

Technical Specification
'FS' Series Pulse Jet Valves


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 including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fibre filters.

Construction

Body: Diecast aluminium or 316 stainless steel
 Ferrule: 304 SS
 Armature: 430FR SS
 Seals: Nitrile or Viton (reinforced)
 Spring: 304 SS
 Screws: 302 SS
 Outlet Slide Seal: EPDM or Viton
 Diaphragm Seat: PA-6 (standard), Viton coated mild steel
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.

Approvals

- Atex II 2D Mechanical (RCA Only)
- CSA (U.S) C22.2 No 139-1982, UL 429 (CA & RCA)
- C-Tick (CA)
- EMC 2004/108/EC (CA)
- Low Voltage Directive 2006/95/EC (CA)

Installation

1. Prepare inlet flange 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 restrained 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. Refer to Camlock product specification for installation details.

*Pipes must be to Schedule 40 outside diameter

Schedule 40 Size	OD mm	OD Inches
1"	33.4	1.315
1.5"	48.3	1.900

Weights

Size	Integral Pilot (CA) Kg (lbs)	Remote Pilot (RCA) Kg (lbs)
25	1.050 (2.31)	0.830 (1.82)
45	1.830 (4.03)	1.610 (3.55)

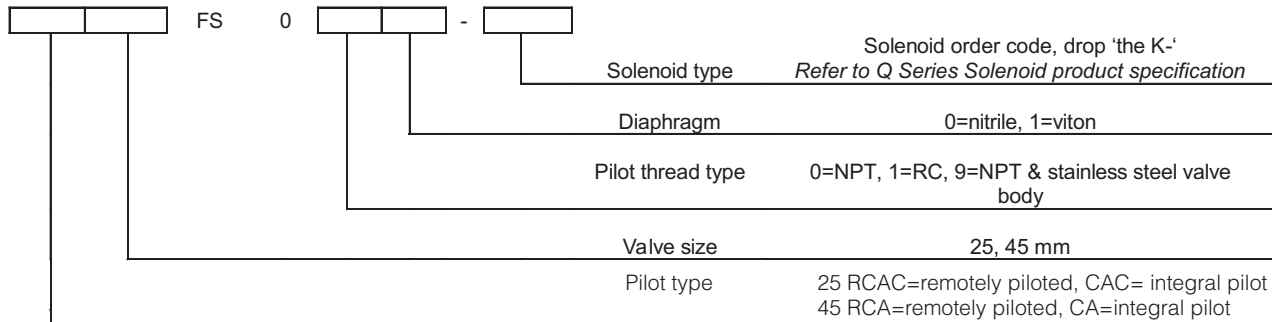
Maintenance Kits

Model	Nitrile	Viton	Includes
CAC/RCAC25FS Diaphragm kit	K2501	K2503	The main diaphragm, secondary diaphragm (45FS only) and spring(s).
CA/RCA45FS Diaphragm kit	K4502	K4503	
CAC45FS to CA45FS Integral pilot cover conversion kit	K4532(NPT) K4538(BSP)	K4537(NPT) K4539(BSP)	The complete CA integrally piloted valve cover assembly. Does not include main diaphragm, main diaphragm spring, cover bolts or main bleed pin.
RCAC45FS to RCA45FS Remote pilot cover conversion kit	K4533(BSP) K4535(NPT)	K4534(BSP) K4536(NPT)	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 only)	K0380	K0384	O-ring armature assembly, armature spring, ferrule.
Integral pilot repair kit (CAC45FS only)	K0390	N/A	O-ring armature assembly, armature spring, ferrule.
25FS Outlet seal	G690763	G690763-2	Outlet seal
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	in		Kv	Cv		Nitrile Seals	Viton Seals
25	25	1	1	28	32	30(5) - 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)
45	40	1.5	1	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" FS valve with 1/8" RC pilot, nitrile seals and 220/240VAC integral pilot with DIN socket terminals.

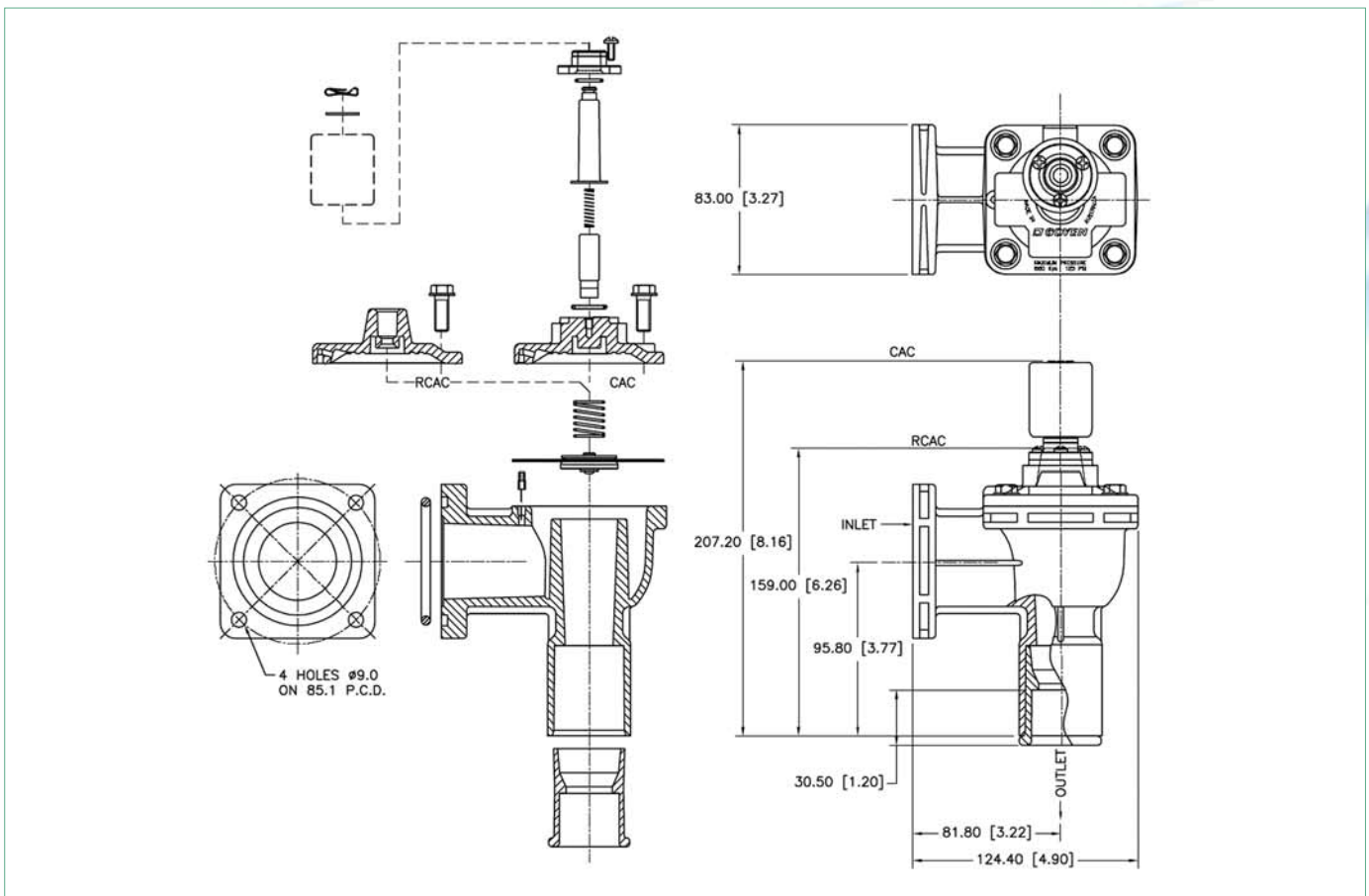
RCAC25FS091

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

Dimensions

(Dimensions in mm and [inches])

CAC/RCAC25FS



CA/RCA45FS

