

## Technical Specification

## 3 Series Pulse Jet Valves



FS3 Series



DD3 Series

T3 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 (RCA Only)
- CSA (US) C22.2 No 139-1982, UL 429 (CA & RCA)

### 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.
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 (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
¾"	26.7	1.050
1"	33.4	1.315

### Weights

Size	Remote Pilot (RCAC) Kg (lbs)	Size	Remote Pilot (RCAC) 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)		

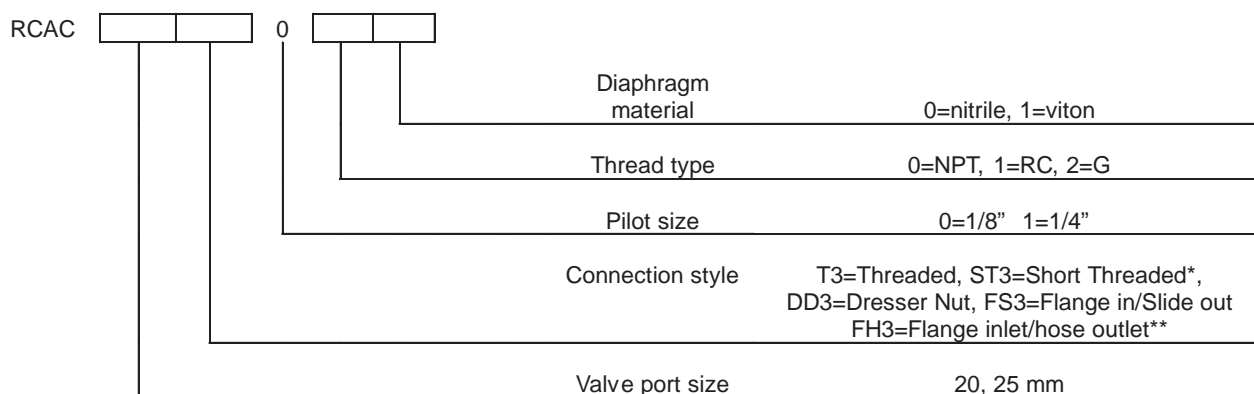
### Maintenance Kits and Accessories

Model	Nitrile	Viton	Includes
RCAC20T3, ST3, DD3, FS3	K2016	K2017	Diaphragm kits include main diaphragm, spring, and locking pin.
RCAC25T3, DD3, FS3, FH3	K2529	K2530	
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 valves to round tanks.
Camlock for 20 & 25FS3 and 8" round tank	K2536-2	-	Eliminates welding. Refer to Camlock product specification.

## Product Characteristics and Performance

Model	Port Size		Number of diaphragms	Flow		Pressure Range kPA(Psi)	Temperature Range °C °(F)	
	mm	in		Kv	Cv		Nitrile Seals	Viton Seals
20T3	20	¾"	1	14	17	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
20ST3	20	¾"	1	14	17	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
20DD3	20	¾"	1	14	17	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
20FS3	20	¾"	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



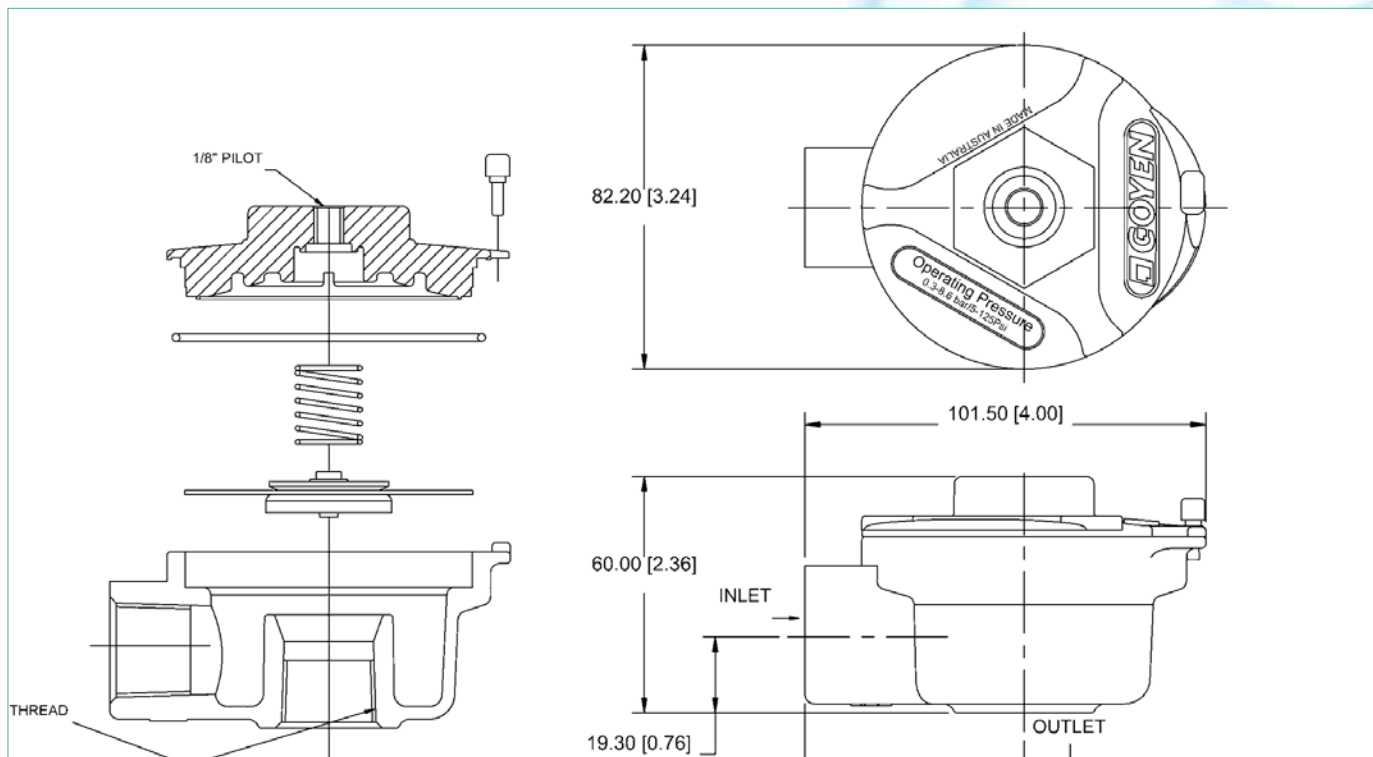
\*Available for 20 (3/4") size only. \*\*Available for 25 (1") size only.

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.

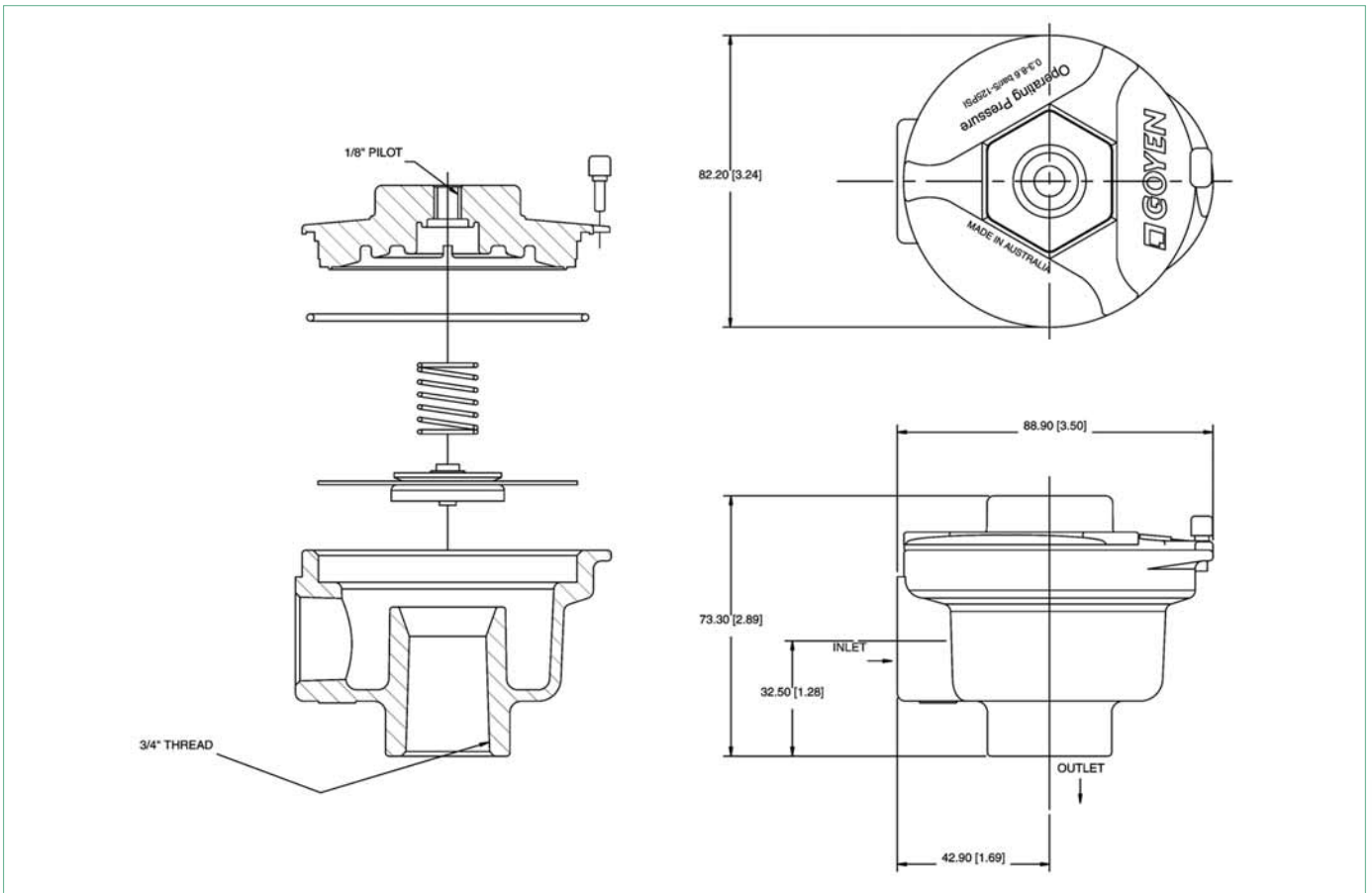
## Dimensions

(Dimensions in mm and [inches])

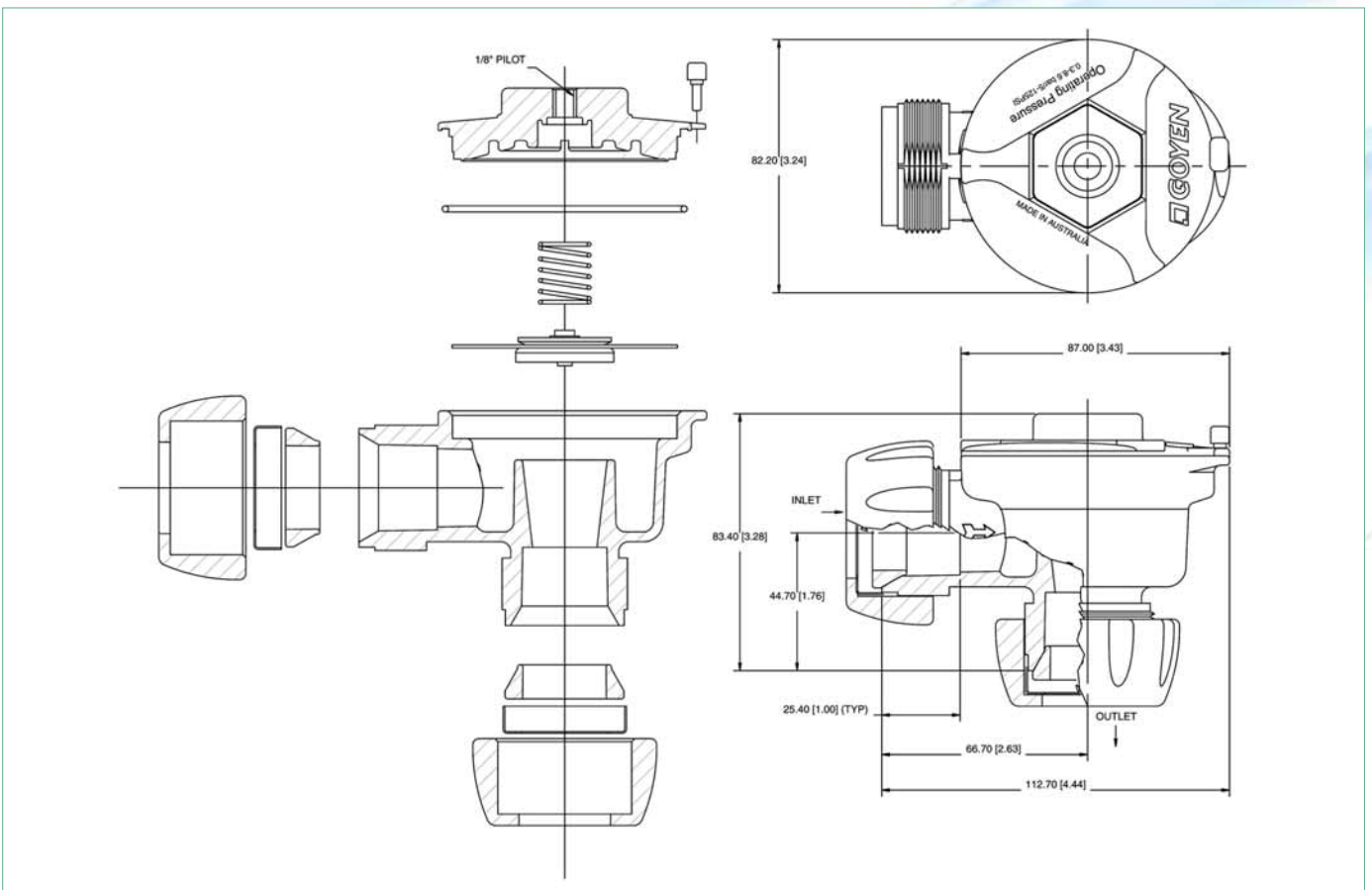
### RCAC20T3



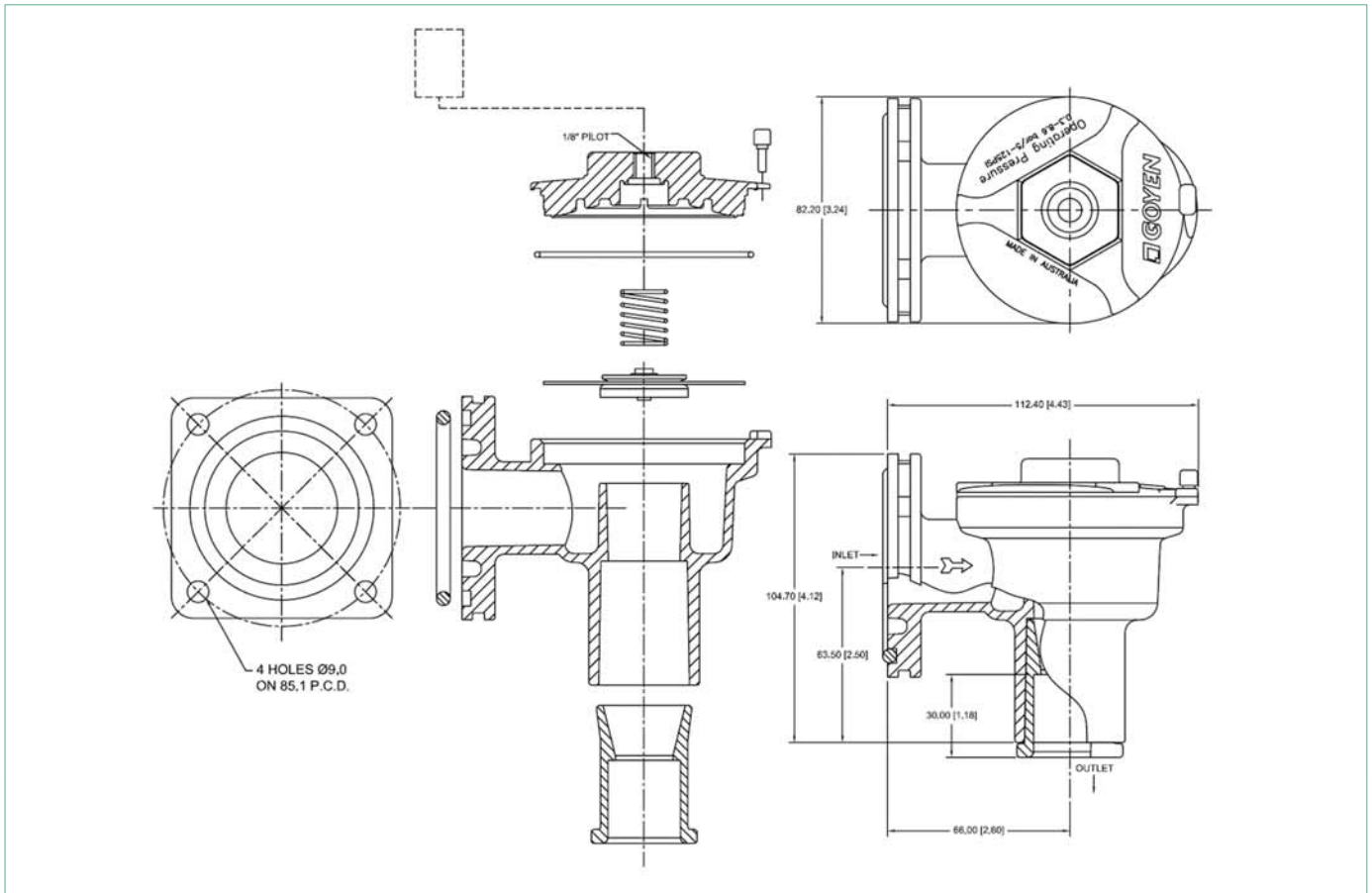
RCAC20ST3



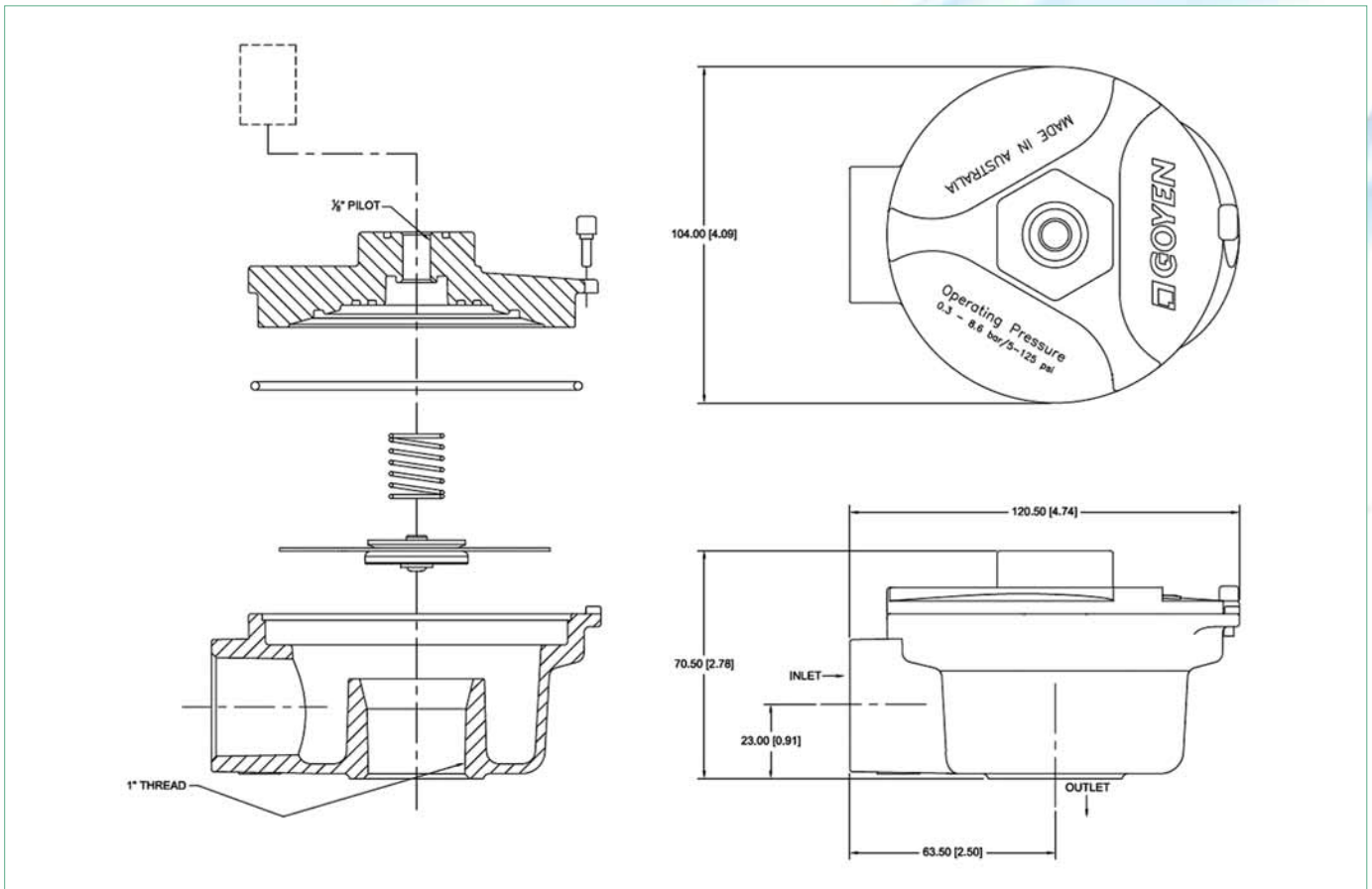
RCAC20DD3



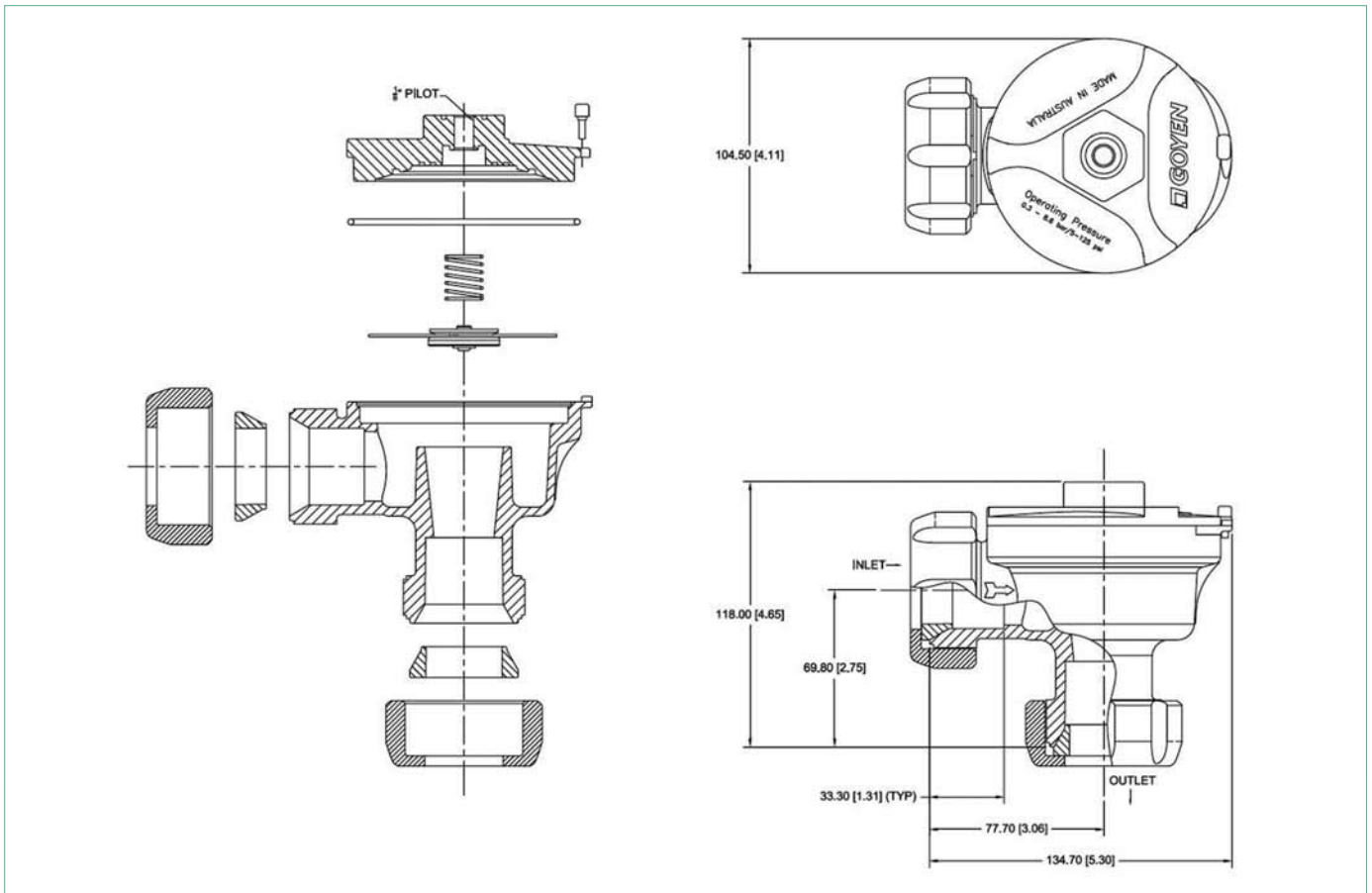
RCAC20FS3



RCAC25T3



RCAC25DD3



RCAC25FS3

