



Calvary Valve, Inc

Rising Stem Ball Valve

The **Calvary RSBV** is a trunnion mounted **Rising Stem Ball Valve** design, suitable for a wide range of applications. The mechanical (or cam) movement of the ball provides friction free operation, eliminating wear between the sealing surfaces and extending the life of the valve. The design also eliminates the “pinch point” or “pressure cut” commonly found with normal quarter turn valves. The combination of linear operation and friction free sealing provides a superior valve in demanding applications including those requiring high cycles or quicker closing times. The features resulting from this rugged design make it suitable for both common and more difficult applications.

Sizes: 2” thru 20”

Pressure Classes:

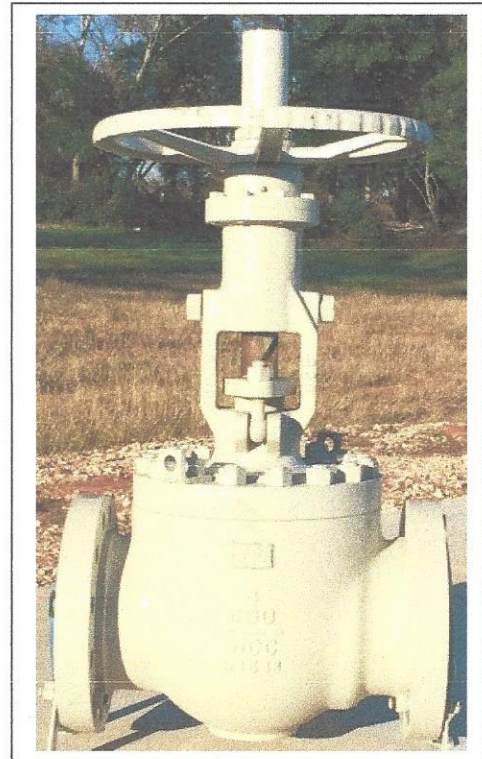
150, 300, 600, 900, 1500

Operating Temperatures:

-50F to +500F (-46C to +426C)

Available End Connections:

Flanged, Weld, Weld by Flanged

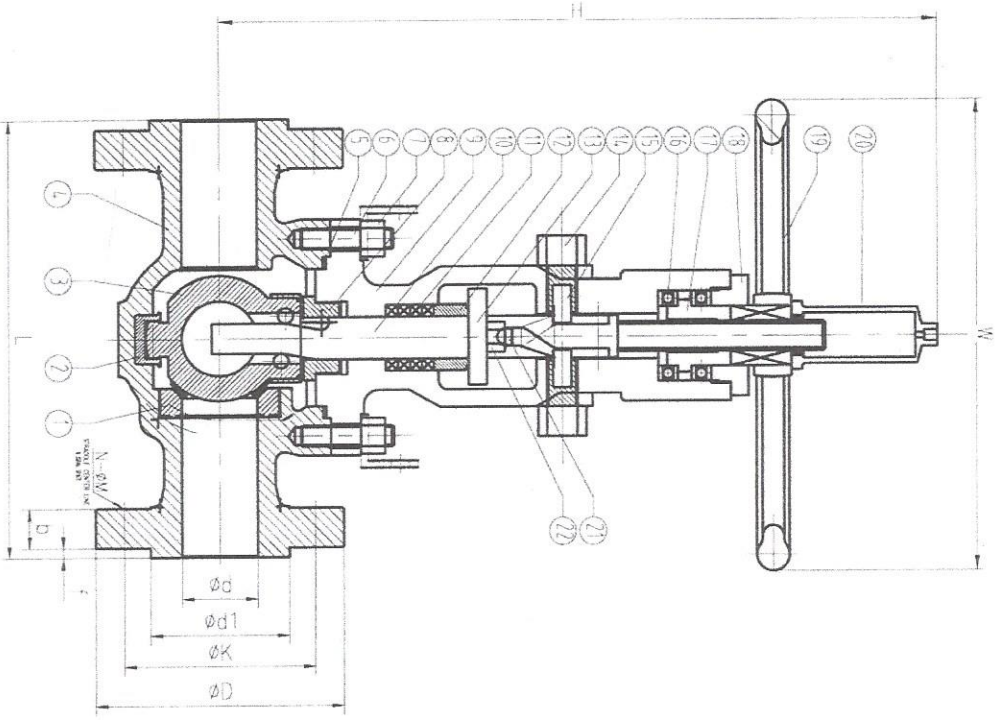


FEATURES INCLUDE:

Positive (Zero Leak) Closure – Mechanical Sealing/Operation – High Reliability – Fire Safe Design
–Positive Stem Retention – No Pinch Point - Single Seat Requires No Bypass System – In Line
Repairable – Low Torque Operation

Emergency Service is available 24 hours a day, seven days a week!

API 6D SPHERE VALVE 2"-8" 150# RF HANDWHEEL
 BODY A216 WCC BALL A105+STL STEM AISI 316



- SPECIFICATIONS
- DESIGN ACCORDING TO API 6D
 - FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 - FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 - TEST AND INSPECTION ACCORDING TO API 598

NPS CLASS	Main Dimensions										
	L	H	W	d	d1	K	D	b	f	N-ØM	
2"	150	216	34.5	200	50	92.1	120.7	150	17.5	2	4-Ø19
3"	150	282	46.5	250	76	127	152.4	190	27.3	2	4-Ø19
4"	150	305	48.5	300	100	157.2	190.5	230	27.3	2	8-Ø19
6"	150	403	62.0	350	152	215.9	241.3	280	27.9	2	8-Ø23
8"	150	502	71.0	450	201	269.9	298.5	34.5	27	2	8-Ø23

Valve Test	Value Test
Nominal pressure	150LB
Shell test pressure	3Ø
High seal test	2.1
Gas seal test	0.6
Suitable Mediums	Oil Regenerant And Granular Media Etc
Suitable Temp	-29°C - 425°C

22	Hex Nut	ASTM A194 2H	
21	Dog Bolt	ASTM A194 2H	
20	Stem Cover	ANSI 1020	
19	Handwheel	ASTM A216 WCB	
18	Bearing Gland	ANSI 1045	
17	Copper Nut	ZQAL9-4	
16	Thrust Ball Bearing	Package	
15	Spacer Pin	ANSI 1045	
14	Threaded Sleeve	ANSI 1045	
13	Packing Plate	ASTM A105	
12	Packing Sleeve	ASTM A276 420	
11	Packing	Flexible Graphite	ENP
10	Stem	ANSI 316L	ENP
9	Cover	ASTM A216 WCC	
8	Stopper	ASTM A105	ENP
7	Screw Nut	ASTM A194 2H	
6	Bolt	ASTM A193 B7	
5	The Flange Gasket	AS-Blekketeppe	
4	Body	ASTM A216 WCC	
3	Ball	A105+STL	
2	Stem Sleeve	ASTM A105	ENP
1	Seal Ring	304+STL	
NO	Parts	Materials	Remark

DESCRIPTION

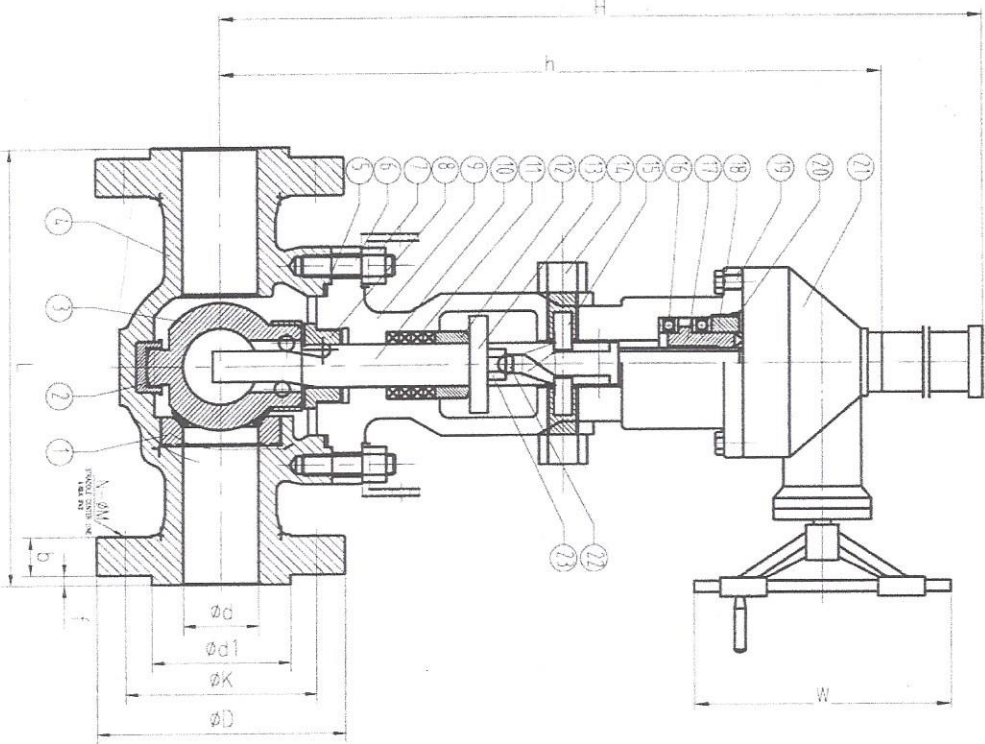
2"-8" 150# RF HANDWHEEL



CALVARYVALVE INC
 HOUSTON TEXAS
 USARUV

APPROVED BY	CHECK BY	DRAWN BY	DRAWING NO.	MATERIAL	UNIT
			RUUV20130531-01		INCH
DATE				SCALE	FREE
05/31/2013					

API 6D SPHERE VALVE, 10", 12", 150# RF GEAR OP
 BODY A216 WCC, BALL A105+STL, STEM ANSI 4140



- SPECIFICATIONS
- DESIGN ACCORDING TO API 6D
 - FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 - FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 - TEST AND INSPECTION ACCORDING TO API 598

Main Dimensions												
NPS	CLASS	L	H	h	W	d	d ¹	K	D	b	f	N-QM
10"	150	673	850	770	350	254	323.8	362	405	28.6	2	12-Ø26
12"	150	762	1050	970	400	305	381	431.8	485	30.2	2	12-Ø26

Valve Test	
Nominal pressure	150LB
Shell Test pressure	30
High seal test	21
Gas seal test	0.6
Suitable Media	Oil, Regenerant And Granular Media Et
Suitable Temp	-29°C - 425°C

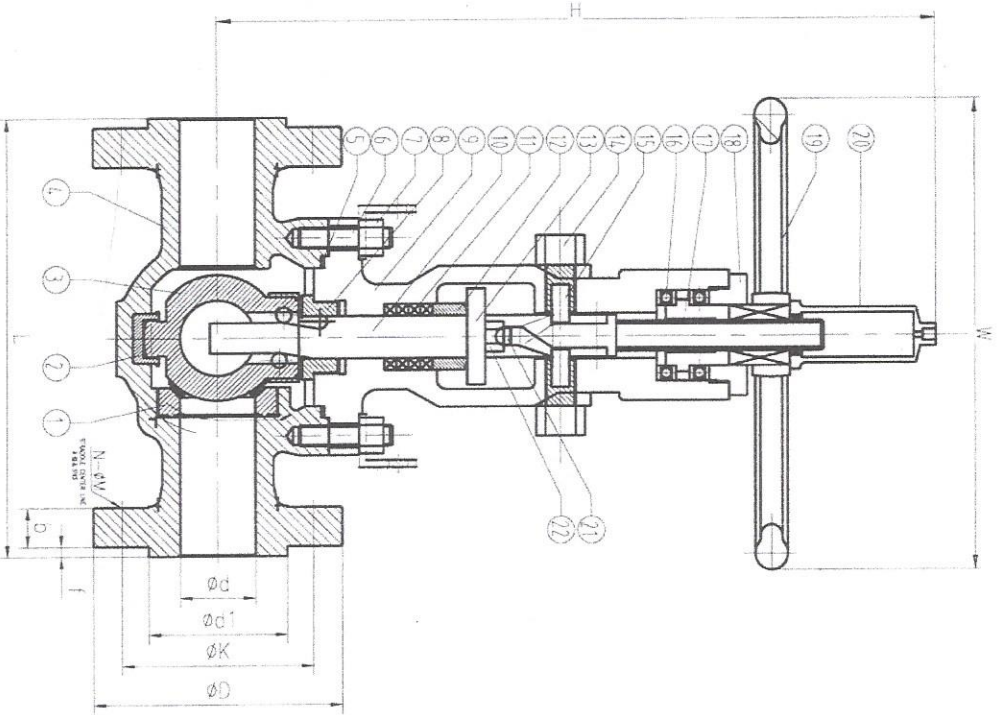
23	Hex Nut	ASTM A194 2H	
22	Dog Bolt	ASTM A194 2H	
21	Conical Gear	Package	
20	Holder Screw	ASTM A194 2H	
19	Hexagon Bolt	ASTM A194 2H	
18	Bearing Gland	ANSI 1045	
17	Copper Nut	Z0AL9-L	
16	Thrust Ball Bearing	Package	
15	Spacer Pin	ANSI 1045	
14	Threaded Sleeve	ANSI 1045	
13	Packing Plate	ASTM A105	
12	Packing Sleeve	ASTM A276 4-20	
11	Packing	Flexible Graphite	ENP
10	Stem	ASTM A140	ENP
9	Cover	ASTM A216 WCC	
8	Stopper	ASTM A105	ENP
7	Screw Nut	ASTM A194 2H	
6	Bolt	ASTM A193 B7	
5	The Flange Gasket	As-Flexible Graphite	
4	Body	ASTM A216 WCC	
3	Ball	A105+STL	
2	Stem Sleeve	ASTM A105	ENP
1	Seat Ring	304+STL	
NO	Parts	Materials	Remark



CALVARVALVE INC
 HOUSTON TEXAS
 USARUV

APPROVED BY	CHECK BY	DRAWN BY	DRAWING NO.	MATERIAL	UNIT	DESCRIPTION
			RUV20130531-06		INCH	
SIGN						
DATE				SCALE	FREE	
						10", 12", 150# RF GEAR OP

API 6D SPHERE VALVE, 2"-8" 600# RF HANDWHEEL
 BODY A216 WCC, BALL A105+STL, STEM A5140




- SPECIFICATIONS**
- 1. DESIGN ACCORDING TO API 6D
 - 2. FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 - 3. FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 - 4. TEST AND INSPECTION ACCORDING TO API 598

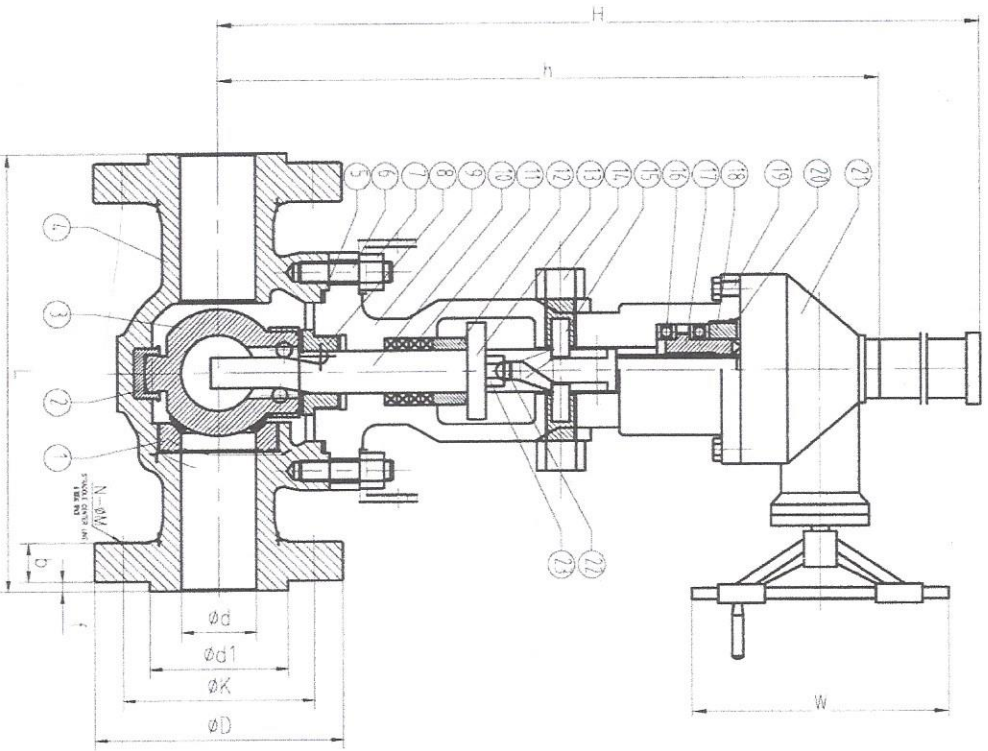
Main Dimensions											
NPS	CLASS	L	H	W	d	d1	K	D	D	f	N-ØM
2"	500	292	34.5	200	50	92.1	127	165	25.4	7	8-Ø19
3"	500	356	44.5	250	76	127	168.3	210	31.8	7	8-Ø23
4"	500	432	48.5	300	100	157.2	215.9	275	38.1	7	8-Ø26
6"	500	559	62.0	350	152	215.9	292.1	355	47.7	7	12-Ø29
8"	500	660	71.0	450	201	269.9	349.2	420	55.6	7	12-Ø32

Valve Test	
Nominal pressure	600lb
Shell test pressure	15.3
High seal test	11.3
Gas seal test	0.6
Suitable Mediums	Oil, Regenerant And Granular Media Etc
Suitable Temp	-29°C - 425°C

22	Hex Nut	ASTM A594 2H									
21	Dog Bolt	ASTM A194 2H									
20	Stem Cover	ANSI 1020									
19	Handwheel	ASTM A216 WCB									
18	Bearing Glend	ANSI 1045									
17	Copper Nut	ZQAL9-4									
16	Thrust Ball Bearing	Package									
15	Spacer Pin	ANSI 1045									
14	Threaded Sleeve	ANSI 1045									
13	Packing Plate	ASTM A105									
12	Packing Sleeve	ASTM A276 420									
11	Packing	Flexible Graphite									ENP
10	Stem	ASTM A110									ENP
9	Cover	ASTM A216 WCC									ENP
8	Stopper	ASTM A105									ENP
7	Screw Nut	ASTM A194 2H									
6	Bolt	ASTM A193 B7									
5	The Flange Gasket	48-Flexible Graphite									
4	Body	ASTM A216 WCC									
3	Ball	A105+STL									
2	Stem Sleeve	ASTM A105									ENP
1	Seal Ring	304+STL									
NO	Parts	Materials									Remark

 CALVARY VALVE INC HOUSTON TEXAS USARUV	SIGN	APPROVED BY	CHECK BY	DRAWN BY	DRAWING NO.	MATERIAL	UNIT	7"-8" 600# RF HANDWHEEL
	DATE	01			RUV20130531-03	SCALE	INCH	
		05/31/2013				FREE		

API 6D SPHERE VALVE, 10", 12", 16", 600# RF GEAR OP
 BODY A216 WCC BALL A105+STL STEM ANSI 414.0



- SPECIFICATIONS
1. DESIGN ACCORDING TO API 6D
 2. FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 3. FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 4. TEST AND INSPECTION ACCORDING TO API 598

Main Dimensions												
NPS	CLASS	L	H	h	W	d	d1	K	D	d	f	N _{GM}
10"	600	787	950	770	300	25.4	323.81	4.31	81	510	635	7
12"	600	838	1050	970	350	305	381	4.89	560	667	7	20.035
16"	600	991	1520	1400	600	387	381	603.2	585	162	7	20.042

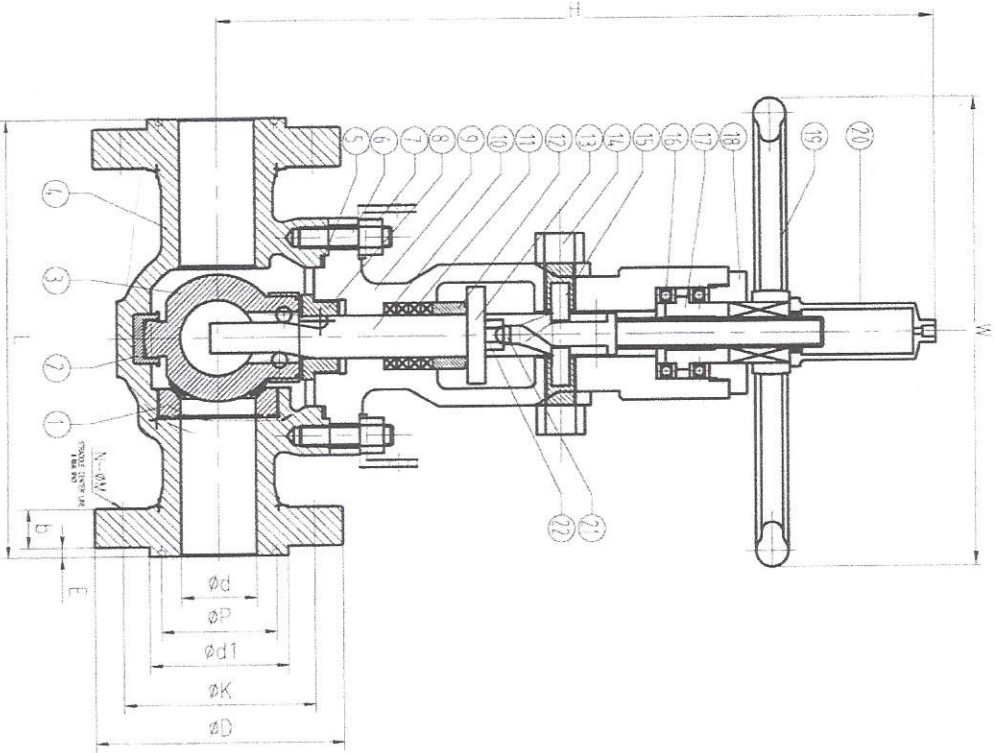
Valve Test	
Nominal pressure	600Lb
Shell test pressure	15.3
High seal test	11.3
Gas seal test	0.6
Suitable Mediums	Oil Regenerant And Granular Media Et
Suitable Temp	-29°C - 425°C

23	Hex Nut	ASTM A194 2H	
22	Dog Bolt	ASTM A194 2H	
21	Conical Gear	Package	
20	holding Screw	ASTM A194 2H	
19	Hexagon Bolt	ASTM A194 2H	
18	Bearing Gland	ANSI 1045	
17	Copper Nut	ZQAL9-4	
16	Thrust Ball Bearing	Package	
15	Spacer Pin	ANSI 1045	
14	Threaded Sleeve	ANSI 1045	
13	Packing Plate	ASTM A105	
12	Packing Sleeve	ASTM A276 420	
11	Packing	Flexible Graphite	
10	Stem	ANSI 414.0	ENP
9	Cover	ASTM A216 WCC	
8	Stopper	ASTM A105	ENP
7	Screw Nut	ASTM A194 2H	
6	Bolt	ASTM A193 B7	
5	The Flange Gasket	AsseFlexible Graphite	
4	Body	ASTM A216 WCC	
3	Ball	A105+STL	ENP
2	Stem Sleeve	ASTM A105	ENP
1	Seat Ring	304+STL	
NO	Parts	Materials	Remark

APPROVED BY		CHECK BY	DRAWN BY	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN				RUV20130531-08		INCH	
DATE					SCALE	FREE	10" 12" 16" 600# RF GEAR OP
APPROVED BY		CHECK BY	DRAWN BY	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN				RUV20130531-08		INCH	
DATE					SCALE	FREE	10" 12" 16" 600# RF GEAR OP



API 6D SPHERE VALVE 2"-8" 900# RTJ HANDWHEEL
 BODY A216 WCC BALL A105 STL STEM AISI 4140

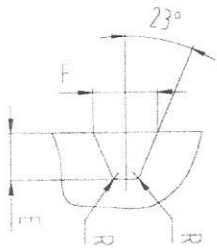


Main Dimensions

NPS CLASS	L	H	W	d	d1	K	D	P	b	F	E	R	N-ØM
2"	900	305	34.5	200	50	124	155.1	215	95.25	38.1	11.91	7.92	0.8
3"	900	384	44.5	250	76	156	190.5	240	123.83	38.1	11.91	7.92	0.8
4"	900	460	48.5	300	100	181	235	290	149.23	44.5	11.91	7.92	0.8
6"	900	613	62.0	350	152	241	317.5	380	211.12	55.6	11.91	7.92	10.8
8"	900	740	71.0	450	201	308	393.7	470	269.88	63.5	11.91	7.92	10.8

- SPECIFICATIONS
- DESIGN ACCORDING TO API 6D
 - FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 - FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 - TEST AND INSPECTION ACCORDING TO API 598

Ring Numbers: R24/R31/R37/R45/R49



22	Hex Nut	ASTM A194 2H											
21	Dog Bolt	ASTM A194 2H											
20	Stem Cover	ANSI 1020											
19	Handwheel	ASTM A216 WCB											
18	Bearing Gland	ANSI 1045											
17	Cooper Nut	Z04L 9-L											
16	Thrust Ball Bearing	Package											
15	Spacer Pin	ANSI 1045											
14	Threaded Sleeve	ANSI 1045											
13	Packing Plate	ASTM A105											
12	Packing Sleeve	ASTM A216 L20											
11	Packing	Flexible Graphite											
10	Stem	AISI 4140											ENP
9	Cover	ASTM A216 WCC											
8	Stopper	ASTM A105											ENP
7	Screw Nut	ASTM A194 2H											
6	Ball	ASTM A193 B7											
5	The Flange Gasket	AB-Flexible Graphite											
4	Body	ASTM A216 WCC											
3	Ball	A105 STL											
2	Stem Sleeve	ASTM A105											ENP
1	Seal Ring	304 STL											
NO	Parts	Materials											Remark

DESCRIPTION

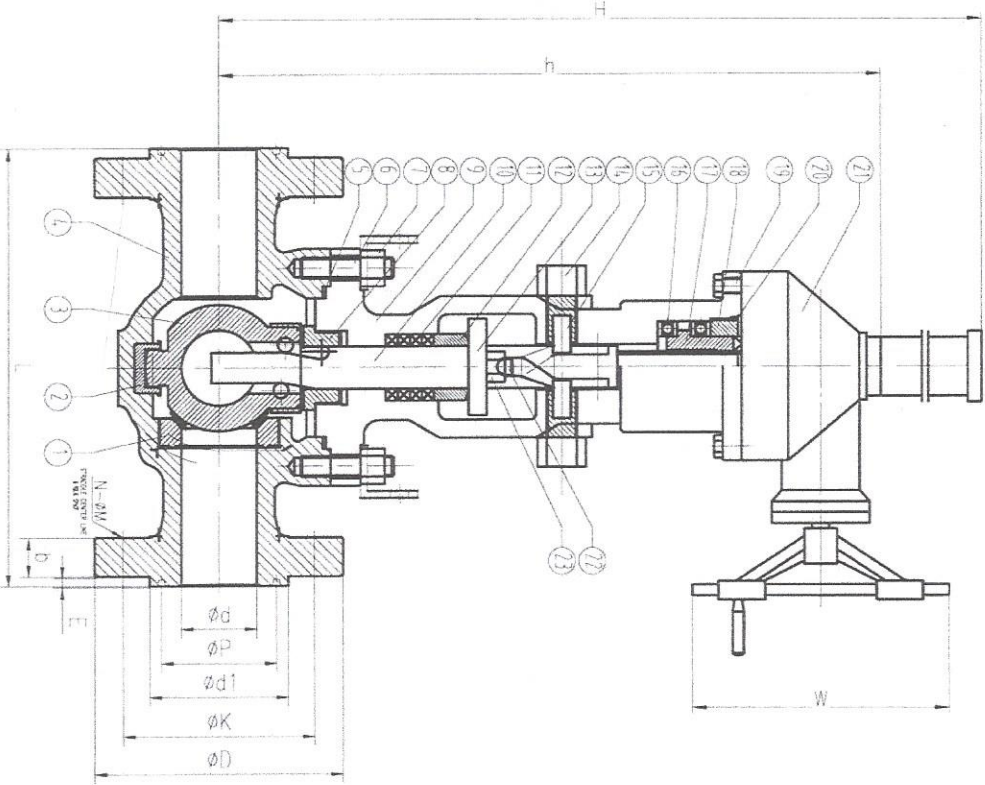
2"-8" 900# RTJ HANDWHEEL



CALVARVALVE INC
 HOUSTON TEXAS
 USA RUY

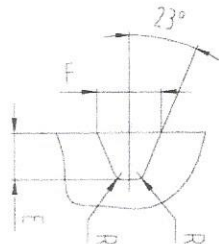
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			RUV20130531-04		INCH		
SIGN							
DATE	01						
	05/31/2013						

API 6D SPHERE VALVE 10" 12" 900# RTJ GEAR OP
 BODY A216 WCC, BALL A105+STL, STEM AISI 4140



- SPECIFICATIONS**
1. DESIGN ACCORDING TO API 6D
 2. FLANGE DIMENSION ACCORDING TO ANSI/ASME B16.5
 3. FACE TO FACE DIMENSION ACCORDING TO ANSI/ASME B16.10
 4. TEST AND INSPECTION ACCORDING TO API 598

Ring Number: R53/R57



Main Dimensions

NPS CLASS	L	H	h	w	d	d1	K	D	p	D	F	E	q	N _{DM}	
10"	900	84.1	850	770	350	254	362	469.9	51.5	323.83	69.9	11.91	11.92	0.8	16-φ39
12"	900	968	1050	970	400	305	419	533.4	61.0	381	79.4	11.91	11.92	0.8	20-φ39

Wave Test	Wave Test
Nominal pressure	900Lb
Shell test pressure	22.9
High seal test	16.9
Gas seal test	0.6
Suitable Mediums	Oil Regenerative And Granular Media Et
Suitable Temp	-29°C - 425°C

23	Hex Nut	ASTM A194 2H													
22	Dog Bolt	ASTM A194 2H													
21	Conical Gear	Package													
20	Holding Screw	ASTM A194 2H													
19	Hexagon Bolt	ASTM A194 2H													
18	Bearing Gland	ANSI 1045													
17	Copper Nut	QA19-4													
16	Thrust Ball Bearing	Package													
15	Starter Pin	ANSI 1045													
14	Threaded Sleeve	ANSI 1045													
13	Packing Plate	ASTM A105													
12	Packing Sleeve	ASTM A276 420													
11	Packing	Flexible Graphite													ENP
10	Stem	ANSI 4140													ENP
9	Cover	ASTM A216 WCC													ENP
8	Stopper	ASTM A105													ENP
7	Screw Nut	ASTM A194 2H													
6	Bolt	ASTM A193 B7													
5	The Flange Gasket	As-fabricable Graphite													
4	Body	ASTM A216 WCC													
3	Ball	A105+STL													ENP
2	Stem Sleeve	ASTM A105													ENP
1	Seat Ring	304+STL													ENP
NO	Parts	Materials													Remark

APPROVED BY		CHECK BY	DRAWN BY	DRAWING NO.	MATERIAL	UNIT	DESCRIPTION
SIGN				RUV20130531-09		INCH	
DATE					SCALE	FREE	10" 12" 900# RTJ GEAR OP
05/31/2013							

