

GOYEN DIAPHRAGM VALVES FOR

REVERSE PULSE JET DUST COLLECTORS

DIAPHRAGM VALVES FOR REVERSE PULSE JET DUST COLLECTORS

Goyen manufactures a full range of diaphragm valves suited to the high flow and fast response demands of reverse pulse jet dust collector applications in a wide range of installations. Goyen reverse pulse jet diaphragm valves are built to an exceptional quality standard and are supported by dedicated and experienced applications engineers.

There is a Goyen reverse pulse jet diaphragm valve solution ideal for a wide range of applications including (amongst many more):

- Power generation
- Gas turbine intake filters
- Steel
- Cement
- Metals refining
- Fume collectors
- Manufacturing processes
- Paint and powdercoating booths
- Powder and bulk solids handling
- Silo venting

The Goyen diaphragm valve is built to the highest quality standards, making it a best-in-class product for durability and longevity. All our valves are tested prior to shipment and are proven to be a reliable design with market-leading performance.

With Goyen, customers are supported by our world-class engineering expertise, innovative designs and high-quality products in the filter cleaning systems solutions market, including diaphragm valves, header tanks, cleaning systems components, pulse cleaning controllers, emissions monitoring and Tribo electric products.

Goyen's advanced application expertise, along with our wide product range and global reach, has allowed us to provide customer-beneficial engineering partnerships since 1935. Our partnerships are maintained by our long-term commitment to leading customer product support.

Goyen, engineering partnerships since 1935



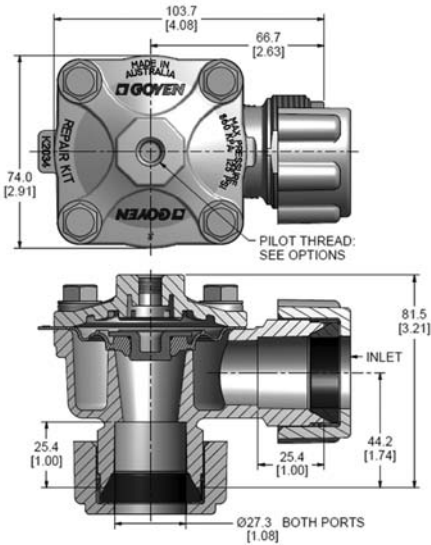
GOYEN RCAC20DD4

REVERSE PULSE JET VALVES



DIMENSIONS

(Dimensions in mm and [inches])



DESCRIPTION

High-performance diaphragm valve with dresser nut ports. Equipped with 'Shockwave' springless diaphragm. The 4 series valves are available as remote pilot valves and may be converted to an integral pilot using either the RCA3DM or RCA3PV screw-in pilots. Outlet is 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 and Dresser Nuts: Aluminium (diecast)

Screws: 304 Stainless steel

Dresser Nut Seals: Nitrile or Viton

Diaphragm: Proprietary high-performance engineering thermoplastic Elastomer or Viton

OPERATION

Recommended on-time range:
50 to 500 ms

Recommended time between pulses:
1 minute or greater

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)
RCAC20DD4	0.52 (1.14)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit		
RCAC20DD4	K2034	K2033
Dresser Seal Kit		
RCAC20DD4	K2008	K2009

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				SHOCKWAVE	VITON
20 (3/4)	1	14 (17)	30(5) to 860(125)	-40[-40] to 82(179.6)	-29[-20.2] to 232(449.6)

Examples:

RCAC20DD4012

3/4" dresser nut 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

RCAC20DD4 0 1 2

Pilot size

0=1/8"

1=1/4"

Diaphragm material

1=Viton

2=Shockwave

Thread type

0=NPT

1=RC

2=G

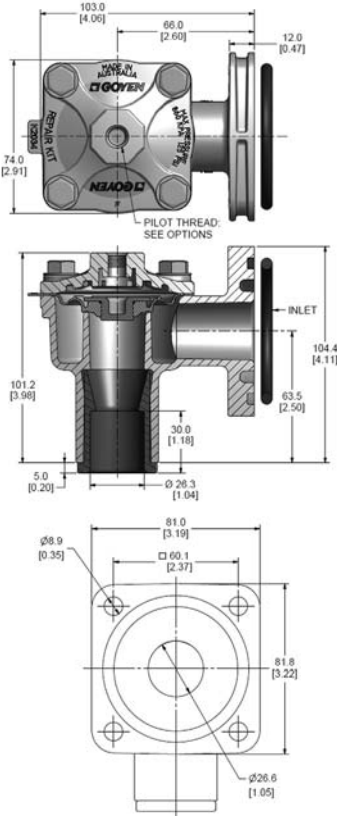
GOYEN RCAC20FS4

REVERSE PULSE JET VALVES



DIMENSIONS

(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 and Dresser Nuts: Aluminium (diecast)

Screws: 304 Stainless steel

Seals: Nitrile & EPDM or Viton

Diaphragm: Proprietary high-performance 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	0.51 (1.12)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit		
RCAC20FS4	K2034	K2033
20FS4 Outlet Seal		
RCAC20FS4	G690338	G690338-2

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				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)

ORDER CODE

RCAC20FS4 0 1 2

Pilot size	Diaphragm material
0=1/8"	1=Viton
1=1/4"	2=Shockwave
	Thread type
	0=NPT
	1=RC
	2=G

Examples:

RCAC20FS4012

3/4" FS valve with 1/8" RC pilot port threads, Shockwave diaphragm."

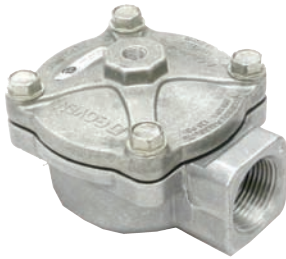
Note:

1/8 Pilot available in NPT, RC and G Thread.

1/4 Pilot is only available in G Thread.

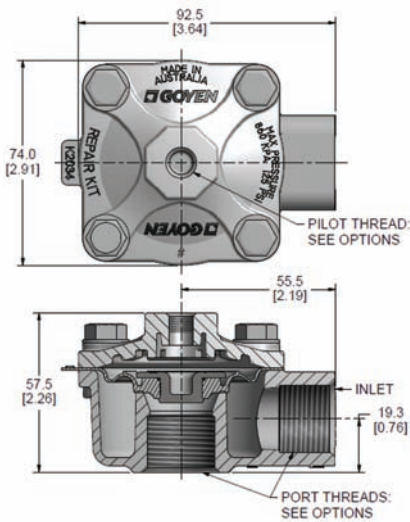
GOYEN RCAC20T4

REVERSE PULSE JET VALVES



DIMENSIONS

(Dimensions in mm and [inches])



DESCRIPTION

High-performance diaphragm valve with threaded ports. Equipped with 'Shockwave' springless diaphragm. The 4 series valves are available as remote pilot valves and may be converted to an integral pilot using either the RCA3DM or RCA3PV screw-in pilots. Outlet is 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: Aluminium (diecast)

Screws: 304 Stainless steel

Diaphragm: Proprietary high-performance 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 RCAC20T4 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)
RCAC20T4	0.31 (0.68)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit RCAC20T4	K2034	K2033

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				SHOCKWAVE	VITON
20 (3/4)	1	14 (17)	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

Examples:

RCAC20T4012

3/4" RC threaded valve with 1/8" RC pilot port thread, Shockwave diaphragm.

Note:

1/8" Pilot available in NPT, RC and G Thread.

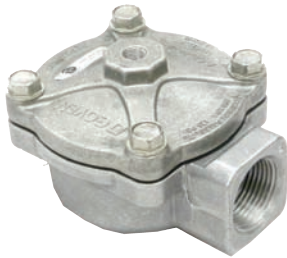
1/4" Pilot is only available in G Thread.

ORDER CODE

RCAC20T4	0	1	2
Pilot size			
0=1/8"			
1=1/4"			
			Diaphragm material
			1=Viton
			2=Shockwave
			Thread type
			0=NPT
			1=RC
			2=G

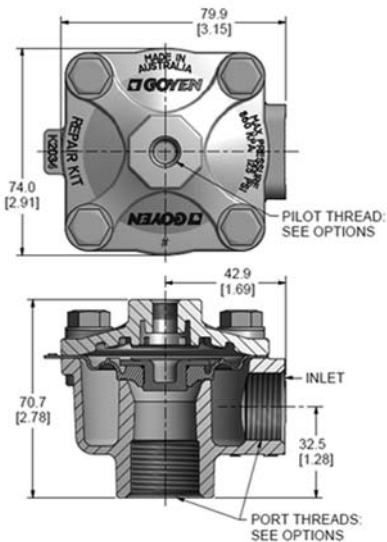
GOYEN RCAC20ST4

REVERSE PULSE JET VALVES



DIMENSIONS

(Dimensions in mm and [inches])



DESCRIPTION

High-performance diaphragm valve with short threaded ports. Equipped with 'Shockwave' springless diaphragm. The 4 series valves are available as remote pilot valves and may be converted to an integral pilot using either the RCA3DM or RCA3PV screw-in pilots. Outlet is 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: Aluminium (diecast)

Screws: 304 Stainless steel

Diaphragm: Proprietary high-performance 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 RCAC20ST4 meet 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)
RCAC20ST4	0.30 (0.66)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit		
RCAC20ST4	K2034	K2033

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				SHOCKWAVE	VITON
20 (3/4)	1	14 (17)	30(5) to 860(125)	-40[-40] to 82(179.6)	-29[-20.2] to 232(449.6)

Examples:

RCAC20ST4012

3/4" RC Short threaded valve with 1/8" RC pilot, 3/4" RC 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

RCAC20ST4 0 1 2

Pilot size

0=1/8"

1=1/4"

Diaphragm material

1=Viton

2=Shockwave

Thread type

0=NPT

1=RC

2=G

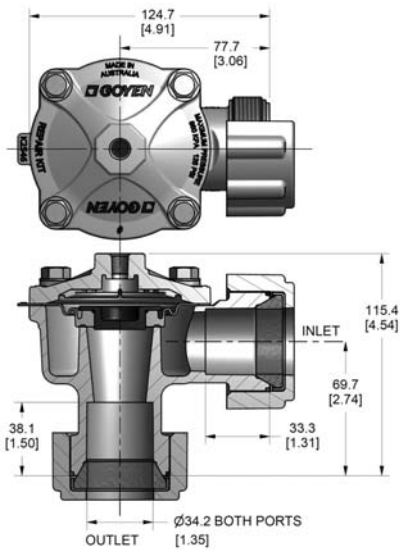
GOYEN RCAC25DD4

REVERSE PULSE JET VALVES



DIMENSIONS

(Dimensions in mm and [inches])



DESCRIPTION

High-performance diaphragm valve with dresser nut ports. 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.

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 and Dresser Nuts:
Aluminium (diecast)

Screws: 304 Stainless steel

Dresser Nut Seals: Nitrile or Viton

Diaphragm: High-performance engineering thermoplastic Elastomer or Viton

OPERATION

Recommended on-time range:
50 to 500 ms

Recommended time between pulses: 1 minute or greater

Please Note: We recommend using Schedule 40 pipe. Thickness OD is as shown below.

SIZE	OD mm	OD inches
1"	33.4	1.315

WEIGHTS

VALVE	kg (lb)
RCAC25DD4	0.96 (2.12)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit RCAC25DD4	K2546	K2551
Dresser Seal Kit RCA25DD	K2508	K2507

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				SHOCKWAVE	VITON
25 (1)	1	22.5 (26.0)	30(5) to 860(125)	-40[-40] to 82(179.6)	-29[-20.2] to 232(449.6)

Examples:

RCAC25DD4012

1" dresser nut valve with 1/8" RC pilot threads, Shockwave diaphragm.

Note:

1/8" Pilot available in NPT, RC and G Thread.

1/4" Pilot is only available in G Thread.

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 RCAC25DD4 meets the requirements of the European Low Voltage Directive 2006/95/EC, when fitted with the RCA3PV pilot.

ORDER CODE

RCAC25DD4 0 1 2

Pilot size

0=1/8"

1=1/4"

Diaphragm material

1=Viton

2=Shockwave

Thread type

0=NPT

1=RC

2=G

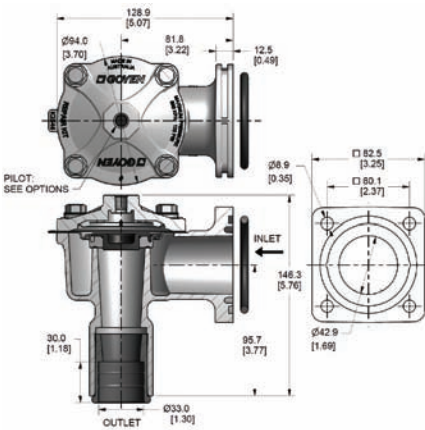
GOYEN RCAC25FS4

REVERSE PULSE JET VALVES



DIMENSIONS

(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

Seals: Nitrile & EPDM or Viton

Diaphragm: Proprietary high-performance engineering thermoplastic Elastomer or Viton

OPERATION

Recommended on-time range: 50 to 500 ms

Recommended time between pulses: 1 minute or greater

Please Note: We recommend using Schedule 40 pipe. Thickness OD is as shown below.

SIZE	OD mm	OD inches
1"	33.4	1.315

WEIGHTS

VALVE	kg (lb)
RCAC25FS4	0.85 (1.87)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit RCAC25FS4	K2546	K2551
FS Outlet Seal RCAC25FS4	G690763	G690763-2

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				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 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

RCAC25FS4 0 1 2

Pilot size

0=1/8"

1=1/4"

Diaphragm material

1=Viton

2=Shockwave

Thread type

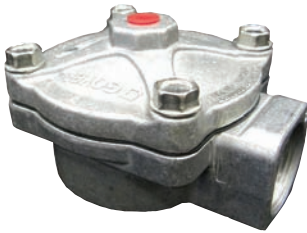
0=NPT

1=RC

2=G

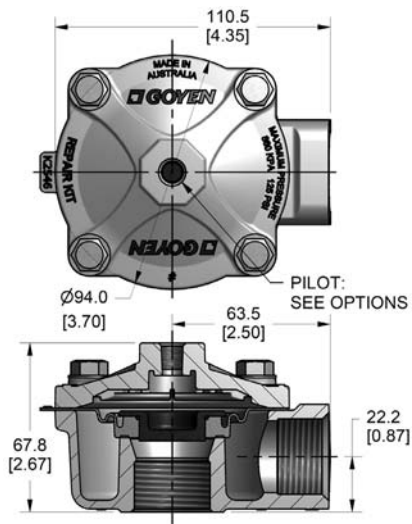
GOYEN RCAC25T4

REVERSE PULSE JET VALVES



DIMENSIONS

(Dimensions in mm and [inches])



DESCRIPTION

High-performance diaphragm valve with threaded ports. 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.

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

Diaphragm: Proprietary high-performance 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 RCAC25T4 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

WEIGHTS

VALVE	kg (lb)
RCAC25T4	0.56 (1.23)

MAINTENANCE KITS

MODEL	SHOCKWAVE	VITON
Diaphragm Kit RCAC25T4	K2546	K2551

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOMINAL PORT SIZE mm (in.)	NO. OF DIAPH.	FLOW KV (CV)	PRESSURE RANGE kPa (psi)	TEMPERATURE RANGE °C (°F)	
				SHOCKWAVE	VITON
25 (1)	1	24 (27)	30(5) to 860(125)	-40(-40) to 82(179.6)	-29(-20.2) to 232(449.6)

Examples:

RCAC25T4012

1" RC threaded port valve with 1/8" RC pilot port threads, Shockwave diaphragm.

Note:

1/8" Pilot is available in NPT, RC and G Thread.

1/4" Pilot is only available in G Thread.

ORDER CODE

RCAC25T4	0	1	2
Pilot size			
0=1/8"			
1=1/4"			
	Diaphragm material		
	1=Viton		
	2=Shockwave		
	Thread type		
	0=NPT		
	1=RC		
	2=G		

SOLENOID SPECIFICATIONS & CODES FOR VALVES



RCA3DM



RCA3PV

ELECTRICAL CHARACTERISTICS							
DIN Socket Connector			PG9 Connection (Cable Entry)				
DIN Socket Specification			EN175301 – 803 (previously DIN 43650A) / A/ISO 4400				
DIN Socket Optional			94/9/CE ATEX ii 3GD T6				
Isolation Class DIN Socket			VDE 0110 – 1/89				
DIN Socket Protection			IP65 EN60529				
	CODE	TYPE	CONNECTION TYPE	PROTECTION CLASS	VOLTAGE	POWER	COLOUR
For use with RCA3PV	206	SB4	DIN43650A	IP65	12 V DC (max. +10% supply)	18 W	Black
	205	SB4	DIN43650A	IP65	24 V DC (max. +10% supply)	18 W	Black
	204	SB4	DIN43650A	IP65	48 V DC (max. +10% supply)	18 W	Black
	203	SB4	DIN43650A	IP65	110 V DC (max. +10% supply)	18 W	Black
	206	SB4	DIN43650A	IP65	24 V 50/60 Hz (max. +10% supply)	38/31 VA	Black
	205	SB4	DIN43650A	IP65	48 V 50/60 Hz (max. +10% supply)	41/32 VA	Black
	204	SB4	DIN43650A	IP65	110/127 V 50/60 Hz (max. +10% supply)	63/53 VA	Black
	203	SB4	DIN43650A	IP65	220/240 V 50/60 Hz (max. +10% supply)	46/37 VA	Black
For use with RCA3DM	300	QR	DIN43650A	IP65	200/240 V 50/60 Hz	17.4/22.6 VA	Grey
	301	QR	DIN43650A	IP64	100/120 V 50/60 Hz	15.2/19.7 VA	Grey
	302	QR	DIN43650A	IP64	24 V 50/60 Hz	23.1/17.2 VA	Grey
	303	QR	DIN43650A	IP64	110 V DC	24 W	Grey
	304	QR	DIN43650A	IP64	48 V DC	20 W	Grey
	305	QR	DIN43650A	IP64	24 V DC	20 W	Grey
	306	QR	DIN43650A	IP64	12 V DC	20 W	Grey
	310	QD	Conduit (M20 × 1.5)	IP31	200/240 V 50/60 Hz	17.4/22.6 VA	Green
	311	QD	Conduit (M20 × 1.5)	IP31	100/120 V 50/60 Hz	15.2/19.7 VA	Green
	312	QD	Conduit (M20 × 1.5)	IP31	24 V 50/60 Hz	23.1/17.2 VA	Green
	313	QD	Conduit (M20 × 1.5)	IP31	24 V DC	20 W	Green
	314	QD	Conduit (M20 × 1.5)	IP31	12 V DC	20 W	Green
	320	QD	Conduit (½" NPSC)	IP31	200/240 V 50/60 Hz	17.4/22.6 VA	Green
	321	QD	Conduit (½" NPSC)	IP31	100/120 V 50/60 Hz	15.2/19.7 VA	Green
	322	QD	Conduit (½" NPSC)	IP31	24 V 50/60 Hz	23.1/17.2 VA	Green
	323	QD	Conduit (½" NPSC)	IP31	24 V DC	20 W	Green
324	QD	Conduit (½" NPSC)	IP31	12 V DC	20 W	Green	

GOYEN RCA3DM

PILOT VALVE OPTIONS FOR INTEGRAL PILOT (CA) APPLICATIONS



FOR INTEGRAL PILOT (CA) APPLICATIONS:

The RCA3DM is a pilot valve with an integral silencer and dust shroud which mounts directly (screw-in) to the 4 series valve cover. The **Dimensional diagrams can be found on Page 12** of this brochure.

RCA3DM and RCA3PV are suitable piloting options for all 4 Series valves and the RCA35T diaphragm valve.

COIL

Encapsulation: PA-66

C-Frame: Mild steel, zinc passivated

Bobbin: PA-66

Insulation class: B/130°C

IP Rating: IP65

Rating: Non-continuous use only

Clip: Mild steel (mechanically plated)

OPERATION

Recommended on-time range: 50 to 500 ms

Recommended time between pulses: 1 minute or greater

COIL CERTIFICATION AND CONFORMITIES

- C-Tick
- EMC (89/336/CE)
- LV
- CSA

SPARE PARTS:

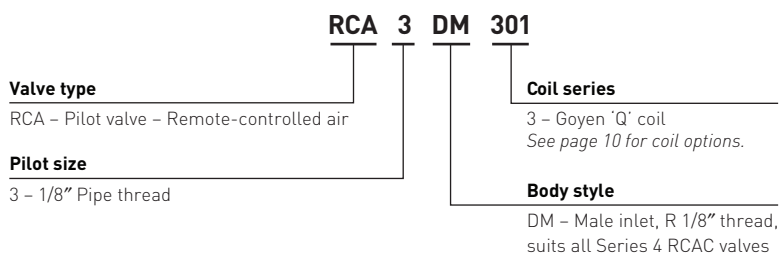
K0380 – Kit includes Nitrile replacement seal, armature, spring and ferrule.

K0384 – Kit includes Viton replacement seal, armature, spring and ferrule.

PRODUCT PERFORMANCE

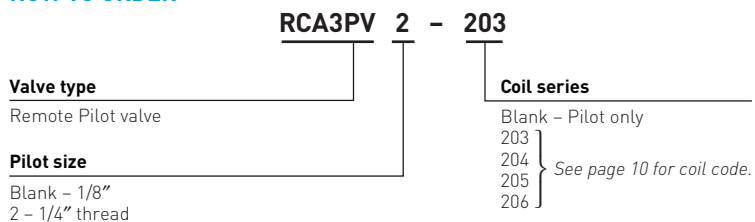
FLOW	MAXIMUM WORKING PRESSURE	MINIMUM WORKING PRESSURE	TEMPERATURE min.		TEMPERATURE max.		FLUID MEDIA
			Viton	Nitrile	Viton	Nitrile	
0.32 Cv	860 kPa	0 kPa	-40°C	-29°C	82°C	282°C	Air or
0.27 Kv	125 psi	0 psi	-40°F	-20°F	180°F	450°F	inert gas

HOW TO ORDER



GOYEN RCA3PV

HOW TO ORDER



GOYEN RCA3DM AND RCA3PV/3PV2

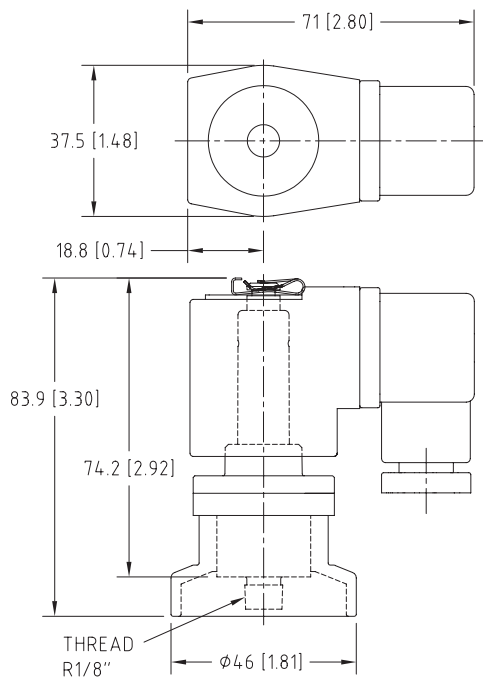
PILOT VALVE OPTIONS FOR INTEGRAL PILOT (CA) APPLICATIONS

Order with 4 series or RCA3ST valves for an integrally piloted application.

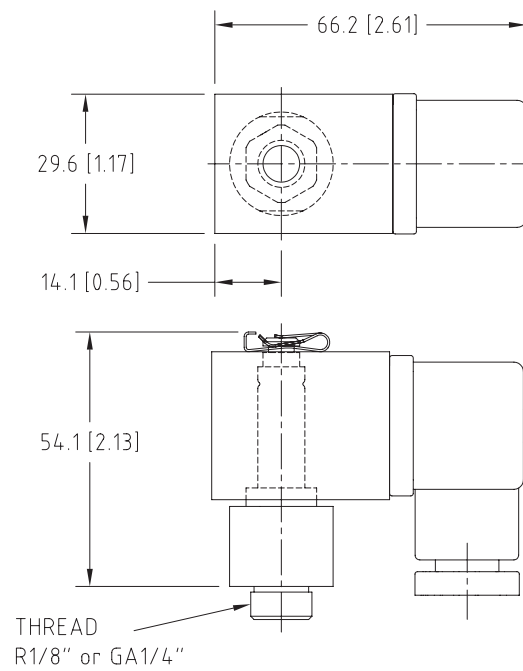
DIMENSIONS

(Dimensions in mm and [inches])

RCA3DM PILOT VALVE



RCA3PV (1/8") AND RCA3PV2 (1/4")



GOYEN 'T' SERIES

PULSE JET VALVES



T Series

DESCRIPTION

High performance diaphragm valve with threaded ports. 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: Aluminium (diecast)

Ferrule: 305 SS

Armature: 430FR SS

Seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 or 304 SS

Diaphragm Seat: PA-66 (standard), Viton or Nitrile coated mild steels, Nitrile, Viton or High Density PE

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 2D Mechanical (RCA 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 supply 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 pipes and blowtube to valves, ensuring no excess thread sealant can enter the valve itself.
5. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
6. Apply moderate pressure to system and check for installation leaks.
7. Fully pressurise system.
8. Test fire and listen for proper actuation and crisp pulse noise.

WEIGHTS

SIZE	INTEGRAL PILOT (CA) kg (lb)	REMOTE PILOT (RCA) kg (lb)	SIZE	INTEGRAL PILOT (CA) kg (lb)	REMOTE PILOT (RCA) kg (lb)
10	NA	0.06 (0.14)	50	2.89 (6.38)	2.68 (5.92)
35	1.04 (2.28)	0.83 (1.83)	62	3.31 (7.30)	3.09 (6.82)
45	1.50 (3.30)	1.28 (2.83)	76	4.77 (10.52)	4.56 (10.04)

MAINTENANCE KITS

MODEL	NITRILE	VITON	LOW TEMPERATURE –60°C (–76°F) min.	INCLUDES
RCA10-6T	K1001	K1002	NA	Diaphragm kits include main and secondary diaphragms (where required) and all springs.
CA/RCA35T	K3500	K3501	K3502	
CA/RCA40T*	K4000	—	NA	
CA/RCA45T	K4502	K4503	K4522	
CA/RCA50/62T	K5004	K5000	NA	
CA/RCA76T	K7600	K7601	NA	
Pilot repair kit	K0380	K0384	NA	o-ring, armature assembly, armature spring, ferrule

* This kit is for discontinued valves.

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOM. SIZE	NOMINAL PORT SIZE		NUMBER OF DIAPHRAGMS	FLOW	
	mm	in		KV	CV
10	10	3/8	1	2.5	2.9
35	40	1.5	1	36	42
45	40	1.5	2	44	51
50	50	2	2	76	88
62	62	2.5	2	91	106
76	76	3	2	144	167

Pressure Range: 30(5)–860(125) kPa(psi)

Temperature Range: Nitrile Seals: –40°C (–40°F) to 82°C (179.6°F)
Viton Seals: –29°C (–20.2°F) to 232°C (449.6°F)

GOYEN 'T' SERIES

PULSE JET VALVES

ORDER CODE

RCA 35 T 0 1 0 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

35 mm*
45 mm*
50 mm
62 mm
76 mm

Pilot size

0=1/8" or CA
1=1/4"

Solenoid type

Coil type for CA only.
See page 10 for coil options.

Diaphragm material

0=Nitrile
1=Viton
3=EPDM (4ST)

Thread type

0=NPT or CA
1=RC
2=G

*Note that the 35 & 45 share the same port sizes.

Order Code RCA50T Series

RCA10-6T/645 (1/4 NPT)

RCA10-6T/669 (1/4 BSPT)

Examples: CA50T010-300

2" threaded port valve with 2" RC port threads, nitrile seals and 200/240 V AC integral pilot with DIN socket terminals.

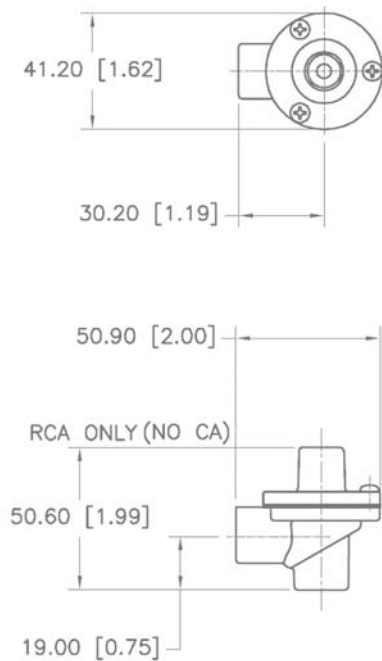
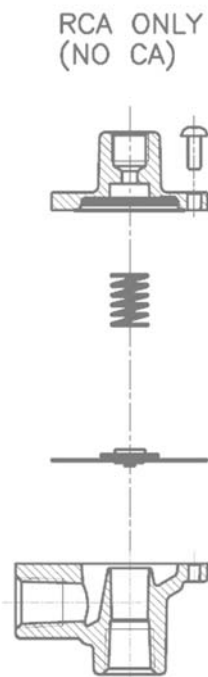
RCA50T001

2" threaded port valve with 1/8" NPT remote pilot port, 2" NPT port threads and viton seals.

DIMENSIONS

(Dimensions in mm and [inches])

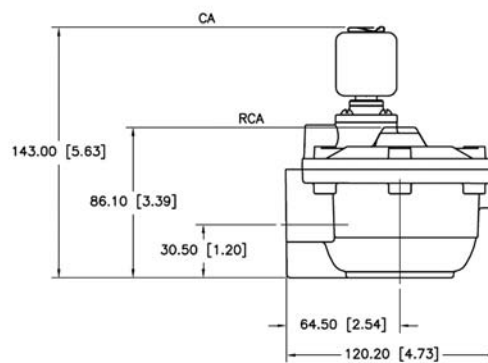
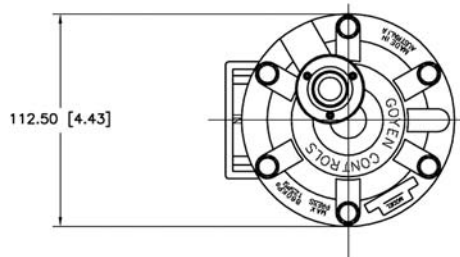
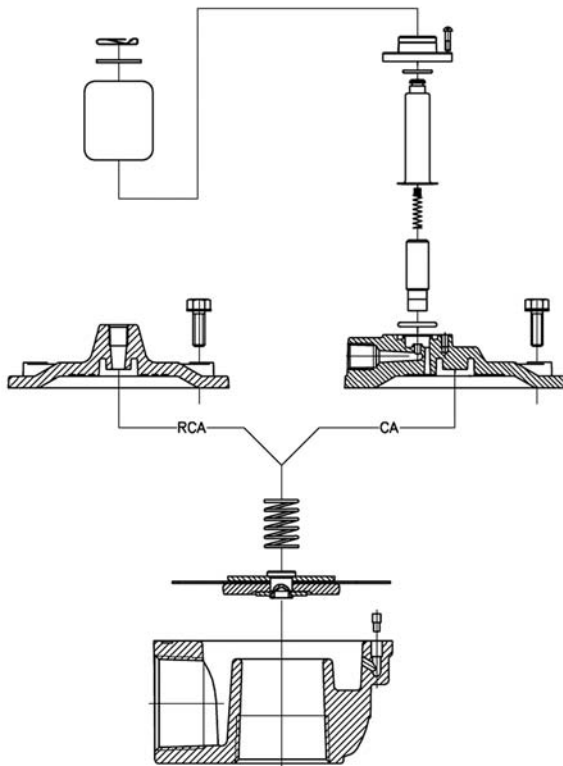
RCA10T



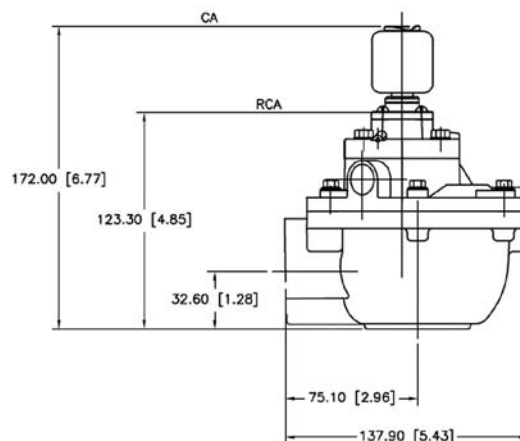
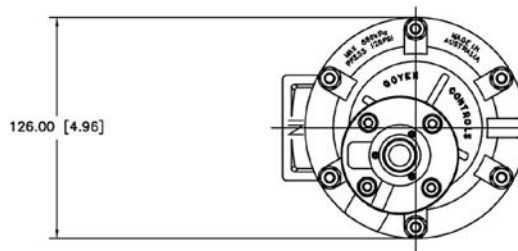
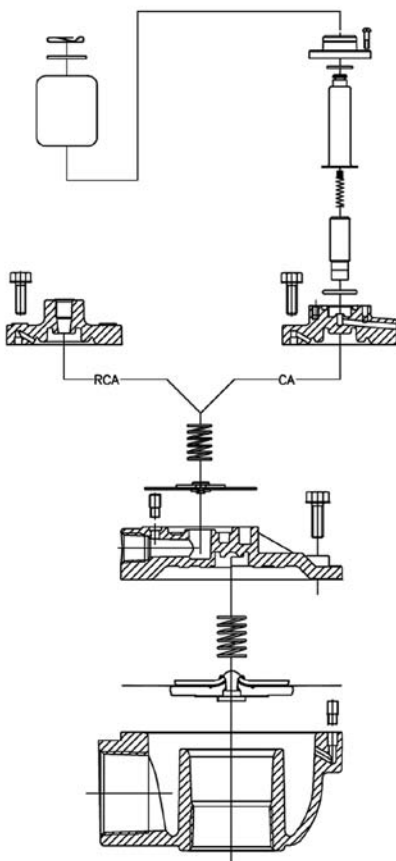
GOYEN 'T' SERIES

PULSE JET VALVES

CA/RCA35T



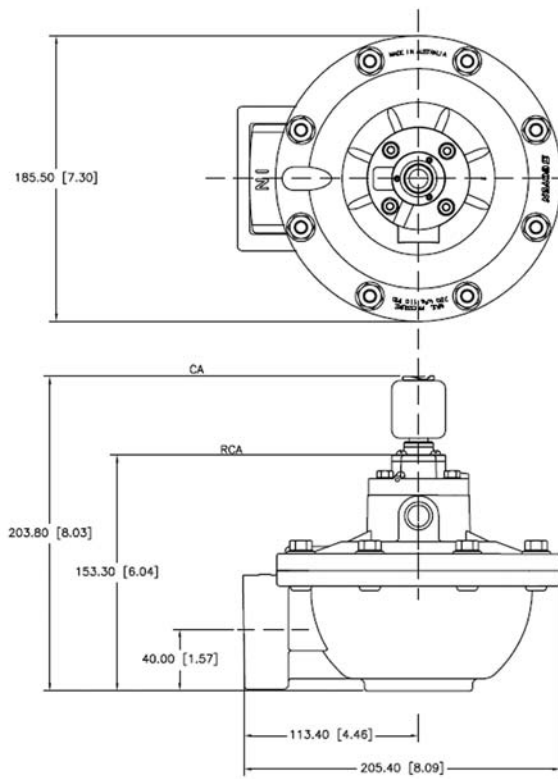
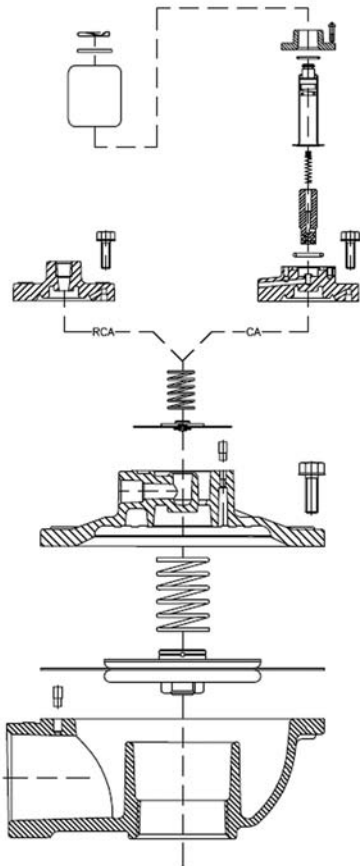
CA/RCA45T



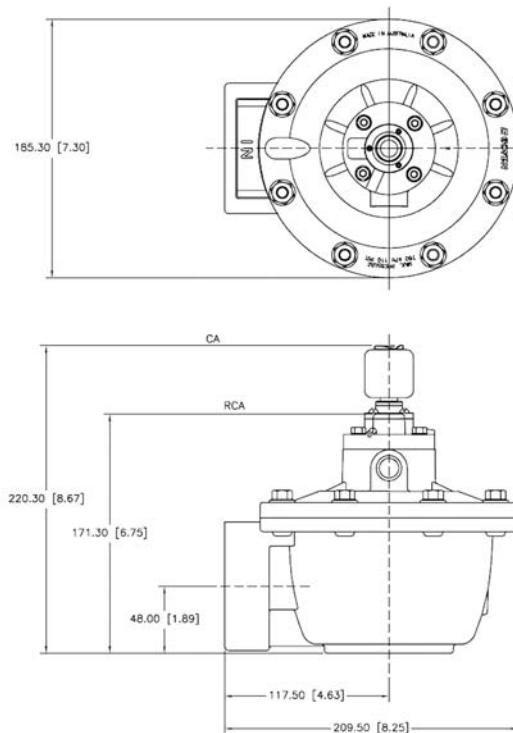
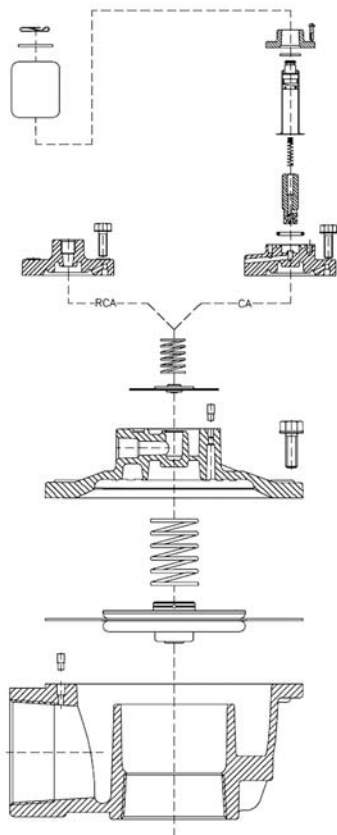
GOYEN 'T' SERIES

PULSE JET VALVES

CA/RCA50T



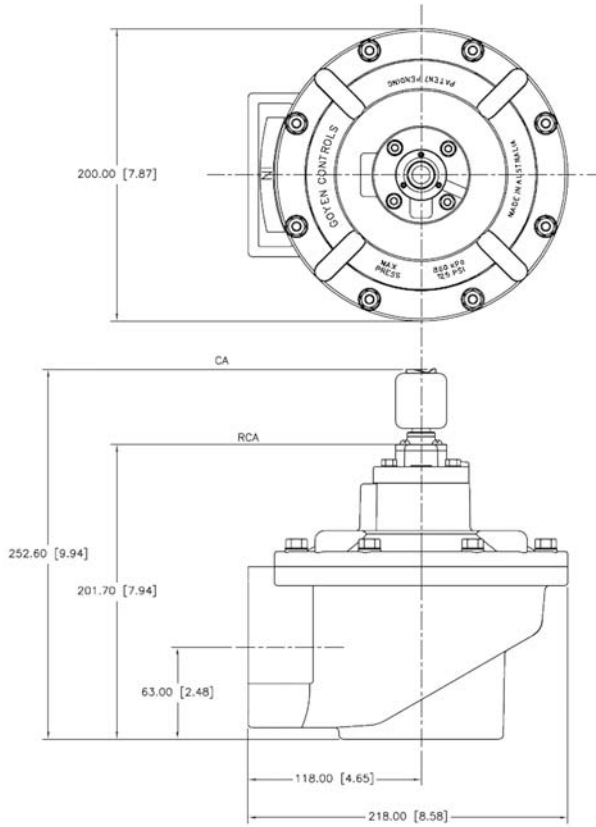
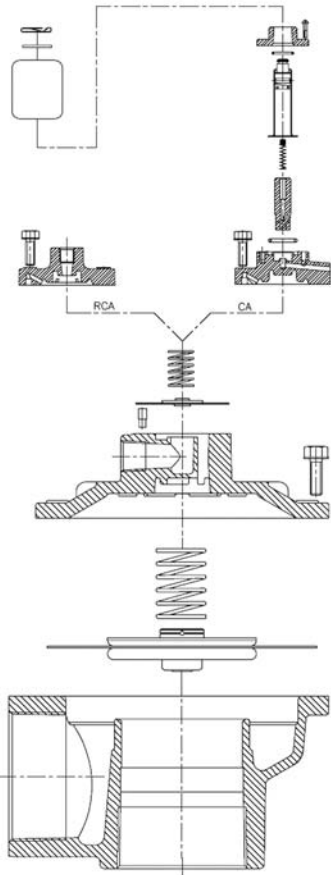
CA/RCA62T



GOYEN 'T' SERIES

PULSE JET VALVES

CA/RCA76T



GOYEN 'DD' SERIES

PULSE JET VALVES



DD Series

DESCRIPTION

High performance diaphragm valve with dresser nut ports. 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 and Dresser

Nuts: Aluminium (diecast)

Ferrule: 305 SS

Armature: 430FR SS

Seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 or 304 SS

Dresser Nut Seals: Nitrile or Viton

Diaphragm Seat: PA-66 (standard), Viton coated mild steel or High Density PE

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 2D Mechanical (RCA 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

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 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 valve to inlet pipes and blowtube to valve, tighten dresser nuts.
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.

* OD as shown below.

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	2.28 (5.03)	2.11 (4.65)

MAINTENANCE KITS

MODEL	NITRILE	VITON	LOW TEMPERATURE –60°C (–76°F) min.	INCLUDES
Diaphragm Kit				
CA/RCA45DD	K4502	K4503	K4522	Diaphragm kits include main and secondary diaphragms and all springs.
Dresser Seal Kit				
CA/RCA45DD	K4510	K4511	NA	2 dresser seals, 2 dresser nuts, 2 seal retainers
Pilot repair kit (suits all CA valves)	K0380	K0384	NA	o-ring, armature assembly, armature spring, ferrule

GOYEN 'DD' SERIES

PULSE JET VALVES

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOM. SIZE	PORT SIZE		NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE	TEMPERATURE RANGE °C °(F)	
	mm	in		KV	CV		NITRILE SEALS	VITON SEALS
45	40	1.5	2	44	51	30[5]-860[125]	-40[-40] to 82[179.6]	-29[-20.2] to 232[449.6]

ORDER CODE

RCA 45 DD 0 1 0 - 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

45 mm

Pilot size

0=1/8" or CA
1=1/4"

Solenoid type

Coil type for CA only.
See page 10 for coil options.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type (RCA), Exhaust thread type (CA)

0=NPT
1=RC

Examples: CA45DD010-300

1.5" dresser nut port valve with nitrile seals and 220/240 V AC integral pilot with DIN socket terminals.

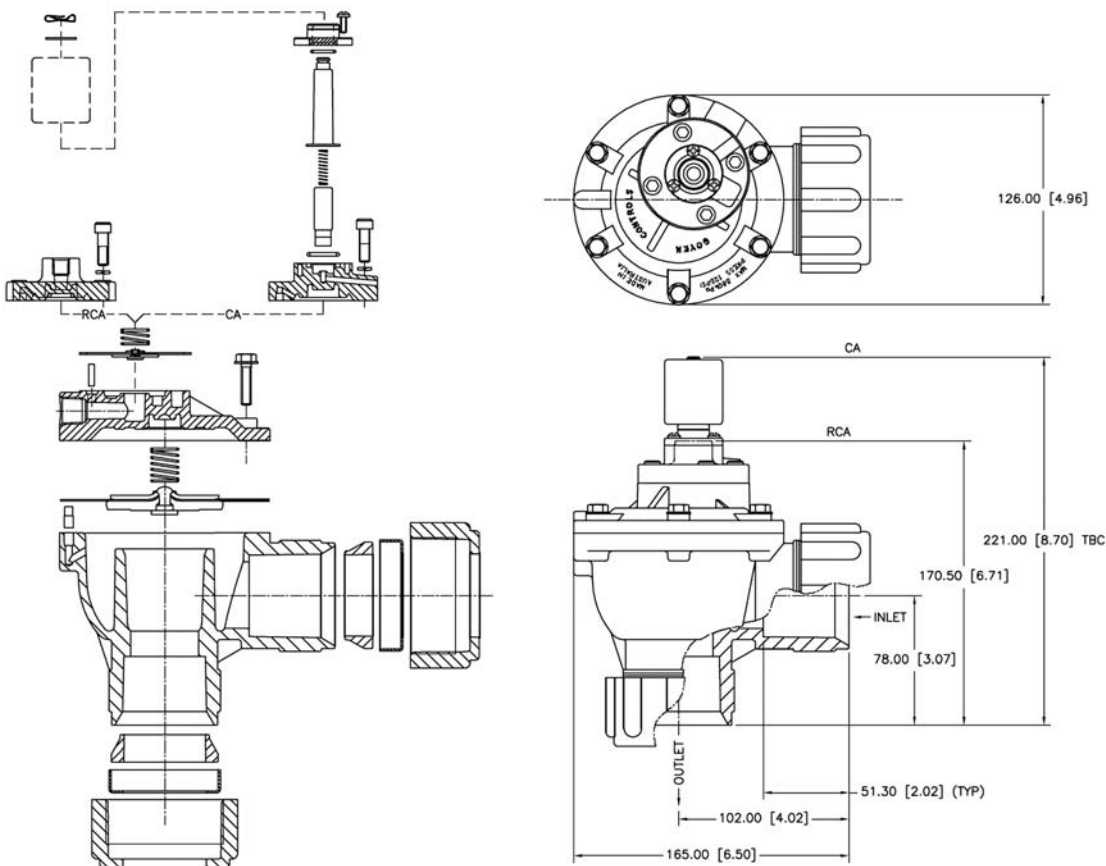
RCA45DD001

1.5" dresser nut port valve with 1/8" NPT remote pilot port and viton seals.

DIMENSIONS

(Dimensions in mm and [inches])

CA/RCA45DD



GOYEN '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 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 2D Mechanical (RCA 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)

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	N/A	O-ring armature assembly, armature spring, ferrule.
45FS Outlet seal	G690864	G690864-2	Outlet seal

GOYEN 'FS' SERIES

PULSE JET VALVES

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
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

RCA 45 FS 0 1 0 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

45 mm

Pilot size

0=1/8" or CA
1=1/4"

Solenoid type

Coil type for CA only.
See page 10 for coil options.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type (RCA), Exhaust thread (CA)

0=NPT
1=RC
9=NPT and stainless-steel valve body

Examples: CA45FS010-300

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

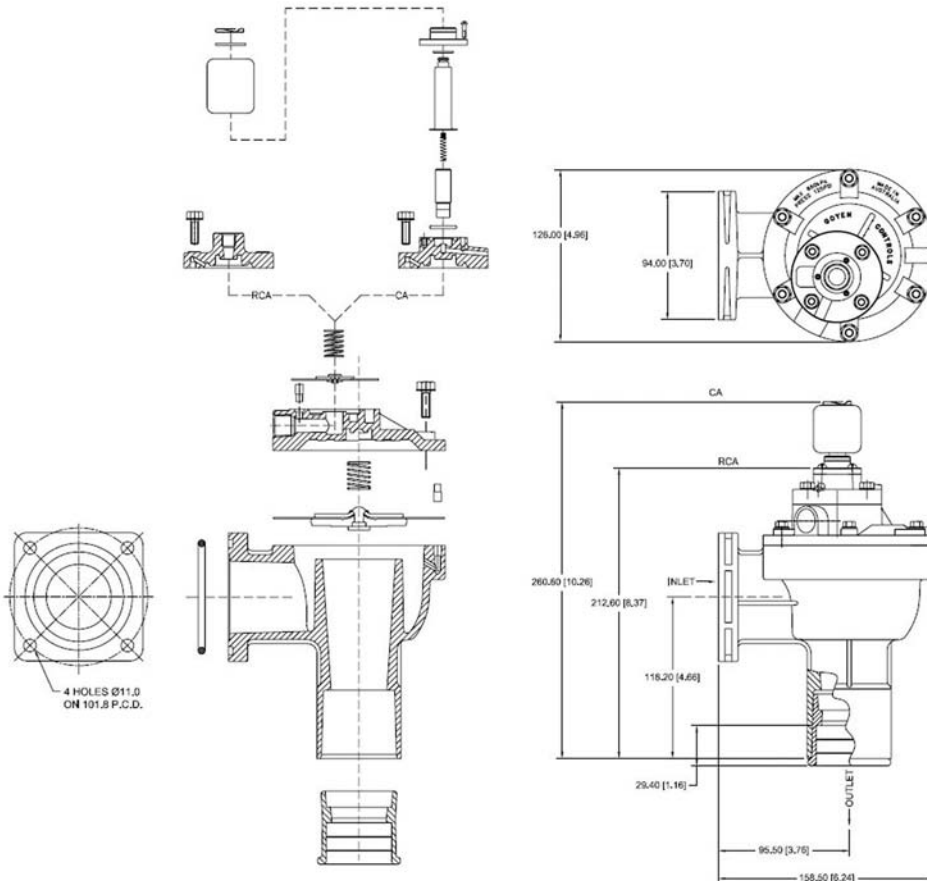
RCAC45FS091

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

DIMENSIONS

(Dimensions in mm and [inches])

CA/RCA45FS



GOYEN '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 and its variations, including bag filters, cartridge filters and envelope filters, ceramic filters and sintered metal fibre filters.

CONSTRUCTION

Body and Dresser

Nuts: Diecast Aluminium

Ferrule: 305 SS

Armature: 430FR SS

Diaphragm and Seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 or 304 SS

Outlet Pipe: Schedule 40 wrought steel zinc passivated

Diaphragm Seat: PA-66 (25 & 40MM standard), Nitrile coated mild steel (76MM standard), Acetal (102MM 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: 50–500 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 2D Mechanical (RCA 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)
- 76MM CRN – Alberta, Quebec, Ontario (to 779 kPa/113.1 psi, 76°C/170°F), British Columbia
- 102MM CRN – Alberta, Quebec, Ontario (to 76°C/170°F)

INSTALLATION

1. MM valves are installed through the tank, refer to the appropriate template listed below.
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 20 Nm (15 ftlbs) max.
5. Tighten pipe outlets to 20 Nm (15 ftlbs).
6. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
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 (lb)	REMOTE PILOT (RCA) kg (lb)
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	
CA/RCA40MM Diaphragm kit	K4000	K4007	
CA/RCA76MM Diaphragm kit	K7600	K7601	
CA/RCA102MM Diaphragm kit	K10200	K10201	
CA/RCA102MM Diaphragm kit for sulfur-rich environments (coal-fired boiler applications)	K10203		
Pilot repair kit (all models)	K0380	K0384	o-ring, armature assembly, armature spring, ferrule
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		
CA/RCA40MM*D Installation template	Drawing 609999		
CA/RCA76MM Installation template	Drawing 690151 RCA and 690051 CA		
CA/RCA102MM Installation template	Drawing 691055 CA and 691056 RCA		Suitable for 102MM hose

GOYEN 'MM' SERIES

PULSE JET VALVES

PRODUCT CHARACTERISTICS AND PERFORMANCE

NOM. SIZE	PORT SIZE		NUMBER OF DIAPHRAGMS	FLOW		PRESSURE RANGE*	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)

* Unless limited by CRN.

ORDER CODE

1" and 1.5" Models

RCA 25 MM F P 4 0 1 0 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

25 mm
40 mm

Tank shape (omit if ordering valve only)

F=Flat face only

Outlet pipe type (omit if ordering valve only)

P=Pipe flange
D=Dresser nut

Tank width (omit if ordering valve only)

4"*
5"*
6"
8"+

*25 mm only, †40 mm only

Solenoid type

Coil type for CA only.
See page 10 for coil options.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type (RCA)

0=NPT
1=RC

Exhaust thread type (CA)

0=NPT
1=RC

Thread and bleed size (RCA)

0=1/8", 0.062" bleed diameter
1=1/4", 0.062" bleed diameter
2=1/8", 0.047" bleed diameter
3=1/4", 0.047" bleed diameter

Bleed size (CA)

0=0.062"
1=0.047"

Examples: CA40MMFD6000-300

1.5" MM valve to suit a foil flat-faced tank with a dresser nut outlet, NPT exhaust port, Ø0.062" bleed, nitrile seals and 220/240V AC integral pilot with DIN socket terminals.

RCA25MM001

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

3" and 3.5" Models

RCA 76 MM 1 0 1 301

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

76 mm
102 mm

Remote pilot size (specify 0 for CA models)

0=1/8" or CA
1=1/4"

Solenoid type

Coil type for CA only.
See page 10 for coil options.

Diaphragm material

0=Nitrile
1=Viton

Thread type (specify 4 for CA models)

0=NPT
1=RC
4=CA valve

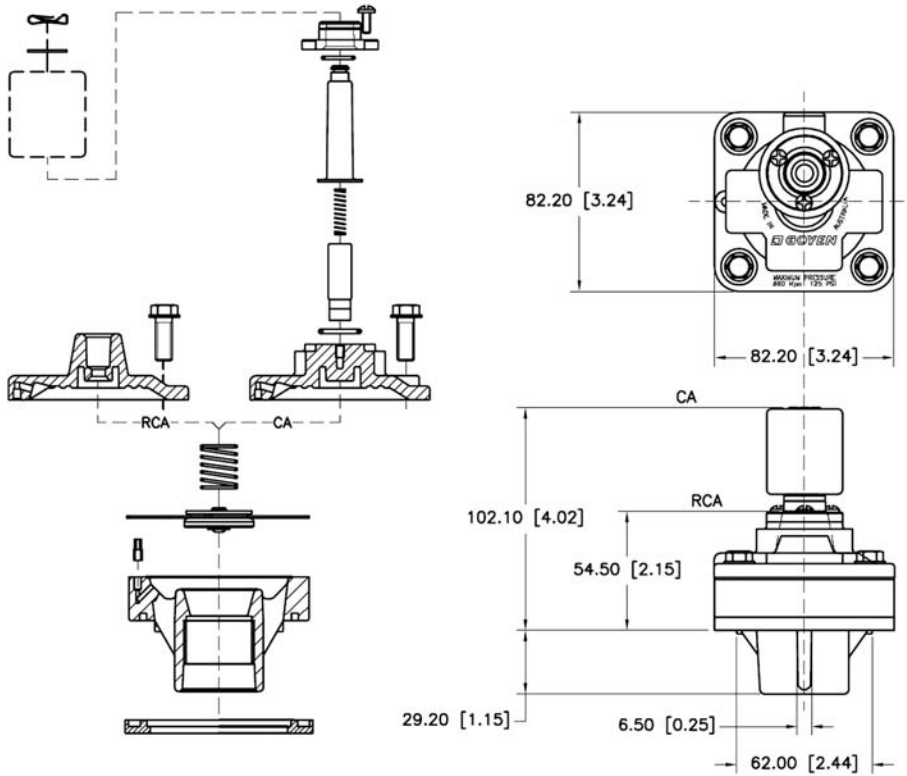
GOYEN 'MM' SERIES

PULSE JET VALVES

DIMENSIONS

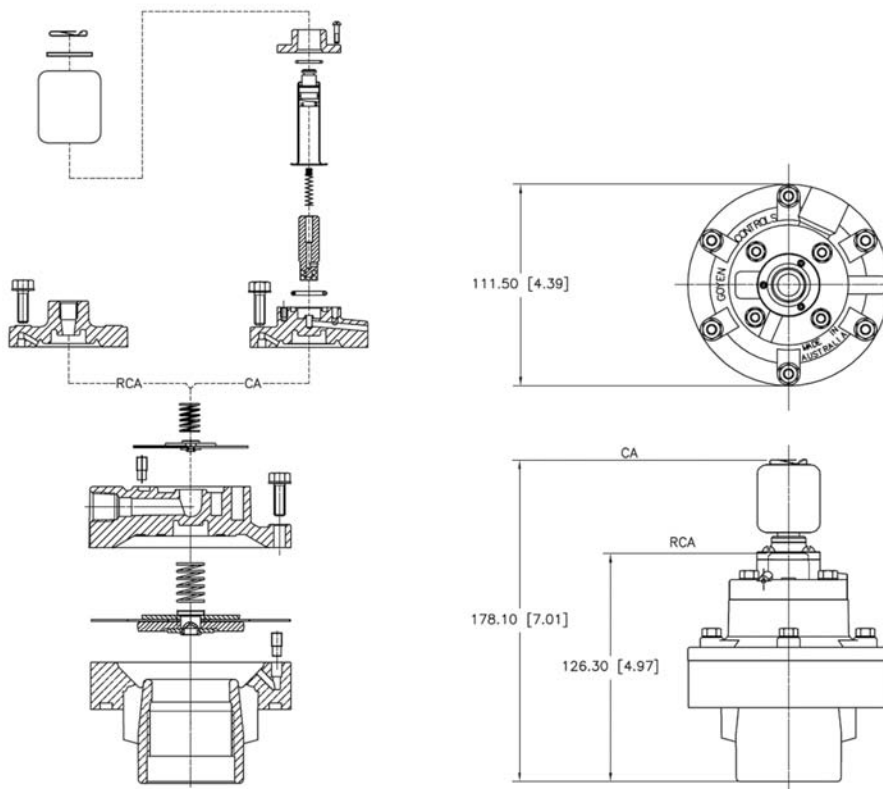
(Dimensions in mm and [inches])

CA/RCA25MM



Note: Pipe outlet not shown

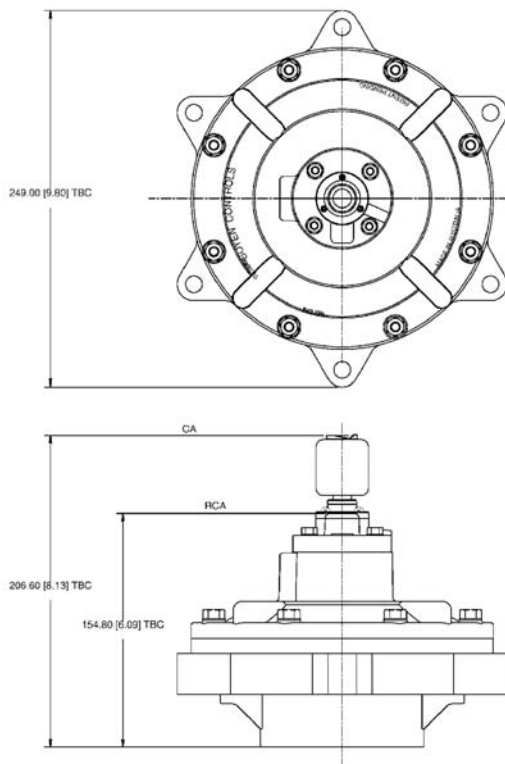
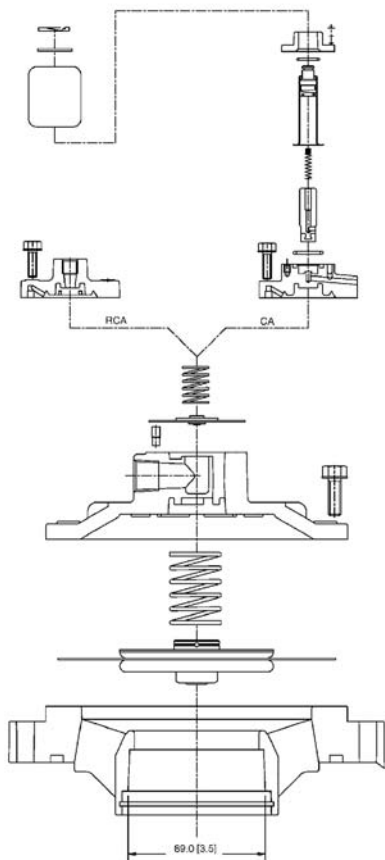
CA/RCA40MM



GOYEN 'MM' SERIES

PULSE JET VALVES

CA/RCA76MM

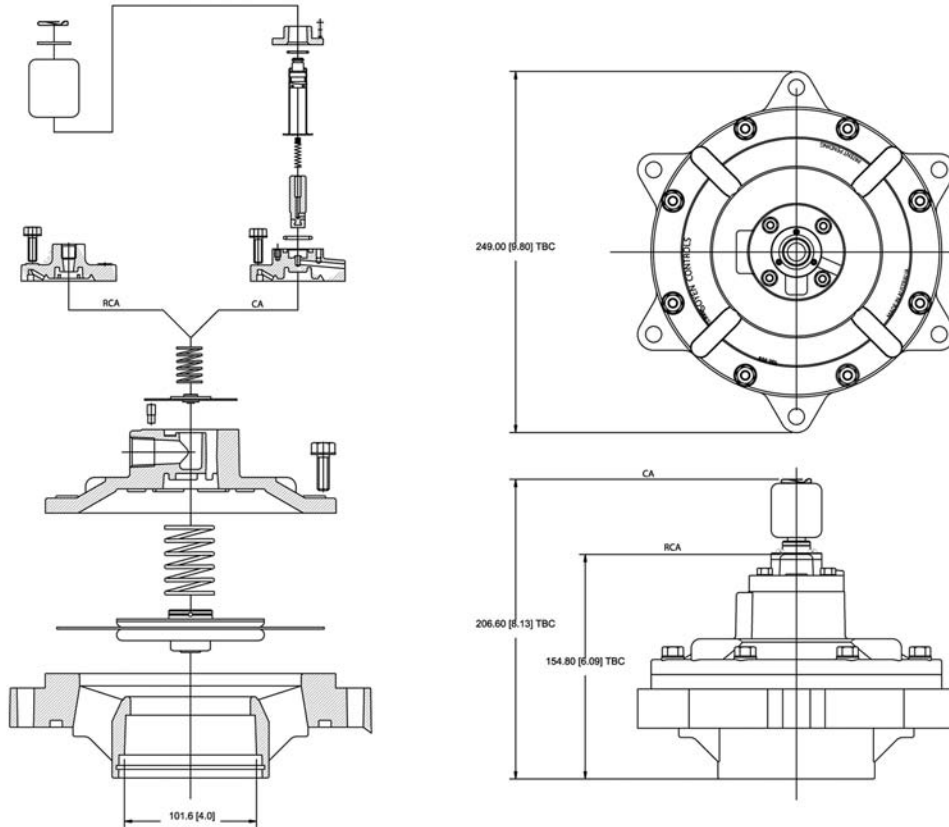


Note: Suggested pipe size is 3" NB Schedule 40 pipe (OD=89.0 mm, 3.5")

GOYEN 'MM' SERIES

PULSE JET VALVES

CA/RCA102MM



Note: Suggested pipe size is 3.5" NB Schedule 30 pipe (OD=101.6 mm, 4")

GOYEN 'MR' SERIES

PULSE JET VALVES



DESCRIPTION

The 3" CA76MR, RCA76MR and the 2.5" CA62MR and RCA62MR pulse jet valves are designed for direct mounting to nominal 12" diameter cylindrical manifolds. The 40MMR is designed for nominal 6" diameter manifolds. The 62MR, 76MR and 40MMR valves deliver very high flow performance and are suited to reverse pulse jet dust collector applications for a wide range of installations. The MR range is built to an exceptional quality standard and is supported by dedicated and experienced applications engineers.

SUITABLE FOR

Mounting to 12" nominal diameter pipe schedule steel or stainless steel manifolds in dust collector applications in reverse pulse jet filter cleaning. Typical applications include bag filters, cartridge filters, envelope filters, ceramic filters and sintered metal fibre filters.

The MR Series valves are available for purchase in three configurations – as a stand-alone valve, with an outlet pipe, or assembled to a manifold as part of a complete filter cleaning solution.

CONSTRUCTION AND SPECIFICATIONS

Body and top cover: Die-cast Aluminium

Ferrule: 305 SS

Armature: 430FR SS

Diaphragm and seals: Nitrile or Viton

Spring: 304 SS

Screws: 302 SS and 304 SS

Outlet pipe: Schedule 40 wrought steel with surface protection (other materials on request)

Diaphragm Seat: Nitrile encapsulated mild steel or Viton encapsulated mild steel

INSTALLATION

1. The valves are installed through the tank.
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. Tighten pipe outlets to 340 Nm [251 ft-lbs].
4. Make electrical connections to solenoid or connect RCA pilot port to pilot valve (RCA valves only).
5. Ensure compressed air supply is dry and free from oil and dirt.
6. Check all cleaning system components are secure before applying pressure.
7. Apply moderate pressure and check for leaks.
8. Fully pressurise system.
9. Test fire and listen for proper actuation and crisp pulse noises.

Note:

Minimum valve-to-valve separation distance must be considered with due regard to the applicable pressure vessel design code (e.g. ASME, PED) and the required tank pressure rating.

WEIGHTS

SIZE	INTEGRAL PILOT (CA) kg (lb)	REMOTE PILOT (RCA) kg (lb)
76MR	4.27 kg (9.41 lb)	4.05 kg (8.93 lb)
62MR	4.58 kg (9.41 lb)	4.36 kg (8.93 lb)
40MMR	1.63 kg (3.59 lb)	1.41 kg (3.11 lb)

PRODUCT CHARACTERISTICS AND PERFORMANCE

SIZE	FLOW KV (CV)	PRESSURE RANGE kPa (psi)*	TEMPERATURE RANGE °C (°F)*	
			NITRILE SEALS	VITON SEALS
76MR	200 [233]	30 kPa/5 psi to 860 kPa/125 psi	-40°C [-40°F] to 82°C [179.6°F].	-29°C [-20.2°F] to 232°C [449.6°F].
62MR	150.7 [175.2]	30 kPa/5 psi to 860 kPa/125 psi	-40°C [-40°F] to 82°C [179.6°F].	-29°C [-20.2°F] to 232°C [449.6°F].
40MMR	150.7 [175.2]	30 kPa/5 psi to 860 kPa/125 psi	-40°C [-40°F] to 82°C [179.6°F].	-29°C [-20.2°F] to 232°C [449.6°F].

* Unless limited by CRN.

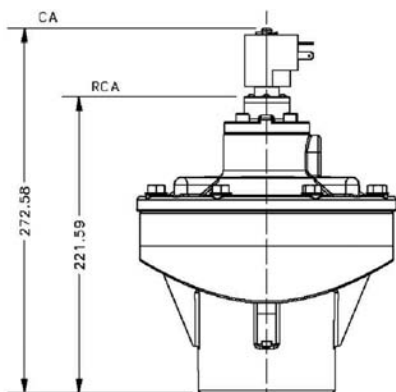
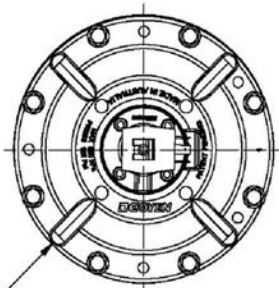
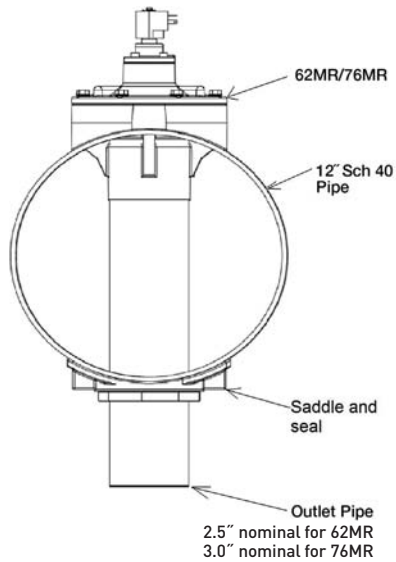
APPROVALS

- 76MR CRN – Alberta (to 632 kPa/91.1 psi, 80°C/176°F)

GOYEN 'MR' SERIES

PULSE JET VALVES WITHOUT MANIFOLD

62MR/76MR CONFIGURATIONS WITH OUTLET PIPE, WITHOUT MANIFOLD



RCA 76MR 12 0 0 0 000

Pilot type

RCA=remotely piloted
CA=integral pilot

Valve size

62MR
76MR

Nominal tank width

12"

Remote pilot size

0=1/8"
1=1/4"

Specify 0 for CA models.

Solenoid type

Solenoid order code for CA valve, drop the 'K-'.
Refer to Q Series Solenoid product specification.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type

0=NPT
1=RC

Specify 4 for CA models.

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.

MAINTENANCE KITS

	NITRILE	VITON
CA/RCA76MR Diaphragm Kit	K7600	K7601
Pilot Repair Kit for all models	K0380	K0384
CA/RCA62MR Diaphragm Kit	K7604	K7602

- Diaphragm kits include main and secondary diaphragms and all diaphragm springs.
- Pilot repair kit includes O-ring, armature assembly, armature spring and ferrule.

TYPE	NOMINAL PORT SIZE	NO. DIAPH	PRESSURE RANGE (BAR)		COIL	KV	CV
			min	max			
CA62MR	2.5"	2	0.3	8.6	YES	150.7	175.2
RCA62MR	2.5"	2	0.3	8.6	NO	150.7	175.2

RCA 40MMR 6 - 1 2 0 -

Pilot type

RCA=remotely piloted
CA=integral pilot

40MM

Nominal tank size

6"

Remote pilot size

0=1/8"

Solenoid type

Solenoid order code for CA valve, drop the 'K-'.
Refer to Q Series Solenoid product specification.

Diaphragm material

0=Nitrile
1=Viton

Pilot thread type

0=NPT
1=RC
2=G

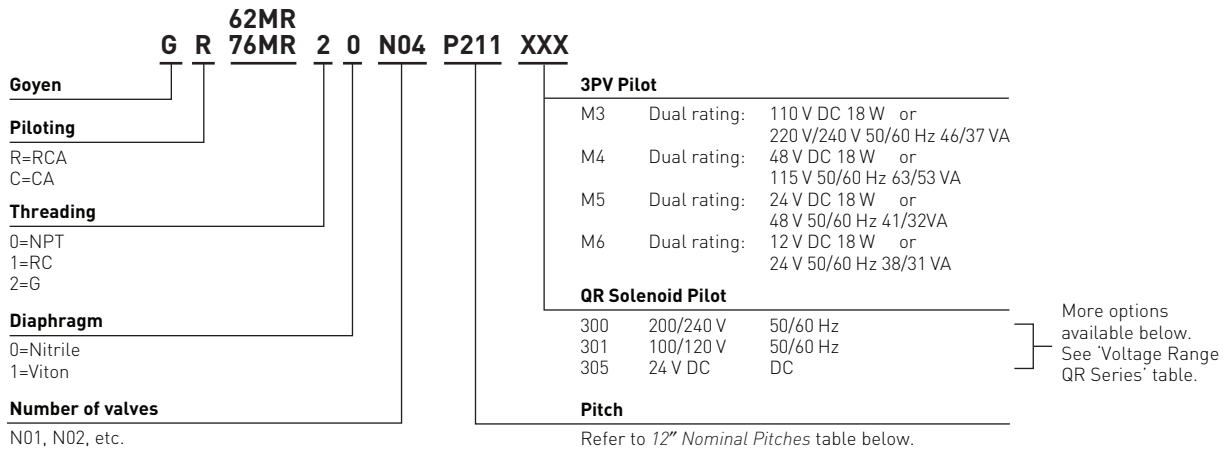
GOYEN 'MR' SERIES

PULSE JET VALVES WITH MANIFOLD

INFORMATION WHEN ORDERING 62/76MR COMPLETE WITH MANIFOLD



ORDER CODE



TANK TEMPERATURE & PRESSURE RANGES		
Carbon steel	-40°C to 110°C	-40°F to 230°F
Stainless steel	-50°C to 93°C	-58°F to 199°F
Pressure range	100 kPa to 800 kPa	14.5 psi to 116 psi

CERTIFICATIONS

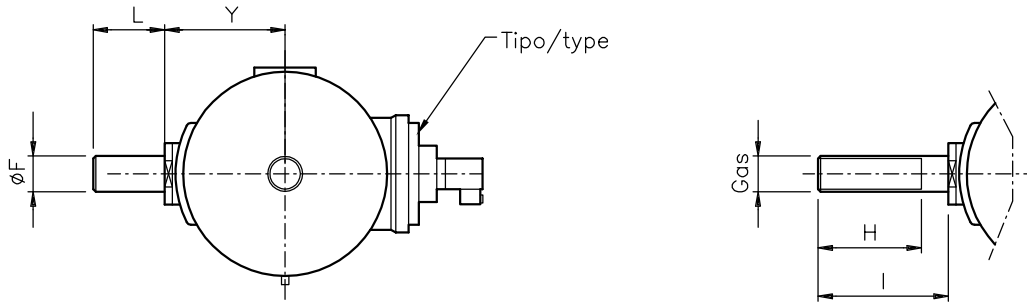


12" MINIMAL PITCH DISTANCES			
HEADER MATERIAL CALCULATION STANDARD WALL	CARBON STEEL ASME 6.35 mm	CARBON STEEL ASME 7.14 mm	STAINLESS STEEL ASME/PED AT TEMPERATURE DESIGN 70°C 4.57 mm
400 kPa	203 mm/8"	203 mm/8"	203 mm/8"
500 kPa	203 mm/8"	203 mm/8"	214 mm/8.4"
600 kPa	210 mm/8.3"	205 mm/8.1"	227 mm/8.9"
700 kPa	215 mm/8.5"	210 mm/8.3"	240 mm/9.4"
800 kPa	225 mm/8.9"	215 mm/8.5"	257 mm/10"
860 kPa	230 mm/9.1"	220 mm/8.7"	268 mm/11"

GOYEN 'MR' SERIES

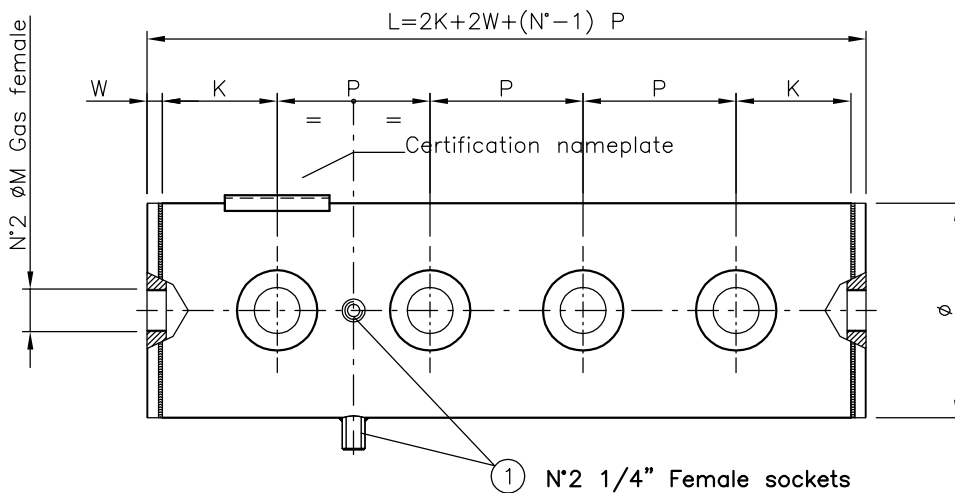
PULSE JET VALVES WITH MANIFOLD

TANK DIMENSIONS



Valve Blowpipe

Ø TANK	Ø F	Y	SHORT UNTHREADED	L	LONG UNTHREADED	L	LONG THREADED	Ø G GAS	H	I
DN12"	88.9	187 mm/ 7.4"	TS520	80 mm/ 3.1"	TL520	140 mm/ 5.5"	TF520	2.5"	130 mm/ 5.1"	140 mm/ 5.5"



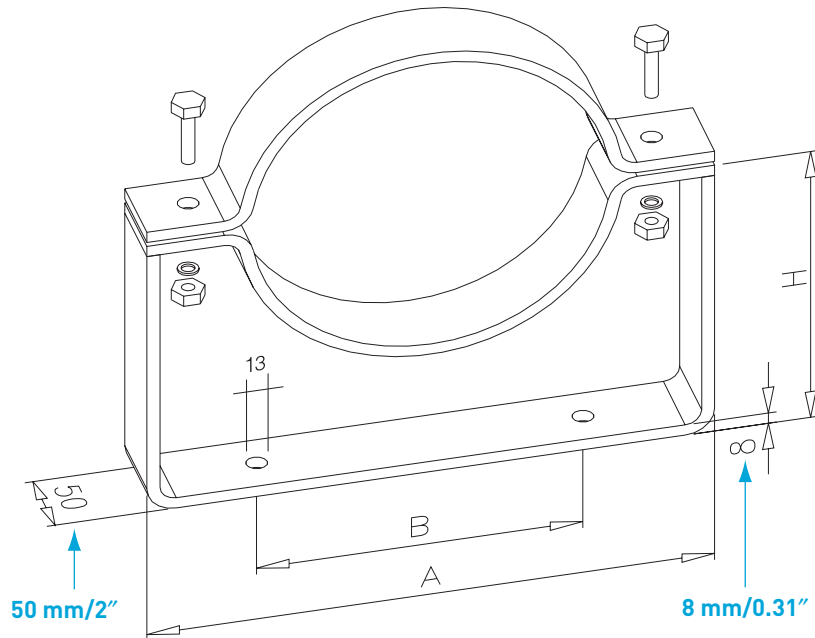
Ø TANK	Ø VALVE	P MIN.	K MIN.	W	Ø M
DN12"	2.5"	205 mm*/8.1"	130 mm/5.1"	25 mm/0.98"	2"

* Refer to 12" Nominal Pitches table above.

TO BE COMPLETED BY CUSTOMER		
P DISTANCE REQUIRED	N NUMBER OF VALVES	K OPTIONAL

GOYEN 'MR' SERIES

PULSE JET VALVES WITH MANIFOLD



BRACKET DIMENSIONS				
DN TANK	TYPE OF BRACKET	A	B	H
12" (323, 9)	TH12	490 mm/19"	300 mm/12"	340 mm/13"
	TM12	490 mm/19"	300 mm/12"	288 mm/11"
	TB12	490 mm/19"	300 mm/12"	234 mm/9.2"

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