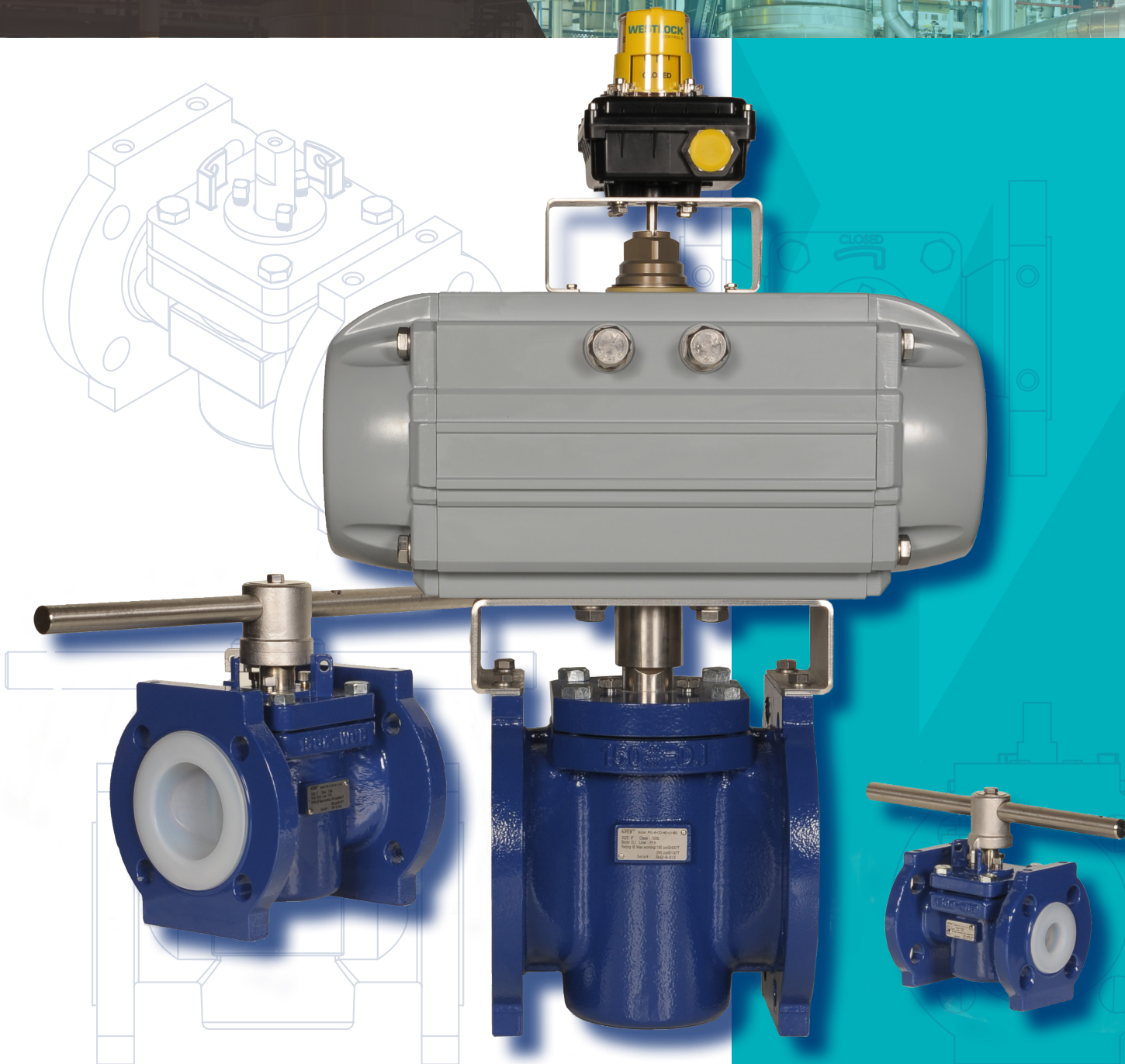


**ADREM™**

*High Performance, Fully Lined*  
**Plug Valves**

**PVL  
Series**



## CHLORINE GAS / HCL

Our high performance lined plug valves are ideally suited for stringent performance requirements demanded with wet/dry wet chlorine gas and aqueous hydrochloric acid applications. Produced from premium virgin grade resins, our thick fluoropolymer linings features superior resistance to the effects of chemical attack, permeation, absorption, swelling and cold flow thus providing industry with convincing performance in handling these highly regulated commodities. The liner integrity of each valve is tested with 10,000 volts to ensure there are no defects. Valves for dry chlorine gas service are thoroughly cleaned and packaged according to our factory procedures and conform to the Chlorine Institute Pamphlet #6 specifications.

### HIGH INTEGRITY STEM SEAL

Our valves are designed to offer long-term maintenance-free security against the harmful affects of fugitive emissions. Our industry validated, innovative stem sealing system has revolutionized the performance benchmark for lined plug valves and has established a new standard for safety, reliability and environmental security.

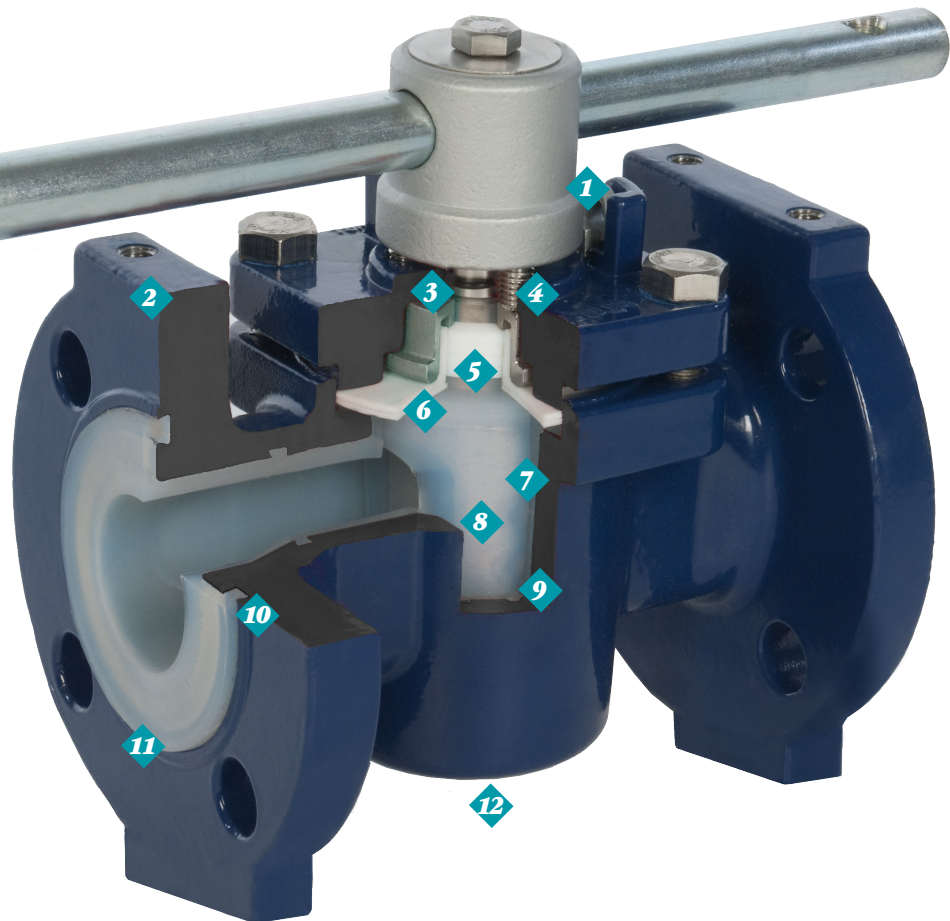
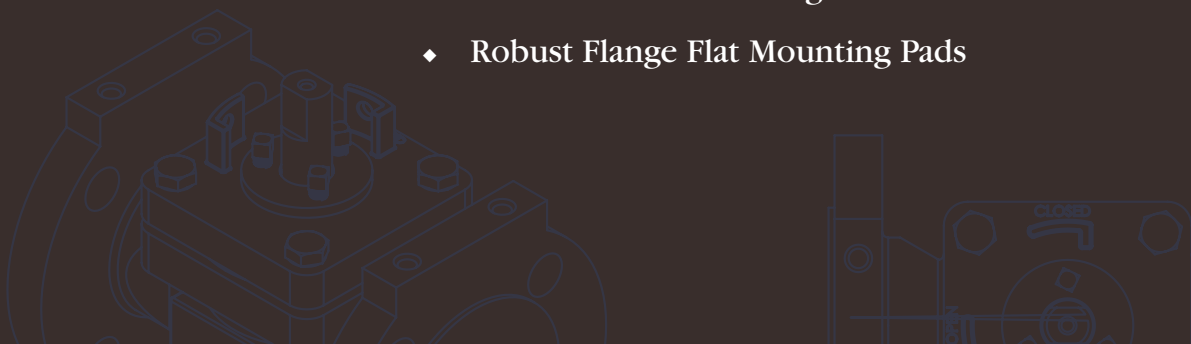
### HAZARDOUS SERVICE APPLICATIONS

- ◆ Acetic Acid
- ◆ Alcohols
- ◆ Brine
- ◆ Bromine
- ◆ Caustic
- ◆ Chlorine Gas
- ◆ Chlorine Condensate
- ◆ Chlorinated Brine
- ◆ Chlorine Dioxide
- ◆ Chlorinated Organics
- ◆ Chlorinated Solvents
- ◆ Chlorosulfonic Acid
- ◆ Deionized Water
- ◆ Ethylene Dichloride
- ◆ Ferric Chloride
- ◆ Hydrobromic Acid
- ◆ Hydrochloric Acid
- ◆ Hydrofluoric Acid
- ◆ Hydrogen Peroxide
- ◆ Nitric Acid
- ◆ Oleum
- ◆ Phosgene Gas
- ◆ Phosphoric Acid
- ◆ Sodium Hypochlorite
- ◆ Sulfuric Acid
- ◆ Spent Acid
- ◆ Triethanolamine
- ◆ Vinyl Chloride Monomer

### ADREM PVL SERIES

		Optional
Body	A-395 Ductile Iron	A-216 WCB & A-351 CF8M
Lining	PFA	PVDF
Temperature	-40°F to 400°F (PFA)	0°F to 275°F (PVDF)
Pressure Rating	250 PSIG (A-395 DI) 285 PSIG (A-216 WCB/A-351 CF8M)	
Size	1/2" - 8"	
Application	Reliable Isolation & Control of Extremely Hazardous Liquids and Gases	
Conforming Standards	ASME B16.5, ASME B16.10, ASME B16.34, API 598	
Stem Sealing	Secondary PTFE Chevron Packing	
Process Sealing	Bi-directional, Gas Tested, Bubble Tight per API 598/EN 12266-1-P12 Rate A	
External Coating	3 Component Epoxy Paint (WCC & LCC)	
Control Characteristics	Equal Percentage	
Connection Type	ASME 150# Flanged	
Flow Direction	Bidirectional	

- ◆ Innovative Secondary Stem Sealing System
- ◆ Mechanically Locked Valve Linings to Body & Plug
- ◆ Stainless Steel Lockable Lever Handles
- ◆ Cavity Free
- ◆ Full Vacuum Rated
- ◆ Bidirectional Zero Leakage
- ◆ In line Plug Adjustment
- ◆ Double-D Stem Profile
- ◆ Maintenance Free Design
- ◆ Robust Flange Flat Mounting Pads



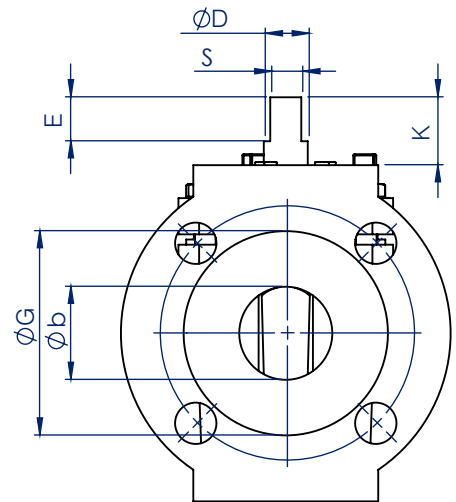
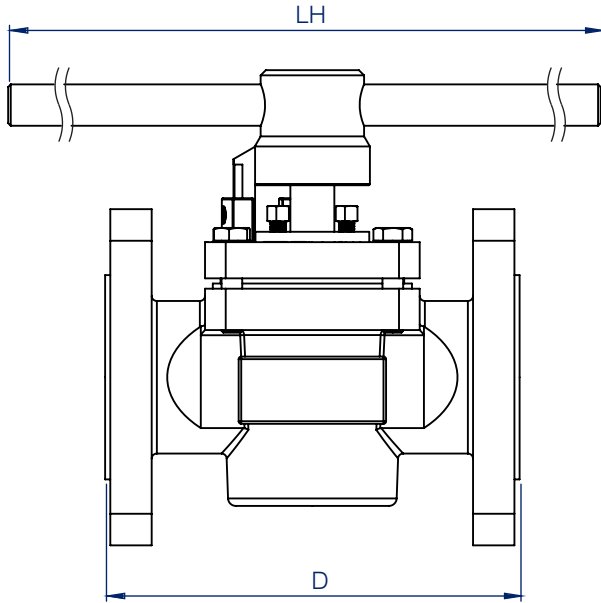
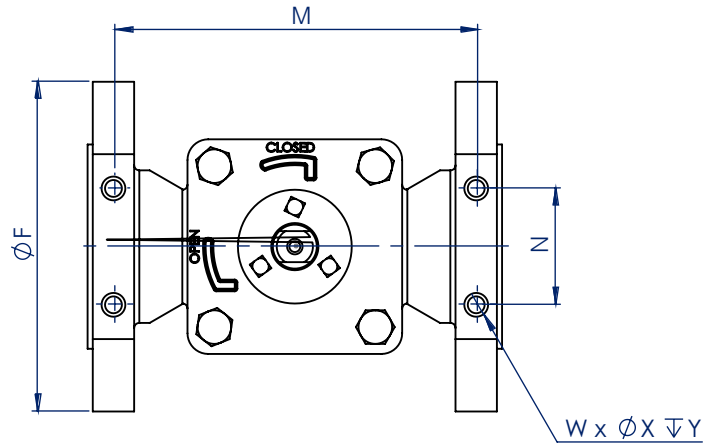
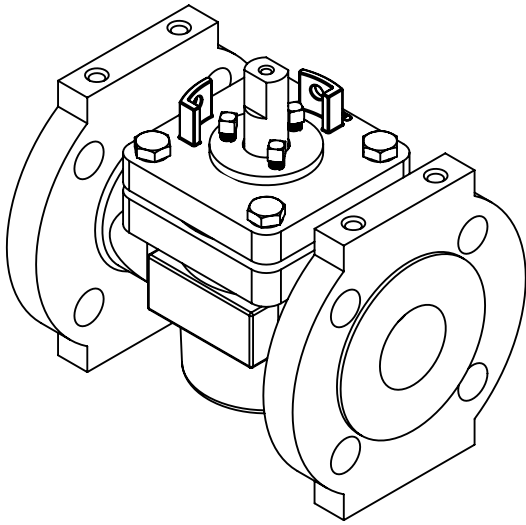
- ◆ 1 Lockable Dual Position Handle Hub
- ◆ 2 Integral Actuator Mounting Flange Flats
- ◆ 3 Static Atmospheric Seal
- ◆ 4 Gland Adjustment Bolts
- ◆ 5 Secondary/Safety PTFE Packing
- ◆ 6 Diaphragm Seal
- ◆ 7 Primary Seal
- ◆ 8 1 Piece PFA Encapsulated Plug/Stem
- ◆ 9 Cavity Free
- ◆ 10 Securely Anchored & Locked Linings
- ◆ 11 Chambered Raised Face
- ◆ 12 Vent Hole

# ASSEMBLY MODEL



			Optional
Body	1	PFA Lined ASTM A-395 DI/A-216 WCB	PFA Lined ASTM A-351 CF8M
Plug	2	PFA Lined ASTM A-351 CD4MCu	
Diaphragm Seat	3	Virgin PTFE	
Stem Seal - Packing	4	Virgin PTFE	
Diaphragm Seal	5	Virgin PTFE	
Pusher	6	ASTM A-351 CF8M	
Bonnet	7	ASTM A-395 DI/A-216 WCB	ASTM A-351 CF8M
Square Head Bolts	8	316SS	Alloy 20
Lockable Stem Hub	9	ASTM A-351 CF8M	
Handle	10	304SS	
Hub Bolts	11	304SS	
Bonnet Bolts	12	Zinc Plated ASTM A-193 B7	Alloy 20
O-ring	13	Viton	
Name Tag	14	304SS	

# DIMENSIONS



SIZE	D	ØG	ØF	Øb	ØD	S	E	K	M	Z	W	X	Y	LH
1/2"	4.25	1.37	3.50	0.51	0.47	0.35	0.47	0.55	3.56	N/A	2	5/16"-18	0.47	9.75
3/4"	4.61	1.69	3.90	0.71	0.47	0.35	0.47	0.55	3.92	N/A	2	5/16"-18	0.47	9.75
1"	5.00	2.00	4.25	1.00	0.59	0.43	0.59	0.89	4.19	1.75	4	5/16"-18	0.47	9.75
1-1/2"	6.50	2.87	5.00	1.49	0.67	0.51	0.67	1.06	5.63	1.75	4	5/16"-18	0.47	12.25
2"	7.00	3.62	5.98	1.96	1.02	0.78	1.02	1.30	6.19	2.25	4	5/16"-18	0.47	17.75
3"	8.00	5.00	7.48	3.00	1.14	0.87	1.14	1.54	7.13	3.50	4	3/8"-16	0.63	23
4"	9.00	6.19	9.02	3.93	1.26	0.95	1.26	1.63	8.00	4.00	4	7/16"-14	0.63	23
6"	10.50	8.50	10.98	6.00	1.70	1.34	1.69	2.52	9.45	4.00	4	7/16"-14	0.63	29
8"	11.50	10.62	13.50	7.87	1.97	1.50	1.97	2.95	10.25	7.69	4	1/2"-13	0.63	MG

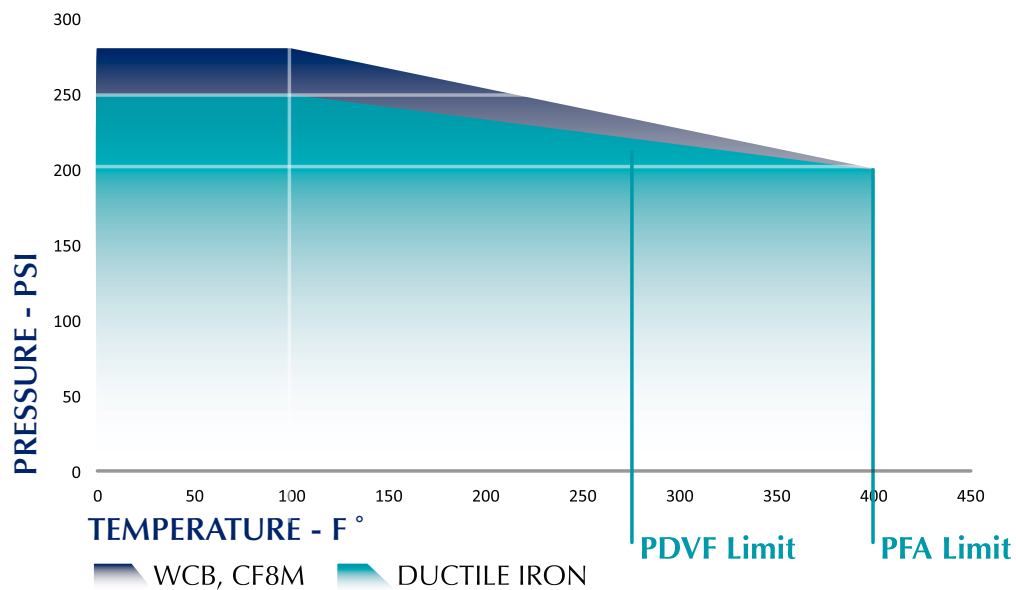
## TORQUE / C<sub>v</sub>

SIZE	OPERATING	MAX ALLOWABLE	C <sub>v</sub>
1/2"	318	487	10
3/4"	336	487	12
1"	504	850	40
1-1/2"	864	1,328	86
2"	1,872	4,487	180
3"	2,232	7,567	291
4"	4,118	10,630	542
6"	11,520	24,534	1,076
8"	18,000	44,139	1,611

Inches / Pounds

Operating Torque Includes 20% Safety Factor

## PRESSURE - TEMPERATURE



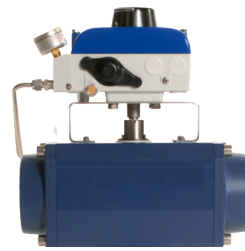
# CONTROL VALVE ACCESSORIES



*Actuator/ Position Indicator  
with Beacon Indicator*



*Instrument  
Enclosure*



*Actuator/  
Pneumatic Positioner*



*Electro-Pneumatic  
Positioner with Gauges*



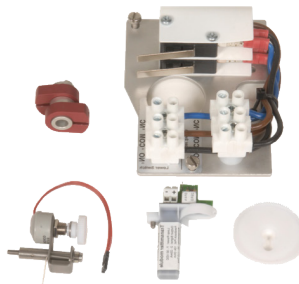
*Pneumatic  
Positioner*



*Digital Positioner  
with Gauges*



*Position Indicator with  
Beacon Indicator*



*Feedback  
Module*



*Pressure Regulator  
with Gauge*

# ORDERING INFORMATION

Ordering example: **PVL-3-C0-M3-L1-DA-PS-C1**

## 1-Valve

PVL

## 2-Size

1/2" - 8"

## 3-Class

CO - 150# Flanged

## 4-Body Material

M1 - A216 WCB

M2 - A395 DI

M3 - A351 CF8M

## 5-Liner

L1 - PFA (*standard*)

L2 - PVDF

## 6-Operators

SB - Bare Shaft

HL - Hand Lever

MG - Manual Gear

DA - DA Actuator

FC - FC Actuator

FO - FO Actuator

## 7-Accessories (optional)

PS - Proximity Switch

PD - Digital Positioner

PP - Pneumatic Positioner

EP - Electro Pneumatic Positioner

PR - Pressure Regulator

SV - Solenoid Valve

## 8-Cleaning (optional)

C1 - Chlorine

C2 - UPW

C3 - Oxygen

## Notes:

# ADREM™

Severe Service Specialists Inc.

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205-655-1163 [ssvalve.com](http://ssvalve.com)

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