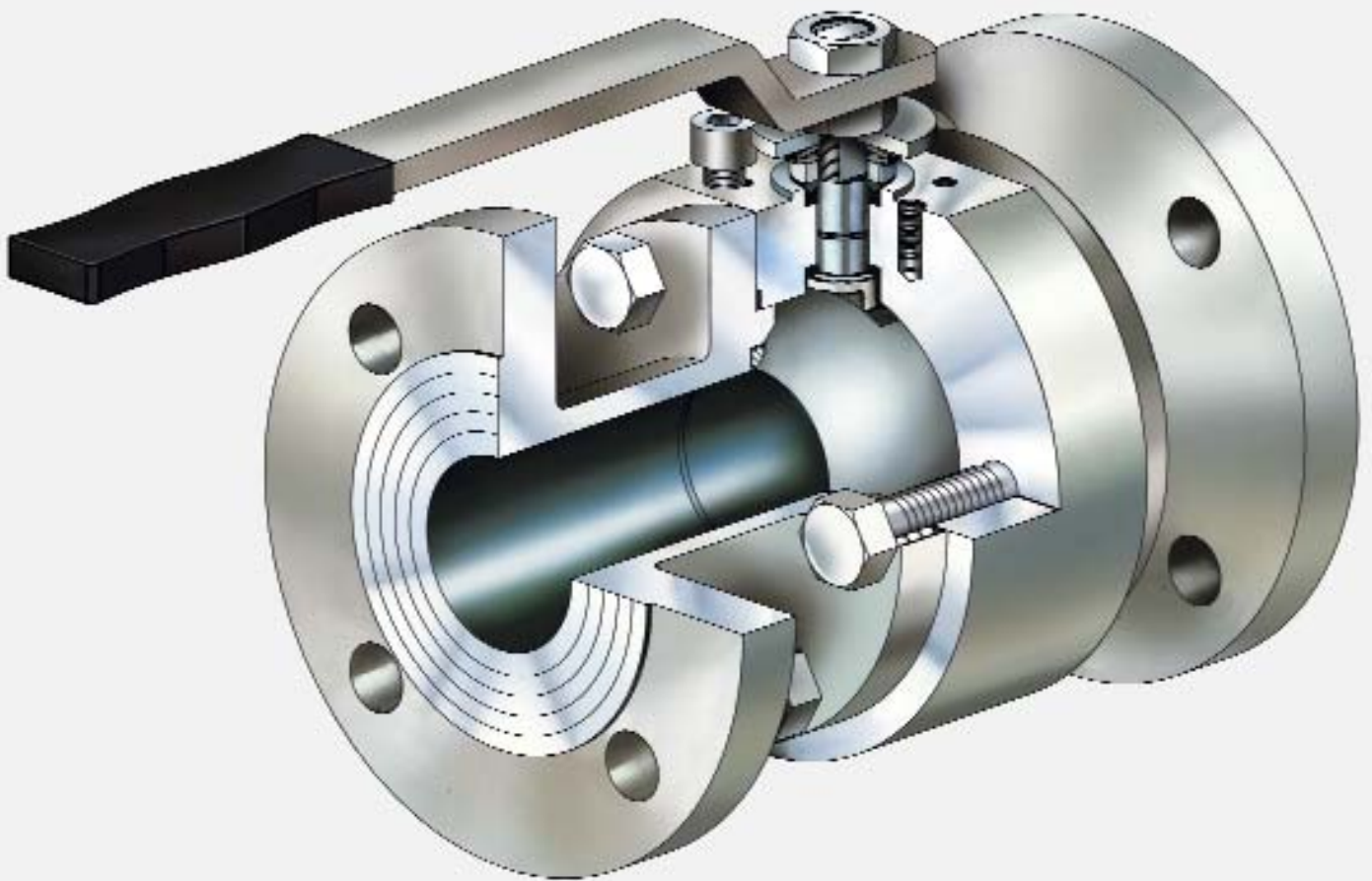
PART LIST

Description

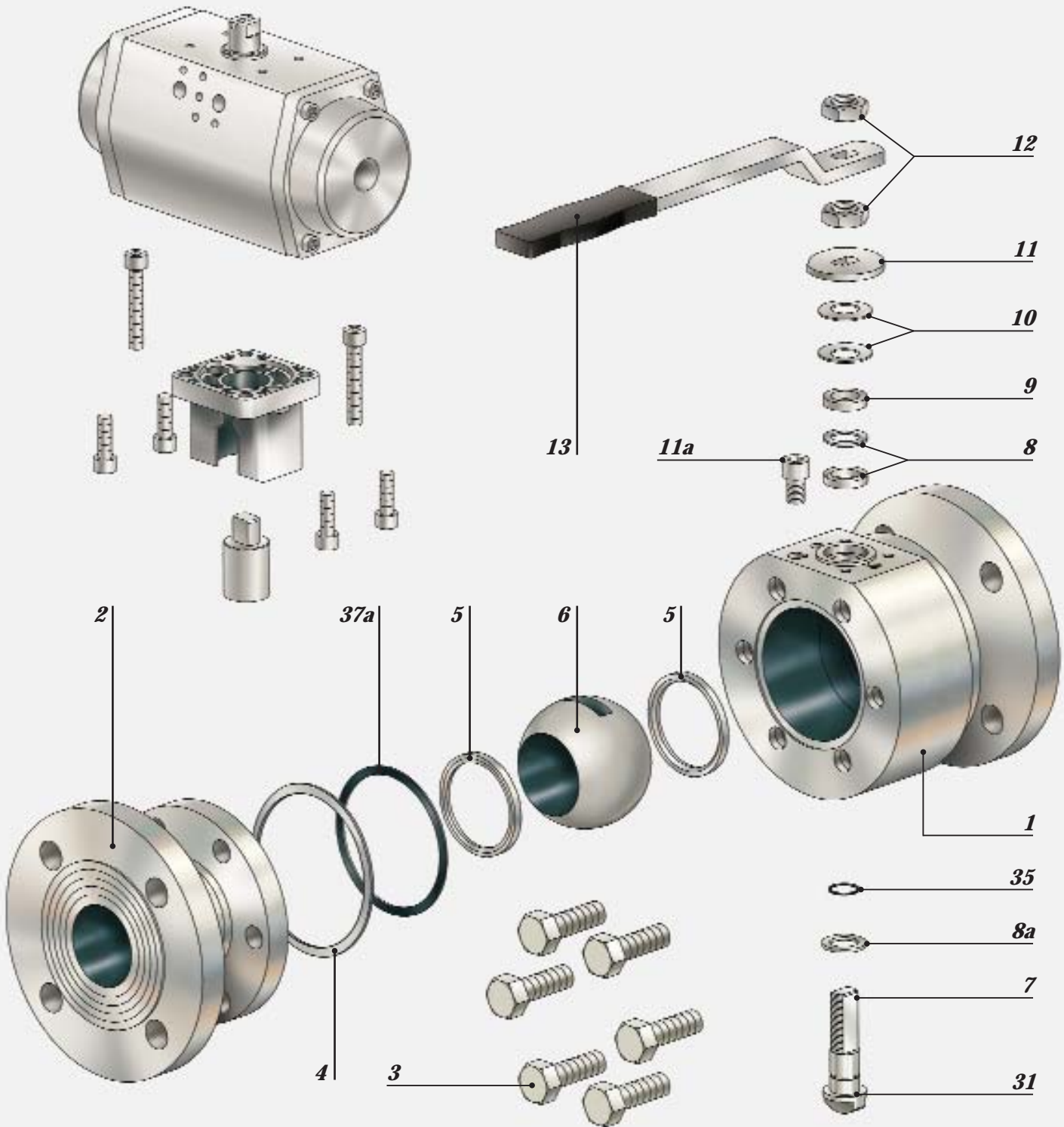
- 1** Body
- 2** Body Connector
- 3** Body Connector Bolting
- 4** Body Gasket
- 5** Seat
- 6** Ball
- 7** Stem
- 8** Stem Seal
- 8a** Stem Gasket
- 9** Gland
- 10** Disk Spring
- 11** Stop
- 11a** Stop Screw
- 12** Gland Nut
- 13** Wrench
- 31** Antistatic Device
- 35** Stem O-Ring
- 37a** Body O-Ring

40 SERIES

VALVE CROSS SECTION

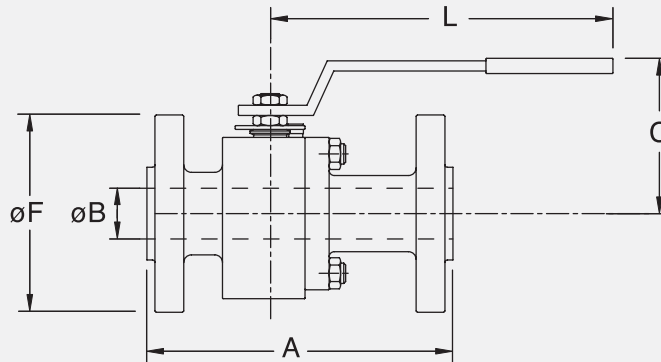


VALVE ASSEMBLY



40 SERIES

DIMENSION & WEIGHT



Class 150 - FB

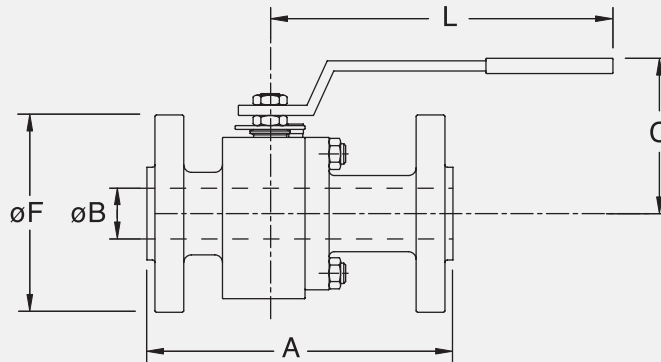
Size DN	End to End A						ØB	ØB1	C	L	ØF	Weights								
	RF	RTJ		BW		RF						RTJ	BW							
Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm					
1/2	15	4,25	108	-	-	5,5	140	0,6	15	-	-	3,5	85	5,9	150	3,54	90	2	2	1
3/4	20	4,62	117	-	-	6	152	0,79	20	-	-	3,54	90	5,9	150	3,88	98,5	4	4	3
1	25	5	127	5,5	140	6,5	165	0,99	25	-	-	4,72	120	10,23	260	4,25	108	6	6	4,5
1.1/4	32	5,51	140	6	152,5	7	178	1,26	32	-	-	3,94	100	8,26	210	4,62	117,3	8	8	6
1.1/2	40	6,5	165	7	178	7,5	191	1,58	40	-	-	4,72	120	10,6	270	5	127	11	11	9
2	50	7	178	7,5	191	8,5	216	1,96	50	-	-	5,12	130	10,6	270	6	152,5	14	14	10,5
2.1/2	65	7,48	190	8	203	9,5	241	2,59	66	-	-	5,7	145	12,9	330	7	178	19	19	16,5
3	80	8	203	8,5	216	11,1	283	3	76	-	-	6,1	155	14,95	380	7,5	190	28	28	21,5
4	100	9	229	9,5	241	12	305	3,94	100	-	-	7,5	190	16,55	420	9	228,5	39	39	30
5	125	10	254	10,5	267	-	-	4,93	125	-	-	8	200	16,55	420	10	254	48	48	45
6	150	10,5	267	11	279	15,88	403	5,9	150	-	-	9,64	245	22,83	580	11,02	280	110	110	93
8	200	11,5	292	12	305	16,5	419	7,87	200	-	-	-	-	-	Gear	13,5	343	120	120	94,5
10	250	21	533	21,5	546	18	559	9,85	250	-	-	-	-	-	Gear	16	406	133	133	109

Class 150 - RB

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm			
1.1/2x1	40x25	6,5	165	7	178	7,51	191	1,58	40	0,99	25	4,72	120	10,23	260	5	127	9	9	6,5
2x1.1/2	50x40	7	178	7,51	191	8,5	216	1,96	50	1,54	39	4,72	120	10,6	270	6	152,5	14	14	10
3x2	80x50	8	203	8,5	216	11,14	283	3	76	1,96	50	5,12	130	10,6	270	7,5	190	23	23	15
4x3	100x80	9	229	9,5	241	12	304	3,94	100	2,96	75	6,1	155	14,95	380	9	228,5	34	34	20
6x4	150x100	10,5	267	11	279	15,88	403	5,9	150	3,78	96	7,5	190	16,55	420	11,02	280	70	70	53
8x6	200x150	11,5	292	12	305	16,5	419	7,87	200	5,9	150	9,65	245	22,8	580	13,5	343	100	100	74
10x8	250x200	12,9	330	13,5	343	18	457	10	254	7,87	200	-	-	-	Gear	16	406	280	280	266

40 SERIES

DIMENSION & WEIGHT



Class 300 - FB

Size DN	End to End A		ØB	ØB1	C	L	ØF	Weights												
	RF	RTJ						BW	RF	RTJ	BW									
1/2	15	5,5	140	5,94	151	5,5	140	0,6	15	-	-	3,5	85	5,9	150	3,75	95,2	4	4	3
3/4	20	6	152	6,5	165	6	152	0,79	20	-	-	3,54	90	5,9	150	4,61	117,5	5	5	3
1	25	6,5	165	7	178	6,5	165	0,99	25	-	-	4,72	120	10,23	260	4,88	123,9	7	7	4,5
1.1/2	40	7,51	191	8	204	7,51	191	1,58	40	-	-	4,72	120	10,6	270	6,1	155	13	13	8,5
2	50	8,5	216	9,12	232	8,5	216	1,96	50	-	-	5,12	130	10,6	270	6,5	165,1	16	16	11
3	80	11,14	283	11,76	298	11,14	283	3	76	-	-	6,1	155	14,95	380	8,25	209,5	38	38	27,5
4	100	12	305	12,62	321	12	305	3,94	100	-	-	7,5	190	16,55	420	10	254	64	64	48
6	150	15,88	403	16,5	419	18	457	5,9	150	-	-	9,64	245	22,83	580	12,5	317,5	135	135	101
8	200	16,5	419	17,13	435	16,5	419	7,87	200	-	-	-	-	-	Gear	15	381	200	200	148
10	250	22,38	568	23	584	22	559	9,85	250	-	-	-	-	-	Gear	17,5	444,5	350	350	303

Class 300 - RB

1.1/2x1	40x25	7,51	191	8	204	7,51	191	1,58	40	0,99	25	4,72	120	10,23	260	6,1	155	11	11	6
2x1.1/2	50x40	8,5	216	9,12	232	8,5	216	1,96	50	1,54	39	4,72	120	10,6	270	6,5	165,1	16	16	10
3x2	80x50	11,1	283	11,72	298	11,14	283	3	76	1,96	50	5,12	130	10,6	270	8,25	209,6	26	26	14
4x3	100x80	12	305	12,62	321	12	305	3,94	100	2,96	75	6,1	155	14,95	380	10	254	45	45	25
6x4	150x100	15,88	403	16,5	419	18	457	5,9	150	3,78	96	7,48	190	16,55	420	12,5	317,5	81	81	46
8x6	200x150	16,5	419	17,13	435	16,5	419	7,87	200	5,9	150	9,65	245	22,8	580	15	381	150	150	97
10x8	250x200	17,9	457	18,62	473	18	457	9,85	250	7,87	200	-	-	-	Gear	17,5	444,5	320	320	239

Class 600 - FB

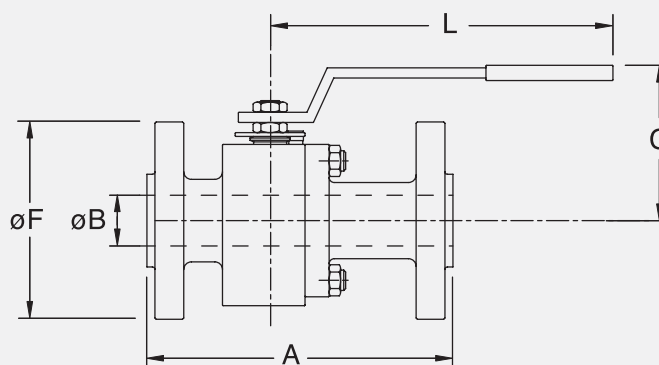
1/2	15	6,5	165	6,44	163,5	6,5	165	0,6	15	-	-	3,5	85	5,9	150	3,75	95,2	8	8	6,5
3/4	20	7,51	191	7,51	191	7,51	191	0,79	20	-	-	3,54	90	5,9	150	4,61	117	9	9	6,5
1	25	8,5	216	8,5	216	8,5	216	0,99	25	-	-	4,72	120	10,23	260	4,88	124	14	14	11
1.1/2	40	9,5	241	9,5	241	9,5	241	1,58	40	-	-	4,72	120	10,6	270	6,12	155,4	15	15	9,5
2	50	11,5	292	11,62	295	11,5	292	1,96	50	-	-	5,12	130	10,6	270	6,5	165,1	18	18	11,5
3	80	14	356	14,12	359	14	356	3	76	-	-	6,1	155	14,95	380	8,25	209,5	42	42	31
4	100	17	432	17,12	435	17	432	3,94	100	-	-	7,5	190	16,55	420	10,74	273	80	80	64

Class 600 - RB

1.1/2x1	40x25	9,5	241	9,5	241	9,5	241	1,58	40	0,99	25	4,72	120	10,23	260	6,12	155,4	15	15	8,5
2x1.1/2	50x40	11,5	292	11,62	295	11,5	292	1,96	50	1,54	39	4,72	120	10,6	270	6,5	165,1	18	18	10,5
3x2	80x50	14	356	14,12	359	14	356	3	76	1,96	50	5,12	130	10,6	270	8,25	209,6	32	32	17
4x3	100x80	17	432	17,13	435	17	432	3,94	100	2,96	75	6,1	155	14,95	380	10,75	273	64	64	34
6x4	150x100	22	559	22,13	562	22	559	5,9	150	3,78	96	7,48	190	16,55	420	14	355,6	93	93	61

40 SERIES

DIMENSION & WEIGHT



Class 900 - FB

Size DN	End to End A						ØB	ØB1	C	L	ØF	Weights								
	RF	RTJ	BW	RF	RTJ	BW														
1/2"	15	8,5	216	8,5	216	8,5	216	0,6	15	-	-	3,5	85	5,9	150	4,77	121	11	11	7,5
3/4"	20	9	229	9	229	9	229	0,79	20	-	-	3,74	95	10,43	265	5,12	130	13	13	8,5
1"	25	10	254	10	254	10	254	0,99	25	-	-	4,72	120	10,23	260	5,88	149,4	17	17	10
1.1/2"	40	12	305	12	305	12	305	1,58	40	-	-	4,72	120	10,6	270	7	178	20	20	11

Class 900 - RB

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
1.1/2"x1"	40x25	12	305	12	305	12	305	1,58	40	0,99	25	4,72	120	10,23	260	7	178	18	18	9		
2"x1.1/2"	50x40	14,48	368	14,6	371	14,48	368	1,96	50	1,54	39	4,72	120	10,6	270	8,5	216	26	26	22		

Class 1500 - FB

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
1/2"	15	8,5	216	8,5	216	8,5	216	0,6	15	-	-	3,5	85	5,9	150	4,77	121	11	11	7,5		
3/4"	20	9	229	9	229	9	229	0,79	20	-	-	3,74	95	10,43	265	5,12	130	13	13	8,5		
1"	25	10	254	10	254	10	254	0,99	25	-	-	4,72	120	10,23	260	5,88	149,4	17	17	10		
1.1/2"	40	12	305	12	305	12	305	1,58	40	-	-	4,72	120	10,6	270	7	178	20	20	11		

Class 1500 - RB

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
1.1/2"x1"	40x25	12	305	12	305	12	305	1,58	40	0,99	25	4,72	120	10,23	260	7	178	18	18	9		
2"x1.1/2"	50x40	14,48	368	14,6	371	14,48	368	1,96	50	1,54	39	4,72	120	10,6	270	8,5	216	26	26	22		

Class 2500 - FB

Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
1/2"	15	10,38	263	10,38	263	10,38	263	0,39	10	-	-	3,54	90	11,02	280	5,23	133	12	12	8		
3/4"	20	10,74	273	10,74	273	10,74	273	0,47	12	-	-	3,74	95	12,9	330	5,18	131,7	16	16	12		

40 SERIES

MATERIALS FOR THE CONSTRUCTION

The valves are manufactured in accordance with our customers' requirements taking in consideration the operating conditions (i.e. fluid condition and environmental parameters like pressure and temperature).

A wide range of forged ferrous and non ferrous materials is available: carbon steel, low alloy steel, stainless steel, duplex stainless steel and nickel alloys, such as:

- A105/WCB
- A350 LF2/LCB
- A350 LF3/LCC



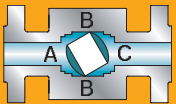
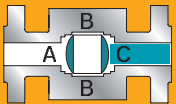
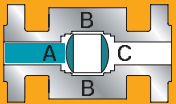
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- AISI 1040
- A694 F60
- A694 F65
- A182 F6A - UNS S41000
- A182 F6NM - UNS S41500
- A182 F304 - UNS S30400/CF8
- A182 F316 - UNS S31600/CF8M
- A182 F316LNM - UNS S31653
- A564 630 - UNS S17400
- A182 F44 - UNS S31254
- A182 F51 - UNS S31803
- A182 - UNS S32550
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- B446 - UNS S06625
- UNS N08825
- UNS N08925



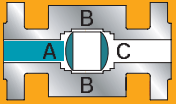
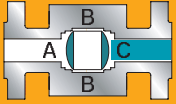
40 SERIES

STANDARD TESTS

HYDROSTATIC TEST

PART	SEQUENCE	AREA	PRESSURE	DURATION (min.)	DESCRIPTION
Shell		A B C	1.5 x Press. Rating 1.5 x Press. Rating 1.5 x Press. Rating	From 2 to 30 min. depending on valve size	Shell hydrostatic test with valve half-open as follows: obtain hydrostatic test pressure and hold it for duration of testing.
Seat		A B C	Atmospheric Atmospheric 1.1 x Press. Rating	From 2 to 5 min. depending on valve size	Seat seal test at "C" end towards body "B".
Seat		A B C	1.1 x Press. Rating Atmospheric Atmospheric	From 2 to 5 min. depending on valve size	Seat seal test at "A" end towards body "B".

AIR TEST (supplementary tests on request)

PART	SEQUENCE	AREA	PRESSURE	DURATION (min.)	DESCRIPTION
Seat		A B C	5,5 bar Atmospheric Atmospheric	From 2 to 5 min. depending on valve size	Seat seal test at "A" end towards body "B".
Seat		A B C	Atmospheric Atmospheric 5,5 bar	From 2 to 5 min. depending on valve size	Seat seal test at "C" end towards body "B".

FIRE SAFE DESIGN

All **RBR** Ball Valves are fire safe designed. The fire safe design allow to prevent any leakages through the seals when the temperature reaches levels higher than the melting point of the seals.

Each **RBR** Ball Valves seals is provided with a secondary graphite seal wich is designed to endure the high temperatures for a determinate time.

The **RBR** Ball Valves fire safe design has been approved during the appropriate tests in accordance with the API 6FA and BS 6755 standards.



40 SERIES

OPTIONAL TESTS

In case of special requirements of the customer various optional tests can be performed:

- Magnetic particle inspection;
- Liquid penetrant test;
- Ultrasonic test;
- X-ray analysis;



SPECIAL TESTS

- Fugitive emission test;
- High pressure Nitrogen/Helium test;
- Low temperature test;
- Hyperbaric test.



ACTUATORS

On customer request all **RBR** Ball Valves can be provided with any kind of pneumatic, electric or hydraulic actuator.

RBR is able to determine the size of the actuator, to assemble and to check the valve/actuator system.

Furthermore **RBR** can provide all the components necessary

for the automation of the valve like electrovalves and boxes operating in the most difficult conditions.

ATEX certified and flame proof components are available upon request.



40 SERIES

QUALITY ASSURANCE DEVELOPMENT

Under the constant supervision of the management and thanks to the large investments in human resources and equipment, **RBR** has grown to the point of being today regarded as a world class high quality valve manufacturer with the ISO 9001 accreditation certified by a primary International Independent Inspection Agency and API 6D monogramming authorisation.

The quality and reliability of **RBR** Ball Valves are checked, verified and guaranteed by the implementation of appropriate engineering and design, procurement, production processes, to the final acceptance test, as well as by endurance type-testing.

Working in an International multistandards environment **RBR** assure the capability to



both standard and special, are identified, implemented, verified and managed by highly qualified personnel who under go periodically scheduled training courses.

The quality of the valves manufactured has always been a priority for **RBR**, as well as the after sales service:

CUSTOMER SATISFACTION is the mission of **RBR**, with no compromises.

comply with the most demanding Customer's requests and specifications.

All production processes,

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SERVICE

A dedicated team of skilled technicians are available on 24 hours base, to quickly and professionally respond to all our Customer's needs in case of emergency situations.

On request we can provide personnel for specific planned standard or preventive maintenance.



On site supervision and assistance are available as well as specific training courses according to Customer's requirements.

Most commonly used spare parts are available from stock and full parts interchangeability is guaranteed.



RBR'S PRODUCTION



10"x8" 1500 Fully Inconel Clad



16" 1500 Fully Duplex Metal Seated



12" 150 Fully Welded Body



12" 2500 Hub Ends



12" 900 Metal to Metal



Actuated valve + Fire Safe protection



24" 150 Fully Welded Body



Underground Application



8" 600 -120°C + 20°C



SUBSEA BALL VALVE



HYPERBARIC TEST



24" 900 TOP ENTRY



Since
1964

AdverTime-MI

RBR Your Favourite Partner
in Technology,
Quality and Service.



PRODUCT RANGE



40T Series

Bolted Body Trunnion Mounted Ball Valves.



40TW Series

Welded Body Trunnion Mounted Ball Valves.



40TE Series

Top Entry Trunnion Mounted Ball Valves.



40 Series

Floating Split / One Piece Body Ball Valves.



10 Series

Wafer Type Ball Valves.



11 Series

Jacketed Wafer Type Ball Valves.



24 Series

Three-Pieces Ball Valves.



70 Series

One-Piece Ball Valves.



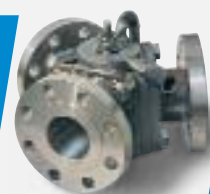
33 Series

Threaded Three-Way Ball Valves.



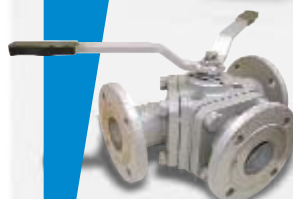
70HP Series

One-Piece Ball Valves High Pressure.



30Y Series

Flanged Three-Way Ball Valves 120°.



30T Series

Flanged Three-Way Ball Valves 90°.



34 Series

Flanged Three-Way Ball Valves 90°.



103 Series

Three-Way Wafer Type Two Seats Ball Valves 90°.



103 Series

Three-Way Wafer Type Three Seats Ball Valves 90°.



ACTUATORS & ACCESSORIES

Parts for Automatic Operations.

RBR
Ball Valves

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