

# 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. BDK however, has formulated one compound in each material that gives the most satisfactory results. This avoids confusion in diaphragm ordering.

BDK elastomer diaphragms are marked with material identification, valve size and month and year of manufacture.

To ensure the highest quality standards BDK tests samples of every production batch. It also continues to develop new materials and improve upon the existing compound.



## Diaphragm Selection

Grade	Material	Temp °C		Typical Services
		min	max	
A	Natural Rubber	30	80	Water, Gases, Sewage, brine
WA	White Natural Rubber	10	80	Pigments, Pharmaceuticals
N	Neoprene	25	95	Weak chemicals, air, oil
E	Ethylene Propylene	30	150	Chemicals, acids, abrasives
B	Black Butyl	25	120	Chemicals, gases, strong acids
WB	White Butyl	25	105	Foods, Beverages
H	Hypalon	15	105	Oxidizing fluids, concentrated Sulphuric acid, Phosphoric acid,
R	Buna-N	10	80	Animal, Vegetable and mineral oils, paraffins, Kerosene.
S	Soft Natural Rubber	15	80	Abrasive fluids
V	Viton	25	165	Hydrocarbons, acids, chlorine
EP	EPDM	20	110	Radio-active fluid
T	PTFE*	30	175	All Chemicals
	*with Neoprene backing cushion			

BDK two piece TEFLON diaphragms have proven through years of outstanding service, to be by far the best design presently available.

The two piece construction shown here, eliminates the delamination problems inherent in competitive "teflon faced" diaphragms and assures that downward closing forces will be absorbed by the elastomer backing cushion and evenly distributed across the closing surface in the valve body. The result is drop tight closure and longer diaphragm life. BDK two piece Teflon diaphragm is used on high vacuum service, depending on the service temperature involved and whether the temperature is constant or intermittent

