

SERIES 35 DIAPHRAGM VALVES WEIR TYPE - PLASTIC LINED

DN15 - DN150 RISING HAND WHEEL





KDV's range of bi directional Weir Type diaphragm valves offer exceptional durability and reliability. The clean design completely isolates line media from the mechanical components of the valve. Bubble tight shutoff (Class VI) and in-line serviceability (top entry) maximise plant efficiency and productivity.

KDV Weir Type diaphragm valves are suited to on-off and control applications and can be custom specified to suit a wide variety of applications.

Contact your KDV technical sales representative to ascertain the correct valve and lining options for your specific application.

COMMON APPLICATIONS

- · Acid (e.g. hydrochloric, sulphuric nitric)
- · Moist chlorine
- · Chlorinated water
- · Demineralised water
- Salts
- Caustic solutions
- · Lime solutions
- Copper chemicals

Designed & Manufactured by KDV

KDV Diaphragm valves are manufactured to international standards. Precision machining and strict quality control ensure consistency, reliability and durability.

PLASTIC LINING OPTIONS & IDENTIFICATION

Lined valves are identified with a flash of colour on the valve body



Polypropylene (Cream)



Kim Diaphragm Valves™

ETFE (Gold)



PFA (Green)

NOTE: FEP & PVDF linings are also available on special order



FEATURES & BENEFITS

- · Bubble-tight shutoff
- Easy/low maintenance
- · Readily available spare parts
- · In-line serviceable (top entry)
- · Cavity free design
- Position indicator
- Excellent control characteristics
- · Low fugitive emissions
- · No stem seal leakage
- · Line media isolated from valve mechanicals

OPERATOR OPTIONS

- · Lockable device (for isolation)
- Sealed bonnet
- Extension spindle
- · Chain wheel
- · Stainless steel bonnet
- Plastic bonnet (DN15-DN50)

AUTOMATION SYSTEMS

- Pneumatic (fail open, fail closed, double acting)
- Electric
- Hydraulic

OPTIONS

- · Flange drilling standards: ANSI, BS, DIN, JIS
- ETFE, PFA, PVDF, PP lining
- · Range of body materials
- · Specialty coatings to suit a variety of environmental requirements
- · Range of bonnet materials

FAST TRACK

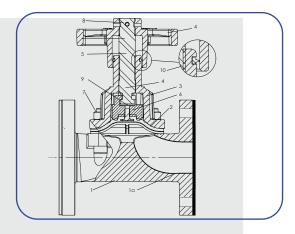
In house manufacture and stock holdings allow KDV to deliver quickly, and reliably facilitate fast-track projects. Visit our website for information on the full range of KDV Valves.

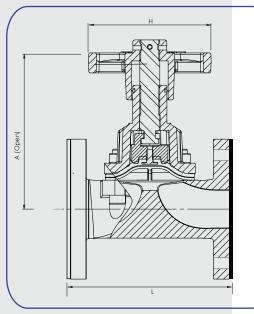
www.kdvflow.com

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MATERIALS OF CONSTRUCTION

| PART | MATERIAL | | | |
|-----------------------|---|--|--|--|
| 1 Body | Cast Iron, Ductile Iron, WCB, Stainless Steel | | | |
| 1a Lining | See Below ¹ | | | |
| 2 Diaphragm | See Below ² | | | |
| 3 Bonnet Shell | Bonnet Shell Cast Iron, Cast Ductile Iron | | | |
| 4 Hand Wheel | and Wheel Cast Iron, Cast Ductile Iron (Coatings and alternative materials on request | | | |
| 5 Spindle | SS304, SS316 | | | |
| 6 Compressor | Cast Iron, Cast Ductile Iron | | | |
| 7 Fasteners | teners ISO Grade 8.8, Stainless Steel | | | |
| 8 Hand Wheel Pin | nd Wheel Pin Spring Steel | | | |
| 9 Thrust Disc | Delrin | | | |
| 10 Environmental Seal | EPDM Wiper Seal | | | |

DIMENSIONS & WEIGHTS (F-F EN558-1 Series 7 BS 5156)

| Valve | L (mm) | A (mm) | H (mm) | Weight (kg) |
|--------|--------|--------|--------|-------------|
| DN15 | 114 | 110 | 64 | 1.9 |
| DN20 | 123 | 122 | 65 | 2.5 |
| DN25 | 133 | 131 | 87 | 3.6 |
| DN32* | 152 | 143 | 124 | 6.1 |
| DN40 | 165 | 169 | 123 | 7.2 |
| DN50 | 196 | 199 | 123 | 9.3 |
| DN65* | 222 | 231 | 185 | 14.8 |
| DN80 | 260 | 250 | 225 | 20.7 |
| DN100 | 311 | 325 | 275 | 34.6 |
| DN125* | 362 | 389 | 360 | 47.0 |
| DN150 | 412 | 457 | 355 | 74.9 |

^{*}Environmental seal not available for DN32, DN65 & DN125

PRESSURE RATING

| Elastomer diaphrag | ms | PTFE diaphragms | |
|--------------------|--------|-----------------|--------|
| DN15 - DN50 | 16 Bar | DN15 - DN50 | 10 Bar |
| DN65 - DN125 | 10 Bar | DN65 - DN125 | 10 Bar |
| DN150 | 10 Bar | DN150 | 7 Bar |

DIAPHRAGM MATERIALS²

- 10 Natural rubber (NR)
- 20 EPDM rubber
- 30 Butyl rubber (IIR)
- 40 Nitrile rubber (NBR)
- 50 Neoprene rubber (CR)
- 60 Hypalon rubber (CSM)
- 70 Viton rubber (FKM/FPM)
- 92 PTFE/EPDM backed
- 93 PTFE/Butyl backed
- 96 PTFE/Hypalon backed
- 97 PTFE/Viton backed
- 98 PTFE/Silicon backed
- 9D TFM/PVDF/EPDM (3 PIECE)
- 9R TFM/PVDF/EPDM (3 PIECE with titanium Connector)

NB: Vacuum grade diaphragms available on request

LINING THICKNESS

DN15 - DN150: 3mm

MATERIAL SPECIFICATIONS

- Cast Iron (ASTM A126 Gr CI B)
- Cast Ductile Iron (ASTM A395 Gr 60-40-18)
- Carbon Steel (ASTM A216 Gr WCB)
- Stainless Steel (ASTM A351 Gr CF8, CF8M, CF3, CF3M)

FLANGE DRILLING STANDARDS

- ANSI B16.5 Class 125 & 150
- EN1092 (PN10/16) (BS4504)
- AS2129-2000 Table D/E (BS10 1962)
- JIS B2220

DESIGN STANDARDS

- EN13397-2001 (BS5156:1985)
- MSS SP88-1993-(R-01)

FACE TO FACE STANDARDS

- EN558-1 Series 7(BS5156)
- EN558-1 Series 1(DIN3202-F1)
- MSS SP88-1993-(R-01)

TESTING STANDARDS

- EN12266-1 2002(BS6755 Part 1)
- MSS SP88-1993-(R-01)

LINING OPTIONS¹

- PFA
- PVDF
- ETFE

KDV CHINA

• PP

Note 1: Specifications contained in this document are subject to change. Note 2: For precise specifications and dimensions contact KDV to obtain a general assembly drawing.