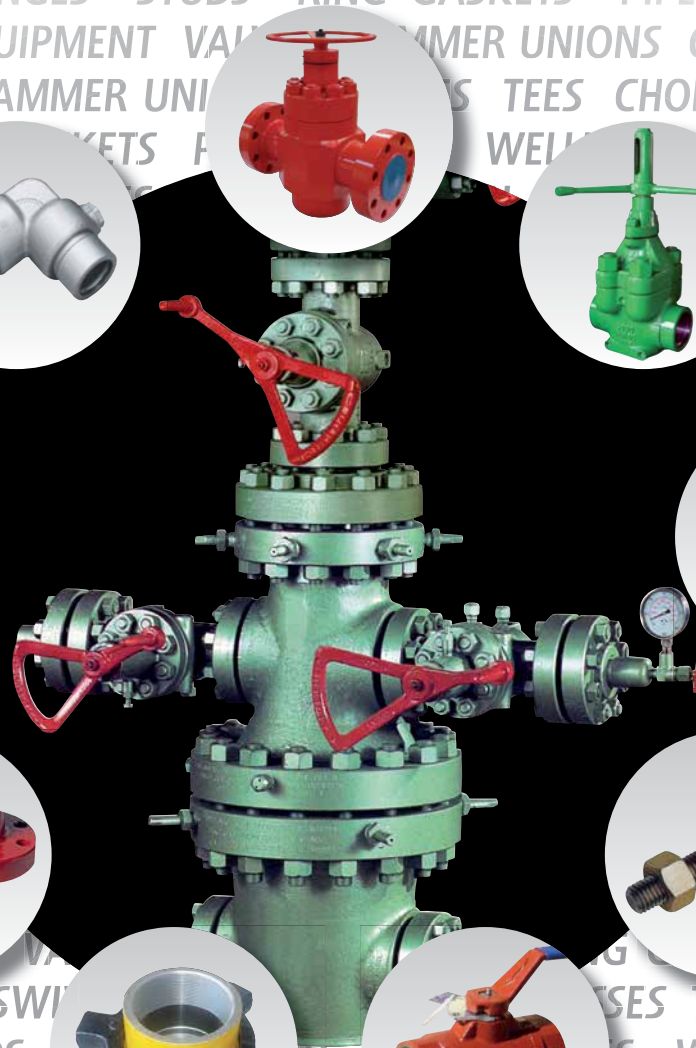


# Oilfield Products Composite Catalogue

SHORT VERSION



ES OILPATCH VALVES FLANGES STUDS  
S FLANGES STUDS RING GASKETS PIPE FITT  
LHEAD EQUIPMENT VALV HAMMER UNIONS CROSSES  
SWIVELS HAMMER UNI S TEES CHOKES OILPAT  
STUDS RING GASKETS F WELLS EQUIPMENT  
R UNIONS C FLANGES STUD  
ETS PIPE FITTI R UNIONS CR  
CHOKES OILPA KETS PIPE FITTI  
LHEAD EQUIPME EES CHOKES OILPAT  
LVES FLANGES S LHEAD EQUIPME  
SWIVELS H FLANGE  
TUDS RING HAMMER  
NIONS CH G GASKETS  
PIPE FITTINGS CROSSES TEES  
HOKES OILPATCH TTINGS WELLHEAD  
QUIPMENT SWIVE OILPATCH VALVES  
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SKETS PIPE UNIONS CROSS  
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G GASKETS PIPE FITTINGS WELLS EQUIPMENT SWIVELS  
ES TEES CHOKES OILPATCH PIPE FITTINGS FLANGES  
D EQUIPMENT SWIVELS HAMMER UNIONS CROS



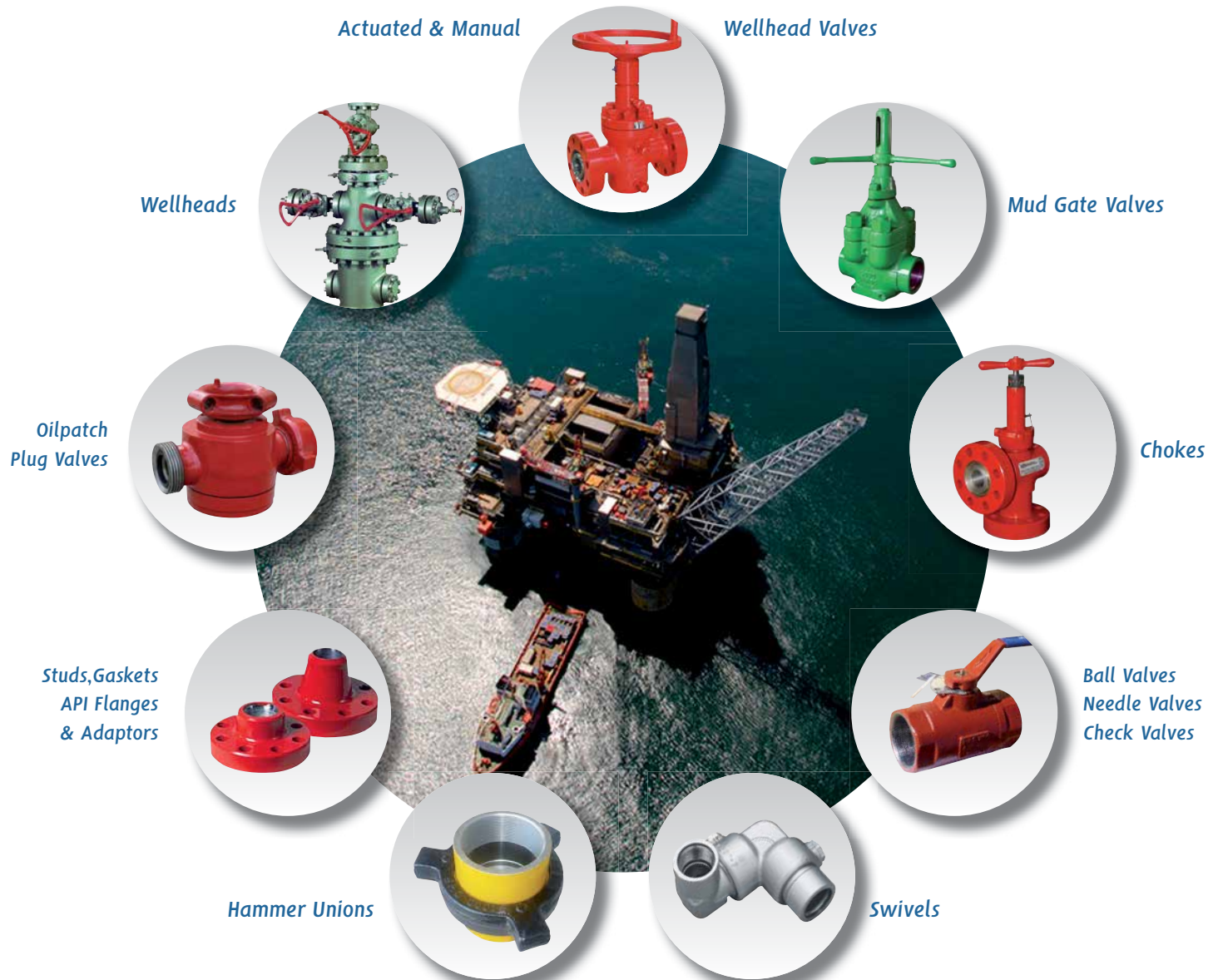
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# Total Oilfield Solutions



We stock an extensive range of NACE Oilfield equipment in API6A licensed brands from API 2000 ~ 15000 psi.

- Chokes, expanding/slab Gate Valves, hydraulic & pneumatic actuated Gate Valves and 'DM' Style Mud Gate Valves.
- NPT and Flanged API Ball and Check Valves, Plug Valves with hammer union ends.
- FMC® and Cameron® style Braden Heads, Tubing Spools, Xmas Trees.
- Flanges in companion, weld neck, adaptor, DSA and blind.
- Butt weld Fittings schedule 40 up to XXS.
- Hammer Unions and Swivels.
- Gaskets, Studs.
- NPT (LP) Bull Plugs, Tees, Nipples and Elbows.

**DEALER INQUIRIES WELCOME**

## SHORT VERSION\*

Global Supply Line has been an Australian leader since 1987 in the supply of various types of Valves, Flanges, Fittings and Wellhead Equipment. We carry a \$60 million inventory in our Adelaide store of fully certified stock making us the biggest oilfield & pipeline products stockist in the southern hemisphere.

Our name is synonymous with high quality and unparalleled dedication to excellence which has kept us at the forefront of the oil industry.

Australian Pipeline Valve and our fleet of brands are proven in the world market and are backed by Global Supply Line.

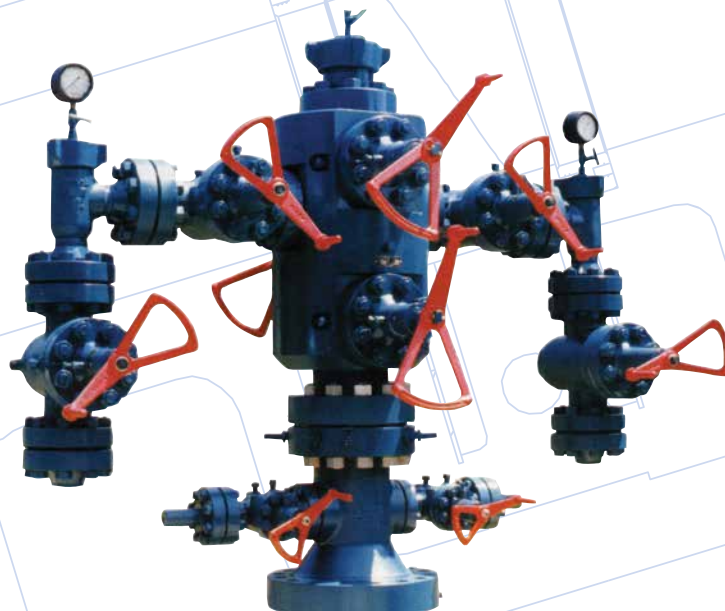
Global Supply Line has \$30 million product liability insurance, our manufacturers hold relevant certifications such as ISO 9001, API6A etc.

We stock an extensive range of NACE Oilfield equipment in API6A licensed brands from API 2000 ~ 15000 psi.

- Chokes, expanding/slab Gate Valves and “DM” Style Mud Gate Valves.
- NPT and Flanged API Ball and Check Valves, Plug Valves with hammer union ends.
- FMC<sup>®</sup>™ & Cameron<sup>®</sup>™ style Braden Heads, Tubing Spools, Xmas Trees.
- Flanges in companion, weld neck, adaptor, DSA and blind.
- Buttweld Fittings schedule 40 up to XXS.
- Hammer Unions, Swivels, Gaskets and Studs.
- NPT (LP) Bull Plugs, Tees, Nipples and Elbows.



[\\*See Website for Full Version](#)

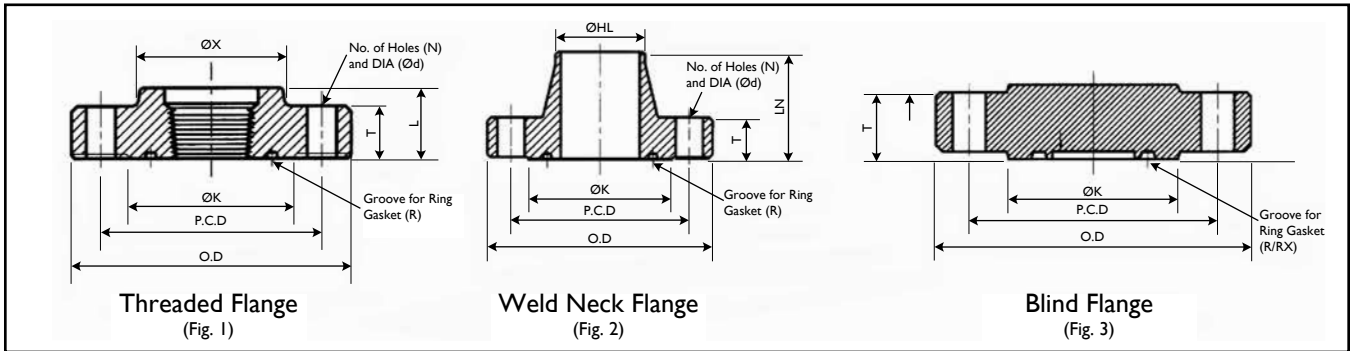


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\*All dimensions are in inches

## 1

### THREADED, BLIND & WELD NECK FLANGES (AS PER API-6A)

#### (I-1) PRESSURE RATING:- API 6B-2000 PSI WP ( With R or RX type Ring Gasket)

SIZE	OD	T	ØK	PCD	N	Ød	L	ØX	LN	ØHL	R/RX
2 1/8	6.50	1.31	4.25	5	8	0.75	1.75	3.31	3.19	2.38	23
2 1/2	7.50	1.44	5	5.88	8	0.88	1.94	3.94	3.44	2.88	26
3 1/8	8.25	1.56	5.75	6.62	8	0.88	2.12	4.62	3.56	3.50	31
4 1/8	10.75	1.81	6.88	8.50	8	1.00	2.44	6.00	4.31	4.50	37
5 1/8	13	2.06	8.25	10.50	8	1.12	2.69	7.44	4.81	5.56	41
7 1/8	14	2.19	9.5	11.50	12	1.12	2.94	8.75	4.94	6.63	45
9	16.5	2.50	11.88	13.75	12	1.25	3.31	10.75	5.56	8.63	49
11	20	2.81	14	17	16	1.38	3.69	13.50	6.31	10.75	53
13 1/8	22	2.94	16.25	19.25	20	1.38	3.94	15.75	-	-	57
16 1/4	27	3.31	20	23.75	20	1.62	4.50	19.50	-	-	65
21 1/4	32	3.88	25	28.50	24	1.75	5.38	24.00	-	-	73

#### (I-2) PRESSURE RATING:- API 6B-3000 PSI WP ( With R or RX type Ring Gasket)

2 1/8	8.50	1.81	4.88	6.50	8	1.00	2.56	4.12	4.31	2.38	24
2 1/2	9.62	1.94	5.38	7.50	8	1.12	2.81	4.88	4.44	2.88	27
3 1/8	9.50	1.81	6.12	7.50	8	1.00	2.44	5.00	4.31	3.50	31
4 1/8	11.50	2.06	7.12	9.5	8	1.25	3.06	6.25	4.81	4.50	37
5 1/8	13.75	2.31	8.50	11.00	8	1.38	3.44	7.50	5.31	5.56	41
7 1/8	15.00	2.50	9.50	12.50	12	1.25	3.69	9.25	5.81	6.63	45
9	18.50	2.81	12.12	15.50	12	1.50	4.31	11.75	6.69	8.63	49
11	21.50	3.06	14.25	18.50	16	1.50	4.56	14.50	7.56	10.75	53
13 1/8	24.00	3.44	16.50	21.00	20	1.50	4.94	16.50	-	-	57
16 1/4	27.75	3.94	20.62	24.25	20	1.75	5.06	20.00	-	-	66
20 1/4	33.75	4.75	25.50	29.25	20	2.12	6.75	24.50	-	-	74

#### (I-3) PRESSURE RATING:- API 6B-5000 PSI WP ( With R or RX type Ring Gasket)

2 1/8	8.50	1.81	4.88	6.50	8	1.00	2.56	4.12	4.31	2.38	24
2 1/2	9.62	1.94	5.38	7.50	8	1.12	2.81	4.88	4.44	2.88	27
3 1/8	10.50	2.19	6.62	8.00	8	1.25	3.19	5.25	4.94	3.50	35
4 1/8	12.25	2.44	7.62	9.50	8	1.38	3.88	6.38	5.19	4.50	39
5 1/8	14.75	3.19	9.00	11.50	8	1.62	4.44	7.75	6.4	5.56	44
7 1/8	15.50	3.62	9.75	12.50	12	1.50	5.06	9.00	7.13	6.63	46
9	19	4.06	12.50	15.50	12	1.75	6.06	11.50	8.81	8.63	50
11	23	4.69	14.63	19.00	12	2.00	6.69	14.50	10.44	10.75	54

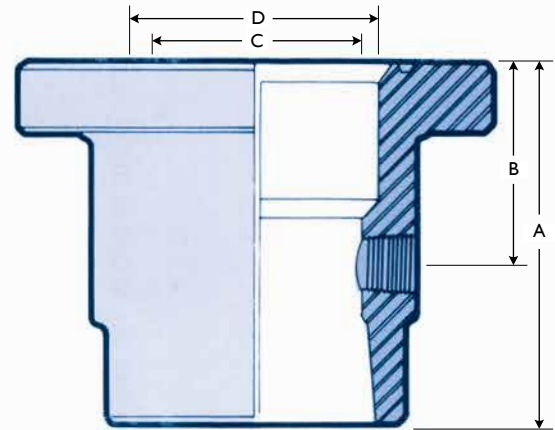
## C-22 CASING HEADS

C-22 Casing Heads are straight bore bowl designs which avoid damage to the sealing (packoff) areas caused by drilling tools and permit hanging more weight than tapered bowls. C-29 Bowl also available.

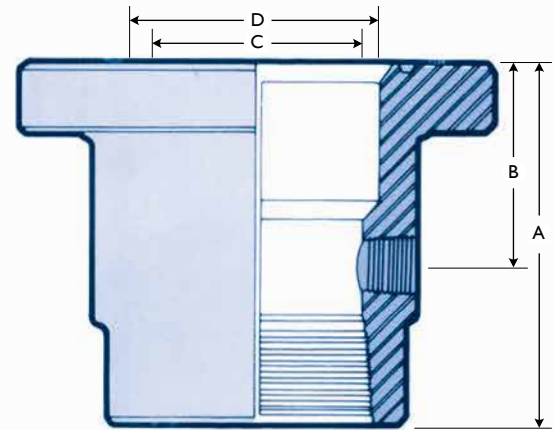
Normally furnished with threaded outlets. Longer bowls and optional lockdowns are available on request. Bottom preparation is threaded or slip-on welding, may be provided with O-Rings.

Part No.	Top Flange <sup>#2</sup>		Bottom <sup>#</sup> Prep (in)	Outlets <sup>†</sup>	Dimensions (in)				Approx. Weight Lbs
	Size (in)	Size (KPSI)			A	B	C	D	
-	9	2	7" 8rd	2" Thd	15	8 <sup>1</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>16</sub>	8 <sup>3</sup> / <sub>16</sub>	210
-	9	3	7" 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>16</sub>	8 <sup>3</sup> / <sub>16</sub>	240
-	9	2	7 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15	8 <sup>1</sup> / <sub>16</sub>	7	8 <sup>3</sup> / <sub>16</sub>	210
-	9	3	7 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	7	8 <sup>3</sup> / <sub>16</sub>	240
277	9	2	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>16</sub>	8	8 <sup>3</sup> / <sub>16</sub>	180
280	9	3	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	8	8 <sup>3</sup> / <sub>16</sub>	240
-	9	5	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	8	8 <sup>3</sup> / <sub>16</sub>	250
201	11	2	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	8	10 <sup>1</sup> / <sub>16</sub>	340
213	11	3	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	8	10 <sup>1</sup> / <sub>16</sub>	460
225	11	5	8 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	18 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>16</sub>	8	10 <sup>1</sup> / <sub>16</sub>	710
202	11	2	9 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	9	10 <sup>1</sup> / <sub>16</sub>	320
214	11	3	9 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	9	10 <sup>1</sup> / <sub>16</sub>	430
226	11	5	9 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	9	10 <sup>1</sup> / <sub>16</sub>	680
203	11	2	10 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	300
215	11	3	10 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	410
227	11	5	10 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	590
207	13 <sup>1</sup> / <sub>2</sub>	2	11 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	17 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	11	13 <sup>1</sup> / <sub>2</sub>	469
219	13 <sup>1</sup> / <sub>2</sub>	3	11 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	17 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	11	13 <sup>1</sup> / <sub>2</sub>	587
-	13 <sup>1</sup> / <sub>2</sub>	3	12 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	500
208	13 <sup>1</sup> / <sub>2</sub>	2	13 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	15	9 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	380
220	13 <sup>1</sup> / <sub>2</sub>	3	13 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	16 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	500
244	13 <sup>1</sup> / <sub>2</sub>	5	13 <sup>1</sup> / <sub>2</sub> " 8rd	2" Thd	18 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	1430
-	16 <sup>1</sup> / <sub>2</sub>	2	16" 8rd	2" Thd	18 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	980
-	16 <sup>1</sup> / <sub>2</sub>	3	16" 8rd	2" Thd	18 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>16</sub>	15 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	995
-	20 <sup>1</sup> / <sub>2</sub>	3	20" 8rd	2" Thd	21 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>16</sub>	20 <sup>1</sup> / <sub>2</sub>	1250
-	21 <sup>1</sup> / <sub>2</sub>	2	20" 8rd	2" Thd	21 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>16</sub>	20 <sup>1</sup> / <sub>2</sub>	1400

† Available with Flanged Outlets  
<sup>#2</sup> Available with Lockdown Screws  
<sup>#</sup> Available with S.O.W. Bottom Preparation  
\* Available with O-Rings



C-22 CASING HEAD  
SLIP-ON WELD PREPARATION



C-22 CASING HEAD  
8RD BOTTOM PREPARATION

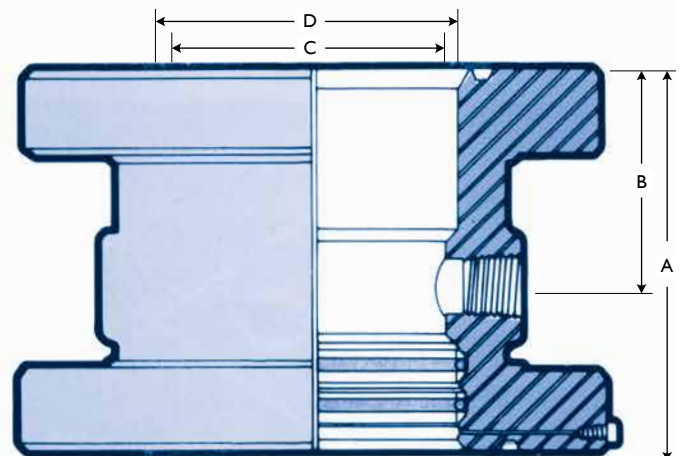
## C-22 CASING SPOOLS

C-22 Casing Head Spools are straight bore bowl designs. Bottom preparation is of the R-Seal Type. Outlets are available threaded, studded or extended neck flanged.

Spools utilize the same C-22 automatic Casing Hangers as Casing Heads adding to equipment flexibility. Bowl Protectors and lockdowns are available on request. C-29 Bowl also available.

Part No.	Bottom Flange		Top Flange		Bottom Prep <sup>#</sup>	Outlet <sup>†</sup> (in)	Dimensions (in)				Approx. Weight Lbs
	Size (in)	WP (KPSI)	Size (in)	WP (KPSI)			A	B	C	D	
-	11	2	11	2	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	520
644	11	3	11	5	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	660
614	11	5	11	5	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	710
607	13 <sup>1</sup> / <sub>2</sub>	2	11	2	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	680
654	13 <sup>1</sup> / <sub>2</sub>	2	11	3	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	680
602	13 <sup>1</sup> / <sub>2</sub>	3	11	3	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	710
604	13 <sup>1</sup> / <sub>2</sub>	3	11	5	R-Seal	2" LPO	24 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	10	10 <sup>1</sup> / <sub>16</sub>	1100
647	13 <sup>1</sup> / <sub>2</sub>	5	11	5	R-Seal	2" LPO	24 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	10	10 <sup>1</sup> / <sub>16</sub>	1254
645	13 <sup>1</sup> / <sub>2</sub>	5	11	10	R-Seal	1 <sup>1</sup> / <sub>2</sub> " SSO	26 <sup>3</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>16</sub>	9	10 <sup>1</sup> / <sub>16</sub>	1948
661	13 <sup>1</sup> / <sub>2</sub>	5	13 <sup>1</sup> / <sub>2</sub>	5	R-Seal	2" LPO	26 <sup>3</sup> / <sub>16</sub>	14 <sup>1</sup> / <sub>16</sub>	9	10 <sup>1</sup> / <sub>16</sub>	1893
-	16 <sup>1</sup> / <sub>2</sub>	2	11	3	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	846
-	16 <sup>1</sup> / <sub>2</sub>	3	11	3	R-Seal	2" LPO	17 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>16</sub>	10	10 <sup>1</sup> / <sub>16</sub>	1080
662	16 <sup>1</sup> / <sub>2</sub>	3	11	5	R-Seal	2" LPO	22 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	10	10 <sup>1</sup> / <sub>16</sub>	1300
-	16 <sup>1</sup> / <sub>2</sub>	3	13 <sup>1</sup> / <sub>2</sub>	3	R-Seal	2" LPO	24 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	10	10 <sup>1</sup> / <sub>16</sub>	1452
623	20 <sup>1</sup> / <sub>2</sub>	3	13 <sup>1</sup> / <sub>2</sub>	5	R-Seal	2" LPO	24 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	2450
-	21 <sup>1</sup> / <sub>2</sub>	2	13 <sup>1</sup> / <sub>2</sub>	3	R-Seal	2" LPO	26 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	2063
-	21 <sup>1</sup> / <sub>2</sub>	3	13 <sup>1</sup> / <sub>2</sub>	3	R-Seal	2" LPO	26 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>16</sub>	12 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>	2063

† Available with Flanged or Studded Outlets.  
<sup>#</sup> Available with 9", 10<sup>1</sup>/<sub>2</sub>" Blank Bottom Preparation.  
\* Available with "00" Bottom.

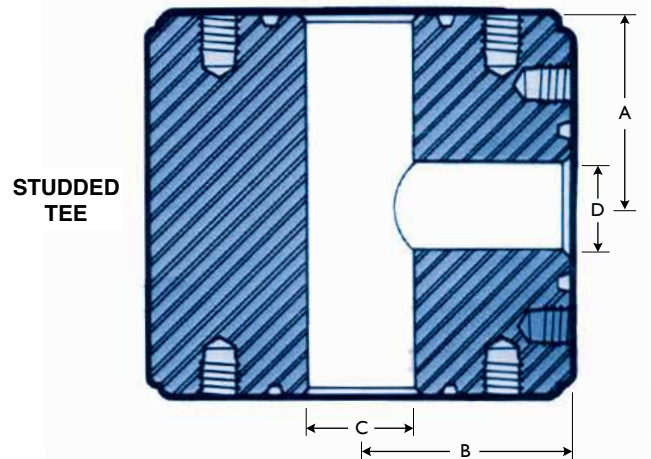
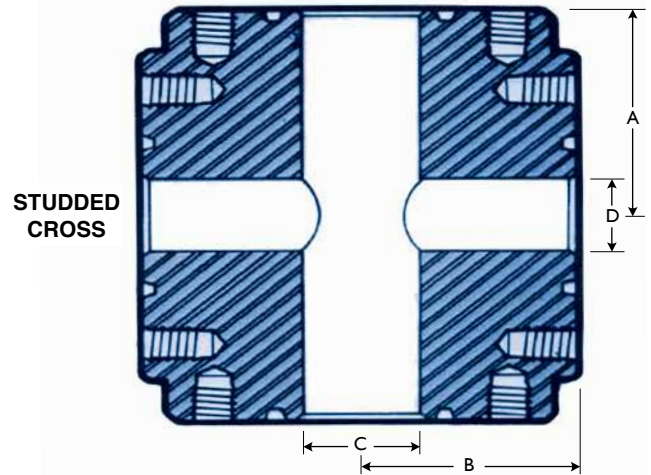


C-22 CASING SPOOL  
"00" BOTTOM PREPARATION

## CROSSES AND TEES

Part No.	Tee Part No.	Run	Outlets	Dimensions (in)				Approx Weight Lbs
				A	B	C	D	
-	-	2 1/8-2,000	2 1/8-2,000	3 1/2	3 1/2	2 1/8	2 1/8	80
-	-	2 1/8-5,000	2 1/8-5,000	4 1/2	4 1/2	2 1/8	2 1/8	200
-	2001	2 1/8-2,000	2 1/8-2,000	3 1/2	4	2 1/8	2 1/8	125
-	2002	2 1/8-5,000	2 1/8-5,000	4 1/2	5	2 1/8	2 1/8	290
-	-	3 1/8-2,000	2 1/8-2,000	3 1/2	4 1/2	3 1/8	2 1/8	165
-	-	3 1/8-2,000	3 1/8-2,000	4 1/2	4 1/2	3 1/8	3 1/8	198
-	-	3 1/8-3,000	2 1/8-5,000	4 1/2	5	3 1/8	2 1/8	264
-	-	3 1/8-3,000	3 1/8-3,000	5	5	3 1/8	3 1/8	264
-	-	3 1/8-5,000	2 1/8-5,000	4 1/2	5 1/2	3 1/8	2 1/8	300
-	-	3 1/8-5,000	3 1/8-5,000	5 1/2	5 1/2	3 1/8	3 1/8	386
-	-	4 1/8-2,000	2 1/8-2,000	4 1/2	5 1/2	4 1/8	2 1/8	231
-	-	4 1/8-2,000	4 1/8-2,000	5 1/2	5 1/2	4 1/8	4 1/8	405
-	-	4 1/8-3,000	2 1/8-5,000	4 1/2	6	4 1/8	2 1/8	374
-	-	4 1/8-3,000	4 1/8-3,000	6	6	4 1/8	4 1/8	495
-	-	4 1/8-5,000	2 1/8-5,000	4 1/2	6 1/2	4 1/8	2 1/8	407
2402	-	4 1/8-5,000	2 1/8-5,000	5	6 1/2	4 1/8	2 1/8	447
2406	-	4 1/8-5,000	3 1/8-5,000	5 1/2	6 1/2	4 1/8	3 1/8	488
-	-	4 1/8-5,000	4 1/8-5,000	6 1/2	6 1/2	4 1/8	4 1/8	565
-	-	1 3/8-10,000	1 3/8-10,000	4 3/8	4 3/8	1 3/8	1 3/8	191
-	-	1 3/8-15,000	1 3/8-15,000	5	5	1 3/8	1 3/8	257
-	2403	2 1/8-10,000	1 3/8-10,000	4 3/8	4 3/8	2 1/8	1 3/8	191
-	-	2 1/8-10,000	2 1/8-10,000	4 3/8	4 3/8	2 1/8	2 1/8	191
-	-	2 1/8-15,000	1 3/8-15,000	5	5	2 1/8	1 3/8	257
2401	2004	2 1/8-10,000	1 3/8-10,000	4 1/2	5 1/2	2 1/8	1 3/8	246
-	-	2 1/8-10,000	2 1/8-10,000	4 1/2	5 1/2	2 1/8	2 1/8	246
-	-	2 1/8-10,000	2 1/8-10,000	5 1/2	5 1/2	2 1/8	2 1/8	286
-	2005	2 1/8-15,000	1 3/8-15,000	5 1/2	5 1/2	2 1/8	1 3/8	389
-	-	2 1/8-15,000	2 1/8-15,000	5 1/2	5 1/2	2 1/8	2 1/8	389
-	2006	3 1/8-10,000	2 1/8-10,000	4 1/2	5 1/2	3 1/8	2 1/8	370
-	-	3 1/8-10,000	2 1/8-10,000	5 1/2	5 1/2	3 1/8	2 1/8	407
-	-	3 1/8-10,000	3 1/8-10,000	5 1/2	5 1/2	3 1/8	3 1/8	480
-	-	4 1/8-10,000	2 1/8-10,000	4 1/2	6 1/2	4 1/8	2 1/8	486
-	-	4 1/8-10,000	2 1/8-10,000	5 1/2	6 1/2	4 1/8	2 1/8	537
-	-	4 1/8-10,000	3 1/8-10,000	5 1/2	6 1/2	4 1/8	3 1/8	614
-	-	4 1/8-10,000	4 1/8-10,000	6 1/2	6 1/2	4 1/8	4 1/8	702

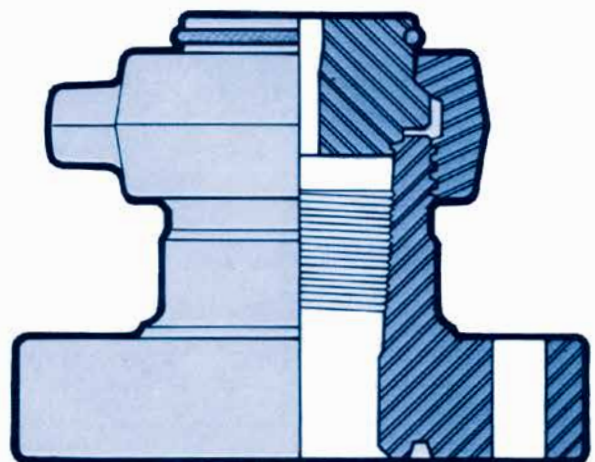
For 20,000 PSI and other sizes see Page 25.



## BOTTOM HOLE TEST ADAPTORS (TREE CAP)

Available in various sizes and working pressures up to 15,000 PSI.

Part No.	Lower Conn.	Bore	Lift Thread	Approx Weight Lbs
-	2 1/8-2,000	2 1/8	2 1/8 EUE	36
2601	2 1/8-5,000	2 1/8	2 1/8 EUE	52
-	2 1/8-2,000	2 1/8	2 1/8 EUE	40
2602	2 1/8-5,000	2 1/8	2 1/8 EUE	60
2603	2 1/8-10,000	2 1/8	2 1/8 EUE	84
2614	2 1/8-15,000	2 1/8	2 1/8 EUE	90
2604	2 1/8-10,000	2 1/8	2 1/8 EUE	88
2615	2 1/8-15,000	2 1/8	2 1/8 EUE	95
2605	3 1/8-10,000	3 1/8	3 1/8 EUE	95
2616	3 1/8-15,000	3 1/8	3 1/8 EUE	103



**BOTTOM HOLE TEST ADAPTOR**

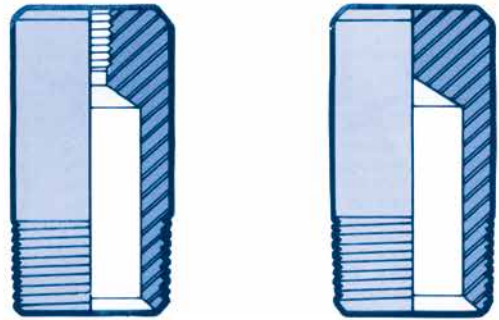


## BULL PLUGS AND NIPPLES

### BULL PLUGS

Part No.	Size (in)
S4201	2 LP
S4202	2½ EUE 8rd
-	2½ LP
-	2½ EUE 8rd
-	3 LP
-	4 LP
S4204	2½ 8rd ½ NPT
S4205	2½ 8rd ½ NPT
S4203	2 LPO ½ NPT

Other sizes on request. For NPT (LP) ¾" to 4" see Page 37.



BULL PLUGS

### DOUBLE X NIPPLES

Part No.	Size (in)	Length (in)
S4002	2 LP	6
S4001	2 LP	8
-	2½ LP	6
-	2½ LP	8
-	3 LP	6
-	3 LP	8
-	4 LP	6
-	4 LP	8
S4003	2½ 8rd	6
S4004	2½ 8rd	6

Other sizes available upon request.

Also see Page 38.



DOUBLE X NIPPLE

### REINSTALLATION NIPPLE

Specifications

Part No.	Size	Length
S4106	2"	8"

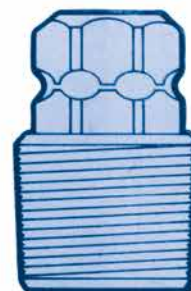


REINSTALLATION NIPPLE

### VALVE REMOVAL PLUG

VR Plugs

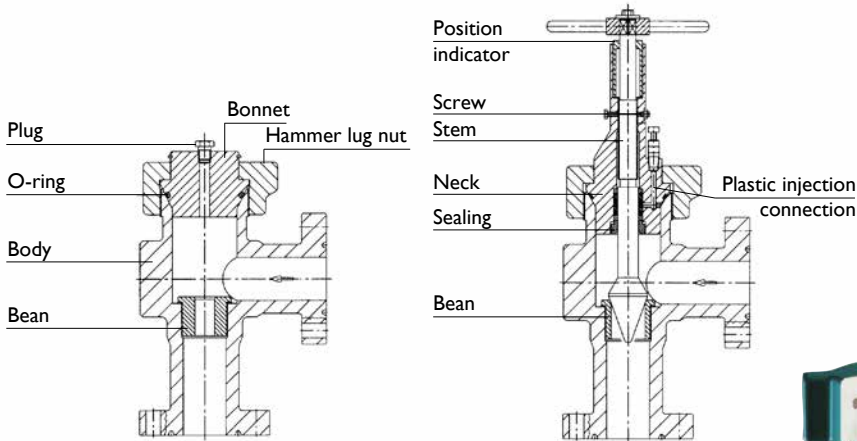
Part No.	Size
S3220	1½"
S3221	1½"



VALVE REMOVAL PLUG



## API6A CHOKE



Available in flanged and screwed type. (mandrel type)

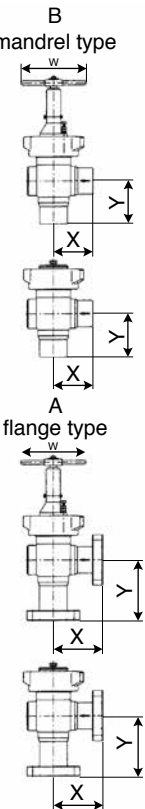
### POSITIVE CHOKE

The flow rate is determined by the choke bean, which are changeable. Positive chokes can be converted readily to adjustable choke by replacement of the interchangeable bonnets and internals.

### ADJUSTABLE CHOKE

The flow rate can be adjusted.

**TRIM/SERVICE:-** See Page 65 and 70 to 74.



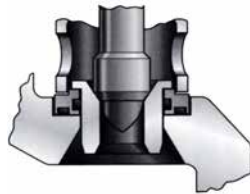
Maximum bean size 1" (Orifice)											
Flange Size	Mandrel Size	Working Pressure PSI	Type	w		x		y		z	
				mm	in	mm	in	mm	in	mm	in
-	2" LP	3000	B			87.3	3 <sup>1</sup> / <sub>16</sub> "	115.9	4 <sup>1</sup> / <sub>16</sub> "		
-	2" LP	5000	B			87.3	3 <sup>1</sup> / <sub>16</sub> "	115.9	4 <sup>1</sup> / <sub>16</sub> "		
2 <sup>1</sup> / <sub>16</sub> "	-	2000	A			169.9	6 <sup>1</sup> / <sub>16</sub> "	198.4	7 <sup>13</sup> / <sub>16</sub> "		
2 <sup>1</sup> / <sub>16</sub> "	-	5000	A			174.6	6 <sup>7</sup> / <sub>16</sub> "	203.2	8"		
2 <sup>3</sup> / <sub>16</sub> "	-	5000	A			176.2	6 <sup>15</sup> / <sub>16</sub> "	209.6	8 <sup>1</sup> / <sub>4</sub> "		
3 <sup>1</sup> / <sub>8</sub> "	-	3000	A			198.4	7 <sup>3</sup> / <sub>16</sub> "	227.0	8 <sup>15</sup> / <sub>16</sub> "		
3 <sup>1</sup> / <sub>8</sub> "	-	5000	A			246.1	9 <sup>1</sup> / <sub>16</sub> "	242.9	9 <sup>9</sup> / <sub>16</sub> "		
2 <sup>1</sup> / <sub>16</sub> "	-	10000	A			195.3	7 <sup>1</sup> / <sub>16</sub> "	223.8	8 <sup>13</sup> / <sub>16</sub> "		
2 <sup>3</sup> / <sub>16</sub> "	-	10000	A			208.0	8 <sup>3</sup> / <sub>16</sub> "	236.5	9 <sup>9</sup> / <sub>16</sub> "		
Maximum bean size 2" (Orifice)											
-	-	3000	B			114.3	4 <sup>1</sup> / <sub>2</sub> "	177.8	7"		
2 <sup>1</sup> / <sub>16</sub> "	-	5000	A			227.0	8 <sup>5</sup> / <sub>16</sub> "	290.5	11 <sup>7</sup> / <sub>16</sub> "		
2 <sup>3</sup> / <sub>16</sub> "	-	5000	A			225.4	8 <sup>7</sup> / <sub>8</sub> "	298.5	11 <sup>3</sup> / <sub>4</sub> "		
3 <sup>1</sup> / <sub>8</sub> "	-	2000	A			225.4	8 <sup>7</sup> / <sub>8</sub> "	288.9	11 <sup>3</sup> / <sub>8</sub> "		
3 <sup>1</sup> / <sub>8</sub> "	-	3000	A			225.4	8 <sup>7</sup> / <sub>8</sub> "	288.9	11 <sup>3</sup> / <sub>8</sub> "		
3 <sup>1</sup> / <sub>8</sub> "	-	5000	A			225.4	8 <sup>7</sup> / <sub>8</sub> "	288.9	11 <sup>3</sup> / <sub>8</sub> "		
4 <sup>1</sup> / <sub>16</sub> "	-	3000	A			263.5	10 <sup>3</sup> / <sub>8</sub> "	295.3	11 <sup>5</sup> / <sub>8</sub> "		
4 <sup>1</sup> / <sub>16</sub> "	-	5000	A			263.5	10 <sup>3</sup> / <sub>8</sub> "	320.7	12 <sup>5</sup> / <sub>8</sub> "		
2 <sup>1</sup> / <sub>16</sub> "	-	10000	A			263.5	10 <sup>3</sup> / <sub>8</sub> "	304.8	12"		
2 <sup>3</sup> / <sub>16</sub> "	-	10000	A			263.5	10 <sup>3</sup> / <sub>8</sub> "	298.6	11 <sup>3</sup> / <sub>4</sub> "		
3 <sup>1</sup> / <sub>16</sub> "	-	10000	A			263.5	10 <sup>3</sup> / <sub>8</sub> "	298.5	11 <sup>3</sup> / <sub>4</sub> "		

## FCV SERIES FLOW CONTROL VALVES



FCV Flow Control Valve

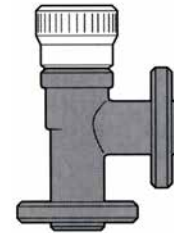
**Optional  
Reverse Flow  
Check Seat**



**APV FCV Series Flow Control Valves** are manually adjusted valves designed to provide repeatable settings. Available in 1 and 2-inch body sizes and a wide range of bodies and trim configurations, these valves feature an adjustable handwheel calibrated in sixty-fourths of an inch, and teflon packing for positive seal and maintenance.

Threaded connections are rated for Service up to 3700 PSI. They are designed to operate in any position and to resist the effects of vibration on the selected setting. Their construction allows easy inspections or replacement of internals without removing the valve from the line. Type 316, 410 or duplex stainless steel bodies, and stainless steel handles and indicator rings are available for corrosive service.

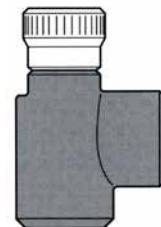
Valve trims and seats are available in 1/8, 1/4, 1/2, 3/4 and 1 inch trim sizes in stainless steel, hard chrome and tungsten carbide materials.



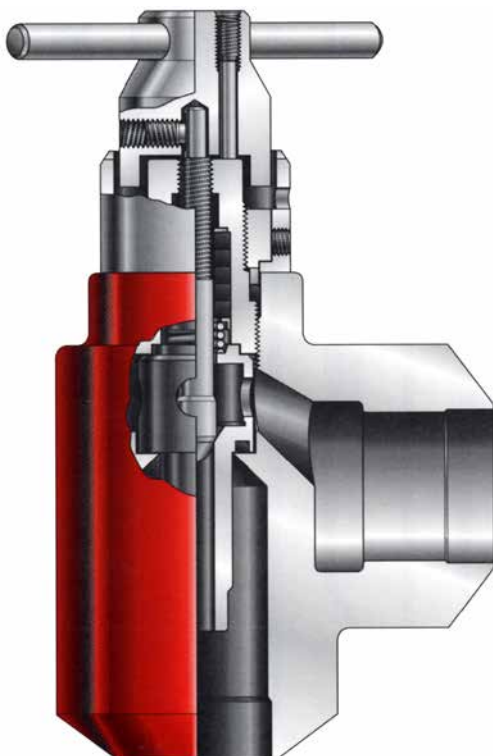
1-Inch Flanged Angle Body



2-Inch Through Body



2-Inch Thread Angle Body



FCVT High Temperature Flow Control Valve

**APV FCVT High Temperature Flow Control Valves** are designed for steam injection or other high temperature gas or liquid service. Rated at 3700 psi working pressure at 150°C, these angle body valves feature 1/4, 1/2, 3/4 and 1 inch size trim with stainless steel, hard chrome or tungsten carbide long throat trim and high temperature packing. The high temperature configuration is also available in adjustable choke valve model (ACVT-5). This valve series is also available with flanged end connections.

## WFC SERIES WATERFLOOD CONTROL VALVES



**APV WFC Waterflood Control Valves** are designed specifically for waterflood applications. They are available in either 1 or 2-inch angle body configurations with threaded, buttweld or flanged connections. This design contains a long throat seat to control the turbulence and erosion associated with liquid service. Standard features of this valve include the adjustable hand wheel calibrated in sixty-fourths of an inch and teflon packing for positive seal and minimum maintenance. An optional feature is the availability of a secondary positive choke bean for high pressure differentials. This feature is designed for a 60% and 40% pressure drop across the primary and secondary controls respectively.

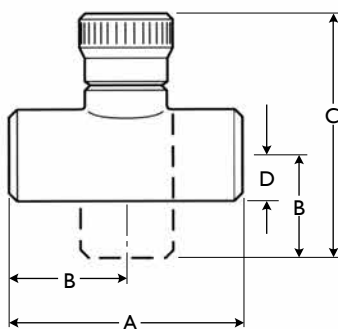
Stainless steel, hard chrome or tungsten carbide trims are available in 1/8, 1/4, 1/2, 3/4 and 1 inch trim sizes. The long throat seat, stainless steel handle and indicator ring are standard.



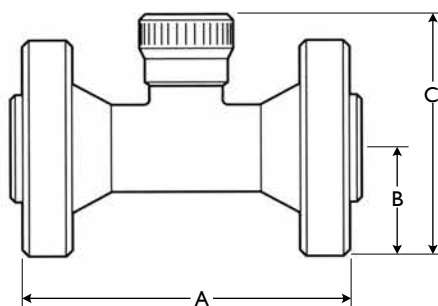
WFC Waterflood Valve

### DIMENSIONAL DATA FOR FCV, WFC AND FCV-2X

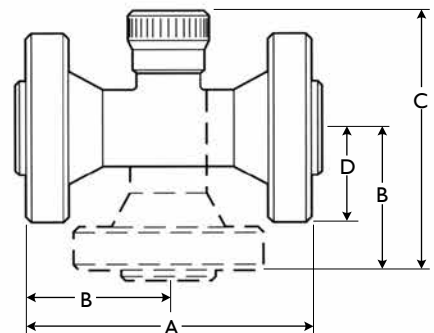
End Connections	Dimensions (inches)												Approximate Weight in Lbs.		
	A			B			C			D					
Type / Size	1	2	2x	1	2	2x	1	2	2x	1	2	2x	1	2	2x
Screwed	6.30	7.80		2.95	3.90		7.90	8.81		1.06	1.72		10	20	
Butt Weld	5.00	6.75		2.50	3.37		7.45	8.065		1.06	1.72		10	20	
Socket Weld	5.12	6.75		2.56	3.37		7.51	8.65		1.06	1.72		10	20	
Series 150 RF		9.00			4.50			9.78			3.00			32	
Series 300 RF		10.00		5.00				10.28			3.25			32	
Series 600 RF	8.50	11.50	11.50	4.25	5.75	5.75	9.20	11.03	9.65	2.44	3.25	3.25	18	40	34
Series 600 RJ	8.50	11.62	11.60	4.25	5.81	5.81	9.20	11.09	9.71	2.44	3.25	3.25	18	40	34
Series 1500 RF	10.00	14.50		5.00	7.25		9.95	12.53		2.94	4.25		30	70	
Series 1500 RJ	10.00	14.62		5.00	7.31		9.95	12.59		2.94	4.25		30	70	
Series 900 RF	10.00	14.50	14.50	5.00	7.25	7.25	9.95	12.53	11.25	2.94	4.25	4.25	30	70	
Series 900 RJ	10.00	14.62	14.62	5.00	7.31	7.31	9.95	12.59	11.21	2.94	4.25	4.25	30	70	90
API 3000		14.62			7.31			12.59			4.25			70	
API 5000		14.62			7.31			12.59			4.25			70	



FCV - WFC



FCV - FLANGED



FCV - 2X

## OVERVIEW

### MODEL M/HM & FC GATE VALVE OVERVIEW

APV API6A Gate Valves are integral body, bi-directional, parallel sided gate valves that are available in solid slab with a floating seat (Model FC) where the sealing force supplied by line pressure, or in expanding self energised slab (Model R).

The Type 'M', 'HM' and 'FC' Gate Valves are proven designs that have been standard in the oil field for more than forty years. Because of APV's commitment to quality and the reliability of these standard designs, these valves can be maintained anywhere in the world, even in the most remote locations, without having to procure hard to find parts.

Available from 1-13/16" to 7-1/16" and from 2,000 psi to 15,000 PSI working pressures.

## FEATURES AND BENEFITS

**MINIMAL TORQUE:** Upper and lower bearings are used to minimize operating stem torque and are isolated from well fluids to increase durability.

**BI-DIRECTIONAL SEALS:** The one piece, parallel sided (Model FC) slab gate seals on a floating seat. The sealing force is supplied by line pressure. The expanding type self energised slab (Model M/HM) seals on both seats.

**METAL TO METAL STEM BACK SEAT:** The gate stem has a bevelled shoulder which allows for metal-to-metal sealing to the bonnet seat.

**FULL THROUGH CONDUIT:** The full through conduit I.D. provides smooth flow with minimal turbulence as well as providing an unobstructed passage for well intervention tools.

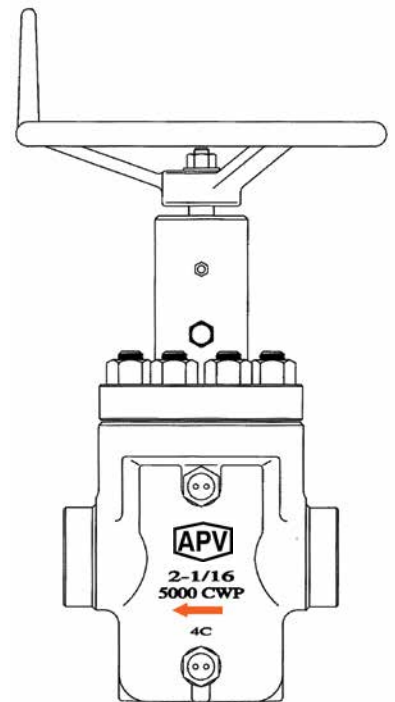
**REPLACEABLE GATE AND SEATS:** Gate and seats are field-replaceable.

**RE-ENERGIZABLE STEM PACKING:** The Stem Packing can be re-energized by injection plastic sealant in between the packing stacks.

### STEM PACKING REPLACEABLE WITH VALVE UNDER PRESSURE:

The bonnet stem to back-seat seal allows the stem packing to be replaced with the valve under pressure.

**GREASE FITTING** The valve body may be greased through the fitting provided in the valve Bonnet.

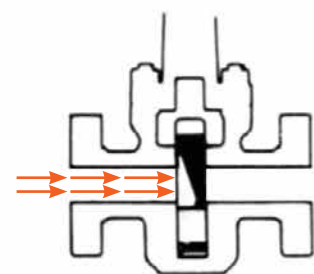
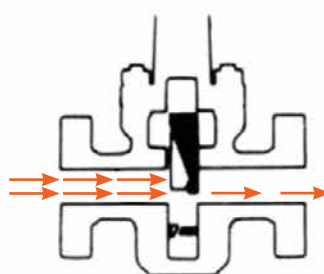
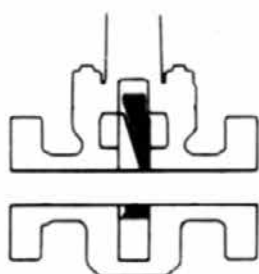


## OPERATION

**TO CLOSE THE VALVE,** rotate the handwheel clockwise, the gate will move downward to the bottom of the body, then rotate the handwheel counter-clockwise one half of a rotation to permit the gate movement under pressure. Do not "cheat".

**TO OPEN THE VALVE,** rotate the handwheel counter-clockwise until the gate stops at the bonnet

**TO CLOSE THE VALVE,** rotate the handwheel clockwise until the gate stops at the bottom.





## API Spec 6A Gate Valves

### MODEL M/HM GATE VALVE

#### FEATURES

##### FULL BORE THROUGH-CONDUIT

The through-conduit design of the model “M” and “HM” gives a full round bore. Destructive turbulence is eliminated.

##### SEALS WITHOUT LUBRICATION

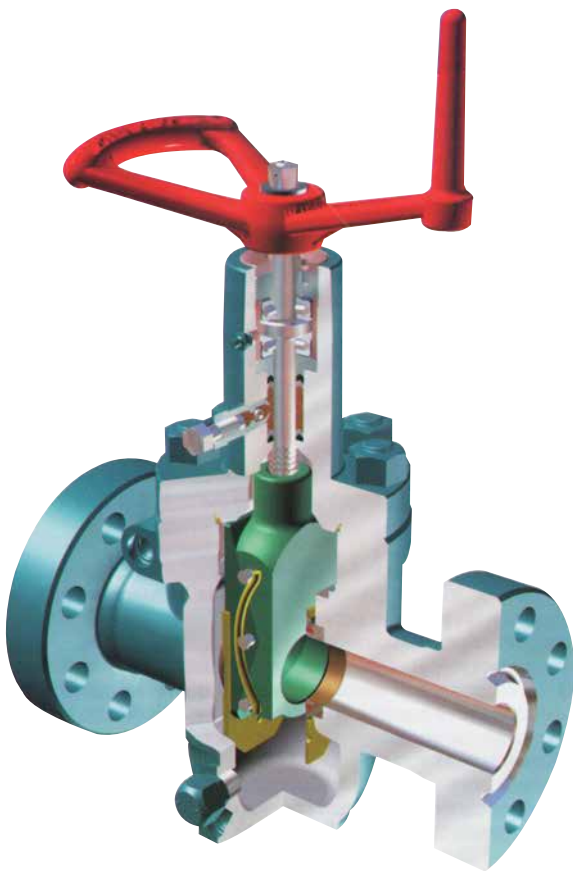
Model “M” and “HM” gate valves do not require lubrication for positive sealing in normal operation. Lubrication can be employed as an emergency measure to help effect a temporary seal in the event the gate or seals have become damaged by foreign matter in the valve. Two safety-capped grease fittings are provided so that the entire valve body can be filled with grease.

##### REPACKABLE UNDER PRESSURE

APV plastic stem packing can be added to the packing box while the valve is under pressure.

##### SEAT INSERTS GIVE DOUBLE SEAL

Seat inserts of PTFE (tetrafluoroethylene resin) give an initial PTFE-to-metal seal in addition to the metal-to-metal seal which is obtained when the gate assembly is fully expanded. All metal to metal stellite faced seating also available.



#### TRIM CHART

Application	*H2S	**CO2	Fluid Class
General Service (A) Non Corrosive	<0.05	<7	AA
General Service (B) Slightly corrosive (Low CO2)	<0.05	7 to 30	BB
General Service (C) Moderately to highly corrosive (High CO2)	<0.05	>30	CC
Sour Service (D) Meets Nace MR-0175 H2S	>0.05	<7	DD
Sour Service (E) Slightly corrosive H2S (Low CO2)	>0.05	7 to 30	EE
Sour Service mod. (H) to highly corrosive (High CO2 + H2S)	>0.05	>30	FF
Sour Service mod. to highly corrosive and chlorides (High H2S high CO2)	>0.05	>30	HH

\* Hydrogen sulphide partial pressure (in psi a) as defined by NACE MR - 01 - 75

\*\* Partial pressure of carbon dioxide (in psi a).

Formula: Partial pressure (PP) = well pressure (psi) X percent of constituent in total well fluid X 1/100

Example: CO2 PP= 3000 psi X 4% x 1/100 = 120 psi

Material must be chosen to resist CO2 weight loss corrosion.

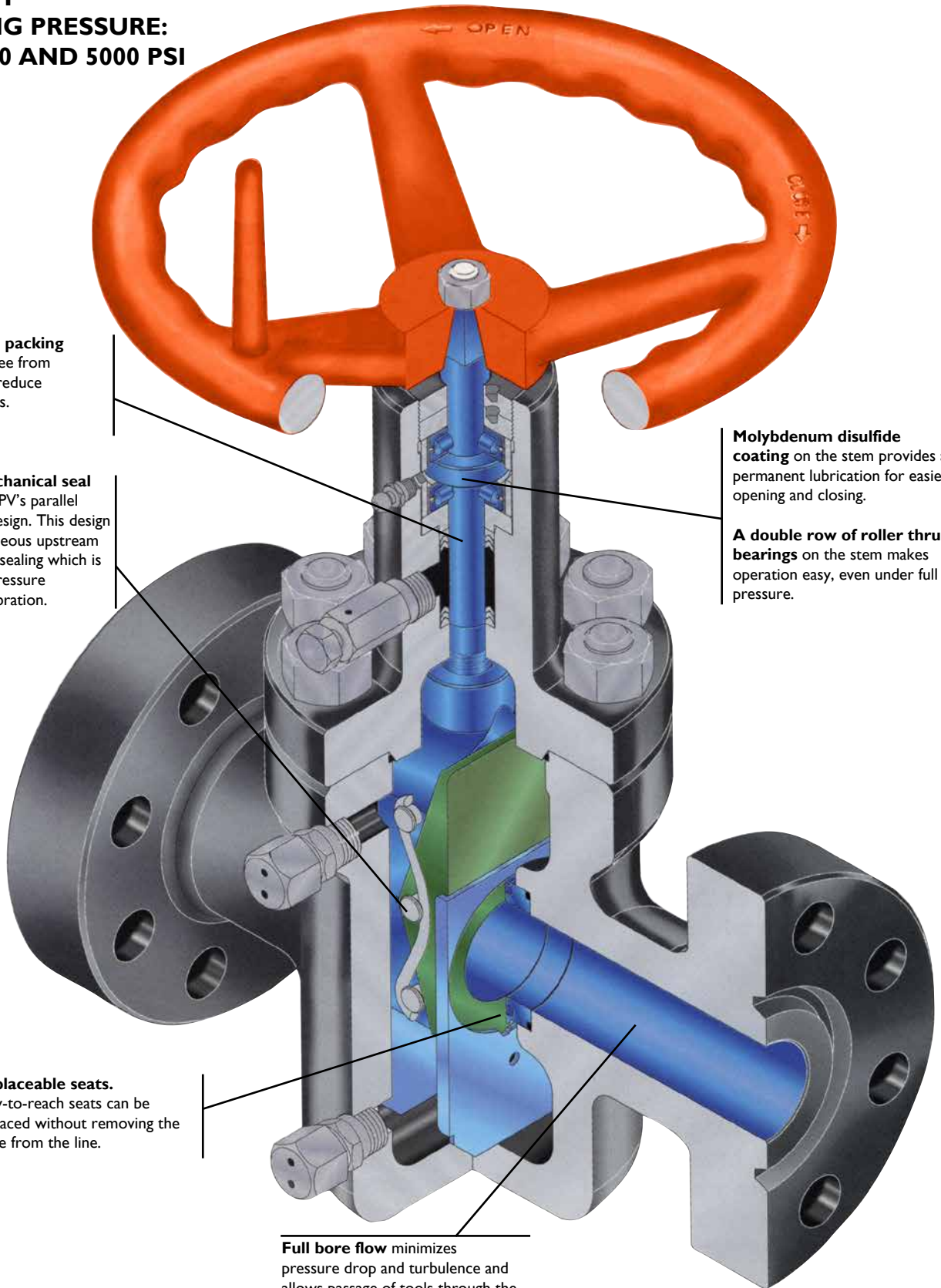


## EXPANDING SEAL

### MODEL M

### WORKING PRESSURE:

2000, 3000 AND 5000 PSI



**Plastic/chevron packing** stays clean and free from contaminants to reduce maintenance costs.

**Dead-tight mechanical seal** is assured with APV's parallel expanding gate design. This design provides simultaneous upstream and downstream sealing which is not affected by pressure fluctuations or vibration.

**Molybdenum disulfide coating** on the stem provides a permanent lubrication for easier opening and closing.

**A double row of roller thrust bearings** on the stem makes operation easy, even under full pressure.

**Replaceable seats.** Easy-to-reach seats can be replaced without removing the valve from the line.

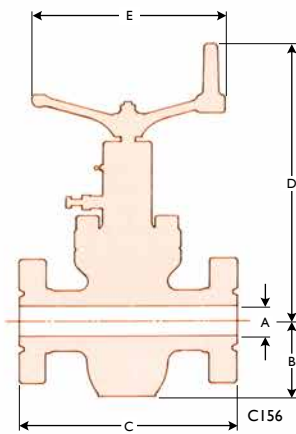
**Full bore flow** minimizes pressure drop and turbulence and allows passage of tools through the valve.

# API6A GATE VALVES

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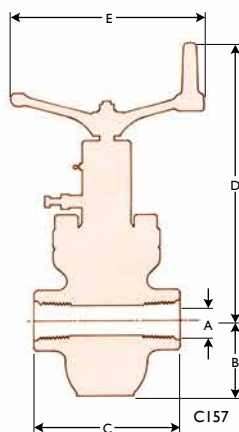
## DIMENSIONS MODEL M AND FC API GATE VALVE



### FLANGED END VALVES 2000, 3000, 5000 PSI MODEL M AND FC

Size	Working Pressure	A	B	C	D	E	N*	Weight lbs
2 1/8"	2000	2 1/8	4 13/16	11 1/8	19 1/4	11	13	91
	3000, 5000		5 1/8	14 5/8	19 1/16	13		150
2 3/8"	2000	2 3/8	5 5/8	13 3/8	20 3/16	13	15 1/2	125
	3000, 5000		5 15/16	16 5/8	20 1/16	16		205
3 1/8"	2000	3 1/8-3 3/8	6 1/8	14 1/8	22 1/2	13	20	181
	3000		7 1/8	17 1/8	22 3/4	16		265
	5000		7 1/8	18 5/8	22 3/4	16		296
4 1/8"	2000	4 1/8	8 3/8	17 1/8	25 15/16	16	24 1/2	345
	3000		9 1/8	20 1/8	26 3/8	20		515
	5000		9 1/8	21 1/8	26 3/8	20		530

\*Number of turns to open.

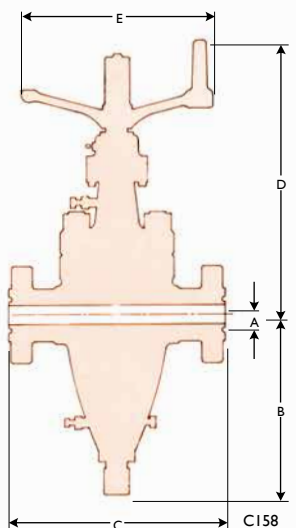


### THREADED VALVES 2000, 3000, 5000 PSI WP MODEL M AND FC

Size	Working Pressure	A	B	C	D	E	N*	Weight lbs
2 1/8"	2000	2 1/8	4 13/16	6 3/8	19 1/4	11	13	91
	3000, 5000		5 1/8	10 1/4	19 1/16	13		150
2 3/8"	2000	2 3/8	5 5/8	10 3/4	20 3/16	13	15 1/2	125
	3000, 5000		5 15/16	10 3/4	20 1/16	16		205
3 1/8"	2000	3 1/8-3 3/8	6 1/8	11 1/8	22 1/2	13	20	181
	3000, 5000		7 1/8	11 1/8	22 3/4	16		265
4 1/8"	2000	4 1/8	8 3/8	13	25 15/16	16	24 1/2	345
	3000, 5000		9 1/8	13	26 3/8	20		515
						20		530

\*Number of turns to open.

## MODEL HM API GATE VALVE



### FLANGED END VALVES 10000 PSI WP MODEL HM

Size	A	B	C	D	E	N*	Weight lbs
1 1/8"	1 1/8	14 3/8	18 1/4	21 1/4	14	14	275
2 1/8"	2 1/8	16	20 1/2	23 3/4	18	12	545
2 3/8"	2 3/8	19	22 1/4	26 1/2	20	15	565
3 1/8"	3 1/8	21 1/4	24 3/8	29 1/2	24		900
4 1/8"	4 1/8	27 1/2	26 3/8	36 1/4	26	23	1080

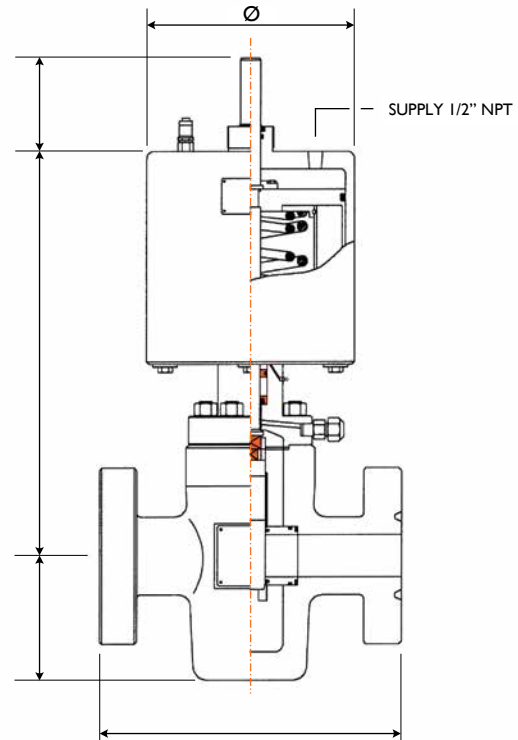
\*Number of turns to open.

### FLANGED END VALVES 15000 PSI WP MODEL HM

Size	A	B	C	D	E	N*	Weight lbs
1 1/8"	1 1/8	14 1/2	18 1/4	21 1/2	12	12	280
2 1/8"	2 1/8	16	20 1/2	23	18	14	490
2 3/8"	2 3/8	19	22 1/4	25	20	15	570
3 1/8"	3 1/8	21	24 3/8	29	23	18	850
4 1/8"	4 1/8	26	26 3/8	36	26	23	1080



## SDV-ASSY PNEUMATIC ACTUATED GATE VALVE 3000-10,000 PSI



### TECHNICAL DATA

**SIZE:** 1 13/16" - 7 1/16" API 6A

**VALVE SERIES:** M 30SL

**ACTUATOR TYPE:** OFS/PN-29SLA

**VALVE ACTION:** SDV-SSV (Fail Safe Close) BI-DIRECTIONAL

**ASSEMBLY No:** 94176 for SDV-SSV

**BORE:** 79.3 mm.

**CYLINDER PRESSURE RATING:** Up to 250 PSI

**CONTROL PRESSURE (Bar):** (0.03 x Valve Pressure) + 1

**WEIGHT:** Kg.



Position Indicator/Limit Switch

Manual Override - Fuseable

Manual Override

Fusible Lock Open Device

Lock Open Cap

# MUD GATE VALVE

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## API6A MUD GATE VALVE X-DM



### APPLICATION

- Drilling and well-treating chemicals
- Sour gas and crude oil
- Abrasive drilling mud
- Pipelines and manifolds
- Wellheads
- Water, oil and gas lines
- Cements and slurries
- Corrosive water flood lines
- Up to 5000 PSI and 400°F services



### SEAT ELASTOMERS

**Buna N** (nitrile) is the basic seat elastomer. It is excellent for petroleum oil and gases, fueled oils and alcohols from -10°F to +200°F. **Hypalon** is optionally offered compounded for maximum chemical resistance, particularly suited for oxidizing acids, it resists hydrocarbon oils and fuels from -10°F to +250°F. **Viton** is highly resistant to mineral acids and hydrocarbons and resists moderate concentrations of hydrogen sulphide. Serviceable from -10°F to +400°F (Not suitable for steam)

### PLASTIC COATINGS

Internally plastic-coated valve bodies and bonnet are available on request.

### TESTING

Mud Gate Valves are hydrostatically tested. Stem seal, body and seat are inspected for zero leakage under pressure, before acceptance.

### WELD END DIMENSIONS

Weld End bodies are machined at each end to match the corresponding pipe OD and ID.

NOMINAL SIZE in.	(mm)	OD	ID			
			Sch. 40	Sch. 80	Sch. 160	XXH
1½	(40)	1.900	1.610	1.500	-	-
2	(50)	2.375	2.067	1.939	1.687	1.503
2½	(65)	2.875	2.469	2.323	2.125	1.771
3	(80)	3.500	3.068	2.900	2.624	2.300
4	(100)	4.500	4.026	3.826	3.438	3.152
5	(125)	5.563	-	4.813	4.313	4.063
6	(150)	6.625	6.065	5.761	5.187	4.897

### PRESSURE RATINGS OF VALVE

CLASS 400	CLASS 600	CLASS 900	CLASS 1500	1000 WP	2000 WP	3000 WP	5000 WP	7500 WP
900 WP	1480 WP	2220 WP	3705 WP	1000 WP	2000 WP	3000 WP	5000 WP	7500 WP
1500 Test	2225 Test	3350 Test	5575 Test	2000 Test	4000 Test	6000 Test	7500 Test*	11,250 Test

\* 3 inch & below are tested to 10,000 psi, 4" & above 7500 psi except on special orders.

Valve rating must be selected to match the piping system in which the valve will be installed.

Shown below are working pressures at 100°F for ASTM A106 Grade B and AISI 4130 60K minimum yield pipe in sizes corresponding to APV Gate Valves.

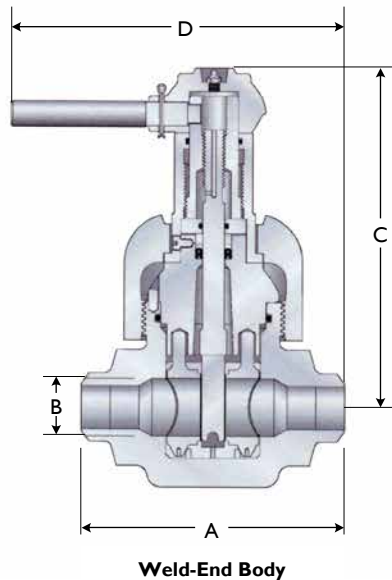
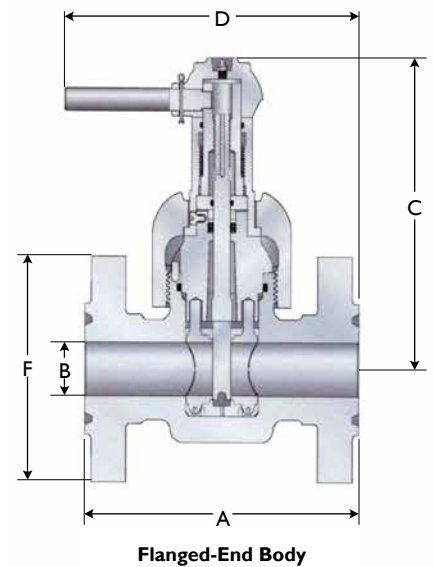
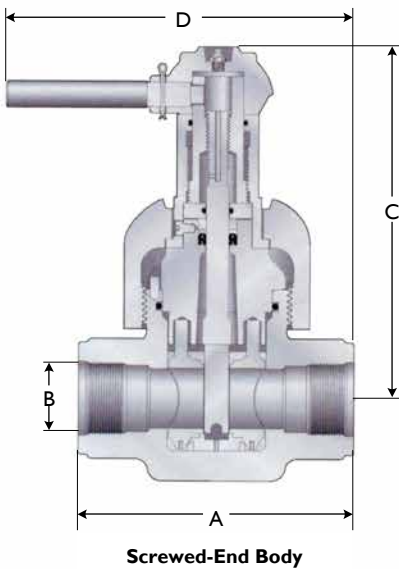
### PRESSURE RATINGS OF PIPE

SIZE in.	(mm)	ASTM A106 GRADE B				4130 60K Min Yield XXH
		Sch. 40	Sch. 80	Sch. 160	XXH	
1½	(40)	1340	2430	-	-	-
2	(50)	1210	2220	4300	5970	10234
2½	(65)	1620	2590	3950	6590	-
3	(80)	1460	2370	3930	5880	10080
4	(100)	1300	2130	3830	5150	8826
5	(125)	-	1970	3730	4650	7971
6	(150)	1110	1970	3650	4724	8098
8	(200)	1030	1790	-	-	-

## API6A MUD GATE VALVE X-DM

2000, 3000 AND 5000 WP

Pressure Rating		2000 WP (4,000 PSI Test)			3000 WP (6,000 PSI Test)			5000 WP (10,000 PSI Test)				
Size		2	3	4	2	3	4 4 <sup>1</sup> / <sub>16</sub>	2	3	4 4 <sup>1</sup> / <sub>16</sub>	5 x 4	6 x 4
		in	in	in	in	in	in	in	in	in	in	in
A	Screwed End	9	11	13	9	11	13	9	11	13	13	N/A
	Weld End	9	11	13	9	11	13	9	11	13	13	13
	Flanged End	11 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	14 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>2</sub>	18	29	N/A
B	(Bore)	2	3	4	2	3	4	2	3	4	4	4
C	(Open)	13	18	21 <sup>1</sup> / <sub>4</sub>	13	18	21 <sup>1</sup> / <sub>4</sub>	13	18	24 <sup>1</sup> / <sub>2</sub>	24 <sup>1</sup> / <sub>2</sub>	24 <sup>1</sup> / <sub>2</sub>
D	(Handle)	14	19	23	14	19	23	14	19	23	23	23
F	(Flange Diameter)	6 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>2</sub>	12 <sup>1</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	N/A
	Flange Bolts (Qty)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	N/A
	Size	<sup>5</sup> / <sub>8</sub>	<sup>3</sup> / <sub>4</sub>	<sup>7</sup> / <sub>8</sub>	<sup>7</sup> / <sub>8</sub>	<sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	<sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	N/A
	Ring No. (RTJ)	R23	R31	R37	R24	R31	R37	R24	R35	R39	R44	N/A



# SWING CHECK VALVE

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## SWING CHECK NPT SCREWED END - BOLTED BONNET TO 5000 PSI

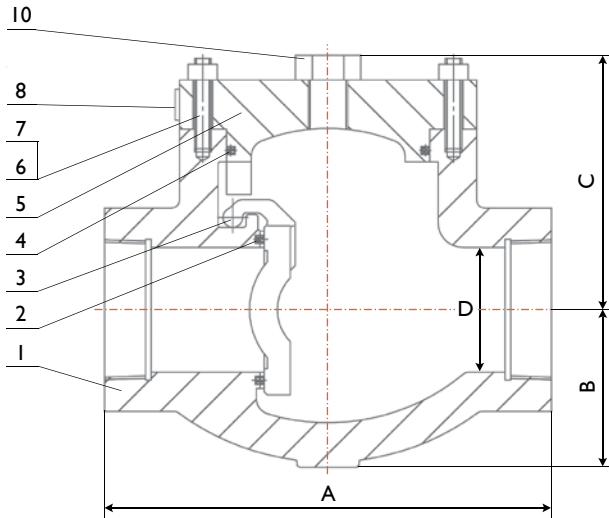


FIG. NO. APSCF01



### SPECIFICATION:

- Design: BS5352, API6D/6A
- Ends: ANSI B16.5
- Face to Face: B16.10
- Nace MR-01-75

Screwed Bonnet also available.



Ball Check Version

- Body (1)** ASTM A216 Gr. WCB
- Cover (5)** ASTM A216 Gr. WCB
- Disk, Arm (3) and Pin** ASTM A351 Gr. CF8M or A216 Gr. WCB + 410SS
- Bushings** 316SS/CR13 SS
- Disc Seal (2)** Viton/F6/CPTFE/PEEK
- Cover Seal (4)** Buna-N/Viton/Spiral Wound
- Cover Stud (6)** ASTM A193 Gr. B7
- Cover Nut (7)** ASTM A194 Gr. 2H
- Plug (10)** ASTM A105
- Name Plate (8)** Aluminium

**Note:** Material specifications conform to latest edition of NACE MR-0175

### DIMENSIONS (inch)

NOMINAL SIZE	MOP (PSI)	A	B	C	D (NOMINAL)
2 NPT	1000	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2
3 NPT		10 $\frac{3}{4}$	3	5 $\frac{1}{8}$	3
4 NPT		12	3 $\frac{3}{8}$	6 $\frac{1}{8}$	4
2 NPT	1500	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2
3 NPT		10 $\frac{3}{4}$	3	5 $\frac{1}{8}$	3
4 NPT		12	3 $\frac{3}{8}$	6 $\frac{1}{8}$	4
2 NPT	2000	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2
3 NPT		10 $\frac{3}{4}$	3	5 $\frac{1}{8}$	3
4 NPT		12	3 $\frac{3}{8}$	6 $\frac{1}{8}$	4
2 NPT	3000	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2
3 NPT		10 $\frac{3}{4}$	3	5 $\frac{1}{8}$	3
4 NPT		12	3 $\frac{3}{8}$	6 $\frac{1}{8}$	4
2 NPT	4000	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2
2 NPT	5000	9	2 $\frac{3}{8}$	4 $\frac{1}{2}$	2

## BALL VALVE 3000 PSI FS660 SERIES - (FS660-72)



### FEATURES

- 3,000 PSI cold, Non-shock
- Proven Design
- Full Port (2" size is full port to schedule 160)
- Nylon or Delrin seats, PTFE or graphite seals
- Heavy duty lockable handle
- Stainless ball and stem
- 2 piece body
- Ball includes Pressure Equalisation Hole to prevent trapped pressure in body cavity which prevents seat damage due to thermal cycling.
- Threaded ends NPT ANSI B 1.20.1 - API 6A

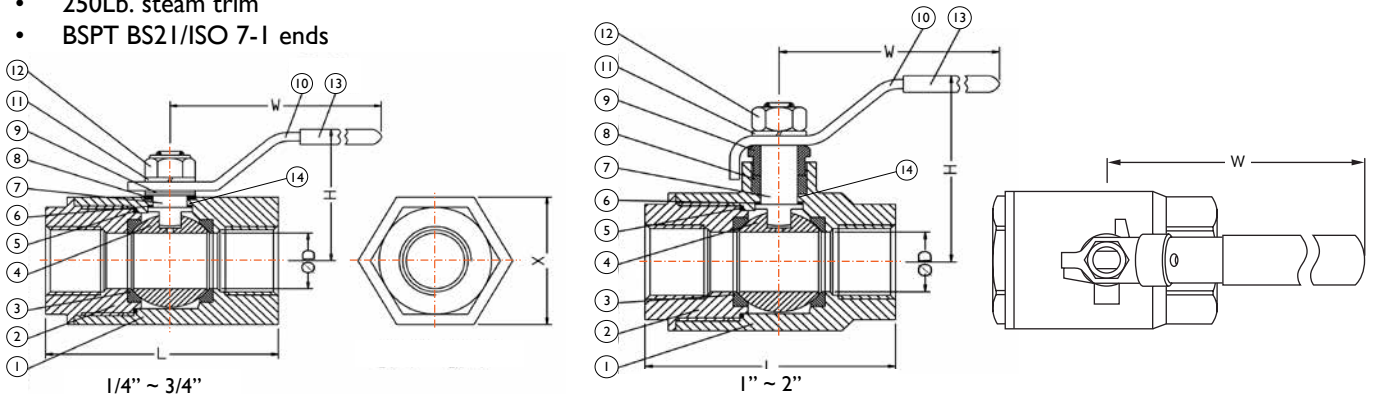
ID# A72-100-AF26



API 6A, API 607 5th Edition  
ISO 10497 Firesafe Certified

### OPTIONS

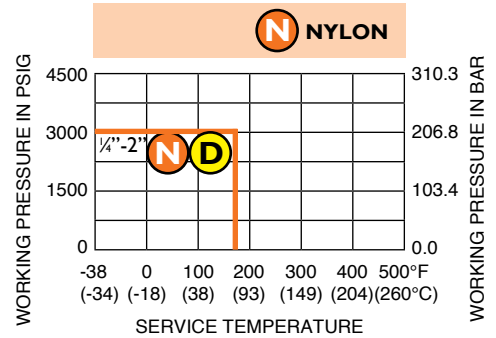
- Padlocking device
- 250Lb. steam trim
- BSPT BS21/ISO 7-1 ends



### MATERIAL LIST

ITEM	DESCRIPTION	STAINLESS STEEL	CARBON STEEL
1	Body	ASTM A351-CF8M	ASTM A216-WCB/A108
2	End Cap	ASTM A351-CF8M	ASTM A216-WCCB/A108
3	Seat	Nylon / Delrin	Nylon / Delrin
4	Ball	ASTM A351-CF8M/316	ASTM A351-CF8/304
5	Gasket	PTFE / Graphite / Viton	PTFE / Graphite / Viton
6	Thrust Washer	PTFE	PTFE
7	Stem	ASTM A276-316	ASTM A276-304
8	Stem Packing	PTFE / Graphite	PTFE / Graphite
9	Belleville Washer	AISI 301	AISI 301
10	Handle	AISI 304	Zinc Plated Steel
11	Handle Washer	AISI 304	AISI 304
12	Anti-Vibration Nut	AISI 304	AISI 301
13	Handle Cover	PVC	PVC
14	Stem O-Ring	Viton	Viton

### P-T RATINGS



### DIMENSIONS

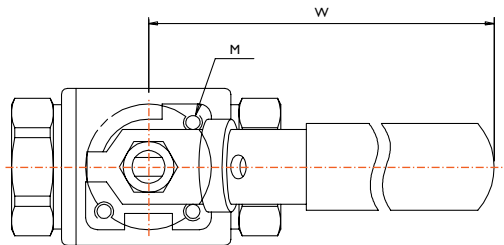
SIZE		ØD		L		H		W		X		Cv*
INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	
1/4"	8	0.50	12.7	2.72	69.0	2.64	67.0	4.80	122.0	1.61	41.0	16
3/8"	10											
1/2"	15											
3/4"	20	0.75	19.0	33.48	88.5	2.91	74.0	5.83	148.0	1.81	46.0	33
1"	25	1.00	25.40	4.02	102.0	3.15	80.0	6.61	168.0			47
1 1/4"	32	1.26	32.00	4.55	115.5	3.39	86.0					81
1 1/2"	40	1.50	38.00	4.88	124.0	4.76	121.0	10.23	260.0			105
2"	50	1.75	44.50	5.87	149.0	4.96	126.0					275

\* The Cv factor is the gallons of water per minute that the valve will pass with 1 PSI pressure drop. 2 1/2" & 3" 3000 psi also available.

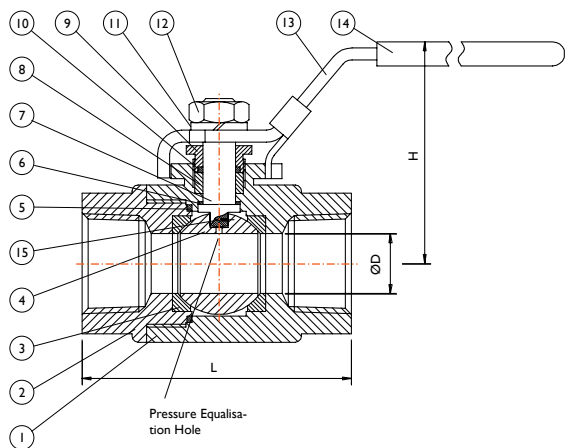
# BALL VALVES

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## BALL VALVE 3000 & 6000 PSI FS660 SERIES



API 6FA, API 607 5th Edition  
ISO 10497 Firesafe Certified



### MATERIALS LIST

NO.	PART NAME	STAINLESS STEEL	CARBON STEEL
1	Body	ASTM A351 CF8M	ASTM A216 WCB
2	Body Cap	ASTM A351 CF8M	ASTM A216 WCB
3	Seat	Delrin	
4	Ball	ASTM A351 CF8M	
5-1	Thrust Washer	PTFE	
5-2		Graphite	
6	Body Gasket	Graphite	
7	Stem	ASTM A276 316	
8	Stem Seal	Graphite	
9	Gland	AISI 304	
*10	Gland Packing	PTFE	
11	Spring Washer	AISI 304	
12	Handle Nut	AISI 304	
13	Handle	AISI 304	
14	Sleeve	Vinyl Plastisol	
15	Anti-Static Device	AISI 304	

\*6000PSI only.

Other special materials are available for seats:  
PTFE + 316; Carbon Graphite; Vespel, Delrin, PEEK  
Technical information upon request.

TEST PRESSURE 8NB - 50NB (1/2" ~ 2")	
Shell Test	9000PSI
HPC Test	6600PSI
LPC Test	80 - 100PSI

### FEATURES

- Two Piece Body Screwed Ends
- Investment Cast Body
- Blow Out Proof Stem / Floating Ball
- Fire-Safe API 607 5th Edition, API 6FA 3rd Edition
- Adjustable Packing Gland
- Standard Locking Handle
- Actuator Mounting Pad
- Ball includes Pressure Equalisation Hole to prevent trapped pressure in body cavity which prevents seat damage due to thermal cycling
- Threads conform to ANSI B1.20.1, BS21, DIN259/2999
- Mount Pad

### API 3000 - 3000 PSI WOG

Max Working pressure: 207 bar @ 38°C - 3000 psi @ 100°F  
Seat Nylon / Delrin

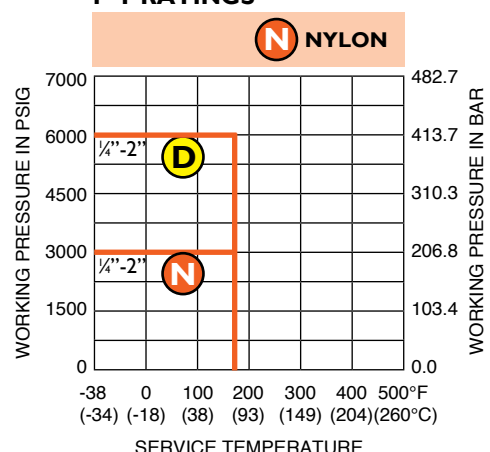
### CLASS 2500 - 6000 PSI WOG

Max Working pressure: 413 bar @ 38°C - 6000 psi @ 100°F  
Seat Nylon / Delrin

### DIMENSIONS

SIZE		ØD		L		H		W		ISO 5211	M
IN	DN	IN	MM	IN	MM	IN	MM	IN	MM		
1/4"	8	0.25	6.4	3.00	76.2	1.92	48.8	5.00	127.0	F03	3xM5
3/8"	10	0.50	12.7	4.00	101.6						
1/2"	15	0.50	12.7	4.00	101.6						
3/4"	20	0.75	19.1	4.25	108.0	2.56	65.0	5.83	148.1	F04	3xM6
1"	25	1.00	25.4	4.5	114.3	3.45	87.6	8.10	205.7	F05	
1 1/4"	32	1.50	38.1	5.25	133.4	4.13	104.9	10.00	254.0	F07	3xM8
1 1/2"	40			6.25	158.8						
2"	50			6.25	158.8						

### P-T RATINGS



# BALL VALVES

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## BALL VALVE CLASS 600/800 High Cycle FS660 SERIES



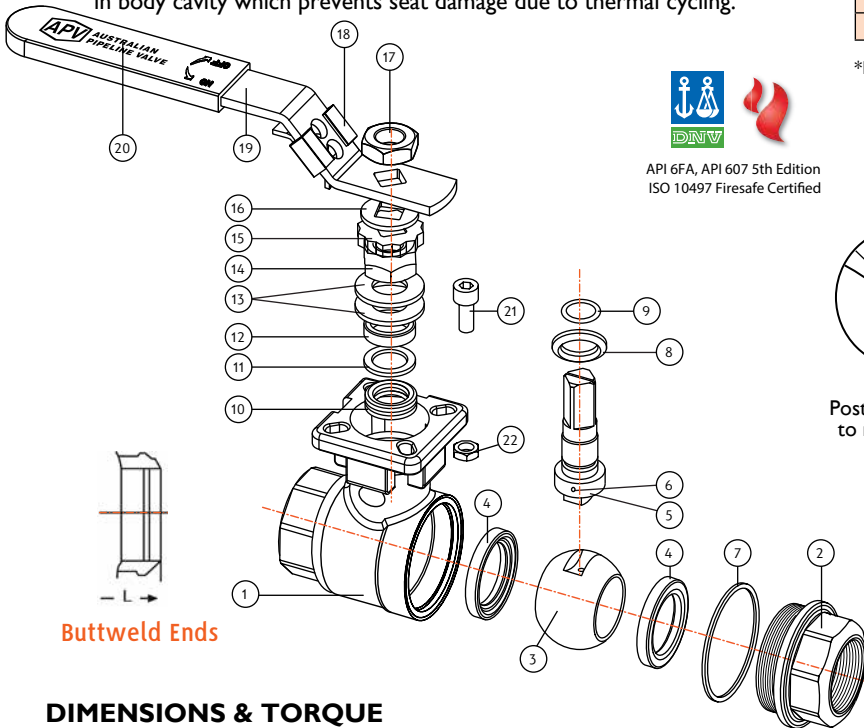
### FEATURES

- 2000PSI (13790 kPa) 8~25NB.  
1500PSI (10342 kPa) 32~80NB.
- Full Port DN 8NB~80NB (1/4" - 3").
- Longlife for Actuated Valve Applications.
- Belleville Washer Set for Automatic Compression of Stem Sealing.
- Blow-Out Proof Stem.
- Graphite Gasket & Stem Packing Prevents Post-fire External Leakage.
- Tested according to API 598.
- Direct Mount Pad (ISO 5211).
- TA Luft Fugitive Emission Compliant.
- Precision Investment Heavy 2 Piece Cast Body.
- Available in Carbon Steel or Stainless Steel.
- Casting Approved by TUV AD 2000-Merkblatt W0.
- Various End Connections Available (NPT, ISO 7/1, ISO 228/1, BSP, DIN 2999, DIN 259, etc.).
- Basic design complies with ANSI B16.34 & MSS SP-110.
- Ball includes Pressure Equalisation Hole to prevent trapped pressure in body cavity which prevents seat damage due to thermal cycling.



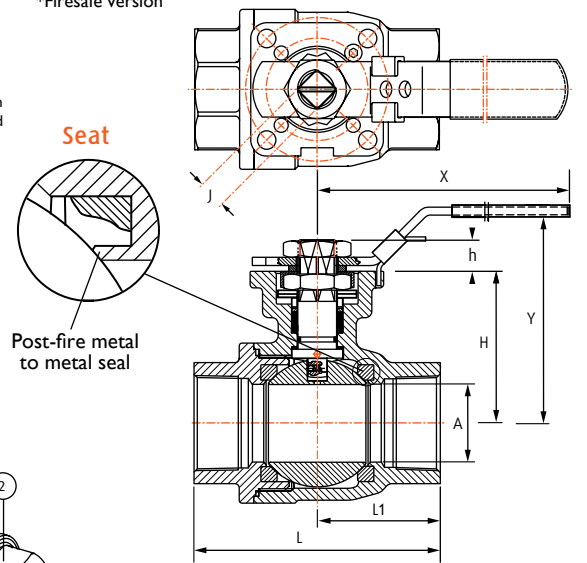
### MATERIALS LIST

NO.	PART NAME	Quantity	MATERIAL
1	Body	1	WCB/CF8M
2	End Cap	1	WCB/CF8M
3	Ball	1	316/CF8M
4	Ball Seat	2	PTFE/TFM1600/TFM4215
5	Stem	1	SUS316
6	Antistatic Device	1	SUS316
7	Body Gasket	1	PTFE/TFM1600/Graphite*
8	Taperseal Stem Seal	1	PTFE/TFM1600/RTFE
9	O-Ring	1	FKM
10	Stem Packing Set	2 or 4	PTFE V- Rings or Graphite*
11	Bushing	2	50% SS+50% PTFE
12	Gland	1	SUS316
13	Belleville Washers	2	SUS301
14	Stem Nut	1	A194-8
15	Stop-Lock Cap	1	SUS304
16	Handle Gland	1	SUS304
17	Handle Nut	1	A194-8
18	Lock Device	1	SUS304
19	Handle	1	SUS304
20	Handle Sleeve	1	Vinyl Plastic
21	Stop Bolt	1	A2-70/SUS304
22	Stop Nut	1	A2-70/SUS304



API 6FA, API 607 5th Edition  
ISO 10497 Firesafe Certified

\*Firesafe version



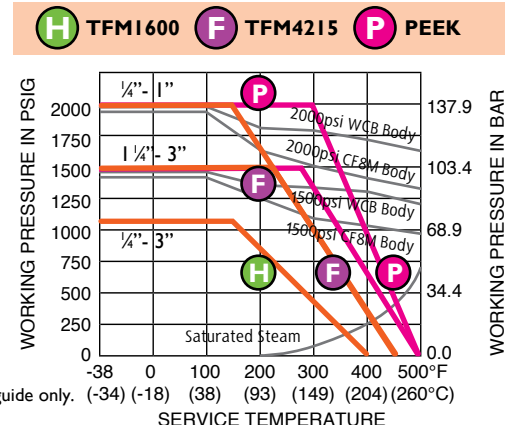
Buttweld Ends

### DIMENSIONS & TORQUE

SIZE		A	h	H	L	L1	J	X	Y	TORQUE
IN	DN									NM
1/4"	8	65	9.0	43.1	62	29.0	9	147	74	7
3/8"	10	80	9.0	43.1	62	29.0	9	147	74	8
1/2"	15	100	9.0	43.1	75	34.5	9	147	74	8
3/4"	20	15.0	9.0	50.7	80	37.0	9	147	82	9
1"	25	25.0	11.0	58.5	90	45.0	11	177	90	16
1 1/4"	32	32.0	11.0	63.0	110	51.0	11	177	94	26
1 1/2"	40	38.0	14.0	73.5	120	60.0	14	197	107	37
2"	50	50.0	14.0	83.0	140	70.0	14	197	117	55
2 1/2"	65	63.5	17.0	102.3	185	92.5	17	267	151	85
3"	80	76.0	17.0	110.7	205	102.5	17	267	160	146

### P-T RATINGS

Full Bore: 2000 PSI (8~25NB) 1500 PSI (32~80NB)

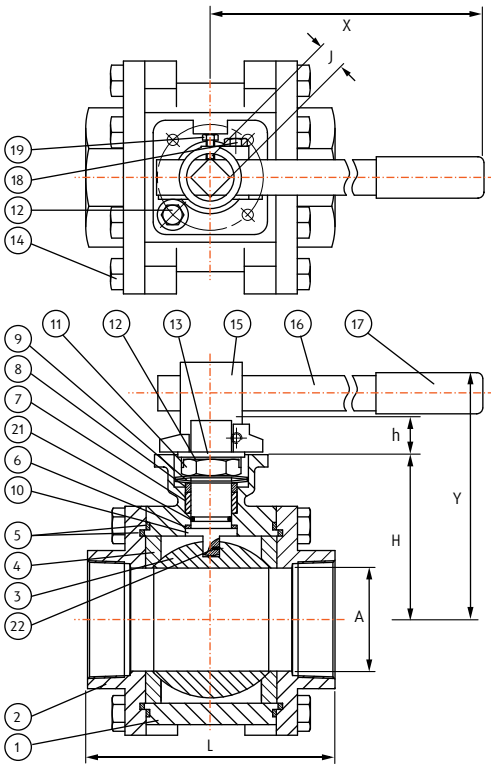


This catalogue is general in its nature and design and can vary at any time. This catalogue is to be used as a guide only. (-34) (-18) (38) (93) (149) (204) (260°C)

# BALL VALVES

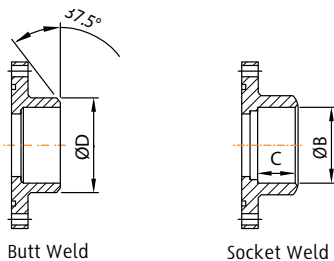
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## BALL VALVE 1500 & 2000 PSI BV100 SERIES



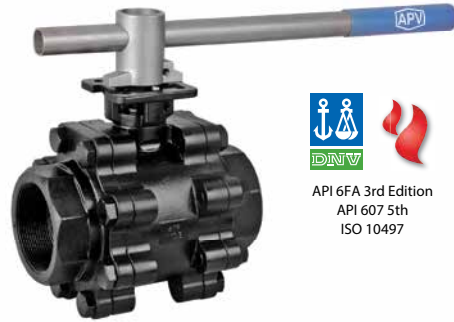
### FEATURES

- Full Port DN 65NB~100NB (2 1/2" - 4")
- 2000PSI (13780 kPa) 65NB~80NB  
1500PSI (10335 kPa) 100NB
- Firesafe Certified
- Long life for Actuated Valve Applications
- Belleville Washer Set for Automatic Compression of Stem Sealing
- Direct Mount Pad (ISO 5211)
- Precision Investment Heavy 3 Piece Cast Body
- Blow-Out Proof Stem
- Available in Carbon Steel or Stainless Steel
- Various End Connections Available (NPT, ISO 7/1, ISO 228/1, BSP, DIN 2999, DIN 259, etc.)



### DIMENSIONS, WEIGHT & TORQUE

SIZE		A	h	H	L	J	X	Y	ØB	ØD	C	ISO 5211	WEIGHTS KG	TORQUE NM
IN	DN													
2 1/2"	65	65	24	116.5	185	22	460	173	73.9	76.3	17	F07-F10	13.4	85
3"	80	80	24	127.0	205	22	460	184	89.8	89.1	17	F07-F10	21.0	96
4"	100	100	29	159.0	240	27	600	242	115.2	114.3	20	F10	34.4	185

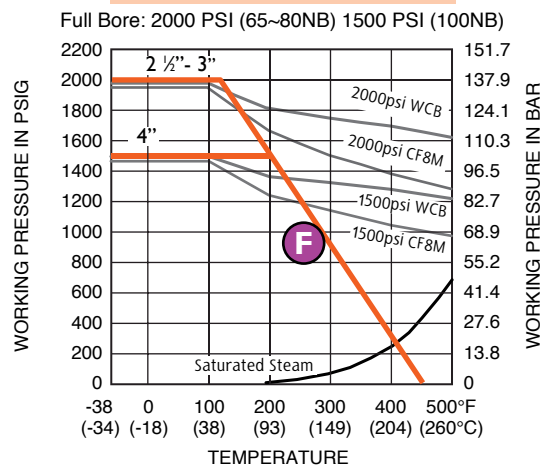


### MATERIALS LIST

NO.	PART NAME	STAINLESS STEEL	CARBON STEEL
1	Body	ASTM A351 CF8M	ASTM A216 WCB
2	End Cap	ASTM A351 CF8M	ASTM A216 WCB
3	Ball	ASTM A351 CF8M/316	ASTM A351 CF8M/316
4	Seats	R-TFE	
5-1	Body Gasket - Outer	Graphite	
5-2	Body Gasket - Inner	PTFE	
6-1	Thrust Washer	Graphite	
6-2		PTFE	
7	Stem Packing	Graphite	
8	Gland	AISI 304	
9	Belleville Washer	AISI 301	
10	Stem	ASTM A276 316	ASTM A276 304
11	Gland Nut	AISI 304	
12	Lock Clip	AISI 304	
13	Flat Washer	AISI 304	
14	Body Bolt	ASTM A193 B8	ASTM A193 B7
15	Handle	ASTM A351 CF8	Carbon Steel
16	Steel Pipe	AISI 304	Carbon Steel
17	Sleeve	Vinyl Plastisol	
18	Fixing Screw (Pipe)	AISI 304	Carbon Steel
19	Fixing Screw (Stem)	AISI 304	Carbon Steel
20	Stop Pin	AISI 304	Carbon Steel
21	Stem O-Ring	Viton / NBR	
22	Antistatic Device	AISI 316	

### P-T RATINGS

**F** TM4215





## OILPATCH BUTTERFLY VALVES X-NE-C (X-DEMC-0)



### DEMCO STYLE

- Parts fully interchangeable

### BLOWOUT PROOF STEM

- Tapered stem shoulder

### POSITIVE STEM/DISC ORIENTATION

- Handle indicates disc position.

### HIGH FLOW DISC

- No stem boss in the path of line fluid.

### INCREASED PRESSURE RANGE

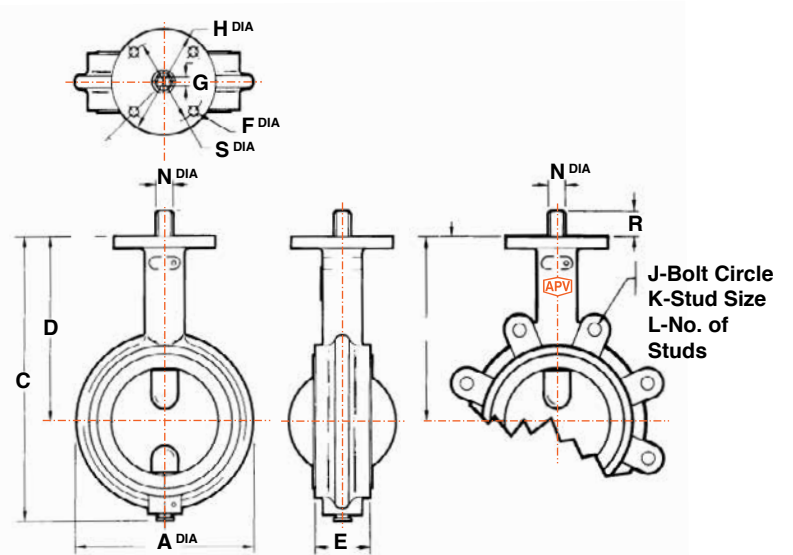
- Standard 200 psi.
- High pressure 285 psi.

### LONG NECK

- Available in all body and trim options.

### PROVEN DESIGN

- Suit ANSI 125/150 or AS/BS Table D, E Flanging.



### DIMENSIONS

Valve Size	A	C	D	E	F	G	H	J	K	L	N	S
2"	4.12	8.44	5.62	1.74	0.408	0.375	4.00				0.625	3.25
2½"	4.88	9.19	6.12	1.86	0.408	0.35	4.00				0.625	3.25
3"	5.38	9.69	6.38	1.86	0.408	0.375	4.00				0.625	3.25
4"	6.88	11	7.12	2.11	0.408	0.375	4.00				0.625	3.25
5"	7.75	12.12	7.75	2.24	0.408	0.500	4.00				0.838	3.25
6"	8.75	13.25	8.25	2.24	0.408	0.500	4.00				0.838	3.25
8"	11	15.56	9.44	2.54	0.533	0.500	6.00				0.838	5.00
10"	13.38	18.69	11.25	2.74	0.533	0.625	6.00				0.963	5.00
12"	16.12	21.69	12.19	3.24	0.533	0.750	6.00				1.338	5.00



## OILPATCH PLUG VALVES NON LUBRICATED - LT STYLE

Quarter-turn valves for standard and sour gas services to 20,000 psi. Rugged plug valves 1 to 3 inches and with threaded or detachable Weco™ style wing union ends. Used for cementing, fracturing, acidizing and other high-pressure lines which handle slurries, abrasives, drilling muds, chemicals and other similar products. These valves are equivalent to Lo-Torc™ style.

### Floating segments ensure positive seal

Two seal segments which float slightly to offset possible micro-expansion of the valve body in extreme high-pressure applications and to ensure a positive seal at all times.

### Easy operation under pressure

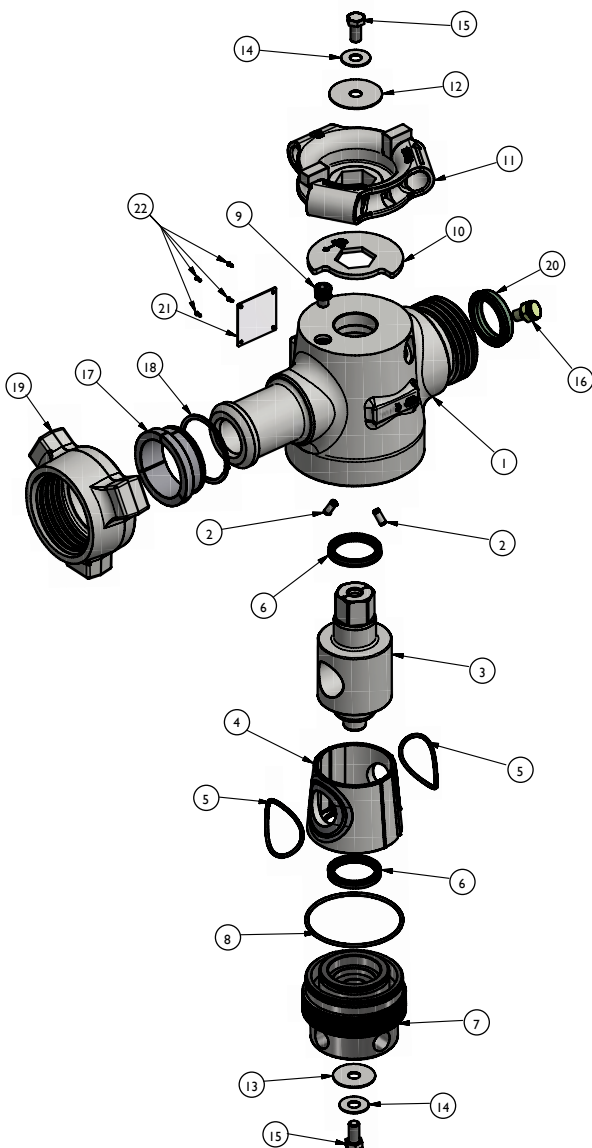
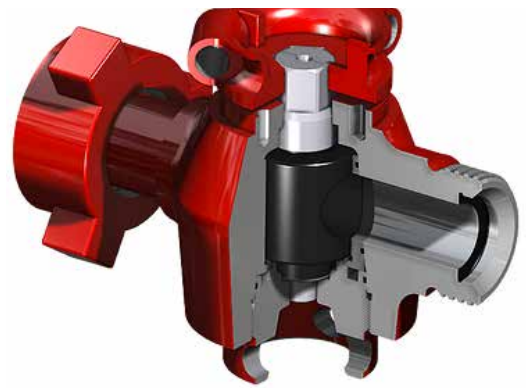
The plug valve's cylindrical plug fits between a set of seal and side segments to prevent the plug from sticking to the valve body, permitting easy operation under pressure.

### Visible indication of valve position

A visible, quarter-turn stop on the plug cap indicated clearly when the valve is fully open or fully closed. A detent spring holds the valve in the desired position.

### In-line maintenance

Can be rebuilt in-line by replacing the side and seal segments.



### MATERIALS

Item	Qty.	Description	Material
1	1	Body	AISI 4130
2	2	Roll Pin	STD.
3	1	Plug	AISI 4130
4	1	Insert Set	AISI 4130
5	2	O-Ring	VITON
6	2	Plug Seal	VITON
7	1	Adjusting Nut	AISI 4130
8	1	O-Ring	VITON
9	1	Bolt, Allen, 1/2" 13 UNC x 1/2"	STD.
10	1	Stop Plate	MILD STEEL + ZP
11	1	Handle Actuator	ALLOY STEEL BS 3100 BTI
12	1	Washer, Plain	MILD STEEL + ZP
13	1	Washer, Plain	MILD STEEL + ZP
14	2	Washer, Plain	MILD STEEL + ZP
15	2	Bolt, Hex, 1/2" 20 UNF x 1"	STD.
16	1	Grease Fitting 1/4" NPT	STD.
17	1	Retainer Segment	AISI 4130
18	1	Retainer, Ring Spiral	STD.
19	1	Nut	AISI 4130
20	1	Seal Ring	VITON
21	1	Name Plate	SS
22	4	Rivet, 3mm X 6mm	STD.

\* Lo-Torc™ is a registered trademark of Halliburton. Weco™ is a registered trademark of TechnipFMC. Lo-Torc™ and Weco™ are not related to APV or GSL in any way.



SIZE	TYPE	RATED CWP	TYPE CONNECTION
1	1 x 1	5000	1" Female Line Pipe Thread
1	1 x 2	15000	2" Male Line Pipe Thread Long
1	1 x 2 x 1	15000	2" Male LPTL x Female LPT
1	1 x 1	15000	1" Fig. 1502 Female x 1" Fig. 1502 Male
1	1 x 1½	15000	1½" Fig. 1502 Female x 1½" Fig. 1502 Male
1	1 x 2	15000	2" Fig. 1502 Female x 2" Fig. 1502 Male
1	1 x 2	15000	2" Fig. 1502 Female x 2" Fig. 1502 Male
1½	1½ x 1½	10000	1½" Female Line Pipe Thread
1½	1½ x 1½	15000	1½" Fig. 1502 Female x 1½" Fig. 1502 Male
1½	1½ x 2	15000	1½" Fig. 1502 Female x 2" Fig. 1502 Male
2	2 x 2	5000	2" Female Line Pipe Thread Long
2	2 x 2	10000	2" Female Line Pipe Thread Long
2	2 x 2	10000	2" Fig. 1002 Female x 2" Fig. 1002 Male
2	2 x 2	15000	2" Female Line Pipe Thread Long
2	2 x 2	15000	2" Fig. 1502 Female x 2" Fig. 1502 Male
2	2 x 2	15000	2" Fig. 1502 Female x 2" Fig. 1502 Male

3 inch also available.

## DIMENSIONAL DETAILS

1" and 2" 5,000 CWP							
A	B	C	D	E	PORT SIZE	THREAD SIZE	APPROX WEIGHT LBS
6	2.31	4.62	7.37	4.88	.87	1" LPT	20
8.50	3.28	6	8.25	6.81	1.75*	2" LPTL	43

\*2½" Port model UT also available.

1½" and 2" 10,000 CWP							
A	B	C	D	E	PORT SIZE	THREAD SIZE	APPROX WEIGHT LBS
7.31	3.28	6	8.25	6.81	1.30	1½" LPT	55
8.50	3.28	6	8.25	6.81	1.75*	2" LPTL	52

\*2½" Port model UT also available.

2" 15,000 CWP							
A	B	C	D	E	PORT SIZE	THREAD SIZE	APPROX WEIGHT LBS
8.50	3.44	6.63	8.50	7.89	1.75	2" LPTL	85

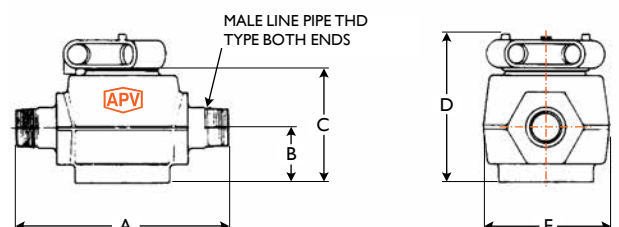
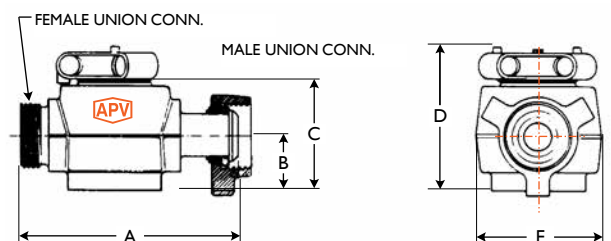
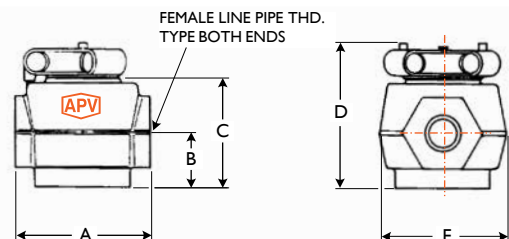
3 inch also available.

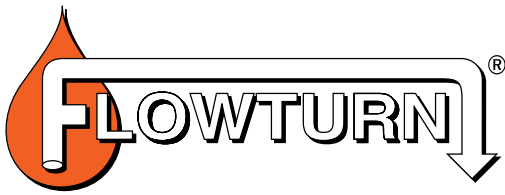
1", 1½" and 2" 10,000 and 15,000 CWP							
A	B	C	D	E	PORT SIZE	UNION SIZE	APPROX WEIGHT LBS
10.56	2.31	4.62	7.37	4.88	.87	1" - 1502	50
10.56	2.31	4.62	7.37	4.88	.87	1½" - 1502	54
10.56	2.31	4.62	7.37	4.88	.87	2" - 1502	57
10.56	2.31	4.62	7.37	4.88	.87	2" - 1502	57
12.63	3.28	6	8.25	6.81	1.30	1½" - 1502	51
12.63	3.28	6	8.25	6.81	1.30	1½" F, 2" M	53
12.63	3.28	6	8.25	6.81	1.75	2" - 1002	51
13.87	3.44	6.63	8.50	7.89	1.75	2" - 1502	100

3 inch also available.

2" 15,000 CWP							
A	B	C	D	E	PORT SIZE	THREAD SIZE	APPROX WEIGHT LBS
9.13	2.31	4.62	7.37	4.88	.87	2" LPTL	27
9.13	2.31	4.62	7.37	4.88	.87	2" M x 1" F	30

3 inch also available.





## SIGHT GLASS FLANGED & SCREWED



### PRESSURE RATINGS

Available up to ANSI 600 Class. (Model shown is standard 200 PSI WOG rated version.) Standard steel/SS flanged sight glass is 200 PSI (1378 Kpa) CWP (maximum temp 200°C). The iron body sight glass (screwed and flanged) is only rated to 100 PSI (700 Kpa) but 1000 Kpa is available on request.

### APPLICATIONS

Water, oil water, air and gas. If mica glass or borosilicate glass is fitted then saturated steam up to 230 PSI at 200°C can be accommodated. For corrosive/abrasive fluids check material grade for compatibility, this is purchaser's responsibility and if for such an application you must state in writing.

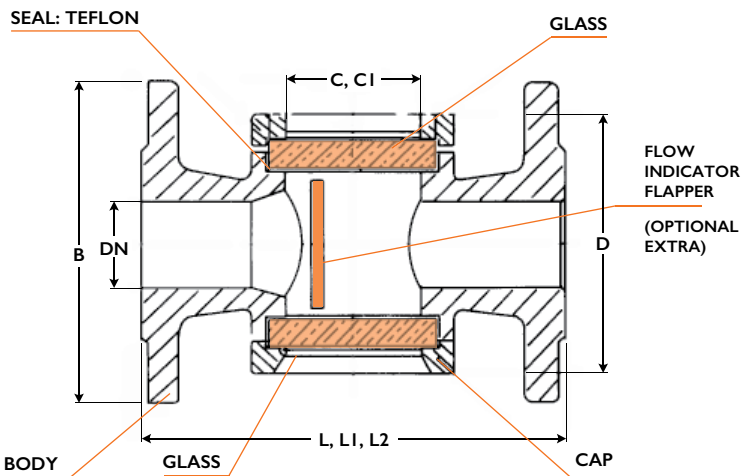
### LININGS

Special linings, coatings on request.

### END CONNECTIONS

Available in screwed ends (NPT, BSP) and flanged in drilling to suit BS Table D & E, DIN/JIS, ANSI 125, 150 (our standard model is not full ANSI class 150 rated).

**Model SLSGI25CI (iron)**  
**Model SLSGI50CS (steel)**  
**Model SLSGI50SS (S/S)**



### DIMENSIONS (MM) FLANGED SIGHT GLASS 150LB

Size (MM)	15	20	25	40	50	65	80	100	150	200
Size (Inch)	0.5	0.75	1	1.5	2	2.5	3	4	6	8
L	130	130	130	166	180	230	240	260	390	600
L1	135	135	160	174	200	245	270	320	420	
L2		145	170	200	220	270	310	350	480	
B	89	98	108	127	152	178	191	229	280	343
D	60	70	89	98	120	140	152	191	241	298
C	32	39	43	50	60	80	80	110	160	160
* CI	40	50	50	65	80	104	125	125	175	175
WT. Kg	3	4	5	8	10	14	19	25	45	70

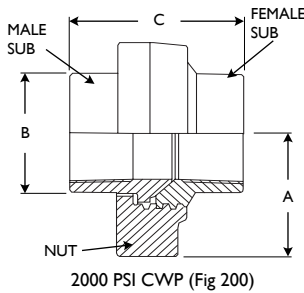
\* Reduced glass size option shown (CI)

### DIMENSIONS (MM) FLANGED SIGHT GLASS 300LB

Size (MM)	15	20	25	40	50	65	80	100	150	200
Size (Inch)	0.5	0.75	1	1.5	2	2.5	3	4	6	8
L	149	149	175	191	219	289	289	337	543	568
B	95	117	124	156	165	191	210	254	318	381
D	67	83	89	114	127	149	168	200	270	330
C	32	32	35	51	54	81	81	108	159	159
WT. Kg	5	5	9	12	17	32	32	68	122	159

600LB available up to 80NB 3", refer to drawing.

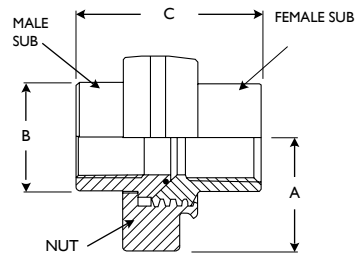
## HAMMER UNIONS WECO STYLE HIGH PRESSURE



2000 PSI CWVP (Fig 200)

**FIGURE 200**

Pressure Rating: 2000 PSI (cold working pressure)  
 Applications: General service manifolds and lines.  
 Economical general purpose union; 1" to 10" sizes; LP (NPT) or Butt weld ends.



2000 PSI CVWP (Fig 206)

**FIGURE 206**

Pressure Rating: 2000 PSI (cold working pressure)  
 Applications: Manifold and line connections, suction service. NACE/H2S service available.  
 Features: O-Ring in male sub improves sealing and protects metal-to-metal seal against corrosion; O-Ring can be replaced to extend union service life. LP (NPT) or Butt weld ends.

### DIMENSIONS FIG 200/206 FORGED STEEL (MM)

Nominal Bore Inch (mm)	Clearance Radius A (mm)	Outside Diameter B (mm)	End to End Threaded C (mm)	Material	
				SUB*	NUT
1" (25)	50	40	66	SF	MIC
1 1/4" (32)	56	51	71	SF	MIC
1 1/2" (40)	64	57	71	SF	MIC
2" (50)	76	71	83	SF	MIC
2 1/2" (65)	90	84	105	SF	MIC
3" (80)	102	104	115	SF	SF
4" (100)	119	130	125	SF	SF
6" (150)	159	191	169	SF	SC
8" (200)	189	243	183	SF	SC
10" (250)	229	292	231	SF	SC

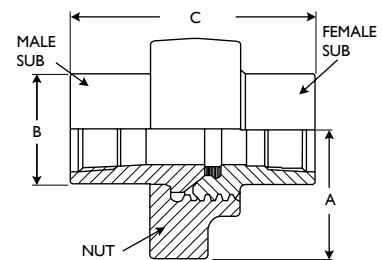
SF = Steel forging; SC = Steel casting; MIC = Malleable iron casting  
 \*Subs are 4130/4140 but A105N also available.



### DIMENSIONS FIG 602 FORGED STEEL (MM)

Nominal Pipe Size	(in) (mm)	1	1 1/4	1 1/2	2	2 1/2	3	4
		25	32	40	50	65	80	100
A Clearance Radius	(mm)	59	83	81	92	99	114	132
B Outside Diameter	(mm)	44	65	65	75	89	106	133
C End to End Threaded	(mm)	90	124	124	133	156	159	210
D End to End Butt weld	(mm)	90	124	119	152	143	144	144
Weight	(kg)	105	4.5	4.2	5.4	7.3	10	14
Material	(Sub)* (Nut)	SF (SF)	SF (SF)	SF (SF)	SF (SF)	SF (SF)	SF (SF)	SF (SF)

SF = Steel forging  
 Sour Service: Olive Green for Nace/H2S service, full certification  
 \*Subs are 4130/4140 but A105N also available.



6000 PSI CWVP (Fig 602)

**FIGURE 602**

Pressure Rating: 6000 PSI (414 bar)(cold working pressure)  
 Applications: Manifold and line connections, and mud service. Standard or NACE/H2S service.  
 Features: Compact, Replaceable, lip-type seal provides primary seal, protects secondary metal-to-metal seal, minimizes flow turbulence. Butt weld or NPT (LP) available. All components are forged steel



1502 15,000 PSI  
 Also in stock



## SWIVEL JOINTS SHORT SWEEP

**APPLICATIONS** Transfer lines, temporary flow lines, discharge lines, auxiliary flow lines, water lines and other general-service oilfield applications

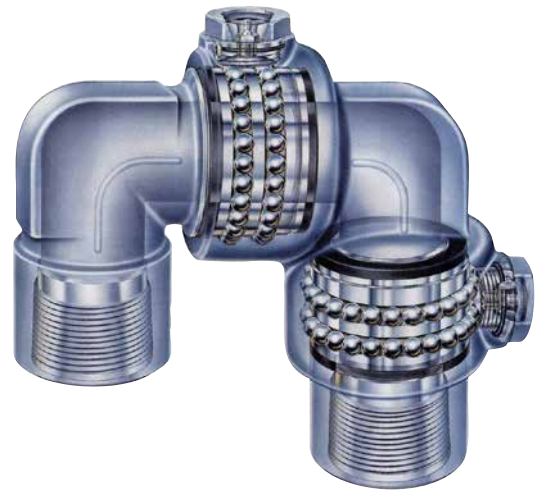
**SIZES** Ranging from 10NB (3/8") to 300NB (12")

**STYLES** 10, 20, 30, 40, 50, 60, 70, 80

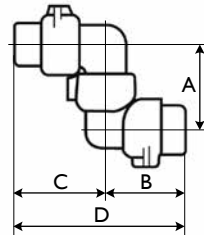
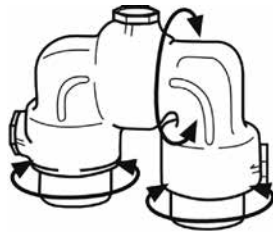
Swivel joints are available in eight basic styles. Details of the four major types are displayed below. Style 20, 60, 70 & 80 also available. These styles permit 360 degree rotation and movement in one, two or three planes. They can be combined in an unlimited variety of ways to suit practically any installation

**NOTE:** Although swivel joints can be rotated while under fluid pressure, they are not recommended for services requiring continuous rotary motion.

All are manufactured from 4130/4140 forged steel.



### STYLE 10 3 SWIVELS, 2 ELBOWS

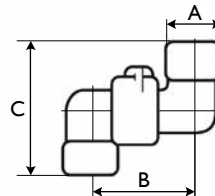


#### DIMENSIONS (MM)

SIZES (in)	3/8" - 1/2"	1"	2"	2.5"	3"	4"
<b>End Connections</b>	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female
<b>A</b>		98	156	194	194	232
<b>B</b>		98	146	175	175	194
<b>C</b>		105	146	175	175	194
<b>D</b>		203	292	349	349	387
<b>WT (Kg)</b>		3.18	10.45	17.73	15.91	24.09

All sizes in MM

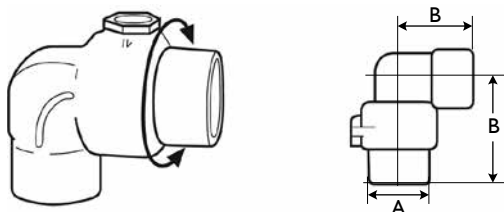
### STYLE 40 SINGLE SWIVEL, 2 ELBOWS



#### DIMENSIONS (MM)

SIZES (in)	1"	2"	2.5"	3"	4"
<b>End Connections</b>	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female
<b>A</b>	41	75	102	102	128
<b>B</b>	92	156	194	194	235
<b>C</b>	127	178	235	235	254
<b>WT (Kg)</b>	1.59	5.68	12.12	10.91	13.18

## STYLE 30 SINGLE SWIVEL, 1 ELBOW

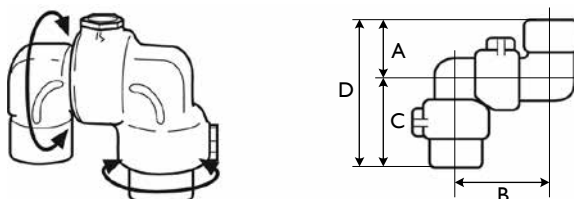


### DIMENSIONS (MM)

SIZES (in)	1"	2"	3"	4"
End Connections	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female
A	41	75	102	128
B	64	89	117	127
C	98	146	175	197
WT (Kg)	1.59	4.55	9.09	10.91

All sizes in MM

## STYLE 50 TWO SWIVELS, 2 ELBOWS



### DIMENSIONS (MM)

SIZES (in)	1"	2"	2.5"	3"	4"
End Connections	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female	Threaded NPT Female
A	64	89	117	117	127
B	92	156	194	194	232
C	98	146	175	175	194
D	162	235	292	292	321
WT (Kg)	2.27	8.18	14.09	12.73	18.18

All sizes in MM

### End Connections

LP (NPT) Female X Female, B/Weld. Flanged and Union End on request

### Pressure Rating

1000 PSI	Code Blue
6000 PSI	Code Silver
10000 PSI	Code Black

### Long Sweep

Also available

### Sour Service

H2S / NACE Service also available.

Certification available on all sizes



ISO 9001

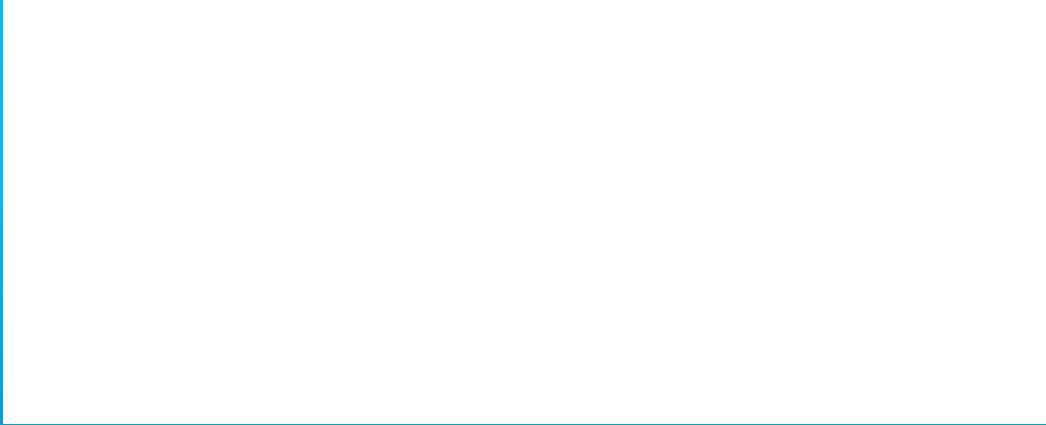


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