

Series - 100

DIAPHRAGM VALVES

For Sludge and Wastewater



TRU-TECH VALVE



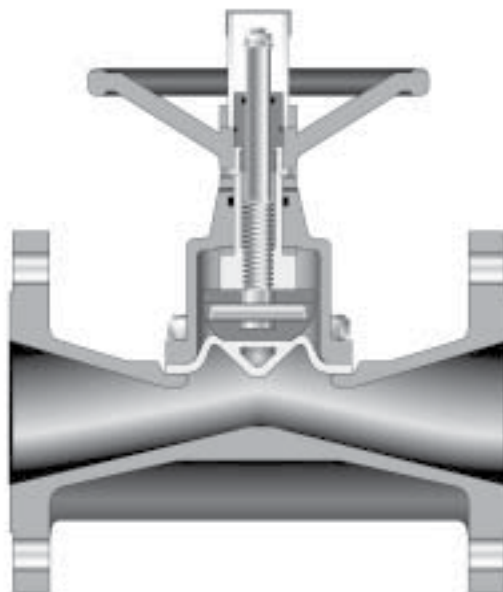
SMOOTH EASY OPERATION - EVEN AFTER YEARS OF INACTIVITY

Unobstructed flow path

Bubble tight shut off; even with abrasives, slurries, and gasses

Designed to handle abrasives and slurries

Rubber and teflon lining available for extreme abrasive or corrosive applications



No packing gland or stuffing box

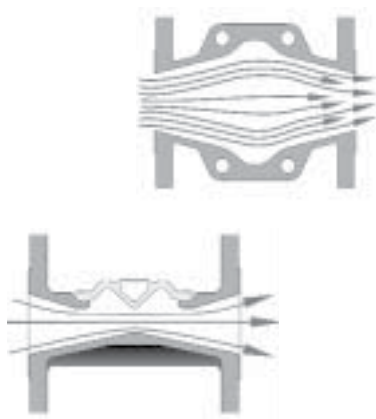
All mechanical parts are isolated from the process fluid

Diaphragm replaceable without removing valve from line

Standard polyester/TGIC interior and exterior coating

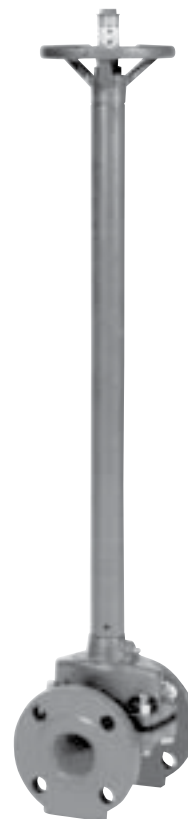
Why Do TTV Diaphragm Valves Last Longer?

The TTV valve reduces diaphragm flex by contracting the vertical height of the flow area and by expanding the width. The resultant body shape provides the laminar flow characteristics of a venturi and less turbulence to the flow media. As a result, the diaphragm life is increased which enables it to last longer.



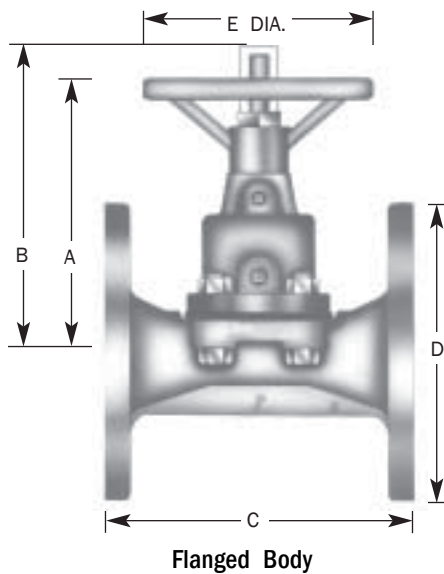
HIGH FLOW CAPACITY Compare CV's

Valve Size	TTV #100 Diaphragm Valve	Brand "D" Eccentric Plug Valve
2-1/2	265	236
3	41	330
4	718	560
6	1690	1180



SERIES 100 GENERAL DIMENSIONS

TRU-TECH VALVE
SIMPLIFY YOUR WORLD.



Standard TTV Face to Face Diaphragm Valve (C-Dimension) is interchangeable with most brands of eccentric "Plug Valves" and "Gate Valves."

VALVE SIZE	GENERAL DIMENSIONS					PRESSURE RATING (PSI)	WEIGHT LBS.
	A	B	C	D	E		
2"	7-1/4	9	7	6	5	175	25#
2-1/2"	7-1/4	9	7-1/2	7	5	175	32#
3"	8-3/8	10-1/2	8	7-1/2	9	150	45#
4"	13	15	9	9	12	150	70#
6"	17-7/8	22	10-1/2	11	14	125	145#
8"	17-7/8	22	11-1/2	13-1/2	14	125	165#



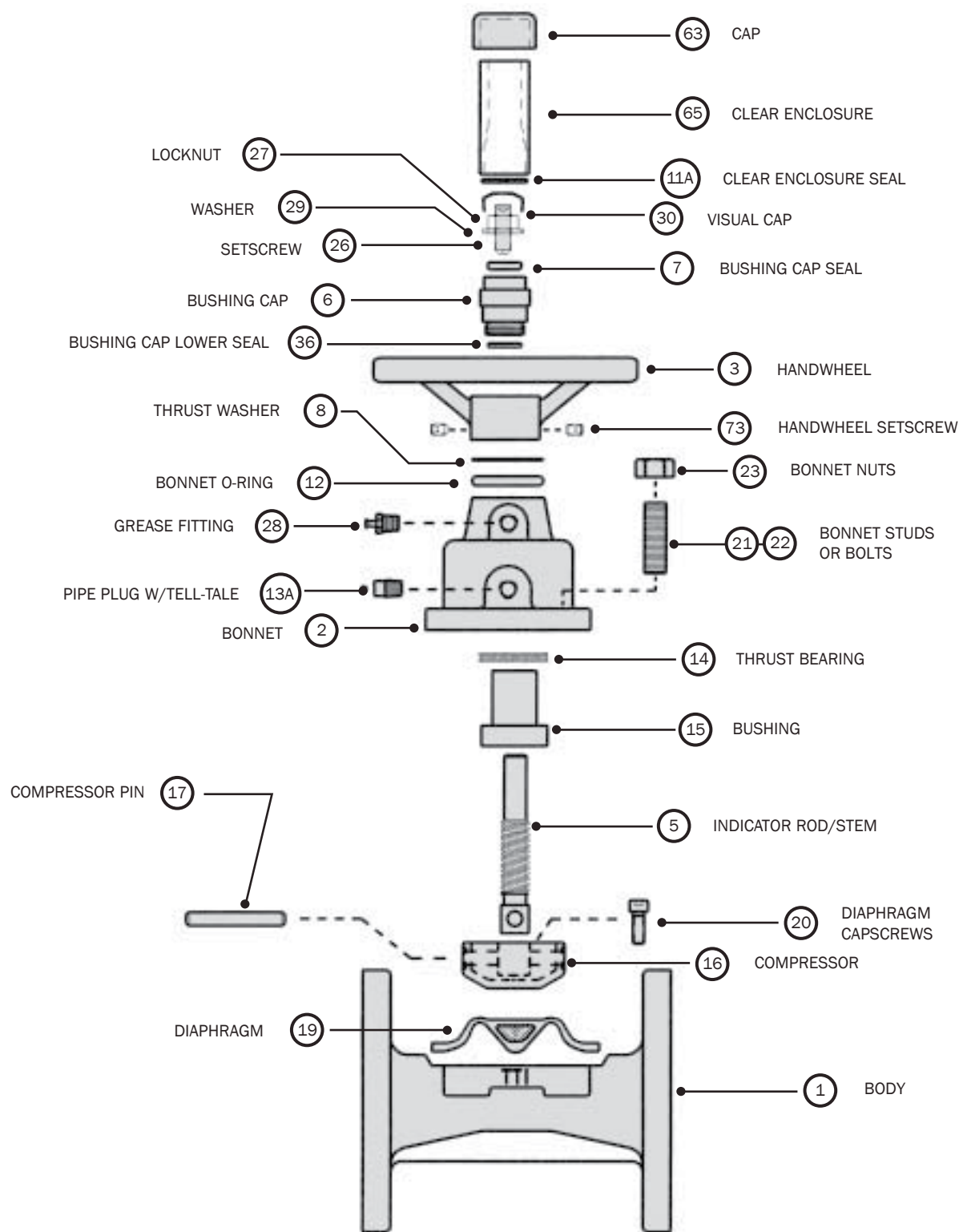
Square Nut Operator



Chain Wheel Operator



Lock-Out Device



SERIES 100 MATERIAL CALLOUT

TRU-TECH VALVE
SIMPLIFY YOUR WORLD.

PARTS LIST

NO.	DESCRIPTION	STANDARD MATERIAL
01	Body	**
02	Bonnet	Cast Iron, A126 Class B
03	Handwheel	Cast Iron, A126 Class B
05	Indicator Rod/Stem	Steel 12L14, Black Oxide Finish
06	Bushing Cap	Steel 12L14, Zinc Chromate Finish
07	Bushing Cap Seal*	BUNA-A
08	Thrust Washer	Nylon
11A	Enclosure Cap Seal*	BUNA-N
12	Bonnet Seal*	BUNA-N
13A	Pipe Plug w/Tell-Tale	Polyethylene
14	Thrust Bearing	Polished Steel
15	Bushing	Ductile Iron, ASTM A536
16	Compressor	Cast Iron, A126 B
17	Compressor Pin*	Carbon Steel, AISI 1070
19	Diaphragm*	Material as Specified
20	Diaphragm Capscrews	18-8 Stainless Steel
21/22	Bonnet Studs or Bolts	Steel Grade 2, Electro Zinc Plated
23	Bonnet Nuts	Steel Grade 2, Electro Zinc
26	Travel Stop Setscrew	Alloy Steel, Black Oxide Finish
27	Locknut	Steel, Zinc-Plate
28	Grease Fitting	Steel, Electro Zinc Plated
29	Washer	Steel, Zinc Plated
30	Visual Cap	Polyethylene
36	Bushing Cap Lower Seal*	BUNA-N
63	Enclosure Cap	Polyethylene
65	Clear Enclosure	Acrylic
73	Handwheel Setscrew	Alloy Steel, Black Finish

* Recommended Spare Parts

** As Supplied - Ductile Iron A536 GR 65-45-12, Cast Iron A126 Class B, 316 Stainless Steel CF8M, Alloy 20 CF7M, Cast Steel WCB

PNEUMATIC ACTUATOR

(Manufactured by TRU-TECHVALVE)

Ordering Information

Flow: Minimum _____ (gpm), Normal _____ (gpm), Max. _____ (gpm)
Valve Size _____ (In.), Line Pressure _____ (Psi), ΔP _____ (Psi)
Minimum Plant Air Available _____ (Psi)
Type of Operation/Actuation: _____ On/Off (Open/Close); _____ Throttling

Operator/Actuator Type

- A. _____ Air-to-Open/Air-to-Close
- B. _____ Air-to-Open/Spring-to-Close
- C. _____ Spring-to-Open/Air-to-Close

"AA"

Air to Open,
Air to Close
with manual
override 4 dual
limit switches



Accessories

- A. _____ Pneumatic Positioner: 3-15 psi (Modulating Service)
- B. _____ Electro-Pneumatic Positioner: 4-20 mA (Modulating Service)
- C. _____ Transducer: 4-20 mA (I/P) - (Modulating Service)
- D. _____ Solenoid Valve (On/Off Service)
- E. _____ Filter Regulator or _____ Regulator
- F. _____ Limit Switches: _____ Open; _____ Closed; _____ Both Positions
- G. _____ Proximity Switches: _____ Open; _____ Closed; _____ Both Positions

"SC"

Air to Open,
Spring to Close
with Dual Limit
Switches



ELECTRIC ACTUATOR

Ordering Information

Valve Size _____ (In.), Line Pressure _____ (Psi), ΔP _____ (Psi)
Flow: Minimum _____ (gpm), Normal _____ (gpm), Maximum _____ (gpm)
Speed Open to Close Required _____ (seconds)
Type of Operation/Actuation: On/Off (Open/Close) _____, Throttling _____
Voltage _____, Hz _____, Phase _____, Cycles _____
AC or DC _____, NEMA _____
Manufacturer Preferred _____ (RCS is Standard)
Duty Cycle _____

Available Options

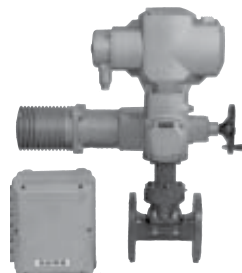
Manual override, limit switches, adjustable speed control throttling capability, heater positioners, and controllers.

Available Brands

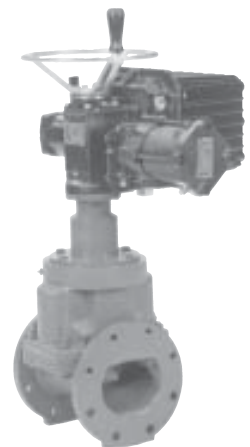
AUMA, RCS, EIM, and Limitork are the most popular, but almost all commercially available actuators can be adapted.



RCS



AUMA



LIMITORK

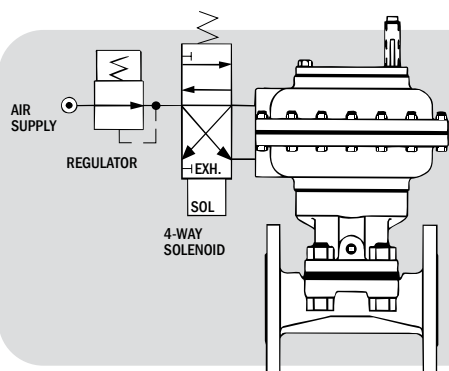
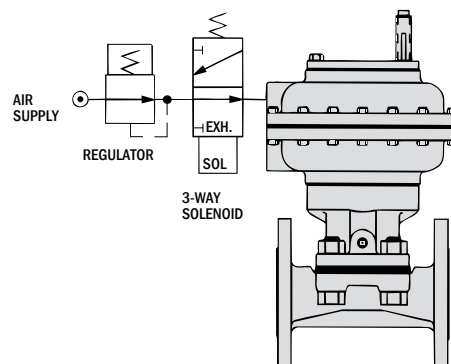
SERIES 100 PNEUMATIC ACTUATOR OPERATION

TRU-TECH VALVE
SIMPLIFY YOUR WORLD.

SO - SPRING TO OPEN

ON - OFF Control

This actuator/accessory package is designed to normally position the valve open. The valve will close when compressed air is admitted into the upper actuator chamber and the actuator spring will open the valve when the air is exhausted.



AA - AIR TO AIR, DOUBLE ACTING

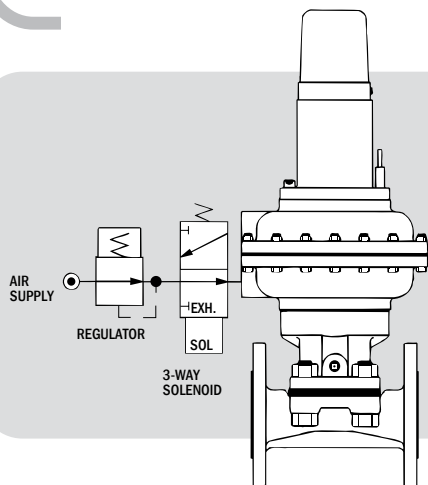
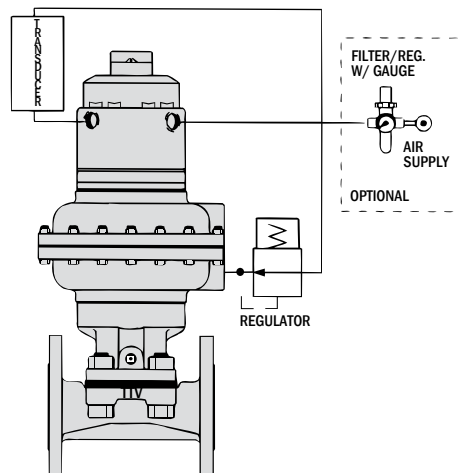
ON - OFF Control

This actuator/accessory package is designed to open the valve when compressed air is admitted into the lower chamber and closes the valve when compressed air is admitted into the upper chamber.

AA - AIR TO AIR, DOUBLE ACTING

AUTOMATIC THROTTLING

This package is provided with a positioner to accurately throttle the valve for pressure, liquid level, flow, temperature, and other control requirements. A transducer is generally supplied to provide valve modulation, proportional to an electric signal (most often 4-20 mA).



SC - SPRING TO CLOSE

ON - OFF Control

OR AUTOMATIC THROTTLING (NOT SHOWN)

This package is designed to normally position the valve closed. The valve will open when compressed air is admitted into the lower actuator chamber and the actuator spring will close the valve when the air is exhausted.

SIMPLIFY YOUR WORLD.

High Performance Solution Valves



**Pneumatic
Actuated**



**Handwheel
Operated**



**Electric
Actuated**



TRU-TECH VALVE

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