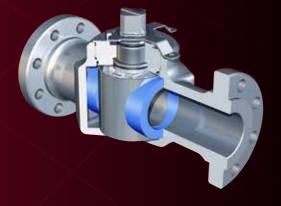


# **TEXSTEAM D Series Plug Valves**

Low-maintenance, bubble-tight sealing for severe service applications

TECHNOLOGY







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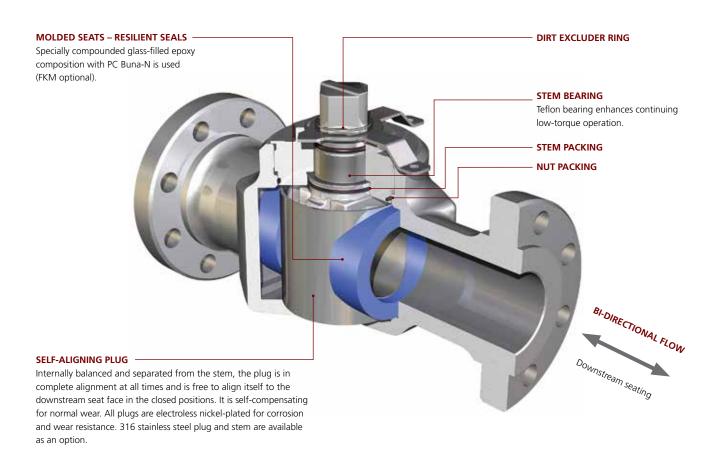
## **TEXSTEAM D Series Plug Valves**

#### FEATURES AND BENEFITS

For severe service conditions –  $H_2S$ ,  $CO_2$  and abrasive applications – Cameron's TEXSTEAM<sup>TM</sup> D Series plug valves are ideal.

- Bubble-tight sealing
- Soft seats resistant to pitting or scratching
- Round ports reduce fluid turbulence and pressure drop
- No lubrication required for operation or sealing, reducing maintenance costs
- Compact and lightweight design as a result of no lubrication system
- Top-entry in-line repair allows seat/plug removal/ replacement without removing the body from the line
- Wide temperature range for severe service conditions

- Ample internal clearance prevents solid buildup from interfering with the free movement of the plug in water, cementing and drilling mud operations
- Position indicator and locking plate for port position indication and tamper resistance
- Quarter-turn operation with cast integral stops ensures quick positive control
- Square stem is robust and requires no special wrench for operation (wrenches are available as an option)
- Repair kits are available for quick and economical repair with reduced downtime
- Durability from wear and shock-resistant components



#### SPECIFICATIONS AND MATERIALS

#### Sizes

- 1" reduced port through 4" reduced port
- 2" and 3" available in reduced port and full port

#### **Pressures**

- Flanged (RF, RJ) are available in ASME Class 150, 300 and 600
- Threaded, butt weld and socket weld are available in 1" valves for 285 psi through 3000 psi and 2" through 4" valves for 285 psi through 2000 psi

#### **Temperature Ranges**

- PC Buna trim for -20° F to 200° F (-29° C to 93° C)
- FKM trim available for -10° F to 400° F (-24° C to 204° C)

## **Body Materials**

- ASTM WCC carbon steel
- 40,000 tensile (min.); 36,000 yield (min.); and 22% elongation in 2" (min.)

#### **Seat Materials**

- Soft, PC Buna-N\* injection-molded seats allow TEXSTEAM D Series valves to be effective (\*FKM optional)
- Resistant to pitting or scratching under tough service conditions

#### Standards

- Meets NACE MR0175
- Built and tested to ASME B16.34





#### **Materials List**

Item	No. Required	Name of Part	
1	1	Body	ASTM A216 WCC Carbon Steel
2	2	Seat	PC Buna-N (FKM Optional)
3	1	Plug	ASTM A395 Nickel-plated
4	1	Stem Nut	ASTM A216 WCB
5	1	Stem	ASTM A395 Ductile Iron
6	1	Stem Bearing	Teflon-filled Nylon
7	1	O-ring	70 Durometer PC Buna-N (FKM Optional)
8	1	O-ring	70 Durometer PC Buna-N (FKM Optional)
9	1	O-ring	70 Durometer PC Buna-N (FKM Optional)
10	1	Snap Ring	Carbon Steel
11	1	Locking Plate	Carbon Steel Cadmium-plated

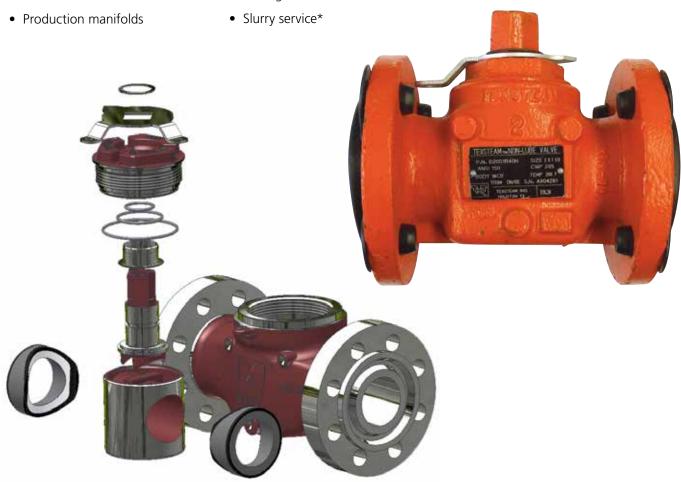


#### **APPLICATIONS**

TEXSTEAM D Series plug valves feature a time-tested design that has provided long service life in tough oilfield conditions worldwide since 1965.

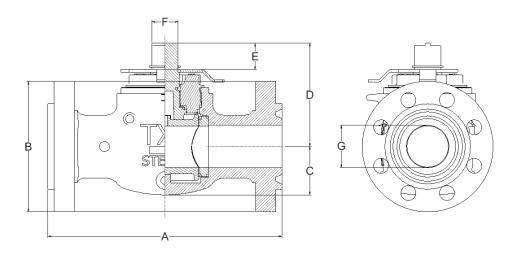
- Tank batteries
- Oil, gas and water flowlines
- Gas systems
- Christmas tree service
- Saltwater injection
- Vacuum
- Pneumatic or electric actuators

- Compressed air-gas
- Metering stations
- Loading racks
- Underground gas storage
- LPG service
- Compressor installations
- Drilling fluids



<sup>\*</sup> Independent laboratory tests results using both water and low-pressure air in a 2% sand slurry mix confirmed bubble-tight sealing after 50 hours of flow testing and 500 operational cycles.

## FLANGED END DIMENSIONS



## Flanged End Dimensions

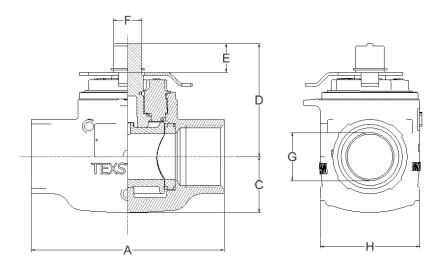
Valve	Model	ASME	Working	Port			——Dime	ension (inc	ches)——			Weight
Size (in.)	n.) Number Clas	Class	Pressure	Opening	Å	В	C	D	Е	F	Ġ (I	(lb)
	6104	150	285 psi	Reduced	5-1/2	4-1/4	2-1/8	3-1/8	1	1-1/8	15/16	9.1
1	6304	300	740 psi	Reduced	6-1/4	4-7/8	2-7/16	3-1/8	1	1-1/8	15/16	12.1
	6604	600	1480 psi	Reduced	8-1/2	4-7/8	2-7/16	3-1/8	1	1-1/8	15/16	12.7
	6104	150	285 psi	Reduced	7	6	3	4-1/8	1-3/8	1-5/16	1-5/8	22.5
	6106	150	285 psi	Full	10-1/2	6	3	4-5/8	1	1-5/16	2-5/8	36.0
2	6304	300	740 psi	Reduced	8-1/2	6-1/2	3-1/4	4-1/8	1-3/8	1-5/16	1-5/8	26.5
2	6306	300	740 psi	Full	11-1/8	6-1/2	3-1/4	4-5/8	1	1-5/16	2-1/8	38.0
	6604	600	1480 psi	Reduced	11-1/2	6-1/2	3-1/4	4-1/8	1-3/8	1-5/16	1-5/8	39.0
	6606	600	1480 psi	Full	11-1/2	6-1/2	3-1/4	4-5/8	1	1-5/16	2-1/8	41.0
	6104	150	285 psi	Reduced	8	7-1/2	3-3/4	4-9/16	1	1-5/16	2-1/8	41.0
	6106	150	285 psi	Full	13-1/2	7-1/2	3-3/4	6-7/16	1-3/4	2-3/16	3-1/8	70.0
3	6304	300	740 psi	Reduced	11-1/8	8-1/4	4-1/8	4-9/16	1	1-5/16	2-1/8	45.0
3	6306	300	740 psi	Full	15-1/4	8-1/4	4-1/8	6-7/16	1-3/4	2-3/16	3-1/8	84.0
	6604	600	1480 psi	Reduced	14	8-1/4	4-1/8	4-9/16	1	1-5/16	2-1/8	67.0
	6606	600	1480 psi	Full	17-1/2	8-1/4	4-1/8	6-7/16	1-3/4	2-3/16	3-1/8	124.0
4	6104	150	285 psi	Reduced	9	9	4-1/2	6-7/16	1-3/4	2-3/16	3-1/8	75.0
	6304	300	740 psi	Reduced	12	10	5	6-7/16	1-3/4	2-3/16	3-1/8	105.0
	6604	600	1480 psi	Reduced	17	10-3/4	5-3/8	6-7/16	1-3/4	2-3/16	3-1/8	131.0

When ordering, specify "RF" for raised face or "RJ" for ring joint flange.

Note: All flange valve lengths given are RF. Add 1/8" to length for RJ ASME Class 600.



## THREADED END DIMENSIONS



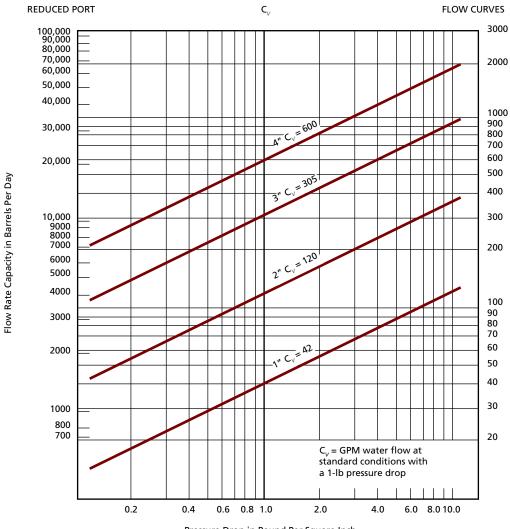
## **Threaded End Dimensions**

Valve	Model	Working	Port			Dim	ension (inc	thes)			Weight
Size (in.)	Number	Pressure	Opening	Α	Н	C	D	Е	F	G	(lb)
	204	285 psi	Reduced	5-1/8	2-3/8	1-3/8	3-1/8	1	1-1/8	15/16	5.5
	1004	1000 psi	Reduced	5-1/8	2-3/8	1-3/8	3-1/8	1	1-1/8	15/16	5.5
1	1504	1500 psi	Reduced	5-1/8	2-3/8	1-3/8	3-1/8	1	1-1/8	15/16	5.5
	2004	2000 psi	Reduced	5-1/8	2-3/8	1-3/8	3-1/8	1	1-1/8	15/16	5.5
	3004*	3000 psi	Reduced	5-1/8	2-3/8	1-3/8	3-1/8	1	1-1/8	15/16	5.5
	204	285 psi	Reduced	7-1/4	4-1/32	1-3/8	4-5/16	1-3/8	1-5/16	1-5/8	12.5
	206	285 psi	Full	8-5/8	4-1/2	2-3/16	4-5/8	1	1-5/16	2-1/8	24.0
	1004*	1000 psi	Reduced	7-1/4	4-1/32	1-7/8	4-5/16	1-3/8	1-5/16	1-5/8	12.5
2	1006*	1000 psi	Full	8-5/8	4-1/2	2-3/16	4-5/8	1	1-5/16	2-1/8	24.0
2	1504*	1500 psi	Reduced	7-1/4	4-1/32	1-7/8	4-5/16	1-3/8	1-5/16	1-5/8	12.5
	1506*	1500 psi	Full	8-5/8	4-1/2	2-3/16	4-5/8	1www	1-5/16	2-1/8	24.0
	2004*	2000 psi	Reduced	7-1/4	4-1/32	1-7/8	4-5/16	1-3/8	1-5/16	1-5/8	12.5
	2006*	2000 psi	Full	8-5/8	4-1/2	2-3/16	4-5/8	1	1-5/16	2-1/8	24.0
	204	285 psi	Reduced	9-9/16	5	2-7/16	4-9/16	1	1-5/16	2-1/8	25.0
	206	285 psi	Full	10-7/8	6-3/4	3-1/4	6-7/16	1-3/4	2-3/16	3-1/8	64.0
	1004	1000 psi	Reduced	9-9/16	5	2-7/16	4-9/16	1	1-5/16	2-1/8	25.0
3	1006*	1000 psi	Full	10-7/8	6-3/4	3-1/4	6-7/16	1-3/4	2-3/16	3-1/8	64.0
3	1504*	1500 psi	Reduced	9-9/16	5	2-7/16	4-9/16	1	1-5/16	2-1/8	25.0
	1506*	1500 psi	Full	10-7/8	6-3/4	3-1/4	6-7/16	1-3/4	2-3/16	3-1/8	64.0
	2004*	2000 psi	Reduced	9-9/16	5	2-7/16	4-9/16	1	1-5/16	2-1/8	25.0
	2006*	2000 psi	Full	10-7/8	6-3/4	3-1/4	6-7/16	1-3/4	2-3/16	3-1/8	64.0
	204	285 psi	Reduced	12-1/8	6-3/4	3-3/8	6-7/16	1-3/4	2-3/16	3-1/8	69.0
4	1004*	1000 psi	Reduced	12-1/8	6-3/4	3-3/8	6-7/16	1-3/4	2-3/16	3-1/8	69.0
4	1504*	1500 psi	Reduced	12-1/8	6-3/4	3-3/8	6-7/16	1-3/4	2-3/16	3-1/8	69.0
	2004*	2000 psi	Reduced	12-1/8	6-3/4	3-3/8	6-7/16	1-3/4	2-3/16	3-1/8	69.0

 $<sup>\</sup>hbox{$^*$ When ordering, specify "SW" for socket weld or "BW" for butt weld. Specify pipe schedule for "BW" ends.}\\$ 

## FLOW COEFFICIENTS - TORQUE AND WRENCH DATA

## Full Opening Valves Exceed Nominal Pipe Size



Pressure Drop in Pound Per Square Inch

## Torque (ft-lb)

Pressure	Inches —								
(psi)	1 RP	2 RP	2 FP	3 RP	3 FP	4 RP			
0	6	10	12	12	15	15			
200	8	15	27	27	34	34			
500	13	25	36	36	48	48			
1000	18	31	48	48	60	60			
1500	20	37	60	60	90	90			
2000	26	42	65	65	105	105			
2500	28	-	-	-	-	-			
3000	34	-	-	=	-	-			

#### Wrench Data

Flow Rate Capacity in Gallons Per Minute

Valve Size (in.)	Part Number
1 RP	9D-GA1382
2 RP	9D-GB 0445
2 FP	9D-GB 0445
3 RP	9D-GB 0445
3 FP	9D-GB 0879
4 RP	9D-GB 0879



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- Field services
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Customized asset management plans that optimize uptime, availability and dedicated services.

- Engineering consultancy
- Site management
- Flange management
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- Spare parts and asset management
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3250 Briarpark Drive, Suite 300 Houston, TX 77042 USA Toll Free 1.800.323.9160

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