



GOYEN

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# FLANGED VALVES

# GOYEN - FS SERIES FLANGED VALVES

## PRODUCT LEAFLET



FS Series

### DESCRIPTION

Very high performance diaphragm valve with flanged inlet port and slide seal outlet port for easy valve installation and removal. 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:** Diecast aluminium or 316 stainless steel

**Ferrule:** 305 SS

**Armature:** 430FR SS

**Seals:** Nitrile or Viton

**Spring:** 304 SS

**Screws:** 302 or 304 SS

**Outlet Slide Seal:** EPDM or Viton

**Diaphragm Seat:** PA-66 (standard), 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/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)

### INSTALLATION

1. Prepare inlet flanges 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 flange and blowtube to valves with all seals in place. Tighten flange bolts to 10Nm (7.4 ft-lbs) Ensure blowtube is pushed all the way into the valve outlet.
5. Tanks and pipes must be independently supported from valve.
6. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
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.**

Where used, refer to DEINC-002 product specification for installation details.

SIZE	OD MM	OD INCHES
1.5"	48.3	1.900

We recommend Schedule 40 thickness.

### WEIGHTS

SIZE	INTEGRAL PILOT (CA) KG (LB)	REMOTE PILOT (RCA) KG (LB)
45	1.830 (4.03)	1.610 (3.55)

# GOYEN - FS SERIES FLANGED VALVES

## PRODUCT LEAFLET

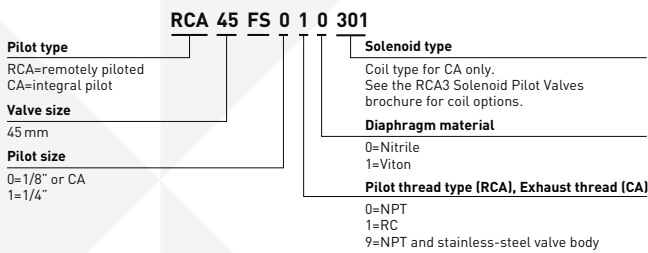
### MAINTENANCE KITS

MODEL	NITRILE	VITON	INCLUDES
CA/RCA45FS	K4502	K4503, K4542 (Viton/SS), K4544 (Viton/SS Main Diaphragm only)	Diaphragm kits include main and secondary diaphragms and all springs
CAC45FS to CA45FS Integral pilot cover conversion kit	K4532(NPT) K4538(RC)	K4537(NPT) K4539(RC)	The complete CA integrally piloted valve cover assembly. Does not include cover bolts or main bleed pin
RCAC45FS to RCA45FS Remote pilot cover conversion kit	K4533(RC) K4535(NPT)	K4534(RC), K4536(NPT) K4543 (NPT/SS)	The complete RCA remotely piloted valve cover assembly with main diaphragm and spring. Does not include cover bolts or main bleed pin
Integral pilot repair kit (CA45FS and CAC25FS)	K0380	K0384	O-ring armature assembly, armature spring, ferrule
Integral pilot repair kit (CAC45FS)	K0390	NA	O-ring armature assembly, armature spring, ferrule
45FS Outlet seal	G690864	G690864-2	Outlet seal

### PRODUCT CHARACTERISTICS AND PERFORMANCE

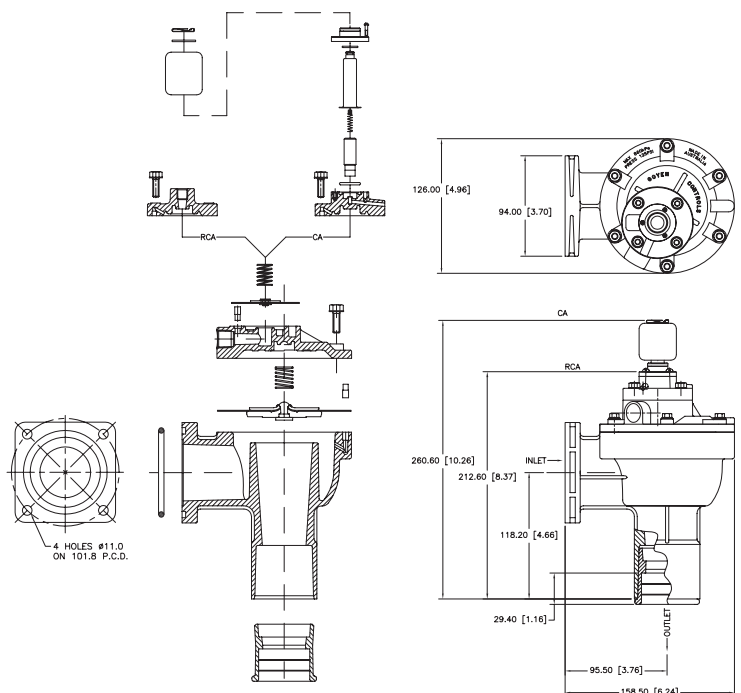
NOM. SIZE	PORT SIZE		NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE KPA (PSI)	TEMPERATURE RANGE °C °(F)	
	MM	INCH		KV	CV		NITRILE SEALS	VITON SEALS
45	40	1.5	2	56	65	30(5)-860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

### ORDER CODE



### DIMENSIONS IN MM (AND INCHES)

#### CA/RCA45FS



### EXAMPLES

CA45FS010-300  
1.5" FS valve with nitrile seals and 220/240 V AC integral pilot with DIN socket terminals.

RCAC45FS091  
1.5" FS valve with 1 8" NPT remote pilot port, stainless steel body and valve cover, and viton seals.

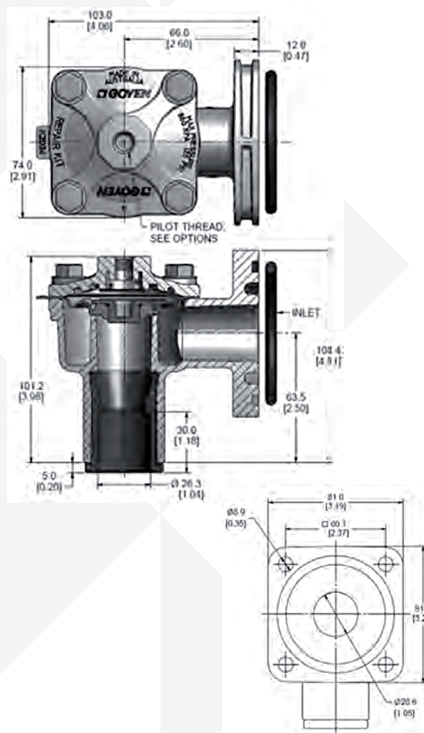
# GOYEN - FS SERIES FLANGED VALVES

PRODUCT LEAFLET

## RCAC20FS4 - REVERSE PULSE JET VALVES



### DIMENSIONS IN MM (AND INCHES)



### DESCRIPTION

High-performance diaphragm valve with a flanged inlet port and slide seal outlet port. 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. The FS valve range features a larger diameter inlet providing higher performance than the DD, T or ST body styles.

### 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  
**Seals:** Inlet O-ring: Nitrile used with shockwave diaphragm, Viton with Viton diaphragm  
**Outlet:** EPDM used with shockwave diaphragm, Viton with Viton diaphragm  
**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 unit inspection should be conducted annually.

### APPROVALS

The RCAC20FS4 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

### MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
<b>DIAPHRAGM KIT</b>		
RCAC20FS4	K2034	K2033
<b>20FS4 OUTLET SEAL</b>		
RCAC20FS4	G690338	G690338-2

### WEIGHTS

VALVE	KG (LB)
RCAC20FS4	0.52 (1.14)

### PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE MM (INCH)	NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE KPA (PSI)	TEMPERATURE RANGE °C (°F)	
		KV	CV		SHOCKWAVE	VITON
20 (3/4)	1	19	26	30(5) to 860(125)	-40[-40] to 82(179.6)	-29[-20.2] to 232(449.6)

### EXAMPLES

RCAC20FS4012  
 3/4" FS 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>RCAC20FS4</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

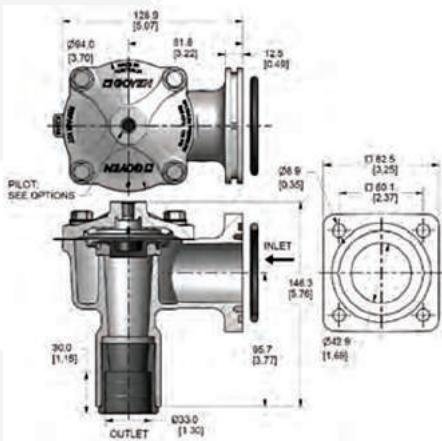
# GOYEN - FS SERIES FLANGED VALVES

PRODUCT LEAFLET

## RCAC25FS4 - REVERSE PULSE JET VALVES



### DIMENSIONS IN MM (AND INCHES)



### DESCRIPTION

High-performance diaphragm valve with a flanged inlet port and slide seal outlet port. 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. The FS valve range features a larger diameter inlet providing higher performance than the DD or T body styles.

### 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  
**Dresser:** Nitrile & EPDM or Viton  
**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 RCAC25FS4 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

### MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
<b>DIAPHRAGM KIT</b>		
RCAC25FS4	K2546	K2551
<b>FS OUTLET SEAL</b>		
RCAC25FS4	G690763	G690763-2

### WEIGHTS

VALVE	KG (LB)
RCAC25FS4	0.85 (1.87)

### PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE MM (INCH)	NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE KPA (PSI)	TEMPERATURE RANGE °C °(F)	
		KV	CV		SHOCKWAVE	VITON
25 (1)	1	34	40	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

### EXAMPLES

RCAC25FS4012  
 1" FS 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

<b>RCAC25FS4</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 - FS SERIES FLANGED 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/RCA20FS	K2000	K2007	NA	Diaphragm kits include main and secondary diaphragms (where required) and all springs.
CA/RCA25FS	K2501	K2503	K2504	



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