

DVU Series

- For Separators/Scrubbers to 2000 psi (13.8 MPa) [138 bar] Working Pressure
- Hex Union Allows Plug and Seat Replacement Without Piping Removal
- Operates on 30–70 psi (207–483 kPa) [2.07–4.83 bar] Control Pressure
- Compatible With Murphy Level Controls
- Soft Seat Valve
- Manual Valve Operator



Description

The DVU Series are pneumatically controlled dump valves. The valves open and close automatically by pneumatic control from a Murphy L1200NDVOR or similar level controller and dump valve operator. Diaphragm actuated, the DVU series dump valves operate at 30–70 psi (207–483 kPa) [2.07–4.83 bar] and up to 2000 psi (13.8 MPa) [138 bar] vessel pressure (depending on the model).

A key benefit of this design is a hex union that provides the ability to replace the seat without removing the valve from piping.

Application

Designed for gas compressor scrubbers, the DVU Series can be used to dump any liquids compatible with its specifications.

Specifications

Operating Temperature:

-30 to 250°F (-34.4 to +121°C)

Valve Operating Pressure: See chart below.

Maximum Working Pressure:

DVU150 and DVU175: 1800 psi (12.4 MPa) [124 bar].

DVU2105: 500 psi (3.44 MPa) [34 bar].

DVU2115: 1500 psi (10.3 MPa) [103 bar].

DVU2120: 2000 psi (13.8 MPa) [138 bar].

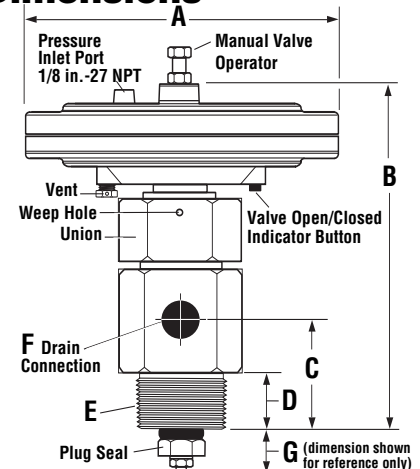
Body Material: Electroless Nickel Plated 12L14 Carbon Steel.

Internal Wetted Parts:

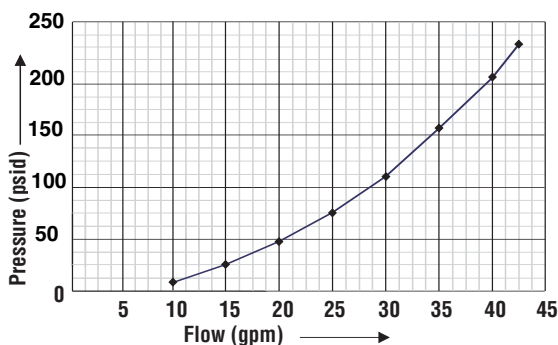
Plug Seal: 90 Durometer Urethane.

Other: 303 stainless steel; Electroless Nickel Plated 12L14 Carbon Steel.

Dimensions



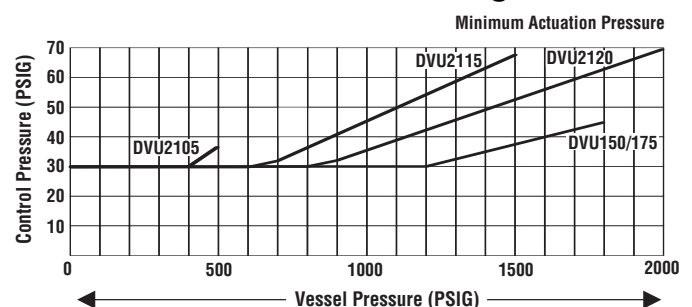
Pressure vs. Flow (DVU150/175)



Model	A	B	C	D	E	F	G
DVU2120	7.50 (191)	8.0 (203)	2.75 (70)	1.0 (25)	2-11.5 NPT	1-11.5 NPT	1.03
DVU2115	7.50 (191)	8.0 (203)	2.75 (70)	1.0 (25)	2-11.5 NPT	1-11.5 NPT	1.03
DVU2105	7.50 (191)	8.0 (203)	2.75 (70)	1.0 (25)	2-11.5 NPT	1-11.5 NPT	1.03
DVU175	7.50 (191)	6.75 (171)	2.06 (52)	1.0 (25)	1-11.5 NPT	3/4"-14 NPT	1.03
DVU150	7.50 (191)	6.75 (171)	2.06 (52)	1.0 (25)	1-11.5 NPT	1/2"-14 NPT	1.03

NOTE: Dimensions are in inches and (millimeters)

Control Pressure vs. Working Pressure



Scrubber Level Systems (SLS)

(Includes LS200, LS200NDVOR, and DVU valve)

SLS2120: Includes DVU2120 valve

SLS2115: Includes DVU2115 valve

SLS2105: Includes DVU2105 valve

SLS175: Includes DVU175 valve

SLS150: Includes DVU150 valve

-LR: Less Regulator option

Replacement Parts

Typical Seal Kit includes: Nut, Washer (1 to 3), "O" Ring, Plug and Seal, Seat, Crush Washer.

Typical Diaphragm Repair Kit includes:

Diaphragm, Diaphragm Washer (upper), Diaphragm Nut, Diaphragm Plate (1 or 2 pcs.), Packing, "O" Ring, Stem, Seal Washer for Maintenance Bolt.

Part No. Description

DVU2120

55-00-0237 Seal Kit (includes plug)
55-00-0236 Diaphragm Kit

DVU2115

55-00-0241 Seal Kit (includes plug)
55-00-0240 Diaphragm Kit

DVU2105

55-00-0245 Seal Kit (includes plug)
55-00-0244 Diaphragm Kit

DVU175

55-00-0230 Seal Kit (includes plug)
55-00-0231 Diaphragm Kit

DVU150

55-00-0230 Seal Kit (includes plug)
55-00-0231 Diaphragm Kit

Shipping Weights

DVU150 and DVU175: 9 lbs. (4 kg.).

DVU150SS and DVU175SS: 9 lbs. (4 kg.)

DVU2105, DVU2115, DVU2120: 14 lbs. (6.4 kg.)

Shipping Dimensions

8 x 8 x 12 in. (203 x 203 x 305 mm.).

The Murphy Gas Compressor Scrubber Level System (SLS)

The system provides for liquid control in gas scrubber applications, by dumping liquids to drain and protecting compressors with a high liquid level switch. Wetted metal parts are made to survive constant use in corrosive environments.

See Bulletin: SLS-04005B for more details.

Filter/Regulator & MURPHYGAGE®

"Instrument Quality Air/Gas Supply"

Pneumatic Level Control

Float actuated level snap-acting switch controls pneumatic pressure to open and close dump valve.

L1200NDVOR: Dump Valve Operator, pressure regulator, and pressure indicating MURPHYGAGE®.

High Level Shutdown Switch

Stainless steel float actuated level switches to alarm and/or shutdown the equipment.

L1200: 2" NPT pipe connection; Rated 2000 psi (13.7MPa) [137bar]; Class I, Division 1. SPDT snap-switch standard. DPDT Optional.

All Stainless Steel available.

Control Panel

Pneumatic Dump Valves See DVU-01069B for more details.

Two piece union design with manual valve operator allows soft plug and hard seat to be replaced without disassembling outlet piping or scrubber pipe connection. Diaphragm actuated valves operate on 30-70 psi (207-483 kPa; 2-5 bar).

How to Order Specify model number:

Model	Inlet	Outlet	Trim Size	Working Max. Press.
DVU2120	2 NPT	1 NPT	0.436 in. (11 mm)	2000 psi.
DVU2115	2 NPT	1 NPT	0.576 in. (15 mm)	1500 psi.
DVU2105	2 NPT	1 NPT	0.859 in. (22 mm)	500 psi.
DVU175	1 NPT	3/4 NPT	0.359 in. (9 mm)	1800 psi.
DVU175SS	1 NPT	3/4 NPT	0.359 in. (9 mm)	1800 psi.
DVU150	1 NPT	1/2 NPT	0.359 in. (9 mm)	1800 psi.
DVU150SS	1 NPT	1/2 NPT	0.359 in. (9 mm)	1800 psi.

Warranty

A limited warranty on materials and workmanship is given with this FW Murphy product.

A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm

CALL MURCAL TO PLACE YOUR ORDER



P:(661)272-4700 F:(661)947-7570

www.murcal.com e-mail: sales@murcal.com

MURPHY



ISO 9001 REGISTERED

Printed in U.S.A.