

AVS



HEADER TANK SOLUTIONS

12" TANKS WITH 2½" AND 3" VALVES

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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: Diecast 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.

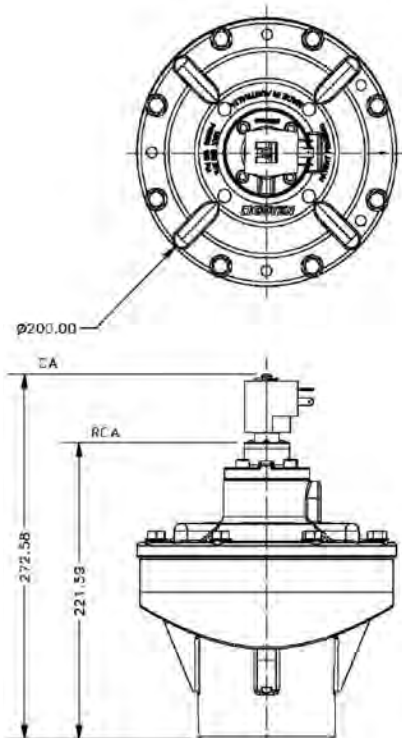
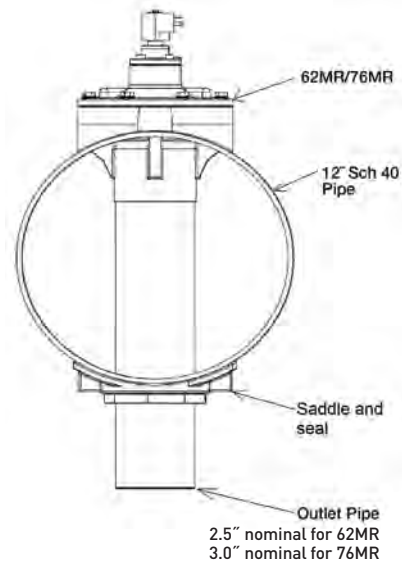
APPROVALS

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

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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

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INFORMATION WHEN ORDERING 62/76MR COMPLETE WITH MANIFOLD



ORDER CODE

	G	R	62MR	76MR	2	0	N04	P211	XXX	
Goyen										3PV pilot
Piloting										M3 Dual rating: 110 V DC 18 W or 220 V/240 V 50/60 Hz 46/37 VA
R=RCA C=CA										M4 Dual rating: 48 V DC 18 W or 115 V 50/60 Hz 63/53 VA
Threading										M5 Dual rating: 24 V DC 18 W or 48 V 50/60 Hz 41/32 VA
0=NPT 1=RC 2=G										M6 Dual rating: 12 V DC 18 W or 24 V 50/60 Hz 38/31 VA
Diaphragm										QR solenoid pilot
0=Nitrile 1=Viton										300 200/240 V 50/60 Hz
Number of valves										301 100/120 V 50/60 Hz
N01, N02, etc.										305 24 V DC DC
										Pitch
										Refer to 12" Nominal Pitches table below.

More options available below. See 'Voltage Range QR Series' table.

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



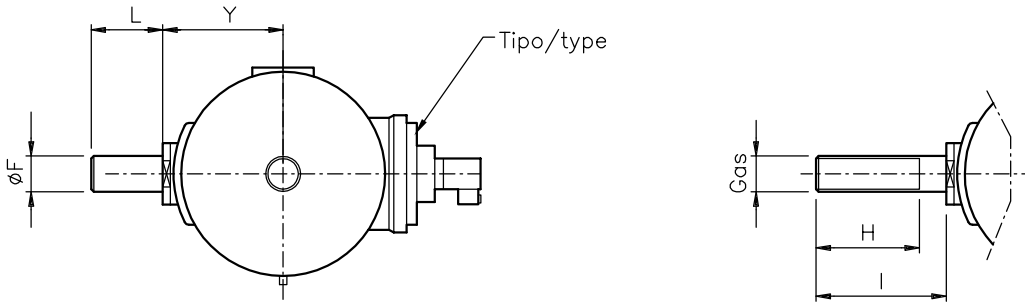
12" MINIMAL PITCH DISTANCES

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"

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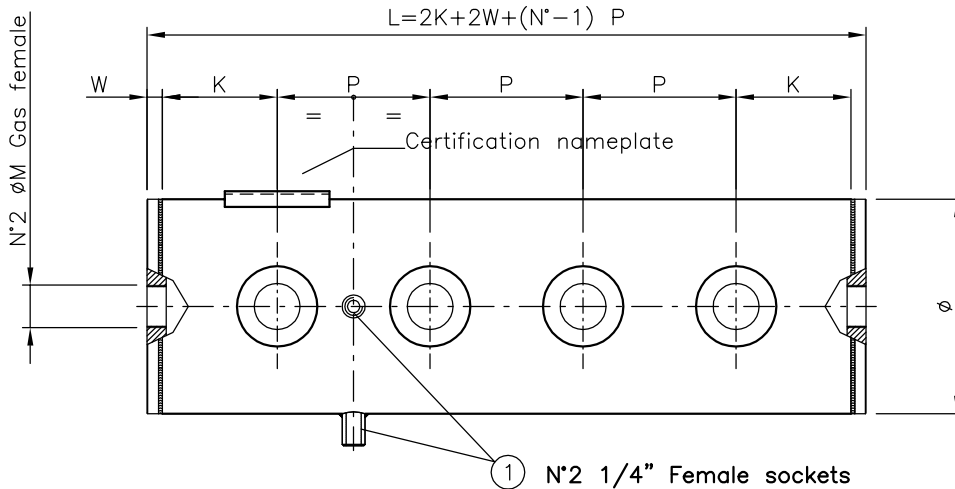
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TANK DIMENSIONS



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"



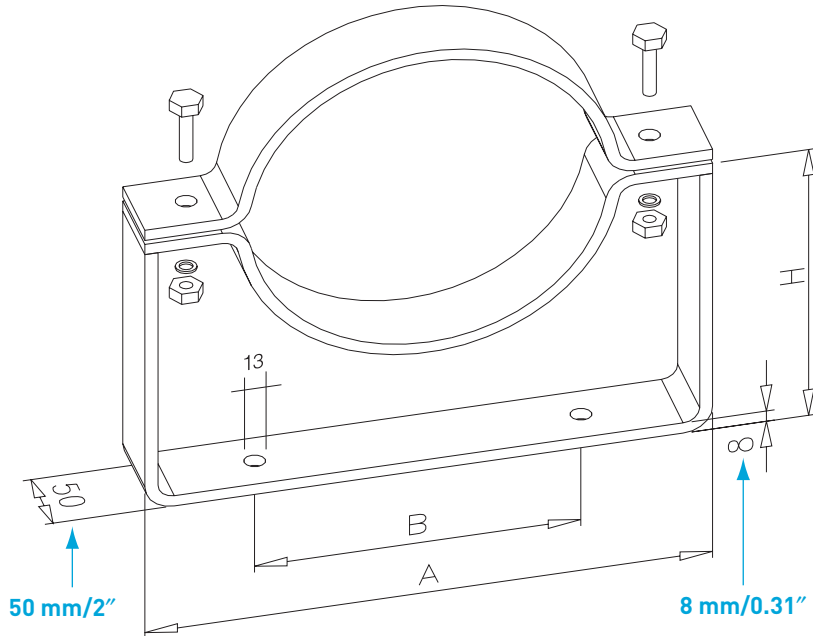
Ø TANK	Ø VALVE	P min.	K min.	W	Ø M
DN12"	2.5"	205 mm*/8.1"	130 mm/5.1"	25 mm/0.98"	2"

* Refer to 12" Nominal Pitches table above.

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

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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"