

GVS® Trunnion Mounted Welded Body Ball Valves (Dual Seats c/w Lip Seals)



Distributors/Agents



**GLOBAL
SupplyLine**

Global Supply Line are Guide Valve stockists, distributing to Australia, NZ & PNG, and can automate, service & test in our Adelaide Lloyd's 9001 facility, approved by Guide Valve.

Contact us: sales@globalsupplyline.com.au

Stock lists at our website: www.globalsupplyline.com.au



FUGITIVE EMISSION CERTIFIED

www.gvs-vci.com



COMPANY PROFILE

Guide Valve Limited, established in 1980 with its headquarters in Ontario, Canada, specializes in the manufacturing of valves. We are the manufacturer of the trademark brands GVS®, VCI®, and LOWE.

Our products are based on the most advanced technologies and are used in all sectors from petrochemical refining, process to transportation and distribution of the end product.

GVS® valves are designed, manufactured & tested according to API 6D, API 6A and CSA Z245.15 and are available to API 608. Our standard product design of Series GW are the trunnion mounted, forged type ball valves of Double Piston Effect (DIB) with our unique Protector/Scraper double soft seated seal feature on valves up to 900# ANSI.



CANADA

ISO 9001: 2015: 0052985-01

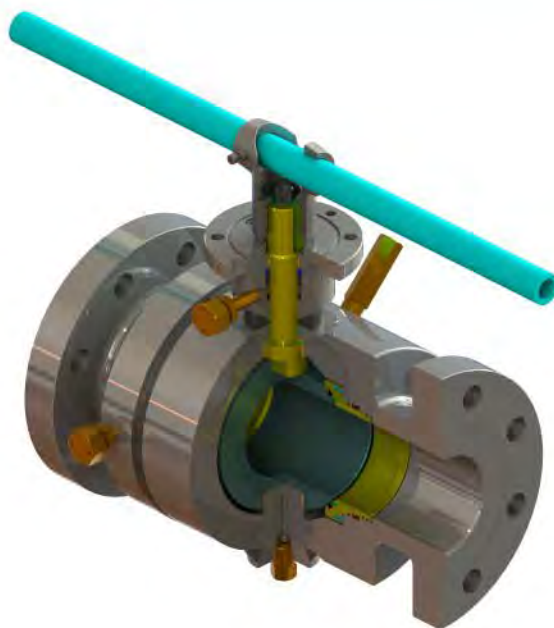


CHINA

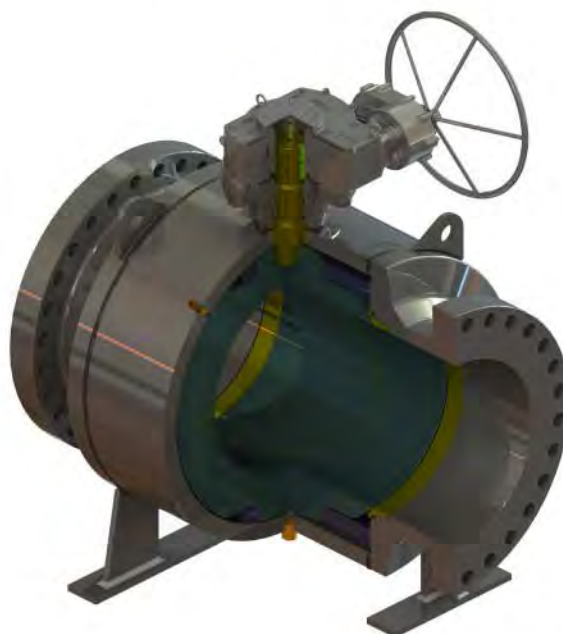
API 6D: 6D-1822
API 6A: 6A-2250
API Spec Q1: Q1-3641
ISO 9001: 2015: ISO-3983



USA

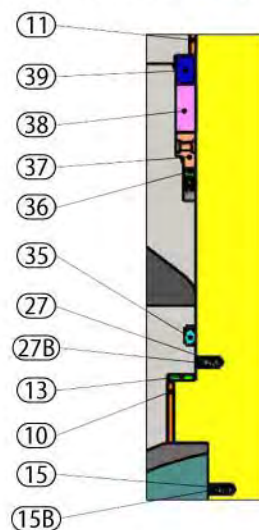


Model GW
Sizes: 2" - 4"
ANSI Class 150 - 2500#

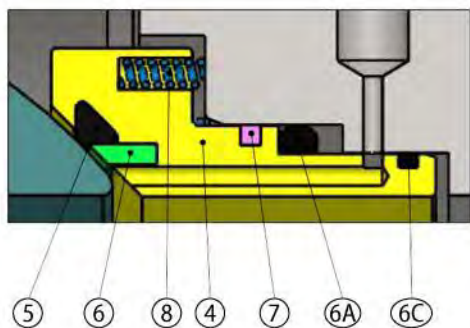


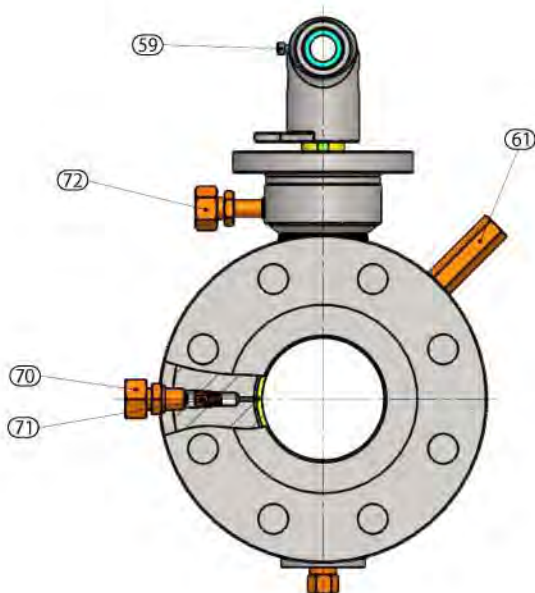
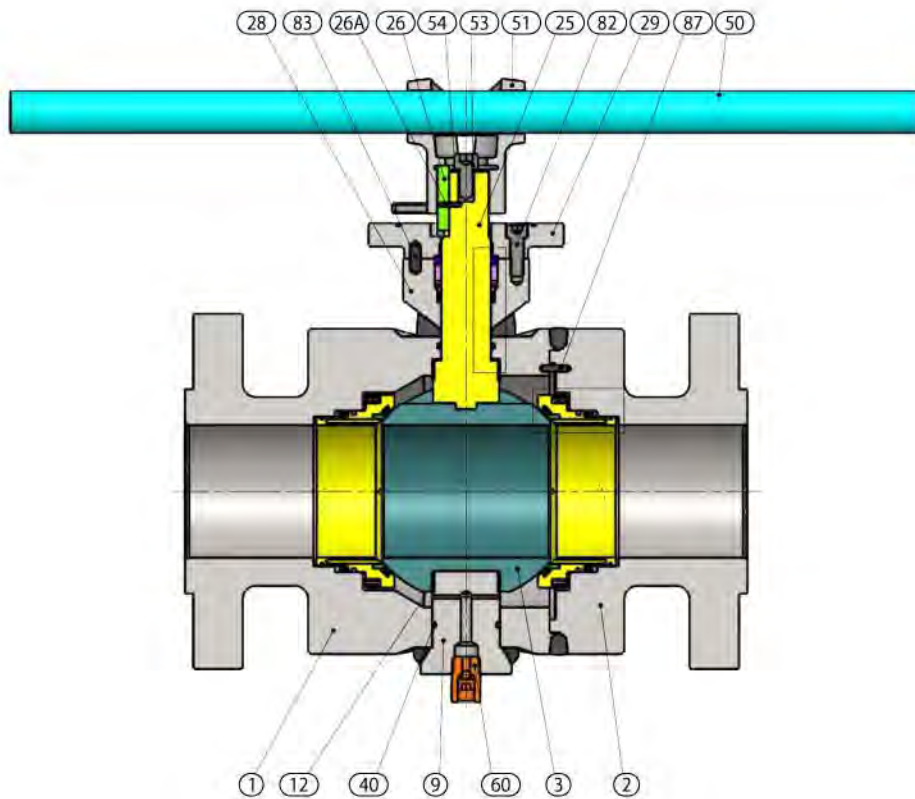
Model GW
Sizes: 6" - 48"
ANSI Class 150 - 2500#

STEM SEAL SUB-ASSEMBLY DETAIL
SHOWN ROTATED AT 90°



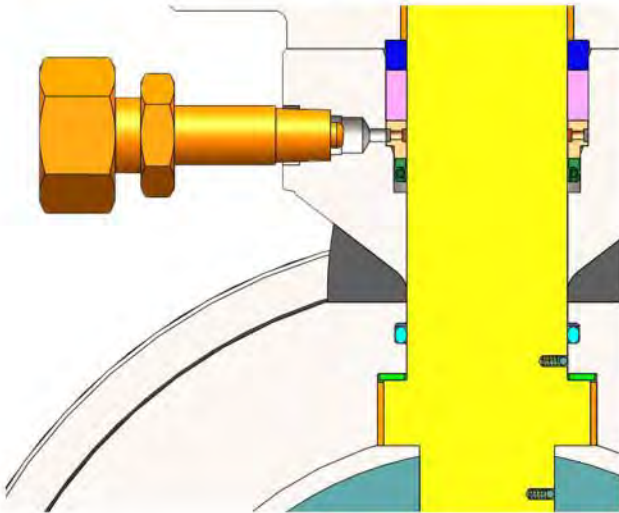
SEAT SUB-ASSEMBLY DETAIL



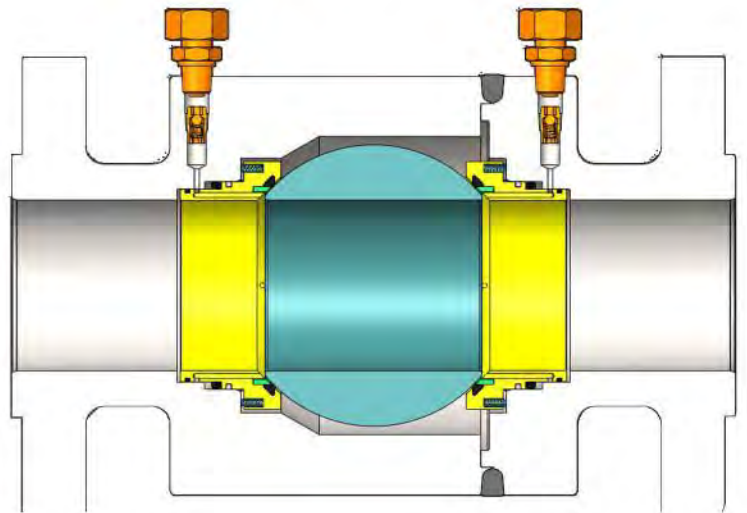


Item	Part Description
1	Body
2	End adapter RF
3	Ball
4	Seat
5	Seat delta ring
6	Seat delta protector
6A	Seat main O-ring
6C	Seat grease O-ring
7	Seat fire-safe seal
8	Seat springs
9	Lower trunnion
10	Stem lower sleeve bearing
11	Stem upper sleeve bearing
12	Trunnion sleeve bearing
13	Stem thrust washer
15	Ball antistatic spring
15B	Ball antistatic ball
25	Stem
26	Stem key
26A	Stem key pin
27	Stem antistatic spring
27B	Stem antistatic piston
28	Lower stem flange
29	Upper stem flange
35	Stem O-ring
36	Stem lip seal
37	Lantern ring
38	Stem top fire-safe seal
39	Spacer ring
40	Lower trunnion O-ring
50	Lever tube
51	Lever knuckle (locking type)
53	Lever knuckle - stem cap screw
54	Lever knuckle - stem washer
59	Lever knuckle - lever cap screw
60	Drain valve
61	Safety relief valve
70	Seat GBH grease fitting
71	Seat inner check valve
72	Stem grease fitting
82	Upper stem flange cap screw
83	Lower stem flange dowel pin
87	Body/end adapter dowel pin

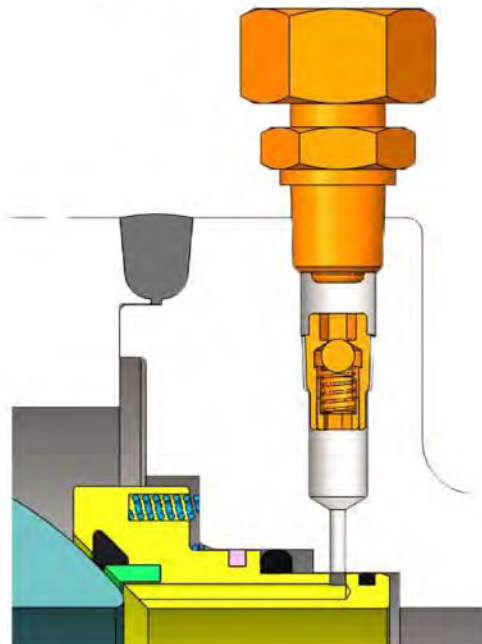
STEM SEAL SECTION VIEW

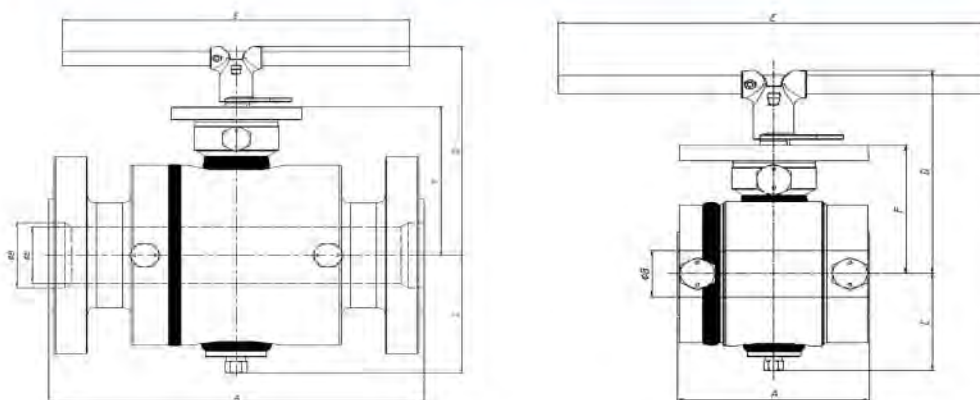


TOP SECTION VIEW



SEAT SEAL SECTION VIEW





ANSI 150

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B	A			C	D	E	F	
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	51	178	191	216	120	208	400	129	33
3"	76.2	203	216	283	153	249	500	147	51
4"	102	229	241	305	178	321	700	189	85

ANSI 300

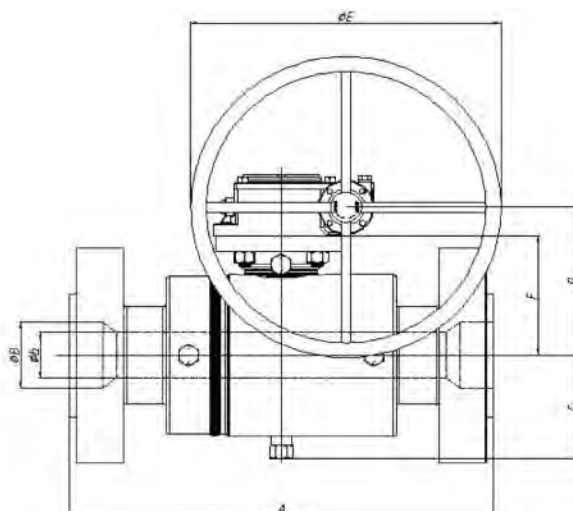
VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	51	216	232	216	120	208	400	129	36
3"x2"	76.2x51	283	298	283	120	208	400	129	40
3"	76.2	283	298	283	153	249	500	147	55
4"x3"	102x76.2	305	321	305	153	249	500	147	65
4"	102	305	321	305	178	321	700	189	101
6"x4"*	152.4x102	403	419	457	178	321	700	189	138

ANSI 600

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	51	292	295	292	120	208	400	129	40
3"x2"	76.2x51	356	359	356	120	208	400	129	45
3"	76.2	356	359	356	153	249	500	147	64
4"x3"	102x76.2	432	435	432	153	249	500	147	86
4"	102	432	435	432	178	321	700	189	132
6"x4"*	152.4x102	559	562	559	178	321	700	189	200

ANSI 900

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	51	368	371	368	121	235	500	139	63
3"x2"	76.2x51	381	384	381	121	235	500	139	75
3"	76.2	381	384	381	165	306	700	174	110
4"x3"	102x76.2	457	460	457	165	306	700	174	148
4"	102	457	460	457	187	356	960	214	220
6"x4"*	152.4x102	610	613	610	190	356	960	214	264



ANSI 1500

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	51	368	371	368	121	235	500	139	63
3"x2"	76.2x51	470	473	470	132.5	235	500	139	75
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
3"	76.2	470	473	470	165	306	700	174	115
4"x3"	102x76.2	546	549	546	165	306	700	174	154
4"	102	546	549	546	187	256	400*	214	225
6"x4"	146.1x102	705	711	705	187	256	400*	214	270

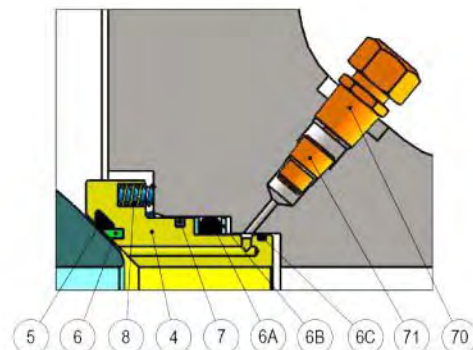
* Gear operated. Handwheel diameter.

ANSI 2500

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW					
NPS	B(xb)	A			C	D	E	F	RTJ
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
2"	44.5	451	454	451	125	262	700*	149	97
3"x2"	64x44.5	578	584	578	152.5	262	700*	149	126
3"	64	578	584	578	164	232	400	190	230
4"x3"	89x64	673	683	673	178	232	400	190	299
4"	89	673	683	673	189	263	500	215	375
6"x4"	133.4x89	914	927	914	197.5	263	500	215	487

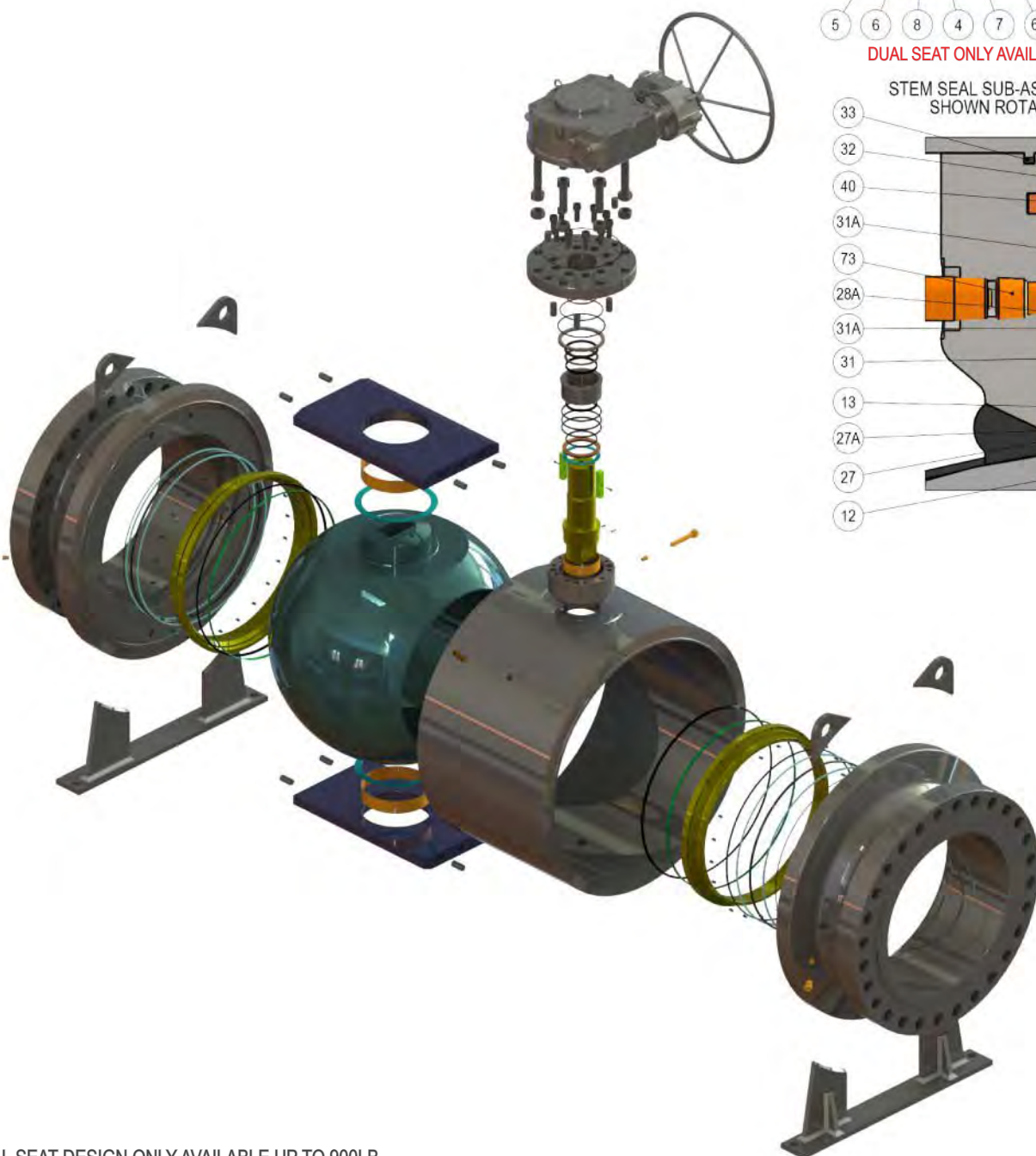
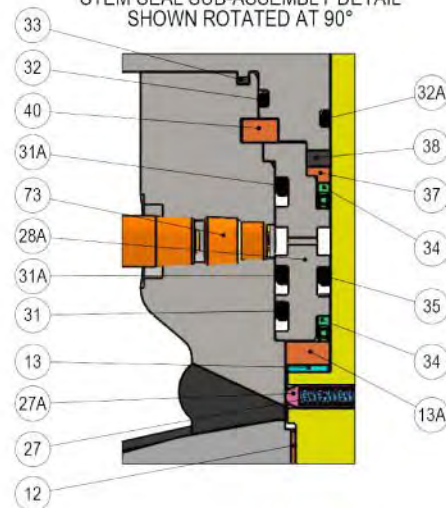
* Lever operated. Lever length.

SEAT SUB-ASSEMBLY DETAIL



DUAL SEAT ONLY AVAILABLE UP TO 900LB

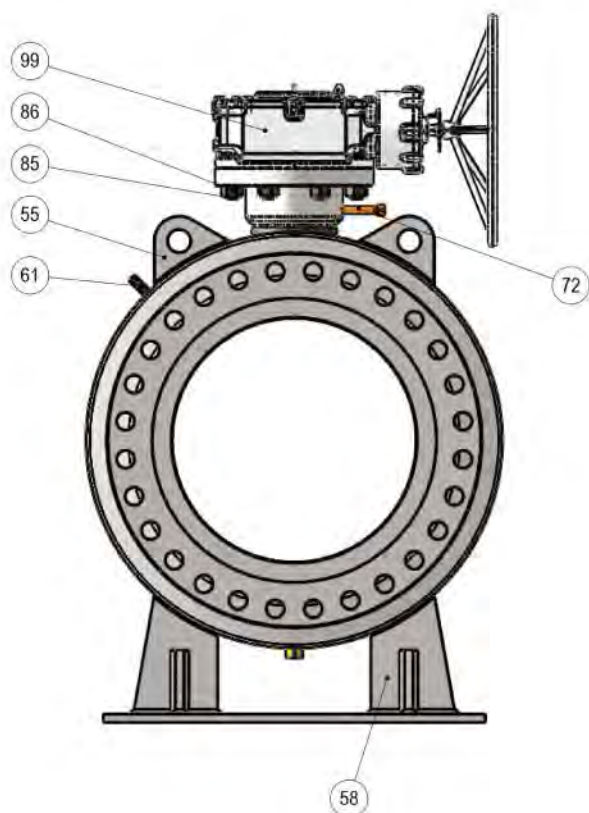
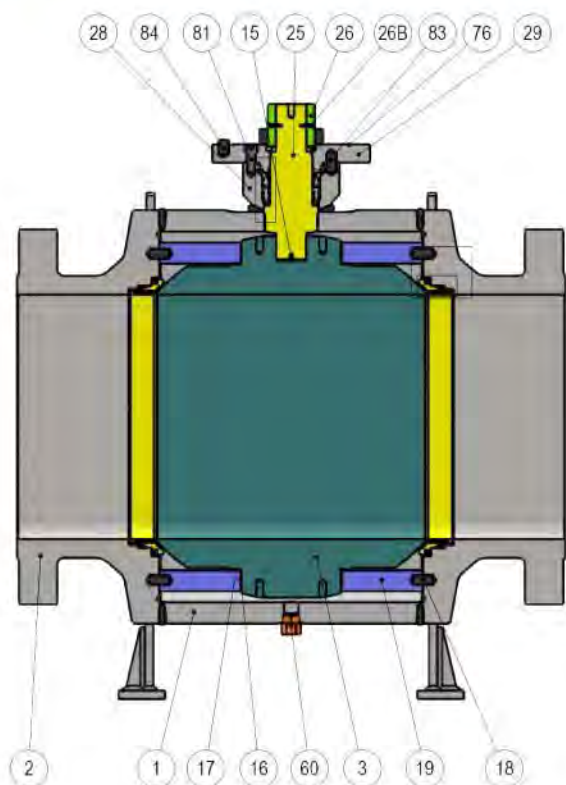
STEM SEAL SUB-ASSEMBLY DETAIL
SHOWN ROTATED AT 90°



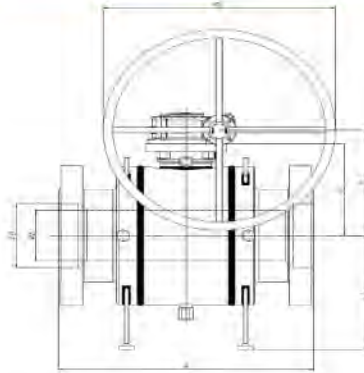
NOTE: DUAL SEAT DESIGN ONLY AVAILABLE UP TO 900LB

SIL 3 CERTIFIED BY 3RD PARTY : FES

FUGITIVE EMISSION CERTIFIED TO ISO 15848-1: ENDURANCE CLASS CO3, TIGHTNESS CLASS AM



Item	Part Description
1	Body
2	End adapter RF
3	Ball
4	Seat
5	Seat delta ring
6	Seat resin
6A	Seat main O-ring
6B	Seat back-up ring
6C	Seat grease O-ring
7	Seat fire-safe seal
8	Seat springs
12	Trunnion sleeve bearing
13	Stem thrust washer
13A	Thrust Ring
15	Ball antistatic spring
16	Trunnion sleeve bearing
17	Ball thrust washer
18	Trunnion support pin
19	Trunnion support
25	Stem
26	Stem key
26B	Stem key capscrew
27	Stem antistatic spring
27A	Stem antistatic piston
28A	Stem bushing
28	Lower stem flange
29	Upper stem flange
31	Stem flange O-ring
31A	Stem flange O-ring
32	Stem flange O-ring
32A	Stem flange O-ring
33	Stem flange fire-safe seal
34	Stem lip seal
35	Stem O-ring
37	Parking spacer
38	Stem top fire-safe seal
40	Split ring
55	Lifting lug
58	Support leg
60	Drain valve
61	Safety relief valve
70	Seat GBH grease fitting
71	Seat inner check valve
72	Stem grease fitting
73	Stem inner check valve
76	Weather seal
81	Lower stem flange capscrew
83	Lower stem flange dowel pin
84	Stem flange/gearbox dowel pin
85	Stem flange/gearbox studs
86	Stem flange/gearbox nuts
99	Gearbox with handwheel (lockable)

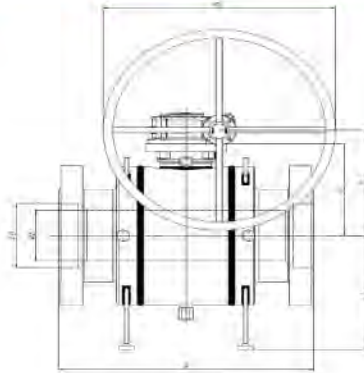


ANSI 150

VALVE SIZE	BORE SIZE	RF							WEIGHT
		A			C	D	E	F	
NPS	B(xb)	mm	mm	mm	mm	mm	mm	mm	kg
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	152.4	394	406	457	205	287	400	245	171
8"x6"	203.2x152.4	457	470	521	205	287	400	245	205
8"	203.2	457	470	521	278.5	325.5	400	283.5	275
10"x8"	254x203.2	533	546	559	278.5	325.5	400	283.5	329
10"	254	533	546	559	361	360	400	318.5	408
12"x10"	305x254	610	622	635	361	360	400	318.5	489
12"	305	610	622	635	411	407	600	359	648
14"x10"	337x305	686	699	762	361	360	400	318.5	635
14"	337	686	699	762	451	444	600	393	888
16"x12"	387.4x337	762	775	838	411	407	600	359	842
16"	387.4	762	775	838	495	481	600	425	1129
18"	438.2	864	876	914	530	557	600	477	1711
20"x16"	438.2x387.4	914	927	991	495	481	600	425	1467
20"	489	914	927	991	580	581.5	600	518	2293
24"x20"	591x489	1067	1080	1143	580	581.5	600	518	2982
24"	591	1067	1080	1143	715	690	700	605	3474
30"x24"	737x591	1295	/	1397	715	690	700	605	4169
30"	737	1295	/	1397	873	826	700	727	5603
32"	781.1	1372	/	1524	950	900	700	800	6723
36"x30"	876x737	1524	/	1727	873	826	700	727	7284
36"	876	1524	/	1727	1035	1036	800	936	9753
42"x36"	1022x876	1829	/	1829	1035	1036	800	936	10560
42"	1022	1829	/	1829	1120	1280	800	1022	11350
48"x42"	1168x1022	1995	/	1995	1120	1280	800	1022	13345
48"	1168	1995	/	1995	1230	1600	800	1130	16540

ANSI 300

VALVE SIZE	BORE SIZE	RF							WEIGHT
		A			C	D	E	F	
NPS	B(xb)	mm	mm	mm	mm	mm	mm	mm	kg
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	152.4	403	419	457	205	287	400	245	189
8"x6"	203.2x152.4	502	518	521	205	287	400	245	239
8"	203.2	502	518	521	330	325.5	600	283.5	322
10"x8"	254x203.2	568	584	559	330	325.5	600	283.5	459
10"	254	568	584	559	361	366	600	318.5	459
12"x10"	305x254	648	664	635	361	366	600	318.5	613
12"	305	648	664	635	401	407	600	359	711
14"x10"	337x305	762	778	762	361	366	600	318.5	797
14"	337	762	778	762	451	444	600	393	1057
16"x12"	387.4x337	838	854	838	401	407	600	359	924
16"	387.4	838	854	838	494	480	600	425	1402
18"	438.2	914	930	914	540	541	700	477	1976
20"x16"	438.2x387.4	991	1010	991	494	480	600	425	1716
20"	489	991	1010	991	634	582	700	518	2549
22"	540	1092	1114	1092	680	610	700	580	2930
24"x20"	591x489	1143	1165	1143	634	582	700	518	3313
24"	591	1143	1165	1143	715	690	700	605	3860
30"x24"	737x591	1397	1422	1397	715	690	700	605	4632
30"	737	1397	1422	1397	873	826	700	727	6225
32"	781.1	1524	1553	1524	950	900	700	800	7470
36"x30"	876x737	1727	1756	1727	873	826	700	727	8093
36"	876	1727	1756	1727	1035	1036	800	936	11475
42"x36"	1022x876	2083	/	2083	1035	1036	800	936	12560
42"	1022	2083	/	2083	1250	1510	800	1052	13480
48"x42"	1168x1022	2170	/	2170	1250	1510	800	1052	15385
48"	1168	2170	/	2170	1300	1630	800	1190	17580

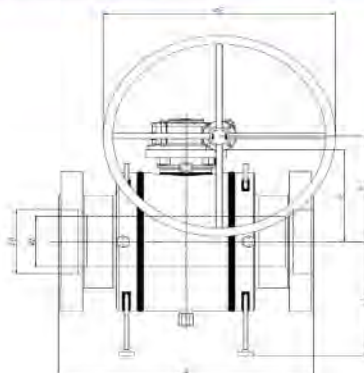


ANSI 600

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW	C	D	E	F	
NPS	B(xb)		A						RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	152.4	559	562	559	291.5	287	600	245	263
8"x6"	203.2x152.4	660	664	660	291.5	287	600	245	275
8"	203.2	660	664	660	340	325.5	600	283.5	377
10"x8"	254x203.2	787	791	787	340	325.5	600	283.5	454
10"	254	787	791	787	370	374.5	600	318.5	575
12"x10"	305x254	838	841	838	370	374.5	600	318.5	620
12"	305	838	841	838	421	415	600	359	753
14"x10"	337x305	889	892	889	421	374.5	600	318.5	897
14"	337	889	892	889	451	444	600	393	1119
16"x12"	387.4x337	991	994	991	421	415	600	359	979
16"	387.4	991	994	991	570	502	700	440	1486
18"	438.2	1092	1095	1092	530	557	700	477	2092
20"x16"	438.2x387.4	1194	1200	1194	570	502	700	440	1931
20"	489	1194	1200	1194	650	618	700	533	2699
22"	540	1295	1305	1295	680	610	700	580	3103
24"x20"	591x489	1397	1407	1397	650	618	700	533	3175
24"	591	1397	1407	1397	724	690	700	605	4343
30"x24"	737x591	1651	1664	1651	724	690	700	605	5087
30"	737	1651	1664	1651	900	846	700	749	6592
32"	781.1	1778	1794	1778	950	900	700	800	7910
36"x30"	876x737	2083	2099	2083	900	846	700	749	8569
36"	876	2083	2099	2083	1035	1036	800	936	12150
42"x36"	1022x876	2175	/	2175	1035	1036	800	936	13500
42"	1022	2175	/	2175	1300	1580	800	1168	15379
48"x42"	1168x1022	2435	/	2435	1300	1580	800	1168	19385
48"	1168	2435	/	2435	1350	1690	800	1290	23104

ANSI 900

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW	C	D	E	F	
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	152.4	610	613	610	294	287	600	245	362
8"x6"	203.2x152.4	737	740	737	294	287	600	245	434
8"	203.2	737	740	737	400	339.5	600	283.5	575
10"x8"	254x203.2	838	841	838	400	339.5	600	283.5	690
10"	254	838	841	838	470	403.5	600	348.5	1040
12"x10"	305x254	965	968	965	470	403.5	600	348.5	1248
12"	305	965	968	965	434.5	440	700	385	1386
14"x10"	324x305	1029	1038	1029	470	403.5	600	348.5	1352
14"	324	1029	1038	1029	510	490	600	423	1793
16"x12"	375x324	1130	1140	1130	500	440	700	385	1801
16"	375	1130	1140	1130	600	530	700	466	2200
18"	425.5	1219	1232	1219	660	608	700	507	3099
20"x16"	425.5x375	1321	1334	1321	600	530	700	466	2861
20"	473.1	1321	1334	1321	705	678	700	590	3998
24"x20"	571.5x473.1	1549	1568	1549	705	678	700	590	5096
24"	571.5	1549	1568	1549	787	730	700	628.5	6434
30"x24"	714.4x571.5	1880	1902	1880	787	730	700	628.5	7536
30"	714.4	1880	1902	1880	945	905	800	800	9765
36"x30"	857x714.4	2286	2315	2286	945	905	800	800	12695
36"	857	2286	2315	2286	1100	988	800	1050	18000



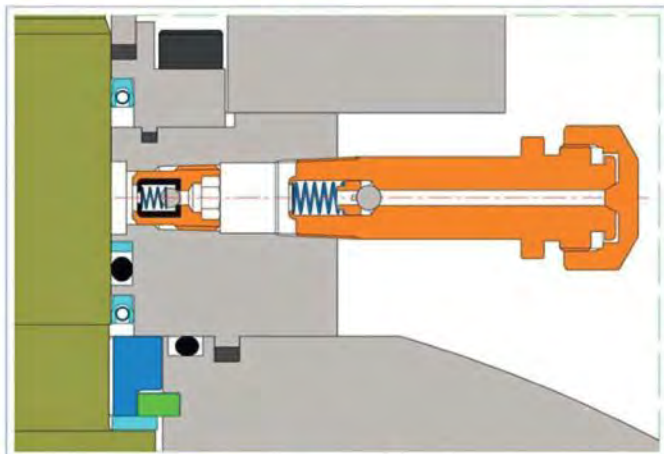
ANSI 1500

VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW	C	D	E	F	
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	146.1	705	711	705	299	316	600	264	488
8"x6"	194x146.1	832	841	832	299	316	600	264	586
8"	194	832	841	832	380	361	700	306	776
10"x8"	241x194	991	1000	991	380	361	700	306	931
10"	241	991	1000	991	490	469	700	400	1404
12"x10"	289x241	1130	1146	1130	490	469	700	400	1684
12"	289	1130	1146	1130	535	510	700	455	1871
14"x10"	317x241	1257	1276	1257	490	469	700	400	1825
14"	317	1257	1276	1257	600	550	700	510	2421
16"x12"	362x289	1384	1407	1384	535	510	700	455	2432
16"	362	1384	1407	1384	645	626	700	565	2971
18"	408	1537	1559	1537	710	668	700	590	4184
20"x16"	456x362	1664	1686	1664	645	626	700	565	3862
20"	456	1664	1686	1664	755	718	700	635	5397
24x20"	508x456	1698	1702	1698	755	718	700	635	6879
24"	508	1698	1702	1698	859	754	700	671	7800
26x24"	549x508	2096	2124	2096	859	754	700	671	8325
26"	549	2096	2124	2096	918	797	700	714	8850
28x26"	584x549	2248	2251	2248	918	797	700	714	9725
28"	584	2248	2251	2248	988	839	700	756	10600
30x28"	630x584	2570	2594	2570	988	839	700	756	12550
30"	630	2570	2594	2570	1060	1107	800	985	14500

ANSI 2500

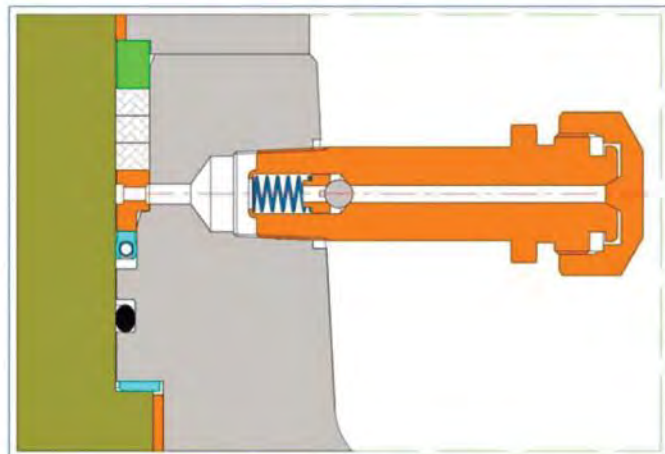
VALVE SIZE	BORE SIZE								WEIGHT
		RF	RTJ	BW	C	D	E	F	
NPS	B(xb)	A			C	D	E	F	RF
inch	mm	mm	mm	mm	mm	mm	mm	mm	kg
6"	133.4	914	927	914	380	395	600	290	733
8"x6"	181x133.4	1022	1038	1022	380	395	600	290	879
8"	181	1022	1038	1022	435	480	700	425	1164
10"x8"	225x181	1270	1292	1270	435	480	700	425	1397
10"	225	1270	1292	1270	510	560	700	490	2106
12"x10"	267x225	1422	1455	1422	510	560	700	490	2527
12"	267	1422	1455	1422	600	650	700	590	2806
14"x12"	280x267	1575	1597	1575	600	650	700	590	4130
14"	280	1575	1597	1575	715	708	700	625	5400
16"x14"	305x280	1683	1702	1683	715	708	700	625	7100
16"	305	1683	1702	1683	731	751	700	668	8800

ISO 15848-1
ENDURANCE CLASS CO3 TIGHTNESS CLASS AM



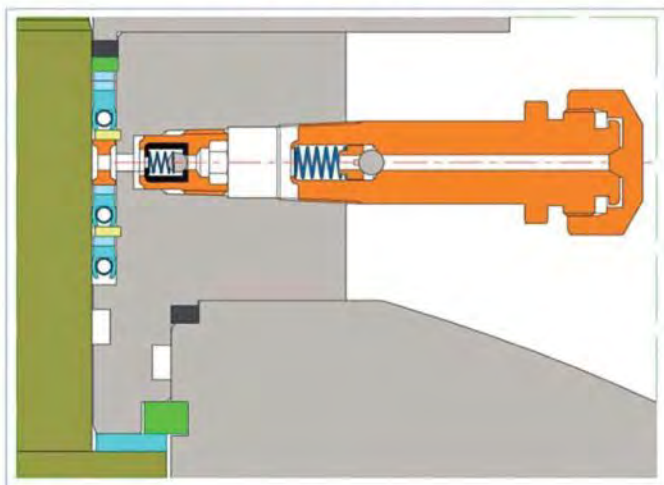
+ 200°C

CERTIFICATION IN PROCESS



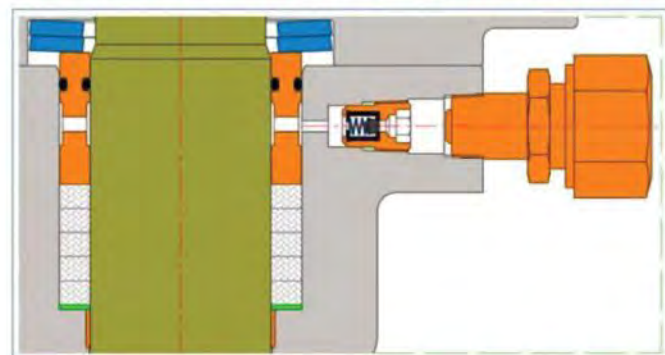
+ 240°C

API STANDARD 641



+ 240°C

API STANDARD 641
ISO 15848-1
ENDURANCE CLASS CO2 TIGHTNESS CLASS CH



+ 350°C

FEATURES

- Welded body type
- Full and reduced bore
- All forged steel component
- Firesafe certified, anti-static devices
- Trunnion mounted, double block and bleed
- Anti-blow out stem design per API 608
- Double piston effect, self-relieving seats, or combination of the two seat design
- Bubble tight seat seals
- Emergency stem and seat sealing
- NACE MR0175 SOUR

Fugitive Emission Certified to:

API STANDARD 641

ISO 15848-1: ENDURANCE CLASS CO3

TIGHTNESS CLASS AM

ISO 15848-1: ENDURANCE CLASS CO2

TIGHTNESS CLASS CH

Firesafe Certified to:

API STANDARD 607

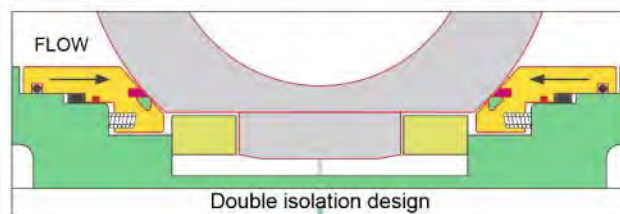
API STANDARD 6FA

B.S. 6755 PART 2

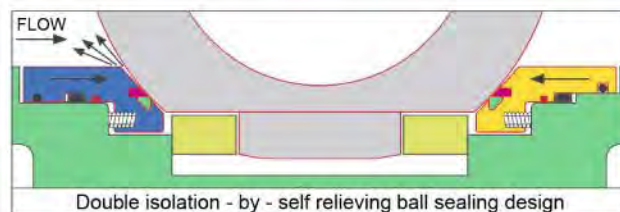
ISO 10497: 2010



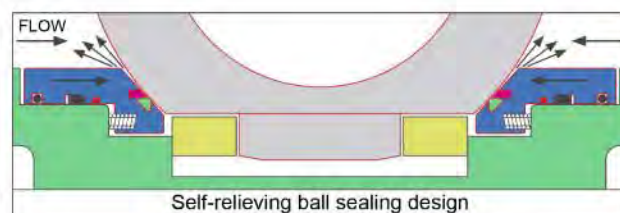
Optional Valve Seat Sealing Designs



DIB-1



DIB-2

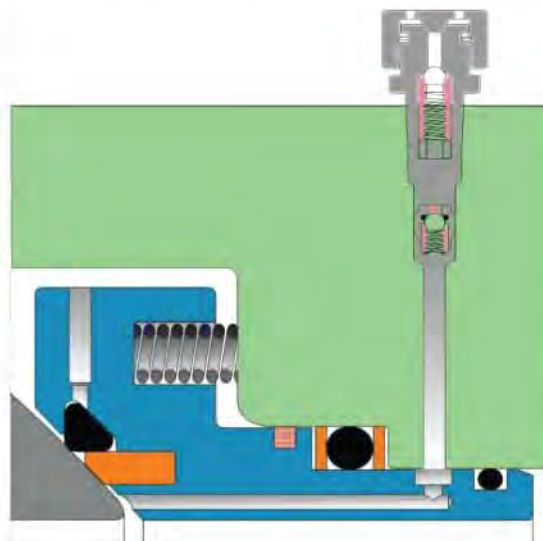


EMERGENCY SEAT SEALING

As an excess of impurities in fluids may have a harmful effect on seat ring seals, GVS® valves are equipped for emergency restoration of sealing.

This consists of special holes and grooves and grooves in the seat ring and valve body through which sealants are injected.

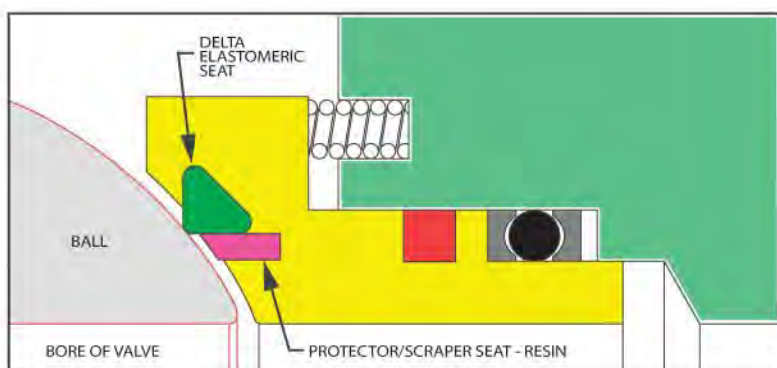
Each body injection port is equipped with an inner check valve and a grease button head fitting



DELTA SEAT SEAL

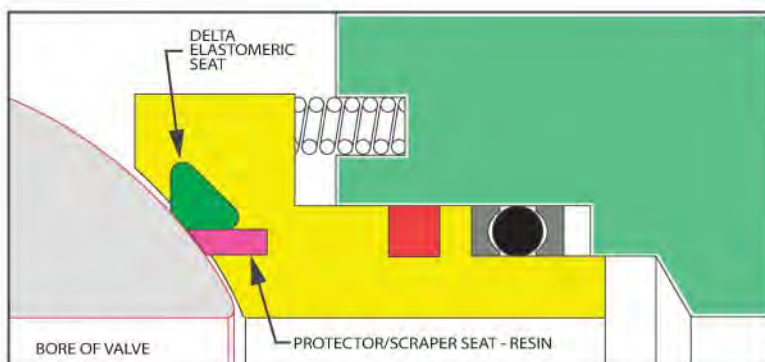
This seat insert is shaped like a triangle "Delta" with rounded corners, which is housed by means of a metal seat. This unique geometry offers several advantages:

Due to the high elasticity of the seat insert, it may ensure sealing even on partly damaged ball surfaces.



At low pressure, the resin seat is more of a "Protector," for it does not touch the ball's outer surface. This is why we state that the insert seat is a protector. The "Delta" elastomeric - shaped seat is always in full contact with the ball at low & high pressure, providing a seat to ball shut-off at all times.

At higher pressure, the complete seat assembly is being pushed against the ball, and the insert resin seat "Protector" eventually does come into contact with the ball's outer surface. At this elevated pressure, the protector acts as a seat seal in addition to being a protector and also acting as a scraper, this wiping off any debris that may be against the ball's outer surface.

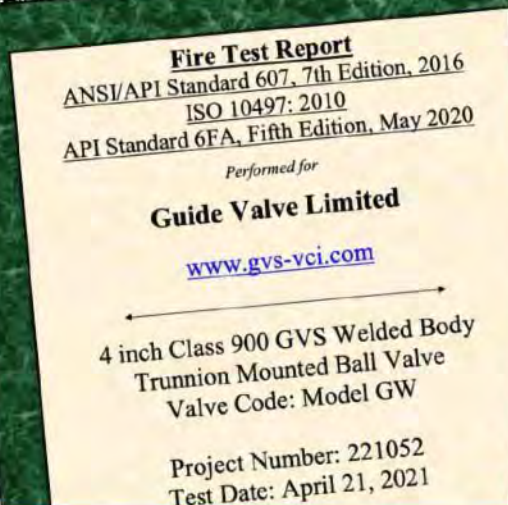
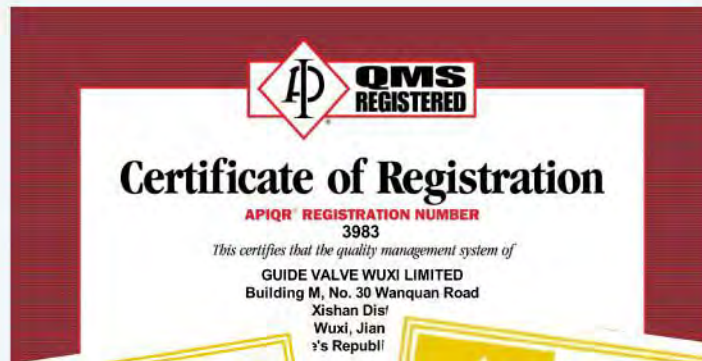


ANTI-EXPLOSIVE DECOMPRESSION SEAL (AED)

All of the elastic compounds present permeability to gases at different levels. The pressured gas penetrates below the o-ring surface, forming air pockets in the intermolecular spaces. The quantity of gas absorbed depends on the type of compound and the gas in contact with it, from the temperature and the exercised pressure.

The instance described previously can be the cause of damage to the o-ring if it is followed by an abrupt reduction in pressure and the consequent dilation of the ring. The gas included in the compound has an explosive behavior. The explosion of the air pockets contained in the compound causes the laceration of the o-ring surfaces.

All o-rings in our GVS Series **W1** & **GW1** are of the **AED** type and possess an Anti-Explosive Decompression Feature that prevents the above from occurring.



Guide Valve Limited

51 Terecar Dr., Unit 1
Woodbridge, ON CANADA L4L 0B5
Tel: 905-761-7877
Fax: 905-761-7917

Guide Valve USA Limited

16295 North Frwy Service Rd
Houston, Texas, 77090.
USA.

www.gvs-vci.com

sales@gvs-vci.com

Toll Free: 1-888-824-5693

Distributor / Agent:



GLOBAL SupplyLine

Global Supply Line are Guide Valve stockists, distributing Aust., NZ & PNG, and can automate, service & test in our Adelaide Lloyd's 9001 facility, approved by Guide Valve.
Contact us: sales@globalsupplyline.com.au
Stock lists at our website: www.globalsupplyline.com.au