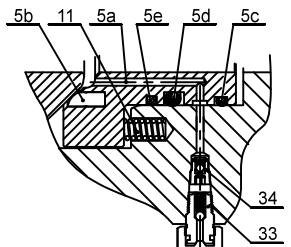
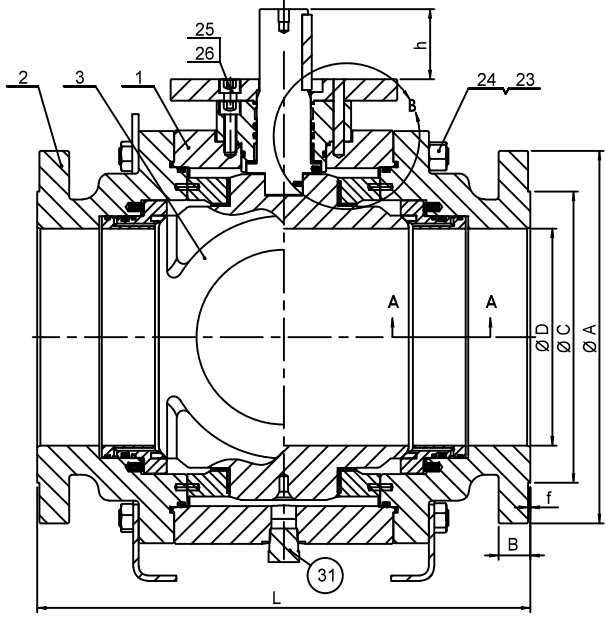
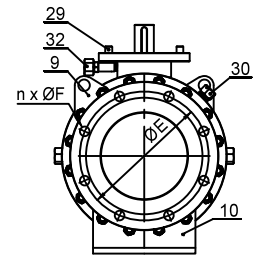
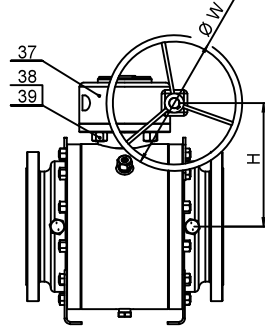


DETAIL B



DETAIL A-A



- NOTES:
1. BASIC DESIGN PER ASME B16.34 AND API6D;
 2. END FLANGE PER ASME B16.5;
 3. FACE TO FACE DIMENSIONS PER ASME B16.10;
 4. PRESSURE TESTS PER API598;
 5. FIRE SAFE DESIGN PER API607.

ITEM	PART NAME	STANDARD (NACE)	LOW TEMP (NACE)	STAINLESS STEEL (NACE)	Q'ty
1	Body	ASTM A105	A350 LF2	A182 F316	1
2	End Adapters	ASTM A105	A350 LF2	A182 F316	2
3	QS Ball	A182 F316+HC			1
4	Stem	A182 F316			1
5a	Seat Ring	A182 F316			2
5b	Seat Insert	R-PTFE			2
5c	O-Ring	VITON A			2
5d	O-Ring & Back-up ring	VITON A & PTFE			2
5e	Seat Fire Safe Seal	Graphite			2
6	Gland	ASTM A105	A350 LF2	A182 F316	1
7	Plate Trunnion	ASTM A105	A350 LF2	A182 F316	2
8	Gland Plate	ASTM A105	A350 LF2	A182 F316	1
9	Lifting Lug	Carbon Steel		Stainless Steel	2
10	Leg Plate	Carbon Steel		Stainless Steel	2
11	Spring	Inconel X750			--
12	Key	AISI 1045		Stainless Steel	1
13	Stem Fire Safe Seal	Graphite			1
14	Body Fire Safe Seal	SPW.316+Graphite			2
15	Gland Fire Safe Seal	SPW.316+Graphite			1
16	Stem O-Ring & Back-up ring	VITON A & PTFE			2
17	Gland O-Ring	VITON A			1
18	Body O-Ring	VITON A			2
19	DU Bearing	1045+PTFE		316SS+PTFE	2
20	DU Thrust Bearing	1045+PTFE		316SS+PTFE	2
21	Thrust Washer	RPTFE			1
22	DU Bearing	1045+PTFE		316SS+PTFE	1
23	Body Studs	ASTM A193-B7M	ASTM A320-L7M	ASTM A193-B8M	--
24	Body Nuts	ASTM A194-2HM	ASTM A194-7M	ASTM A194-8M	--
25	Gland Bolt	ASTM A193-B7M	ASTM A320-L7M	ASTM A193-B8M	--
26	Gland Plate Bolt	ASTM A193-B7M	ASTM A320-L7M	ASTM A193-B8M	--
27	Parallel Pins	ASTM A276 Gr.316			--
28	Parallel Pins	AISI 1045		ASTM A276 Gr.316	--
29	Parallel Pins	AISI 1045		ASTM A276 Gr.316	2
30	Vent Valve	AISI 316 S/S			1
31	Plug	AISI 316 S/S			1
32	Sealant Injection Fitting	ASTM A105N +Zn	A350 LF2 + Zn	ASTM A276 Gr.316	1
33	Sealant Injection Fitting	ASTM A105N +Zn	A350 LF2 + Zn	ASTM A276 Gr.316	4
34	Check Valve	AISI 316 S/S			4
35	Anti-static Ball	AISI 316 S/S			2
36	Anti-Static Spring	AISI 316 S/S			2
37	Gear Device	ASTM A216 GR.WCB			1
38	Gear Studs	ASTM A193-B7		ASTM A193-B8	--
39	Gear Nuts	ASTM A194-2H		ASTM A194-8	--

Standard materials of construction listed

VALVE SIZE		DIMENSIONS							150#		WEIGHT	
NPS	UNIT	ØA	B	ØC	ØE	n-ØF	f	ØD	L	H (Ref.)	ØW	unit:lb (Kg)
24"	INCH	32.0	1.88	27.25	29.5	20-Ø1.38	0.06	23.27	42.0	29.1	31.5	6228
	MM	813	48	692	749.5	20-Ø35	1.5	591	1067	738	800	(2825)
20"	INCH	27.5	1.69	23.0	25.0	20-Ø1.25	0.06	19.25	36.0	24.7	27.6	4225
	MM	699	43	584	635	20-Ø32	1.5	489	914	627	700	(1916)
18"	INCH	25.0	1.56	21.0	22.75	16-Ø1.25	0.06	17.25	34.0	22.4	27.6	3155
	MM	635	40	533	578	16-Ø32	1.5	438	864	568	700	(1431)
16"	INCH	23.5	1.44	18.5	21.25	16-Ø1.12	0.06	15.25	30.0	21.3	27.6	2244
	MM	597	37	470	540	16-Ø29	1.5	387	762	540	700	(1018)
14"	INCH	21.0	1.38	16.25	18.75	12-Ø1.12	0.06	13.25	27.0	18.8	27.6	1908
	MM	533	35	413	476	12-Ø29	1.5	337	686	478	700	(865)

Quadrosphere®	NPS 14"~24" CLASS 150# Full Bore	REVISED : E1
CLASS 150 TRUNNION MOUNTED BALL VALVE		DATE : 10-11-14
		DRAWING NUMBER VMC-4714A1W