

Honeywell MODUTROL IV™ MOTOR

1885 Douglas Drive, Golden Valley, MN 55422

VOLTS 24 HZ 50/60 AMP 15

US Patent 6954044, 6970096, 7021072, 7102027 and etc.

CE N8314

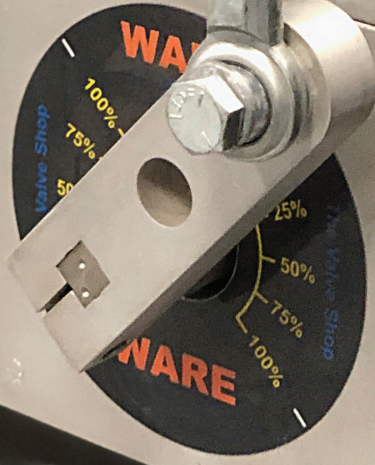
MS184D1021

# Mod-V

## MODULATING FEEDWATER VALVE

### WARE Mod-V

- In Stock
- Class 6 Shut Off
- Non Slip Linkage
- Excellent Flow Control
- Reduce Thermal Shock
- Efficient Boiler Operation



# WARE Mod-V MODULATING VALVES

- The WARE Mod-V and Mod-F assemblies are designed for Boiler and Deaerator applications. Stock valves are offered in sizes of 1/2" through 2" in NPT connections.

- Flanged connections can be supplied upon request.

- The Mod-V is a characterized Carbon steel ball valve with Teflon seat and 316SS ball with 60 deg V port. (See chart for temperature and pressure ratings on page 6.)

- The electric actuator is typically a Honeywell Modutrol Motor for electric applications that require a 0-135 ohm or 4-20mA control signal. These can be provided with end switches for valve proving as well as transformers so that they can be wired as 24v or 120v upon request.

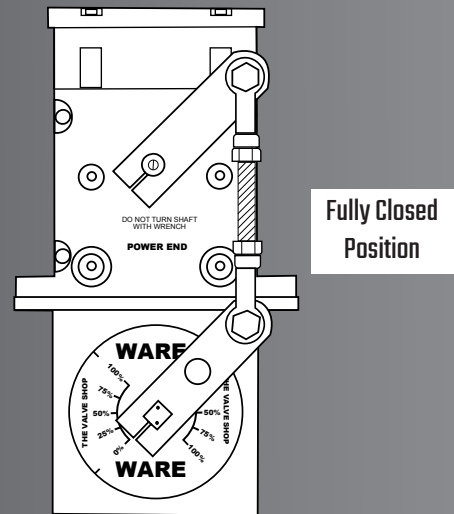
- In applications that require a 4-20ma electro-pneumatic actuator, we use a Jamesbury QP2 Quadrapower actuator with Neles NP700 positioners (3-15 psig air supply to positioner).

Note: The Mod-V are directional valves and are set up as standard to flow from right to left. The valve bodies can be field swapped to flow the opposite direction or can be done before shipping upon request.

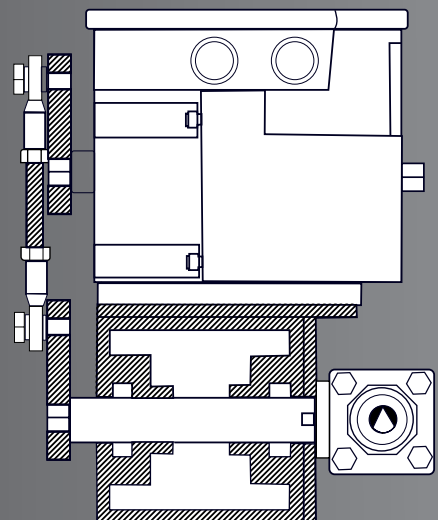
- The Mod-F valves are full port valves that use the same actuators as the Mod-V. The Mod-F is typically used on boiler deaerator make-up applications where full port valves flow more and open and close times of the actuators are not super critical.

## MAINTENANCE NOTES:

Each valve assembly comes with a pillow block bearing with grease fitting that must be greased regularly. It is also recommended to have a strainer upstream of each valve to prevent contaminants from entering the valve body. Rust and debris can damage the seats and ball of the valves and cause pre-mature leaking.



Fully Closed Position



Fully Open Position

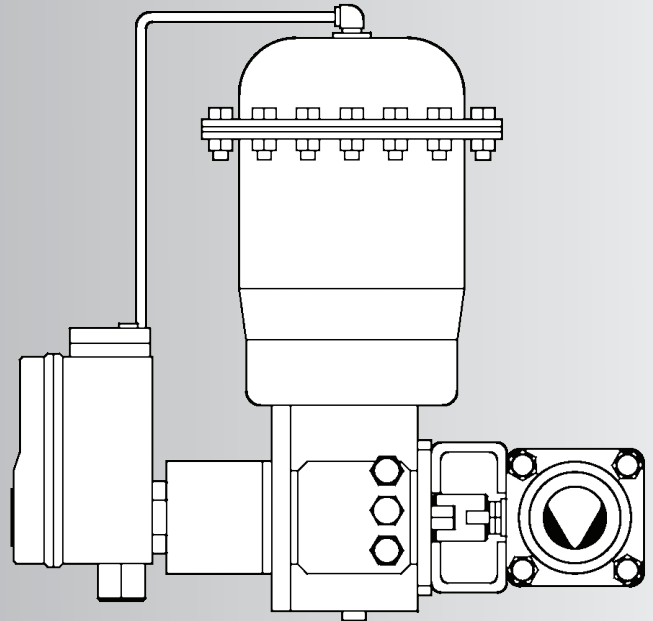
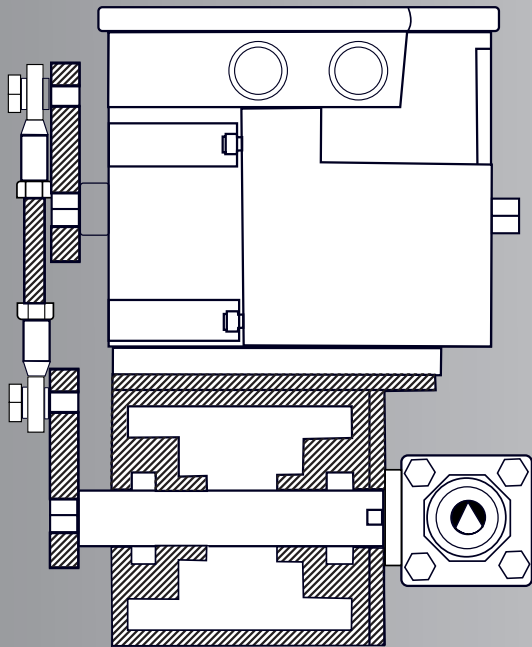
# Build Your Part

## WARE Mod-

F - denotes full port  
or  
V60 - denotes 60 deg. V Ball

Blank - Electric Actuator,  
0-135 Ohm Control Signal  
or  
A - Electric Actuator,  
4-20 mA Control Signal  
or  
QPX2A - Electropneumatic  
Actuator, 4-20 mA Control  
Signal, 3-15 psig Air Supply  
Requirement.

**Denotes size 1/2", 3/4", 1", 1 1/2" or 2" NPT connections  
150# and 300# flanged can be supplied upon request**



# TIGHT SHUT OFF

# FAST RESPONDING INDUSTRIAL DURABLE

## WARE

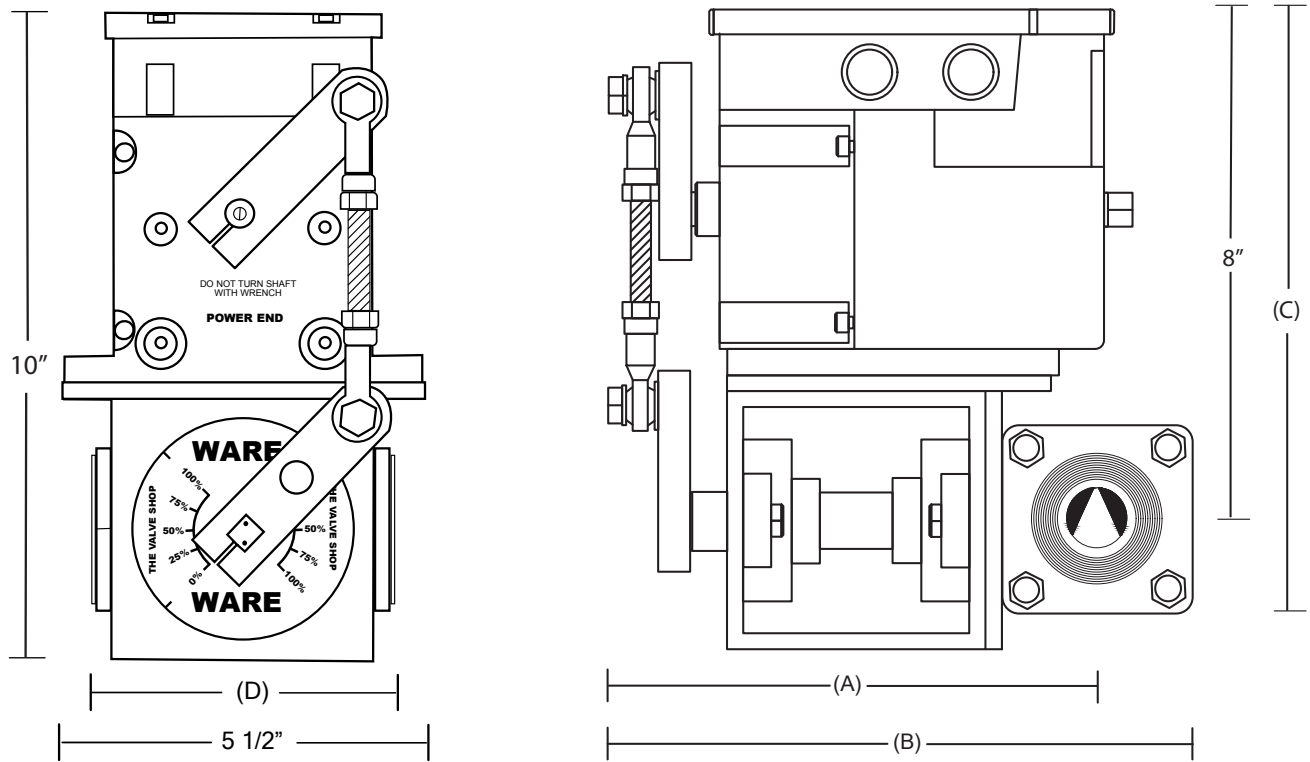
### 60 Degree V Cv Table

CPT Cv Values		Percent of Travel										
Valve Size	Port Angle	0	10	20	30	40	50	60	70	80	90	100
1/2"	60	0	0	.12	.33	.60	.84	1.40	2.00	3.10	4.40	5.90
3/4"	60	0	0	.13	.36	.55	1.0	1.50	2.30	3.60	5.00	6.70
1"	60	0	0	0.30	0.78	1.2	2.3	3.60	5.30	8.30	11.60	15.50
1¼"	60	0	0	.48	1.30	2.0	3.70	5.80	8.50	13.40	18.70	25.00
1½"	60	0	0	.57	1.70	3.00	5.60	9.10	13.20	19.80	28.40	37.50
2"	60	0	0	.70	2.60	4.90	9.30	15.50	22.20	32.10	47.20	61.60

### Full Port Cv Table

Size	Cv	Size	Cv
1/4"	8	1"	48
1/2"	15	1¼"	85
3/4"	34	1½"	125
1"	48	2"	275





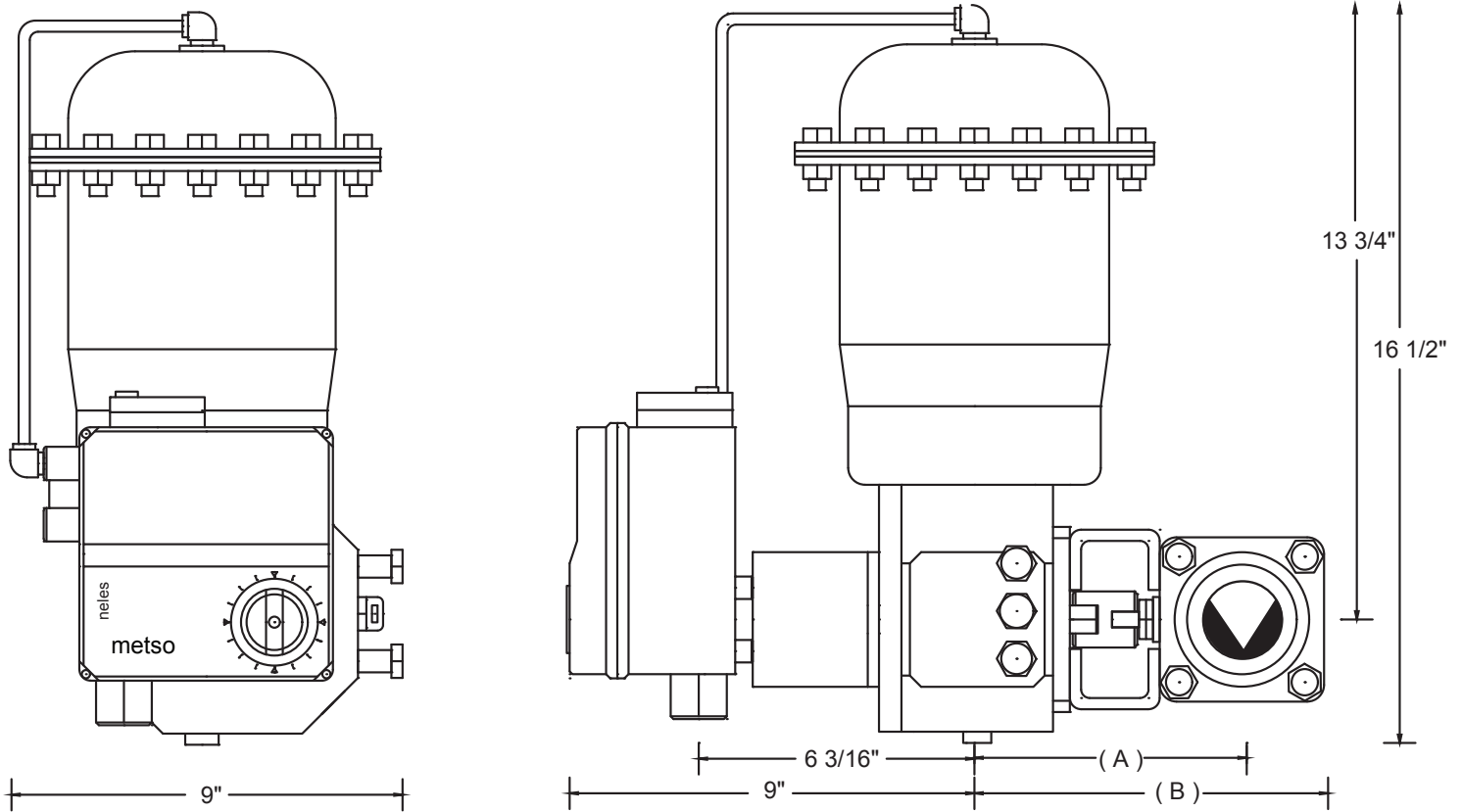
Modulating valve with Honeywell Modulating motor, 0-135 or 4-20mA control signal, 24v or 120v options

## Marwin 3000R Series Ball Valve

Valve size	(A)	(B)	(C)	(D)	WT (LBS)
1/2"	7 5/16"	8 5/16"	8 15/16"	3"	13.0
3/4"	7 5/16"	8 3/8"	9"	3 3/16"	13.5
1"	7 5/8"	8 15/16"	9 1/4"	3 7/8"	15.0
1 1/4"	7 9/16"	9"	9 3/8"	4 3/8"	17.0
1 1/2"	7 13/16"	9 1/2"	9 5/8"	4 3/4"	20.0
2"	7 15/16"	9 3/4"	9 3/4"	5 1/2"	24.0
2 1/2"	8 1/2"	11 1/8"	10 9/16"	5 5/8"	32.0

## Marwin 3000F Series Ball Valve

Valve size	(A)	(B)	(C)	WT (LBS)
1/4"	7 5/16"	8 5/16"	8 15/16"	13.5
3/8"	7 5/16"	8 5/16"	8 15/16"	13.0
1/2"	7 5/16"	8 3/8"	9"	13.5
3/4"	7 5/8"	8 15/16"	9 1/4"	15.0
1"	7 9/16"	9"	9 3/8"	17.0
1 1/4"	7 13/16"	9 1/2"	9 5/8"	20.0
1 1/2"	7 15/16"	9 3/4"	9 3/4"	24.0
2"	8 1/2"	11 1/8"	10 9/16"	32.0



Modulating valve with Quadrapower Electro-Pneumatic actuator 4-20mA signal, 3-25 psi air supply requirement.

### Marwin 300R Series

Valve Size	(A)	(B)	WT (LBS)
1"	5 11/16"	7"	61.0
1 1/4"	5 9/16"	7 1/16"	64.0
1 1/2"	7 1/2"	5 13/16"	66.0
2"	6"	7 13/16"	70.0
2 1/2"	6 7/16"	9 1/16"	76.5

### Marwin 300F Series

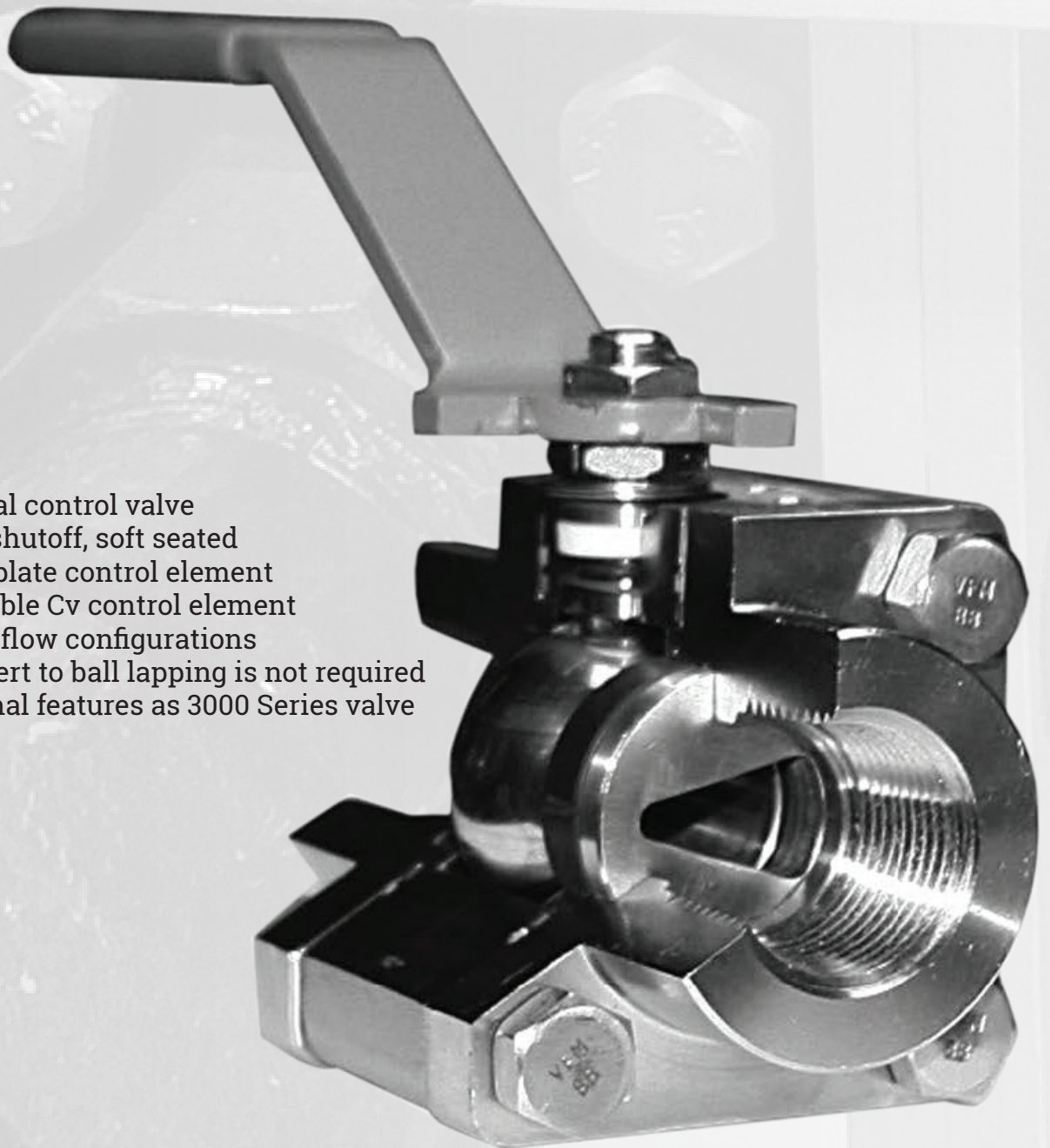
Valve Size	(A)	(B)	WT (LBS)
1"	5 9/16"	7 1/16"	64.0
1 1/4"	7 1/2"	5 13/16"	66.0
1 1/2"	6"	7 13/16"	70.0
2"	6 7/16"	9 1/16"	76.5

### Worcester CPT 44 Series

Valve Size	(A)	(B)	WT (LBS)
1 1/2"	5 13/16"	7 7/16"	62.5
2"	6 1/16"	7 7/8"	67.0

## FEATURES

- Uni-directional control valve
- Zero leakage shutoff, soft seated
- Upstream Cv plate control element
- Field replaceable Cv control element
- Customizable flow configurations
- Seat or Cv insert to ball lapping is not required
- Same additional features as 3000 Series valve

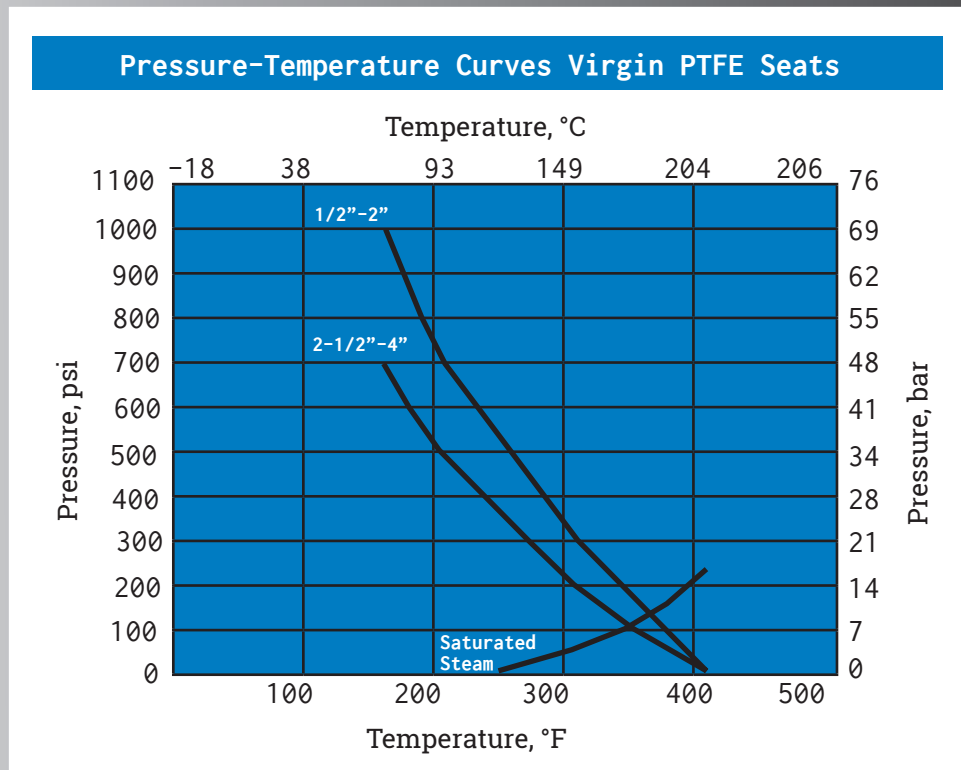




# MATERIALS OF CONSTRUCTION

PARTS	CARBON STEEL	STAINLESS STEEL
Body	WCB	CF8M
End Cap	WCB	CF8M
Seat	CRPTFE	CRPTFE
Ball	316 SS	316 SS
Stem	S31600	S31600
Seal, Body	CRPTFE	CRPTFE
Secondary Seal, Body	Non-Asbestos	Non-Asbestos
Lock Washer	SS	SS
Anti-Static Spring	316 SS	316SS
Bolt, Body	A193 B8 CI 1	A193 B7
Thrust Washer	CRPTFE	CRPTFE
Packing	PTFE	PTFE
Gland Bushing	316 SS	316 SS
Belleville Washer	17-7PH SS	17-7PH SS
Nut, Stem	316 SS	316 SS
O-Ring, Stem	Viton	Viton
Characterized Insert	S31600	S31600
Index Pin	S31600	S31600

## CV3000R SERIES



# WARE

# Mod-V

THE NEXT LEVEL OF FEEDWATER FLOW CONTROL



800-228-8861

502-968-8861

[www.wareinc.com](http://www.wareinc.com)

WARE Mod-V can be purchased at [BoilerWAREhouse.com](http://BoilerWAREhouse.com)