

C A R B O N S T E E L

Texseal D Series



TEN GOOD REASONS TO DROP THE BALL.

If your oilfield has tough service conditions - H_2S , CO_2 , entrained sand, high flow conditions - you need more than lightweight, leaky ball valves. It's time to drop the ball and switch to Texsteam's soft-seated D Series block valves. *Here's why:*

- ❶ D Series block valves are top entry, infield/inline repairable - saves you substantial repair time and money.
- ❷ Choice of molded Buna N or Viton seats - excellent for abrasive service.
- ❸ Bubble tight shut-off - zero leakage.
- ❹ Soft, resilient DuraSeat™ won't pit or scratch like Teflon or Nylon.
- ❺ Meets NACE MRO175 standard. Built and tested to API 6D and ANSI B16.34.
- ❻ Large, rugged stem with secure locking device to prevent tampering.
- ❼ Quarter turn with internal stops.
- ❽ Time-tested design has been working hard for years in oilfields worldwide.
- ❾ Every D Series block valve is backed by the respected Texsteam name.
- ❿ It takes a beatin' and keeps on seatin'!



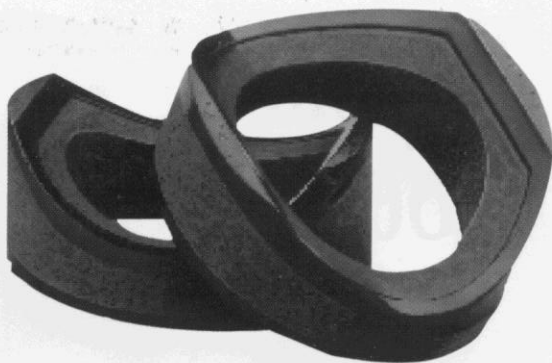
TEXSTEAM OPERATIONS

Texseal D Series

The Secret's in the Seats

The secret to our Texseal D Series block valves is in the seats—soft, Buna N* injection molded seats that won't scratch or leak like Teflon or Nylon—even under tough service conditions. They won't break down like cheap ball valves.

D Series – takes a beatin' and keeps on seatin'!



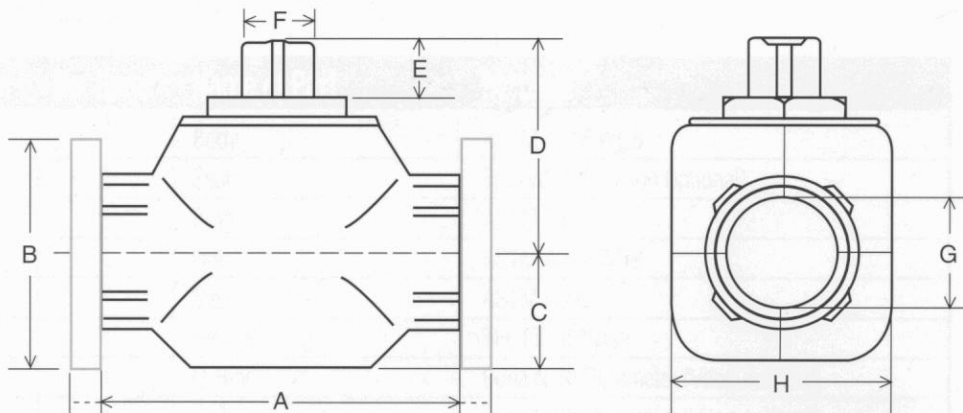
Flanged End Dimensions

Valve Size	Model No.	ANSI	Working Pressure	Port Opening	A	B	Dimension (inches)		E	F	G	Weight (lbs.)
							C	D				
1"	6104	150	285 PSI	Regular	5 ½	4 ¼	2 ½	3 ¾	1	1 ½	1 5/16	9.1
	6304	300	740 PSI	Regular	6 ¼	4 7/8	2 7/16	3 ¾	1	1 ½	1 5/16	12.1
	6404	400	985 PSI	Regular	8 ½	4 7/8	2 7/16	3 ¾	1	1 ½	1 5/16	12.7
	6604	600	1480 PSI	Regular	8 ½	4 7/8	2 7/16	3 ¾	1	1 ½	1 5/16	12.7
	6904	900	2220 PSI	Regular	10	5 ½	2 15/16	3 ¾	1	1 ½	1 5/16	12.7
1 ½"	6104	150	285 PSI	Regular	6 ½	5	2 ½	4 ¾	1 ¾	1 5/16	1 ¾	22.5
2"	6104	150	285 PSI	Regular	7	6	3	4 ¾	1 ¾	1 5/16	1 ¾	22.5
	6106	150	285 PSI	Full	10 ½	6	3	4 ¾	1	1 5/16	2 ¾	36.0
	6304	300	740 PSI	Regular	8 ½	6 ½	3 ¾	4 ¾	1 ¾	1 5/16	1 ¾	26.5
	6306	300	740 PSI	Full	11 ½	6 ½	3 ¾	4 ¾	1	1 5/16	2 ¾	38.0
	6404	400	985 PSI	Regular	11 ½	6 ½	3 ¾	4 ¾	1 ¾	1 5/16	1 ¾	39.0
	6406	400	985 PSI	Full	11 ½	6 ½	3 ¾	4 ¾	1	1 5/16	2 ¾	41.0
	6604	600	1480 PSI	Regular	11 ½	6 ½	3 ¾	4 ¾	1 ¾	1 5/16	1 ¾	39.0
	6606	600	1480 PSI	Full	11 ½	6 ½	3 ¾	4 ¾	1	1 5/16	2 ¾	41.0
	6904	900	2220 PSI	Regular	14 ½	8 ½	4 ¾	4 ¾	1 ¾	1 5/16	1 ¾	39.0
	6906	900	2220 PSI	Full	15	8 ½	4 ¾	4 ¾	1	1 5/16	2 ¾	41.0
2 ½"	6104	150	285 PSI	Regular	7 ½	7	3 ½	4 ¾	1	1 5/16	2 ¾	36.0
3"	6104	150	285 PSI	Regular	8	7 ½	3 ¾	4 ¾	1	1 5/16	2 ¾	41.0
	6106	150	285 PSI	Full	13 ½	7 ½	3 ¾	6 7/16	1 ¾	2 3/16	3 ¾	70.0
	6304	300	740 PSI	Regular	11 ½	8 ¾	4 ¾	4 ¾	1	1 5/16	2 ¾	45.0
	6306	300	740 PSI	Full	15 ¼	8 ¾	4 ¾	6 7/16	1 ¾	2 3/16	3 ¾	84.0
	6404	400	985 PSI	Regular	14	8 ¾	4 ¾	4 ¾	1	1 5/16	2 ¾	67.0
	6406	400	985 PSI	Full	17 ½	8 ¾	4 ¾	6 7/16	1 ¾	2 3/16	3 ¾	124.0
	6604	600	1480 PSI	Regular	14	8 ¾	4 ¾	4 ¾	1	1 5/16	2 ¾	67.0
	6606	600	1480 PSI	Full	17 ½	8 ¾	4 ¾	6 7/16	1 ¾	2 3/16	3 ¾	124.0
	6904	900	2220 PSI	Regular	15	9 ½	4 ¾	4 ¾	1	1 5/16	2 ¾	80.0
	6906	900	2220 PSI	Full	18 ½	9 ½	4 ¾	6 7/16	1 ¾	2 3/16	3 ¾	110.0
4"	6104	150	285 PSI	Regular	9	9	4 ½	6 7/16	1 ¾	2 3/16	3 ¾	75.0
	6304	300	740 PSI	Regular	12	10	5	6 7/16	1 ¾	2 3/16	3 ¾	105.0
	6404	400	985 PSI	Regular	16 ¾	10	5	6 7/16	1 ¾	2 3/16	3 ¾	131.0
	6604	600	1480 PSI	Regular	17	10 ¾	5 ¾	6 7/16	1 ¾	2 3/16	3 ¾	131.0
	6904	900	2220 PSI	Regular	18	11 ½	5 ¾	6 7/16	1 ¾	2 3/16	3 ¾	170.0

When ordering specify "RF" for Raised Face or "RJ" for Ring Joint Flange.

*Viton optional.

Note: All flange valve lengths given are RF. Add 1/8" to length for RTJ.



Screwed End Dimensions

Valve Size	Model No.	Working Pressure	Port Opening	Dimension (inches)							Weight (lbs.)
				A	H	C	D	E	F	G	
1"	204	285	Regular	5 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	1	1 $\frac{1}{8}$	$\frac{15}{16}$	5.5
	1004	1000	Regular	5 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	1	1 $\frac{1}{8}$	$\frac{15}{16}$	5.5
	1504	1500	Regular	5 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	1	1 $\frac{1}{8}$	$\frac{15}{16}$	5.5
	2004	2000	Regular	5 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	1	1 $\frac{1}{8}$	$\frac{15}{16}$	5.5
	3004*	3000	Regular	5 $\frac{1}{8}$	2 $\frac{3}{8}$	1 $\frac{1}{8}$	3 $\frac{1}{8}$	1	1 $\frac{1}{8}$	$\frac{15}{16}$	5.5
2"	204	285	Regular	7 $\frac{1}{4}$	4 $\frac{1}{32}$	1 $\frac{3}{8}$	4 $\frac{1}{8}$	1 $\frac{3}{8}$	1 $\frac{5}{16}$	1 $\frac{5}{8}$	12.5
	206	285	Full	8 $\frac{3}{8}$	4 $\frac{1}{2}$	2 $\frac{3}{16}$	4 $\frac{5}{8}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	24.0
	1004*	1000	Regular	7 $\frac{1}{4}$	4 $\frac{1}{32}$	1 $\frac{7}{8}$	4 $\frac{1}{8}$	1 $\frac{3}{8}$	1 $\frac{5}{16}$	1 $\frac{5}{8}$	12.5
	1006*	1000	Full	8 $\frac{3}{8}$	4 $\frac{1}{2}$	2 $\frac{3}{16}$	4 $\frac{5}{8}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	24.0
	1504*	1500	Regular	7 $\frac{1}{4}$	4 $\frac{1}{32}$	1 $\frac{7}{8}$	4 $\frac{1}{8}$	1 $\frac{3}{8}$	1 $\frac{5}{16}$	1 $\frac{5}{8}$	12.5
	1506*	1500	Full	8 $\frac{3}{8}$	4 $\frac{1}{2}$	2 $\frac{3}{16}$	4 $\frac{5}{8}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	24.0
	2004*	2000	Regular	7 $\frac{1}{4}$	4 $\frac{1}{32}$	1 $\frac{7}{8}$	4 $\frac{1}{8}$	1 $\frac{3}{8}$	1 $\frac{5}{16}$	1 $\frac{5}{8}$	12.5
	2006*	2000	Full	8 $\frac{3}{8}$	4 $\frac{1}{2}$	2 $\frac{3}{16}$	4 $\frac{5}{8}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	24.0
3"	204	285	Regular	9 $\frac{9}{16}$	5	2 $\frac{7}{16}$	4 $\frac{9}{16}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	25.0
	206	285	Full	10 $\frac{7}{8}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	64.0
	1004*	1000	Regular	9 $\frac{9}{16}$	5	2 $\frac{7}{16}$	4 $\frac{9}{16}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	25.0
	1006*	1000	Full	10 $\frac{7}{8}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	64.0
	1504*	1500	Regular	9 $\frac{9}{16}$	5	2 $\frac{7}{16}$	4 $\frac{9}{16}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	25.0
	1506*	1500	Full	10 $\frac{7}{8}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	64.0
	2004*	2000	Regular	9 $\frac{9}{16}$	5	2 $\frac{7}{16}$	4 $\frac{9}{16}$	1	1 $\frac{5}{16}$	2 $\frac{1}{8}$	25.0
	2006*	2000	Full	10 $\frac{7}{8}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	64.0
4"	204	285	Regular	12 $\frac{1}{8}$	6 $\frac{3}{4}$	3 $\frac{3}{8}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	69.0
	1004*	1000	Regular	12 $\frac{1}{8}$	6 $\frac{3}{4}$	3 $\frac{3}{8}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	69.0
	1504*	1500	Regular	12 $\frac{1}{8}$	6 $\frac{3}{4}$	3 $\frac{3}{8}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	69.0
	2004*	2000	Regular	12 $\frac{1}{8}$	6 $\frac{3}{4}$	3 $\frac{3}{8}$	6 $\frac{7}{16}$	1 $\frac{3}{4}$	2 $\frac{3}{16}$	3 $\frac{1}{8}$	69.0

*When ordering specify "SW" for Socket Weld or "BW" for Butt Weld. Specify pipe schedule for "BW" ends.

Texseal D Series

D Series Plug Valves SEAL — No Matter What the Service!

NO SPECIAL WRENCH REQUIRED

Square stem permits valve operation without the use of a special wrench. Wrenches are, however, available from TXT as an option.

BUNA-N O-RING SEALS

(Secondary Metal to Metal)
Viton available as an option

DIRT EXCLUDER RING

STEM PACKING

NUT PACKING

AMPLE CLEARANCE

Prevents any solid buildup from interfering with the free movement of the plug as is often encountered in water, cementing, and drilling mud operations

POSITION INDICATOR

Arrow on stem indicates position of plug port

STEM BEARING

Teflon bearing insures continuing low torque operation

BI-DIRECTIONAL FLOW

Valve seats on downstream seat in either direction.

MOLDED SEATS— RESILIENT SEALS

Specially compounded glass filled epoxy composition with Buna-N (Viton optional)

HIGH STRENGTH RESISTANCE • HIGH WEAR RESISTANCE HIGH IMPACT RESISTANCE

CORROSION RESISTANCE • BUBBLE TIGHT SEALING

The Texseal molded seat is excellent for salt water service. Seat has integral molded and bonded in one place seal rings — front and back. Buna-N insures a positive seal even over sand and rust particles

INTERNAL STOPS

Cast integral with body
— cannot be misaligned

SELF ALIGNING PLUG

Internally balanced and separated from the stem, the plug is in complete alignment at all times and is free to align itself to the downstream seat face in the closed positions. It is self compensating for normal wear. All plugs are electroless nickel-plated for corrosion and wear resistance. 316SS plug and stem are available as an option

NON-LUBRICATED

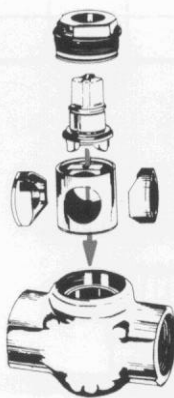
TEXSEAL "D" Series valves are designed to meet the demand for plug valves that do not require the use of any lubricant for operation or sealing. Maintenance costs are reduced to an absolute minimum without sacrificing bubble-tight sealing.

COMPACT DESIGN

Elimination of the lubrication system permits a much lighter, more compact valve — easier to handle. No need to make your installation fit the valve to provide access for lubricating. No special wrench required to operate TEXSEAL valves, and quarter-turn operation assures quick, positive control.

ROUND PORTS

Round ports (regular or full-opening) reduce fluid turbulence and pressure drops. Free floating seats and plugs align easily when subjected to severe weather conditions, vibrations or pipe misalignment.



THE IN-LINE-REPAIRS

The design of TEXSEAL "D" Series valves allows both seats and plugs to be removed without removing the valve body from the line. Should replacement parts be required, repair kits are available for quick, economical in-the-line repairs.

DURABILITY

All parts are wear, shock and corrosion-resistant. The floating plug is self-compensating for normal wear and electroless nickel-plated for corrosion and wear resistance.

WIDE TEMPERATURE RANGE

TEXSEAL "D" Series valves are recommended for -40° to 200°F with Buna-N trim, and for -20° to 400°F with Viton trim.

TYPICAL APPLICATIONS

- Tank Batteries
- Oil, Gas, Water Flow Lines
- Christmas Tree Service
- Gas Systems
- Salt Water Injection and Pressure Maintenance
- Vacuum Applications
- Pneumatic or Electric Actuation
- Wet CO₂ and Water Flood
- Compressor installations
- Handling Drilling Fluids
- Compressed Air-Gas
- Metering Stations
- Complex or inaccessible Manifolds
- Loading Racks
- Underground Gas Storage Systems
- LPG Service

DUCTILE / CARBON STEEL

CARBON STEEL

Sizes: 1" thru 4"
Butt weld, Socket weld &
Unionend: 500-3000 psi WOG
Flanged: 300, 400 &
600 ASA (RF or RTJ)

DUCTILE IRON

Sizes: 1" thru 4"
Working Pressure:
500-3000 psi WOG
Connections:
Screwed or Grooved

DUCTILE IRON SPECIFICATIONS

ASTM A-395
60,000 Tensile (Min.)
40,000 Yield (Min.)
18% Elongation in 2" (Min.)

CHEMICAL REQUIREMENTS
Carbon 3.00% Min P.08 Max
Silicon 2.50% Max NI 0.1-0
Phosphorus 0.08% Max

CARBON STEEL SPECIFICATIONS

ASTM A-216 WCB
70,000 Tensile (Min.)

36,000 Yield (Min.)
22% Elongation in 2" (Min.)

NACE TRIM STANDARD

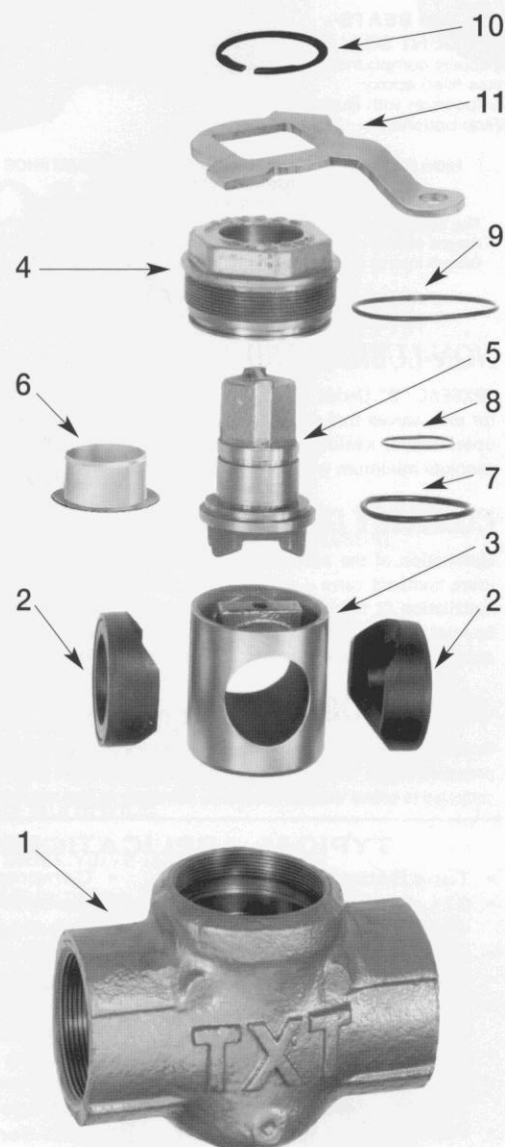
Parts List

Item	No. Req'd.	Name of Part	Material
1	1	Body	ASTM A216 WCB
2	2	Seat	Epoxy/Nitrile (Viton Optional)
3	1	Plug	ASTM A395
4	1	Nut	ASTM A216 WCB
5	1	Stem	ASTM A395
6	1	Stem Bearing	TFE Filled Nylon
7	1	O-Ring	Buna N 70 Durometer (Viton optional)
8	1	O-Ring	Buna N 90 Durometer (Viton optional)
9	1	O-Ring	Buna N 90 Durometer (Viton optional)
10	1	Snap Ring	Carbon Steel
11	1	Locking Plate	Carbon Steel Cad Plated

Wrench Data	
Valve Size	Part Number
1"	GA-1382
1 1/2"	GB-445
2"	GB-445
2" FO	GB-445
2 1/2"	GB-445
2 1/2" FO	GB-879
3" FO	GB-879
3" FO	GB-445
4"	GB-879

Torque (Foot Pounds)

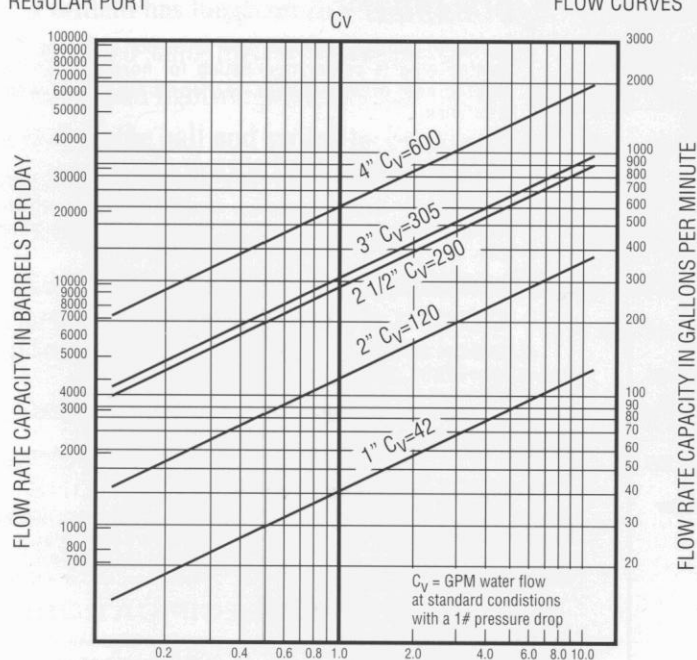
Pressure PSI	1" RO	2" RO	2" FO	2 1/2" RO	2 1/2" FO	3" RO	3" FO	4" RO
0	6	10	12	12	15	12	15	15
200	8	15	27	27	34	27	34	34
500	13	25	36	36	48	36	48	48
1000	18	31	48	48	60	48	60	60
1500	20	37	60	60	90	60	90	90
2000	26	42	65	65	105	65	105	105
2500	28							
3000	34							



C_v Flow Curves For Regular Port

FULL OPENING VALVES EXCEED NOMINAL PIPE SIZE

REGULAR PORT FLOW CURVES



PRESSURE DROP IN POUNDS PER SQUARE INCH