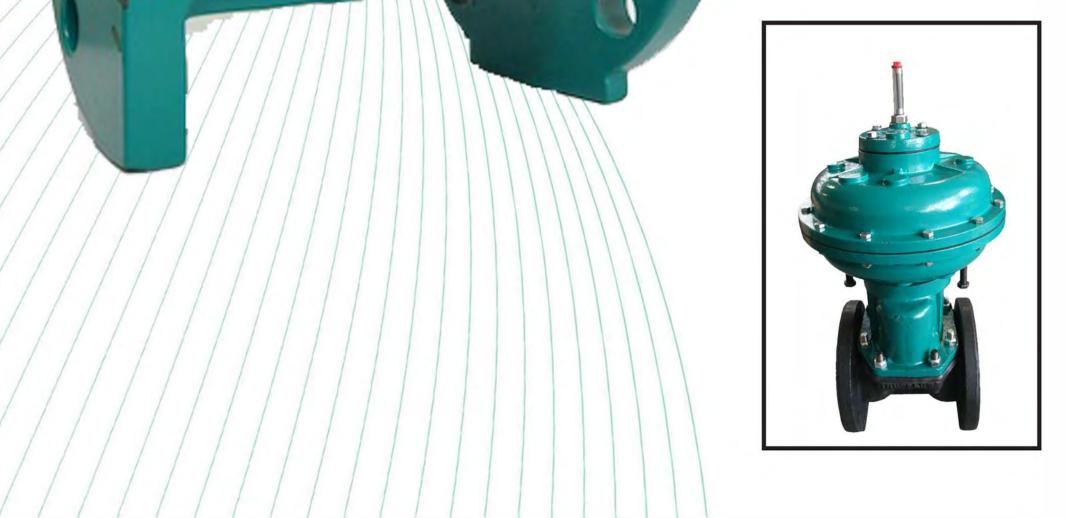
TRU-FLOW

IMPROVED STRAIGHT THROUGH TYPE COMPACT DIAPHRAGM VALVES











TTV B101 12 2015



TRU-FLOW DIAPHRAGM VALVES

PROVIDE SUPERIOR LEAK PROOF CONTROL FOR HARD-TO-HANDLE FLUIDS

WHAT IS THE TRU-FLOW STRAIGHT THROUGH 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-Flow 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-FLOW FUNCTION?

When the value 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-Flow diaphragm valve permits bidirectional flow and can be installed in any position.

TRU-FLOW ADVANTAGES

HIGHER OPERATING PRESSURES

The Tru-Flow diaphragm value is designed for higher operating pressures than other straight through diaphragm values.

COMPACT DESIGN

Tru-Flow's face to face dimensions sizes 1", 2", 3", 4", and 6", conform to ASME/ANSI B16.10, class 125 cast iron and class 150-cast steel. Consequently, the Tru-Flow 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 value 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 values are generally as strong as the piping system in which they are installed.



TRU-FLOW DIAPHRAGM VALVES

TRU-FLOW ADVANTAGES

HIGHER FLOW COEFFICIENT

The patented Tru-Flow body and Duo-Flex diaphragm provide the streamlined flow of a venturi without substantially changing the incremental cross sectional area. The velocity and static pressure remain essentially unchanged. The result is a minimum pressure drop through the valve.

LONGER DIAPHRAGM LIFE

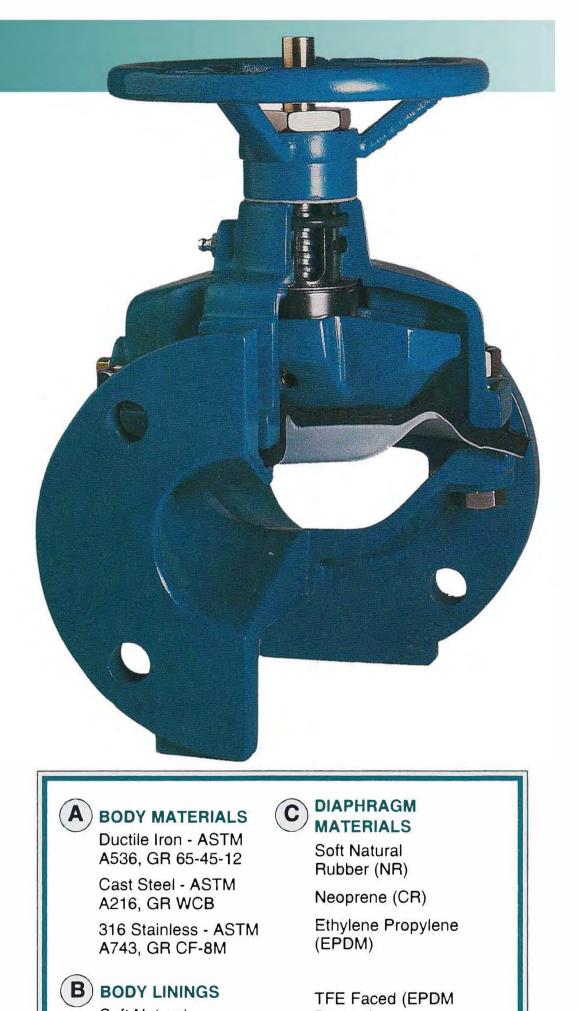
Because of the unique body and diaphragm design of the Tru-Flow valve, the diaphragm is protected from the fluid flow while in the open position. The Tru-Flow's short stroke also serves to reduce diaphragm's stress.

FUGITIVE EMISSION CONTROL

The Tru-Flow valve, as a standard, has effectively zero emissions. The Tru-Flow, 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.

DIAPHRAGM ASSEMBLY

The Duo-Floex diaphragm is molded around a rigid metal insert which is connected to the compressor with two bolts. In addition, the compressor supports almost the entire surface of the diaphragm even under high vacuum conditions.



IN LINE MAINTENANCE

The Duo-Flex diaphragm can easily be replaced in line. The straight through design also facilitates the use of brushes or rods to clean the valve.

WIDE RANGE OF MATERIALS AND SIZES

Tru-Flow diaphragm valve bodies are available in many materials with various linings. A wide selection of Duo-Flex diaphragm materials is also available.

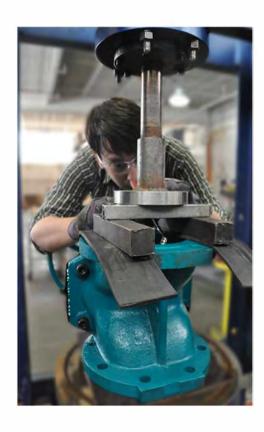
Soft Natural Backed) Rubber (NR) Viton (FKM) Hard Natural Others Rubber (NR) Neoprene (CR) D **EXTERIOR COATINGS Ethylene Propylene** Blue Universal Enamel (EPDM) Primer (Std) Glass (Borosilicate) Epoxies Polypropylene (PP) Nylon 11 Polyvinylidene Fluoride (PVDF) Others Tefzel (ETFE) Others Note: Only the common materials are listed. Many other materials can be furnished. Consult factory for details.

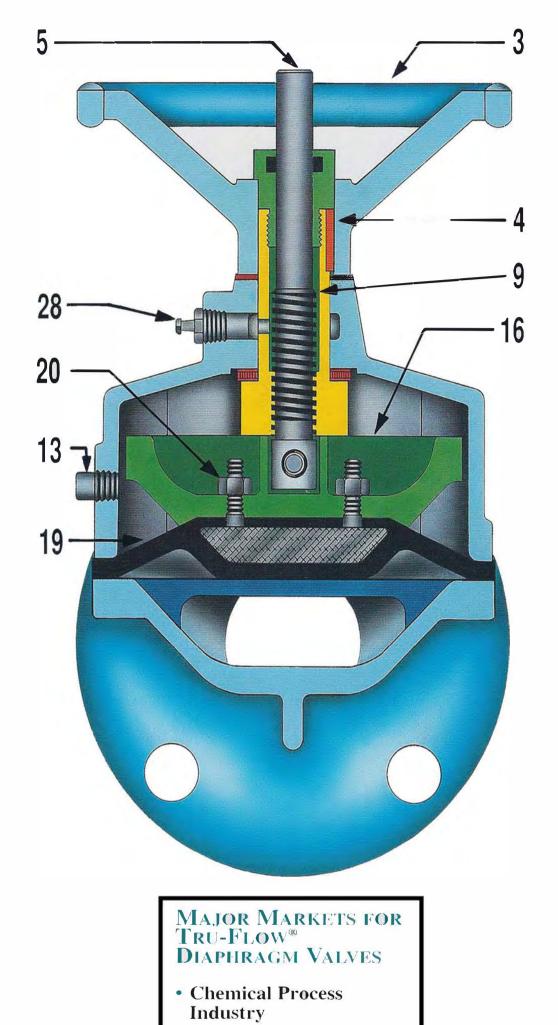


TRU-FLOW THE BEST OF THE BEST







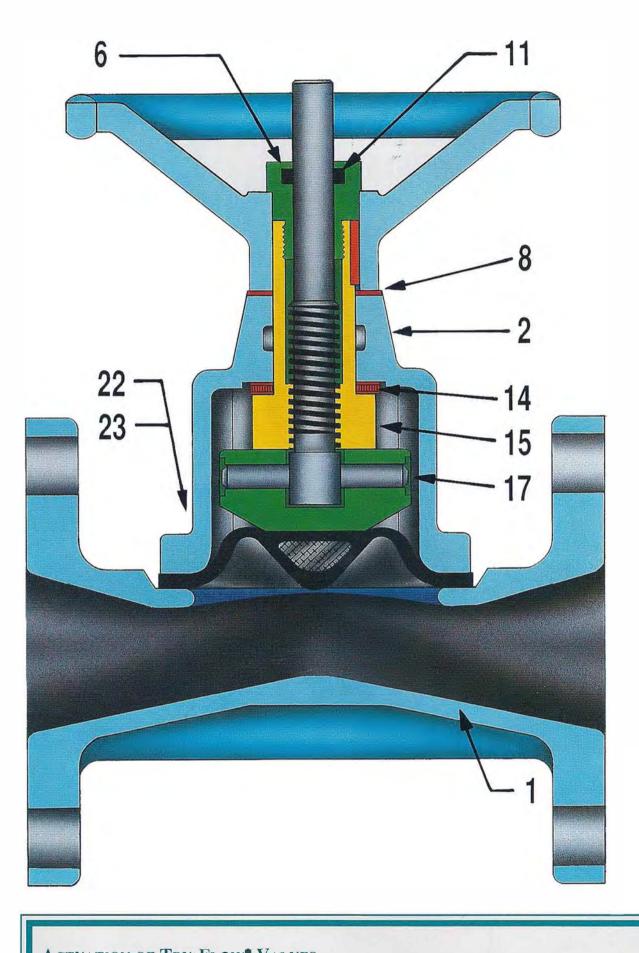




- Petro-Chemical Industry
- Power Plants
- Pulp and Paper Processing
- Mining
- Municipal and Industrial Water & Wastewater Treatment
- Electronics
- Metal Refining



TRU-FLOW THE BEST OF THE BEST



PARTS LIST

NO.	DESCRIPTION
1	BODY
2	BONNET
3	HANDWHEEL
4	HANDWHEEL KEY
5	INDICATOR ROD
6	BUSHING CAP
8	THRUST WASHER
9	SHAFT
11	WIPER RING
13	PIPE PLUG
14	THRUST BEARING
15	BUSHING
16	COMPRESSOR
17	COMPRESSOR PIN
19	DIAPHRAGM
20	DIAPHRAGM NUTS
22	BONNET BOLTS
23	BONNET NUTS
28	GREASE FITTING

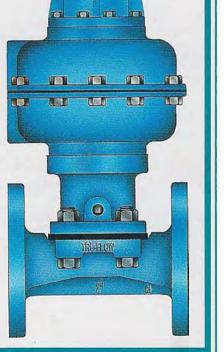
ACTUATION OF TRU-FLOW VALVES

For open/closed or modulating control applications Tru-Flow[®] diaphragm valves can be furnished with pneumatic or electric actuators, including positioners, controllers and other instrumentation for various control functions.

PNEUMATIC- • DOUBLE ACTING (AIR TO OPEN, AIR TO CLOSE)
• AIR TO CLOSE, SPRING TO OPEN
• AIR TO OPEN, SPRING TO CLOSE

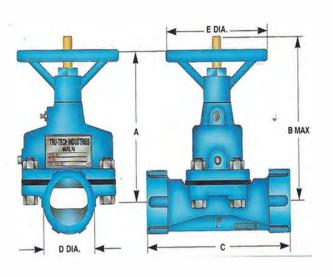
For sizing and selection of actuator, please provide the factory with the following:

- 1. Type of fluid
- 2. Flow rate (minimum and maximum)
- 3. Line size
- 4. Pressure drop (minimum and maximum Delta P)
- 5. Available control signal (pneumatic or electronic)
- 6. Pressure
- 7. Any special requirements



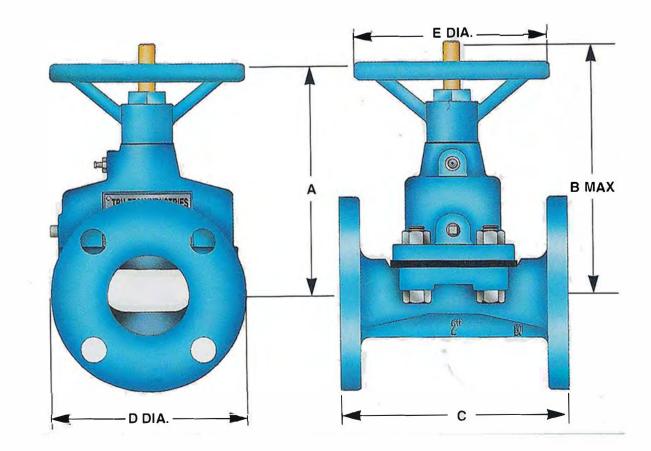


TRU-FLOW DIAPHRAGM VALVES



	SCREWED END - VALVE GENERAL DIMENSIONS									
Screwed Ends	Valve Size	А	В	С	Weight (Ibs)	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	7.00	175		
	2	5.50	6.13	8.50	13.00	3.25	7.00	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		

	MAXI-FLOW AND TRU-FLOW VALVE GENERAL DIMENSIONS										
	Valve Size	А	В	C MAXI-FLOW (MSS LENGTH)			C TRU-FLOW				Body Pressure
				Plastic Lined	Rubber Lined	Weight (LBS)		Weight (LBS)	D	E	Rating (PSI)
	1/2	4.00	4.69	5.75*	5.75*	11.00	5.00	10.00	3.50	3.50	200
Ends	3/4	4.00	4.69	5.75	5.75	11.00	5.00	10.00	3.50	3.50	200
	1	4.00	4.69	5.75	5.75	11.00	5.00	10.00	3.50	3.50	200
Flanged	1 1/4	4.00	4.69	5.75*	5.75*	11.00	5.00	10.00	3.50	3.50	200
Fla	1 1/2	7.25	9.00	7.88*	7.88*	27.00	7.00	25.00	6.00	7.00	175
	2	7.25	9.50	7.88	7.88	27.00	7.00	25.00	6.00	7.00	175
	2 1/2	8.38	10.50	10.25*	10.25*	35.00	8.00	45.00	7.00	9.00	150
	3	8.38	10.38	10.25	10.25	52.00	8.00	45.00	7.50	9.00	150
	4	11.25	14.00	12.88	12.75	80.00	9.00	70.00	9.00	12.00	150
	6	17.88	22.00	16.38	16.25	160.00	10.50	125.00	11.13	14.13	125



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