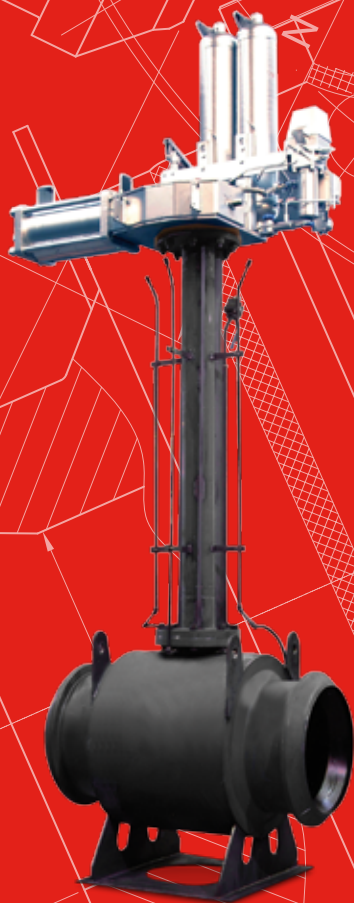


**JC**  
**VALVES**  
*The quality option*



**FULLY WELDED  
VALVES**





## | INDEX |

2

**JC VALVES**  
The company

4

**INTRODUCTION**

6

**MAIN FEATURES**

8

**PARTS & MATERIALS**

10

**FULLY WELDED VALVES**  
Full Bore

13

**FULLY WELDED VALVES**  
Reduced Bore



The quality option



"We make valves since 1968"

» JC World Wide

JC Valves provides world wide coverage thanks to the strategic locations of its factories and offices:



JC Fábrica de Válvulas S.A., established in 1968, is a multinational company specialised in the manufacture and sale of high quality industrial valves.

The expertise and know how acquired over the years coupled with the continued investments in the design of valves, has made JC a world renowned company in the field of valve applications.

» Market sectors

JC develops and designs valves for all applications, but the main focus is in Oil & Gas, Chemical, Petrochemical, Pulp & Paper and Energy sectors.



Oil



Chemical



Gas



Pulp & Paper



Petrochemical



Energy



## » Quality assurance

JC Valves are designed and produced to meet the major international standards and we take great care and put a lot of emphasis on QUALITY, which provides our customers with a total guarantee and trouble free operation of their process. And in addition, we take great care to make our facilities and our products Environment friendly.



## » Global services

JC Fábrica de Válvulas S.A. offers its customers a worldwide service, from technical advice to choose the right valve up to the design and manufacture of custom built valves to meet special service requirements.

Our R+D department is always ready to find solutions for severe applications and our global distribution network offers quick availability of JC valves and an efficient after sales service.

### GLOBAL SERVICE

TECHNICAL SUPPORT



DESIGN



MANUFACTURE



WORLDWIDE DISTRIBUTION



AFTER-SALES SERVICE



## JC Quality Assurance System

- » ISO 9001 : 2008 certified by BVQI
- » API Q1 certified by the AMERICAN PETROLEUM INSTITUTE
- » PED 97 / 23 / EC certified by BVQI

## Manufacturing Program

- » API 6D certified by the AMERICAN PETROLEUM INSTITUTE
- » CE Marking (Module H1) in accordance with PED 97 / 23 / EC certified by BVQI
- » Fire Safe ISO 10947 : 2004 certified by SGS
- » API 607 3rd., 4th. and 5th. Edition certified by SGS
- » BS 6755 Part 2 certified by Lloyd's Register and SGS
- » GOST "R" certified for Russian market
- » SIL 3 (Safety integrity level) certified by BV
- » Atex
- » EN 13774
- » TA-LUFT

## Environmental Certifications

- » ISO 14001 : 2004 certified by BVQI
- » ISO-EN 15848-1 certified by SGS

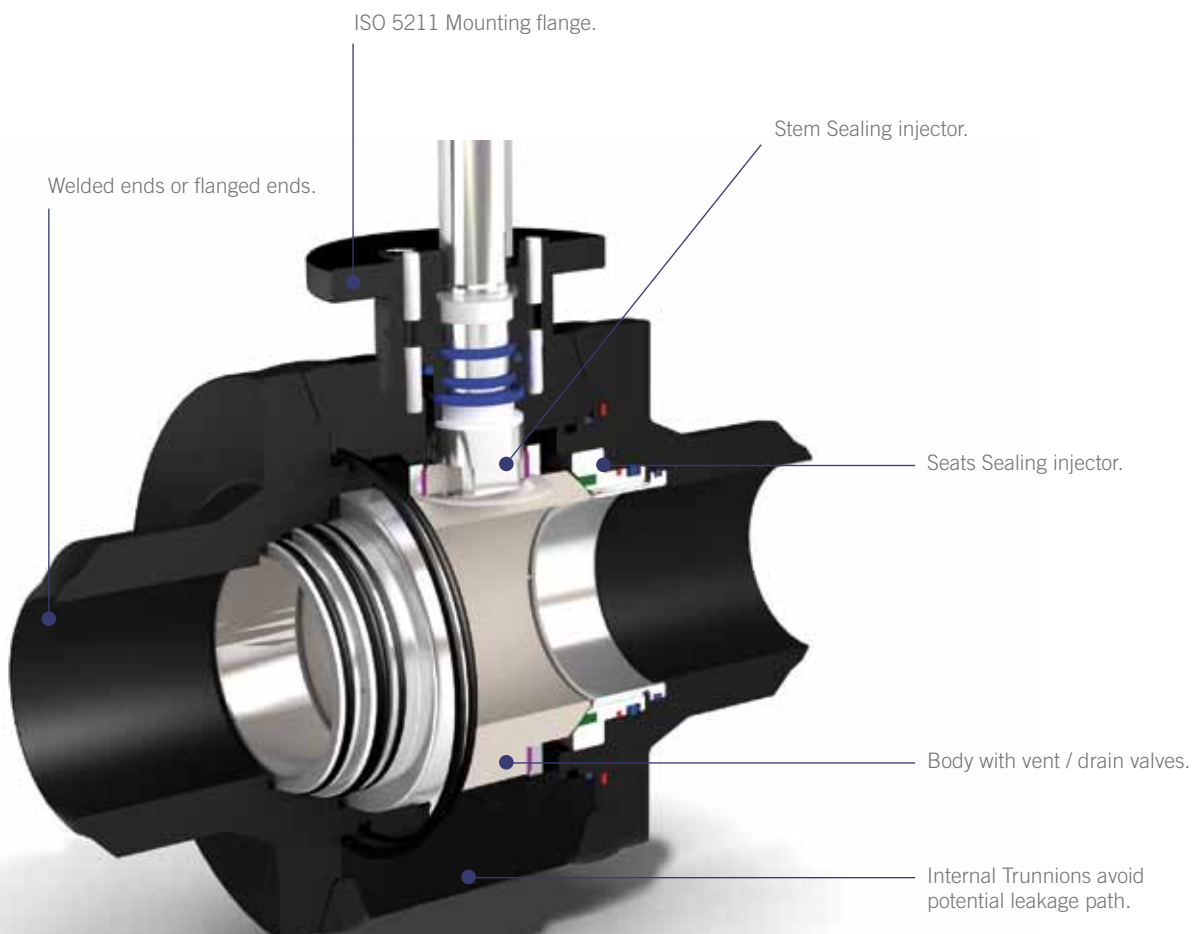


# FULLY WELDED VALVES

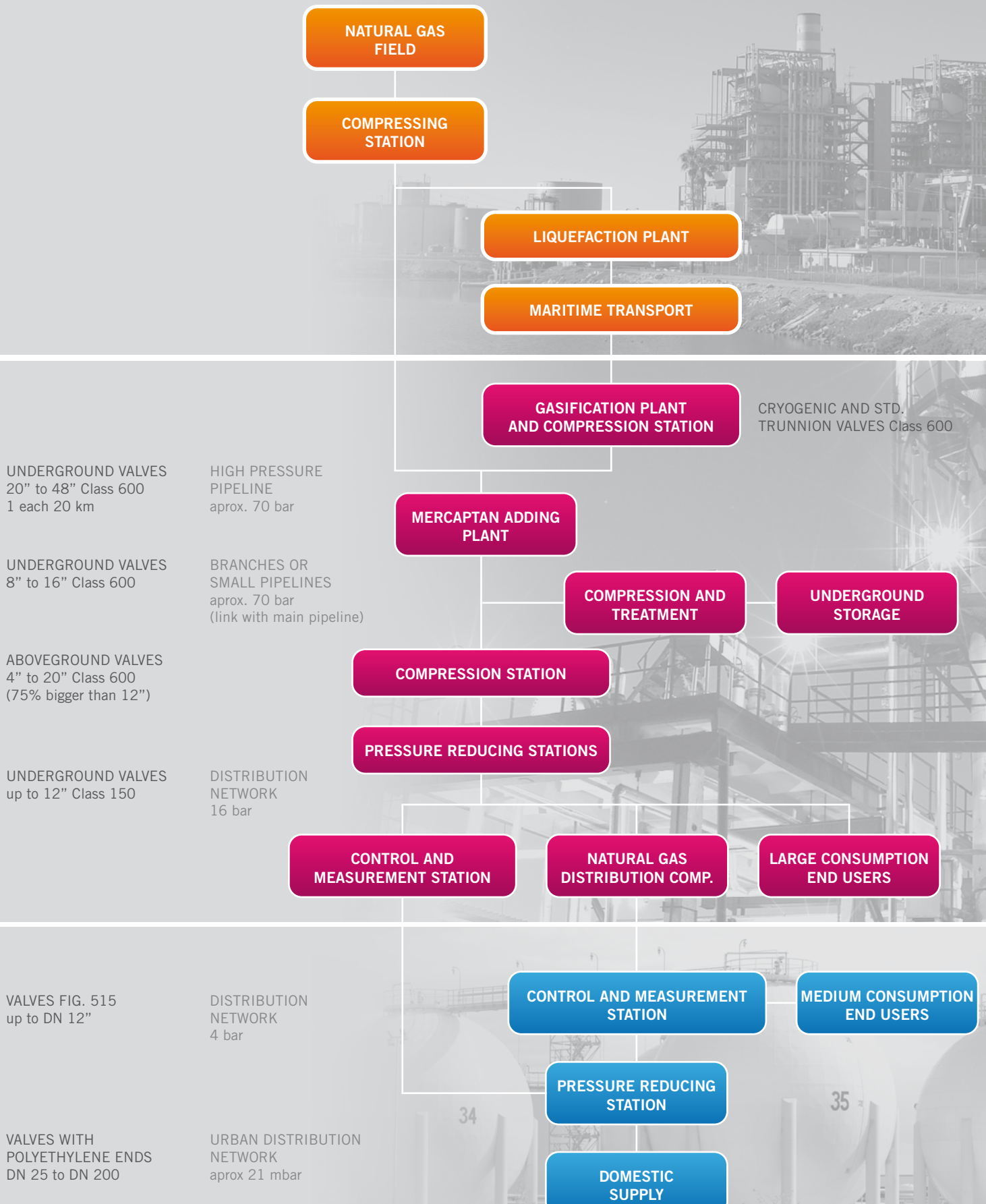
2" - 24" | Class 150 - Class 600

The JC Fully Welded Ball Valve gives it maximum strength at minimum weight as well as maximum resistance both to pipeline pressures and stresses. The compact, spherical design also eliminates body flanges, thus reducing overall size and leak paths.

JC welded body ball valves are used mainly in Gas transmission and distribution pipeline (Mid-stream), typical for underground and buried installation.



# JC BALL VALVES FOR GAS DISTRIBUTION LINES



## VALVES FOR UNDERGROUND PIPELINES

### Trunnion mounted ball valves

The ball is fixed and the seat rings are floating, free to move along the valve axis. Side load generated by pressure acting on the ball is absorbed by bearings. At low pressure the seat sealing acting is achieved by the thrust of the springs acting on the seat. As the pressure increases the fluid pressure pushes the seat rings against the ball, making the sealing more reliable.

### Independent ball and stem

The ball and stem are independent components to minimize the effect of the side thrust generated by the pressure acting on the ball to minimize the valve operation torque.

### Anti-static design

The electrical conductance continuity between all the metallic components is guaranteed and certified with the design of anti-static device spring and ball.

### Fire Safe

Prototypes have been Fire tested and certified to BS 6755 Part 2 and API 607 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> Edition.



## NON-DESTRUCTIVE TESTING FOR GAS VALVES

### Body (Shell under pressure)

#### Cast

- » X-raying of critical areas and BW ends (50 mm). % according to Table 1.
- » Magnetic particles testing of internal and external surfaces at 100%.

#### Forged

- » Ultrasonic test of critical areas and BW ends (50 mm). % according to Table 1.

#### Welds

- » Dye Penetrant inspection at 100%.

### Ball

#### Cast

- » Magnetic particles or dye penetrant liquids at 100%.

Table 1

Class	Diameter				
	< 4	4	6	8	≥ 10
150	30		50		100
300		50		100	
≥ 600			100		

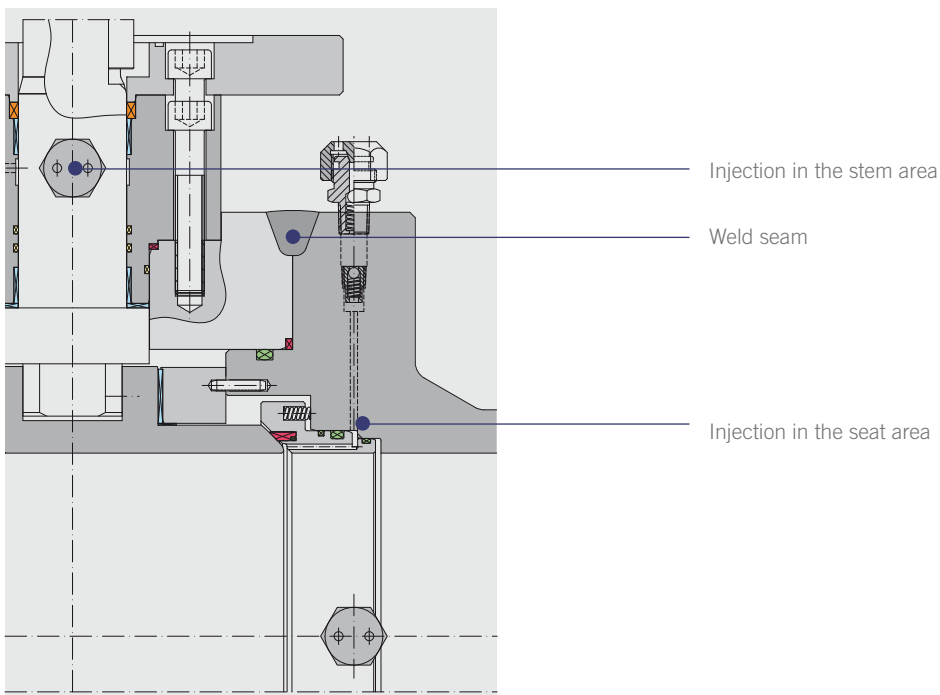


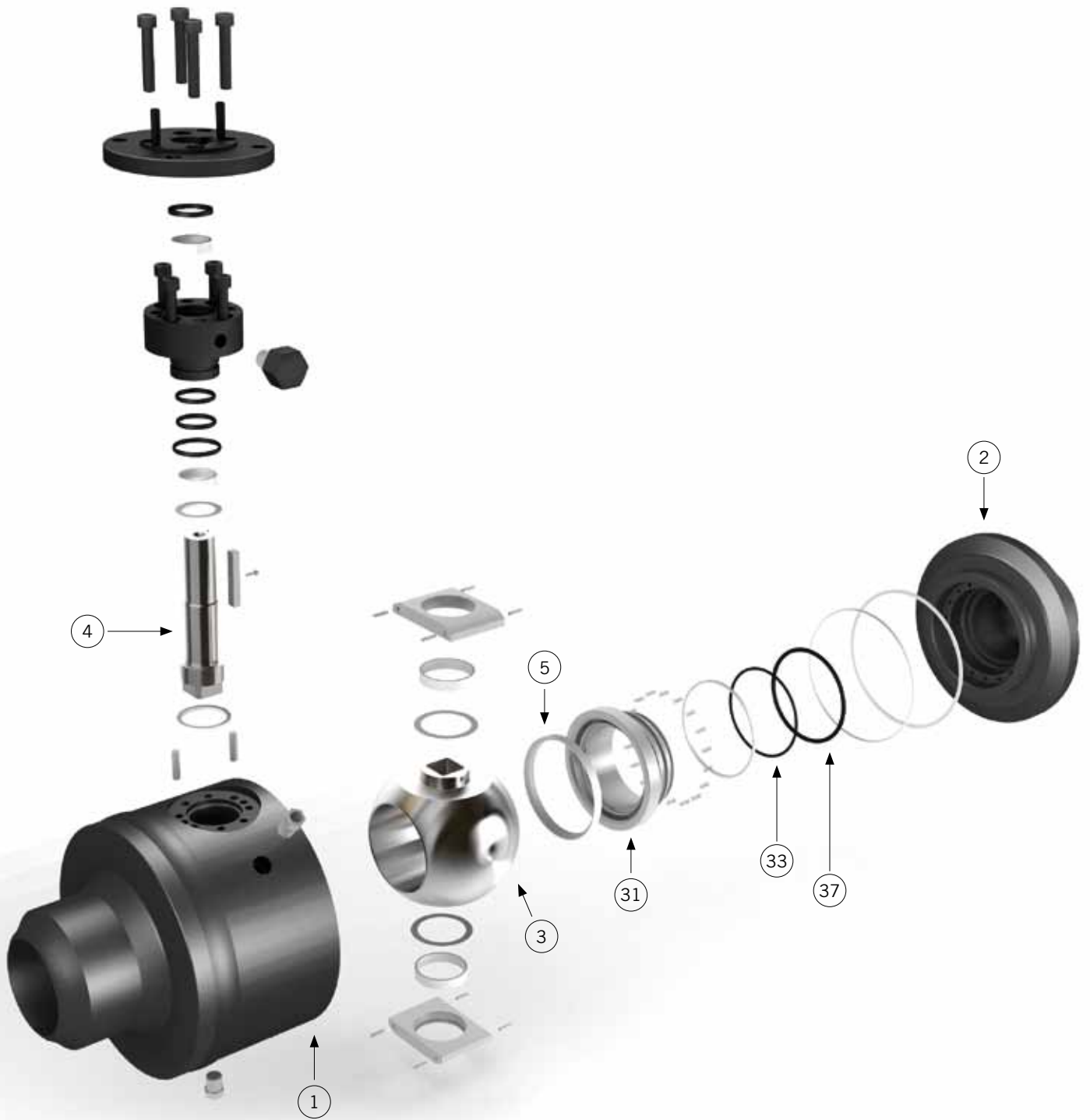
## FULLY WELDED UNDERGROUND



- ① Seat grease line
- ② Drain line
- ③ Seat sealant injector
- ④ Stem extension up to 5 meters long

## SEALING INJECTIONS





## Parts

- |                  |        |                  |             |
|------------------|--------|------------------|-------------|
| ① Body           | ③ Ball | ⑤ Seat Insert    | ③③ "O" Ring |
| ② Body Connector | ④ Stem | ③① Seat Retainer | ③⑦ "O" Ring |

Body /  
Body Connector

① ②
Body Material
A105
A694 F52
A684 F6D
A350 LF2
A360 LF3
A182 F51 (UNS 31803)
A182 F53 (UNS 31750)
A182 F55 (UNS 31760)
A182 F44 (UNS 31254)
MONEL
F6A
F304
F304L
F316
F316L
Alloy 20
Hastelloy A
Hastelloy B

Other materials under request.

TRIM Materials

③	③①	④
Ball Material	Seat Retainer Material	Stem Material
A105 ENP	A105 ENP	A105 ENP
		F6A
		4140
LF2 Cl. 1 ENP	LF2 Cl. 1 ENP	LF2 Cl. 1 ENP
		F6A
		4140
F6A	F6A	F6A
F304	F304	F304
F304L	F304L	F304L
F316	F316	F316
F316L	F316L	F316L
F51 (UNS 31803)	F51 (UNS 31803)	F51 (UNS 31803)
F53 (UNS 31750)	F53 (UNS 31750)	F53 (UNS 31750)
F55 (UNS 31760)	F55 (UNS 31760)	F55 (UNS 31760)
F44 (UNS 31254)	F44 (UNS 31254)	F44 (UNS 31254)
MONEL	MONEL	MONEL

Other materials under request.

Sealing Materials

⑤	③③ ③⑦
Seat Material	"O" Ring Material
NYLON PA12	NBR
	HNBR
	LNBR
	VITON
	VITON B
	VITON AED
DEVLON	PTFE Packing
	NBR
	HNBR
	LNBR
	VITON
	VITON B
RPTFE	VITON AED
	PTFE Packing
	NBR
	HNBR
	LNBR
	VITON
PEEK	VITON B
	VITON AED
	PTFE Packing
	NBR
	HNBR
	LNBR
STL Stellite	VITON
	VITON B
	VITON AED
	PTFE Packing
	NBR
	HNBR

Other materials under request.



## FULLY WELDED 6215

Class 150

Full Bore

Class 150. From 2" to 24"

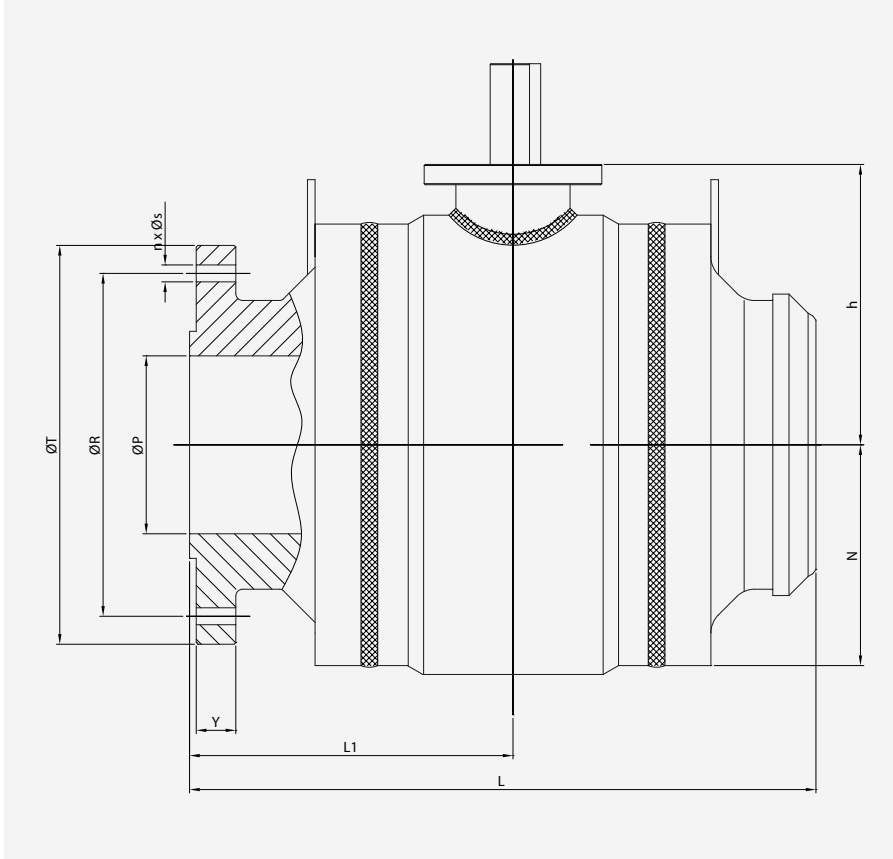


Fig. 6215 (Class 150)

in	DN	ØT	ØR	ØP	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weigh - WE
2"	50	150	120.7	49	4 x 19	14	178	216	89	108	106	102	27
3"	80	190	152.4	74	4 x 19	18	203	283	105.5	141.5	157	126	54
4"	100	230	190.5	100	8 x 19	22	229	305	114.5	152.5	198	163	89
6"	150	280	241.3	150	8 x 22	24	394	457	197	228.5	247	187	160
8"	200	345	298.5	201	8 x 22.2	27	457	521	228.5	260.5	280	224	253
10"	250	405	362	252	12 x 25.4	29	533	559	266.5	279.5	320	278	387
12"	300	485	431.8	303	12 x 25.4	30	610	635	305	317.5	337	306	559
14"	350	535	476.3	334	12 x 28.5	33	688	762	344	381	374	334	760
16"	400	595	539.8	385	16 x 28.5	35	762	838	381	419	408	358	1020
18"	450	635	577.9	436	16 x 31.8	38	864	914	432	457	439	390	1215
20"	500	700	635	487	20 x 31.8	41	914	991	457	495.5	492	434	1793
24"	600	815	749.3	589	20 x 34.9	46	1067	1143	533.5	571.5	588	523	3099

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.

## FULLY WELDED 6230

Class 300

Full Bore

Class 300. From 2" to 24"

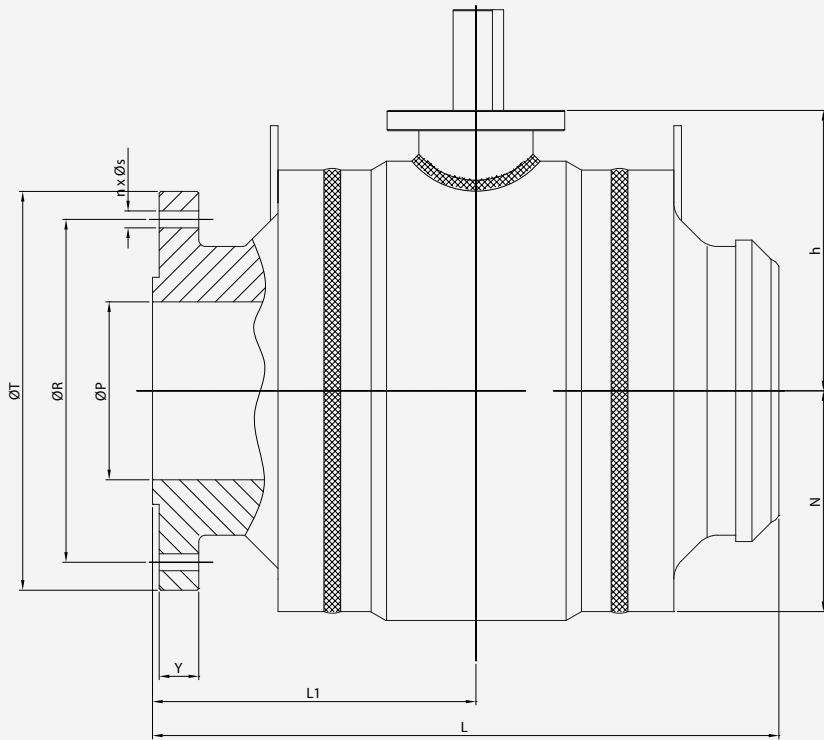


Fig. 6230 (Class 300)

in	DN	ØT	ØR	ØP	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weight - WE
2"	50	165	127	49	8 x 19	21	216	216	108	108	100	92	27
3"	80	210	168.3	74	8 x 22.2	27	283	283	141.5	141.5	150	120	55
4"	100	255	200	100	8 x 22.2	30	305	305	152.5	152.5	200	160	92
6"	150	320	269.9	150	12 x 22.2	35	403	457	201.5	228.5	246	200	182
8"	200	380	330.2	201	12 x 25.4	40	502	521	251	260.5	275	230	278
10"	250	445	387.4	252	16 x 28.5	46	566	559	283	279.5	330	295	500
12"	300	520	450.8	303	16 x 31.8	49	648	635	324	317.5	355	330	733
14"	350	585	514.4	334	20 x 31.8	52	762	762	381	381	390	345	1029
16"	400	650	571.5	385	20 x 34.9	56	838	838	419	419	430	390	1418
18"	450	710	628.6	436	24 x 34.9	59	914	914	457	457	455	410	1592
20"	500	775	685.8	487	24 x 34.9	62	991	991	495.5	495.5	500	465	2195
24"	600	915	812.8	589	24 x 41.3	68	1143	1143	571.5	571.5	590	545	3460

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.

## FULLY WELDED 6260

Class 600

Full Bore

Class 600. From 2" to 24"

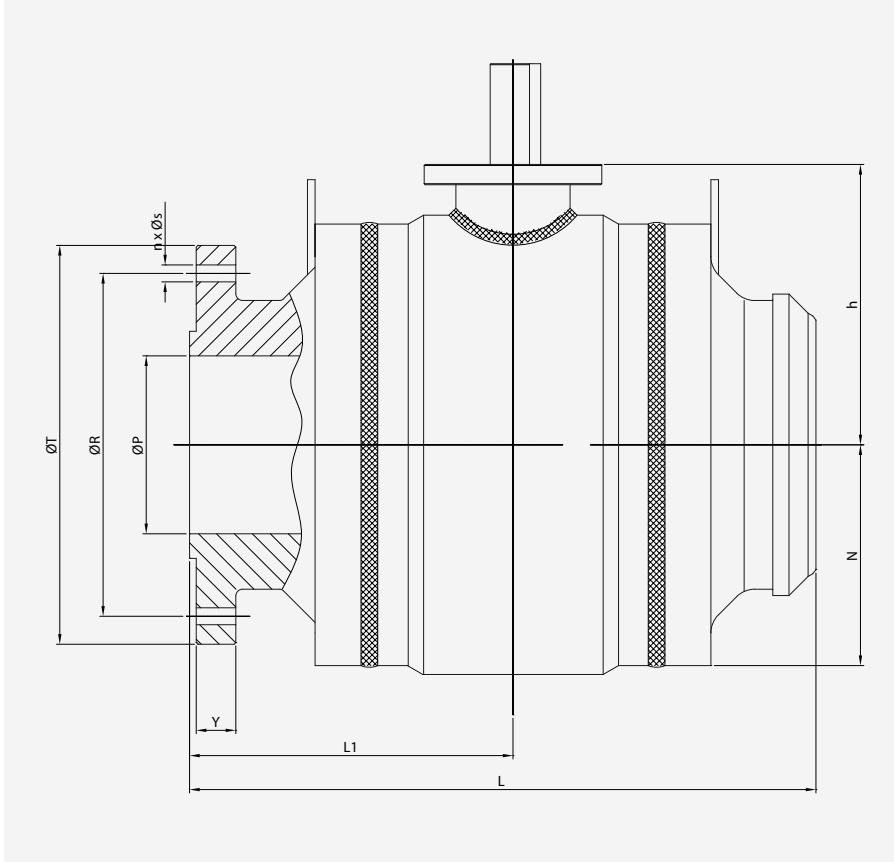


Fig. 6260 (Class 600)

in	DN	ØT	ØR	ØP	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weigh - WE
2"	50	165	127	49	8 x 19	25	292	292	146	146	102	96	31
3"	80	210	168.3	74	8 x 22.2	32	356	356	178	178	165	128	62
4"	100	275	213.9	100	8 x 25.4	38	432	432	216	216	210	160	113
6"	150	355	292.1	150	12 x 28.5	48	559	559	279.5	279.5	250	200	253
8"	200	420	349.2	201	12 x 31.8	56	660	660	330	330	288	255	485
10"	250	510	431.8	252	16 x 34.9	64	787	787	393.5	393.5	330	308	758
12"	300	560	489	303	20 x 34.9	67	838	838	419	419	378	348	1067
14"	350	605	527	334	20 x 38.1	70	889	889	444.5	444.5	394	360	1083
16"	400	685	603.2	385	20 x 41.3	76	991	991	495.5	495.5	430	410	1525
18"	450	745	654	436	20 x 44.5	83	1092	1092	546	546	467	430	2095
20"	500	815	723.9	487	24 x 44.5	89	1194	1194	597	597	500	492	2638
24"	600	940	838.2	589	24 x 50.8	102	1397	1397	698.5	698.5	594	570	4736

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.

## FULLY WELDED 7215

Class 150

Reduced Bore

Class 150. From 2" to 24"

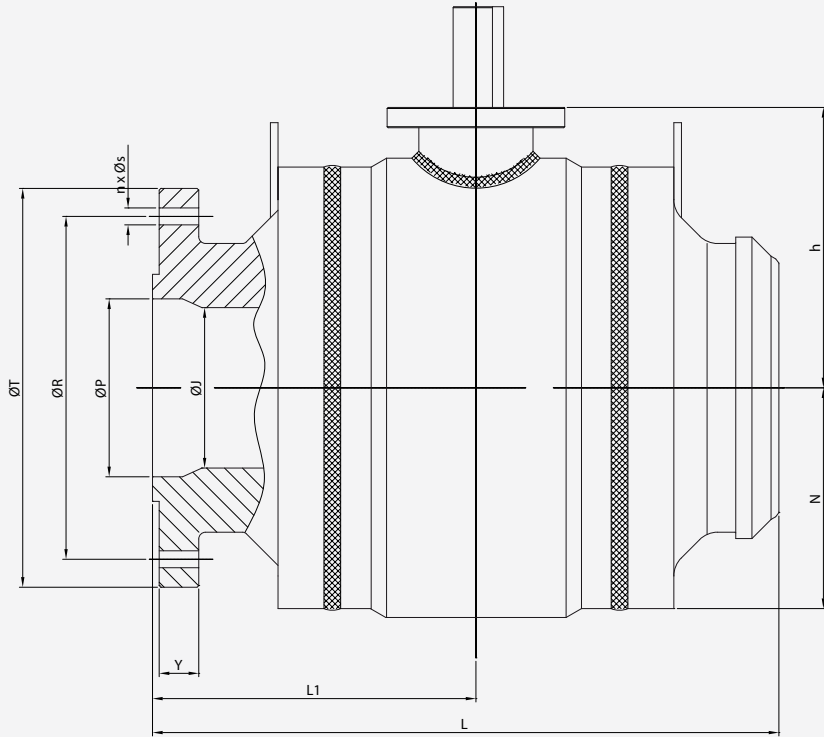


Fig. 7215 (Class 150)

in (DN)	ØT	ØR	ØP	ØJ	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weigh - WE
3" x 2"	190	152.4	74	49	4 x 19	18	203	283	101.5	141.5	106	100	30
4" x 3"	230	190.5	100	74	8 x 19	22	229	305	114.5	152.5	154	127	60
6" x 4"	280	241.3	150	100	8 x 22	24	394	457	197	228.5	198	163	100
8" x 6"	345	298.5	201	150	8 x 22.2	27	457	521	228.5	260.5	252	187	185
10" x 8"	405	362	252	201	12 x 25.4	29	533	559	266.5	279.5	280	222	291
12" x 10"	485	431.8	303	252	12 x 25.4	30	610	635	305	317.5	323	280	462
14" x 12"	535	476.3	334	303	12 x 28.5	33	686	762	343	381	342	300	610
16" x 14"	595	538.8	385	334	16 x 28.5	35	762	838	381	419	370	335	820
18" x 16"	635	577.9	436	385	16 x 31.8	38	664	914	432	457	415	348	1060
20" x 18"	700	635	487	436	20 x 34.9	41	914	991	457	495.5	439	390	1190
24" x 20"	815	749.3	589	487	20 x 31.8	46	1067	1143	533.5	571.5	490	435	1970

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.

## FULLY WELDED 7230

Class 300

Reduced Bore

Class 300. From 2" to 24"

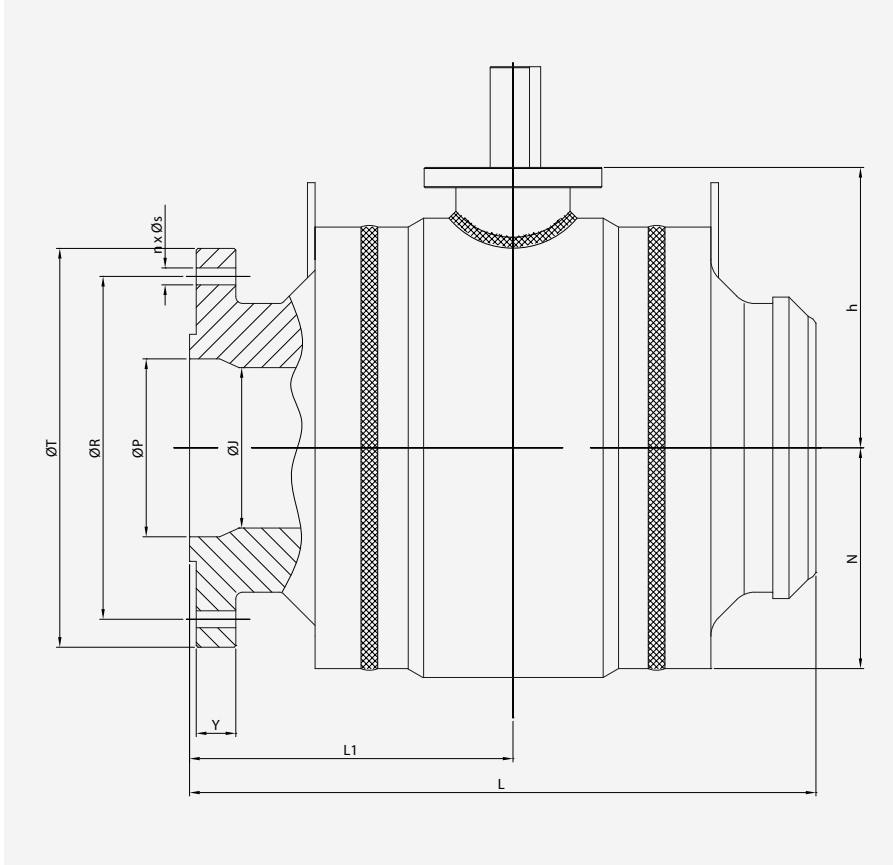


Fig. 7230 (Class 300)

in (DN)	ØT	ØR	ØP	ØJ	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weigh - WE
3" x 2"	210	168.3	74	49	8 x 22.2	27	283	283	141.5	141.5	100	96	32
4" x 3"	255	200	100	74	8 x 22.2	30	305	305	152.5	152.5	150	120	62
6" x 4"	320	269.9	150	100	12 x 22.2	35	403	457	201.5	228.5	200	160	115
8" x 6"	380	330.2	201	150	12 x 25.4	40	502	521	251	260.5	245	200	219
10" x 8"	445	387.4	252	201	16 x 28.5	46	568	559	284	279.5	275	230	292
12" x 10"	520	450.8	303	252	16 x 31.8	49	648	635	324	317.5	330	295	594
14" x 12"	585	514.4	334	303	20 x 31.8	52	762	762	381	381	355	330	816
16" x 14"	650	571.5	385	334	20 x 34.9	56	838	838	419	419	390	345	1125
18" x 16"	710	628.6	436	385	24 x 34.9	59	914	914	457	457	430	390	1593
20" x 18"	775	685.8	487	436	24 x 34.9	62	991	991	495.5	495.5	455	410	1792
24" x 20"	915	812.8	589	487	24 x 41.3	68	1143	1143	571.5	571.5	500	465	2661

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.



## FULLY WELDED 7260

Class 600

Reduced Bore

Class 600. From 2" to 24"

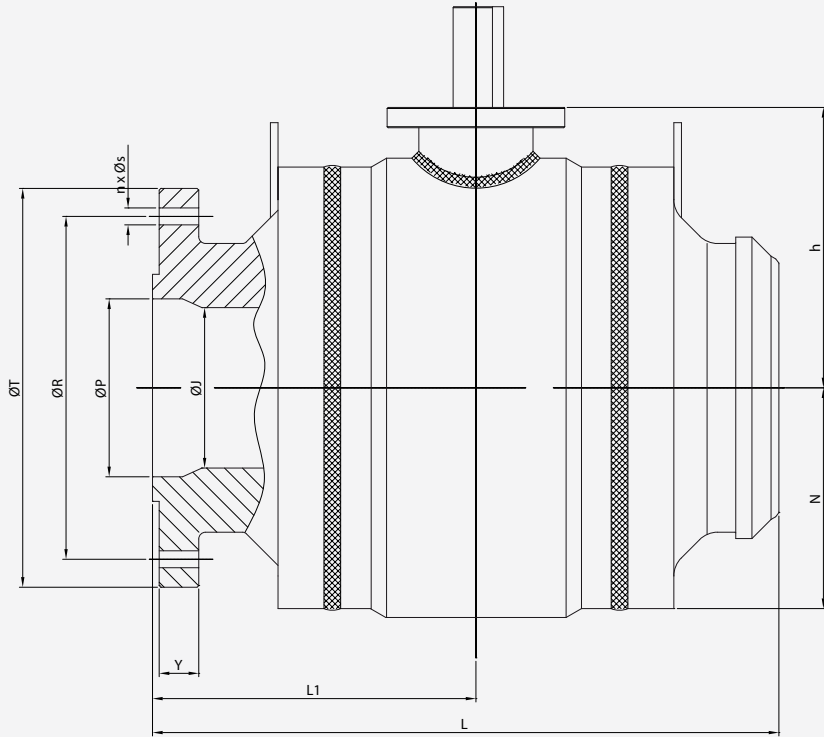


Fig. 7260 (Class 600)

in (DN)	ØT	ØR	ØP	ØJ	n x ØS	Y	L - RF	L - WE	L1 - RF	L1 - WE	h	N	Weigh - WE
3" x 2"	210	168.3	74	49	8 x 22.2	32	356	356	178	178	102	98	39
4" x 3"	275	215.9	100	74	8 x 25.4	38	432	432	216	216	165	128	78
6" x 4"	355	292.1	150	100	12 x 28.5	48	559	559	279.5	279.5	210	160	150
8" x 6"	420	349.2	201	150	12 x 31.8	56	660	660	330	330	250	200	292
10" x 8"	510	431.8	252	201	16 x 34.9	64	787	787	395.5	395.5	288	255	550
12" x 10"	560	489	303	252	20 x 34.9	67	838	838	419	419	330	308	811
14" x 12"	605	527	334	303	20 x 38.1	70	889	889	444.5	444.5	378	348	1145
16" x 14"	685	603.2	385	334	20 x 41.3	76	889	889	444.5	444.5	394	360	1083
18" x 16"	745	654	436	385	20 x 44.5	83	1092	1092	546	546	430	410	1880
20" x 18"	815	723.9	487	436	24 x 44.5	89	1194	1194	597	597	467	430	2375
24" x 20"	940	838.2	589	487	24 x 50.8	102	1397	1397	697.5	697.5	500	492	3248

Note: Dimensions in mm and weight in kg.  
Weights and dimensions can be changed without notice.  
Bigger sizes available under customers request.



*The quality option*



# JC VALVES

*The quality option*

## MORE PRODUCTS



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GATE, GLOBE & CHECK VALVES - BALL VALVES - STRAINERS

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## ACCESSORIES



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CHAIN WHEELS - GEAR OPERATORS - ELECTRIC ACTUATORS - POSITION INDICATORS  
LOCKING DEVICES - LANTERN RINGS - LIMIT SWITCHES - BYPASSES - DAMPERS

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# FULLY WELDED VALVES

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