



Kim Diaphragm Valves

ETFE (Tefzel®)
PFA
PVDF
POLYPROPYLENE

www.kdvflow.com



DIAPHRAGM VALVES

PLASTIC LINED

Plastic Lined Diaphragm Valves



The safest, most cost effective valve for corrosive services.



Corrosive media types used in mineral processing and many other industries pose significant challenges for plant operators. Damage to internal valve components from corrosion can quickly reduce valve efficiency and ultimately, risk the health and safety of employees and the environment.

KDV's range of plastic lined diaphragm valves have been designed to eliminate the problems typically experienced with line media such as:

- Sulphuric acid (H₂SO₄)*
- Hydrochloric acid (HCl)*
- Nitric acid (HNO₃)*
- Hydrofluoric acid (HF)*
- Methane (CH₄)*
- Hydrogen peroxide (H₂O₂)*
- Sodium Hydroxide (NaOH)*

KDV diaphragm valves isolate mechanical components from line media. This ensures much longer operational life.

Top entry allows diaphragm replacement in minutes with the body remaining in-line; instead of carrying complete spares valves, a plant operator can maintain a small inventory of inexpensive replacement diaphragms.

- Resistant to strong acids, organic and inorganic compounds.
- Clean design - Cavity free
- Valve operation isolated from line media
- Low fugitive emissions
- DI, WCB & SS bodies
- AS4041:2006 (ANSI B31.3) compliant
- Excellent control characteristics.
- Self draining
- In line serviceable (top entry)
- Bubble tight Class VI shut off
- Wide range of body/bonnet material and external coating options
- 3 layer diaphragm (PTFE/PVDF/Rubber)

For detailed technical and ordering information, visit : www.kdvflow.com



Features



Handwheel

Designed for functional use and comfortable handling.

Spindle

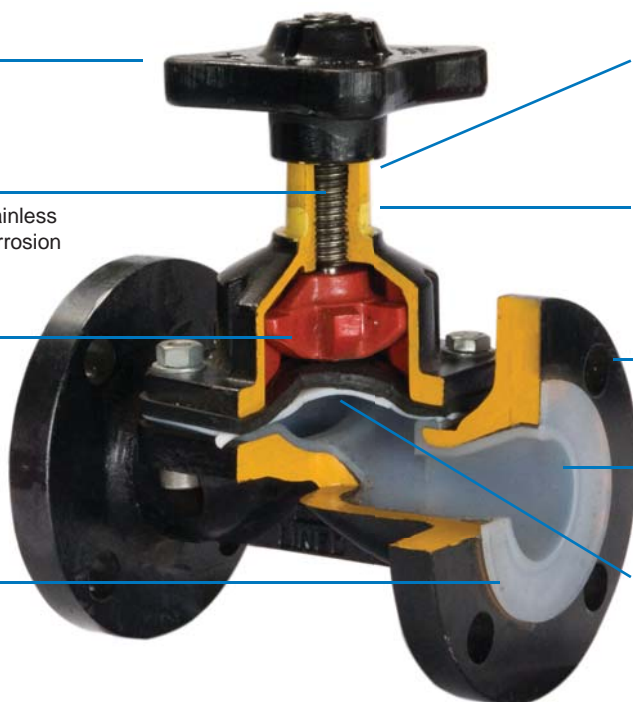
Precision machined from stainless steel - provides long term corrosion resistance.

Compressor

Shaped to provide maximum surface contact with diaphragm for support during opening and closing

Body Linings

Polypropylene
PVDF
PFA
ETFE (Tefzel).



Bonnet

Provides overclosure protection for the diaphragm in the closed position. Available with stem and hand wheel seals for corrosive media and environments.

Position Indicator

Bonnet painted bright yellow under handle skirt to provide clear indication of valve position from any angle.

Self draining

Valve self-drains when mounted at approximately 20 degrees to the horizontal.

1 piece interior contours

Smooth interior contours provide unrestricted flow and minimum pressure loss.

Diaphragm

Elastomer backed PTFE diaphragm provides positive closure and isolates bonnet components from line media.

NB: Alternative diaphragm materials including 3 layer PVDF available on request.

DESIGN STANDARDS

• EN, BS, MSS

FACE TO FACE STANDARDS

• EN, DIN, BS, MSS

TESTING STANDARDS

• EN, BS

FLANGE DRILLING STANDARDS

• ANSI, EN, BS, AS, JIS

TEMPERATURE RANGE

LINING MATERIAL	VALVE SIZE	TEMPERATURE RANGE
ETFE (Tefzel®)	mm/inch	C°
PFA	15 - 150 (1/2" - 6")	-10 to 149°
PVDF	15 - 150 (1/2" - 6")	-10 to 175°
PP	15 - 150 (1/2" - 6")	-10 to 145°
	15 - 150 (1/2" - 6")	-10 to 100°

PRESSURE

MAXIMUM PRESSURE	VALVE SIZE	PRESSURE
PTFE/Rubber backed diaphragm	mm/inch	Bar (kPa)
	15 - 125 (1/2" - 5")	10 (1000)
	150 (5" - 6")	7 (700)

Note: For information on 8" plastic lined valves contact your KDV sales representative

KDV Chemical Resistant Valves

ACCESSORIES

Optional lockable handwheel for additional safety and security in high risk applications. OH&S (Occupational Health & Safety) compliant.



ACTUATION

KDV diaphragm valves can be automated using a variety of actuation systems and can be fitted with a wide range of accessories including:

- Solenoid valves
- Switch enclosures
- Electro-pneumatic positioners
- Limit stops
- Emergency hand wheel over-rides.



Also available from KDV



Straight Through Type Diaphragm Valve



Stainless Steel Diaphragm Valves



Plastic Valve Systems



PFA Lined Ball Valves



PTFE Lined Butterfly Valves



Flap Check Valves

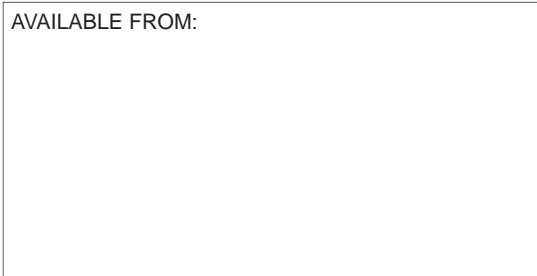


PFA Lined Check Valve (swing and poppet)

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AVAILABLE FROM:



KDV

A Passion for perfection

KDV specialises in the manufacture and distribution of a wide range of industrial valves.

The company's core product group continues to be the range of Kim Diaphragm Valves, now marketed internationally under the KDV brand.

The expansion of the business over the years has seen exponential growth of the KDV product base, which now includes a wide range of both manually operated and automated diaphragm valves. These products incorporate features now demanded by instrumentation and mechanical engineers from a wide range of industries such as:

- Chemical processing
- Water/Waste water
- Water treatment
- Mining
- Mineral processing
- Fertiliser production
- Petroleum/Petrochemical
- Food and beverage
- High Purity
- Power generation
- Pulp and paper



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BR CV A4 13.1

