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HISTORY HIGHLIGHTS AND MANUFACTURING PLANTS



DELLA FOGLIR was founded in 1962 by Mr. Guido and Mrs. Amalia Della Foglia as a small artisan company producing ball and needle valves for the domestic market only. During the last 50 years this family owned & managed Company has acquired considerable experience, product knowledge and a high degree of specializations.

> The **DELLR FOGLIR** brand is now recognized worldwide for guaranteeing 100% made in Italy high quality products for the oil and gas, petrochemical, power generation and water industries.

The manufacturing plant, based in two different locations (five buildings for a total of 40.000 square meters) is located in Italy, 20 minutes from Milan Malpensa International Airport and 30 minutes from Milan's city centre.

Latest technology CNC machines are real-time connected to the 3D design software and Cad CAM. An ERP system combined with a barcode tracking system

are installed to ensure the full traceability of the product from the receipt of raw materials to the shipment. Valves from $\frac{1}{2}$ " to 64" are machined internally.





Testing rigs and benches can handle up to 50 tons. An underground bunker complete with cameras and automatic leakage detection systems are used to carry out gas testings, at ambient, high and cryogenic temperature (down to -196°C).













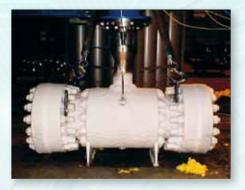




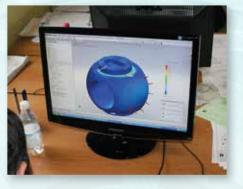








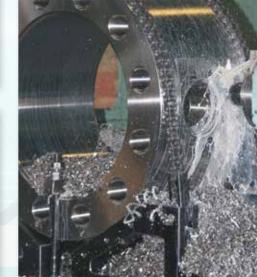


















MAIN FEATURES OF BALL VALVES

DOUBLE BLOCK AND BLEED

With this valve design, it is possible to isolate the valve body cavity between two valve seats and to safely drain/vent it, even when the line is in pressure. It is also called "on-line leak detection system" when the ball is in closed position and the body cavity is vented (in proper procedure). This makes it possible to check for seat leakages from the body vent connection.⁽¹⁾

ANTISTATIC DEVICE

To avoid any dangerous effects caused by static electricity charges, all Della Foglia ball valves incorporate an antistatic device to keep electric continuity between body, stem and ball. This is generally achieved by using springs (stem and/or trunnion to ball) or spring energized balls (stem to body).

ANTI-BLOWOUT STEM

As a safety feature, the value is designed to avoid the blowout of the stem during the disassembly of the packing when pressure is trapped in the body cavity.

FIRE SAFE DESIGN

To limit leakage in case of fire, our valves are provided with a secondary seal, metallic or graphite based, in all the sealing points. Fire tests according to API 607, API 6FA and EN ISO 10497 have already been performed to certify the entire range of valves.

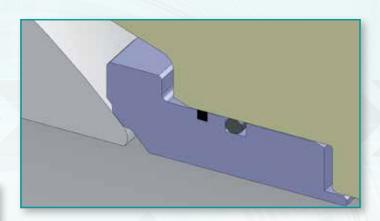
SELF-RELIEVING SEATS

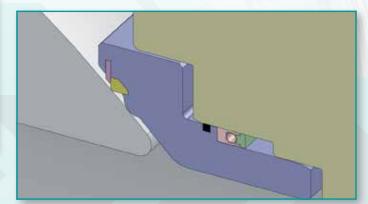
The self-relieving seats are designed to vent to the line any excessive build-up pressure in the body cavity. Refer to the explanation "Single Piston Effect (self-relieving) vs. Double Piston Effect".

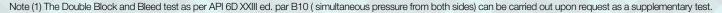
METAL TO METAL SEAT

In case of high temperature, abrasive and critical services, or highly corrosive fluid the seating surfaces of ball and seats are coated with hard material such as Tungsten carbide, Chrome Carbide or Stellite.

There is no soft insert on the seats and tightness (both at low and high pressure) is ensured by a special shape of the seat and a complex pre-assembly procedure.





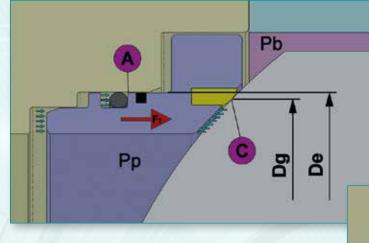




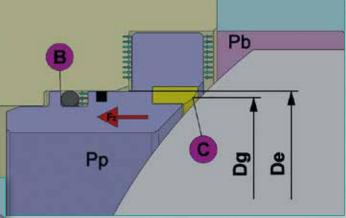
MAIN FEATURES OF BALL VALVES

SINGLE PISTON EFFECT SEAT AND DOUBLE PISTON EFFECT SEAT

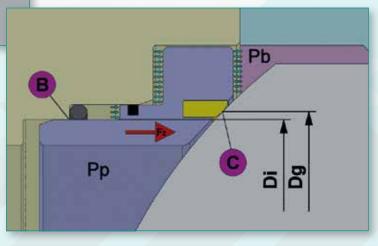
In the single piston effect seat design, the pressure in the line energizes the seat and presses it towards the ball. The pressure in the body cavity pushes the seat in the opposite direction venting it automatically (a single effect seat is also a self relieving seat). In the double piston effect seat design, both the pressure in the line and the pressure in the body cavity energize the seat pressing it towards the ball.

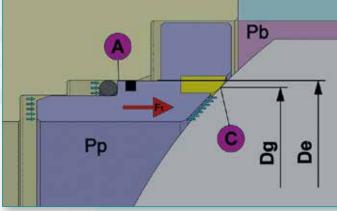


Single piston effect seat (Self-Relieving seat) case B: the pressure in the body cavity (Pb) pushes back the seat; the fluid can pass and relieve. Single piston effect seat (Self-Relieving seat) case A: the pressure in the pipeline (Pp) pushes the seat towards the ball.



Double piston effect case A: the pressure in the pipeline (Pp) pushes the seat towards the ball.





Double piston effect case B: the seat design permits the pressure in the body cavity (Pb) to push the same seat towards the ball.



MAIN FEATURES OF BALL VALVES

GREASE INJECTION DEVICES

Upon request our valves can be equipped with grease injection devices on stem and/or seats. This feature pumps sealant to restore tightness in case of damaged sealing materials in the stem area or in the seat area.

The injection devices are very helpful as preventive maintenance as well as preservation procedure (refer to our product manual). Della Foglia can provide a wide range of products for flushing, lubricating, greasing and sealing.

LINING

The ball valve's internal wetted parts can undergo a special coating process which protects the components with an epoxy film (thickness may be up to 1500 mic). This process may help in case of high corrosion.

EXTENDED BONNET

Extended bonnets are used in either high or low temperature applications in order to move the stem sealing packing as far as possible from the fluid (which is at low/high temperature).

The extension length is calculated by Della Foglia engineers based on the actual service conditions or can be adjusted based on the customer's specifications.

STEM EXTENSIONS

Stem extensions bring at the requested height all the operation features, such as gears actuators, sealant injectors, vent and drain valves etc. They are normally requested when the valves are installed in underground line.

WELD OVERLAYS

When it is required to improve the corrosion resistance of the base material and/or the mechanical performances of a component, it is possible to place a weld overlay of CRA materials (stainless steel or incoloy) on the sealing areas only or on all the wetted parts.

The parts undergo a pre-machining process, followed by the welding activity and the final machining. The welding is carried out by qualified welders and it is controlled by certified NDE personnel.

LOW EMISSION VALVES

Use of special seals and the accurate machining of stem and bonnet sealing areas ensure the compliance with the "low fugitive emission" regulations. Specially designed stem and body joint seals, available upon request, satisfy the most stringent fugitive emission requirements also in low and high temperature.

We can provide several types of sealing systems which vary from multiple elastomers, pressure energized seals, mechanically energized seals and metallic seals.

APPLICABLE STANDARDS

The design, manufacturing and testing of Della Foglia Ball valves are generally in accordance with the following standards, however, we can provide tailor made products based on any kind of specification or international standard.

[
	API 6A	ASME B16.5	ISO 9001-2000	NACE MR-01-75
	API 6D	ASME B16.10	ISO 10497	DIRECTIVE 97/23/
	API 6DSS	ASME B16.25	ISO 15156	EC
	API 607	ASME B16.34	ISO 5211	DIRECTIVE 94/9/
	API 6FA	ASME B16.47	ISO 17292	EC
	API 598	ASME B31.3	ISO 15848	EN 12266
		ASME B31.4		BS 5351
		ASME B31.8		BS 6755
		ASME II – V - VIII		





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MAJOR PROJECTS REFERENCE LIST

	END USERS	CONTRACTOR	PROJECT	MATERIAL
1	Adco	Snamprogetti	Bu Hasa (U.A.E.)	3.000 valves from 1" up to 24" manual and actuated
2	ADMA OPCO	HYUNDAY E. & C.	Satah Al Razboot SARB package 4 (U.A.E.)	220 valves from 3" to 36" classes 150 to 2500 manual operated
3	HYUNDAY E. & C.	NPCC	ZCSC Demothballing Project (U.A.E.)	46 actuated trunnion mounted valves from 1" to 24", classes from 150 to 2500
4	Aramco	Metal Service	Khuraish (Saudi Arabia)	7 pcs of 48" cl. 600
5	Aramco	NPCC	Khuraish (Saudi Arabia)	from 8" cl. 1500 up to 30" cl. 1500
6	Aramco / KNPC	CCC	Al-Khafji (Saudi Arabia / Kuwait)	3.000 valves from 1" up to 42"
7	BP	AIBEL - UK	In Amenas (Algeria)	112 trunnion mounted valves 6" 8" 10" class 1500 body in LTCS+welding overlay, metal seated
8	BP	KBR	Azeri Project - Baku (Azerbaijan)	7 pcs of 24" cl. 900 metal to metal actuated
9	BP	PSN	BP Dimlington OCTIP (UK)	200 valves from 2" up to 30" actuated
10	BP	TECHNIP HOSUTON	BPTT Juniper project (Trinidad & Tobago)	35 valves from 2" to 10" classes from 150 to 2500, soft and metal seated, actuated
11	ConocoPhillips		Hang Tuah (Indonesia)	16" cl. 900 metal to metal subsea
12	GASCO	Hyunday E & C	Habshan 5 (U.A.E.)	Trunnion and floating side entry, top entry and fully welded body size from 1"" up to 36"" cl. 150 to 600"
13	Karachaganak	Petrofac	Karachaganak 4th Stabilization & Sweeting Train (Kazakhstan)	500 valves manual and actuated from 2" up to 24" exotic materials/lip seals
14	KOC	Snamprogetti	BS 131 (Kuwait)	1.500 valves from 1" up to 24" manual and actuated
15	Maersk Oil Qatar	McDERMOTT	Al Shaheen Field Development Pj (Qatar)	more than 2.000 valves
16	PEMEX	Global Offshore Mexico	Offshore Platform (Mexico)	2 valves 36"-600 metal seated - leakage rate A
14	QATAR PETROLEUM	Petrofac	Gas Sweeting at Mesaieed & Dukhan (Qatar)	897 trunnion mounted valves from 1,5" to 30" classes from 150 to 1500, manual operated and actuated
18	RAS GAS	CTJV (Chiyoda/Technip)	RGS Train 6 / 7, QGX (Qatar)	5.000 valves from 2" up to 46" all ratings
19	RAS GAS	HYUNDAI HEAVY INDUSTRIES	Flow assurance (Qatar)	19 top entry double ball valves 6" API 6A 5000 metal seated for subsea service
20	RAS GAS	JGC Corporation	Barzan (Qatar)	112 trunnion mounted valves from 4" to 32" classes from 150 to 900, side entry & top enty design + jacketed valves, soft & metal seated
21	Shell	Aker Kvaerner	LNG SLUG CATCHER (Nigeria)	Cryogenic valves from 16" up to 30"
22	Shell	Amec	LEMAN ALPHA COMPRESSION UPGRADE PJ (UK)	Low temp. service valves from 16" up to 24"
23	Sonatrach	JGC	Hassi R'MEL Boosting Project (Algeria)	valves from 2" up to 12"
24	Sonatrach	Saipem Sa	Lpg Hassi Messaoud	cryogenic ball valves from 1" up to 24" cl. 150 to cl. 900
25	Sonatrach	Samsung Engineering	Skikda	cryogenic ball valves from 1" up to 20"
26	Statoil	Aker Kvaerner	Statfjord (Norway)	120 valves metal to metal from 2" up to 24" lip seals
27	TOTAL	TOTAL UK	Elgin Franklin (UK)	500 valves metal to metal from 2" up to 24" exotic materials/lip seals



Trunnion side entry ball valve is the most popular ball valve design for Oil & Gas application. The ball is held on a fixed vertical axis and is free to rotate about it. Sealing is assured by pressure & spring energized seats.

The body can be 2 or 3 bolted pieces. For small sizes, the ball is supported by a Trunnion, while for large sizes trunnion plates are used. Valves are designed in accordance with the most recognized international standards as well as the applicable customer specifications.

Body material may vary from carbon steel, stainless steel, duplex stainless steel and any exotic alloy. Various solutions are available for body seals and seats including true metalto-metal contact sealing.

TECHNICAL FEATURES

Standard Features

- Design according to API 6D, ISO 17292, B16.34, ASME VIII
- Ends according to ASME B16.5, B16.25
- Anti blow out stem
- Antistatic device
- Double block and bleed
- Self relieving (only if trunnion type)
- Fire safe according to ISO 10497, API 607, API 6FA, BS 6755-2

Optional features

- Ends according to custom design
- Double piston effect seats
- One seat self relieving and one seat double piston effect

BOLTED BODY SIDE ENTRY BALL VALVES

- Emergency sealant injection on seat and/or stem sealings
- Bonnet extension
- Stem extension
- Metal to metal seat
- Body Lining
- Weld overlay on seat pocket or and stem pocket area
- Weld overlay on wetted parts



PRODUCT RANGE WELDED BODY BALL VALVES / UNDERGROUND

Fully welded ball valves are characterized by body fabricated by welding of forged rings.

The result is a solid assembly with no leakage paths.

A fully welded application is a preferable solution when no maintenance is scheduled on valves and when it is mandatory to avoid any external leakage.

A typical application is for underground valves.

Welding is performed by highly qualified professionals, in accordance with all applicable ASME requirements.

The same options and features of side entry Trunnion ball valves are available for fully welded ball valves as well.

TECHNICAL FEATURES

Standard Features	Optional features
 Design according to API 6D, ISO 17292, B16.34, ASME VIII Ends according to ASME B16.5, B16.25 Anti-blowout stem Antistatic device Double block and bleed Self relieving (only if trunnion type) Fire safe according to ISO 10497, API 607, API 6FA, BS 6755-2 	 Ends according to custom design Double piston effect seats One seat self relieving and one seat double piston effect Emergency sealant injection on seat and/or stem sealings Stem extension Metal to metal seat Body Lining Weld overlay on seat pocket and/or stem pocket area Weld overlay on all wetted parts







TOP ENTRY BALL VALVES





Top Entry ball valve design is characterized by one piece body construction with top access to all internal components. Top Entry Ball Valves are the preferable solution when it is required to perform in line maintenance, and when the reduction of possible leakage path is mandatory. The body could be manufactured from forged billet or high quality castings. Same options and features of side entry Trunnion ball valve are available also for top entry ball valves.



TECHNICAL FEATURES

Standard Features

- Design according to API 6D, ISO 17292, B16.34, ASME VIII
- Ends according to ASME B16.5, B16.25
- Anti-blowout stem
- Antistatic device
- Double block and bleed
- Self relieving (only if trunnion type)
- Fire safe according to ISO 10497, API 607, API 6FA, BS 6755-2

Optional features

- Ends according to custom design
- Double piston effect seats
- One seat self relieving and one seat double piston effect
- Emergency sealant injection on seat and/or stem sealings
- Stem extension
- Bonnet extension
- Metal to metal seat
- Body Lining
- Weld overlay on seat pocket and/or stem pocket area
- Weld overlay on all wetted parts

Della Foglia is one of the first worldwide companies to reach API 6DSS qualification for subsea pipeline ball valves. This proves the capability of Della Foglia to manufacture such critical products.

Special design is developed for each application in order to guarantee the required performance level for the whole predicted life of the valve.

A high level quality control inspection & test, as well as advanced design tools (finite element simulation, fatigue analysis, fluidodynamic study etc.) contribute to the increase in performance of the valves.

An internal testing facility is available to perform hydrostatic and gas tests up to 1000bar pressure.

TECHNICAL FEATURES

Standard Features

Optional features

- Design according to API 6DSS, ISO 17292, B16.34, ASME VIII
- Ends according to ASME B16.5, B16.25
- Anti-blowout stem
- Antistatic device
- Double block and bleed
- Self relieving (only if trunnion type)
- Fire safe according to ISO 10497, API 607, API 6FA, BS 6755-2
- Ends according to custom design
- Double piston effect seats
- One seat self relieving and one seat double piston effect

PRODUCT RANGE

SUBSEA VALVES

- Emergency sealant injection on seat and/or stem sealings
- Stem extension
- Bonnet extension
- Metal to metal seat
- Body Lining
- Weld overlay on seat pocket and/or stem pocket area
- Weld overlay on wetted parts



PRODUCT RANGE DOUBLE BALL VALVES

Double Ball Valves are basically made up of two ball valves in one solid body. They provide two physical barriers against downstream leakages with a very compact pattern.

Double ball valves are available in both floating and trunnion mounted Different configuration. body constructions are available: one piece body (cartridge type), bolted body and fully welded body.

A center bleed port between the valves allows testing of valve's performance, and provides a "double block and bleed" feature with maximum safety.

TECHNICAL FEATURES

Standard Features	Optional features
• Design according to API 6D, ISO 17292, B16.34, ASME VIII	 Ends according to custom design
 Ends according to ASME B16.5, B16.25 	 Double piston effect seats (only if trunnion type)
Anti-blowout stem	• Emergency sealant injection on seat and/or stem sealings
Antistatic device	Stem extension
 Self relieving (only if trunnion type) 	Bonnet extension
• Fire safe according to ISO 10497, API 607, API 6FA, BS	Metal to metal seat
6755-2	Body Lining
	Weld overlay on seat pocket or and stem pocket area
	Weld overlay on wetted parts





Floating ball valves have a simple structure: the ball is supported by the seats but can float inside the valve body.

Under medium pressure, the ball drifts towards the downstream side pushing against the seat ensuring sealing reliability.

The range of Della Foglia Floating ball valves includes side entry, bolted body or threaded body, and the special top entry design.

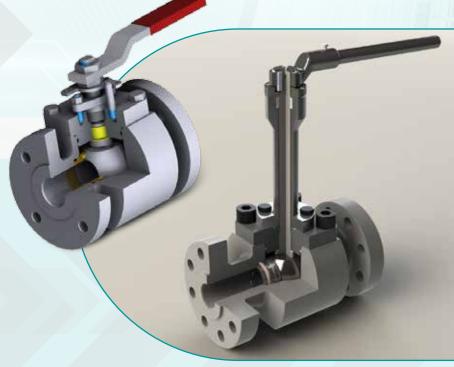
Materials of construction are carbon steel, stainless steel or any exotic alloy.



TECHNICAL FEATURES

Standard Features	Optional features
Design according to API 6D, ISO 17292, B16.34, ASME VIII	 Ends according to custom design Bonnet extension Stem extension
• Ends according to ASME B16.5, B16.25	Metal to metal seatBody Lining
Anti-blowout stemAntistatic device	
 Fire safe according to ISO 10497, API 607, API 6FA, BS 6755-2 	



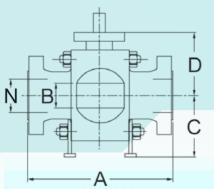


PRODUCT RANGE FLOATING BALL VALVES

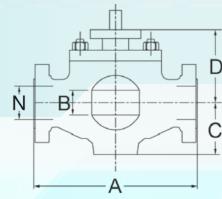


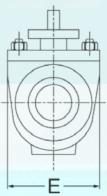












ASME class 150 full bore

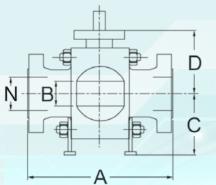
ALL 1	YPES				SI	DE ENT	RY					WEI	.DED B	ODY					тс	DP ENT	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"	50	50	178	191	216	149	104	81	19	178	191	216	149	104	81	18	292	295	292	180	207	85	30
3"	76	76	203	216	283	210	157	121	41	203	216	283	210	157	121	40	356	359	356	230	223	114	57
4"	102	102	229	241	305	237	172	138	56	229	241	305	237	172	138	54	432	435	432	282	280	140	100
6"	152	152	394	406	457	318	210	219	163	394	406	457	318	210	219	147	559	562	559	323	275	219	215
8"	203	203	457	470	521	408	270	303	250	457	470	521	408	270	303	225	660	664	660	405	321	265	407
10"	254	254	533	546	559	480	310	340	385	533	546	559	480	310	340	347	787	791	787	490	355	315	560
12"	305	305	610	622	635	560	347	375	664	610	622	635	560	347	375	506	838	841	838	565	470	405	710
14"	334	334	686	699	762	620	420	400	865	686	699	762	620	420	400	785	889	892	889	660	455	432	760
16"	387	387	762	775	838	693	436	442	1270	762	775	838	693	436	442	1178	991	994	991	700	460	451	1100
18"	438	438	864	876	914	790	466	500	1672	864	876	914	790	466	500	1505	1092	1095	1092	747	503	472	1512
20"	489	489	914	927	991	860	506	530	1798	914	927	991	860	506	530	1618	1194	1200	1194	849	560	560	1930
22"	538	538	991	1003	1092	948	562	574	2359	991	1003	1092	948	562	574	2123	1295	1305	1295	935	565	591	2750
24"	590	590	1067	1080	1143	1000	592	600	3097	1067	1080	1143	1000	592	600	2787	1397	1407	1397	1005	610	600	3200
26"	633	633	1143	1270	1245	1090	645	646	3687	1143	1270	1245	1090	645	646	3318	1448	1461	1448	1066	670	632	3800
28"	684	684	1245	1376	1346	1136	644	658	4490	1245	1376	1346	1136	644	658	4041	1549	1562	1549	1136	730	710	4600
30"	735	735	1295	1423	1397	1250	756	778	5230	1295	1423	1397	1250	756	778	4707	1651	1664	1651	1259	800	790	5630
32"	781	781	1372	1555	1524	1310	786	820	6820	1372	1555	1524	1310	786	820	6138	1778	1794	1778	1300	846	830	7085
34"	830	830	1473	1655	1626	1415	827	830	8221	1473	1655	1626	1415	827	830	7700	1930	1946	1930	1400	870	880	7800
36"	874	874	1524	1758	1727	1510	878	905	10140	1524	1758	1727	1510	878	905	9450	2083	2099	2083	1438	935	933	9100
40"	976	976	1753	(1)	1956	1595	977	1030	13538	1753	(1)	1956	1595	977	1030	13538	2337	2337	2337	1650	1012	1030	12790
42"	1020	1020	1855	(1)	2083	1742	978	1021	14280	1855	(1)	2083	1742	978	1021	12852	2437	2437	2437	1700	1070	1065	15100
48"	1166	1166	2134	(1)	2388	1920	1097	1066	21900	2134	(1)	2388	1920	1097	1066	19710	2540	2540	2540	1950	1190	1230	22600
54"	1314	1314	2489	(1)	2489	2110	1290	1250	30180	2489	(1)	2489	2110	1290	1250	27162	(1)	(1)	(1)	(1)	(1)	(1)	(1)
56"	1360	1360	2489	(1)	2489	2260	1302	1253	34100	2489	(1)	2489	2260	1302	1253	30690	(1)	(1)	(1)	(1)	(1)	(1)	(1)
60"	1458	1458	2667	(1)	2667	2422	1387	1360	47000	2667	(1)	2667	2422	1387	1360	42300	(1)	(1)	(1)	(1)	(1)	(1)	(1)

dimensions in mm
design and dimensions are subject to change without notice, except the dimensions established by international standard - for dimension and weights above 60" up to 64", please contact our technical department

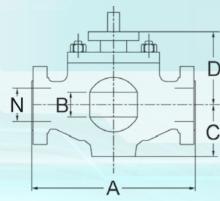
weight figures refer to flanged valves
 measures marked as (1), and larger sizes are not standard values. Please contact Della Foglia for more details

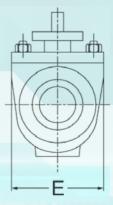


TRUNNION MOUNTED









ASME class 150 reduced bore

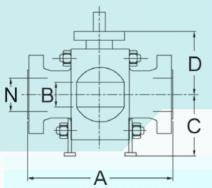
ALL TYP	PES				SI	DE ENT	RY					WE	.DED B	ODY					TO	P ENTF	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"x1.1/2"	50	38	178	191	216	165	120	96	20	178	191	216	165	120	96	19	292	295	292	175	207	85	25
3" x 2"	76	50	203	216	283	149	104	81	30	203	216	283	149	104	81	27	356	359	356	191	210	87	34
4" x 3"	102	76	229	241	305	210	157	121	47	229	241	305	210	157	121	45	432	435	432	230	225	110	70
6" x 4"	152	102	394	406	457	237	172	138	82	394	406	457	237	172	138	80	559	562	559	279	270	143	130
8" x 6"	203	152	457	470	521	318	210	219	185	457	470	521	318	210	219	167	660	664	660	343	275	215	250
10" x 8"	254	203	533	546	559	405	270	303	291	533	546	559	405	270	303	262	787	791	787	406	320	262	455
12" x 10"	305	254	610	622	635	484	310	340	462	610	622	635	484	310	340	416	838	841	838	485	355	310	485
14" x 10"	334	254	686	699	762	484	310	340	518	686	699	762	484	310	340	466	889	892	889	535	355	310	665
14" x 12"	334	305	686	699	762	560	347	375	610	686	699	762	560	347	375	549	889	892	889	535	475	395	790
16" x 12"	387	305	762	775	838	560	347	375	698	762	775	838	560	347	375	628	991	994	991	595	475	395	940
16" x 14"	387	334	762	775	838	620	420	400	933	762	775	838	620	420	400	850	991	994	991	660	450	430	908
18" x 16"	436	387	864	876	914	693	436	442	1060	864	876	914	693	436	442	954	1092	1095	1092	700	460	450	1248
20" x 16"	487	387	914	927	991	693	436	442	1100	914	927	991	693	436	442	990	1194	1200	1194	700	460	450	1542
20" x 18"	487	436	914	927	991	790	466	500	1190	914	927	991	790	466	500	1071	1194	1200	1194	745	495	470	1740
24" x 20"	590	487	1067	1080	1143	860	506	530	1970	1067	1080	1143	860	506	530	1773	1397	1407	1397	870	550	580	2378
30" x 24"	735	590	1295	(1)	1397	1000	592	600	3250	1295	(1)	1397	1000	592	600	2925	1651	1664	1651	1020	590	592	4008
36" x 30"	874	735	1524	(1)	1727	1250	756	778	6314	1524	(1)	1727	1250	756	778	5683	2083	2099	2083	1250	795	765	7048

- dimensions in mm

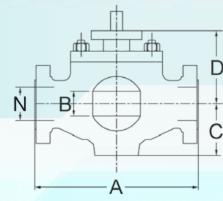
- dimensions in mining
- design and dimensions are subject to change without notice, except the dimensions established by international standard
- for dimension and weights above 60" up to 64", please contact our technical department
- weight figures refer to flanged valves
- measures marked as (1), and larger sizes are not standard values. Please contact Della Foglia for more details

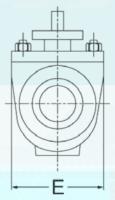












ASME class 300 full bore

ALL T	YPES				BOI	TED BO	DY					WEL	.DED B	ODY					тс)P ENTI	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	C	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"	50	50	216	232	216	149	104	83	22	216	232	216	149	104	83	20	292	295	292	185	211	90	36
3"	76	76	283	298	283	210	157	121	56	283	298	283	210	157	121	51	356	359	356	235	226	119	63
4"	102	102	305	321	305	250	172	138	80	305	321	305	250	172	138	86	432	435	432	287	286	145	106
6"	152	152	403	419	403	318	210	259	185	403	419	403	318	210	259	167	559	562	559	330	282	224	221
8"	203	203	502	518	521	408	270	303	287	502	518	521	408	270	303	258	660	664	660	410	325	270	412
10"	254	254	568	584	559	480	310	340	507	568	584	559	480	310	340	456	787	791	787	500	360	320	566
12"	305	305	648	664	635	560	347	388	703	648	664	635	560	347	388	666	838	841	838	570	475	410	715
14"	334	334	762	778	762	625	400	410	1050	762	778	762	625	400	410	934	889	892	889	665	460	437	766
16"	387	387	838	854	838	693	436	448	1428	838	854	838	693	436	448	1285	991	994	991	707	465	456	1106
18"	438	438	914	930	914	790	466	495	1602	914	930	914	790	466	495	1442	1092	1095	1092	752	508	477	1519
20"	489	489	991	1010	991	880	506	543	2207	991	1010	991	880	506	543	1986	1194	1200	1194	855	565	565	1936
22"	538	538	1092	1114	1092	940	525	550	2788	1092	1114	1092	940	525	550	2509	1295	1305	1295	942	572	596	2756
24"	590	590	1143	1165	1143	1029	592	615	3770	1143	1165	1143	1029	592	615	3123	1397	1407	1397	1010	617	605	3208
26"	633	633	1245	1270	1245	1120	645	660	4670	1245	1270	1245	1120	645	660	4203	1448	1461	1448	1072	678	637	3808
28"	684	684	1346	1372	1346	1210	728	755	6200	1346	1372	1346	1210	728	755	5193	1549	1562	1549	1141	738	715	4607
30"	735	735	1397	1422	1397	1250	756	778	6600	1397	1422	1397	1250	756	778	5940	1651	1664	1651	1265	811	795	5638
32"	781	781	1524	1553	1524	1320	760	780	7932	1524	1553	1524	1320	760	780	7139	1778	1794	1778	1312	850	835	7092
34"	830	830	1626	1654	1626	1390	780	800	9040	1626	1654	1626	1390	780	800	8136	1930	1946	1930	1408	877	885	7811
36"	874	874	1727	1756	1727	1490	878	895	11130	1727	1756	1727	1490	878	895	9084	2083	2099	2083	1445	942	938	9112
40"	976	976	1956	(1)	1956	1620	900	920	13775	1956	(1)	1956	1620	900	920	12398	2337	2337	2337	1663	1020	1036	12798
42"	1020	1020	2083	(1)	2083	1685	1027	1090	18100	2083	(1)	2083	1685	1027	1090	17550	2437	2437	2437	1715	1081	1070	15113
48"	1166	1166	2169	(1)	2169	2038	1197	1163	27500	2169	(1)	2169	2038	1197	1163	24750	2540	2540	2540	1965	1201	1236	22614
54"	1314	1314	2565	(1)	2565	2120	1260	1255	32500	2565	(1)	2565	2120	1260	1255	29250	(1)	(1)	(1)	(1)	(1)	(1)	(1)
56"	1360	1360	2743	(1)	2743	2275	1285	1270	38155	2743	(1)	2743	2275	1285	1270	34340	(1)	(1)	(1)	(1)	(1)	(1)	(1)
60"	1458	1458	2997	(1)	2997	2460	1480	1370	49900	2997	(1)	2997	2460	1480	1370	44910	(1)	(1)	(1)	(1)	(1)	(1)	(1)

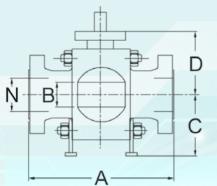
dimensions in mm
design and dimensions are subject to change without notice, except the dimensions established by international standard

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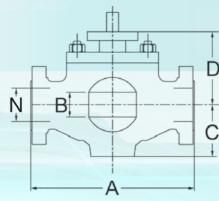
weight figures refer to flanged valves
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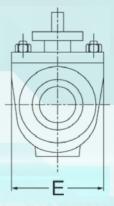


TRUNNION MOUNTED









ASME class 300 reduced bore

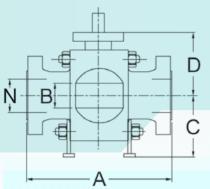
ALL TYP	PES				BOL	TED BO	DY					WEI	.DED B	ODY			TOP ENTRY								
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*		
2"x1.1/2"	50	38	216	232	216	165	120	96	21	216	232	216	165	187	86	20	292	295	292	178	206	80	26		
3" x 2"	76	50	283	298	283	149	104	105	31	283	298	283	149	104	105	30	356	359	356	210	211	90	42		
4" x 3"	102	76	305	321	305	209	157	128	65	305	321	305	209	157	128	59	432	435	432	254	226	119	82		
6" x 4"	152	102	403	419	403	254	172	138	118	403	419	403	254	172	138	106	559	562	559	318	286	145	161		
8" x 6"	203	152	502	518	521	318	210	259	219	502	518	521	318	210	259	197	660	664	660	381	282	224	285		
10" x 8"	254	203	568	584	559	408	270	303	292	568	584	559	408	270	303	263	787	791	787	445	325	270	536		
12" x 10"	305	254	648	664	635	480	310	340	594	648	664	635	480	310	340	535	838	841	838	520	360	320	572		
14" x 10"	334	254	762	778	762	480	310	340	643	762	778	762	480	310	340	579	889	892	889	520	360	320	781		
14" x 12"	334	305	762	778	762	560	347	388	816	762	778	762	560	347	388	734	889	892	889	585	475	410	916		
16" x 12"	387	305	838	854	838	560	347	388	965	838	854	838	560	347	388	869	991	994	991	650	475	410	1092		
16" x 14"	387	334	838	854	838	625	399	410	1002	838	854	838	625	399	410	1013	991	994	991	665	460	437	1095		
18" x 16"	436	387	914	930	914	693	436	448	1593	914	930	914	693	436	448	1434	1092	1095	1092	710	465	456	1462		
20" x 16"	487	387	991	1010	991	693	436	448	1663	991	1010	991	693	436	448	1497	1194	1200	1194	775	465	456	1809		
20" x 18"	487	436	991	1010	991	790	466	495	1792	991	1010	991	790	466	495	1613	1194	1200	1194	775	508	477	2023		
24" x 20"	590	487	1143	1165	1143	880	506	543	2661	1143	1165	1143	880	506	543	2395	1397	1407	1397	915	565	565	2774		
30" x 24"	735	590	1397	1422	1397	1029	592	615	4484	1397	1422	1397	1029	592	615	4036	1651	1664	1651	1090	617	605	4665		
36" x 30"	874	735	1727	1756	1727	1250	756	78	8183	1727	1756	1727	1250	756	78	7365	2083	2099	2083	1270	811	795	8298		

- dimensions in mm

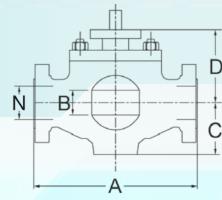
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- weight figures refer to flanged valves
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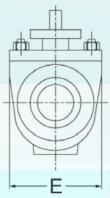












ASME class 600 full bore

ALL T	YPES				BOI	TED BO	DY					WEL	.DED B	ODY					тс	DP ENT	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"	50	50	292	295	292	165	104	83	33	292	295	292	165	104	83	30	292	295	292	223	240	85	41
3"	76	76	356	359	356	210	157	121	64	356	359	356	210	157	121	58	356	359	356	240	305	116	67
4"	102	102	432	435	432	250	172	138	114	432	435	432	250	172	138	103	432	435	432	290	275	140	230
6"	152	152	559	562	559	335	218	259	274	559	562	559	335	218	259	230	559	562	559	335	296	180	420
8"	203	203	660	664	660	426	280	303	487	660	664	660	426	280	303	438	660	664	660	415	324	275	417
10"	254	254	787	791	787	510	363	330	725	787	791	787	510	363	330	684	787	791	787	505	365	325	570
12"	305	305	838	841	838	575	378	389	965	838	841	838	575	378	389	963	838	841	838	575	480	415	720
14"	334	334	889	892	889	655	415	405	1315	889	892	889	655	415	405	981	889	892	889	670	465	442	770
16"	387	387	991	994	991	720	448	450	1745	991	994	991	720	448	450	1374	991	994	991	712	470	461	1112
18"	438	438	1092	1095	1092	815	506	500	2097	1092	1095	1092	815	506	500	1887	1092	1095	1092	757	512	482	1523
20"	489	489	1194	1200	1194	907	546	608	3242	1194	1200	1194	907	546	608	2376	1194	1200	1194	860	570	570	1940
22"	538	538	1295	1305	1295	1016	627	608	4170	1295	1305	1295	1016	627	608	3411	1295	1305	1295	947	578	602	2760
24"	590	590	1397	1407	1397	1090	654	693	5187	1397	1407	1397	1090	654	693	4266	1397	1407	1397	1015	622	610	3213
26"	633	633	1448	1461	1448	1170	697	733	5650	1448	1461	1448	1170	697	733	5085	1448	1461	1448	1078	682	640	3813
28"	684	684	1549	1562	1549	1270	807	785	6760	1549	1562	1549	1270	807	785	6084	1549	1562	1549	1146	742	722	4612
30"	735	735	1651	1664	1651	1354	852	851	9746	1651	1664	1651	1354	852	851	7542	1651	1664	1651	1270	817	804	5640
32"	781	781	1778	1794	1778	1330	860	840	9738	1778	1794	1778	1330	860	840	8764	1778	1794	1778	1317	855	840	7103
34"	830	830	1930	1946	1930	1400	900	890	11336	1930	1946	1930	1400	900	890	10202	1930	1946	1930	1423	893	890	7822
36"	874	874	2083	2099	2083	1535	943	918	14021	2083	2099	2083	1535	943	918	11970	2083	2099	2083	1450	947	944	9118
40"	976	976	2169	2169	2169	1790	1072	1045	20805	2169	2169	2169	1790	1072	1045	17271	2169	2169	2169	1668	1025	1041	12805
42"	1020	1020	2437	2437	2437	1915	1127	1108	21356	2437	2437	2437	1915	1127	1108	19220	2437	2437	2437	1720	1086	1075	15118
48"	1166	1166	2435	2435	2435	2014	1200	1180	27800	2435	2435	2435	2014	1200	1180	26100	2435	2435	2435	1970	1506	1240	22619
54"	1314	1314	3137	(1)	3137	2340	1309	1270	48800	3137	(1)	3137	2340	1309	1270	43920	(1)	(1)	(1)	(1)	(1)	(1)	(1)
56"	1360	1360	2949	2949	2949	2508	1416	1404	43400	2949	2949	2949	2508	1416	1404	42735	(1)	(1)	(1)	(1)	(1)	(1)	(1)
60"	1458	1458	3430	(1)	3430	2620	1403	1390	53000	3430	(1)	3430	2620	1403	1390	47700	(1)	(1)	(1)	(1)	(1)	(1)	(1)

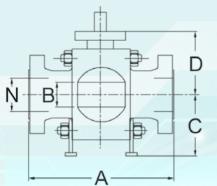
dimensions in mm
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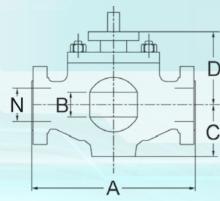
weight figures refer to flanged valves
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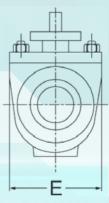


TRUNNION MOUNTED









ASME class 600 reduced bore

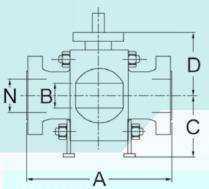
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ALL TYP	'EƏ				BUL	TED BC	זענ					WEI	DED B	זעט						P ENTR	i Y		
SIZE	Ν	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	Е	D	С	WEIGHT (kg)*
2"x1.1/2"	50	38	292	295	292	165	120	96	33	292	295	292	165	120	96	30	292	295	292	178	210	85	34
3" x 2"	76	50	356	359	356	152	104	81	40	356	359	356	152	104	81	36	356	359	356	210	215	95	46
4" x 3"	102	76	432	435	432	210	157	121	80	432	435	432	210	157	121	72	432	435	432	273	232	124	94
6" x 4"	152	102	559	562	559	250	172	138	153	559	562	559	250	172	138	138	559	562	559	356	283	154	280
8" x 6"	203	152	660	664	660	335	218	259	292	660	664	660	335	210	259	263	660	664	660	419	287	129	318
10" x 8"	254	203	787	791	787	426	280	303	550	787	791	787	426	280	303	495	787	791	787	510	324	275	600
12" x 10"	305	254	838	841	838	503	310	351	811	838	841	838	503	310	351	730	838	841	838	560	365	325	719
14" x 10"	334	254	889	892	889	503	310	351	912	889	892	889	503	310	351	821	889	892	889	605	365	325	991
14" x 12"	334	305	889	892	889	575	378	387	1170	889	892	889	575	378	387	1053	889	892	889	605	480	415	1191
16" x 12"	387	305	991	994	991	575	378	387	1350	991	994	991	575	378	387	1215	991	994	991	685	480	415	1411
16" x 14"	387	334	991	994	991	655	415	405	1450	991	994	991	635	399	410	1305	991	994	991	685	465	442	1377
18" x 16"	438	387	1092	1095	1092	720	448	450	1860	1092	1095	1092	720	448	450	1512	1092	1095	1092	745	470	461	1856
20" x 16"	489	387	1194	1200	1194	720	448	450	2085	1194	1200	1194	720	448	450	1877	1194	1200	1194	815	470	461	2896
20" x 18"	489	438	1194	1200	1194	815	506	500	2375	1194	1200	1194	815	506	500	2138	1194	1200	1194	815	512	482	2930
24" x 20"	590	489	1397	1407	1397	902	546	552	3248	1397	1407	1397	902	546	548	2923	1397	1407	1397	940	570	570	3518
30" x 24"	735	590	1651	1664	1651	1090	654	673	5768	1651	1664	1651	1090	654	673	5191	1651	1664	1651	1130	622	610	5968
36" x 30"	874	735	2083	2099	2083	1354	852	827	10376	2083	2099	2083	1354	852	827	9338	2083	2099	2083	1315	817	804	10572

- dimensions in mm

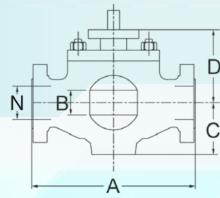
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- weight figures refer to flanged valves
- measures marked as (1), and larger sizes are not standard values. Please contact Della Foglia for more details

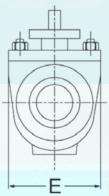












ASME class 900 full bore

ALL T	YPES				BOL	TED BO	DY					WEI	.DED B	ODY					тс	DP ENT	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"	50	50	368	371	368	198	143	112	50	368	371	368	198	143	112	45	368	371	368	216	295	110	52
3"	76	76	381	384	381	224	157	121	84	381	384	381	224	157	121	68	381	384	381	253	230	122	110
4"	102	102	457	460	457	292	192	166	160	457	460	457	292	192	166	135	457	460	457	300	283	154	200
6"	152	152	610	613	610	345	218	253	290	610	613	610	345	218	290	330	610	613	610	397	329	203	430
8"	203	203	737	740	737	440	280	314	570	737	740	737	440	280	314	540	737	740	737	459	375	245	800
10"	254	254	838	841	838	510	310	354	1027	838	841	838	510	310	354	924	838	841	838	543	431	275	1000
12"	305	305	965	968	965	615	390	408	1340	965	968	965	615	390	408	1200	965	968	965	634	511	322	1300
14"	322	322	1029	1038	1029	720	450	460	1900	1029	1038	1029	720	450	460	1800	1029	1038	1029	640	520	443	1695
16"	373	373	1130	1140	1130	780	478	490	2400	1130	1140	1130	780	478	490	1941	1130	1140	1130	803	582	390	2560
18"	423	423	1219	1232	1219	860	529	530	2860	1219	1232	1219	860	529	530	2574	1219	1232	1219	800	580	487	3400
20"	471	471	1321	1334	1321	980	591	590	4420	1321	1334	1321	980	591	590	3978	1321	1334	1321	890	625	605	4400
22"	524	524	1435	1448	1435	1062	600	640	6380	1435	1448	1435	1062	600	640	5842	(1)	(1)	(1)	(1)	(1)	(1)	(1)
24"	570	570	1549	1568	1549	1210	772	755	8250	1549	1568	1549	1210	772	755	6165	1549	1568	1549	1059	690	625	7200
26"	617	617	1651	1674	1561	1250	780	780	9270	1651	1674	1561	1250	780	780	8443	(1)	(1)	(1)	(1)	(1)	(1)	(1)
28"	665	665	1753	1775	1753	1351	846	826	10900	1753	1775	1753	1351	846	826	9910	1753	1775	1753	1234	820	723	10400
30"	712	712	1880	1902	1880	1460	904	880	12210	1880	1902	1880	1460	904	880	10989	1880	1902	1880	1300	880	800	12875
32"	760	760	2032	2054	2032	1518	906	909	13540	2032	2054	2032	1518	906	909	12186	2032	2054	2032	1357	938	870	15950
34"	808	808	2159	2188	2159	1588	941	944	17200	2159	2188	2159	1588	941	944	15480	2159	2188	2159	1468	982	920	17500
36"	855	855	2286	2315	2286	1810	1037	980	19920	2286	2315	2286	1810	1037	980	17928	2286	2315	2286	1532	1050	990	20600
40"	956	956	2540	(1)	2540	1845	1094	1073	22100	2540	(1)	2540	1810	1094	1073	19890	(1)	(1)	(1)	(1)	(1)	(1)	(1)
42"	1006	1006	2667	2783	2667	1900	1060	1200	23620	2667	2696	2667	1900	1060	1200	21258	(1)	(1)	(1)	(1)	(1)	(1)	(1)
48"	1166	1166	2540	2540	2540	2014	1183	1157	31195	2540	2540	2540	2014	1183	1157	28076	2540	2540	2540	1970	1506	1240	22619
54"	1314	1314	3137	(1)	3137	2340	1309	1270	48800	3137	(1)	3137	2340	1309	1270	43920	(1)	(1)	(1)	(1)	(1)	(1)	(1)
56"	1360	1360	2949	2949	2949	2508	1416	1404	47483	2949	2949	2949	2508	1416	1404	42735	(1)	(1)	(1)	(1)	(1)	(1)	(1)
60"	1461	1461	3430	(1)	3430	2620	1403	1390	53000	3430	(1)	3430	2620	1403	1390	47700	(1)	(1)	(1)	(1)	(1)	(1)	(1)

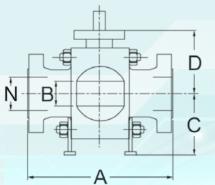
dimensions in mm
design and dimensions are subject to change without notice, except the dimensions established by international standard

- for dimension and weights above 60" up to 64", please contact our technical department

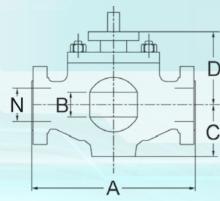
weight figures refer to flanged valves
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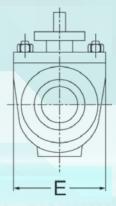


TRUNNION MOUNTED









ASME class 900 reduced bore

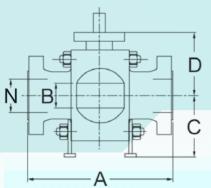
ALL TYP					POI	TED BO	עחו					WEI	DED B	000					то	P ENTF	v		
	LO				DUI		וענ					WE							101				
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"x1.1/2"	50	38	368	371	368	170	120	96	41	368	371	368	170	120	96	37	368	371	368	209	161	95	50
3" x 2"	76	50	381	384	381	198	143	112	52	381	384	381	198	143	112	47	381	384	381	241	211	84	75
4" x 3"	102	76	457	460	457	224	157	121	107	457	460	457	224	157	121	86	457	460	457	253	230	122	140
6" x 4"	152	102	610	613	610	292	192	166	245	610	613	610	292	192	166	189	610	613	610	300	283	154	273
8" x 6"	203	152	737	740	737	345	218	253	440	737	740	737	345	218	253	396	737	740	737	397	329	209	548
10" x 8"	254	203	838	841	838	440	280	320	690	838	841	838	440	280	320	621	838	841	838	459	375	245	906
12" x 10"	305	254	965	968	965	510	310	354	1027	965	968	965	510	310	354	924	965	968	965	543	431	275	1090
14" x 10"	322	254	1029	1038	1029	510	310	354	1240	1029	1038	1029	510	310	354	1116	1029	1038	1029	640	380	324	1495
14" x 12"	322	305	1029	1038	1029	615	390	408	1635	1029	1038	1029	615	390	408	1472	1029	1038	1029	634	511	322	1800
16" x 12"	373	305	1130	1140	1130	615	390	408	1730	1130	1140	1130	615	390	408	1557	1130	1140	1130	705	515	360	2100
16" x 14"	373	322	1130	1140	1130	720	449	460	2065	1130	1140	1130	680	399	430	1530	1130	1140	1130	705	520	360	2300
18" x 16"	423	373	1219	1232	1219	780	478	490	2440	1219	1232	1219	780	478	490	2196	1219	1232	1219	785	536	380	2837
20" x 16"	471	373	1321	1334	1321	780	478	490	2875	1321	1334	1321	780	478	490	2588	1321	1334	1321	803	582	390	3515
20" x 18"	471	423	1321	1334	1321	860	529	530	3250	1321	1334	1321	860	529	530	2925	1321	1334	1321	855	580	485	3875
24" x 20"	570	471	1549	1568	1549	980	591	590	5400	1549	1568	1549	980	591	590	4860	1549	1568	1549	1040	629	604	5395
30" x 24"	712	570	1880	1902	1880	1210	772	755	9500	1880	1902	1880	1210	772	755	7830	1880	1902	1880	1230	640	665	9000
36" x 30"	855	712	2286	2315	2286	1460	904	880	15350	2286	2315	2286	1460	904	880	13815	2286	2315	2286	1460	777	795	15235

- dimensions in mm

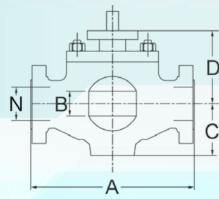
- dimensions in mining
- design and dimensions are subject to change without notice, except the dimensions established by international standard
- for dimension and weights above 60" up to 64", please contact our technical department
- weight figures refer to flanged valves
- measures marked as (1), and larger sizes are not standard values. Please contact Della Foglia for more details

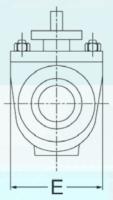












ASME class 1500 full bore

ALL T	YPES				BOI	TED BO	DDY					WE	LDED B	ODY					тс	P ENTI	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"	50	50	368	371	368	198	143	112	50	368	371	368	198	143	112	45	368	371	368	208	201	100	56
3"	76	76	470	473	470	224	157	121	98	470	473	470	224	157	121	89	470	473	470	275	230	122	153
4"	102	102	546	549	546	296	193	167	198	546	549	546	296	193	167	179	546	549	546	326	293	164	278
6"	144	144	705	711	705	446	297	303	485	705	711	705	446	297	303	437	705	711	705	442	245	416	600
8"	192	192	832	841	832	508	336	352	827	832	841	832	508	336	352	745	832	841	832	531	465	273	1100
10"	239	239	991	1000	991	594	379	397	1507	991	1000	991	594	379	397	1357	991	1000	991	622	574	330	1438
12"	287	287	1130	1146	1130	790	511	495	2272	1130	1146	1130	790	511	495	2045	1130	1146	1130	709	520	427	2017
14"	315	315	1257	1276	1257	805	519	523	2850	1257	1276	1257	805	519	523	2565	1257	1276	1257	765	550	456	2612
16"	360	360	1384	1407	1384	860	530	544	4120	1384	1407	1384	860	530	545	3708	1384	1407	1384	848	565	487	3890
18"	406	406	1537	1559	1537	1015	626	620	6150	1537	1559	1537	1015	626	620	5700	1537	1559	1537	980	592	527	5100
20"	454	454	1664	1686	1664	1080	672	640	7800	1664	1686	1664	1080	672	640	7020	1664	1686	1664	1015	650	630	6678
24"	546	546	1945	1972	1945	1270	803	736	12355	1945	1972	1945	1270	803	736	11120	1945	1972	1945	1293	660	640	11700
28"	641	641	2032	2061	2032	1451	941	1037	13100	2032	2061	2032	1451	941	1037	11790	(1)	(1)	(1)	(1)	(1)	(1)	(1)
30"	686	686	2286	2315	2286	1536	1035	1066	13600	2286	2315	2286	1536	1035	1066	12240	(1)	(1)	(1)	(1)	(1)	(1)	(1)
32"	730	730	2415	2444	2415	1669	1060	1165	15100	2415	2444	2415	1669	1060	1165	13590	(1)	(1)	(1)	(1)	(1)	(1)	(1)
36"	819	819	2743	2755	2743	1893	1180	1306	18840	2743	2755	2743	1893	1180	1306	16956	(1)	(1)	(1)	(1)	(1)	(1)	(1)

ASME class 2500 full bore

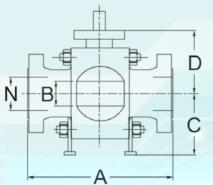
ALL T	YPES				BOI	TED BO	DY					тс)P ENTI	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	Е	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	C	WEIGHT (kg)*
2"	42	42	451	454	451	235	180	136	110	451	454	451	235	212	98	120
3"	62	62	578	584	578	280	206	161	212	578	584	578	319	243	122	246
4"	87	87	673	683	673	373	259	211	406	673	683	673	364	299	164	470
6"	131	131	914	927	914	502	345	355	1043	914	927	914	483	355	243	937
8"	179	179	1022	1038	1022	664	424	427	1672	1022	1038	1022	550	424	292	1410
10"	223	223	1270	1292	1270	752	475	475	2137	1270	1292	1270	675	503	352	2600
12"	265	265	1422	1445	1422	850	544	535	3210	1422	1445	1422	765	588	436	4200
14"	292	292	1651	1651	1651	990	630	580	5090	(1)	(1)	(1)	(1)	(1)	(1)	(1)
16"	333	333	1962	1962	1962	1100	720	670	6160	(1)	(1)	(1)	(1)	(1)	(1)	(1)
18"	374	374	2134	2134	2134	1215	810	740	8630	(1)	(1)	(1)	(1)	(1)	(1)	(1)
20"	419	419	2286	2286	2286	1325	900	825	11640	(1)	(1)	(1)	(1)	(1)	(1)	(1)

- dimensions in mm

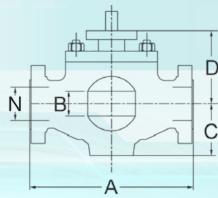
- design and dimensions are subject to change without notice, except the dimensions established by international standard
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- weight figures refer to flanged valves
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- standard values. Please contact Della Foglia for more details

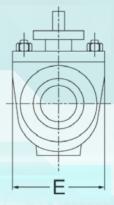


TRUNNION MOUNTED









ASME class 1500 reduced bore

ALL TYP	PES				BOL	TED BO	DDY					WEI	.DED B	ODY					то	P ENTI	RY		
SIZE	N	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	C	WEIGHT (kg)*
2"x1.1/2"	50	38	368	371	368	170	120	96	51	368	371	368	170	120	96	48	368	371	368	209	161	95	50
3" x 2"	76	50	470	473	470	198	143	112	60	470	473	470	198	143	112	53	470	473	470	267	211	105	98
4" x 3"	102	76	546	549	546	224	157	121	134	546	549	546	224	157	121	120	546	549	546	275	229	121	203
6" x 4"	144	102	705	711	705	296	192	166	295	705	711	705	296	192	166	266	705	711	705	326	293	164	376
8" x 6"	192	144	832	841	832	446	297	303	700	832	841	832	446	297	303	600	832	841	832	442	416	245	703
10" x 8"	239	192	991	1000	991	508	336	352	1022	991	1000	991	508	336	352	920	991	1000	991	531	465	273	1273
12" x 10"	287	239	1130	1146	1130	594	379	397	1760	1130	1146	1130	594	379	397	1584	1130	1146	1130	620	574	330	1535
14" x 10"	315	239	1257	1276	1257	594	379	397	2145	1257	1276	1257	594	379	397	1931	1257	1276	1257	650	580	330	2100
14" x 12"	315	287	1257	1276	1257	790	511	495	2500	1257	1276	1257	790	511	495	2250	1257	1276	1257	650	580	427	2698
16" x 12"	360	287	1384	1407	1384	790	511	495	2800	1384	1407	1384	790	511	495	2520	1384	1407	1384	720	630	427	3200
16" x 14"	360	315	1384	1407	1384	805	519	523	3245	1384	1407	1384	805	519	523	2921	1384	1407	1384	725	640	455	3100
18" x 16"	406	360	1537	1559	1537	860	530	543	4970	1537	1559	1537	860	530	543	4473	1537	1559	1537	816	657	493	4200
20" x 16"	454	360	1664	1686	1664	860	530	543	5135	1664	1686	1664	860	530	543	4622	1664	1686	1664	885	657	493	4500
20" x 18"	454	406	1664	1686	1664	975	617	588	7500	1664	1686	1664	975	617	588	6750	1664	1686	1664	885	693	527	5900
24" x 20"	546	454	1945	1972	1945	1080	672	640	10875	1945	1972	1945	1080	672	640	9788	1945	1972	1945	1070	757	620	9200

ASME class 2500 reduced bore

ALL TYP	ES				BO	LTED B	ODY					т	OP ENT	RY		
SIZE	Ν	В	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*	A-RF	A-RTJ	A-WE	E	D	С	WEIGHT (kg)*
2"x1.1/2"	42	38	451	454	451	235	120	127	88	451	454	451	240	212	98	80
3" x 2"	62	42	578	584	578	305	120	127	155	578	584	578	305	212	98	160
4" x 3"	87	62	673	683	673	356	177	198	264	673	683	673	356	243	122	300
6" x 4"	131	87	914	927	914	483	227	233	670	914	927	914	483	299	164	670
8" x 6"	179	131	1022	1038	1022	502	345	355	1240	1022	1038	1022	550	355	243	1150
10" x 8"	223	179	1270	1292	1270	675	383	339	1663	1270	1292	1270	675	424	292	2100
12" x 10"	265	223	1422	1445	1422	760	520	482	2555	1422	1445	1422	760	503	352	3300
16"x12"	333	265	1962	1962	1962	915	540	495	5170	(1)	(1)	(1)	(1)	(1)	(1)	(1)
18"x14"	374	292	2134	2134	2134	990	630	580	6670	(1)	(1)	(1)	(1)	(1)	(1)	(1)
20"x16"	419	333	2286	2286	2286	1100	720	670	8955	(1)	(1)	(1)	(1)	(1)	(1)	(1)

- dimensions in mm

design and dimensions are subject to change without notice, except the dimensions establi-shed by international standard

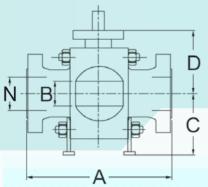
- for dimension and weights above 60" up to 64", please contact our technical department

weight figures refer to flanged valves
 measures marked as (1), and larger sizes are not standard values. Please contact Della Foglia for

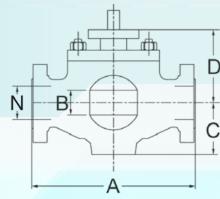
more details

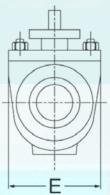












API 6A 3000

	ALL TYP	ES		BC	LTED B	ODY			Т	OP ENT	RY	
SIZE (inch)	Ν	В	А	E	D	С	WEIGHT	А	E	D	С	WEIGHT
2 ^{1/16} x 1 ^{13/16}	52,4	46,0	371	198	143	112	(1)	371	208	200	100	(1)
2 ^{1/16}	52,4	52,4	371	198	143	112	(1)	371	208	200	100	(1)
3 ^{1/8} x 2 ^{1/16}	79,4	52,4	384	198	143	112	(1)	384	208	200	100	(1)
3 ^{1/8}	79,4	79,4	384	224	157	121	(1)	384	253	230	122	(1)
4 ^{1/16} x 3 ^{1/8}	103,2	79,4	460	224	157	121	(1)	460	253	230	122	(1)
4 ^{1/16}	103,2	103,2	460	292	193	166	(1)	460	300	283	154	(1)
5 ^{1/8} x 4 ^{1/16}	130,2	103,2	613	292	193	166	(1)	613	300	283	154	(1)
5 ^{1/8}	130,2	130,2	613	345	218	175	(1)	613	397	328	203	(1)
7 ^{1/16} x 6	<mark>179</mark> ,4	152,4	613	345	218	253	(1)	613	397	328	203	(1)
7 ^{1/16}	179,4	179,4	714	440	280	320	(1)	714	459	375	245	(1)

API 6A 5000

	ALL TYP	ES		BC	LTED B	ODY			т	OP ENT	RY	
SIZE (inch)	N	В	А	E	D	С	WEIGHT	А	E	D	C	WEIGHT
2 ^{1/16} x 1 ^{13/16}	52,4	46	371	198	143	112	(1)	371	208	200	100	(1)
2 ^{1/16}	52,4	52,4	371	198	143	112	(1)	371	208	200	100	(1)
3 ^{1/8} x 2 ^{1/16}	79,4	52,4	473	198	143	112	(1)	473	208	200	100	(1)
3 1/8	79,4	79,4	473	224	157	121	(1)	473	275	230	122	(1)
4 ^{1/16} x 3 ^{1/8}	103,2	79,4	549	224	157	121	(1)	549	275	230	122	(1)
4 1/16	103,2	103,2	549	296	192	166	(1)	549	326	293	164	(1)
5 ^{1/8}	130,2	130,2	727	450	323	243	(1)	727	466	422	228	(1)
7 ^{1/16}	179,4	179,4	841	560	374	386	(1)	841	(1)	(1)	(1)	(1)

API 6A 10000

	ALL TYP	ES		BC	LTED B	ODY			Т	OP ENT	RY	
SIZE (inch)	N	В	А	E	D	C	WEIGHT	А	E	D	C	WEIGHT
1 ^{13/16}	46	46	464	244	172	122	(1)	464	244	172	122	(1)
2 ^{1/16}	52,4	52,4	521	338	236	169	(1)	521	338	236	169	(1)
2 9/16	65,1	65,1	565	(1)	(1)	(1)	(1)	565	(1)	(1)	(1)	(1)
3 1/16	77,8	77,8	619	(1)	(1)	(1)	(1)	619	(1)	(1)	(1)	(1)
4 1/16	103,2	103,2	670	(1)	(1)	(1)	(1)	670	(1)	(1)	(1)	(1)
5 ^{1/8}	130,2	130,2	737	(1)	(1)	(1)	(1)	737	(1)	(1)	(1)	(1)
7 ^{1/16} x 6 ^{3/8}	179,4	161,9	889	(1)	(1)	(1)	(1)	889	(1)	(1)	(1)	(1)
7 ^{1/16}	179,4	179,4	889	(1)	(1)	(1)	(1)	889	(1)	(1)	(1)	(1)

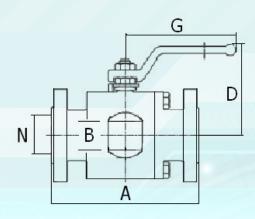
- dimensions in mm

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values. Please contact Della Foglia for more details



FLOATING BALL SIDE ENTRY



ALL	CLASSES			CLASS	150 FULI	BORE			CLASS	300 FULL	BORE			CLASS	600 FULL	BORE	
SIZE (inch)	N	В	A-RF	A-RTJ	D	G	WEIGHT	A-RF	A-RTJ	D	G	WEIGHT	A-RF	A-RTJ	D	G	WEIGHT
1/2"	13	13	108	/	77	158	2	140	151	68	160	3,8	163	165	80	170	4
3/4"	19	19	118	/	88	178	3,8	152	165	90	178	6	191	191	85	175	7
1"	25	25	127	140	108	208	5	165	178	100	215	8	216	216	100	215	10
1.1/2"	38	38	165	178	134	254	10	191	203	138	260	14	241	241	130	260	20
2"	50	50	178	191	135	260	13,6	216	232	148	260	23	292	295	135	260	24
3"	76	76	203	216	180	400	23	283	299	180	400	27	356	359	220	640	55
4"	102	102	229	242	210	540	46	305	321	210	540	62	/	/	/	/	/
6"	152	152	394	407	235	640	106	403	419	252	640	156	/	/	/	/	/

		CLASS 9	900 / 1500) FULL BO	RE									
SIZE (inch)	N	В	A-RF	A-RTJ	D	G	WEIGHT							
1/2"														
3/4"														
1"	25	25	254	254	120	215	14							
1.1/2"	38	38	305	305	155	315	27							
2"	50	50	368	371	160	315	42							

	CLASS 2500 FULL BORE												
SIZE (inch)	N	В	A-RF	A-RTJ	D	G	WEIGHT						
1/2"	13	13	264	264	110	175	13						
3/4"	18	18	273	273	120	175	14,5						
1"	20	20	308	308	135	380	20						

ALL CLASSES			CLASS 150 REDUCED BORE						CLASS 300 REDUCED BORE				CLASS 600 REDUCED BORE				
SIZE (inch)	Ν	В	A-RF	A-RTJ	D	G	WEIGHT	A-RF	A-RTJ	D	G	WEIGHT	A-RF	A-RTJ	D	G	WEIGHT
3/4" x 1/2"	19	13	108	/	77	158	2,6	152	165	68	160	5	191	191	80	170	6
1" x 3/4"	25	19	127	140	95	178	4,5	165	178	90	178	6	216	216	85	175	8
1.1/2" x 1.1/4"	38	30	165	178	105	208	8,8	191	203	100	215	12	241	241	100	215	14
2" x 1.1/2"	50	38	178	191	128	254	11,8	216	232	138	260	15	292	295	130	260	24
3" x 2"	76	50	203	216	135	260	18,5	283	299	140	260	20	356	359	160	260	36
4" x 3"	102	76	229	242	180	400	43	305	321	180	400	53	432	435	220	640	72
6" x 4"	152	102	394	407	210	540	81	403	419	210	540	95	/	/	/	/	/
8" x 6"	200	152	457	470	235	640	145	502	517	(1)	(1)	(1)	/	/	/	/	/

	CLASS 900 / 1500 REDUCED BORE										
SIZE (inch)	Ν	В	A-RF	A-RTJ	D	G	WEIGHT				
3/4" x 1/2"	19	13	229	229	100	170	8				
1" x 3/4"	25	19	254	254	110	175	12,5				
1.1/2" x 1.1/4"	38	25	305	305	120	215	27				
2" x 1.1/2"	50	38	368	371	130	315	37				

		CLASS	CLASS 2500 REDUCED BORE									
SIZE (inch)	N	В	A-RF	A-RTJ	D	G	WEIGHT					
3/4" x 1/2"	19	13	273	273	100	110	14,5					
1" x 3/4"	25	19	308	308	103	120	18,5					

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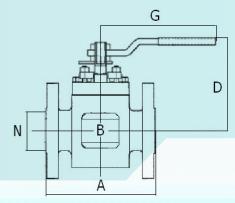
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⁻ dimensions in mm



FLOATING BALL TOP ENTRY



ALL	CLASSES		CLA	SS 150 / 3	00 FULL E	BORE	CLASS 600 FULL BORE					
SIZE (inch)	BIZE (inch) N B		A-RF	A-RTJ	D	G	A-RF	A-RTJ	D	G		
1/2"	13	13	140	151	95	130	163	165	95	130		
3/4" 19 19		152	165	110	150	191	191	115	150			
1"	25	25	165	165 178	125	150	216	216	125	150		
1.1/2 "	1.1/2" 38 38		191	203	150	200	241	241	155	200		
2"	50	50	216	232	175	210	292	295	165	310		

ALL	CLASSES		CLASS	150 / 300	REDUCEI	D BORE	CLASS 600 REDUCED BORE				
SIZE (inch)	Ν	В	A-RF	A-RTJ	D	G	A-RF	A-RTJ	D	G	
3/4" x 1/2"	13	13	152	165	95	130	191	191	95	130	
1" x 3/4"	19	19	165	178	110	150	216	216	115	150	
<mark>1.1/2" x 1.1/4</mark> "	25	25	191	203	125	150	241	241	125	150	
2" x 1.1/2"	38	38	216	232	150	200	292	295	155	200	
3" x 2"	50	50	283	299	175	210	/	/	/	/	

- dimensions in mm

- design and dimensions are subject to change without notice, except the dimensions established by international standard
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MATERIALS AVAILABLE FOR VALVES BOTH TRUNNION MOUNTED AND FLOATING BALL

	FORGINGS											
-	A105N	-	АРІ 6А 60К	-	A182 F51 – UNS S31803							
-	A350 LF2	-	A182 F6A – UNS S41000	-	A182 – UNS S32550							
-	A350 LF3	-	A182 F6NM – UNS S41500	-	A182 F53 – UNS S32750							
-	AISI 4140	-	A182 F304 – UNS S30400	-	A182 F55 – UNS S32760							
-	AISI 1040	-	A182 F316 – UNS S31600	-	B446 – UNS S06625							
-	A694 F60	-	A182 F316LNM – UNS S31653	-	UNS N08825							
-	A694 F60 impact tested	-	A564 630 – UNS S17400	-	UNS N08925							
-	A694 F65	-	A182 F44 – UNS S31254									

CASTINGS										
- A216 WCB	-	A352 LC2	-	A351 – UNS S31803						
- A216 WCC	-	A352 LC3	-	A351 – UNS S31254						
- A352 LCB	-	A352 CA6NM	-	A890 – UNS J93370						
- A352 LCC	-	A351 CF8M	-	A890 – UNS J92205						































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LOCAL AGENT