

MM SERIES

MANIFOLD MOUNT FLAT VALVES

GOYEN – MM SERIES MANIFOLD MOUNT FLAT VALVES

PRODUCT LEAFLET

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 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

Diaphragm and seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 or 304 SS

Outlet pipe: Schedule 40 wrought steel zinc passivated (size 25). Aluminium tube, Alloy 6061-T6 (size 40).

Diaphragm Seat: PA-66 (25 & 40MM standard), Nitrile-coated mild steel (76MM standard), Acetal (102MM standard) or Viton-coated mild steel

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 only)
- CSA (C, US) [C22.2 No 139-10 and UL 429] (CA & RCA)
- RCM (CA)
- EMC 2014/30/EU (CA)
- Low Voltage Directive 2014/35/EU (CA)
- 76MM – CRN: 0C10061.2136 & CRN: 0C13550.5R1
*Operating limits: 779 kPa, 76°C
- 102MM – CRN: 0C10062.26 & CRN: 0C15386.5R1
*Operating limits: 76°C

WEIGHTS

SIZE	INTEGRAL PILOT (CA) KG (LB)	REMOTE PILOT (RCA) KG (LB)
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)

INSTALLATION

1. MM valves are installed through the tank; refer to the appropriate template listed below.
2. 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.
3. 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 20 Nm (15 ftlbs) max.
5. Tighten 25MM outlet pipe to 30 N.m (22 lbf.ft)
Tighten 40MM outlet pipe to 60 N.m (44 lbf.ft)
6. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
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.

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MAINTENANCE KITS AND ACCESSORIES

MODEL	NITRILE	VITON	INCLUDES
CA/RCA25MM Diaphragm kit	K2501	K2503	Diaphragm and spring
CA/RCA40MM Diaphragm kit	K4000	K4007	Diaphragms and springs (main and secondary)
CA/RCA76MM Diaphragm kit	K7600	K7601	
CA/RCA102MM Diaphragm kit	K10200	K10201	
CA/RCA102MM Diaphragm kit for sulphur-rich environments (coal-fired boiler applications)	K10203		
Pilot repair kit (all models)	K0380	K0384	O-ring, armature assembly, armature spring, ferrule
CA/RCA25MMFP installation template	Drawing 690048		Installation templates are available free of charge.
CA/RCA25MMFD installation template	Drawing 690046		
CA/RCA40MMFP installation template	Drawing 690045		
CA/RCA40MMFD installation template	Drawing 609999		
CA/RCA76MM Installation template	Drawing 690151 RCA and 690051 CA		
CA/RCA102MM Installation template	Drawing 691055 CA and 691056 RCA		

PRODUCT CHARACTERISTICS AND PERFORMANCE

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

* Unless limited by CRN.

ORDER CODE

1" and 1.5" Models

RCA 25 MM F P 4 0 1 0-301	
Pilot type RCA=remotely piloted CA=integral pilot	Solenoid type Coil type for CA only. See the RCA3 Solenoid Pilot Valves brochure for coil options.
Valve size 25 mm 40 mm	Diaphragm material 0=Nitrile 1=Viton
Tank shape (omit if ordering valve only) F=Flat face only	Pilot thread type (RCA) 0=NPT 1=RC
Outlet pipe type (omit if ordering valve only) P=Plain pipe D=Dresser nut	Exhaust thread type (CA) 0=NPT 1=RC
Tank width in inches (omit if ordering valve only) 3, 4, 5, 6, 8, 12	Thread and bleed size (RCA) 0=1/8", 0.062" bleed diameter 1=1/4", 0.062" bleed diameter 2=1/8", 0.047" bleed diameter 3=1/4", 0.047" bleed diameter
	Bleed size (CA) 0=0.062" 1=0.047"

EXAMPLES

CA40MMFD6000-300
1.5" MM valve to suit a flat-faced tank with a dresser nut outlet, NPT exhaust port, Ø0.062" bleed, nitrile seals and 220/240 V AC integral pilot with DIN socket terminals.

RCA25MM001
1" MM valve only, 1/8" NPT remote pilot, Ø0.062" bleed and viton seals.

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3" and 3.5" Models

RCA 76 MM 1 0 1 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

76 mm
102 mm

Remote pilot size (specify 0 for CA models)

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

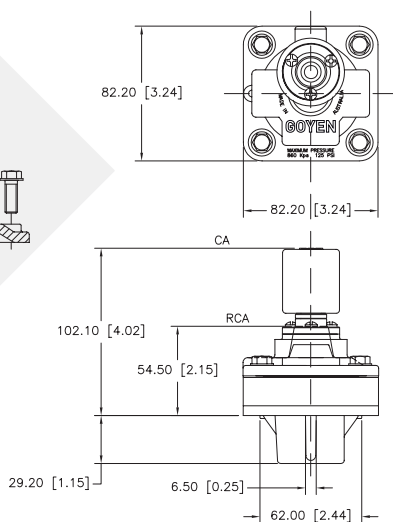
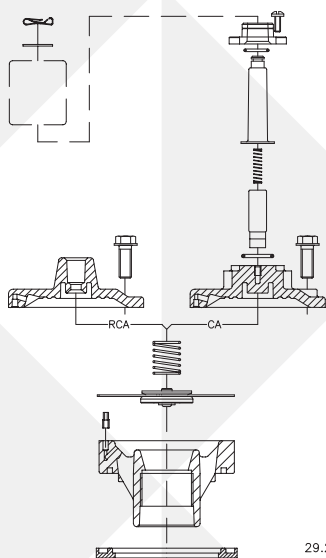
0=Nitrile
1=Viton
4=for Sulfur-rich environments (102 mm)

Thread type (specify 4 for CA models)

0=NPT
1=RC
4=CA valve

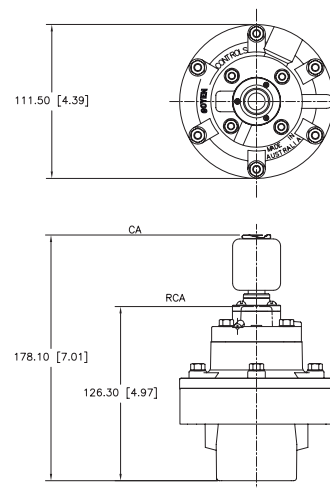
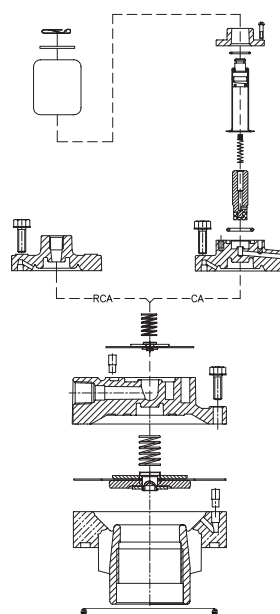
DIMENSIONS IN MM (AND INCHES)

CA/RCA25MM



Note: Pipe outlet not shown.

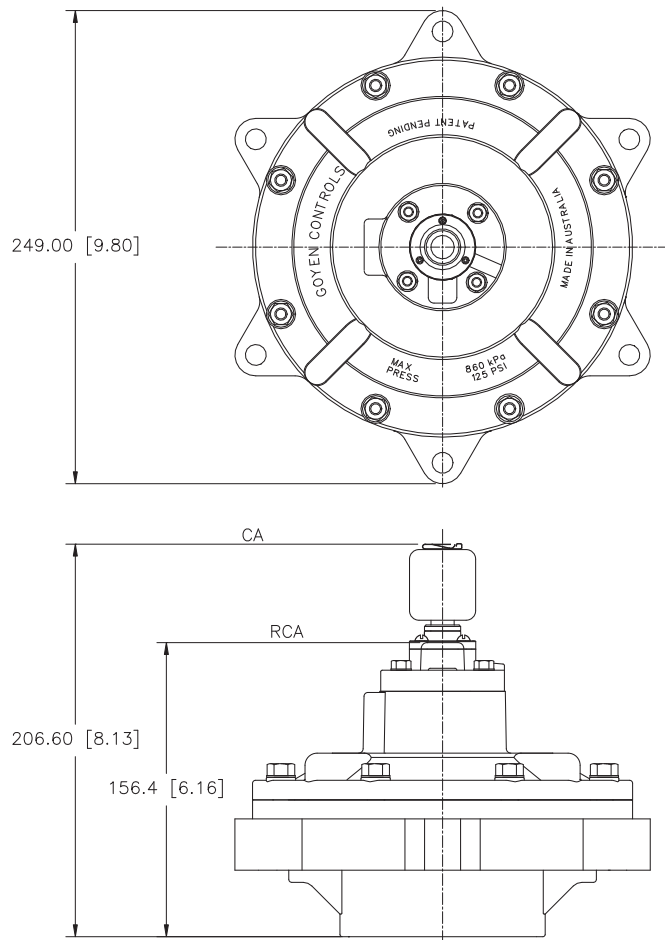
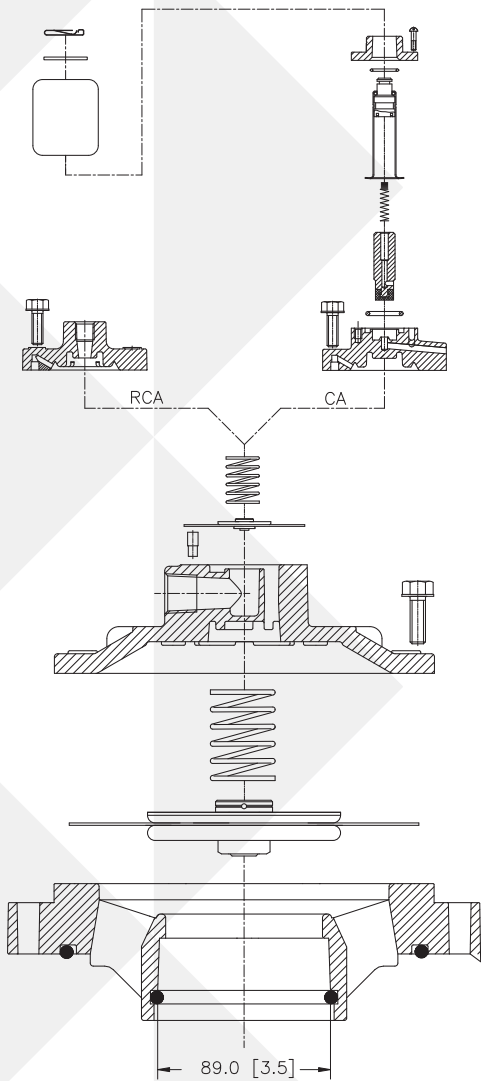
CA/RCA40MM



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CA/RCA76MM

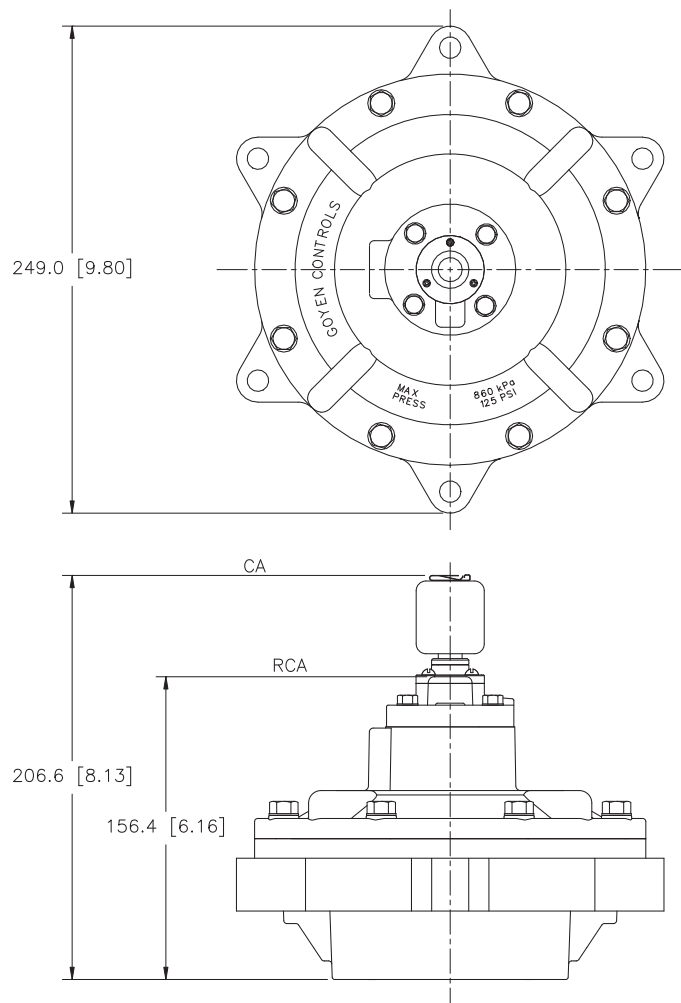
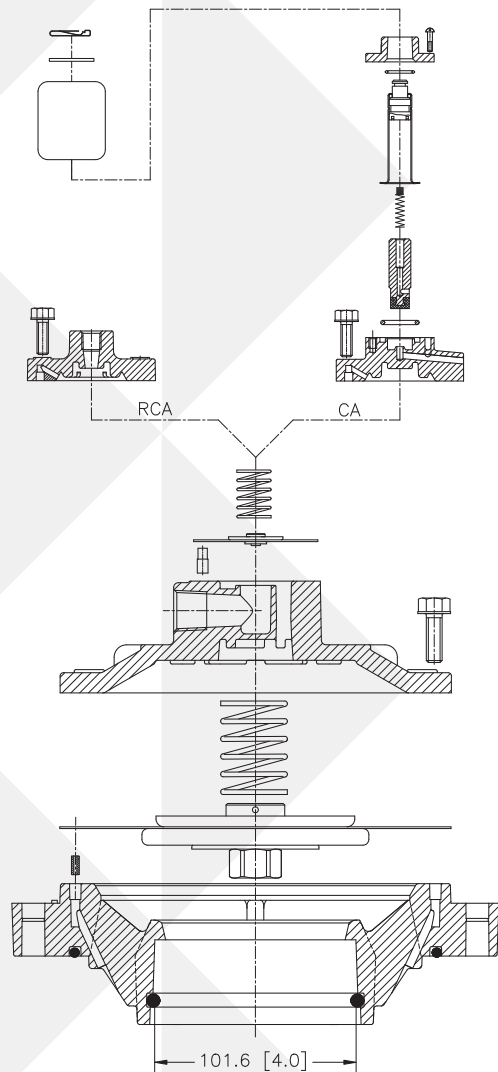


Note: Suggested pipe size is 3" NB Schedule 40 pipe (OD=89.0 mm, 3.5").

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CA/RCA102MM



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



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