

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

1. MM valves are installed through the tank, refer to the appropriate template listed above.
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 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) Kg (lbs)	Remote Pilot (RCA) 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 and secondary (where required) diaphragms and all diaphragm springs.
CA/RCA40MM Diaphragm kit	K4000	K4007	
CA/RCA76MM Diaphragm kit	K7600	K7601	
CA/RCA102MM Diaphragm kit	K10200	K10201	
Pilot repair kit (all models)	K0380	K0384	
CA/RCA25MM*P Installation template	Drawing 690048		Installation templates are available free of charge.
CA/RCA25MM*D Installation template	Drawing 690046		
CA/RCA40MM*P Installation template	Drawing 690045		Suitable for 102MM hose
CA/RCA40MM*D Installation template	Drawing 609999		
CA/RCA76MM Installation template	Drawing 690151 and 690051		
CA/RCA102MM Installation template	Drawing 691055 and 691056		

Approvals

Integrally piloted valves meet the requirements of:

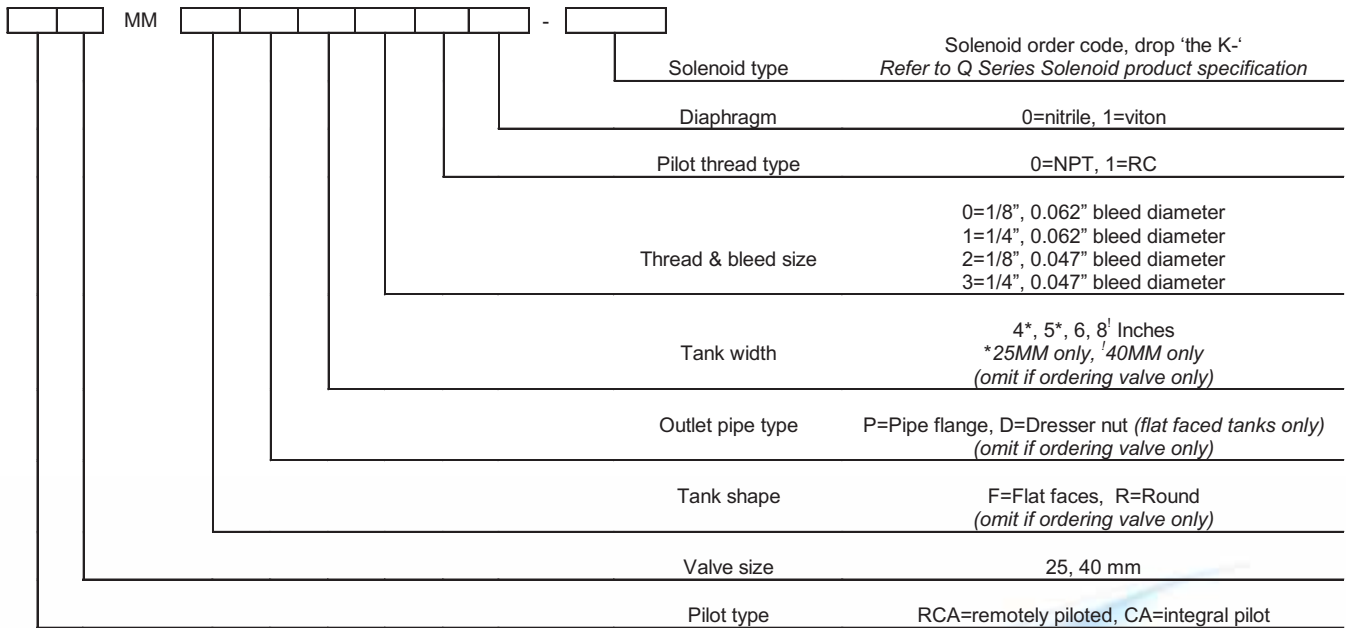
- Atex II 2D Mechanical
- CSA (C&US) C22.2 No. 139-1982 UL Std No. 429
- C-Tick - integral pilots
- EMC (89/336/CE) - integral pilots

Product Characteristics and Performance

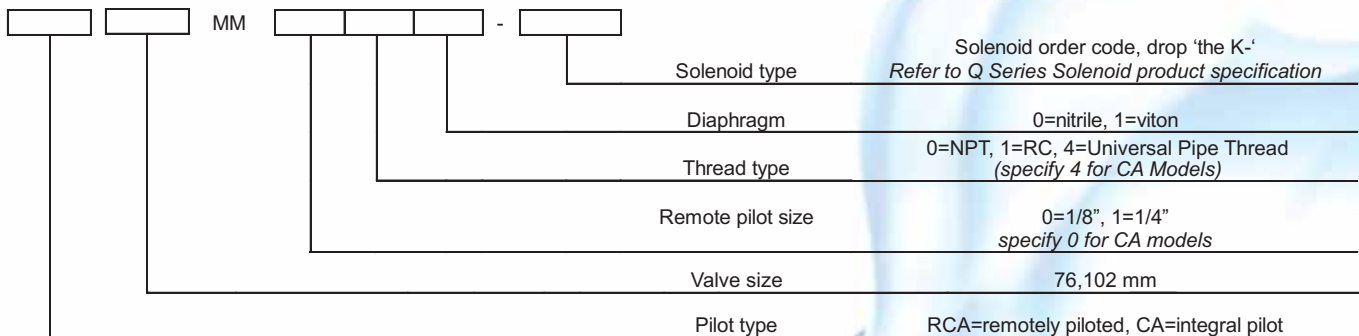
Nom. Size	Port Size		Number of diaphragms	Flow		Pressure Range kPA(Psi)	Temperature Range °C °(F)	
	mm	in		Kv	Cv		Nitrile Seals	Viton Seals
25	25	1	1	26	30	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
40	40	1.5	2	44	51	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)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

Order Code

1" and 1.5" Models



3" and 3.5" Models



Examples:

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.

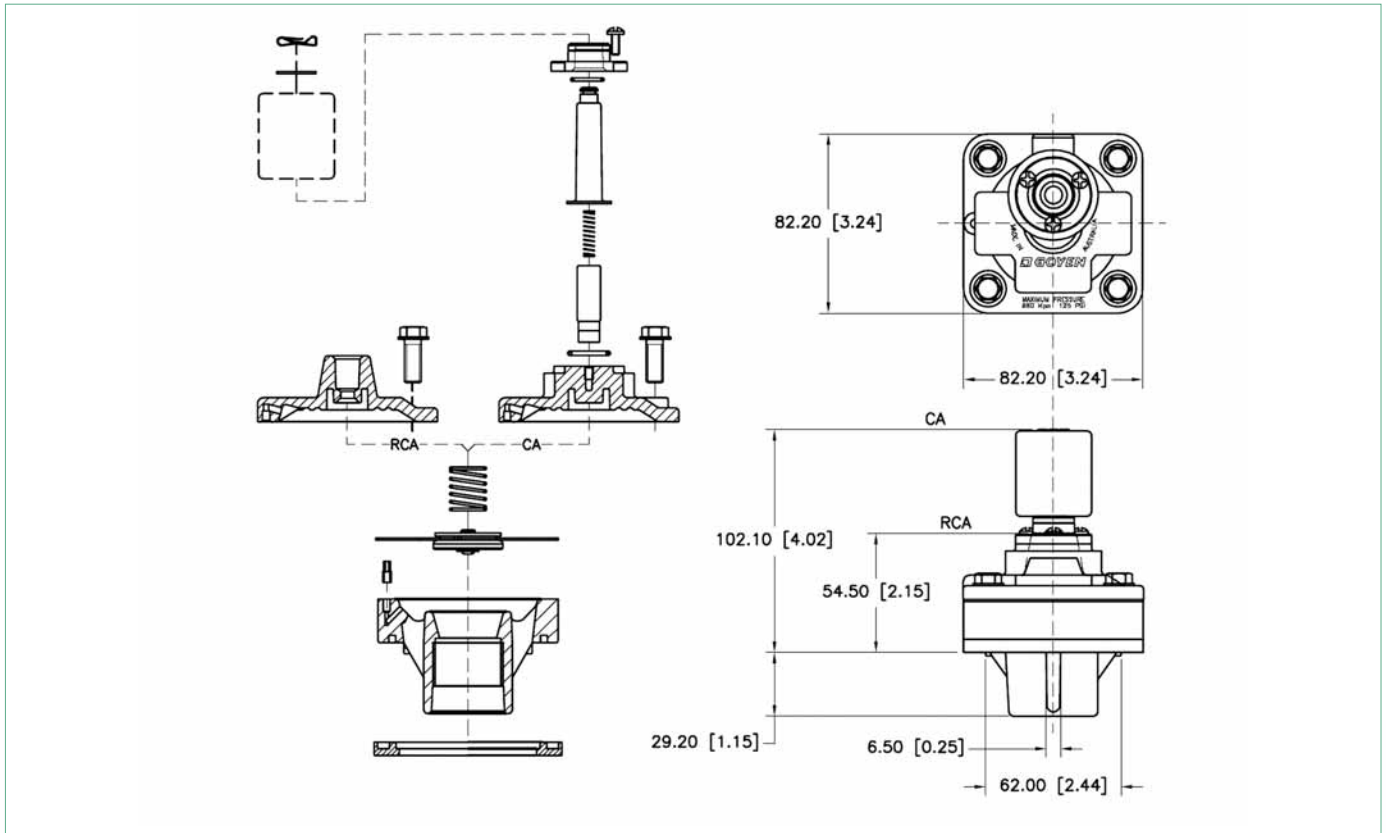
RCA25MM001

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

Dimensions

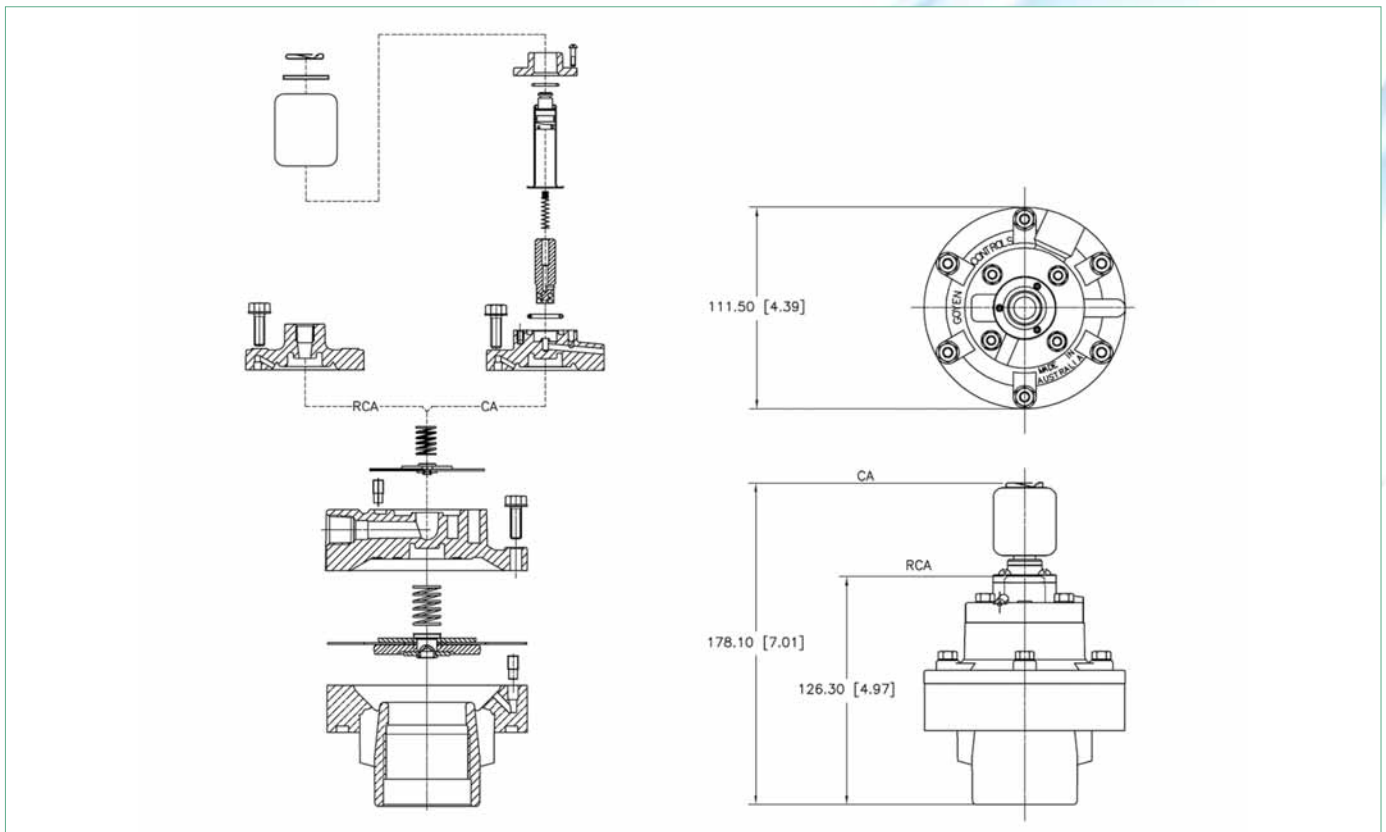
(Dimensions in mm and [inches])

CA/RCA25MM



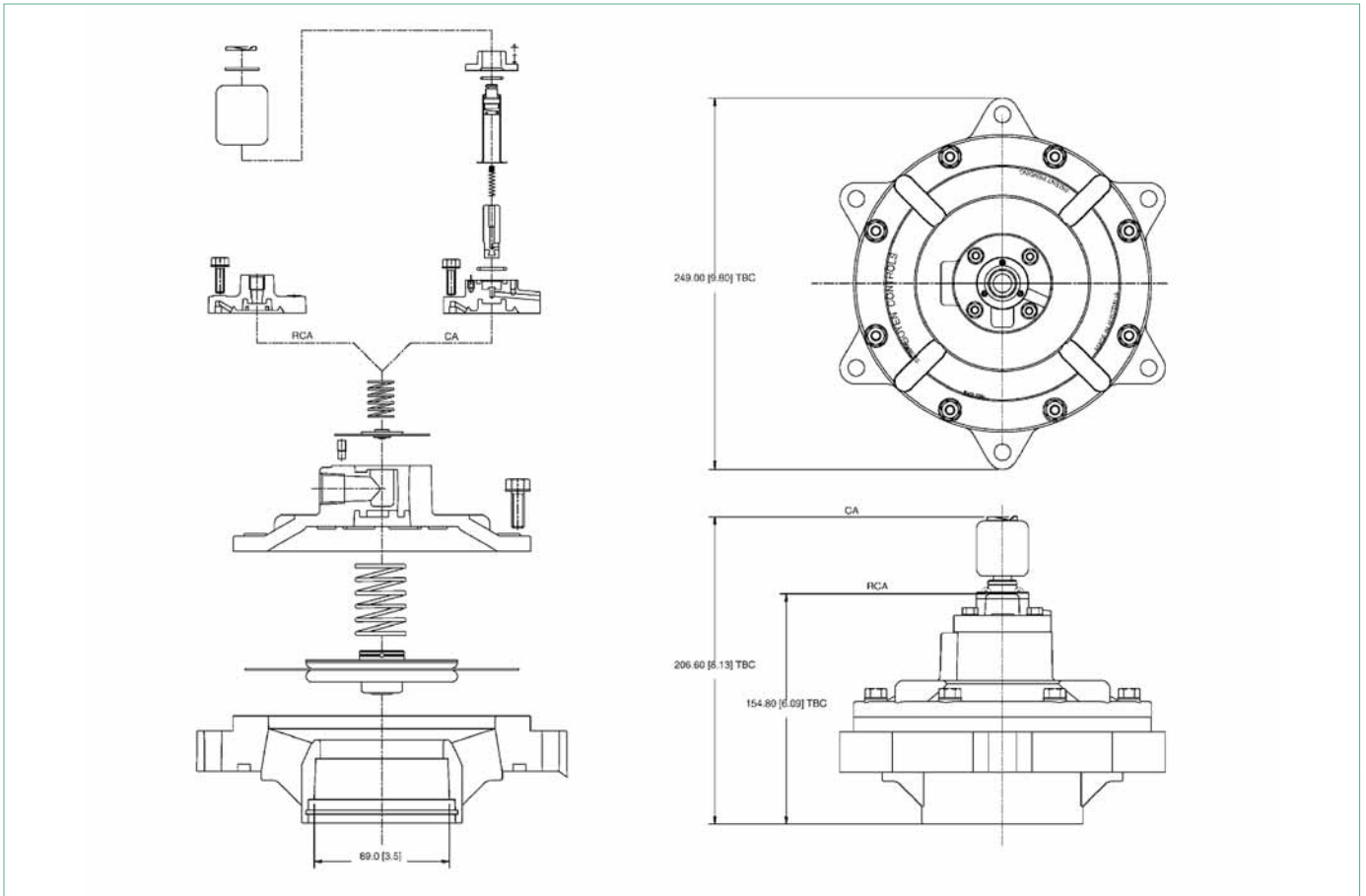
Note: Pipe outlet not shown

CA/RCA40MM



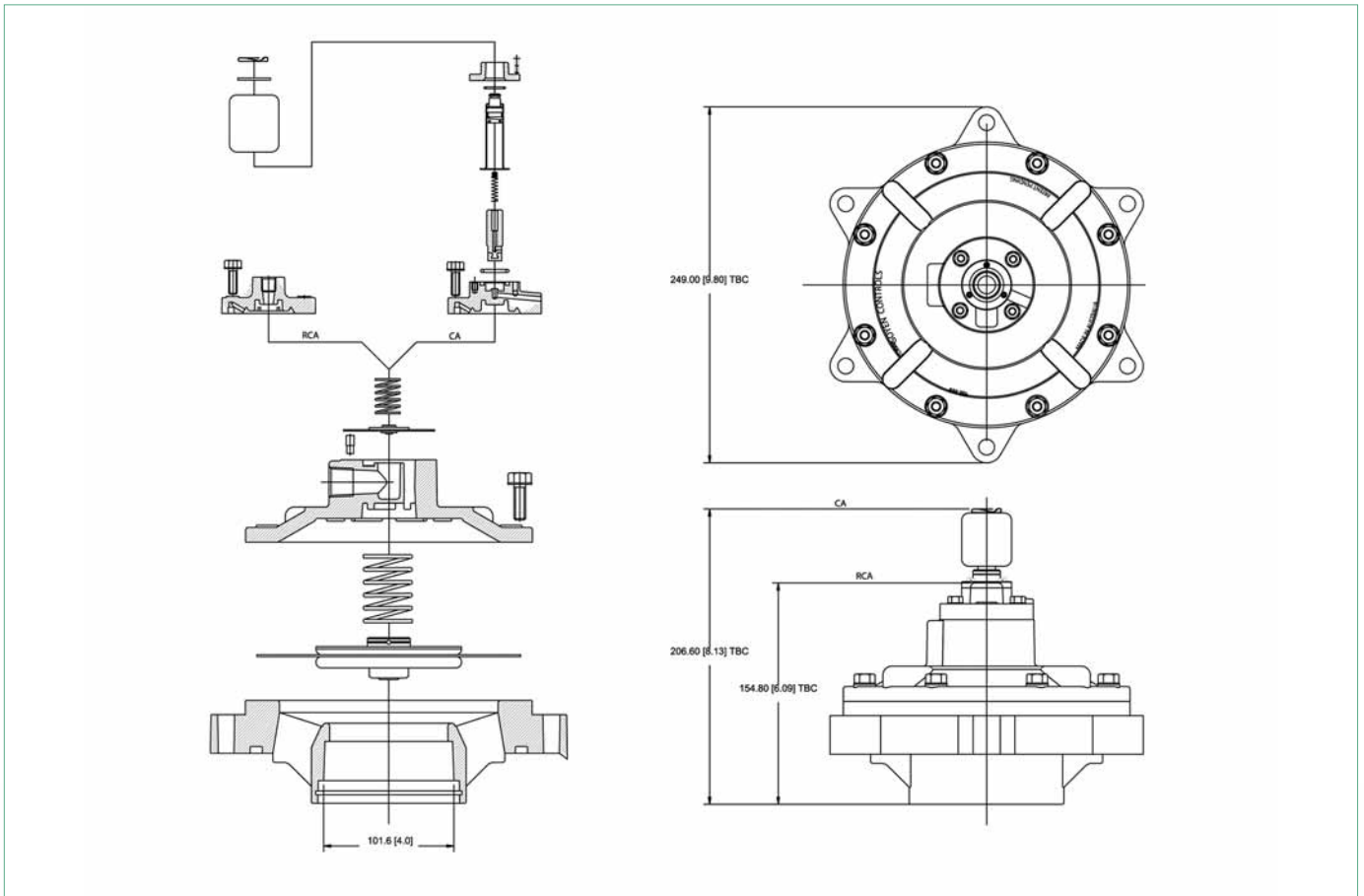
Note: Pipe outlet not shown

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")