

DIAPHRAGM VALVES

Pulse Valves, Ideal for Dust Collection Systems and Bag Houses



DCV62T1D



DCV20C1D



RDCV62T



RDCV20C

The **Series DCV/RDCV Diaphragm Valves** are ideal for use with the Series DCT1000 and Series DCT500 duct collection timer boards for controlling the air pulse in jet pulse type dust collectors to clean the filters. Both the Series DCV and RDCV have the option for either coupling or NPT connections. The coupling connection allows for a quick and simple installation. Only the stub pipe and blowtube need to be cleaned and deburred before the valve is fit into position. The "T" Series DCV has female threaded connections. Both the "C" and "T" versions have a 90° angle between the inlet and outlet the most suitable configuration for pulse valve applications. The design offers not only ease of installation, but also minimal airflow restriction for an exceptional cleaning pulse. The valves are offered in both integrated and remote coil configurations.

BENEFITS/FEATURES

- Thermoplastic polyurethane diaphragm for longer life
- High flow factor for effective cleaning
- Valve can be mounted in any position
- Quick on and off response time

APPLICATIONS

- Dust collection systems
- Bag houses
- For use with DCT1000 and DCT500

MODEL CHART					
Model	Size	Solenoid	Connection	Number of Diaphragms	Cv Factor (gal/min)
RDCV20T	3/4"	Remote	NPT	1	114
RDCV20C	3/4"	Remote	Coupling	1	114
DCV20T1D	3/4"	Integral*	NPT	1	114
DCV20C1D	3/4"	Integral*	Coupling	1	114
RDCV25T	1"	Remote	NPT	1	23
RDCV25C	1"	Remote	Coupling	1	23
DCV25T1D	1"	Integral*	NPT	1	23
DCV25C1D	1"	Integral*	Coupling	1	23
RDCV35T	1-1/2"	Remote	NPT	1	42
RDCV35C	1-1/2"	Remote	Coupling	1	42
DCV35T1D	1-1/2"	Integral*	NPT	1	42
DCV35C1D	1-1/2"	Integral*	Coupling	1	42
RDCV45T	1-1/2"	Remote	NPT	2	51
RDCV45C	1-1/2"	Remote	Coupling	2	51
DCV45T1D	1-1/2"	Integral*	NPT	2	51
DCV45C1D	1-1/2"	Integral*	Coupling	2	51
RDCV50T	2"	Remote	NPT	2	106
DCV50T1D	2"	Integral*	NPT	2	106
RDCV62T	2-1/2"	Remote	NPT	2	136
DCV62T1D	2-1/2"	Integral*	NPT	2	136
RDCV76T	3"	Remote	NPT	2	167
DCV76T1D	3"	Integral*	NPT	2	167

*110 VAC with DIN connector.

SPECIFICATIONS

Service: Compatible gases, filtered and oil free.

Wetted Materials: Body: aluminum; Trim: 304 SS; Diaphragm and seals: NBR; Diaphragm disc: Polyamide.

Other Materials: Cover: aluminum; Body bolts and spring: 304 SS.

Pressure Limits: Minimum of 4.4 psi (0.3 bar), maximum of 124.7 psi (8.6 bar).

Temperature Limits: Ambient: -4 to 140°F (-20 to 60°C) for RDCV models; -4 to 122°F (-20 to 50°C) for DCV models; Operating: -4 to 185°F (-20 to 85°C).

Power Requirements: 110 VAC, 220 VAC, or 24 VDC for DCV models.

Power Consumption: 12 W, inrush: 17 VA; Holding: 14.5 VA for DCV models.

Electrical Connection: DIN connection for DCV models.

Enclosure Rating: NEMA 4X (IP65) for DCV models.

Process Connection: See Catalog page.

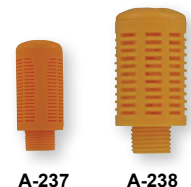
Mounting Orientation: Any position.

Compliance: CE.

MODEL CHART					
Example	DCV	20	T	ID	DCV20T1D
Construction	DCV RDCV				Integrated coil Remote coil
Size		20 25 35 45 50 62 76			3/4" 1" 1-1/2" 1-1/2" (2 diaphragms) 2" 2-1/2" 3"
Connection			T C		NPT Coupling
Voltage				1D 2D 3D	110 VAC (for integrated coil only) 220 VAC (for integrated coil only) 24 VDC (for integrated coil only)

ACCESSORIES

Model	Description	Fits Valve Sizes
A-237	1/8" NPT	3/4", 1", 1-1/2", RSV
A-238	3/8" NPT	1-1/2", 2", 2-1/2", 3"



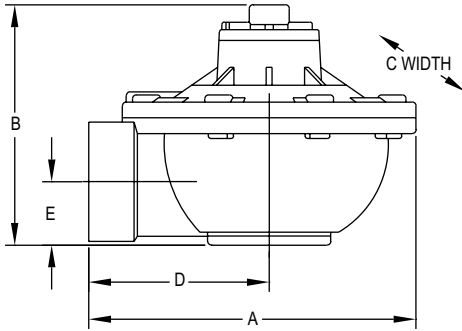
A-237

A-238

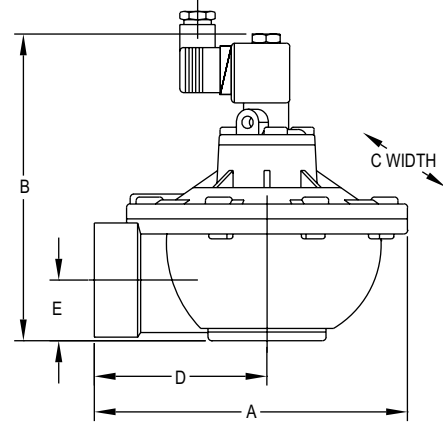
The muffler accessory can be easily field installed to any diaphragm valve with an exhaust. Pneumatic exhaust ports are on the diaphragm valves that have dual diaphragms and the units with the integral mounted solenoid. The muffler decreases the amount of noise when the air is exhausted from the valve. Valves with dual diaphragms and an integral solenoid have two exhaust ports and will require one A-237 and one A-238.

DIAPHRAGM VALVES

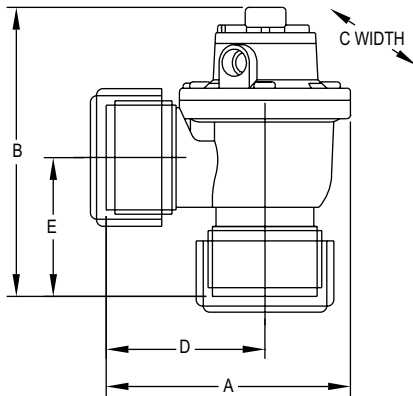
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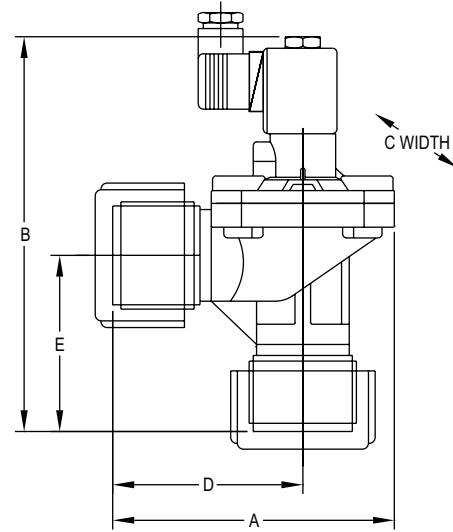
Remote NPT



Integrated NPT



Remote coupling



Integrated coupling

DIMENSIONAL CHART										
Solenoid	Connection	Model	A (mm)	B (mm)	C (mm)	Weight lb (kg)	D (mm)	E (mm)		
Remote	NPT	RDCV20T	3-15/16" (100)	2-31/32" (75)	3-7/16" (87)	1.12 (.51)	2-3/16" (56)	25/32" (20)		
		RDCV25T	4-1/8" (105)	3" (76)	3-1/4" (83)	1.15 (.52)	2-1/2" (64)	7/8" (22)		
		RDCV35T	5-1/8" (130)	4-29/32" (125)	4-3/8" (111)	2.0 (.91)	4-1/2" (114)	1-9/32" (33)		
		RDCV45T	5-25/32" (147)	5-5/32" (131)	4-3/8" (111)	2.2 (1.0)	3-5/8" (91)	3" (76)		
		RDCV50T	8-1/16" (205)	5-7/8" (148)	7-1/4" (184)	4.2 (1.9)	4-15/32" (113)	1-9/16" (40)		
		RDCV62T	8-9/32" (210)	6-11/16" (170)	7-1/4" (184)	5.5 (2.5)	4-21/32" (118)	1-29/32" (48)		
		RDCV76T	8-19/32" (218)	7-27/32" (199)	7-7/8" (200)	6.6 (3.0)	4-21/32" (118)	2-1/2" (63)		
	Coupling	RDCV20C	4-13/32" (112)	4" (102)	3-7/16" (87)	1.37 (.62)	2-5/8" (67)	1-25/32" (45)		
		RDCV25C	4-5/8" (117)	5" (127)	3-1/4" (83)	2.1 (.96)	3" (76)	2-3/4" (70)		
		RDCV35C	5-13/16" (147)	5-15/32" (139)	4-3/8" (111)	2.4 (1.1)	3-5/8" (91)	3" (76)		
		RDCV45C	5-25/32" (147)	6-25/32" (172)	4-3/8" (111)	3.2 (1.45)	3-5/8" (91)	3" (76)		
		Integrated	NPT	DCV20T_D	3-15/16" (100)	2-31/32" (75)	3-7/16" (87)	1.31 (.59)	2-3/16" (56)	25/32" (20)
				DCV25T_D	4-1/8" (105)	3" (76)	3-1/4" (83)	1.33 (.60)	2-1/2" (64)	7/8" (22)
				DCV35T_D	5-1/8" (130)	4-29/32" (125)	4-3/8" (111)	2.2 (.99)	4-1/2" (114)	1-9/32" (33)
DCV45T_D	5-25/32" (147)			5-5/32" (131)	4-3/8" (111)	2.4 (1.1)	3-5/8" (91)	3" (76)		
DCV50T_D	8-1/16" (205)			5-7/8" (148)	7-1/4" (184)	4.4 (2.0)	4-15/32" (113)	1-9/16" (40)		
DCV62T_D	8-9/32" (210)			6-11/16" (170)	7-1/4" (184)	5.7 (2.6)	4-21/32" (118)	1-29/32" (48)		
DCV76T_D	8-19/32" (218)			7-27/32" (199)	7-7/8" (200)	6.8 (3.1)	4-21/32" (118)	2-1/2" (63)		
Coupling	DCV20C_D	4-13/32" (112)	4" (102)	3-7/16" (87)	1.55 (.70)	2-5/8" (67)	1-25/32" (45)			
	DCV25C_D	4-5/8" (117)	5" (127)	3-1/4" (83)	2.3 (1.0)	3" (76)	2-3/4" (70)			
	DCV35C_D	5-13/16" (147)	5-15/32" (139)	4-3/8" (111)	2.6 (1.2)	3-5/8" (91)	3" (76)			
	DCV45C_D	5-25/32" (147)	6-25/32" (172)	4-3/8" (111)	3.4 (1.5)	3-5/8" (91)	3" (76)			