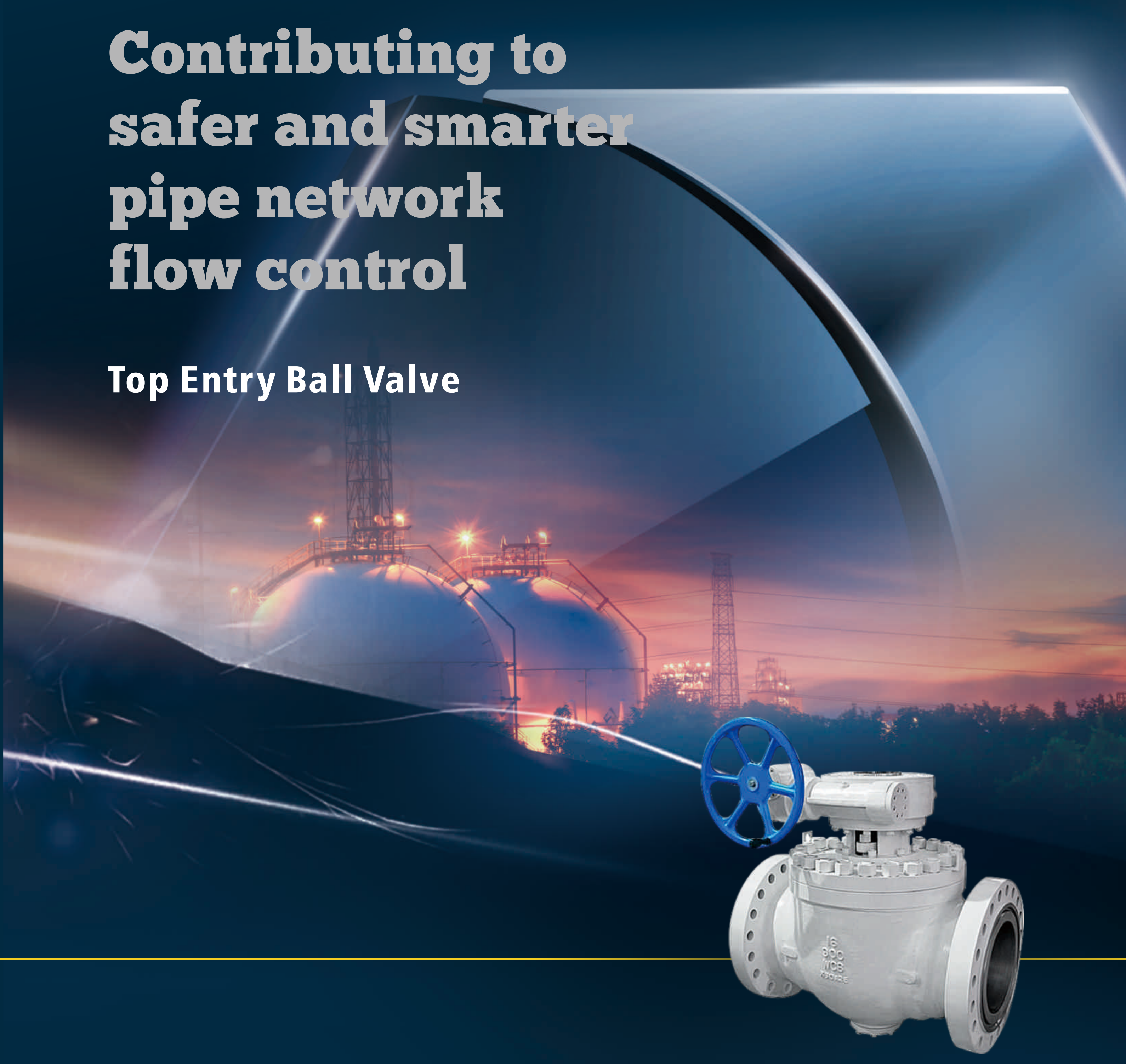
KAMROO

Contributing to safer and smarter pipe network flow control

Top Entry Ball Valve



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KAMROO

BRIFE INTRODUCTION

EST.2012

Contributing to safer and smarter pipe network flow control

Founded in 2012, KAMROO Holding Group is an innovative integrator focusing on "smart" manufacturing of valves. The core products are suitable for tough working applications such as low temperature, high temperature, high pressure, strong corrosion, and solids mixed medium. KAMROO products are suitable for industries such as Oil&Gas, Refinery, Chemical, Natural Gas, Power Plant, Metallurgy, Electronics, and new energy. The equivalent standards cover many industrial pipelines fields.

KAMROO strives to create an automation, digital, and intelligent platform, integrates profound technical accumulation and professional wisdom of the team. We also provide superior product support and technical services for domestic and international clients, as well as provide customized solutions for end user.

KAMROO adheres to customer-oriented principle and guarantees system compatibility. We will continue to maintain the attitude and belief of concentration and ingenuity, adhering to safer, more reliable and smarter pipeline flow control technology and advanced design concepts to help you optimize the working application, improve the efficiency and save the costs.

With a flexible and open attitude, KAMROO listens to the voice of the market and embraces multiculturalism. KAMROO focuses on the construction of a global service system, and strives to become the preferred partner in the field of flow control. No matter where you are in the world, we look forward to keeping in close contact with you to understand your specific needs and provide precise services.

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QUALIFICATION CERTIFICATE

API607 Cert

API 641 Cert

API 6D cert

FE Cert

EAC Cert

CE Cert

ISO 14001:2015

ISO 45001:2018

ISO 9001:2015

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TOP ENTRY BALL VALVE

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DESIGN STANDARDS	API6D, ASME B16.34, ASME B16.5, API598, etc.
SIZE RANGE	NPS2~NPS48
NOMINAL PRESSURE	CLASS150~CLASS2500
MATERIALS	ASTM A105, ASTM A216 WCB, ASTM A352 LCB, ASTM A350 LF2, ASTM A351 CF8, ASTM A182 F304, ASTM A351 CF8M, ASTM A182 F316, etc.
APPLICABLE TEMPERATURE	-29~180℃
APPLICABLE MEDIUM	Water, Oil, Gas, etc.

TOP ENTRY DESIGN

One of the outstanding features of the top entry ball valve is that the key components such as the valve stem and ball can be removed from the top of the body, without disassembling the entire valve or affecting the pipeline system, which greatly reduces the maintenance difficulty and cost, as well as shortens the repair time.

QUICK REPLACEMENT

When parts need to be serviced or replace, the top entry design makes the operation easier and faster, increasing work efficiency.

LARGE FLOW AREA

The ball design makes the valve has a large flow area in the full open state, which reduces the resistance of the medium at the valve, and improves the flow efficiency of the pipeline system.

REASONABLE FLOW TUNNEL DESIGN

The flow tunnel design of the top entry ball valve is reasonable, which can effectively reduce the deposition and blockage of the medium at the valve, and extend the valve service life.

VARIOUS MEDIUM

Top entry ball valve can be applied to various medium, including water, steam, oil, gas, etc., to meet the needs of different industrial fields.

LONG SERVICE LIFE

The structure of the top entry ball valve is simple and reliable with the long service life, which can operate stably under various conditions.

ANTI-STATIC DESIGN

The electrostatic extraction device of spring and small ball is used to form an electrostatic channel between the ball and the valve body through the valve stem, so that the static electricity caused by the friction between the ball and the sealing ring is led to the earth through the valve body, which can prevent fire or explosion and other hazards caused by electrostatic sparks.

SEALING EMERGENCY RESCUE AND VALVE LUBRICATION

When the valve seat and stem seals are damaged and leaked, the sealing grease injected by the grease injection valve can achieve instantaneous sealing. In normal operation, the valve stem and ball can be lubricated by injecting grease to make the valve opening and closing more flexible and convenient.

MIDDLE CAVITY SELF-PRESSURE RELIEF FUNCTION

When the pressure in the valve cavity is abnormally elevated, the piston valve seat structure can ensure that the pressure in the valve cavity is pushed away from the valve seat, so that the pressure in the valve cavity is released to ensure the safety of the valve.

ACTUATOR MOUNTING PLATFORM SETUP

The flange of the top entry ball valve is designed according to ISO 5211, which allows easy installation of any type of actuator by means of brackets and coupling sleeves.

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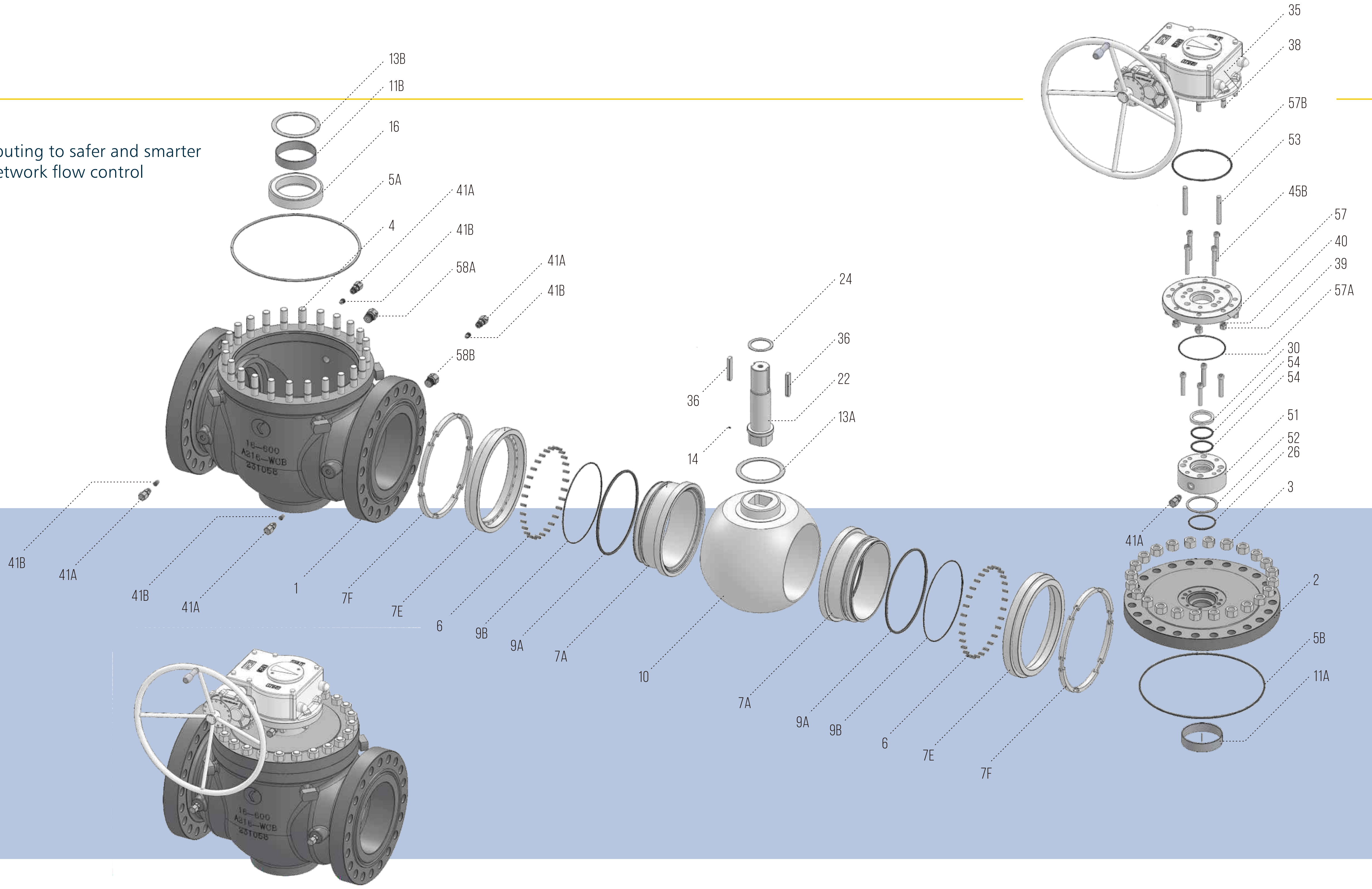
pipe network flow control



No.	Part Name	CAST STEEL Carbon Steel	CAST STEEL Stainless Steel	FORGED STEEL Carbon Steel	FORGED STEEL Stainless Steel	METAL SEAT Carbon Steel	METAL SEAT Stainless Steel
1	Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A105N	ASTM A182 F316	ASTM A105N	ASTM A182 F316
2	Bonnet	ASTM A216 WCB	ASTM A351 CF8M	ASTM A105N	ASTM A182 F316	ASTM A105N	ASTM A182 F316
3	Nut	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H	ASTM A194 8M
4	Bolt	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M
5a	Gasket	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS316+GRAPHITE	SPW SS304+GRAPHITE	SPW SS316+GRAPHITE
5b	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
6	Spring	INCONELX-750	INCONELX-750	INCONELX-750	INCONELX-750	INCONELX-750	INCONELX-750
7a	Seat	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316	ASTM A105+Ni55	ASTM A182 F316+STL
7e	Spring Seat	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316
7f	Seat Locking Device	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316
9a	Seat Insert	VITON AED	VITON AED	VITON AED	VITON AED	ASTM A105+Ni60	ASTM A182 F316+STL
9b	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
10	Ball	ASTM A105+ENP	ASTM A182 F316	ASTM A105+ENP	ASTM A182 F316	ASTM A105+Ni60	ASTM A182 F316+STL
11a	Sliding Bearing	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE
11b	Sliding Bearing	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE
13a	Bearing	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE
13b	Bearing	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE
14	Anti-static Device	316SS	316SS	316SS	316SS	316SS	316SS
16	Lower Shaft Sleeve	ASTM A105N	ASTM A182 F316	ASTM A105N	ASTM A182 F316	ASTM A105N	ASTM A182 F316
18	Gasket	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE
20	Bolt	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M
22	Shaft	ASTM A4140+ENP	ASTM A182 F316	ASTM A4140+ENP	ASTM A182 F316	ASTM A4140+ENP	ASTM A182 F316
24	Bearing	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE	304+PTFE
26	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
30	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
35	Gear	Assembly	Assembly	Assembly	Assembly	Assembly	Assembly
36	Key	ANSI 1045	ASTM A276 304	ANSI 1045	ASTM A276 304	ANSI 1045	ASTM A276 304
38	Bolt	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M
39	Nut	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H	ASTM A194 8M
40	Springs	65Mn	304SS	65Mn	304SS	65Mn	304SS
41a	Injection Valve	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
41b	Check Valve	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316	ASTM A182 F304	ASTM A182 F316
45a	Bolt	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M
45b	Bolt	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7	ASTM A193 B8M
51	Bushing	ASTM A105	ASTM A182 F316	ASTM A105	ASTM A182 F316	ASTM A105	ASTM A182 F316
52	Gasket	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE	SPW SS304+GRAPHITE
53	Locking pin	ANSI 1045	ASTM A276 304	ANSI 1045	ASTM A276 304	ANSI 1045	ASTM A276 304
54	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
57	Connecting Board	ASTM A105	ASTM A182 F316	ASTM A105	ASTM A182 F316	ASTM A105	ASTM A182 F316
57a	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
57b	O-ring	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED	VITON AED
58	Venting Valve	Carbon Steel	Stainless Steel	Carbon Steel	Stainless Steel	Carbon Steel	Stainless Steel

Optional Body/Bonnet Material:
A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF3/CF8M/CF3M, A890 4A/5A/6A, B148 C95800,Alloy Steel ect..

TOP ENTRY BALL VALVE

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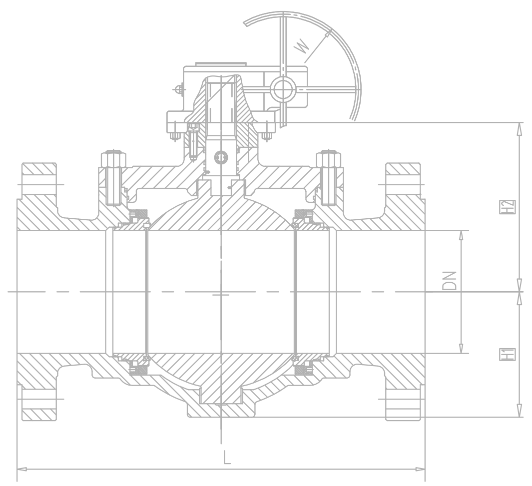
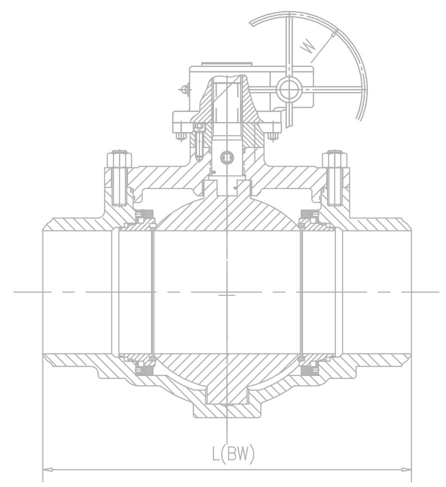
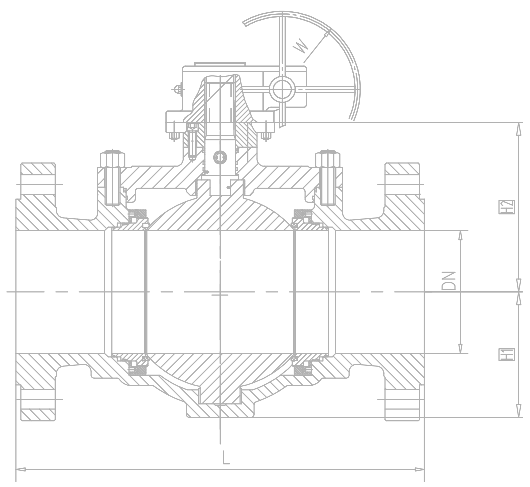
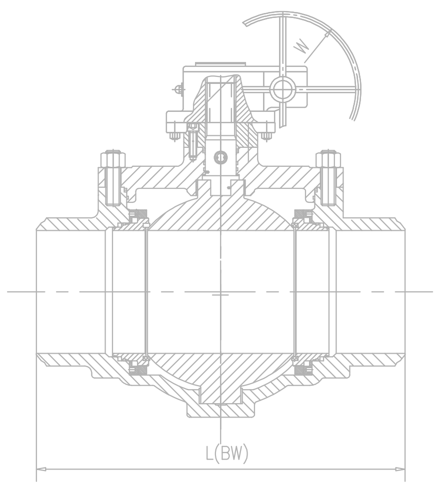








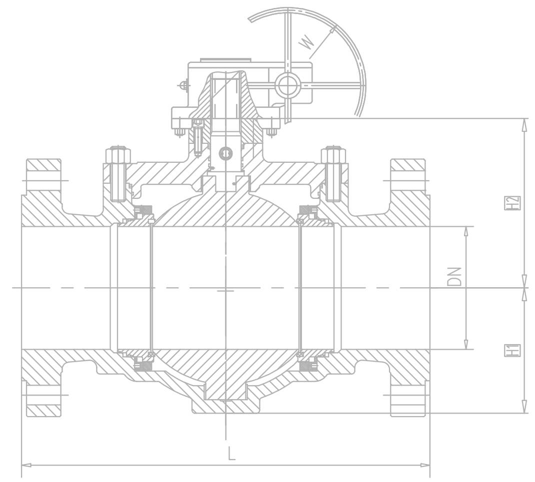
Remark: "/"in tablet are non-standard size, please confirm with KAMROO

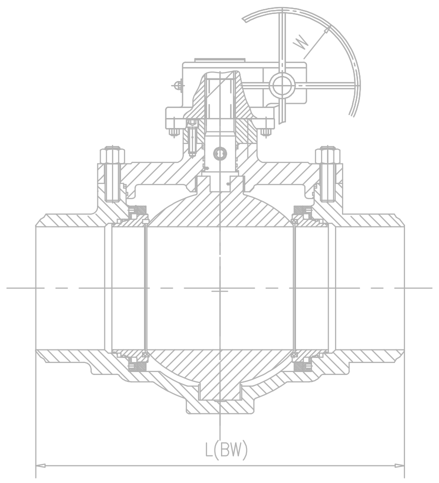
CLASS 150

DN	NPS	L RF	L WE	L RJ	H1	H2	W	Weight (kg) RF/RJ	Torque (N.M)
50	2	178	216	191	78	170	300	40	42
65	2 1/2	191	241	203	90	182	350	48	68
80	3	203	283	216	100	212	400	65	92
100	4	229	305	241	120	236	650	110	145
150	6	394	457	406	162	271	460	210	210
200	8	457	521	470	207	308	600	375	625
250	10	533	559	546	244	348	600	462	835
300	12	610	635	622	290	385	600	660	1150
350	14	686	762	699	370	398	750	930	1560
400	16	762	838	775	405	423	750	1354	2375
450	18	864	914	876	445	470	750	2100	2850
500	20	914	991	927	540	528	750	2680	3580
550	22	991	1092	1004	550	578	750	3400	4275
600	24	1067	1143	1080	595	630	750	4180	5650
650	26	1143	1245	1156	640	635	750	4850	6520
700	28	1245	1346	1285	680	685	750	5850	7380
750	30	1295	1397	1308	745	720	750	6400	8380
800	32	1372	1524	1385	770	760	750	7850	9370
850	34	1473	1626	1486	800	790	750	8600	12065
900	36	1524	1727	1537	820	810	750	9850	14760
1000	40	1727	1780	1985	850	900	750	14500	18465
1050	42	1829	1829	2115	890	930	750	16150	29210
1200	48	1995	1995	2418	970	1067	750	25000	44500

CLASS 300

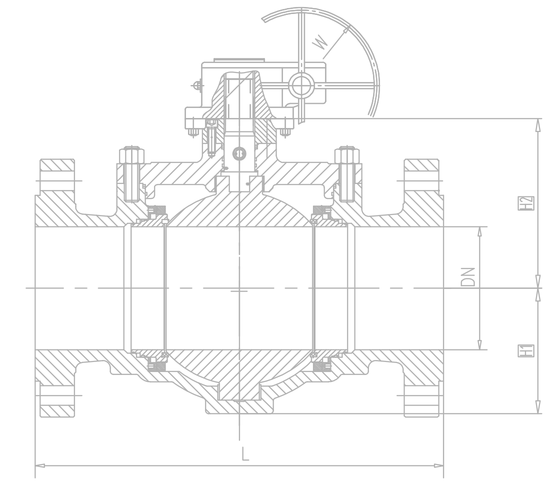
DN	NPS	L RF	L WE	L RJ	H1	H2	W	Weight (kg) RF/RJ	Torque (N.M)
50	2	216	216	232	78	170	300	40	75
65	2 1/2	241	241	257	90	182	350	47	117
80	3	283	283	298	100	212	400	65	159
100	4	305	305	321	120	236	650	125	250
150	6	403	457	419	162	271	460	277	410
200	8	502	521	518	207	308	600	407	935
250	10	568	559	584	244	348	600	484	1300
300	12	648	635	664	290	385	600	664	1790
350	14	762	762	778	370	398	750	1060	2415
400	16	838	838	854	405	436	750	1450	3850
450	18	914	914	930	445	478	750	2200	4645
500	20	991	991	1010	540	536	750	3400	5870
550	22	1092	1092	1114	550	600	750	3950	7970
600	24	1143	1143	1165	595	645	750	4400	9718
650	26	1245	1245	1270	640	650	750	5410	10795
700	28	1346	1346	1372	680	708	750	6640	11715
750	30	1397	1397	1422	745	720	750	7780	14025
800	32	1524	1524	1553	770	785	750	9550	15775
850	34	1626	1626	1654	800	815	750	11230	20075
900	36	1727	1727	1756	820	848	750	13180	24375
1000	40	1930	1930	1985	850	935	750	17310	29625
1050	42	2083	2083	2115	890	965	750	19600	44130
1200	48	2170	2170	2418	970	1130	750	26000	67140

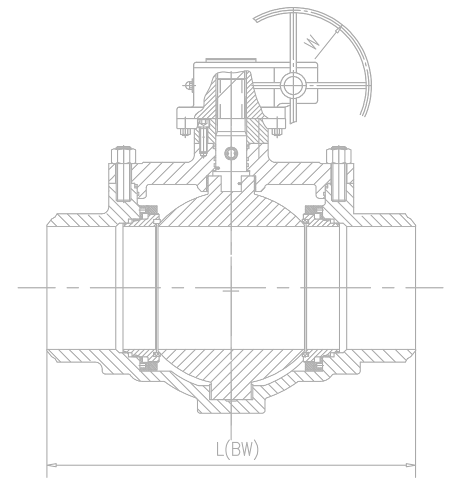




CLASS 600

		L						Weight (kg)	
DN	NPS	RF	WE	RJ	H1	H2	W	RF/RJ	Torque (N.M)
50	2	292	292	295	78	170	300	50	125
65	2 1/2	330	330	333	90	182	350	59	198
80	3	356	356	359	100	212	400	75	270
100	4	432	432	435	120	236	650	155	430
150	6	559	559	562	162	271	460	290	685
200	8	660	660	664	207	308	600	480	1635
250	10	787	787	791	244	348	600	710	2320
300	12	838	838	841	290	385	600	1050	3210
350	14	889	889	892	365	425	750	1530	5595
400	16	991	991	994	430	493	750	1980	6985
450	18	1092	1092	1095	475	530	750	2460	10980
500	20	1194	1194	1200	540	588	750	3420	15010
550	22	1295	1295	1305	580	645	750	4030	18585
600	24	1397	1397	1407	620	679	750	5010	23420
650	26	1448	1448	1461	655	755	750	6340	28265
700	28	1549	1549	1562	730	770	750	8080	32625
750	30	1651	1651	1664	800	870	750	9150	39375
800	32	1778	1778	1794	830	895	750	10760	46125
850	34	1930	1930	1946	870	945	750	12750	52590
900	36	2083	2083	2099	900	1020	750	15200	59065
1000	40	2337	2159	2366	960	1165	750	19210	73875
1050	42	2439	2175	2467	1030	1205	750	21850	88875
1200	48	2540	2435	2540	1130	1307	750	33000	107137





CLASS 900

		L						Weight (kg)	
DN	NPS	RF	WE	RJ	H1	H2	W	RF/RJ	Torque (N.M)
50	2	368	368	371	83	190	650	67	215
65	2 1/2	419	419	422	98	202	800	75	350
80	3	381	381	384	110	225	800	90	485
100	4	457	457	460	127	268	1050	185	895
150	6	610	610	613	170	321	460	380	1690
200	8	737	737	740	225	361	600	620	3910
250	10	838	838	841	260	368	600	880	5615
300	12	965	965	968	310	460	600	1360	9630
350	14	1029	1029	1038	395	478	750	1910	13435
400	16	1130	1130	1140	450	513	750	2790	17920
450	18	1219	1219	1232	505	590	750	3740	21280
500	20	1321	1321	1334	565	665	750	4600	27100
550	22	1422	1422	1435	620	750	750	6150	40305
600	24	1549	1549	1568	660	793	750	7850	50510
650	26	1651	1651	1673	685	835	750	10900	61750
700	28	1753	1753	1775	740	893	750	12500	72675
750	30	1880	1880	1902	830	950	750	14150	83600
800	32	2032	2032	2054	880	1000	750	17100	100320
850	34	2159	2159	2188	930	1043	750	18570	112850
900	36	2286	2286	2315	960	1096	750	21000	125400

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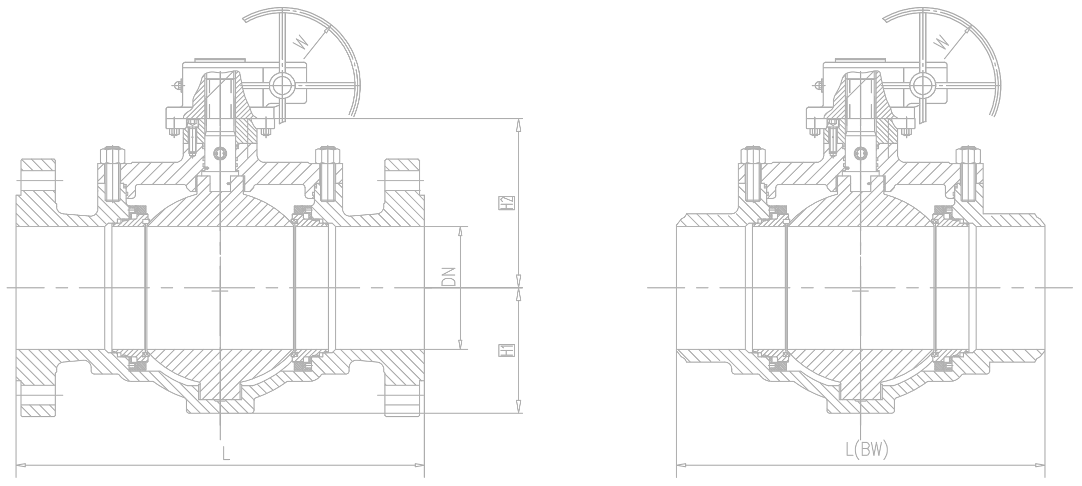

CLASS 1500

		L						Weight (kg)	
DN	NPS	RF	WE	RJ	H1	H2	W	RF/RJ	Torque (N.M)
50	2	368	368	371	83	190	650	67	385
65	2 1/2	419	419	422	98	202	800	75	610
80	3	470	470	473	110	243	800	130	815
100	4	546	546	549	142	290	1050	260	1490
150	6	705	705	711	188	361	460	560	2875
200	8	832	832	841	250	430	600	870	7070
250	10	991	991	1000	300	493	600	1380	10900
300	12	1130	1130	1146	350	553	600	2290	15780
350	14	1257	1257	1276	440	593	750	2890	24030
400	16	1384	1384	1407	460	643	750	4700	29050
450	18	1537	1537	1559	560	713	750	5985	40750
500	20	1664	1664	1686	615	805	750	7770	52430
550	22	/	/	/	/	/	/	/	/
600	24	/	/	1972	720	878	750	12980	71050

CLASS 2500

		L						Weight (kg)	
DN	NPS	RF	WE	RJ	H1	H2	W	RF/RJ	Torque (N.M)
50	2	451	451	454	95	230	1000	122	630
65	2 1/2	508	508	514	105	245	1200	167	985
80	3	578	578	584	128	265	460	250	1345
100	4	673	673	683	165	315	460	468	2465
150	6	914	914	927	245	325	600	950	4745
200	8	1022	1022	1038	315	350	600	1790	11680
250	10	1270	1270	1292	350	415	750	2650	17990
300	12	1422	1422	1445	410	455	750	4300	26050