



# FLANGED VALVES

# **GOYEN** - FS SERIES

### FLANGED VALVES

#### PRODUCT LEAFLET



#### **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.
- 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)

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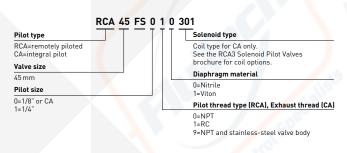
#### **MAINTENANCE KITS**

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



#### **EXAMPLES**

#### CA45FS010-300

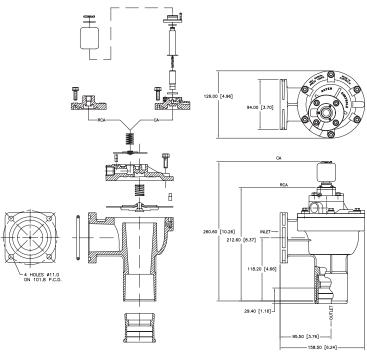
 $1.5\ensuremath{^{\circ}}$  FS valve with nitrile seals and 220/240 V AC integral pilot with DIN socket terminals.

#### RCAC45FS091

1.5" FS valve with 1.8" NPT remote pilot port, stainless steel body and valve cover, and viton seals.

#### **DIMENSIONS IN MM (AND INCHES)**

#### CA/RCA45FS



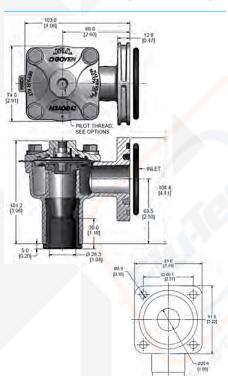
# GOYEN - FS SERIES FLANGED VALVES

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

#### **WEIGHTS**

VALVE	KG (LB)
RCAC20FS4	0.52 (1.14)

#### **MAINTENANCE KITS**

MODEL	SHOCKWAVE	VITON
DIAPHRAGM M	(IT	
RCAC20FS4	K2034	K2033
20FS4 OUTLET	SEAL	
RCAC20FS4	G690338	G690338-2

#### PRODUCT CHARACTERISTICS AND PERFORMANCE

	NUMBER OF				TEMPERATURE RANGE °C °(F)	
MM (INCH)	DIAPHRAGMS				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)

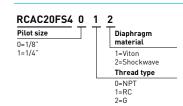
#### **EXAMPLES**

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



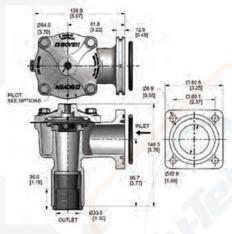
# GOYEN - FS SERIES FLANGED VALVES

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.

1 33.4	1.315

#### WEIGHTS

7 1/2	
VALVE	KG (LB)
RCAC25FS4	0.85 (1.87)

#### MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON	
DIAPHRAGM K	(IT		
RCAC25FS4	K2546	K2551	
FS OUTLET SE	AL		
RCAC25FS4	G690763	G690763-2	

#### PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL	PORT SIZE DIAPHRAGMS	FLOW	1	PRESSURE RANGE	TEMPERATURE RANGE °C °(F)	
MM (INCH)		0111 0122   01111 1111110110	KV	CV	KPA (PSI)	SHOCKWAVE
25 (1)	1	34	40	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

#### **EXAMPLES**

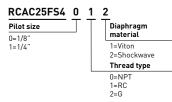
#### RCAC25FS4012

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



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#### DIAPHRAGM SERVICE KITS FOR DELETED VALVES

#### 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
CA/RCA25FS	K2501	K2503	K2504	(where required) and all springs.

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