

# Compact Manifold Valves

Dresser  
Valve  
Division



# **The Super G's**

reputation for bubble tight sealing and long service life

has made it a preferred valve for manifold service.

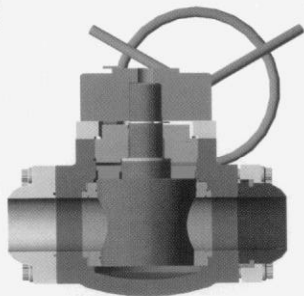
Oil companies in recent years have

developed a need for a smaller, lighter weight valve. In 1998, Dresser Valve Division undertook the task of designing a valve that utilized the features of the original Super G that had made it a preferred valve, but in a compact body design. As a result of those efforts, Dresser Valve Division can now not only offer the Super G in the original flanged or threaded configuration, but also in a compact version with compact flange, weld end or hub end configurations.

## **The new Compact Manifold Valve incorporates all of the following features from the Original Super G:**

### **Metal to Metal Seating**

- Zero leakage
- Hard coated plug (70 Rc+) and seats resist damage to solids
- Maximum service life



## **Inline Repairable**

- Fast and easy
- Repair does not require removal from the line
- Internals can be removed without special tools
- Teflon encapsulated cover for easy removal
- Plug and seats fully interchangeable without lapping

## **Secondary Sealant Injection**

- Internal sealant path to provide an emergency seal
- Sealant is injected into a groove in the center of the seats resulting in an O-ring type seal
- Extended service life
- Lower torques

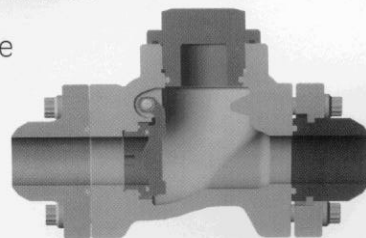


## **Other Features**

- Ease of actuation
- Round ports—low turbulence/pressure drop
- Valve bores to match pipe bores
- API 6A/6D & NACE MR-01-75 standard
- API 6FA fire safe standard
- Locking device standard
- Valve position indicator standard

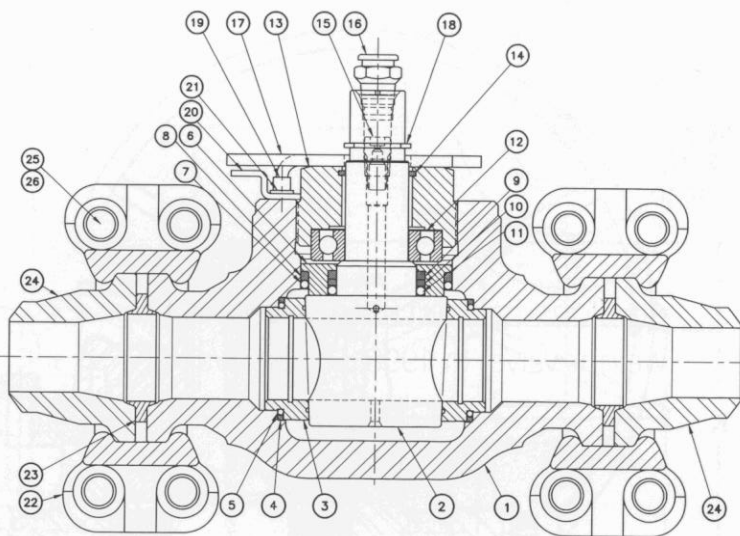
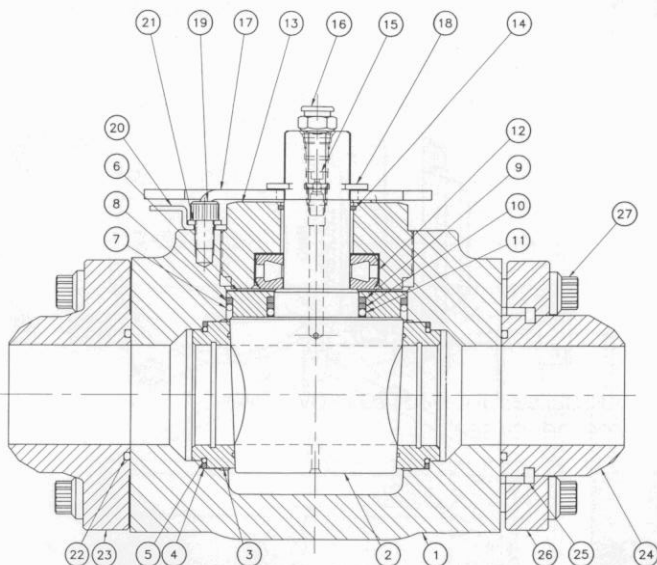
## **In conjunction with the development of the Compact Super G, we also developed a compact check valve.**

- Top entry inline repairable
- Primary metal seating
- Secondary low pressure soft sealing
- Removable seat
- Stainless steel internals
- Full pipe opening



*The new check valve is offered in the same size and pressure ranges, as well as choice of end connections, as the Compact Super G.*

# Compact Super G Parts List



Note: The drawing illustrates both the one piece compact flange (left) and the split ring flange

## Compact/Swivel Flange

Item	No. Req'd.	Description	Material
1	1	Body	ASTM A216 GR. WCC
* 2	1	Plug	1018 chrome plated
* 3	2	Seat	17-4 SS
* 4	2	Seat spacer ring	Steel, nickel plated
* 5	2	Seat o-ring	90 duro viton
6	1	Packing plate	AISI 1018 steel, nickel plated
* 7	1	Body o-ring	90 duro viton
* 8	1	Body seal	Grafoil
* 9	1	Stem seal	Grafoil
* 10	1	Stem backup ring	Teflon
* 11	1	Stem o-ring	90 duro viton
12	1	Thrust bearing	Alloy steel
13	1	Adjusting nut	ASTM A216 GR. WCC
14	1	Dirt excluder	90 duro viton
15	1	Lub check valve	316 SS
16	1	Button head fitting	Alloy steel
17	1	Lock stop collar	1018 CRS nickel plated
18	1	Stop collar retainer	Carbon steel
19	1	SHC screw	SS
20	1	Nut lock plate	Carbon steel
21	1	Lock washer	Carbon steel
* 22	1	O-ring, flange	90 duro viton
23	1	Compact flange	ASTM A216 GR. WCC
24	1	Hub, swivel flange	ASTM A216 GR. WCC
25	2	Split ring halves	ASTM A747 GR. CB7CU1
26	1	Collar swivel flange	ASTM A216 GR. WCC
27	—	Cap screws, 12-pt flanged	ASTM A193 GR. B7/bright zinc plated (PTFE coated bolting available)

\* Recommended spare parts

## Hub End

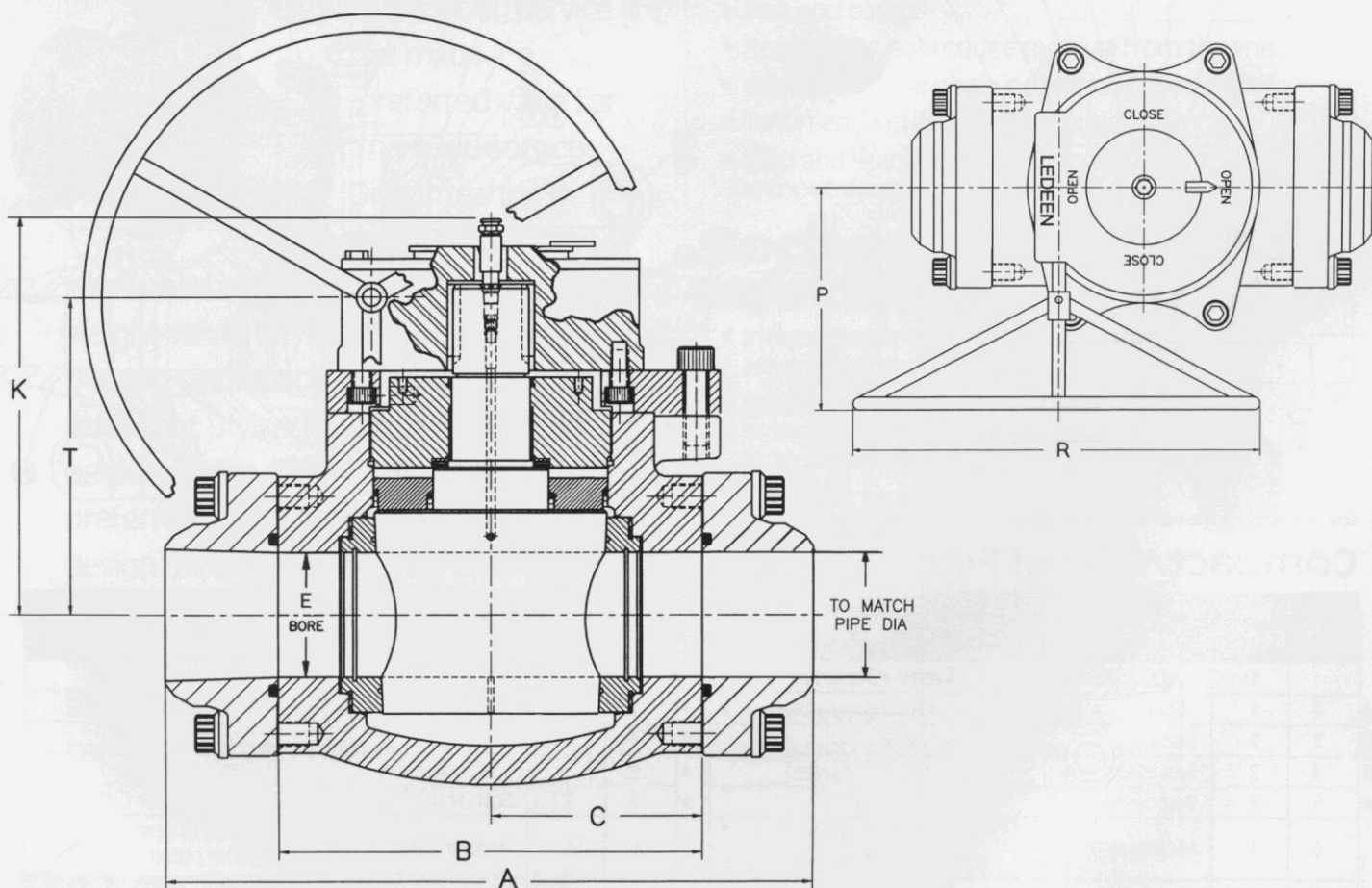
Item	No. Req'd.	Description	Material
1	1	Body	ASTM A216 GR. WCC
* 2	1	Plug	1018 chrome plated
* 3	2	Seat	17-4 SS
* 4	2	Seat spacer ring	Steel, nickel plated
* 5	2	Seat o-ring	90 duro viton
6	1	Packing plate	AISI 1018 steel, nickel plated
* 7	1	Body o-ring	90 duro viton
* 8	1	Body seal	Grafoil
* 9	1	Stem seal	Grafoil
* 10	1	Stem backup ring	Teflon
* 11	1	Stem o-ring	90 duro viton
12	1	Thrust bearing	Alloy steel
13	1	Adjusting nut	ASTM A216 GR. WCC
14	1	Dirt excluder	90 duro viton
15	1	Lub check valve	316 SS
16	1	Button head fitting	Alloy steel
17	1	Lock stop collar	1018 CRS nickel plated
18	1	Stop collar retainer	Carbon steel
19	1	SHC screw	SS
20	1	Nut lock plate	Carbon steel
* 21	1	Lock washer	Carbon steel
22	2	Clamps	AISI 4140 PTFE coated
23	2	Sealrings (2in/16)	AISI 4140 PTFE coated
* 24	1	Buttweld hubs	ASTM A350 LF2
* 25	8	Studs	A193 GR B7 Cad/PTFE coated
26	16	Nuts	A194 GR 2H PTFE coated

\* Recommended spare parts

When ordering parts, please furnish part name as given above, plus valve model, size and working pressure.

# Compact Super G Dimensions

## Compact/Swivel Flange



### Dimensions/Pressures<sup>†</sup>

Valve Size	Pressure Class	A	B	C	E	K	P	T	R	Valve Weight (lbs)	Weight With Flanges
2" (1.75")	900/1500	13.25	7.75	3.87	1.75	7.25				59	76
	2500	13.25	7.75	3.87	1.75	7.25				59	76
3" (2.62")	900/1500	16.25	9.75	4.87	2.62	9.13				99	134
	2500	16.25	9.75	4.87	2.62	9.13				99	134
4" (3.12") (3.43")	900/1500	—	—	—	—	—	—	—	—	—	—
	2500	—	—	—	—	—	—	—	—	—	—
	900/1500	18.50	11.25	5.63	3.43	11.00	13.75	8.53	24	226*	279*
	2500	19.75	12.50	6.25	3.43	11.00	13.75	8.53	24	254*	307*
6" (4.06") (5.18")	900/1500	22.75	13.50	6.75	4.06	12.06	16.75	9.56	36	352*	490*
	2500	23.25	14.00	7.00	4.06	12.06	16.75	9.56	36	423*	561*
	900/1500	26.75	17.50	8.75	5.18	16.35	23.75	13.22	36	487*	625*
	2500	28.25	19.00	9.50	5.18	16.35	23.75	13.22	36	574*	712*
8" (6.06") (6.81")	900/1500	28.75	18.00	9.00	6.06	20.00	27.12	16.95	36	1041*	1272*
	900/1500	—	—	—	—	—	—	—	—	—	—

<sup>†</sup> THE COMPACT FLANGE AND SWIVEL FLANGE ASSEMBLY ARE INTERCHANGEABLE AND WILL MATE TO EITHER END OF VALVE

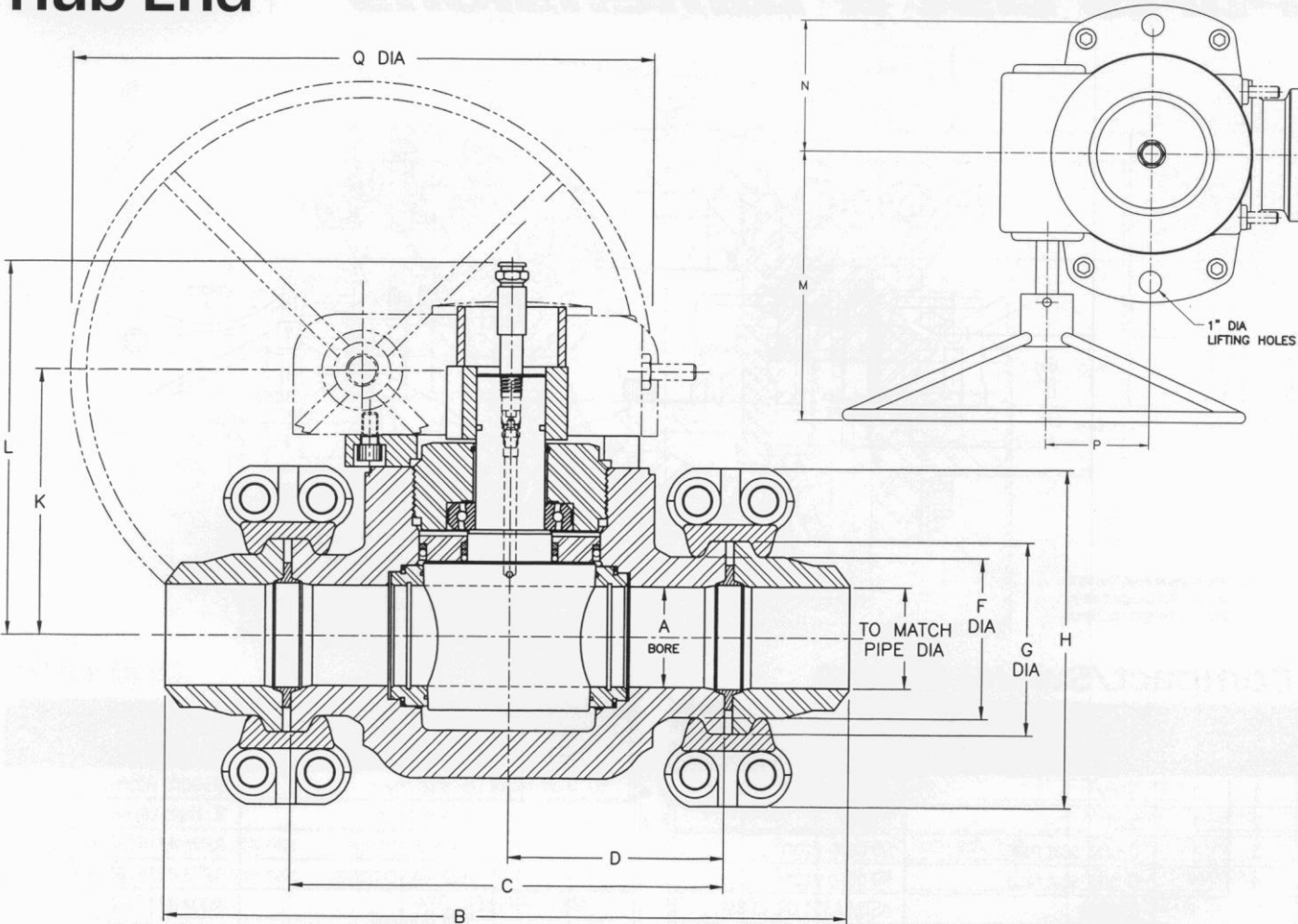
\* WITH GEAR OPERATOR

NOTE: All dimensions are in inches.



# Compact Super G Dimensions

## Hub End



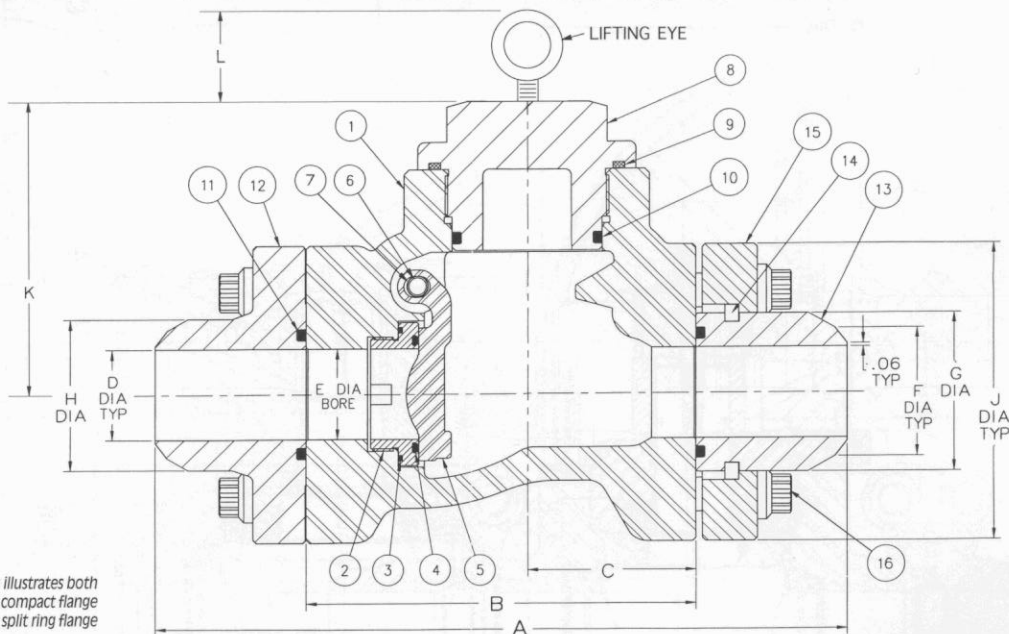
Dimensions/Pressures<sup>+</sup>

Valve Size	Pressure Class	A	B	C	D	F	G	H	K	L	M	N	P	Q	Valve Weight	Weight With Hub (Lbs)
2"	2500	1.75	15.88	9.87	4.94	2.88	3.63	7.50	—	6.63	—	—	—	—	59	92
3" RP	2500	2.13	19.50	12.50	6.25	4.00	5.00	9.25	—	7.06	—	—	—	—	59	92
3" FP	1500/2500	2.62	19.50	12.50	6.25	4.00	5.00	9.25	—	7.63	—	—	—	—	86	189
4"	1500	3.13	21.25	13.50	6.75	5.00	6.00	10.50	8.25	11.63	12.16	5.95	4.62	18	130	209
6" RP	1500	4.12	26.25	17.00	8.50	7.75	9.25	15.25	10.50	13.50	16.75	7.25	5.43	30	388*	593*
6" FP	1500	6.06	31.25	21.50	10.75	7.75	9.25	15.25	14.20	22.50	25.74	10.75	9.33	36	548*	753*
8"	1500	6.06	31.25	21.50	10.75	10.00	11.50	18.50	14.20	22.50	25.74	10.75	9.33	36	1087*	1427*

<sup>+</sup> WITH GEAR OPERATOR

NOTE: All dimensions are in inches.

# Compact Check Valve Parts List & Dimensions



## Compact/Swivel Flange

Item	No. Req'd.	Description	Material
1	1	Body	ASTM A216 GR. WCC
2	1	Seat	316 SS
3	1	O-ring, seat rear	90 duro viton
4	1	O-ring, seat face	90 duro viton
5	1	Clapper	ASTM A351 GR. CF8M
6	1	Shaft	17-4 PH H1150M
7	1	Hex plug	Carbon steel
8	1	Cover	ASTM A216 GR. WCC
9	1	Fire safe seal	Graphoil

\* Recommended spare parts

Item	No. Req'd.	Description	Material
10	1	O-ring, cover	90 duro viton
11	1	O-ring, body	90 duro viton
12	1	Compact flange	ASTM A216 GR. WCC
13	1	Hub, swivel flange	ASTM A216 GR. WCC
14	1	Split ring half	ASTM A747 GR. CB7CU1 (17-4PH)
15	1	Collar, swivel flange	ASTM A216 GR. WCC
16	—	Cap screw, 12-point flanged	ASTM A193 GR. B7/ bright zinc plated (PTFE coated bolting available)

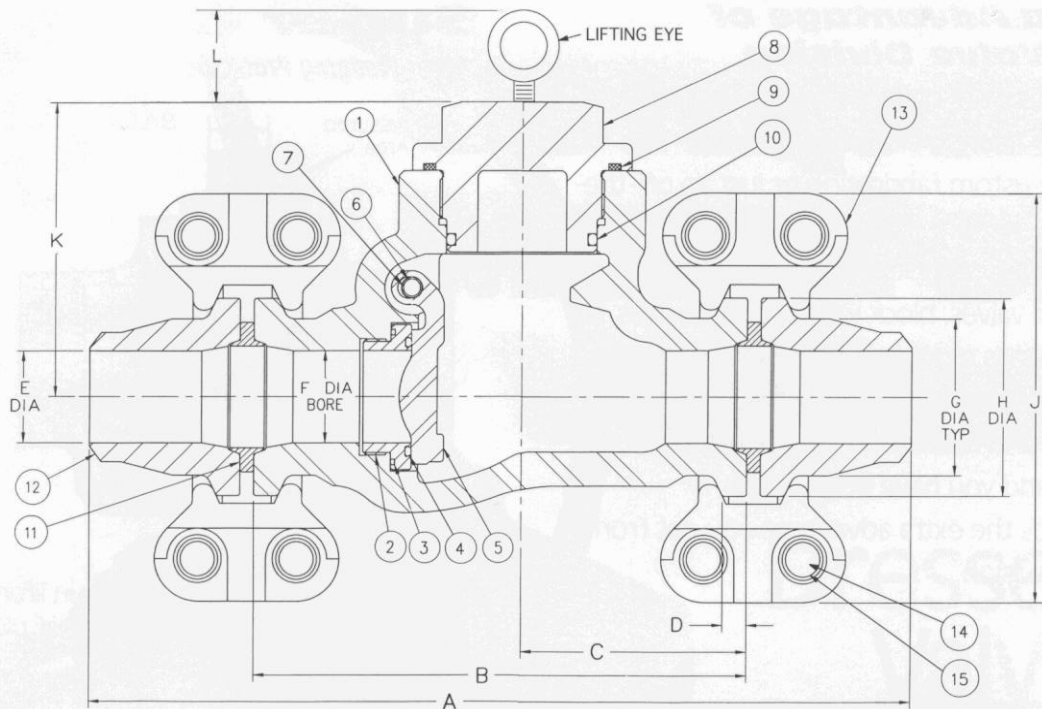
## Dimensions/Pressures<sup>†</sup>

Valve Size	Pressure Class	A	B	C	D	E	F	G	H	J	K	L	Valve Weight (Lbs)	Valve With Flanges
2"	900/1500 2500	12.63	7.13	3.09	1.689	1.69	2.375	2.94	2.81	5.50	5.41	N/A	36	53
3"	900/1500 2500	15.88	9.38	4.25	2.624	2.62	3.500	4.25	4.12	7.12	6.69	N/A	76	111
4"	900/1500 2500	18.25	11.00	4.88	3.438	3.44	4.500	5.38	5.19	8.25	7.84	3.06	131	184
6"	900/1500 2500	24.13	14.88	6.75	5.189	5.19	6.625	7.88	7.50	11.50	9.97	3.06	300	438

<sup>†</sup> THE COMPACT FLANGE AND SWIVEL FLANGE ASSEMBLY ARE INTERCHANGEABLE AND WILL MATE TO EITHER END OF VALVE.

NOTE: All dimensions are in inches.

When ordering parts, please furnish part name as given above, plus valve model, size and working pressure.



## Hub End

Item	No. Req'd.	Description	Material
1	1	Body	ASTM A216 GR. WCC
* 2	1	Seat	316 SS
* 3	1	O-ring, seat rear	90 duro viton
* 4	1	O-ring, seat face	90 duro viton
5	1	Clapper	ASTM A351 GR. CF8M
6	1	Shaft	17-4 PH H1150M
7	1	Hex plug	Carbon steel
8	1	Cover	ASTM A216 GR. WCC
* 9	1	Fire safe seal	Graphoil

Item	No. Req'd.	Description	Material
* 10	1	O-ring, cover	90 duro viton
* 11	2	Sealrings	AISI 4140 PTFE coated
12	2	Buttweld hubs sch. 160	ASTM A350 GR. LF2
13	4	Clamps	AISI 4140 PTFE coated
14	8	Studs	ASTM A193 GR. B7 Cad/PTFE coated
15	16	Nuts	ASTM A194 GR. 2H PTFE coated

\* Recommended spare parts

## Dimensions/Pressures

Valve Size	Pressure Class	A	B	C	D	E	F	G	H	J	K	L	Valve Weight (Lbs)	Valve With Hubs
2"	900/1500 2500	15.00	9.00	4.13	.44	1.689	1.69	2.88	3.63	7.50	5.41	7.20	29	62
3"	900/1500 2500	18.38	11.38	5.19	.50	2.624	2.62	4.00	5.00	9.25	6.69	9.20	61	122
4"	900/1500	20.75	13.00	5.88	.50	3.438	3.44	5.00	6.00	10.50	7.84	10.80	89	168
4"	2500	22.00	13.50	6.25	.63	3.438	3.44	5.75	6.75	11.75	7.84	11.80	124	237
6"	900/1500	26.00	16.25	7.56	.81	5.189	5.19	7.75	9.25	15.25	9.97	16.00	223	428
6"	2500	27.00	17.25	8.06	.81	5.189	5.19	7.75	9.25	15.25	9.97	16.00	272	477

NOTE: All dimensions are in inches.

When ordering parts, please furnish part name as given above, plus valve model, size and working pressure.

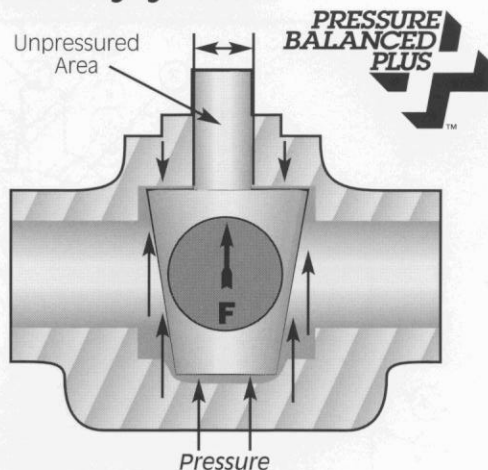
## ***The Extra Advantage of Dresser Valve Division***

At Dresser Valve Division, energy is our business. If you need engineering expertise, project management, custom fabrication or just an off-the-shelf plug or check valve, call the Dresser Valve Division. We offer a complete range of valve products — ball valves, block valves, check valves. From the industry's most trusted names — Grove, Texsteam, Wheatley and Tom Wheatley. Add to that custom design and fabrication using the very latest in technology and you have single point responsibility. It's the extra advantage you get from Dresser Valve Division.



*Dimensions/Pressures*

## **Super G** ***Solves Wedging Problems***



Unpressured area at stem results in lifting force "F" which prevents wedging of plug.

### ***Available Options***

- Actuators
- Positioners
- Spool Pieces
- Blind Flanges
- 10,000# W.P. Valves



***We have it all.***