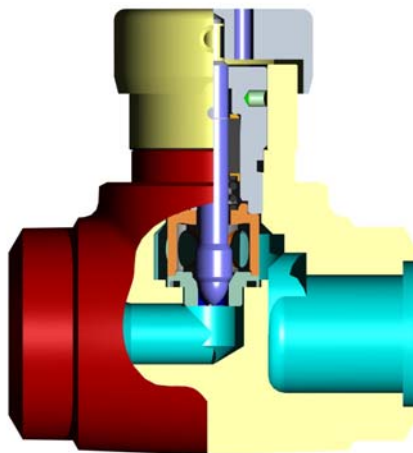


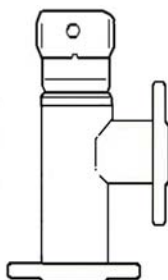


# Flow Control Valve

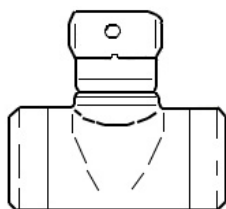


## FEATURES

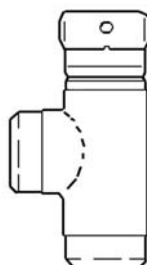
Proportioning Trim	Permits straight line increase in flow
Adjustable Hand wheel	Calibrated in sixty-fourths (1/64")
Available in Wide Range	Bodies and Trim Styles
Standard Pressure Ratings	LP Threaded API 6A 5M, Socket Weld 600lbs thru 900lbs, Butt Weld 600lbs thru API 6A 10M, Flanged 600lbs thru API 6A 10M
Teflon Packing	For positive seal and minimum maintenance
Construction	Affords simple easy inspection or replacement
Secure	In any position to resist vibration
Corrosive Service	316SS, 410SS, Alloy 625, F51, F53, F55 Duplex
Available in angle or through body configuration in 1", 2" or 3" sizes with Flanged, Threaded, Butt Weld, Wireloc® (Grayloc Type) or OECs. Choose ¼", ½", ¾" or 1" ported trim in Stainless Steel, Chrome plated, or Tungsten Carbide. Specify Stainless Steel Handle and Indicator Ring for corrosive atmospheres	



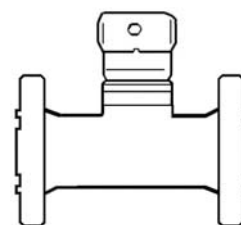
1 Inch Flanged  
90° Angle



2 Inch LP  
Straight Wall



2 Inch LP  
90° Angle



2 Inch Flanged  
Straight Wall



## FCV Specifications

**1" API 6A 5M/10M NPT THREADED IN-LINE & 90° ANGLED**

**1" & 2" API 6A LP THREADED IN-LINE & 90° ANGLED**

**2" ANSI CLASS 600/900/1500/2500LBS FLANGED IN-LINE & 90° ANGLED**

**2" API 6A 10M FLANGED IN-LINE & 90° ANGLED**

**3" ANSI CLASS 600/900/1500/2500LBS FLANGED IN-LINE & 90° ANGLED**

**3" API 10M FLANGED IN-LINE & 90° ANGLED**

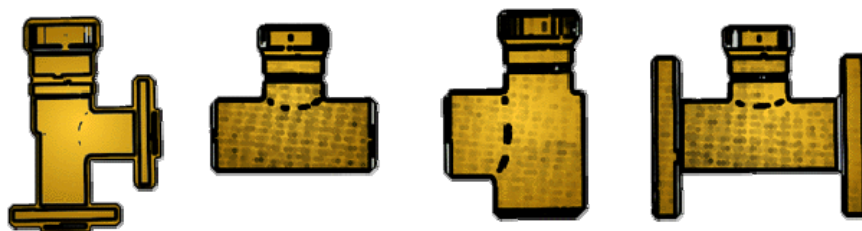
Service	Materials					
	Body	Flange	Packing Gland	Seals	Seats ***	Stem ***
General Oilfield Service	A105, A350 LF2, 4130	A105, A350 LF2, 4130	Brass, 316 SS	Viton O-ring Teflon Packing	316 SS	17-4 PH
Corrosive Service High CO <sub>2</sub> No H <sub>2</sub> S	316L, 410, 625, Duplex	316L, 410, 625, Duplex	410 SS	Peroxide cured O-ring Teflon Packing	316, 410, 17-4, F51	17-4 PH, F51, 718
Water-Flood Service	A105, A350 LF2, 4130**	A105, A350 LF2, 4130	316L SS	Viton O-ring Teflon Packing	316L SS	17-4 PH, F51, 718
Steam Service To 700°F	A105	A105	316 SS	Grafoil Seal & Packing*	316 SS	17-4 PH, 718

\*\* Body can be Internally Plastic Coated for corrosive conditions without inhibitors.

\*\*\* Stem and Seat also available with Tungsten Carbide inserts.

*THESE SPECIFICATIONS ARE FOR LTS GAS LIFT CHOKES*

**LTS GAS LIFT CHOKES COMPLY WITH NACE MR-0175 SPECIFICATIONS**





# Engineering Data

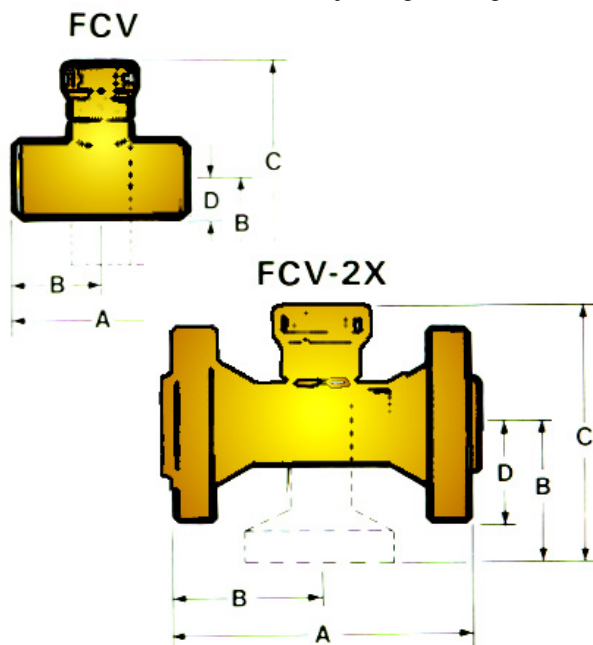
## FCV Gas Lift Choke \*Comparable to TELEDYNE MERLA™

Dimensions for FCV, FCV-2X Valves																				
End Connections	Dimensions (Inches)																Approximate Weight in Lbs.			
	A				B				C				D							
Type --> Size	1	2	2x	3	1	2	2x	3	1	2	2x	3	1	2	2x	3	1	2	2x	3
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	8.65			1.06	1.72			10	20		
Socket Weld	5.00	6.75			2.56	3.37			7.51	8.65			1.06	1.72			10	20		
Series 150 RF	10.00	9.00	9.00			4.50	4.50			9.78	9.78			3.00	3.00			32	32	
Series 300 RF	10.00	10.00	10.00	11.50	5.00	5.00				10.28	10.28			3.25	3.25			32	32	
Series 600 RF	10.00	11.50	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	10.00	11.62	11.62	11.62	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	14.50	15.00	5.00	7.25	7.25		9.95	12.53	12.53		2.94	4.25	4.25		30	70	70	
Series 1500 RJ	10.00	14.62	14.62	15.12	5.00	7.31	7.31		9.95	12.59	12.59		2.94	4.25	4.25	5.25	30	70	70	
Series 900 RF	10.00	14.50	14.50	15.00	5.00	7.25	7.25	7.50	9.95	12.53	11.25	12.78	2.94	4.25	4.25	5.25	30	70		
Series 900 RJ	10.00	14.62	14.62	15.12	5.00	7.31	7.31	7.56	9.95	12.59	11.21	12.84	2.94	4.25	4.25	5.25	30	70	70	
API 3000		14.62	14.62	15.00		7.31	7.31	8.50		12.59	12.59	13.50		4.25	4.25	5.25		80	80	##
API 5000		14.62	14.62	15.12		7.31	7.31	8.50		12.59	12.59	13.50		4.25	4.25	5.25		80	80	##

Chokes assemblies and parts are manufactured by LTS, LLC.

LTS Gas lift Chokes comply with NACE MR-0175 Specifications

\*MERLA™ is a trademark of Tejas Engineering, Inc.



### Capacity and Sizing Data for FCV, FCVT, FCV-2X, FCV-M, Values

Gas at 14.7 psig and 60°F

Maximum  
Cv Factor  
For  
Indicated  
Trim Size

1/4 in. = 1.4  
1/2 in. = 4.5  
3/4 in. = 7.7  
1 in. = 9.1

$$Q = 1780 \text{ Cv} \sqrt{\frac{(P_1 - P_2) P_2}{GT}}$$

Q = SCF/Hr. 14.7 - 60°F

P<sub>1</sub> = Upstream Press., psig

P<sub>2</sub> = Downstream Press., psig

G = Specific Gravity (Air = 1)

T = Absolute Temp (460 + °F)

Sub Critical Flow P<sub>2</sub> = 1/2 P<sub>1</sub>



# Engineering Data

## FCV Gas Lift Choke \*Comparable to TELEDYNE MERLA™

FCV-5 Available with 3/4, 1, or 1 - 1/4 inch trim.										
Body Style	Maximum Working Pressure (psi)	2 Inch			2 - 1/2 Inch			3 Inch		
	Inches 2 2 - 1/2 - 6	Inches A & B	Inches C	Approx. Wt. in Lbs	Inches A & B	Inches C	Approx. Wt. in Lbs	Inches A & B	Inches C	Approx. Wt. in Lbs
Threaded	5000 3000	5.00	13.44	35	5.00	13.44	40	5.00	13.44	45
Socket Weld	3600	5.00	13.44	35	5.00	13.44	40	5.00	13.44	45
Butt Weld 160	6000	4.50	12.94	35	5.00	13.44	40	5.00	13.44	45
Butt Weld XXH	10000	4.50	12.94	35	5.00	13.44	40	5.00	13.44	45
600-lb RF	1480	5.75	14.19	55	6.50	14.94	60	7.00	15.44	65
600-lb RJ	1480	5.81	14.25	55	6.56	15.00	60	7.06	15.50	65
900-lb RF	2220	7.25	15.68	83	8.25	16.68	88	7.50	15.74	93
900-lb RJ	2220	7.31	15.75	83	8.31	16.75	88	7.56	16.00	93
1500-lb RF	3705	7.25	15.68	83	8.25	16.68	88	9.25	17.68	93
1500-lb RJ	3705	7.31	15.75	83	8.31	16.75	88	9.31	17.75	93
2500-lb RF	5000	8.87	17.31	119	10.00	18.44	144	11.38	19.44	233
2500-lb RJ	5000	8.94	17.38	119	10.13	18.56	144	11.50	19.56	233
2000-lb API	2000	5.81	14.25	55	6.56	15.00	60	7.06	15.50	65
3000-lb API	3000	7.31	15.75	83	8.31	16.75	88	7.56	16.00	93
5000-lb API	5000	7.31	15.75	83	8.31	16.75	88	9.31	17.75	93
10000-lb API	10000	6.92	15.36	119	7.83	16.27	144	8.86	17.30	233

FCV-5

