



SHADECO VALVES & PUMPS CC

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**VALVES - DECO, AMCO, NINGBO AND ACTUATORS
PUMPS - SHADECO AND EXCELLENT PUMPS
SERVICE - INSTALLATIONS AND REPAIRS**

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GAUTENG PROVINCE



Look, Think, Take Action and Stay Alive

DECO WEIR TYPE DIAPHRAGM VALVE

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DECO WEIR TYPE DIAPHRAGM VALVE

The basic construction of the Diaphragm valve is quite simple. It is composed of three principal units called Body, Bonnet & Diaphragm.

Diaphragm Valves are particularly suitable for service lines handling Corrosive, Abrasives, Viscous or Fibrous Fluids.

Advantages of Diaphragm Valves

- The most economical corrosion/abrasion resisting valve available today.
 - Versatile Body & Diaphragm materials.
- Permanent bubble tightness against slurry, fibre and gases.
 - Resilient closure.
- Non contamination. The most suitable for Nuclear & Food Service.
- No gland packing.
- Simple in-line maintenance.
- Easy dismantling and assembly possible without removing the body from pipeline.

Choice of Bodies

There are numerous combinations available for selecting the most suitable body material, body lining and diaphragm material for a specific service depends on several variables, economic considerations, nature of fluid handled, its concentration and corrosiveness, temperature, pressure, velocity and continuity of flow.

Flanged Ends - Cast Iron, Carbon Steel, Stainless Steel (CF8,CF8M) Sizes: DN 15 - DN 300.

Flanged Ends Cast Iron Lined - Natural Rubber, White Natural Rubber, Neoprene, Hypalon, Black Butyl, White Butyl, BunaN, Ebonite Sizes: DN 15 - DN 300.

Choice of Diaphragms

Diaphragm life depends not only upon the nature of the fluid handled but also upon the temperature, pressure and frequency of operations.

Diaphragms can be moulded in wide variety of compounds, to give the most satisfactory results, depending upon application. AMCO elastomer diaphragms are marked with materials identification, valve size, month and year of manufacture.



Sailent Features

BODY:

Weir design reduced diaphragm travel, increasing its life pocketless design for contamination free performance and smooth flow characteristics.

BONNET:

Isolates working parts from hazardous atmosphere.

DIAPHRAGM:

Strong and resilient, giving positive shut-off, designed to assist flow and totally isolates working parts from fluids.

STEM & STEM BUSHING:

Designed to reduce friction for low operational torque.

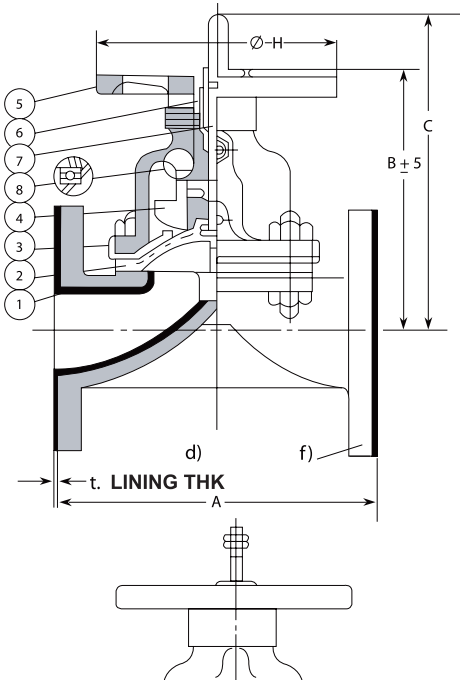
THRUST BEARING:

Provided for sizes 80mm and above to reduce friction & torque.

FINGER PLATE & COMPRESSOR:

Finger plates or fingers cast into the bonnet in larger valves combine with the compressor, supports diaphragm at all stages of travel to increase diaphragm life.

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INDICATING WITH TRAVEL STOP

PT. No	PART NAME	MATERIAL
1	Body / Lining	CI / As Req'd.
2	Diaphragm ^{c)}	Neoprene / As Req'd.
3	Bonnet	CI
4	Compressor	AL ^{a)} / CI
5	Handwheel	CI
6	Stem bushing	S. G. Iron
7	Stem	EN 8 / 410
8	Thrust bearing ^{b)}	Steel

a) For sizes upto 50 b) For sizes 80 and higher c) Diaphragm hardness shore 'A'.
d) Lining hardness- shore 'D' f) Flange: OD, THK, Drilling. Only dimension 'A' is certified and conforms to BS: 5156 other dimensions are only indicative.

Size	15	20	25	40	50	65	80	100	125	150	200	250	300	
A	114	123	133	165	196	222	260	313	364	414	529	645	759	
B	84	92	104	143	150	170	218	241	291	350	465	555	659	
C	90	102	118	164	179	206	260	296	362	431	584	699	825	
ØH	70		100	140		180	225		310	368	471	587	690	
t	3.0							4.0				5.0		
Wgt-kg	2.50	2.60	3.50	7	10	15	22	37	62	91	163	240	418	
OPT.PR.bar	14.00			12.00		10.50			8.75		7.00	5.00	4.25	
TEST PRESSURE BAR														
HYDRO	SHELL	21.00		18.00		15.75		13.25		10.50	7.50	6.50		
	SEAT	14.00		12.00		10.50		8.75		7.00	5.00	4.25		
AIR	SEAT	5.00											4.25	

HANDWHEEL:

Comfortable handgrip, eases rapid operation.

CLOSURE CAP:

Stops the ingress of foreign particles and atmosphere. Additionally an 'O' Ring seal can be provided to increase security on hazardous products.

MANUFACTURING STANDARD:

Shadeco Valves are manufactured to the following standards as well as being in over all lengths to BS: 5156.

FLANGES		
British	BS 10 Table D, E & F BS 4504 Table PN 10/16 BS 1560 Class 150.	Female Screwed Ends BS 21 Taper BS 21 Parallel
American	ANSI B 16.1 Class 125 ANSI B 16.5 Class 150	

MAJOR CONSUMERS:

Basic Chemicals, End User Chemicals, Food & Beverage, Mining, Nuclear Power, Pulp & Paper, Sewage Treatment, Water Treatment, Pollution Control, Pharmaceuticals.

CODE	CI	CI	WC B
MATERIAL	IS: 120	IS: 210	A216
SPECN.	FG200	FG260	WC B

DIAPHRAGM MATERIALS AND CONFIGURATIONS				
GRADE	MATERIAL	TEMP. °C		TYPICAL SERVICES
		MIN	MAX	
A	Natural Rubber	-30	80	Water, Gases, Sewage, Slurry Sludge, Brine, Acids, Alkalies, Salts
WA	White Natural Rubber	-10	80	Pigments Pharmaceuticals
N	Neoprene	-25	95	Weak Chemicals. Hot compressed air, Acids, Alkalies, Oils
E	Ethylene Propylene	-30	150	Chemicals, Acids, Abrasives
B	Black Butyl	-25	120	Chemicals, Gases, Strong Acids, Chlorine
WB	White Butyl	-25	105	Foods, Beverages
H	Hypalon	-15	105	Oxidizing Agents, Concentrated Sulphuric Acid, Phosphoric Acid, Chlorine
R	Buna-N	-10	80	Animal, Vegetable and Mineral Oils, Paraffins, Kerosene
S	Soft Natural Rubber	-15	80	Abrasive Fluids
V	Viton	-25	165	Hydro Carbons, Strong Acids, Solvents, Chlorine
EP	EPDM	-20	110	Radio Active Fluid, Chemical resistance similar to 'BG'
T	PTFE (with Neoprene)	-30	175	All Chemicals and Food

WT 48073 ONS Print: 0861 667 123

NB: Due to continuous development program Shadeco Valves and Pumps
deserved the right to make change without giving any notice

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