

DRESSER NUT VALVES

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DRESSER NUT VALVES

PRODUCT LEAFLET



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 and envelope filters, ceramic filters and sintered metal fibre filters.

CONSTRUCTION

Body and Dresser Nuts: Aluminium (diecast)

Ferrule: 305 SS

Armature: 430FR SS

Seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 or 304 SS

Dresser Nut Seals: Nitrile or Viton

Diaphragm Seat: PA-66 (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: 50–500 ms

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 3 GD (RCA/RCAC only)
- CSA [C, US] [C22.2 No 139–10 and UL 429:2009] (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 nuts.
5. Tanks and pipes must be independently supported 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.

* OD as shown below.

SIZE	OD MM	OD INCHES
1.5"	48.3	1.900

WEIGHTS

SIZE	INTEGRAL PILOT (CA) KG (LB)	REMOTE PILOT (RCA) KG (LB)
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/RCA45DD	K4502	K4503	K4522	Diaphragm kits include main and secondary diaphragms and all springs
DRESSER SEAL KIT				
CA/RCA45DD	K4510	K4511	NA	2 dresser seals, 2 dresser nuts, 2 seal retainers
Pilot repair kit (suits all CA valves)	K0380	K0384	NA	o-ring, armature assembly, armature spring, ferrule

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PRODUCT CHARACTERISTICS AND PERFORMANCE

NOM. SIZE	PORT SIZE		NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE	TEMPERATURE RANGE °C °(F)	
	MM	INCH		KV	CV		NITRILE SEALS	VITON SEALS
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

RCA 45 DD 0 1 0 - 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

45 mm

Pilot size

0=1/8" or CA
1=1/4"

Solenoid type

Coil type for CA only.
See the RCA3 Solenoid Pilot Valves brochure
for coil options.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type (RCA), Exhaust thread type (CA)

0=NPT
1=RC

EXAMPLES

CA45DD010-300

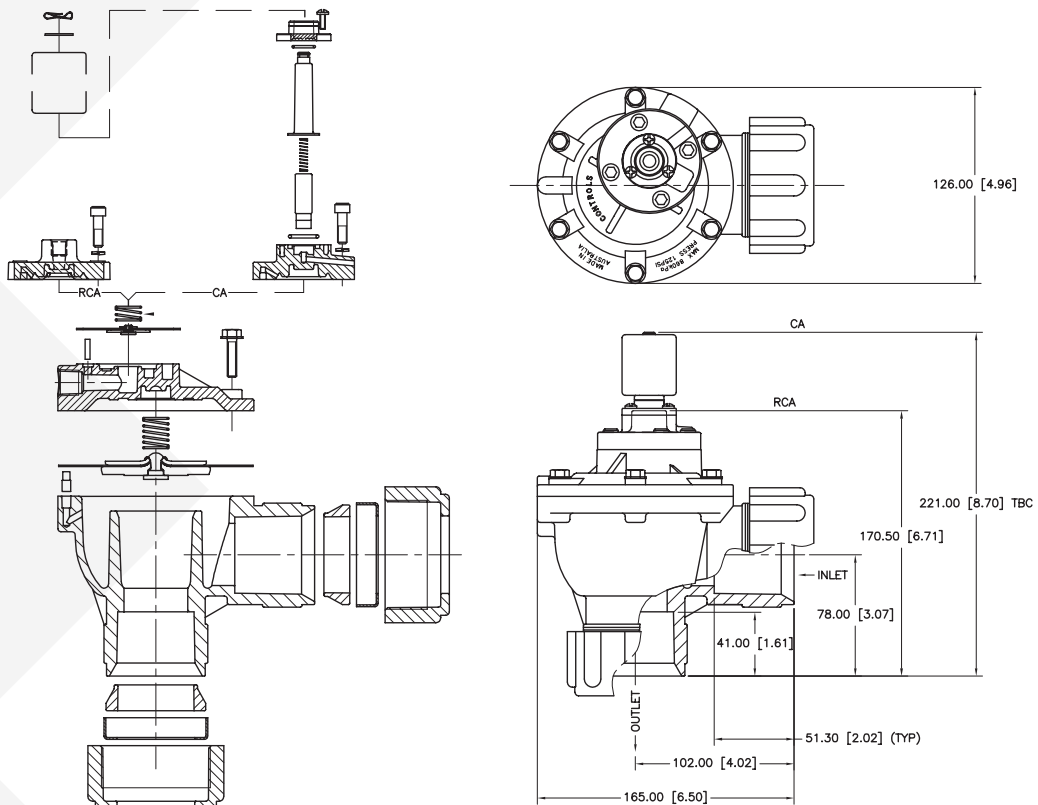
1.5" dresser nut port valve with nitrile seals
and 220/240 V AC integral pilot with DIN
socket terminals.

RCA45DD001

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

DIMENSIONS IN MM (AND INCHES)

CA/RCA45DD



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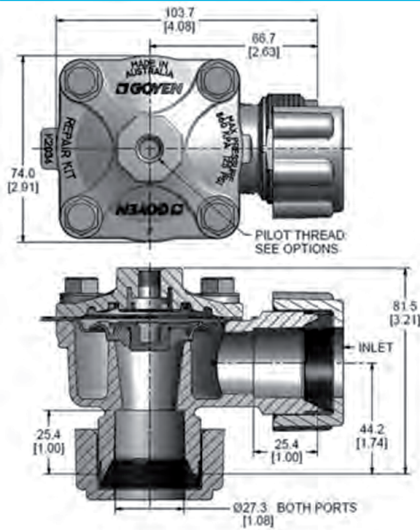
DRESSER NUT VALVES

PRODUCT LEAFLET

RCAC20DD4 - REVERSE PULSE JET VALVES



DIMENSIONS IN MM (AND INCHES)



DESCRIPTION

High-performance diaphragm valve with dresser nut ports. Equipped with 'Shockwave' springless diaphragm. The 4 series valves are available as remote pilot valves and may be converted to an integral pilot using either the RCA3DM or RCA3PV screw-in pilots. Outlet is 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 and envelope filters, ceramic filters and sintered metal fibre filters.

CONSTRUCTION

Body and Dresser Nuts: Aluminium (diecast)

Screws: 304 Stainless steel

Dresser Nut Seals: Nitrile or Viton

Diaphragm: Proprietary highperformance engineering thermoplastic Elastomer or Viton

OPERATION

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

Please Note: We recommend using Schedule 40 pipe. Thickness OD is as shown below.

SIZE	OD MM	OD INCHES
3/4"	26.67	1.05

WEIGHTS

VALVE	KG (LB)
RCAC20DD4	0.52 (1.14)

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

The RCAC20DD4 meets the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
DIAPHRAGM KIT		
RCAC20DD4	K2034	K2033
DRESSER SEAL KIT		
RCAC20DD4	K2008	K2009

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE MM (INCH)	NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE KPA (PSI)	TEMPERATURE RANGE °C °(F)	
		KV	CV		SHOCKWAVE	VITON
20 (3/4)	1	14	17	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

EXAMPLES

RCAC20DD4012
 3/4" dresser nut valve with 1/8" RC pilot port thread, Shockwave diaphragm.

Note:
 1/8 Pilot available in NPT, RC and G Thread.
 1/4 Pilot is only available in G Thread.

ORDER CODE

RCAC20DD4	0	1	2
Pilot size	0=1/8"	1=1/4"	
Diaphragm material	1=Viton	2=Shockwave	
Thread type	0=NPT	1=RC	2=G

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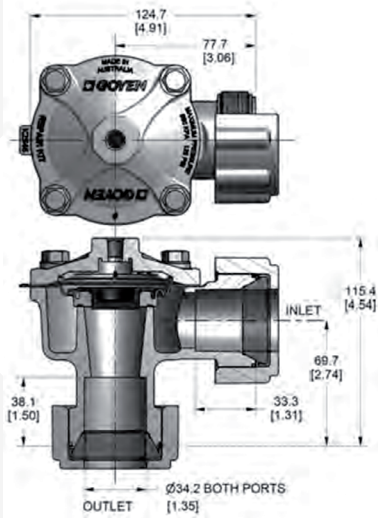
DRESSER NUT VALVES

PRODUCT LEAFLET

RCAC25DD4 - REVERSE PULSE JET VALVES



DIMENSIONS IN MM (AND INCHES)



DESCRIPTION

High-performance diaphragm valve with dresser nut ports. Equipped with 'Shockwave' springless diaphragm. The 4 series valves are available as remote pilot valves and may be converted to integral pilot using either the RCA3DM or RCA3PV screw-in pilots. Outlet is 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 and envelope filters, ceramic filters and sintered metal fibre filters.

CONSTRUCTION

Body and Dresser Nuts: Aluminium (diecast)

Screws: 304 Stainless steel

Dresser Nut Seals: Nitrile or Viton

Diaphragm: High-performance engineering thermoplastic Elastomer or Viton

OPERATION

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

Please Note: We recommend using Schedule 40 pipe. Thickness OD is as shown below.

SIZE	OD MM	OD INCHES
1	33.4	1.315

WEIGHTS

VALVE	KG (LB)
RCAC25DD4	0.96 (2.12)

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

The RCAC25DD4 meets the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
DIAPHRAGM KIT		
RCAC25DD4	K2546	K2551
DRESSER SEAL KIT		
RCA25DD	K2508	K2507

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE MM (INCH)	NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE KPA (PSI)	TEMPERATURE RANGE °C °(F)	
		KV	CV		SHOCKWAVE	VITON
25 (1)	1	22.5	26.0	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

EXAMPLES

RCAC25DD4012
 1" dresser nut valve with 1/8" RC pilot port thread, Shockwave diaphragm.

Note:
 1/8 Pilot available in NPT, RC and G Thread.
 1/4 Pilot is only available in G Thread.

ORDER CODE

RCAC25DD4	0	1	2
Pilot size	0=1/8"	1=1/4"	
Diaphragm material	1=Viton	2=Shockwave	
Thread type	0=NPT	1=RC	2=G

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DIAPHRAGM SERVICE KITS FOR DELETED VALVES

Maintenance kits

MODEL	NITRILE	VITON	LOW TEMPERATURE -60°C (-76°F) MIN.	INCLUDES
CA/RCA20DD	K2000	K2007	NA	Diaphragm kits include main and secondary diaphragms (where required) and all springs.
CA/RCA25DD	K2501	K2503	K2504	



GOYEN CONTROLS PTY LIMITED

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Note: The information and data contained in this document are based on our general experience and are believed to be correct. They are given in good faith and are intended to provide a guideline for the selection and use of our products. Since the conditions under which our products may be used are beyond our control, this information does not imply any guarantee of final product performance and we cannot accept any liability with respect to the use of our products. The quality of our products is guaranteed under our conditions of sale. Existing industrial property rights must be observed.
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