

Technical Specification

'DD' Series Pulse Jet Valves



DD Series

Description

High performance diaphragm valve with dresser nut ports. Available with integral pilot or as remotely piloted valve. Outlet at 90° to inlet.

Suitable for

Dust collector applications, in particular for reverse pulse jet filter cleaning and its variations including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fibre filters.

Construction

- Body and Dresser Nuts: Aluminium (diecast)
- Ferrule: 304 SS
- Armature: 430FR SS
- Seals: Nitrile or Viton (reinforced)
- Spring: 304 SS
- Screws: 302 SS

Dresser Nut Seals: Nitrile or Viton
 Diaphragm Seat: PA-6 (standard), Viton coated mild steel or High Density PE
 Refer to Q Series Solenoid product data sheet for solenoid construction details.

Operation

Recommended on time range: 50-500ms
 Recommended time between pulses: 1 minute or greater

Maintenance

Before conducting any maintenance activity on the system ensure that components are fully isolated from pressure and power supplies. Pressure and power should not be reapplied until the valve has been fully assembled. Diaphragm and pilot inspection should be conducted annually.

Approvals

- Atex II 2D Mechanical (RCA Only)
- CSA (U.S) C22.2 No 139-1982, UL 429 (CA & RCA)
- C-Tick (CA)
- EMC 2004/108/EC (CA)
- Low Voltage Directive 2006/95/EC (CA)

Installation

For your safety do not pressurise system until all valves and pipes are fully secured. Do not attempt to remove a fitted valve while system is under pressure.

1. Prepare supply and blowtube pipes* to suit valve specification. Avoid installing valves underneath the tank.
2. Ensure tank and pipes are free from dirt, rust or other particulate.
3. Ensure supply air is clean and dry.
4. Mount valve to inlet pipes and blowtube to valve, tighten dresser nut.
5. Tanks and pipes must be independently restrained from valve.
6. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
7. Apply moderate pressure to system and check for installation leaks.
8. Fully pressurise system.
9. Test fire and listen for proper actuation and crisp pulse noise.

Valve is not a structural component. Do not rely on valve to retain tanks or pipe.

*Pipes must be to Schedule 40 outside diameter

Schedule 40 Size	OD mm	OD Inches
¾"	26.7	1.050
1"	33.4	1.315
1.5"	48.3	1.900

Weights

Size	Integral Pilot (CA) Kg (lbs)	Remote Pilot (RCA) Kg (lbs)
20	0.82 (1.80)	0.61 (1.34)
25	1.21 (2.67)	0.99 (2.18)
45	2.28 (5.03)	2.11 (4.65)

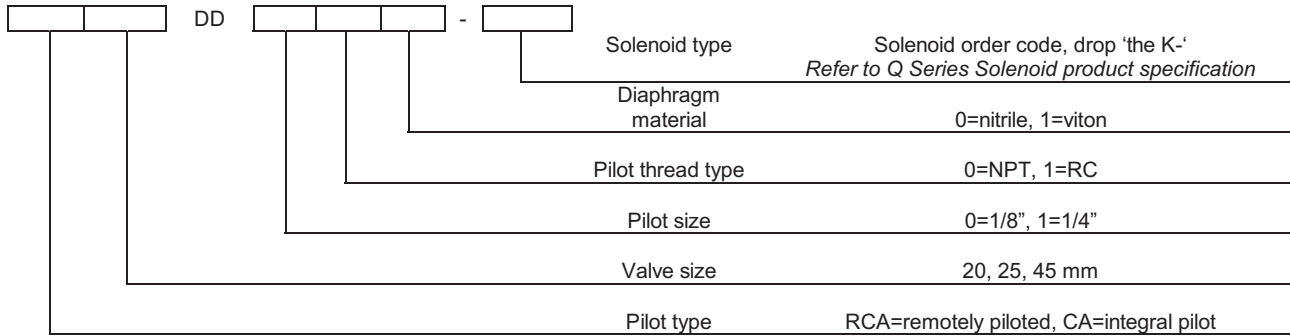
Maintenance Kits

Model	Nitrile	Viton	Low Temperature -60°C (-76°F) Min.	Includes
Diaphragm Kit				
CA/RCA20DD	K2000	K2007	NA	Diaphragm kits include main and secondary diaphragms (where required) and all springs.
CA/RCA25DD	K2501	K2503	K2504	
CA/RCA45DD	K4502	K4503	K4522	
Dresser Seal Kit				
CA/RCA20DD	K2008	K2009	NA	1 dresser seal, 1 dresser nut, 1 seal retainer
CA/RCA25DD	K2508	K2507	NA	1 dresser seal, 1 dresser nut, 1 seal retainer
CA/RCA45DD	K4510	K4511	NA	1 dresser seal, 1 dresser nut, 1 seal retainer
Pilot repair kit (suits all CA valves)	K0380	K0384	NA	o-ring, armature assembly, armature spring, ferrule

Product Characteristics and Performance

Nom. Size	Port Size		Number of diaphragms	Flow		Pressure Range kPA(Psi)	Temperature Range °C (°F)	
	mm	in		Kv	Cv		Nitrile Seals	Viton Seals
20	20	¾	1	12	14	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
25	25	1	1	20	23	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
45	40	1.5	2	44	51	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

Order Code



Examples: CA45DD010-300

1.5" dresser nut port valve with 1/8" RC pilot, nitrile seals and 220/240VAC integral pilot with DIN socket terminals.

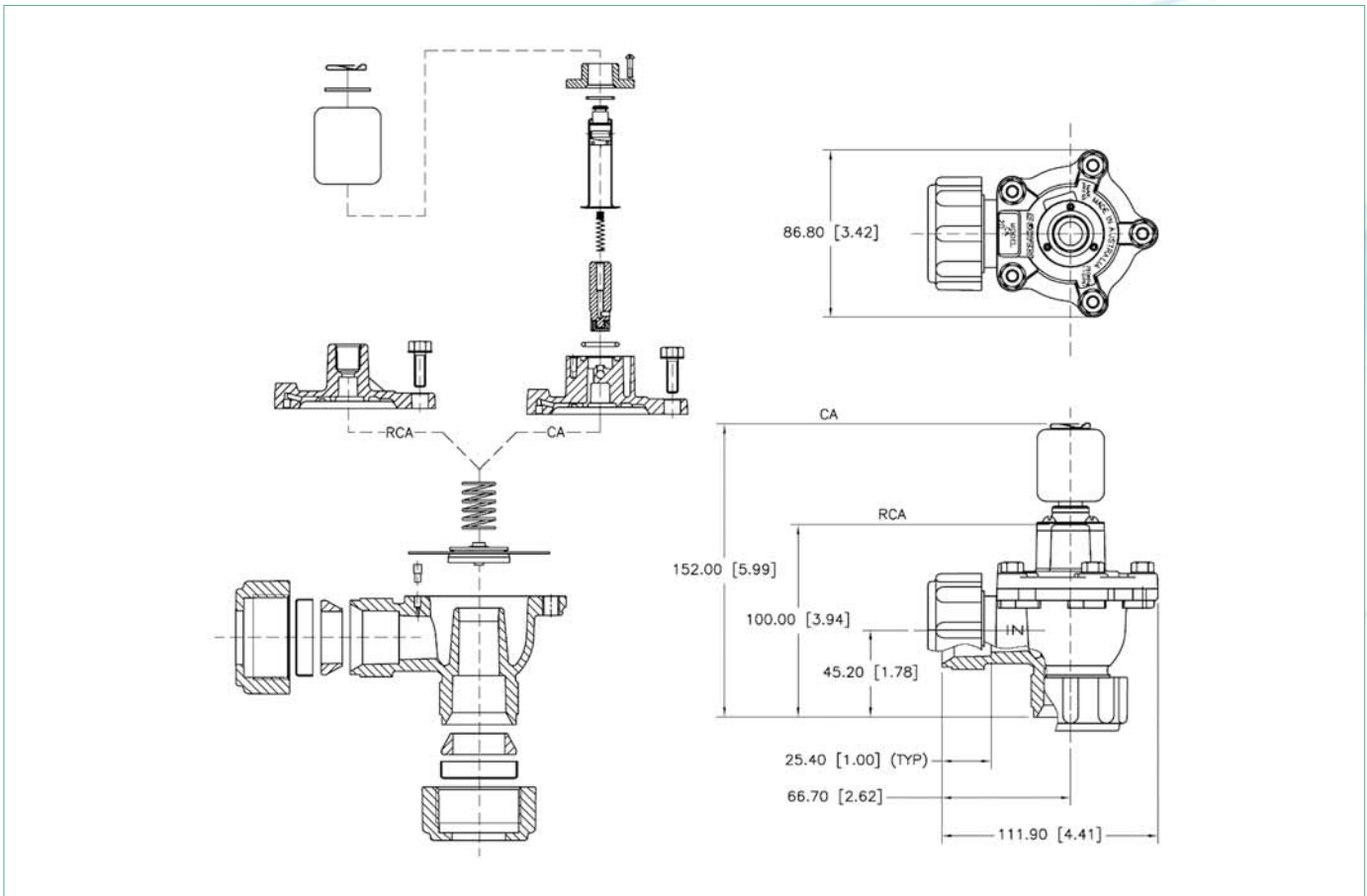
RCA25DD001

1" dresser nut port valve with 1/8" NPT remote pilot port and viton seals.

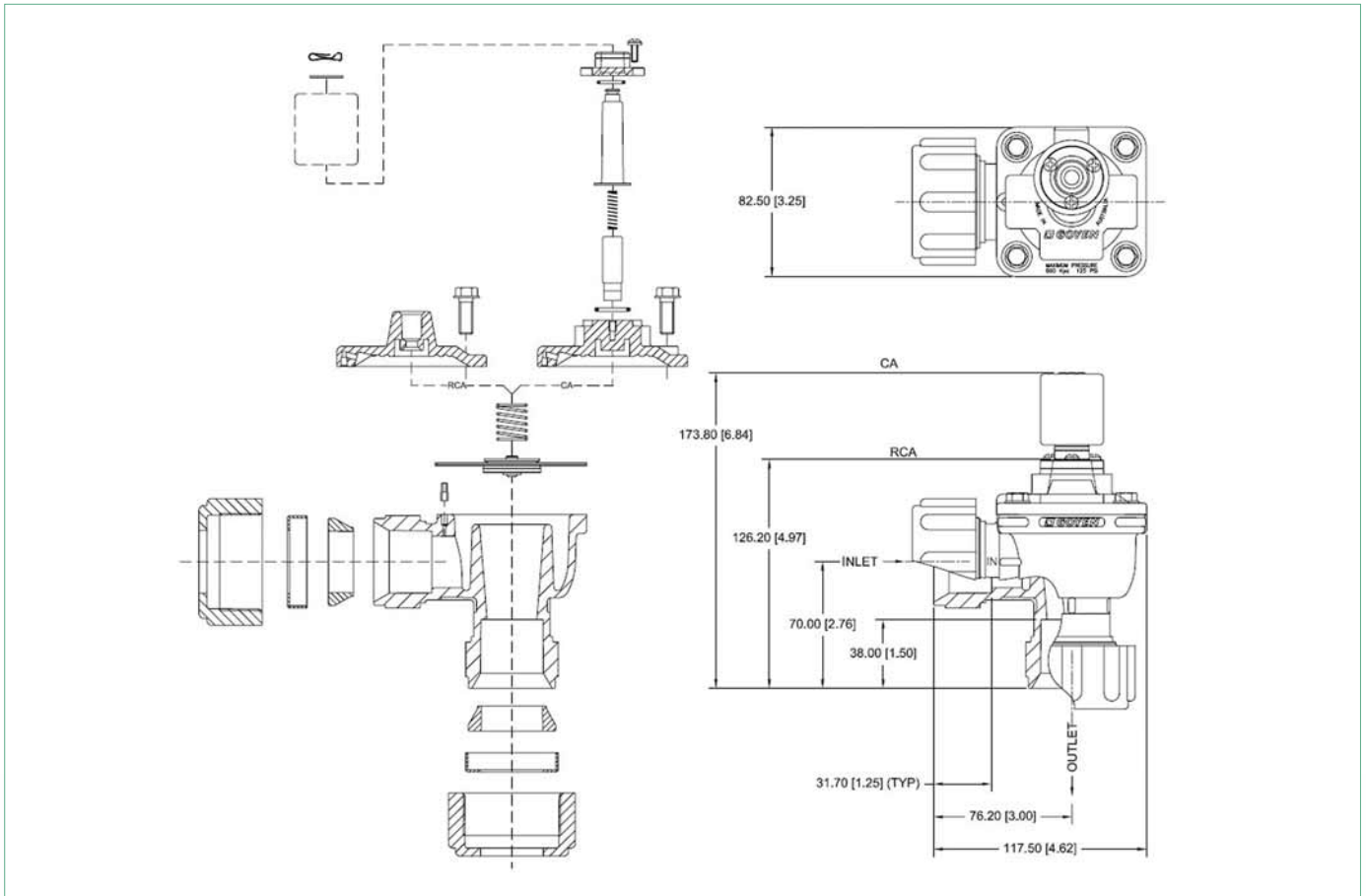
Dimensions

(Dimensions in mm and [inches])

CA/RCA20DD



CA/RCA25DD



CA/RCA45DD

