



# SERIES 35 DIAPHRAGM VALVES

## WEIR TYPE - PLASTIC LINED

### DN25 - DN150 NON RISING HAND WHEEL

F-F: EN558-1 Series 7 BS 5156  
(RAISED FACE)



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.*

#### PLASTIC LINING OPTIONS & IDENTIFICATION

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

Polypropylene (Cream)
  ETFE (Gold)
  PFA (Green)

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

#### 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.



#### 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/Components
- Travel stop

#### 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
- Specialty Diaphragms

#### 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 Diaphragm Valves.

[www.kdvflow.com](http://www.kdvflow.com)



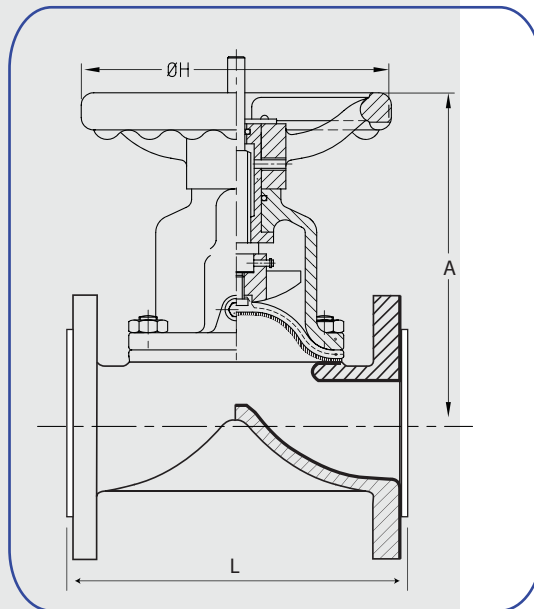
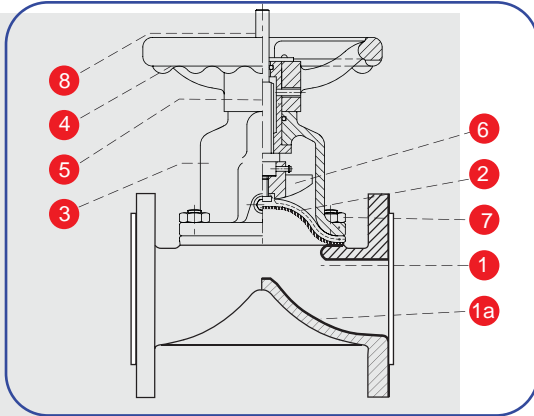
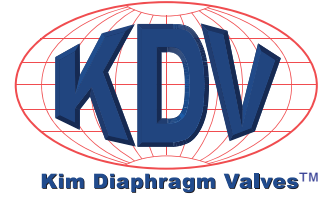
**Kim Diaphragm Valves™**

Corrosion and Abrasion Resistant Flow Control

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#### MATERIALS OF CONSTRUCTION

PART	MATERIAL
1 Body	Cast Iron, Ductile Iron, WCB, Stainless Steel
1a Lining	See Below <sup>1</sup>
2 Diaphragm	See Below <sup>2</sup>
3 Bonnet Shell	Cast Iron, Cast Ductile Iron, WCB, Stainless Steel
4 Hand Wheel	Cast Iron (Coatings and alternative materials on request)
5 Spindle	SS304, SS316
6 Compressor	Cast Iron, Cast Ductile Iron, WCB, Stainless Steel
7 Fasteners	ISO Grade 8.8, Stainless Steel
8 Visual Indicator	Mild Steel

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

Valve	L (mm)	A (mm)	H (mm)	Weight (kg)
DN25	133	114	100	3.5
DN40	165	153	140	7.0
DN50	196	160	140	10.0
DN65	222	180	180	15.0
DN80	260	233	225	22.0
DN100	311	256	225	37.0
DN150	412	368	368	91.0

#### PRESSURE RATING

Elastomer diaphragms		PTFE diaphragms	
DN25 - DN50	16 Bar	DN25 - DN50	10 Bar
DN65 - DN100	10 Bar	DN65 - DN100	10 Bar
DN150	10 Bar	DN150	7 Bar

#### DIAPHRAGM MATERIALS<sup>2</sup>

- 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 - PTFE/EPDM with PVDF interlayer
- 9R - PTFE/EPDM with PVDF interlayer & TiG7 insert

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 OPTIONS<sup>1</sup>

- PFA
- PVDF
- ETFE
- 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.