# **GOYEN**





# **Technical Specification**

# 3 Series Pulse Jet Valves



FS3 Series



**DD3 Series** 



# Description

Superior performance, easy maintenance diaphragm valve available with threaded ports (T3), dresser nut ports (DD3) or flange and slide ports (FS3). Outlet at 90° to inlet. 3 Series valves are available as remote pilot valves and may be converted to integral pilot applications through the use of the screw in pilots of the MIP and 3DS series.

#### 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: Aluminium (diecast)

Seals: Nitrile or Viton (diaphragms

reinforced) Spring: 304 SS

Diaphragm Seat: PA-6 (standard), Viton

coated mild steel

#### 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
- CSA (C&US) C22.2 No. 139-1982 UL Std No. 429

#### 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 type and specification. Avoid installing valves underneath the tank.
- Ensure tank and pipes are free from dirt, rust or other particulate.
- 3. Ensure supply air is clean and dry.
- 4. Mount valves to inlet pipes (or flanges, tighten bolts to 10Nm) and blowtube to valves, ensuring no excess thread sealant can enter the valve itself. Ensure blowtube is fully inserted into the valve outlet.
- 5. Tanks and pipes must be independently restrained from FS and DD valves.
- 6. Connect RCAC pilot port to remote pilot valve, or install MIP/3DS screw in pilot valve.
- 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. Refer to Camlock product specifications for installation details.

\*Pipes must be to Schedule 40 outside diameter

| Schedule 40 Size | OD mm | OD Inches |
|------------------|-------|-----------|
| 3/4"             | 26.7  | 1.050     |
| 1"               | 33.4  | 1.315     |

#### Weights

| Size  | Remote Pilot (RCAC)<br>Kg (lbs) | Size  | Remote Pilot (RCAC)<br>Kg (lbs) |
|-------|---------------------------------|-------|---------------------------------|
| 20T3  | 0.55 (1.21)                     | 25T3  | 0.65 (1.43)                     |
| 20ST3 | 0.55 (1.21)                     | 25DD3 | 1.05 (2.32)                     |
| 20DD3 | 0.55 (1.21)                     | 25FS3 | 0.95 (2.08)                     |
| 20FS3 | 0.55 (1.21)                     |       |                                 |

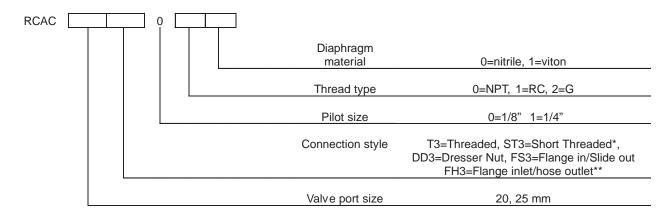
#### Maintenance Kits and Accessories

| Model                             | Nitrile | Viton     | Includes  |
|-----------------------------------|---------|-----------|---|
| RCAC20T3, ST3, DD3, FS3           | K2016   | K2017     | Diaphragm kits include main                                 |
| RCAC25T3, DD3, FS3, FH3           | K2529   | K2530     | diaphragm, spring, and locking pin.                         |
| 20DD3 Dresser nut seal kit        | K2018   | K2019     | Nut, seal, and seal   |
|                                   |         |           | retaining ring.   |
| 25DD3 Dresser nut seal kit        | K2533   | K2534     | Nut, seal, and seal retaining ring.                         |
| 20FS3 Outlet seal replacement     | G690338 | G690338-2 | Outlet seal   |
| 25FS3 Outlet seal replacement     | G690763 | G690763-2 | Outlet seal   |
| 25FS3 Valve to baghouse wall seal | G690125 | G690125-2 | Wall seal   |
| Camlock for 20 & 25FS3 and        |         |           |   |
| 6" round tank                     | K2514-2 | -         | Flange adaptor to mount FS                                  |
| Camlock for 20 & 25FS3            |         |           | valves to round tanks.                                      |
| and 8" round tank                 | K2536-2 | 2         | Eliminates welding. Refer to Camlock product specification. |

#### **Product Characteristics and Performance**

| Model | Port 9 | Size | Number of  | Flo | w  | Pressure Range   | Temperature           | Range °C °(F)            |
|-------|--------|------|------------|-----|----|------------------|-----------------------|--------------------------|
|       | mm     | in   | diaphragms | Kv  | Cv | kPA(Psi)         | Nitrile Seals         | Viton Seals              |
| 20T3  | 20     | 3/4" | 1          | 14  | 17 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 20ST3 | 20     | 3/4" | 1          | 14  | 17 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 20DD3 | 20     | 3/4" | 1          | 14  | 17 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 20FS3 | 20     | 3/4" | 1          | 19  | 22 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 25T3  | 25     | 1"   | 1          | 24  | 27 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 25DD3 | 25     | 1"   | 1          | 24  | 27 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |
| 25FS3 | 25     | 1"   | 1          | 34  | 40 | 30(5) - 860(125) | -40(-40) to 82(179.6) | -29(-20.2) to 232(449.6) |

# **Order Code**



<sup>\*</sup>Available for 20 (3/4") size only. \*\*Available for 25 (1") size only.

Examples: RCAC25T3010

1" threaded port valve with 1/8" pilot, 1" RC port threads, nitrile seals.

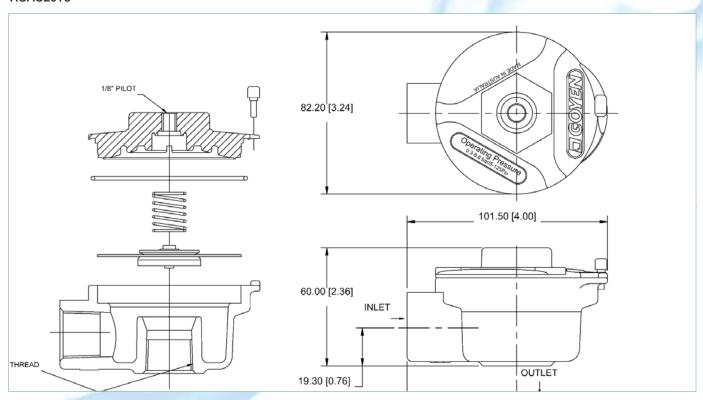
RCAC20FS3001

3/4" flange inlet slide seal outlet port valve with 1/8" NPT remote pilot port and viton seals.

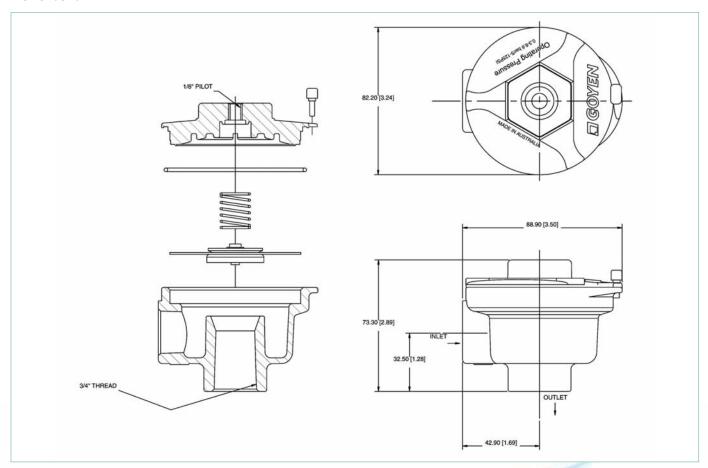
## **Dimensions**

(Dimensions in mm and [inches])

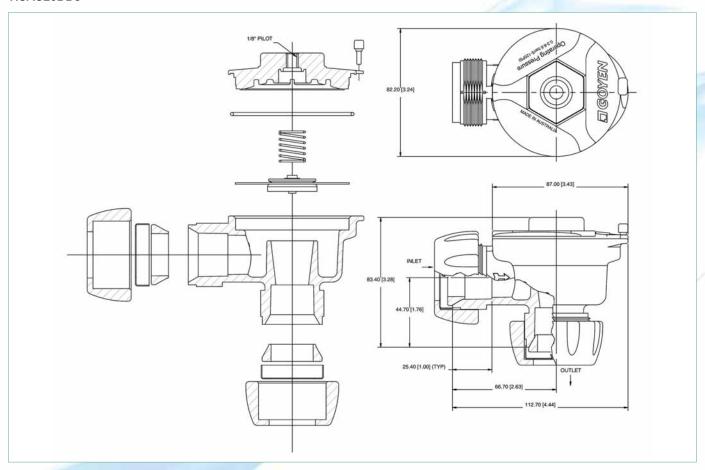
# RCAC20T3



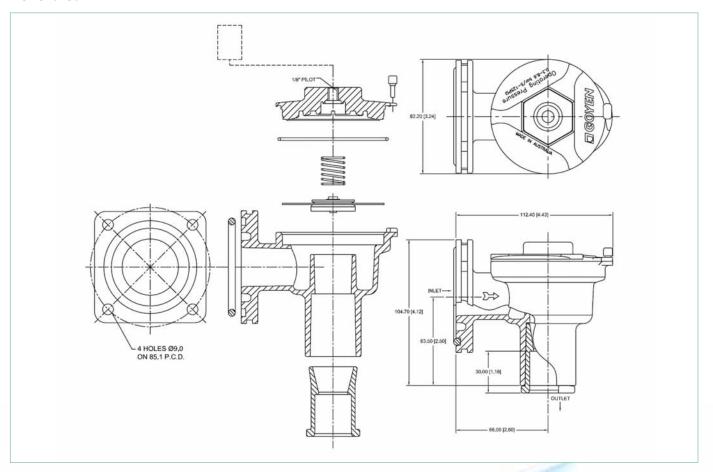
# RCAC20ST3



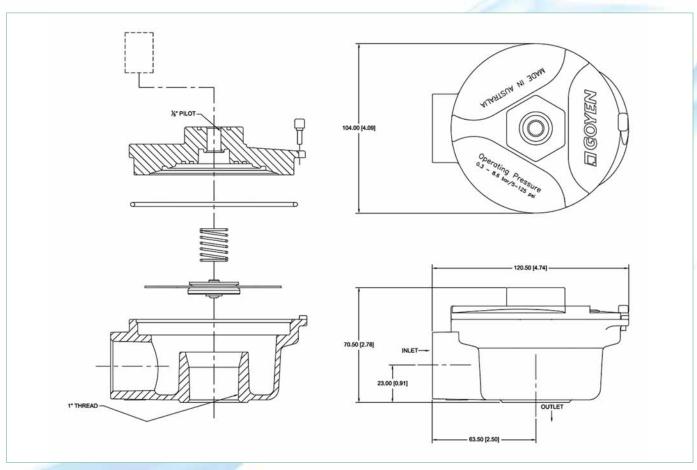
# RCAC20DD3



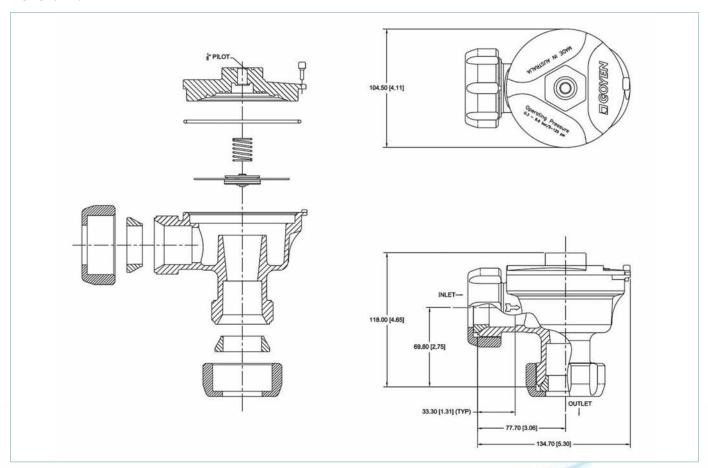
# RCAC20FS3



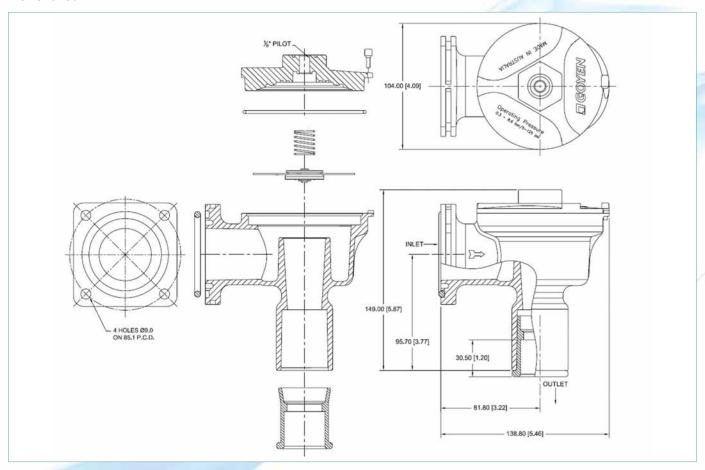
# RCAC25T3



#### RCAC25DD3



#### RCAC25FS3



# Technical Specification

#### 'T' Series Pulse Jet Valves



T Series

#### Description

High performance diaphragm valve with threaded 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 including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fibre filters.

#### Construction

Body: Aluminium (diecast)

Ferrule: 304 SS Armature: 430FR SS

Seals: Nitrile or Viton (reinforced)

Spring: 304 SS Screws: 302 SS

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**

Integrally piloted valves meet the requirements of:

- Atex II 2D Mechanical
- CSA (C&US) C22.2 No. 139-1982 UL Std No. 429
- C-Tick integral pilots
- EMC (89/336/CE) integral pilots

#### Installation

- 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 valves to inlet pipes and blowtube to valves, ensuring no excess thread sealant can enter the valve itself.
- Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
- Apply moderate pressure to system and check for installation leaks.
- 7. Fully pressurise system.
- 8. Test fire and listen for proper actuation and crisp pulse noise.

# Weights

| (CA) Kg (lbs) (RCA) Kg (lbs) (CA) Kg (lbs) (RCA) Kg (lb | 3) |
|---|----|
| 10 NA 0.06 (0.14) 45 1.50 (3.30) 1.28 (2.83)            |    |
| 20 0.60 (1.31) 0.38 (0.83) 50 2.89 (6.38) 2.68 (5.92)   |    |
| 25 0.73 (1.61) 0.51 (1.13) 62 3.31 (7.30) 3.09 (6.82)   |    |
| 35 1.04 (2.28) 0.83 (1.83) 76 4.77 (10.52) 4.56 (10.04) |    |

# Maintenance Kits

| Model            | Nitrile | Viton | Low Temperature<br>-60°C (-76°F) Min. | Includes  |
|------------------|---------|-------|---------------------------------------|---|
| RCA10T           | K1001   | K1002 | NA                                    | Diaphragm kits include main                               |
| CA/RCA20T        | K2000   | K2007 | NA                                    | and secondary diaphragms                                  |
| CA/RCA25T        | K2501   | K2503 | K2504                                 | (where required) and all                                  |
| CA/RCA32T*       | K2500   |       | NA                                    | springs.  |
| CA/RCA35T        | K3500   | K3501 | K3502                                 | *These kits are for                                       |
| CA/RCA40T*       | K4000   |       | NA                                    | discontinued valves.                                      |
| CA/RCA45T        | K4502   | K4503 | K4522                                 |   |
| CA/RCA50/62T     | K5004   | K5000 | NA                                    |   |
| CA/RCA76T        | K7600   | K7601 | NA                                    |   |
| Pilot repair kit | K0380   | K0384 | NA                                    | o-ring, armature<br>assembly, armature<br>spring, ferrule |

# **Product Characteristics and Performance**

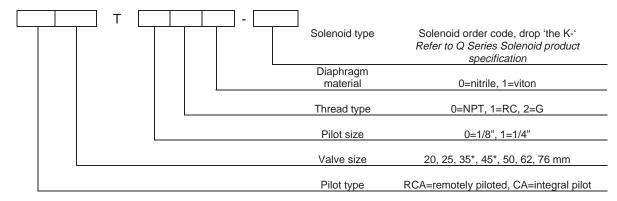
| Nom. | Port | Size | Number of  | Flo | w   |
|------|------|------|------------|-----|-----|
| Size | mm   | in   | diaphragms | Κv  | Cv  |
| 10   | 10   | 3/8  | 1 //       | 2.5 | 2.9 |
| 20   | 20   | 3/4  | 1          | 12  | 14  |
| 25   | 25   | 1    | 1          | 20  | 23  |
| 35   | 40   | 1.5  | 1          | 36  | 42  |
| 45   | 40   | 1.5  | 2          | 44  | 51  |
| 50   | 50   | 2    | 2          | 91  | 106 |
| 62   | 62   | 2.5  | 2          | 117 | 136 |
| 76   | 76   | 3    | 2          | 144 | 167 |

30(5) - 860(125) kPA(Psi) Pressure Range:

Temperature Range: Nitrile Seals: -40°C (-40°F) to 82°C (179.6°F)

Viton Seals: -29°C (-20.2°F) to 232°C (449.6°F)

# **Order Code**



<sup>\*</sup>Note that the 35 & 45 share the same port sizes.

# Order Code RCA10T Series

RCA10-6T/645 (1/4 NPT) RCA10-6T/669 (1/4 BSPT)

Examples: CA50T010-300

2" threaded port valve with 1/8" pilot, 2" RC port threads, nitrile seals and 200/240VAC integral pilot with DIN socket terminals.

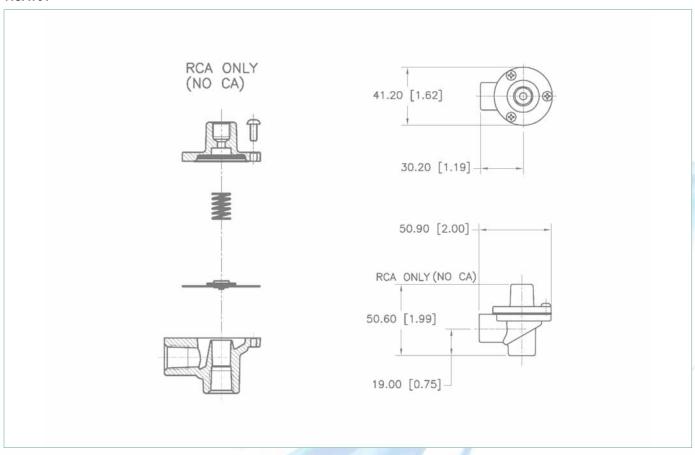
RCA25T001

1" threaded port valve with 1/8" NPT remote pilot port, 1" NPT port threads and viton seals.

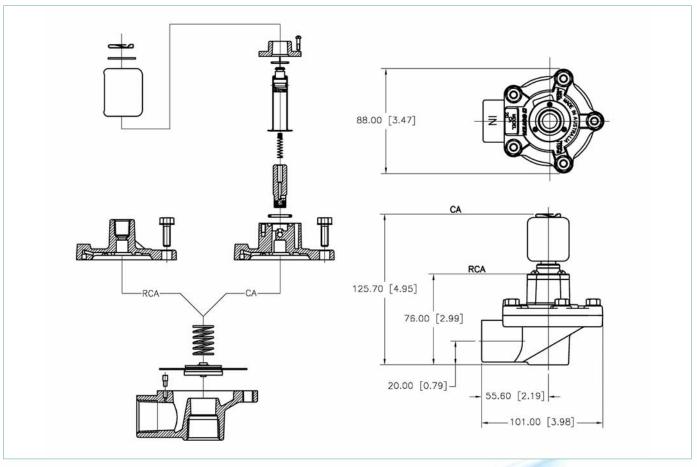
#### **Dimensions**

(Dimensions in mm and [inches])

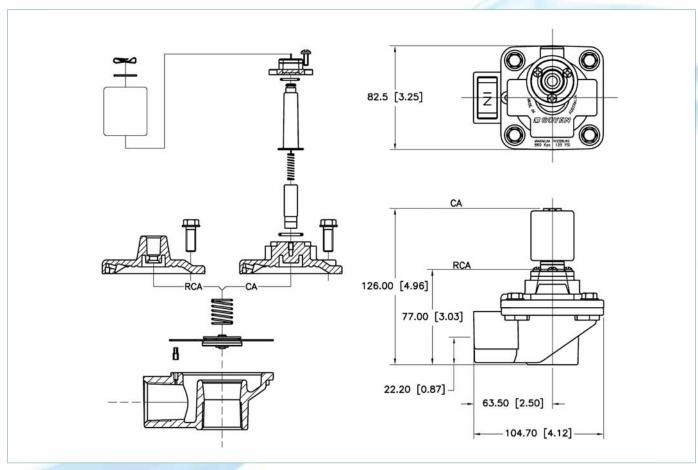
#### RCA10T



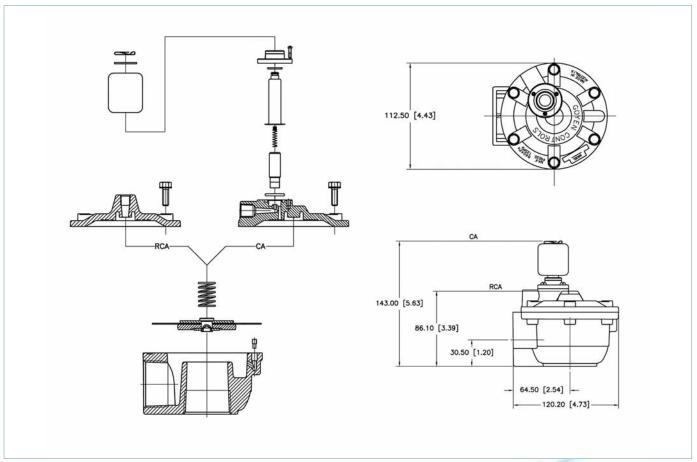
# CA/RCA20T



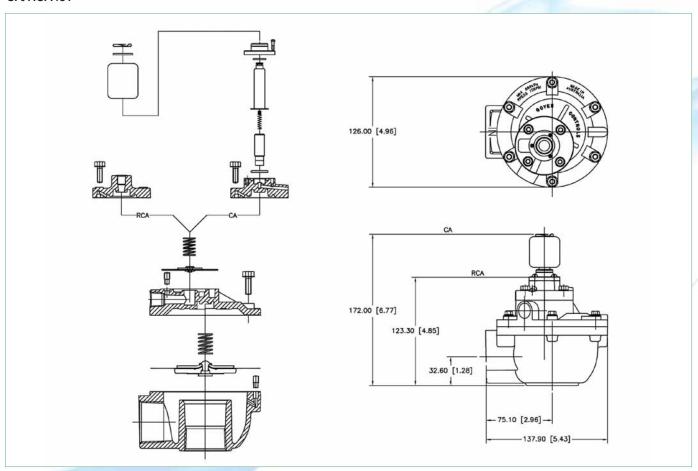
# CA/RCA25T



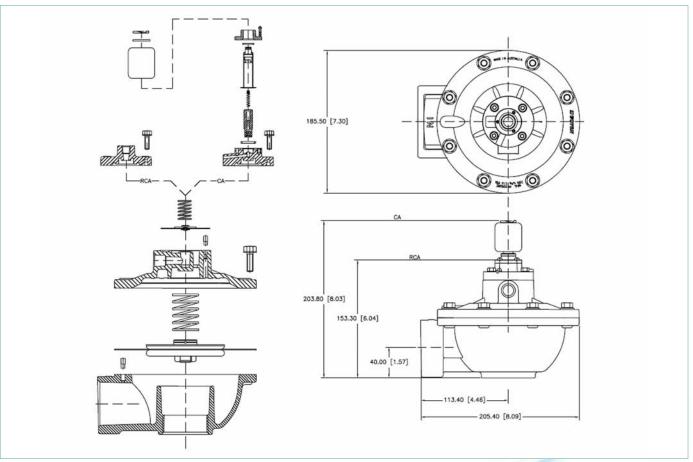
#### CA/RCA35T



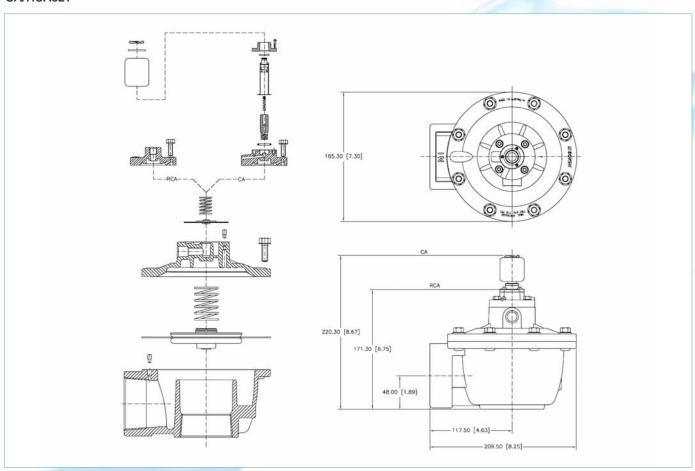
# CA/RCA45T



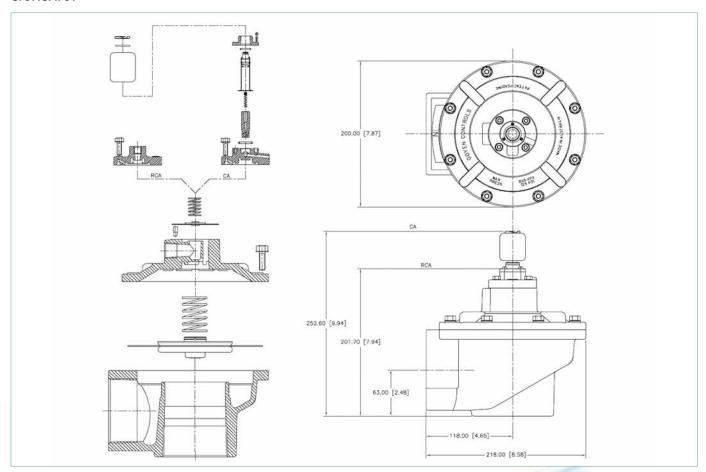
# CA/RCA50T



# CA/RCA62T



# CA/RCA76T





#### '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**

Integrally piloted valves meet the requirements of:

- Atex II 2D Mechanical
- CSA (C&US), C22.2 No. 139-1982 UL Std No. 429
- C-Tick integral pilots
- EMC (89/336/CE) integral pilots

# 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.
- 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 |
|------------------|-------|-----------|
| 3/4"             | 26.7  | 1.050     |
| 1"               | 33.4  | 1.315     |
| 1.5"             | 48.3  | 1.900     |

# Weights

| Size | Integral Pilot (CA) | Remote Pilot (RCA) |
|------|---------------------|--------------------|
|      | Kg (lbs)            | 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)        |

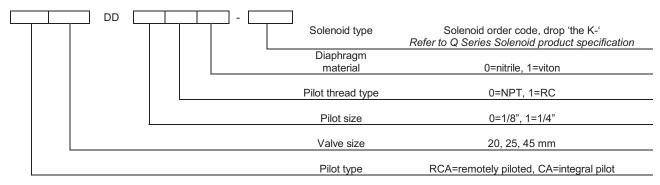
#### Maintenance Kits

| Model                 | Nitrile | Viton | Low Temperature -60°C (-76°F) Min. | Includes  |
|-----------------------|---------|-------|------------------------------------|---|
| Diaphragm Kit         |         |       |                                    |   |
| CA/RCA20DD            | K2000   | K2007 | NA                                 | Diaphragm kits include                              |
| CA/RCA25DD            | K2501   | K2503 | K2504                              | main and secondary                                  |
| CA/RCA45DD            | K4502   | K4503 | K4522                              | diaphragms (where required) and all springs.        |
| Dresser Seal Kit      |         |       |                                    |   |
| CA/RCA20DD            | K2008   | K2009 | NA                                 | 1 dresser seal, 1 dresser<br>nut, 1 seal retainer   |
| CA/RCA25DD            | K2508   | K2507 | NA                                 | 1 dresser seal, 1 dresser nut,<br>1 seal retainer   |
| CA/RCA45DD            | K4510   | K4511 | NA                                 | 1 dresser seal, 1 dresser<br>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. | Port S | Size | Number of  | Flo | W  | Pressure Range   | Temperature           | Range °C °(F)            |
|------|--------|------|------------|-----|----|------------------|-----------------------|--------------------------|
| Size | mm     | in   | diaphragms | Κv  | Cv | kPA(Psi)         | Nitrile Seals         | Viton Seals              |
| 20   | 20     | 3/4  | 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.

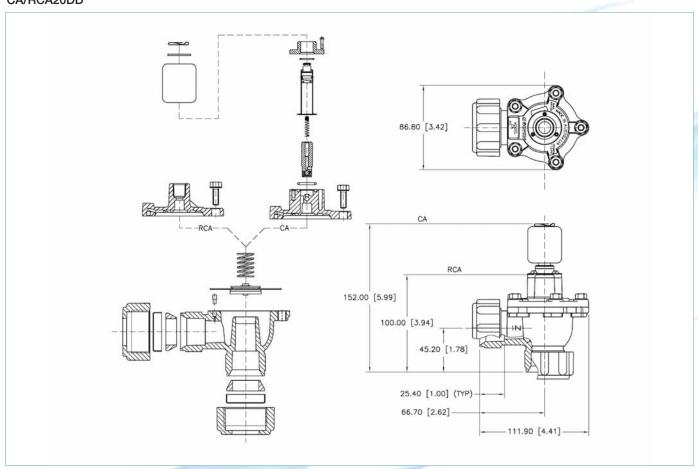
#### RCA25DD001

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

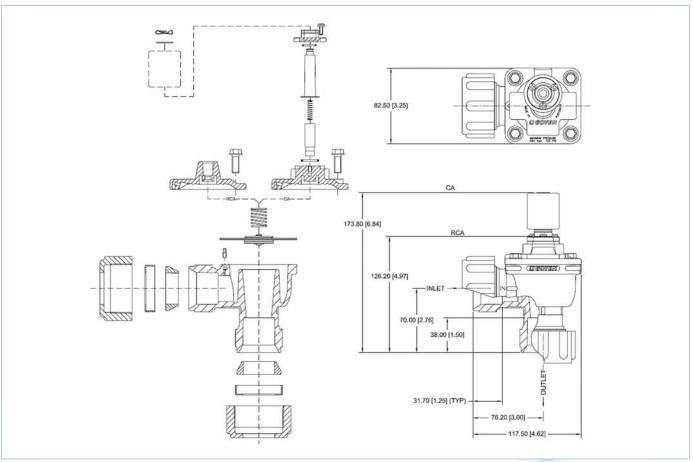
# **Dimensions**

(Dimensions in mm and [inches])

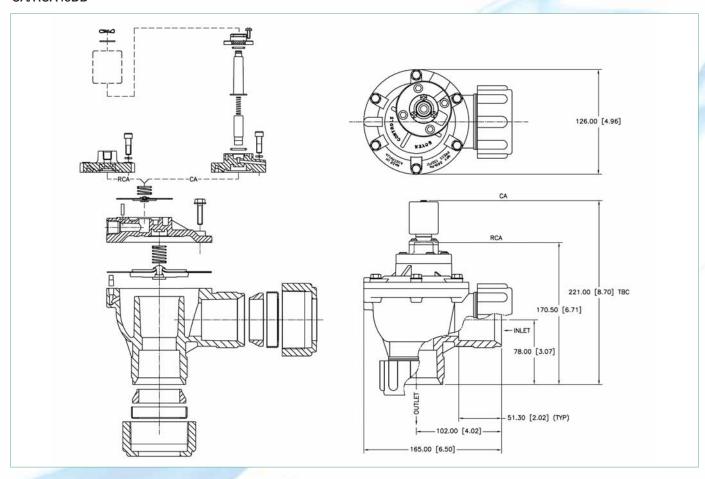
#### CA/RCA20DD



#### CA/RCA25DD



# CA/RCA45DD





# **Technical Specification**

#### 'FS' Series Pulse Jet Valves



#### FS Series

# Description

Very high performance diaphragm valve with flanged inlet port and slide seal outlet port for easy valve installation and removal. 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 including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fibre filters.

#### Construction

Body: Diecast aluminium or 316

stainless steel Ferrule: 304 SS Armature: 430FR SS

Seals: Nitrile or Viton (reinforced)

Spring: 304 SS Screws: 302 SS

Outlet Slide Seal: EPDM or Viton Diaphragm Seat: PA-6 (standard), Viton coated mild steel

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

Integrally piloted valves meet the requirements of:

- Atex II 2D Mechanical
- CSA (C&US) C22.2 No. 139-1982 UL Std No. 429
- C-Tick integral pilots
- EMC (89/336/CE) integral pilots

#### Installation

- 1. Prepare inlet flange 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 valves to inlet flange and blowtube to valves with all seals in place. Tighten flange bolts to 10Nm (7.4 ft-lbs) Ensure blowtube is pushed all the way into the valve outlet.
- 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. Refer to Camlock product specification for installation details.

\*Pipes must be to Schedule 40 outside diameter

| Schedule 40 Size | OD mm | OD Inches |
|------------------|-------|-----------|
| 1"               | 33.4  | 1.315     |
| 1.5"             | 48.3  | 1.900     |

# Weights

| Size | Integral Pilot (CA)<br>Kg (lbs) | Remote Pilot (RCA)<br>Kg (lbs) |
|------|---------------------------------|--------------------------------|
| 25   | 1.050 (2.31)                    | 0.830 (1.82)                   |
| 45   | 1.830 (4.03)                    | 1.610 (3.55)                   |

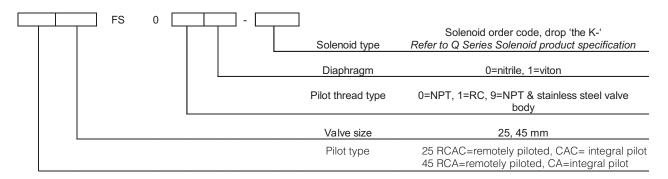
#### Maintenance Kits

|   | Model   | Nitrile                  | Viton                    | Includes  |
|---|---|--------------------------|--------------------------|---|
|   | CAC/RCAC25FS Diaphragm kit                            | K2501                    | K2503                    | The main diaphragm,   |
|   | CA/RCA45FS Diaphragm kit                              | K4502                    | K4503                    | secondary diaphragm   |
|   |   |                          |                          | (45FS only) and spring(s).  |
|   | CAC45FS to CA45FS Integral pilot cover conversion kit | K4532(NPT)<br>K4538(BSP) | K4537(NPT)<br>K4539(BSP) | The complete CA integrally piloted valve cover assembly. Does not include main diaphragm, main diaphragm spring, cover bolts or main bleed pin. |
|   | RCAC45FS to RCA45FS Remote pilot cover conversion kit | K4533(BSP)<br>K4535(NPT) | K4534(BSP)<br>K4536(NPT) | The complete RCA remotely piloted valve cover assembly with main diaphragm and spring. Does not include cover bolts or main bleed pin.          |
|   | Integral pilot repair kit (CA45FS and CAC25FS only)   | K0380                    | K0384                    | O-ring armature assembly, armature spring, ferrule.   |
|   | Integral pilot repair kit<br>CAC45FS only)            | K0390                    | N/A                      | O-ring armature assembly, armature spring, ferrule.   |
|   | 25FS Outlet seal                                      | G690763                  | G690763-2                | Outlet seal   |
|   | 45FS Outlet seal                                      | G690864                  | G690864-2                | Outlet seal   |
| - |   |                          |                          |   |

#### **Product Characteristics and Performance**

| Nom. | Nom. Port Size |     | Number of  | of Flow Pressure Range |    | Pressure Range   | Temperature Range °C °(F) |                          |  |
|------|----------------|-----|------------|------------------------|----|------------------|---------------------------|--------------------------|--|
| Size | mm             | in  | diaphragms | Κv                     | Cv | kPA(Psi)         | Nitrile Seals             | Viton Seals              |  |
| 25   | 25             | 1   | 1          | 22                     | 25 | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |  |
| 45   | 40             | 1.5 | 1          | 52                     | 61 | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |  |

#### **Order Code**



Examples: CA45FS010-300

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

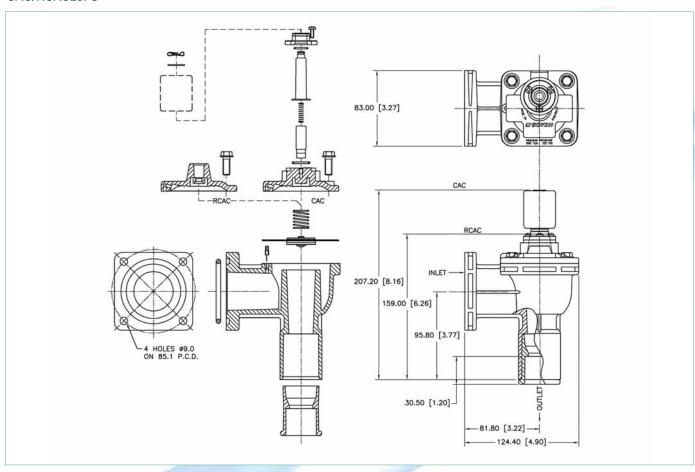
RCAC25FS091

1" FS valve with 1/8" NPT remote pilot port, stainless steel body and valve cover, and viton seals.

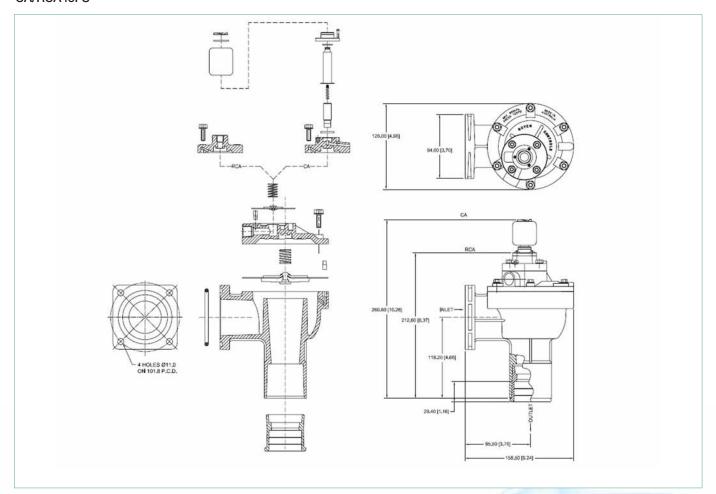
#### **Dimensions**

(Dimensions in mm and [inches])

#### CAC/RCAC25FS



# CA/RCA45FS



# Technical Specification

# 'MM' Series Pulse Jet Valves



#### MM Series

#### Description

Very high performance diaphragm valve designed to be mounted directly into the compressed air manifold. 1" and 1.5" models are supplied with outlet pipes to length specified, 3" and 3.5"models are supplied without outlet pipes.

# Suitable for

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

#### Construction

Body and Dresser Nuts: Diecast Aluminium

Ferrule: 304 SS Armature: 430FR SS

Diaphragm and Seals: Nitrile or Viton (reinforced)

Spring: 304 SS Screws: 302 SS

Outlet Pipe: Schedule 40 wrought steel

zinc passivated

Diaphragm Seat: PA-6 (25 & 40MM standard), Nitrile coated mild steel (76MM standard), or Viton coated mild

steel (all sizes)

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.

#### Installation

- MM valves are installed through the tank, refer to the appropriate template listed above.
- To avoid any potential operational problems it is preferable that the valves are not mounted underneath the tank where condensation may collect. All o-rings should be coated with a silicone based lubricant or similar.
- Dresser nut seals where used are a pressure seal only, not a structural component. Do not rely on dresser seals to retain either the tanks or blowtubes. Tanks and blowtubes must be independently restrained.
- 4. Tighten dresser nuts to 20Nm (15 ftlbs) max.
- 5. Tighten pipe outlets to 20 Nm (15 ftlbs).
- 6. Connect to Goyen pilot valve, if remotely actuated.
- 7. Ensure compressed air supply is dry and free from oil and dirt.
- 8. Check all cleaning system components are secure before applying pressure.
- 9. Apply moderate pressure and check for leaks.
- 10. Fully pressurise system.
- 11. Test fire and listen for proper actuation and crisp pulse noises.

## Weights

| Size | Integral Pilot (CA) | Remote Pilot (RCA) | Remote Pilot (RCA) |  |
|------|---------------------|--------------------|--------------------|--|
|      | Kg (lbs)            | Kg (lbs)           |                    |  |
| 25   | 0.720 (1.59)        | 0.500 (1.10)       |                    |  |
| 40   | 1.120 (2.47)        | 0.900 (1.98)       |                    |  |
| 76   | 3.900 (8.60)        | 3.680 (8.11)       |                    |  |
| 102  | 3.900 (8.60)        | 3.680 (8.11)       |                    |  |
|      |                     |                    |                    |  |

#### Maintenance Kits and Accessories

| Model  | Nitrile                                  | Viton            | Includes   |
|--|--|------------------|--|
| CA/RCA25MM Diaphragm kit   | K2501                                    | K2503            | Diaphragm kits include main                          |
| CA/RCA40MM Diaphragm kit   | K4000                                    | K4007            | and secondary (where                                 |
| CA/RCA76MM Diaphragm kit   | K7600                                    | K7601            | required) diaphragms and                             |
| CA/RCA102MM Diaphragm kit  | K10200                                   | K10201           | all diaphragm springs.                               |
| Pilot repair kit (all models)  | K0380                                    | K0384            | o-ring, armature assembly, armature spring, ferrule  |
| CA/RCA25MM*P Installation template<br>CA/RCA25MM*D Installation template<br>CA/RCA40MM*P Installation template<br>CA/RCA40MM*D Installation template | Drawing<br>Drawing<br>Drawing<br>Drawing | 690046<br>690045 | Installation templates are available free of charge. |
| CA/RCA76MM Installation template   | Drawing 6 and 6900                       | 51               | Suitable for 102MM hose                              |
| CA/RCA102MM Installation template  | Drawing 6 and 69105                      |                  |  |

# **Approvals**

Integrally piloted valves meet the requirements of:

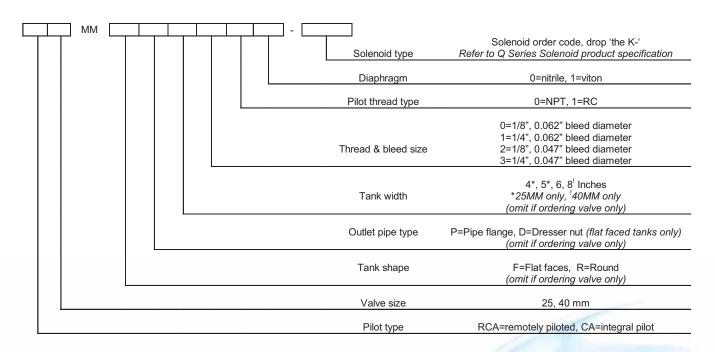
- Atex II 2D Mechanical
- CSA (C&US)
  C22.2 No. 139-1982
  UL Std No. 429
- C-Tick integral pilots
- EMC (89/336/CE) integral pilots

#### **Product Characteristics and Performance**

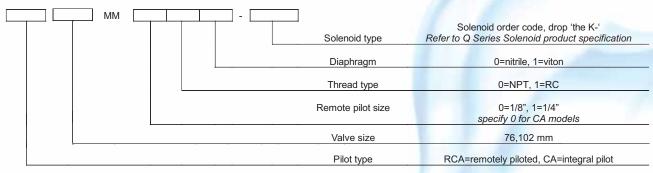
| Nom. | Nom. Port Size |     | Number of  | Flow |     | Pressure Range   | Temperature Range °C °(F) |                          |
|------|----------------|-----|------------|------|-----|------------------|---------------------------|--------------------------|
| Size | mm             | in  | diaphragms | Kv   | Cv  | kPA(Psi)         | Nitrile Seals             | Viton Seals              |
| 25   | 25             | 1   | 1          | 26   | 30  | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |
| 40   | 40             | 1.5 | 2          | 44   | 51  | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |
| 76   | 76             | 3   | 2          | 200  | 233 | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |
| 102  | 102            | 3.5 | 2          | 238  | 277 | 30(5) - 860(125) | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |

#### **Order Code**

1" and 1.5" Models



#### 3" and 3.5" Models



# Examples: CA

#### CA40MMFD6000-300

1.5" MM valve to suit a flat faced tank with a dresser nut outlet, 1/8" NPT exhaust port, Ø0.062" bleed, nitrile seals and 220/240VAC integral pilot with DIN socket terminals.

#### RCA25MMRP5001

1" MM valve to suit a Ø 5" round tank with pipe flange outlet, 1/8" NPT remote pilot port, Ø0.062" bleed and viton seals.

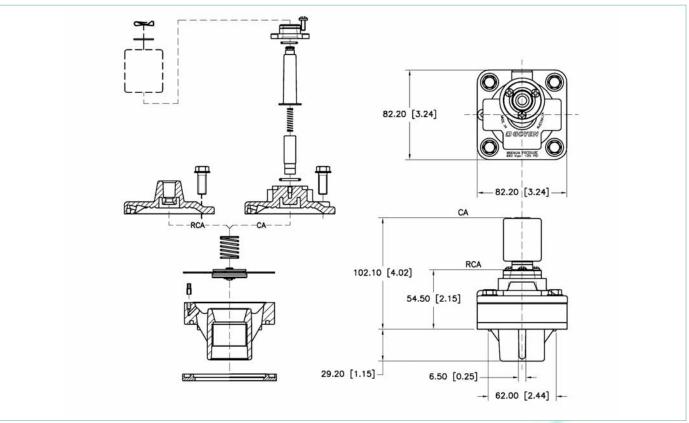
#### RCA25MM001

1" MM valve only, 1/8" NPT remote pilot, Ø0.062" bleed and viton seals.

# **Dimensions**

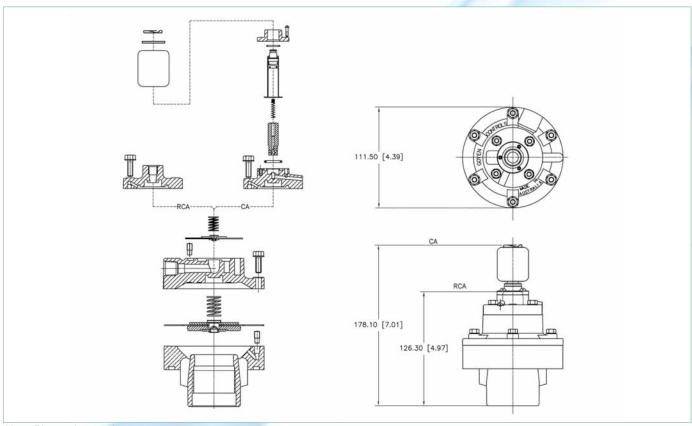
(Dimensions in mm and [inches])

#### CA/RCA25MM



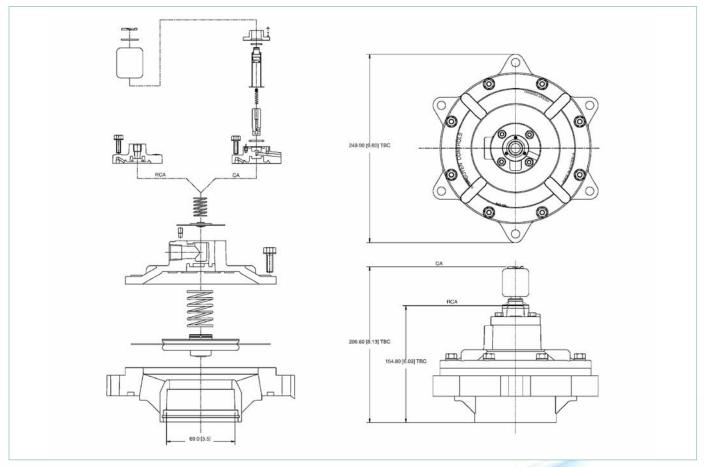
Note: Pipe outlet not shown

# CA/RCA40MM



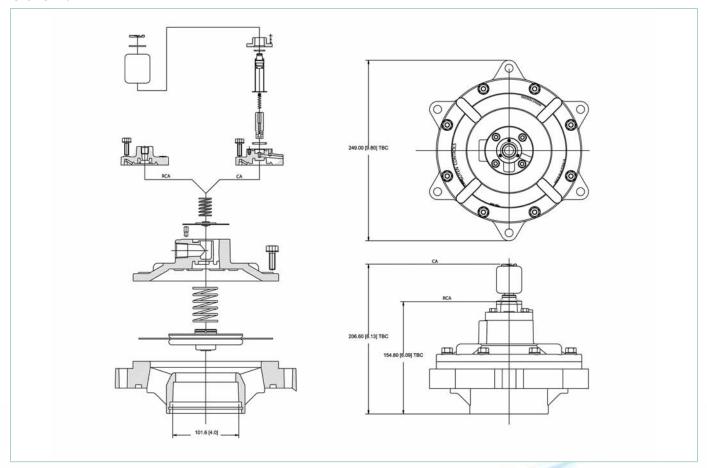
Note: Pipe outlet not shown

# CA/RCA76MM



Note: Suggested pipe size is 3" NB Schedule 40 pipe (OD=89.0mm, 3.5")

# CA/RCA102MM



Note: Suggested pipe size is 3.5" NB Schedule 30 pipe (OD=101.6mm, 4")



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