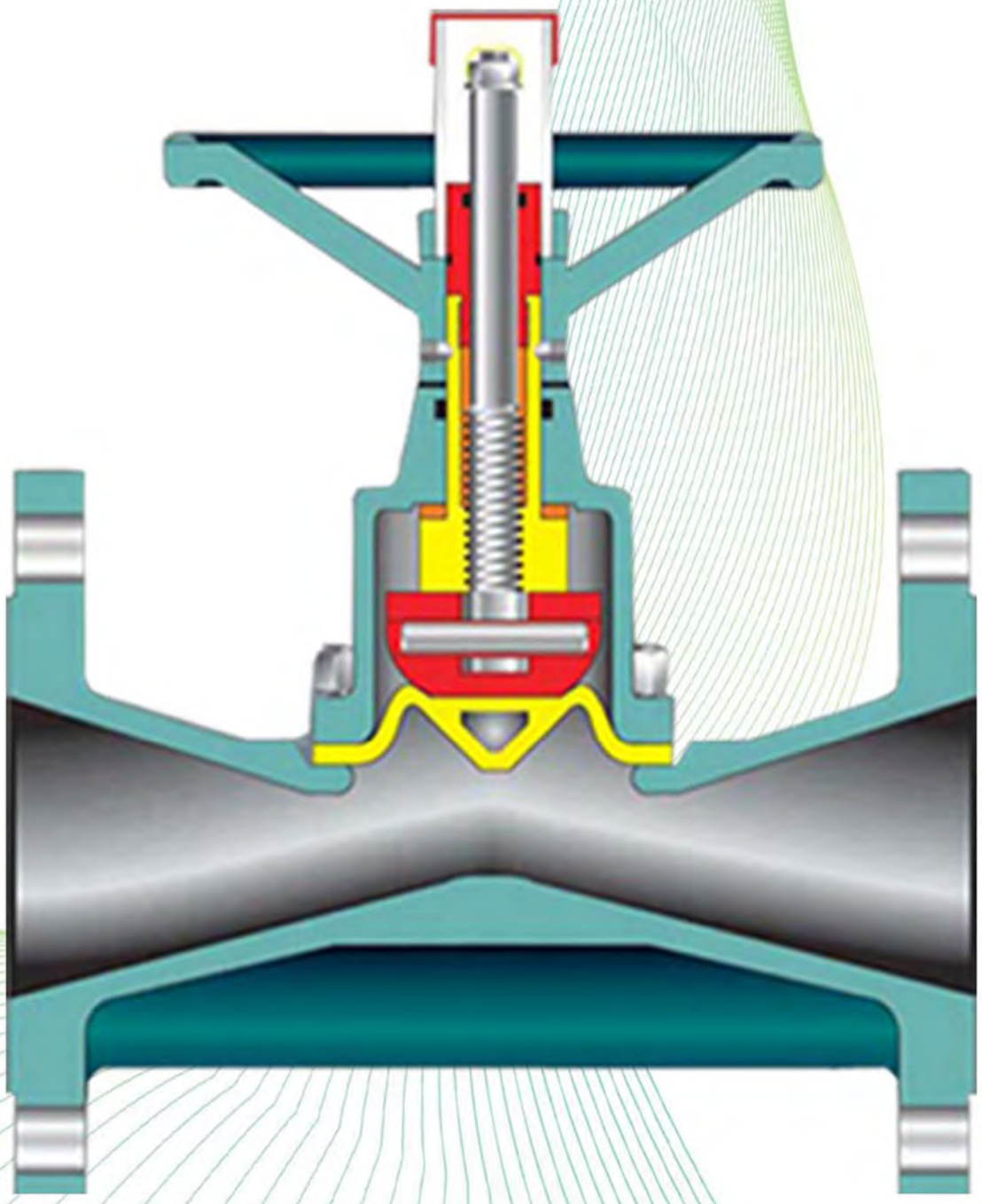
TRU-TROL

ENHANCED WEIR TYPE
COMPACT DIAPHRAGM VALVES



TRU-TECH VALVE

TTV B102
12 2015

TRU-TROL DIAPHRAGM VALVES

Provide Superior Leak-Proof Control for Hard-To-Handle Fluids

WHAT IS THE TRU-TROL ENHANCED WEIR DIAPHRAGM VALVE?

It is rugged, simple operating valve designed to control the flow of fluids by pressing a resilient diaphragm against the smooth contour of the valve body interior. The Tru-Trol valve, with a number of unique features, is superior to other diaphragm valve designs, and is preferred for demanding applications such as leak-proof control of abrasive and corrosive liquids, suspensions, slurries, and pulps.

HOW DOES THE TRU-TROL FUNCTION?

When the valve is wide open, the fluid passes directly through the streamlined body, which permits a virtually undisturbed flow. The diaphragm is firmly attached between the body and the bonnet, preventing any fluid from entering the bonnet area.

As the actuator or hand wheel is initiated, the compressor guides the resilient diaphragm toward the seating contour of the body. The compressor seats the diaphragm against the bottom, positively sealing and preventing further flow. Suspended particles will not cause leakage, as the resilient diaphragm will accommodate such irregularities. The Tru-Trol diaphragm valve permits bidirectional flow and can be installed in any position.

COMPARISON Tru-Trol vs. Standard Weir	Standard Materials of Construction	Valve can be rodded out	Face to face interchangeable with most Gate, Ball and Plug Valves	Valve Weight (Shipping Costs)	Valve Performance	Cost	Control/Throttling Capabilities	Fugitive Emission Control	Temperature/ Pressure Ratings	Handling Abrasive Fluids	Handling Corrosive Fluids	Availability of electric or pneumatic actuation
Tru-Trol	Ductile Iron	YES	YES	Low	Better	ABOUT THE SAME						
Standard Weir	Cast Iron	NO	NO	Higher	Good							
ADVANTAGES OF TRU-TROL®						AREAS OF SIMILARITY						

TRU-TROL ADVANTAGES

COMPACT DESIGN

Tru-Trol's face to face dimensions sizes 1", 2", 3", 4", 6", and 8", conform to ASME/ANSI B16.10, class 125 cast iron and class 150 cast steel. Consequently, the Tru-Trol in these sizes, is interchangeable with most solid wedge, double disc, and resilient wedge gate valves as well as short pattern plug and ball valves.

STANDARD DUCTILE IRON CONSTRUCTION

A ductile iron valve is stronger than cast iron and less likely to be affected by abuse, improper, installation or natural disaster. Materials of superior quality are essential to comply with today's demanding environmental legislation. Ductile iron valves are generally as strong as the piping system in which they are installed.

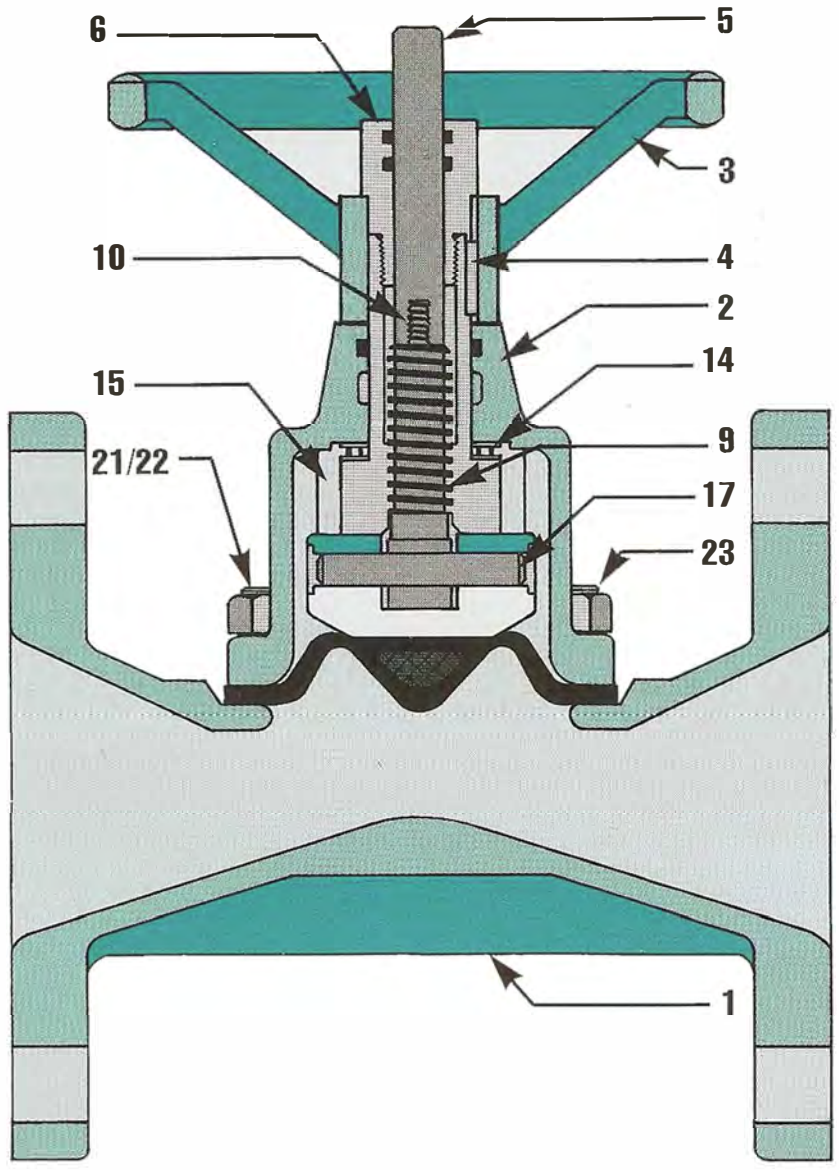
FUGITIVE EMISSION CONTROL

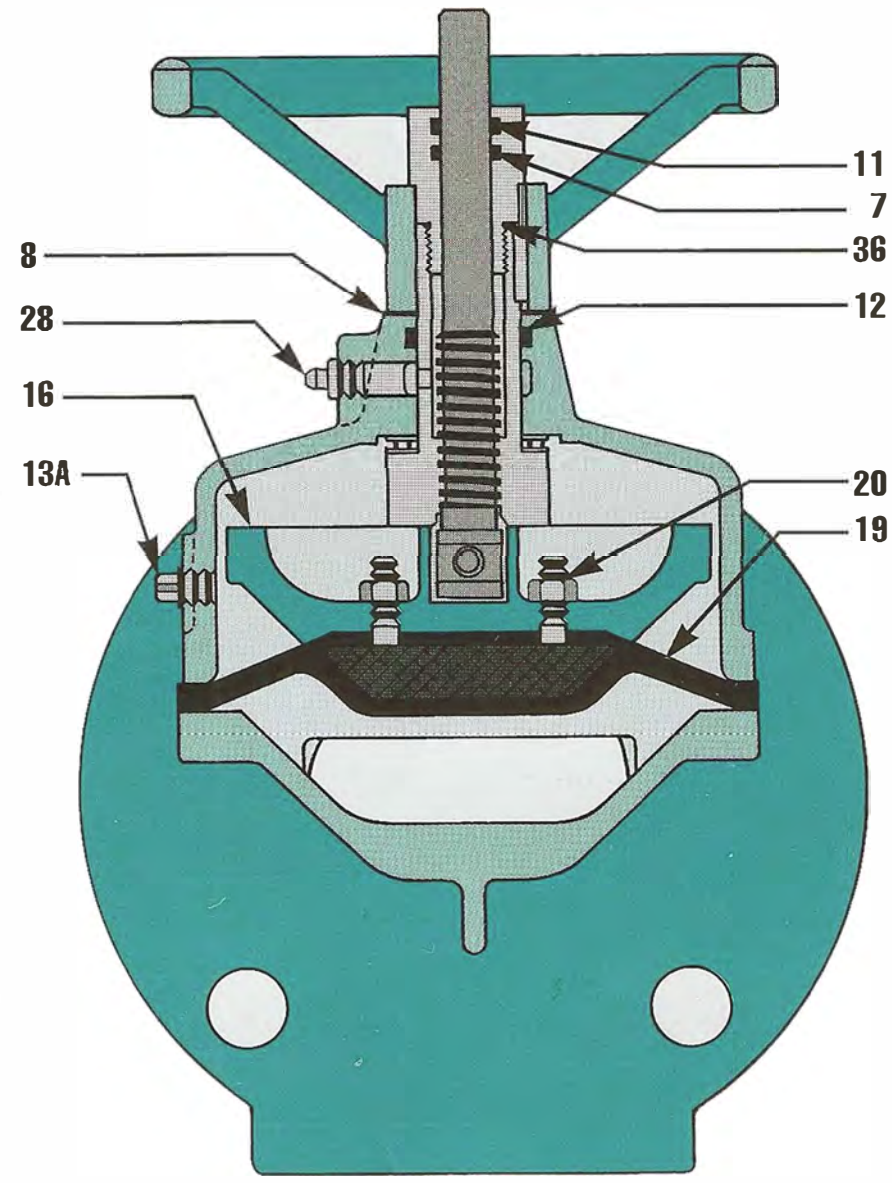
The Tru-Trol valve, as standard, has effectively zero emissions. The Tru-Trol, as an option, can be furnished with a sealed bonnet. In the event of a diaphragm rupture, a sealed bonnet will protect against the escape of fumes or media from the valve. A pressure gauge or monitoring device can be mounted on the bonnet for immediate detection of service interruption.

WIDE RANGE OF MATERIALS

Tru-Trol diaphragm valve bodies are available in many materials with various linings. A wide selection of Duo-flex diaphragm materials is also available. Tru-Techs staff is available to assist you in determining the most suitable combination of materials for you application.

TRU-TROL DIAPHRAGM VALVES





PARTS LIST

NO.	DESCRIPTION
1	BODY
2	BONNET
3	HANDWHEEL
4	HANDWHEEL KEY
5	INDICATOR ROD
6	BUSHING CAP
7	CAP SEAL
8	THRUST WASHER
9	SHAFT
10	CONNECTOR
11	WIPER RING
12	BONNET SEAL
13A	PIPE PLUG,W/TELL-TALE
14	THRUST BEARING
15	BUSHING
16	COMPRESSOR
17	COMPRESSOR PIN
19	DIAPHRAGM
20	DIAPHRAGM NUTS
21/22	BONNET STUDS/BOLTS
23	BONNET NUTS
28	GREASE FITTING
36	CAP LOWER SEAL

Major Markets for Tru-Trol® Diaphragm Valves

- Chemical Process Industry
- Petro-Chemical Industry
- Power Plants
- Pulp and Paper Processing
- Mining
- Municipal and Industrial Water & Wastewater Treatment
- Electronics
- Metal Refining

A. BODY MATERIALS

Ductile Iron - ASTM A536, GR 65-45-12

Cast Steel - ASTM A216, GR WCB

316 Stainless - ASTM A743, GR CF-8M

B. BODY LININGS

Soft Natural Rubber (NR)

Hard Natural Rubber (NR)

Neoprene (CR) *(2)*

Ethylene Propylene (EPDM)

Glass (Borosilicate)

Polypropylene (PP)

Polyvinylidene Fluoride (PVDF)

Tefzel (ETFE) *(2)*
Others *(1)*

C. DIAPHRAGM MATERIALS

Soft Natural Rubber (NR)

Neoprene (CR) *(2)*

Ethylene Propylene (EPDM)

TFE Faced (EPDM Backed)

Viton (FKM) *(2)*

Others *(1)*

D. EXTERIOR COATINGS

Blue Universal Enamel Primer (Std)

Epoxies

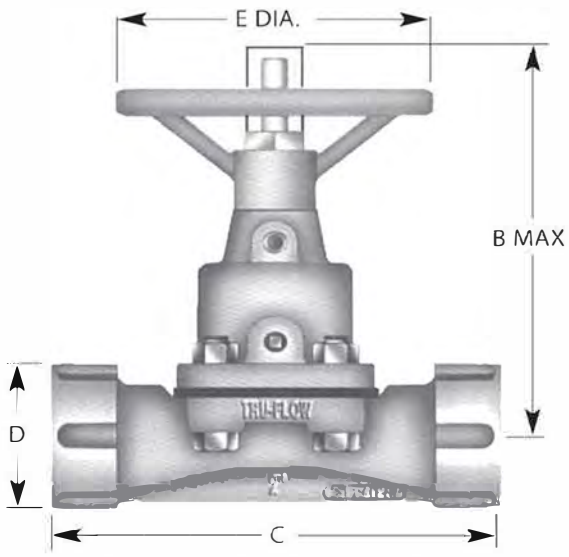
Nylon 11

Others *(1)*

(1) Note: Only the common materials are listed. Many other materials can be furnished. Consult factory for details.
(2) Registered trademark of E.I.DuPont de Nemours & Co.

Manufacturers of TRU-TECH Diaphragm Valves

TRU-TROL DIAPHRAGM VALVES



Screwed End Body and
Socket & Butt Weld Body

Screwed Ends	SCREWED END - VALVE GENERAL DIMENSIONS							
	Valve Size	A	B	C	Weight (lbs)	D	E	Body Pressure Rating (PSI)
	1/2	4.00	4.69	7.25	5.00	1.88	3.50	200
	3/4	4.00	4.69	7.25	5.00	1.88	3.50	200
	1	4.00	4.69	7.25	5.00	1.88	3.50	200
	1 1/2	5.50	6.13	8.50	13.00	3.25	5.00	175
	2	5.50	6.13	8.50	13.00	3.25	5.00	175
	2 1/2	8.38	10.50	10.50	35.00	4.50	9.00	150
	3	8.38	10.50	10.50	35.00	4.50	9.00	150

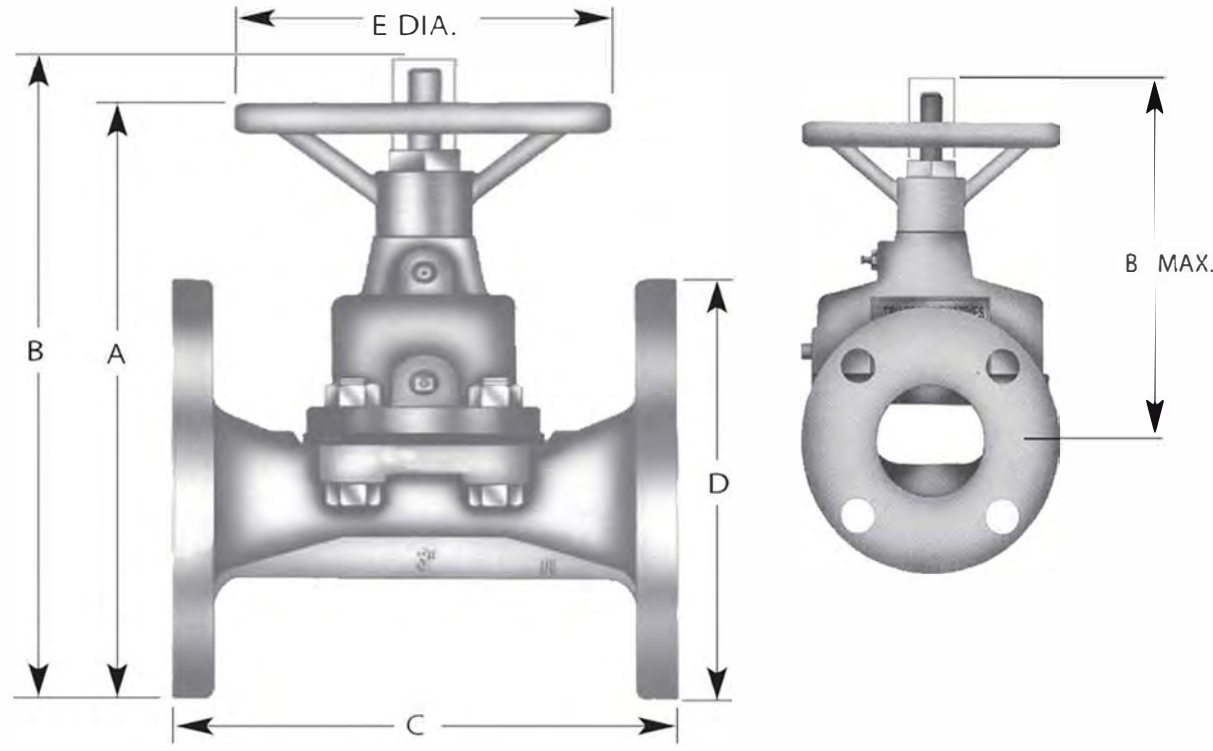
Flanged Ends	MAXI-TROL AND TRU-TROL VALVE GENERAL DIMENSIONS									
	Valve Size	A	B	C MAXI-TROL (MSS LENGTH)			C TRU-TROL (ANSI LENGTH)	Weight (LBS)	D	E	Body Pressure Rating (PSI)
				Plastic Lined	Rubber Lined	Weight (LBS)					
	1/2	4.00	4.69	5.75*	5.75*	7.00	5.00	6.50	3.50	3.50	200
	3/4	4.00	4.69	5.75	5.75	7.00	5.00	6.50	3.50	3.50	200
	1	4.00	5.75	5.75	5.75	7.00	5.00	6.50	4.25	3.50	200
	1 1/4	5.50	6.13	5.75*	5.75*	14.00	5.00	12.00	5.00	5.00	175
	1 1/2	5.50	7.00	7.88*	7.88*	12.00	7.00	14.00	5.00	5.00	175
	2	7.00	8.00	7.88	7.88	25.00	7.00	21.00	6.00	5.00	175
	2 1/2	7.25	9.00	10.25*	10.25*	55.00	8.00	35.00	7.00	7.00	150
	3	7.25	9.50	10.25	10.25	55.00	8.00	35.00	7.50	7.00	150
	4	8.38	10.50	12.88	12.75	80.00	9.00	51.50	9.00	9.00	150
	6	11.00	14.50	16.38	16.25	104.00	10.50	80.00	11.00	12.00	125
	8	17.88	17.88	20.88	20.88	231.00	11.50	165.00	13.75	14.00	100
	10	17.88	17.88	25.38	25.75	265.00	NA	NA	16.00	14.00	65

OUR GUARANTEE

We guarantee these valves to be made of first grade materials and workmanship. Should any valve fail to operate satisfactorily from lack of either or both of these factors, we will accept return of the valve F.O.B. our plant and refund the purchase price. Any part of the valve which fails due to poor quality within one year of shipment from our plant will be replaced without charge. This is not meant to include labor cost of installing the part in the valve.

We reserve the right to substitute materials which, in our opinion, are of equal or superior quality, in the construction of any valve for a particular application.

This warranty shall not cover cost of installation or any charges related thereto, and it is valid for a period of one year from date of shipment. All returns must be accompanied with factory issued returned goods authorization number.



Flanged Body

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