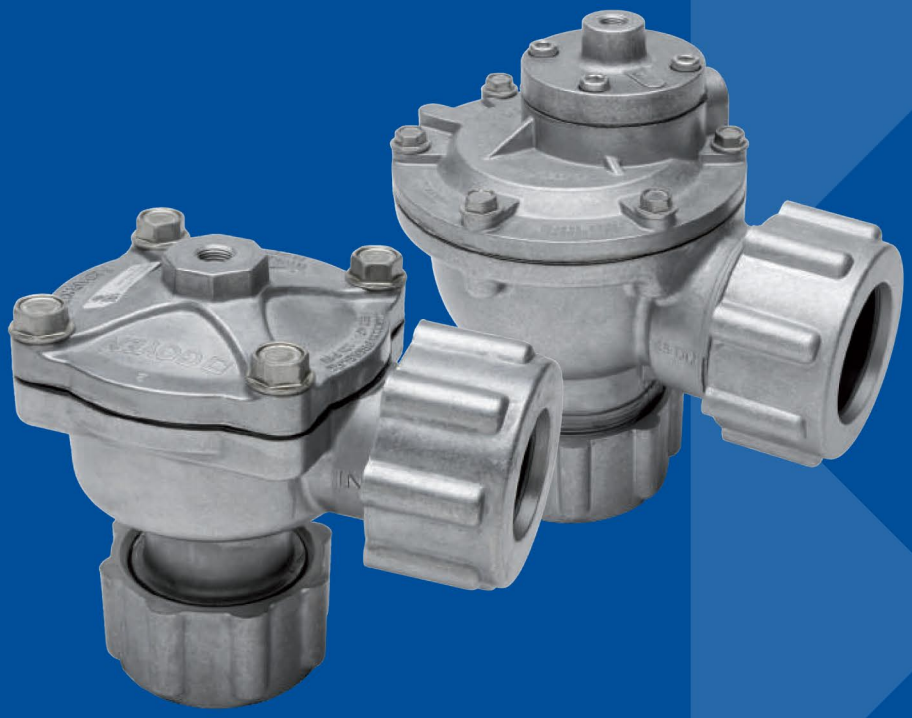
PENTAIR GOYEN

DISTRIBUTED BY:
IAS Industry Air Sales Ltd.
650 Woodlawn Rd. W. Unit A-8
Guelph, ON N1K 1B8
TEL: 888-211-0171 / 519-823-8900
FAX: 519-824-5599
EMAIL: parts@industryairsales.com
www.industryairsales.com



# DRESSER NUT VALVES

CLEAN AIR SOLUTIONS | PRODUCT LEAFLET

# GOYEN
## 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 |

# GOYEN
## DRESSER NUT VALVES

PRODUCT LEAFLET

## PRODUCT CHARACTERISTICS AND PERFORMANCE

| NOM. SIZE | PORT SIZE | | NUMBER OF DIAPHRAGMS | FLOW | | PRESSURE RANGE | TEMPERATURE RANGE °C °(F) | |
|---|---|---|---|---|---|---|---|---|
| | MM | INCH | | KV | CV | KPA (PSI) | 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

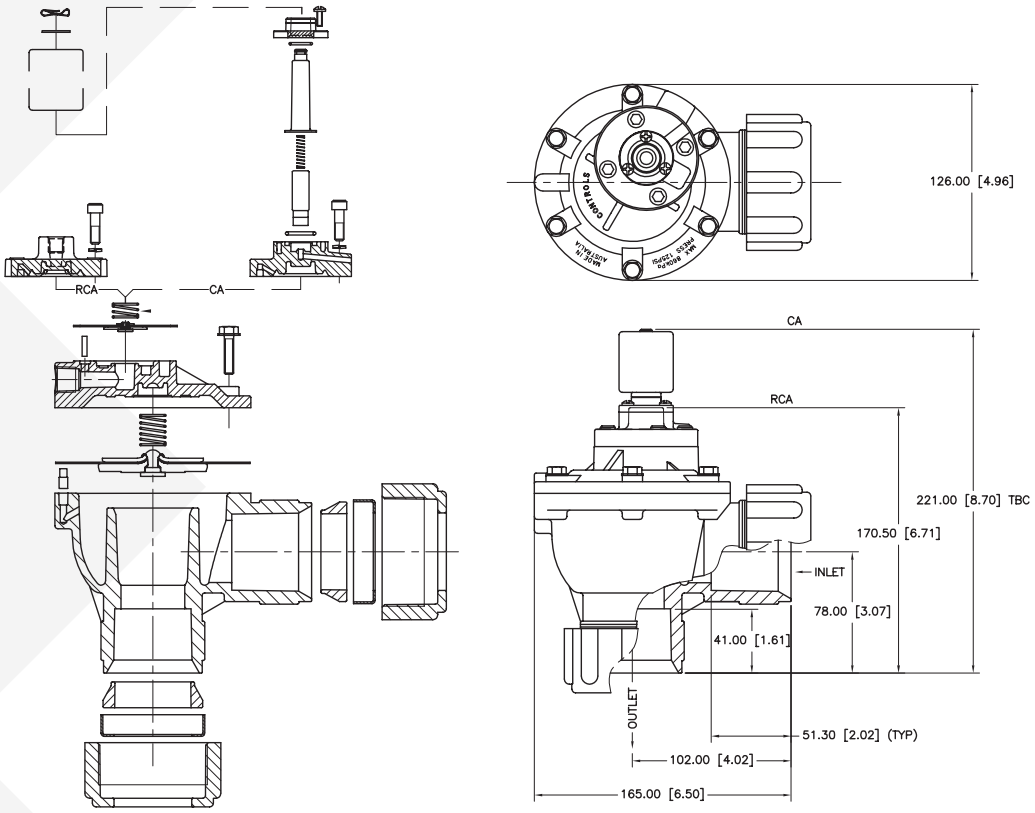
## EXAMPLES

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**

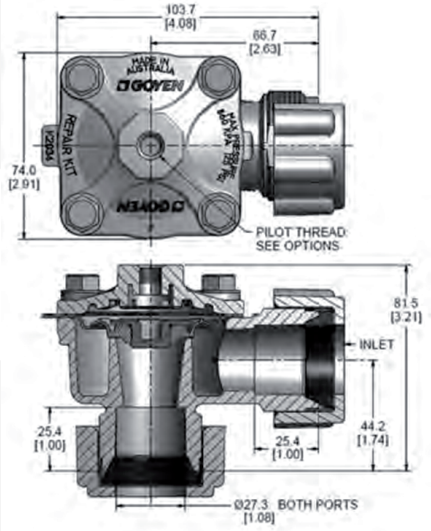


# GOYEN
## DRESSER NUT VALVES

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

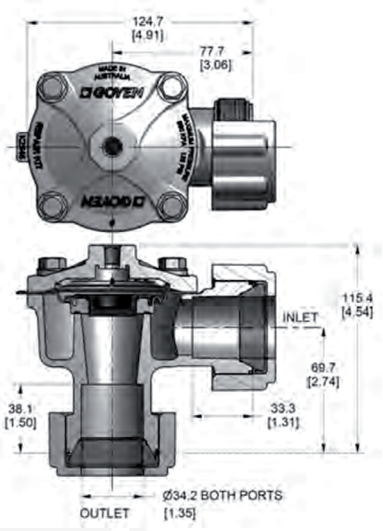
**Thread type**
0=NPT
1=RC
2=G

# GOYEN
## 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

## 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**
268 MILPERRA ROAD, MILPERRA NSW 2214, AUSTRALIA  WWW.GOYENMECAIR.PENTAIR.COM

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.
PL PENTAIR GOYEN DRESSER NUT VALVES 3517 © 2017 Pentair. All Rights Reserved.