

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.
5. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
6. 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

| Size | Integral Pilot (CA) Kg (lbs) | Remote Pilot (RCA) Kg (lbs) | Size | Integral Pilot (CA) Kg (lbs) | Remote Pilot (RCA) Kg (lbs) |
|------|------------------------------|-----------------------------|------|------------------------------|-----------------------------|
| 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 -60°C (-76°F) Min. | Includes |
|------------------|---------|-------|------------------------------------|--|
| RCA10T | K1001 | K1002 | NA | Diaphragm kits include main and secondary diaphragms (where required) and all springs. |
| CA/RCA20T | K2000 | K2007 | NA | |
| CA/RCA25T | K2501 | K2503 | K2504 | |
| CA/RCA32T* | K2500 | --- | NA | |
| CA/RCA35T | K3500 | K3501 | K3502 | *These kits are for discontinued valves. |
| CA/RCA40T* | K4000 | --- | NA | |
| 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

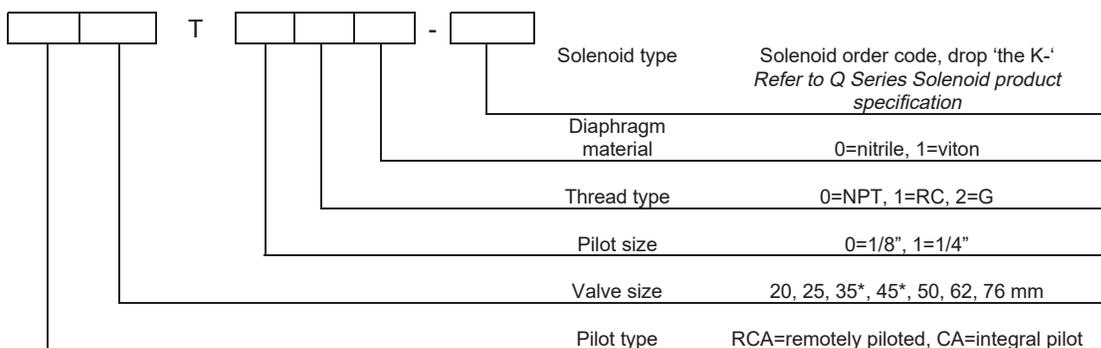
| Nom. Size | Port Size | | Number of diaphragms | Kv | Flow | |
|-----------|-----------|-----|----------------------|-----|------|--|
| | mm | in | | | Cv | |
| 10 | 10 | 3/8 | 1 | 2.5 | 2.9 | |
| 20 | 20 | 3/4 | 1 | 12 | 14 | |
| 25 | 25 | 1 | 1 | 20 | 23 | |
| 35 | 40 | 1.5 | 1 | 36 | 42 | |
| 45 | 40 | 1.5 | 2 | 44 | 51 | |
| 50 | 50 | 2 | 2 | 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)

Order Code



*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.

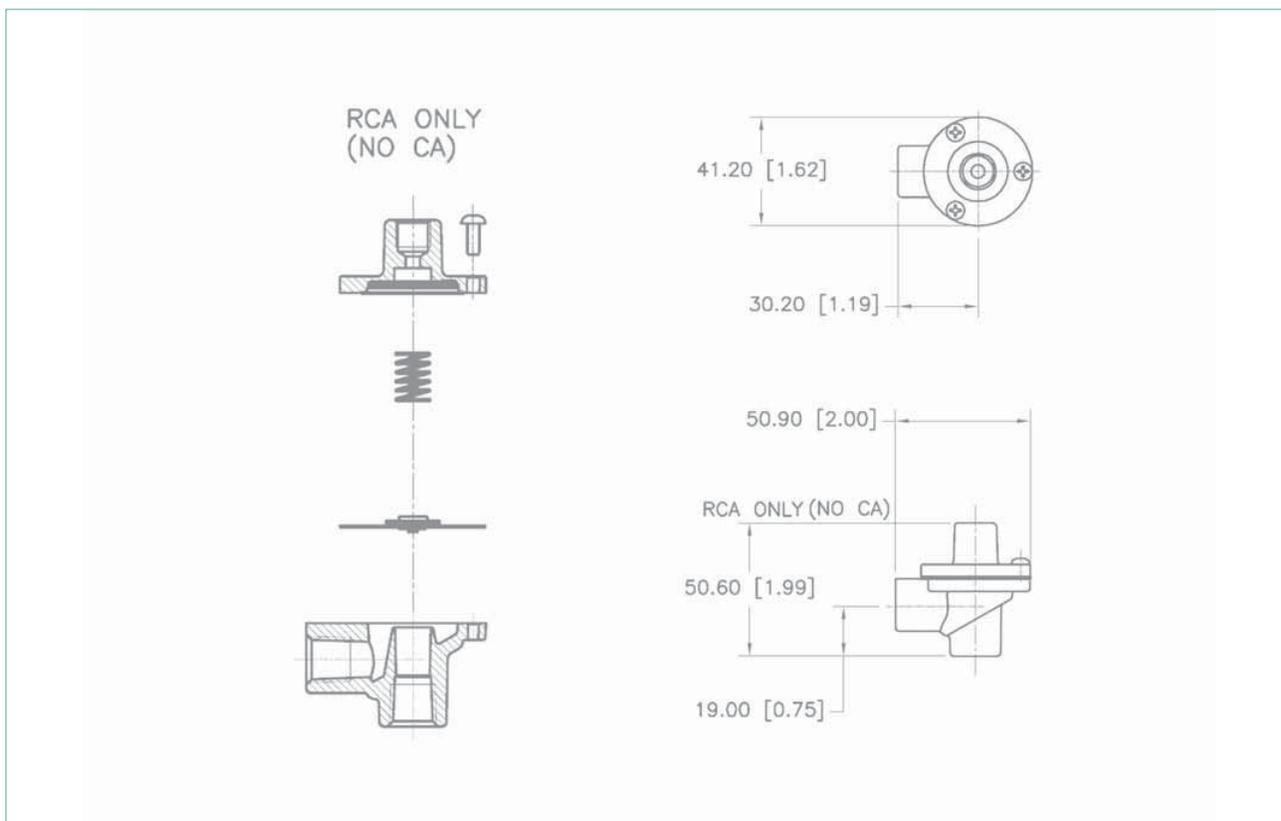
RCA25T001

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

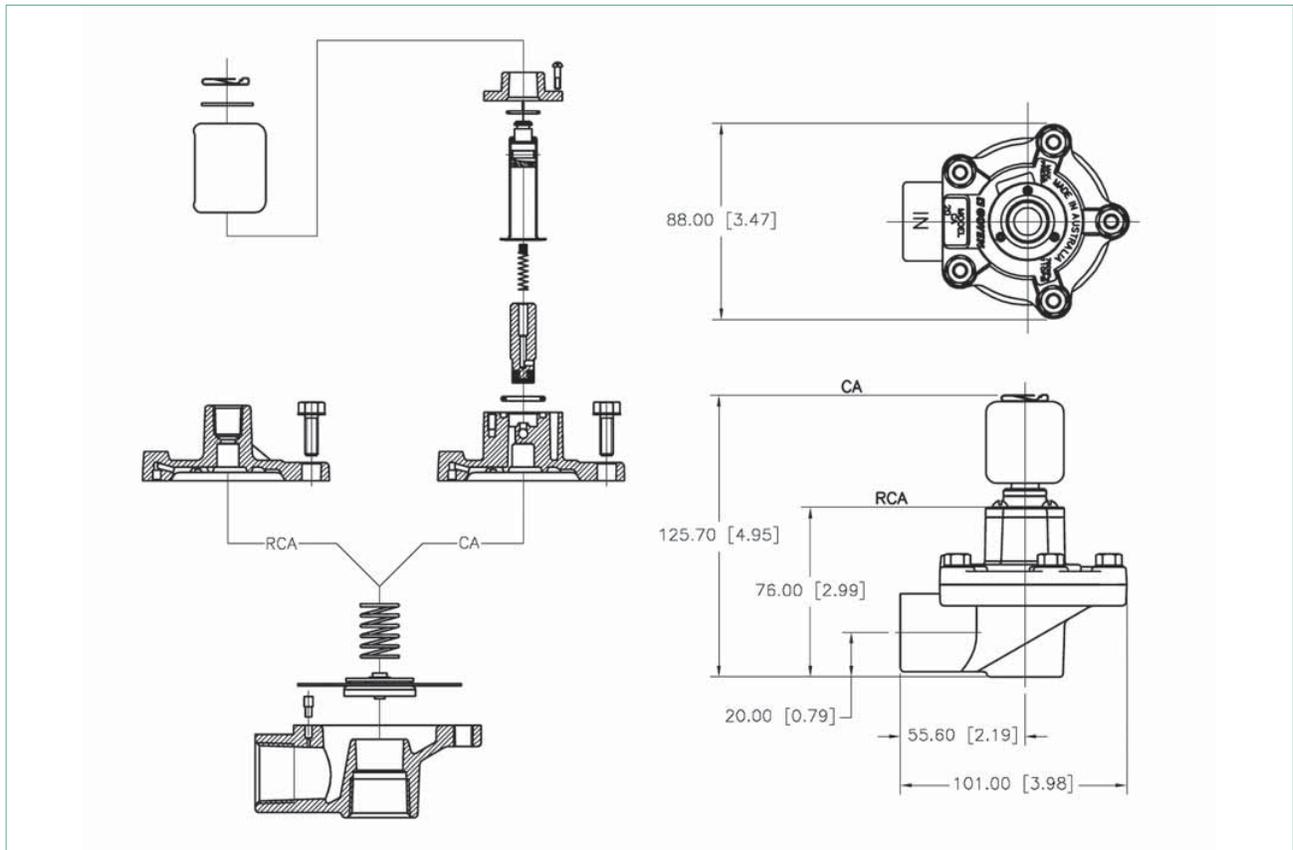
Dimensions

(Dimensions in mm and [inches])

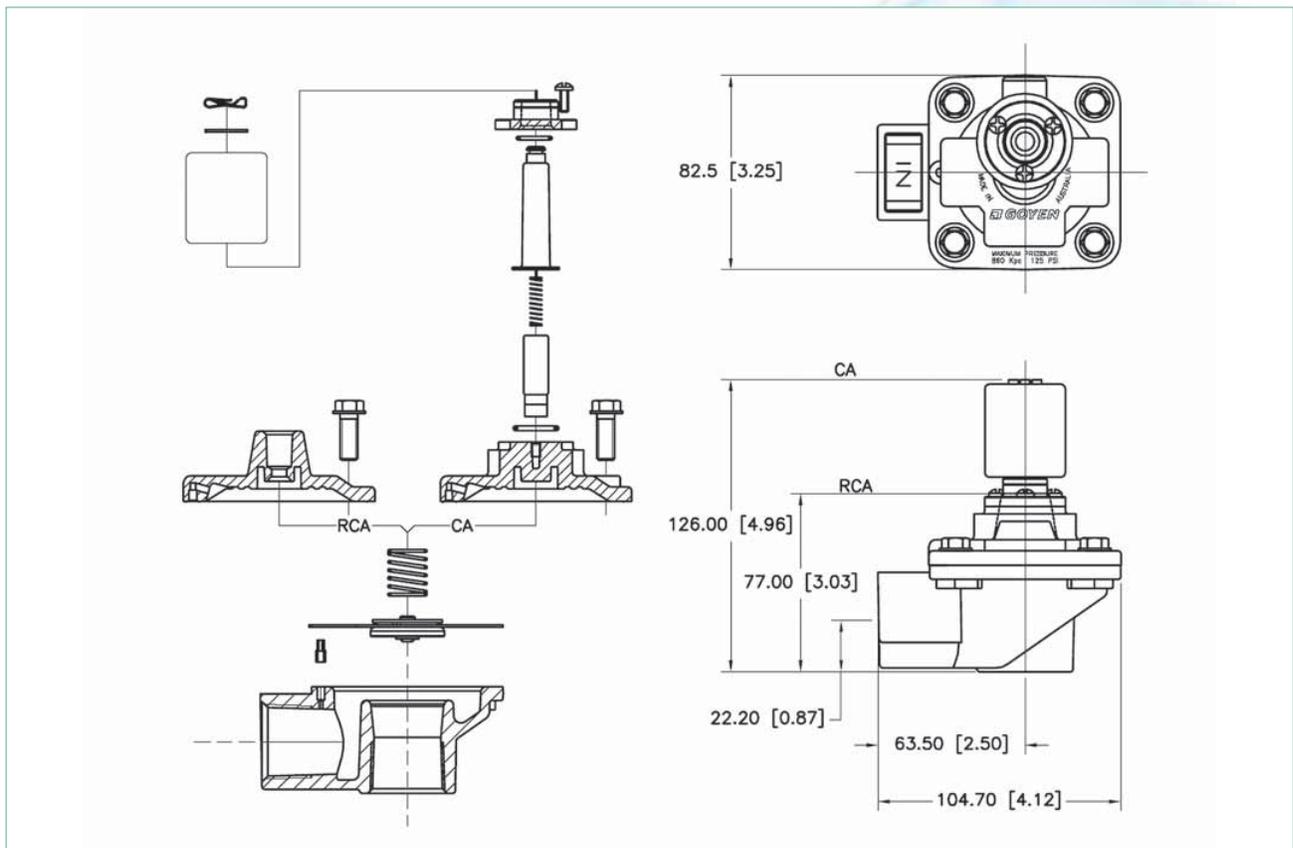
RCA10T



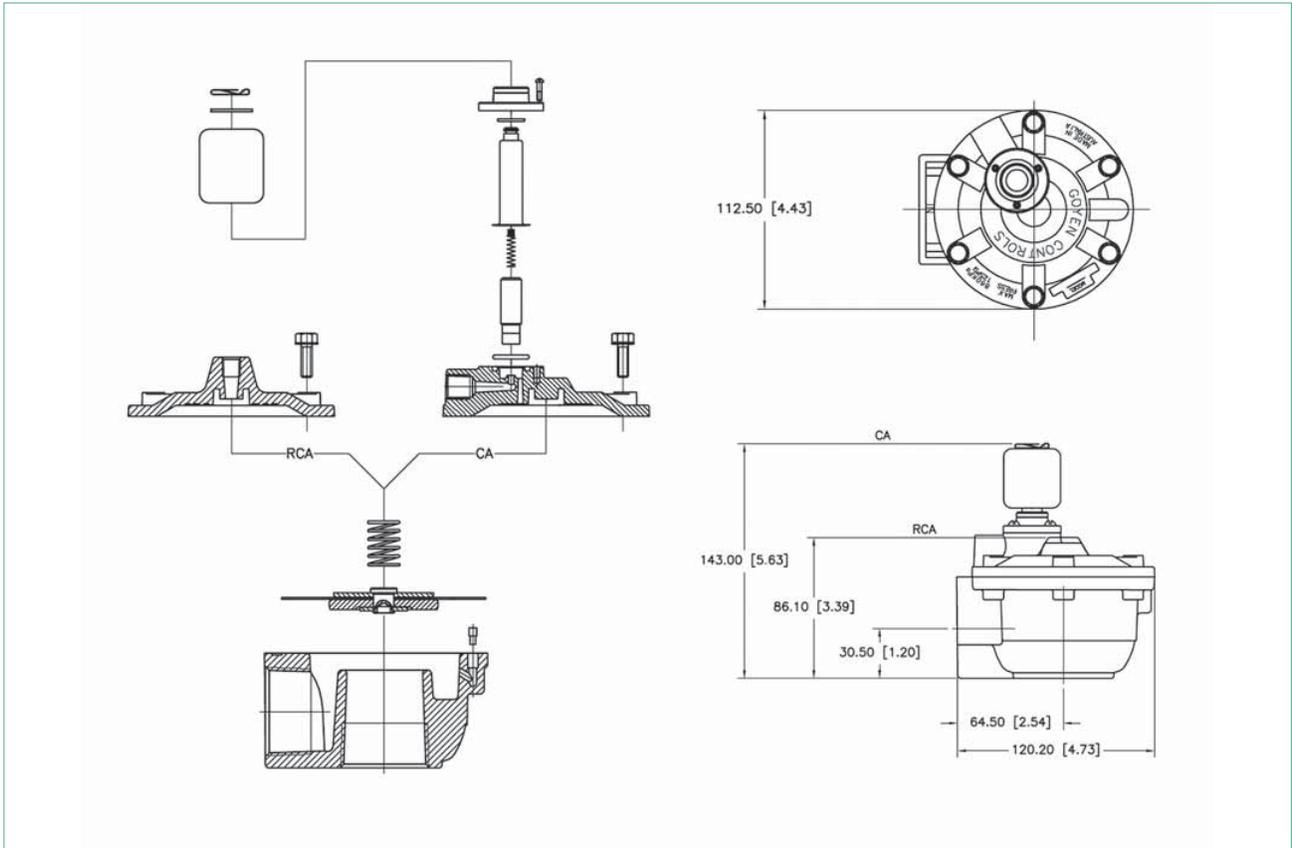
CA/RCA20T



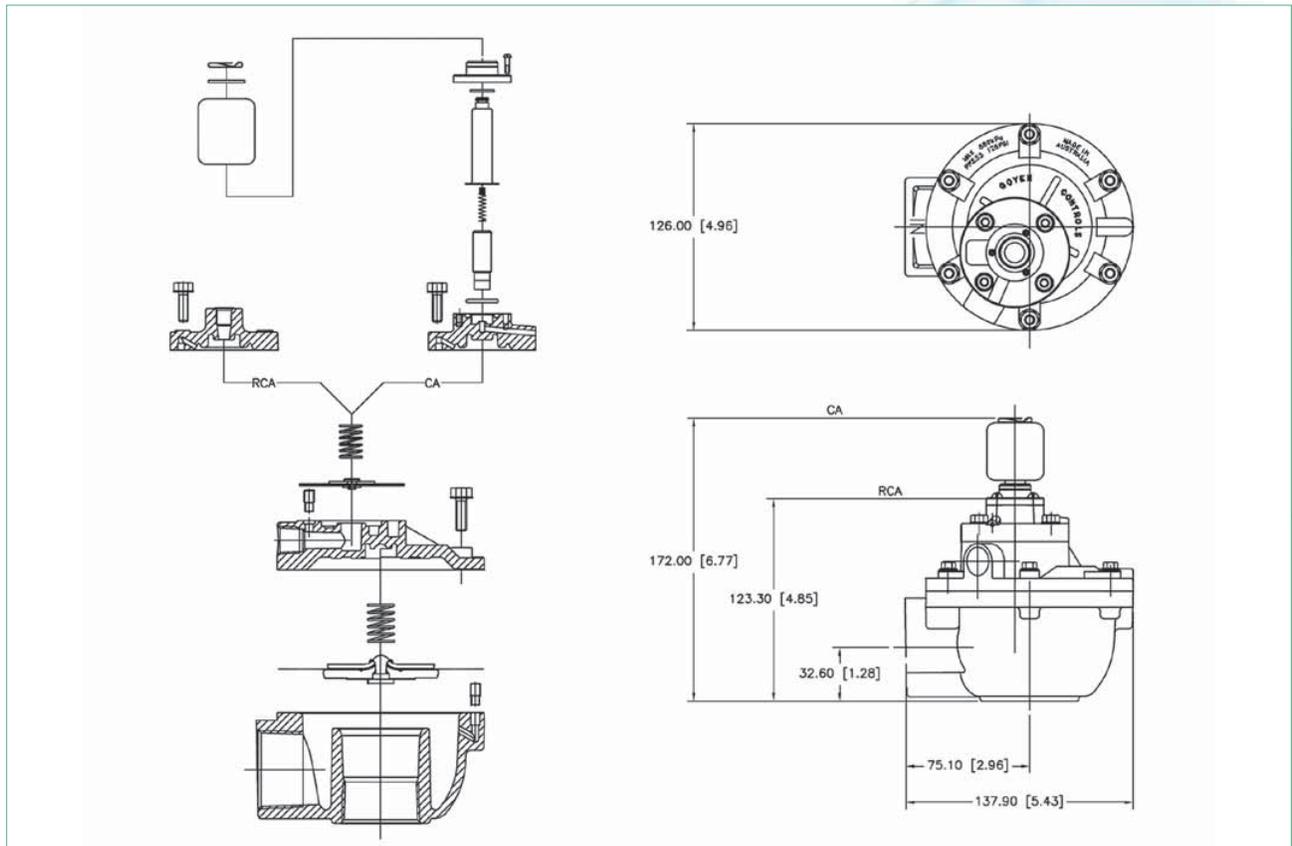
CA/RCA25T



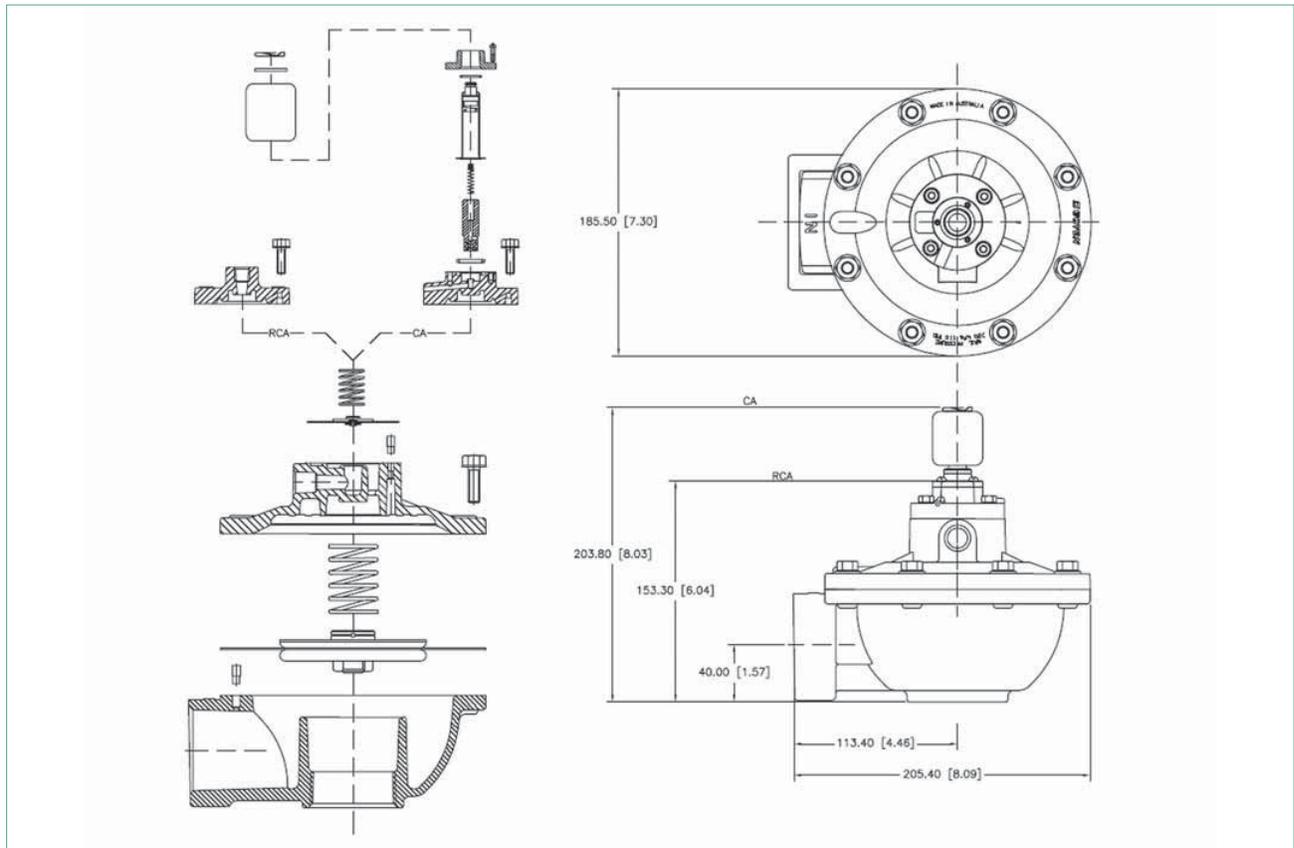
CA/RCA35T



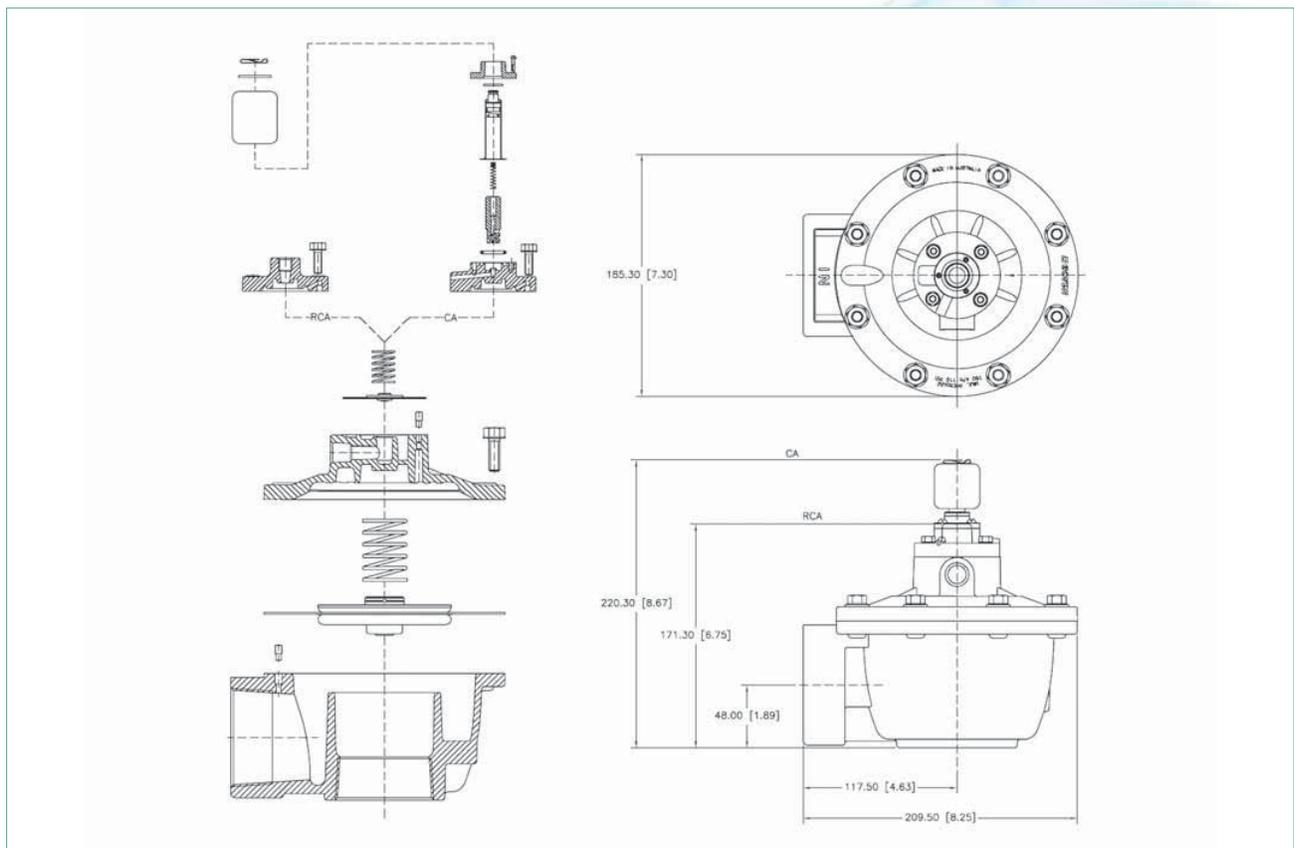
CA/RCA45T



CA/RCA50T



CA/RCA62T



CA/RCA76T

