

T SERIES

# THREADED VALVES

# GOYEN - T SERIES THREADED VALVES

## PRODUCT LEAFLET



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 and its variations, including bag filters, cartridge filters and envelope filters, ceramic filters and sintered metal fibre filters.

### CONSTRUCTION

**Body:** Aluminium (diecast)

**Ferrule:** 305 SS

**Armature:** 430FR SS

**Seals:** Nitrile or Viton

**Spring:** 304 SS

**Screws:** 302 or 304 SS

**Diaphragm Seat:** PA-66 (standard), Viton or Nitrile coated mild steels, Nitrile, Viton 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)

### WEIGHTS

| SIZE | INTEGRAL PILOT<br>[CA] KG [LB] | REMOTE PILOT<br>[RCA] KG [LB] | SIZE | INTEGRAL PILOT<br>[CA] KG [LB] | INTEGRAL PILOT<br>[CA] KG [LB] |
|------|--------------------------------|-------------------------------|------|--------------------------------|--------------------------------|
| 10   | NA                             | 0.06 [0.14]                   | 50   | 2.89 [6.38]                    | 2.68 [5.92]                    |
| 35   | 1.04 [2.28]                    | 0.83 [1.83]                   | 62   | 3.31 [7.30]                    | 3.09 [6.82]                    |
| 45   | 1.50 [3.30]                    | 1.28 [2.83]                   | 76   | 4.77 [10.52]                   | 4.56 [10.04]                   |

### MAINTENANCE KITS

| MODEL            | NITRILE | VITON | LOW TEMPERATURE<br>–60°C (–76°F) MIN. | INCLUDES   |
|------------------|---------|-------|---------------------------------------|--|
| RCA10-6T         | K1001   | K1002 | NA                                    | Diaphragm kits include main and secondary diaphragms (where required) and all springs. |
| CA/RCA35T        | K3500   | K3501 | K3502                                 |  |
| 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 assembly, armature spring, ferrule                                    |

### PRODUCT CHARACTERISTICS AND PERFORMANCE

| NOM. SIZE | NOMINAL PORT SIZE |      | NUMBER OF DIAPHRAGMS | FLOW |     |
|-----------|-------------------|------|----------------------|------|-----|
|           | MM                | INCH |                      | KV   | CV  |
| 10        | 6                 | 1/4  | 1                    | 2.5  | 2.9 |
| 35        | 40                | 1.5  | 1                    | 35   | 42  |
| 45        | 40                | 1.5  | 2                    | 44   | 51  |
| 50        | 50                | 2    | 2                    | 76   | 88  |
| 62        | 62                | 2.5  | 2                    | 91   | 106 |
| 76        | 76                | 3    | 2                    | 144  | 167 |

#### Pressure Range:

30(5)–860(125) kPa(psi)

#### 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)

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## ORDER CODE

| RCA 35 T 0 1 0 301   |  |
|--|--|
| <b>Pilot type</b><br>RCA=remotely piloted<br>CA=integral pilot     | <b>Solenoid type</b><br>Coil type for CA only.<br>See the RCA3 Solenoid Pilot Valves<br>brochure for coil options. |
| <b>Valve size</b><br>35 mm*<br>45 mm*<br>50 mm<br>62 mm<br>76 mm   | <b>Diaphragm material</b><br>0=Nitrile<br>1=Viton<br>3=EPDM (4ST)  |
| <b>Pilot size</b><br>0=1/8" or CA<br>1=1/4" (Not available on 35T) | <b>Thread type</b><br>0=NPT or CA<br>1=RC<br>2=G   |

\*Note that the 35 & 45 share the same port sizes.

## ORDER CODE RCA10-6T SERIES

RCA10-6T/645 (1/4" NPT IN/OUT port, 1/8" NPT pilot port)  
RCA10-6T/669 (1/4" RC IN/OUT port, 1/8" RC pilot port)

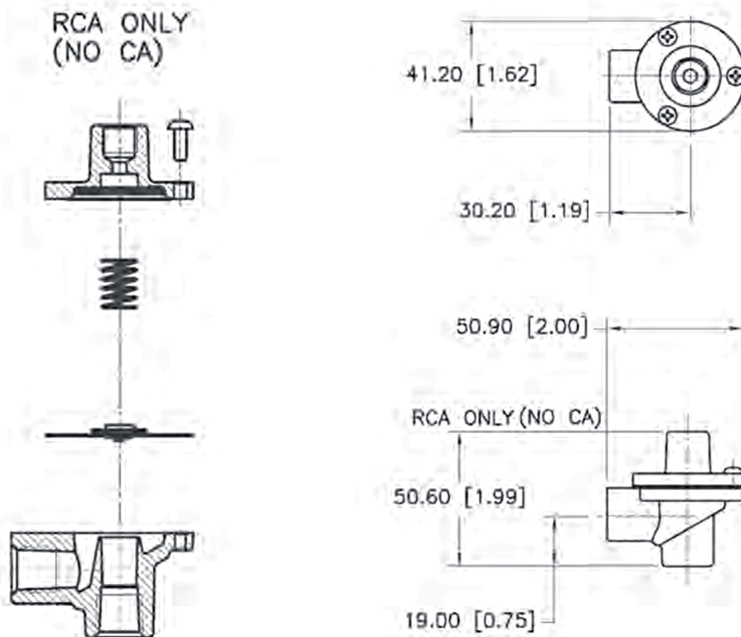
## EXAMPLES

CA50T010-300  
2" threaded port valve with 2" RC port threads, nitrile seals and 200/240 V AC integral pilot with DIN socket terminals.

RCA50T001  
2" threaded port valve with 1/8" NPT remote pilot port, 2" NPT port threads and viton seals.

## DIMENSIONS IN MM (AND INCHES)

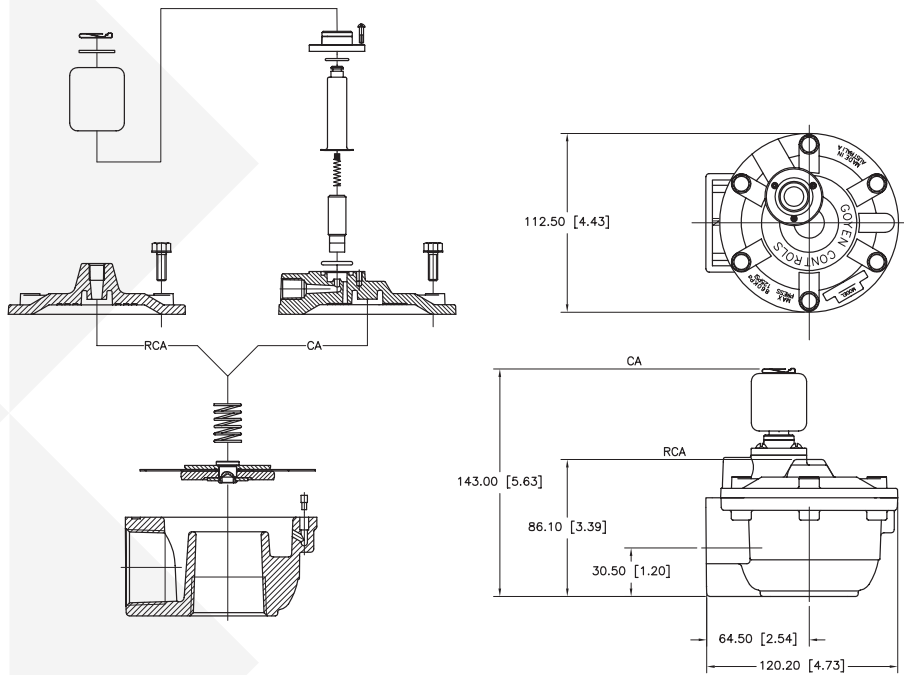
### RCA10-6T



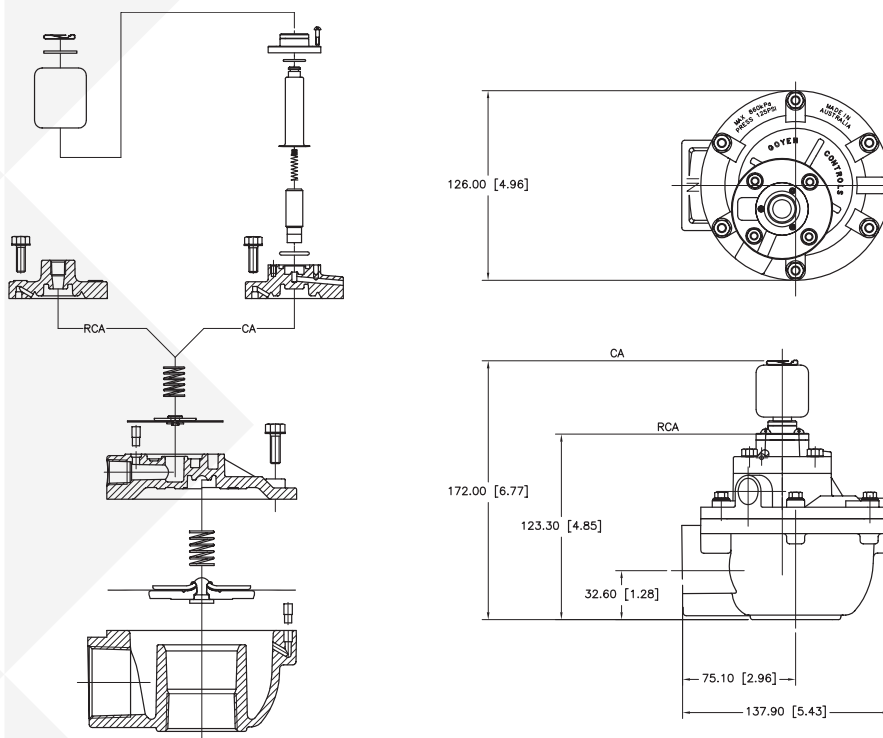
# GOYEN - T SERIES THREADED VALVES

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## CA/RCA35T



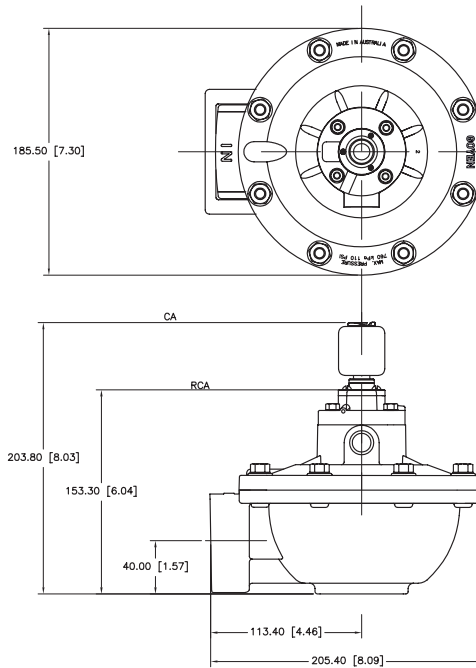
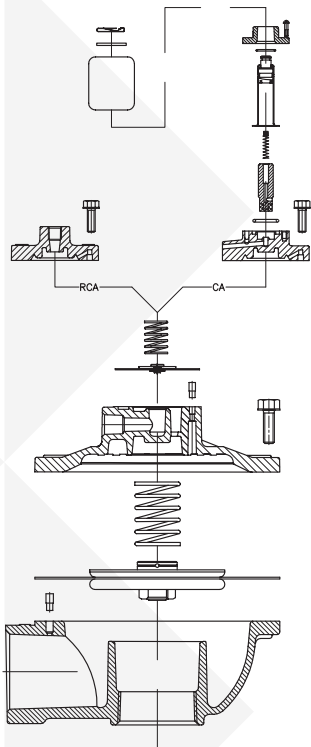
## CA/RCA45T



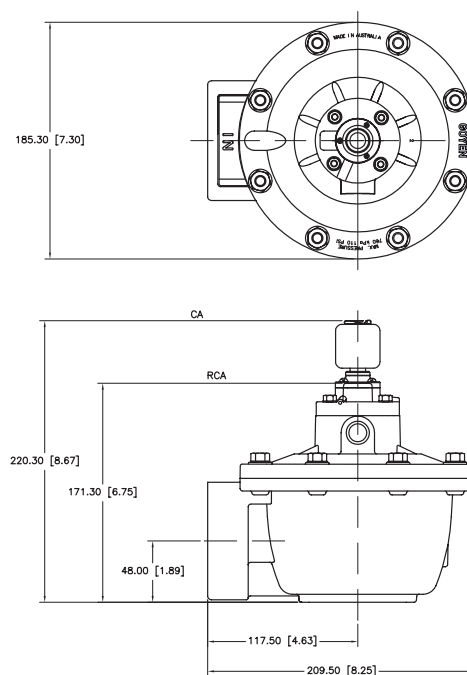
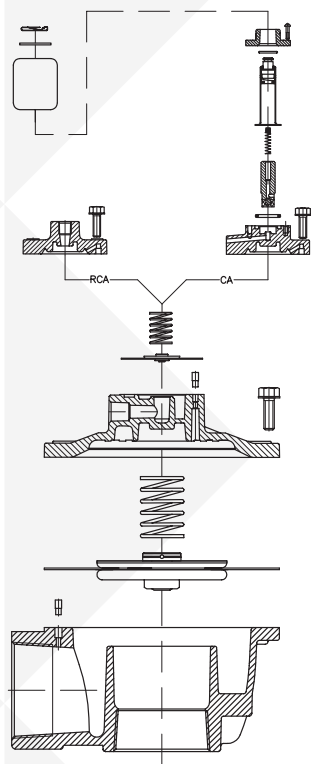
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PRODUCT LEAFLET

CA/RCA50T



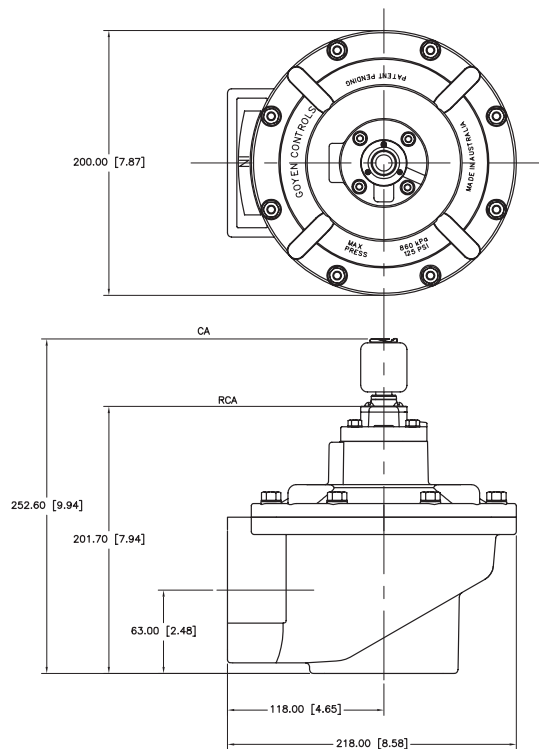
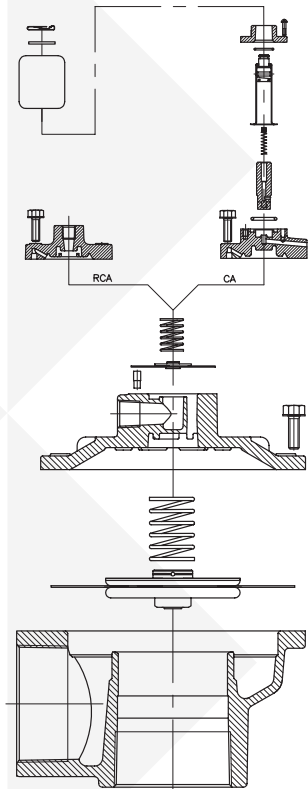
CA/RCA62T



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PRODUCT LEAFLET

CA/RCA76T



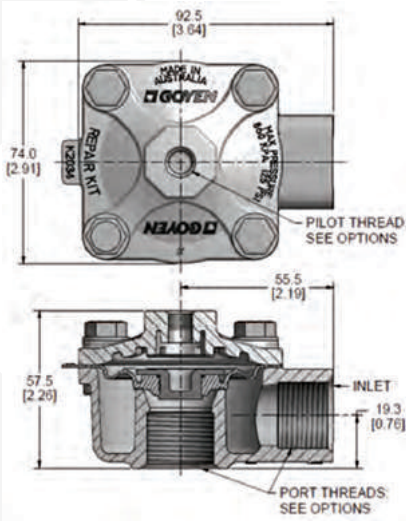
# GOYEN - T SERIES THREADED VALVES

PRODUCT LEAFLET

## RCAC20T4 - REVERSE PULSE JET VALVES



### DIMENSIONS IN MM (AND INCHES)



### DESCRIPTION

High-performance diaphragm valve with threaded 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:** Aluminium (diecast)  
**Screws:** 304 Stainless steel  
**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

### 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 RCAC20T4 meets the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

**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)     |
|----------|-------------|
| RCAC20T4 | 0.31 (0.68) |

### MAINTENANCE KITS

| MODEL    | SHOCKWAVE | VITON |
|----------|-----------|-------|
| RCAC20T4 | K2034     | K2033 |

### PRODUCT CHARACTERISTICS AND PERFORMANCE

| NOMINAL PORT SIZE<br>MM (INCH) | NUMBER OF DIAPHRAGMS | FLOW |    | PRESSURE RANGE<br>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

RCAC20T4012  
 3/4" RC threaded 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

| RCAC20T4 0 1 2    |                           |
|-------------------|---------------------------|
| <b>Pilot size</b> | <b>Diaphragm material</b> |
| 0=1/8"            | 1=Viton                   |
| 1=1/4"            | 2=Shockwave               |
|                   | <b>Thread type</b>        |
|                   | 0=NPT                     |
|                   | 1=RC                      |
|                   | 2=G                       |

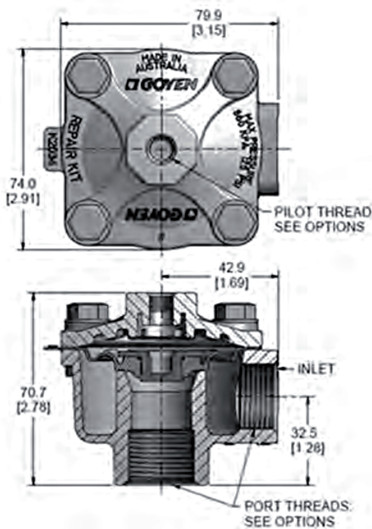
# GOYEN - T SERIES THREADED VALVES

PRODUCT LEAFLET

## RCAC20ST4 - REVERSE PULSE JET VALVES



### DIMENSIONS IN MM (AND INCHES)



### DESCRIPTION

High-performance diaphragm valve with short threaded 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:** Aluminium (diecast)  
**Screws:** 304 Stainless steel  
**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

### 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 RCAC20ST4 meet the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

**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)     |
|-----------|-------------|
| RCAC20ST4 | 0.30 (0.66) |

### MAINTENANCE KITS

| MODEL     | SHOCKWAVE | VITON |
|-----------|-----------|-------|
| RCAC20ST4 | K2034     | K2033 |

### PRODUCT CHARACTERISTICS AND PERFORMANCE

| NOMINAL PORT SIZE<br>MM (INCH) | NUMBER OF DIAPHRAGMS | FLOW |    | PRESSURE RANGE<br>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

RCAC20ST4012  
 3/4" RC Short threaded valve with 1/8" RC pilot, 4/3" RC port threads, Shockwave diaphragm.

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

### ORDER CODE

|                           |          |             |          |
|---------------------------|----------|-------------|----------|
| <b>RCAC20ST4</b>          | <b>0</b> | <b>1</b>    | <b>2</b> |
| <b>Pilot size</b>         | 0=1/8"   | 1=1/4"      |          |
| <b>Diaphragm material</b> | 1=Viton  | 2=Shockwave |          |
| <b>Thread type</b>        | 0=NPT    | 1=RC        | 2=G      |



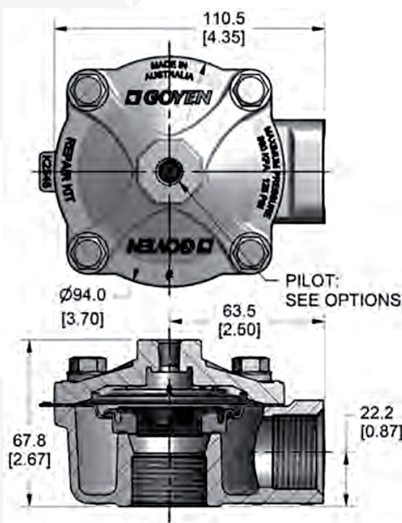
# GOYEN - T SERIES THREADED VALVES

PRODUCT LEAFLET

## RCAC25T4 - REVERSE PULSE JET VALVES



### DIMENSIONS IN MM (AND INCHES)



### DESCRIPTION

High-performance diaphragm valve with threaded 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:** Aluminium (diecast)  
**Screws:** 304 Stainless steel  
**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

### 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 RCAC25T4 meets the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

**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)     |
|----------|-------------|
| RCAC25T4 | 0.56 (1.23) |

### MAINTENANCE KITS

| MODEL    | SHOCKWAVE | VITON |
|----------|-----------|-------|
| RCAC25T4 | K2546     | K2551 |

### PRODUCT CHARACTERISTICS AND PERFORMANCE

| NOMINAL PORT SIZE<br>MM (INCH) | NUMBER OF DIAPHRAGMS | FLOW |    | PRESSURE RANGE<br>KPA (PSI) | TEMPERATURE RANGE °C °(F) |                          |
|--------------------------------|----------------------|------|----|-----------------------------|---------------------------|--------------------------|
|                                |                      | KV   | CV |                             | SHOCKWAVE                 | VITON                    |
| 25 (1)                         | 1                    | 24   | 27 | 30(5) to 860(125)           | -40(-40) to 82(179.6)     | -29(-20.2) to 232(449.6) |

### EXAMPLES

RCAC25T4012  
1" RC threaded port valve with 1/8" RC pilot port threads, Shockwave diaphragm.

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

### ORDER CODE

|                           |          |          |             |
|---------------------------|----------|----------|-------------|
| <b>RCAC25T4</b>           | <b>0</b> | <b>1</b> | <b>2</b>    |
| <b>Pilot size</b>         | 0=1/8"   | 1=1/4"   |             |
| <b>Diaphragm material</b> |          | 1=Viton  | 2=Shockwave |
| <b>Thread type</b>        | 0=NPT    | 1=RC     | 2=G         |

# GOYEN - T SERIES THREADED VALVES

PRODUCT LEAFLET

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## DIAPHRAGM SERVICE KITS FOR DELETED VALVES

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### Maintenance kits

| MODEL     | NITRILE | VITON | LOW TEMPERATURE -60°C (-76°F) MIN. | INCLUDES   |
|-----------|---------|-------|------------------------------------|--|
| CA/RCA20T | K2000   | K2007 | NA                                 | Diaphragm kits include main and secondary diaphragms (where required) and all springs. |
| CA/RCA25T | K2501   | K2503 | K2504                              |  |
| CA/RCA32T | K2500   | NA    | NA                                 |  |
| CA/RCA40T | K4000   | NA    | NA                                 |  |



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