

# TRINE DIAPHRAGM VALVE

## THE PRODUCT

Trine diaphragm valve is designed to provide the industry with a valve of exceptional reliability and trouble free performance. This valve has its advantages in interchangeability of parts, variety in materials of construction and finally capital and recurring expenses.

## APPLICATION

This is a general purpose valve with application in every industry. The streamlined body can take any type of lining and hence is suitable for all corrosive fluids (For water service - Ebonite/Rubber lining, Acid & Oil Temp. service - Neoprene lining, Acid Service - Glass lining, Acid Rough handling - Lead lining)

## CONSTRUCTION

Standard product is made in cast iron and the wear-out parts in non ferrous material for longer life. The Weir design ensures efficient closure at low stem loads and hence enhances diaphragm life. The diaphragm is reinforced with best quality synthetic fabric and manufactured to our specifications under our supervision.

## TYPES

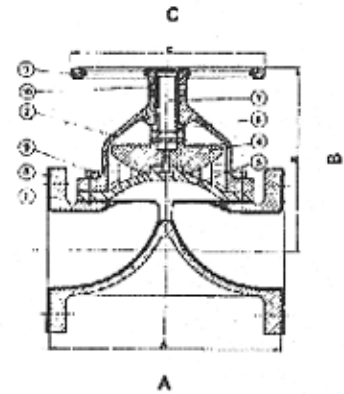
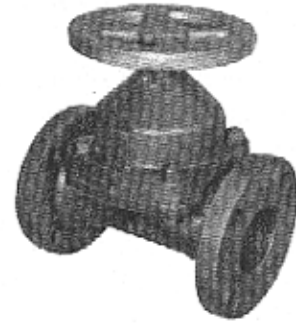
The valves are offered in different materials of construction for the body, anti-corrosive lining and end connections to suit individual requirements. Diaphragms in rare materials such as viton are also available.

## OPERATION

The valve is operated by means of handwheel provided on top. Being precision built, the valve requires moderate torque for leakproof closure.

## MAINTENANCE

The valve needs light greasing through the nipple provided for the purpose. Depending on the type of liquid being handled and frequency of operation, the diaphragm needs replacement at pre-determined intervals. In case of diaphragms failure, the valve should be isolated and drained prior to opening the bonnet for replacement. It is not necessary to dismantle the valve from the line for this purpose.



Nom. Bore mms	A	B	C	Weight	Pressure Rating Kgs/cm <sup>2</sup>		Cv (gpm/psi HL)	
					Seat	Body	Unlined	E/Lined
15	102	70	60	1.7	14.0	20.0	4.6	2.3
20	118	82	75	2.5	14.0	20.0	9.5	7.0
25	127	100	90	3.3	14.0	20.0	14.0	11.0
40	159	125	115	6.5	10.0	15.0	36.0	28.0
50	191	150	140	9.5	7.0	10.5	72.0	56.0
65	216	175	165	13.0	7.0	10.5	110.0	80.0
80	254	195	195	18.5	7.0	10.5	155.0	125.0
100*	305	240	255	30.0	7.0	10.5	260.0	215.0
125*	356	290	310	46.0	7.0	10.5	350.0	290.0
150*	406	335	370	62.0	7.0	10.5	510.0	425.0
200*	521	465	480	135.0	6.0	10.0	1080.0	820.0
250*	635	540	580	220.0	5.0	7.5	1680.0	1340.0
300*	749	640	700	300.0	4.2	6.3	2150.0	1740.0

Items No.	Description	Material
1.	Body	IS-210, Gr. 20
2.	Bonnet	IS-210, Gr. 20
3.	Handwheel	IS-210, Gr. 20
4.	Compressor	IS-210, Gr. 20
5.	Diaphragm	Neoprene
6.	Sleeve	Gun Metal
7.	Spindle	EN-8
8.	Lining 3mm Thick	Ebonite (hardness : 95 to 100 Shore A)
9.	Fixing Bolts	Carbon Steel
10.	Grub Screws	Unbrako Make

Mfg. Std. BS 5156  
Temp. Ebonite : 70° to 80°C Neoprene : 100° to 120°C

\*Dimension A for Ebonite lined valve, add 6mms. \* Available with Ball Thrust Bearing.

Body Material	Body Lining	Diaphragm Grade	End Connections	Special Types
Cast Iron	Ebonite	Natural Rubber	B.S. Table D	Rising Spindle for indication of Valve Position
Cast Steel	Natural Rubber	Neoprene	B.S. Table F	Chain operated handwheel
S.S. AISI-316	Neoprene	Hypalon	ASA 150 lbs	Extension shaft handwheel
Hastealloy	Hypalon	Nitrile	DIN NP 10/16	Pneumatically operated Valves (Diaphragm actuator)
Aluminium	T.F.E.	Butyle	Screwed (BSP)	Pneumatically operated Valves (Air Cylinder actuator)
Bronze		Silicon		
		Viton		
		P.T.F.E.		

Enquires : For proper selection of valve, enquires should accompany details such as tupe of liquid, temperature pressure conditions, and application