

## *Header Tank Solutions*

*Clean Air Systems*

**tyco** | Flow Control | **Environmental Systems**

## Description

Goyen manufactures a wide range of custom built header tanks for pulse-jet dust collector filters, complying with the following European Directives: CEE 87/404 and 90/488 and have fulfilled the conditions required to carry a CE approval. Header tanks are certified for a maximum working pressure of 7,5 bar and are supplied with a test certificate.

Goyen header tanks are available in the following diameters: 5", 6", 8" and 10". The tank length and distance between valves are manufactured according to project requirements and CE regulations, however, we recommend tank lengths below 3 metres for ease of handling and installation. If a larger volume of compressed air is required, Goyen can provide a solution which connects several smaller tanks together.

For optimum header tank performance, it is recommended that the compressed air used should be filtered, dried,

## Suitable for

Dust collector applications, in particular for reverse pulse jet filter cleaning and its variations including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fibre filters.

## Types of Solution

Header tanks can be manufactured and supplied with the following Goyen valves:

### T Series

The T series valve as shown below is screwed directly onto threaded pipe stubs welded directly on to the header.

Valve Model	Min. Header Dia. Inches	Pipe/Orifice Ins	mm	CV	KV
CA 20T RCA20T	4	3/4	20	14	12
CA25T RCA25T	5	1	25	24	20.6
CA35T RCA35T	5	1 ½	40	42	36.1
CA45T RCA45T	6	1 ½	40	53	46.4
CA50T RCA50T	8	2	50	88	75.6
CA62T RCA62T	8	2 ½	62	106	91.2
CA76T RCA76T	10	3	76	167	143.6

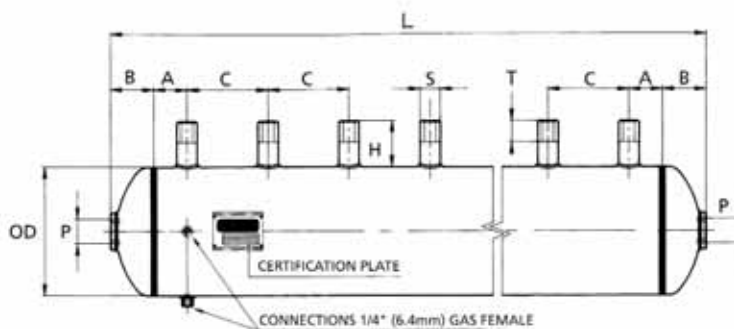
**Note:**

Header length and diameter must provide sufficient air capacity to meet the required air flow through the nozzles on the blow tube. This capacity can be established by using the Go-Co sizing programme

### T Series



RCA model



CA Model

$$L = 2A + 2B + C(N-1)$$

N = No of Connections

C = Distance between connections - Refer to installation instructions for minimum dimensions

Centres (C) to be set by designer

Tanks are painted in Goyen Green (PMS 349/RAI 6029) or standard primer.

## DD Series

DD series valves feature a coupling nut which is tightened after positioning the valve onto a straight pipe stub welded to the header

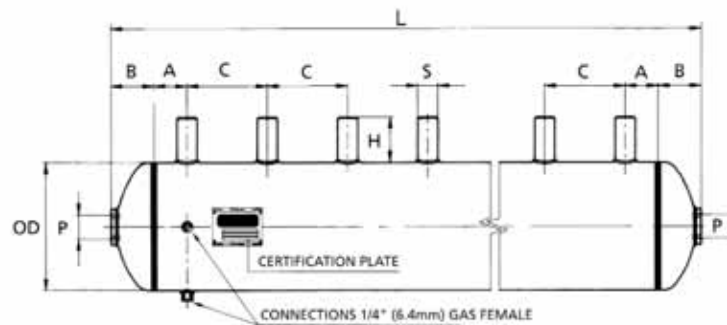
Valve Model	Min. Header Dia **Inches	Pipe/Orifice Size Ins	mm	CV	KV
CA 20DD/RCA20DD	4	3/4	20	14	12
CA25DD/RCA25DD	5	1	25	24	20.6
CA45DD/RCA45DD2	6	1 1/2"	40	53	46.5

### DD Series



RCA model

*Special Note: DD' compression coupling connectors are designed as connection seals only and should not be used to physically restrain blowtubes or header.*



CA Model



Dresser Spanner

$$L = 2A + 2B + C(N-1)$$

*N = No of Connections*

*C = Distance between connections*

*Centres (C) to be set by designer*

*Tanks are painted in Goyen Green (PMS 349/RAI 6029) or standard primer.*

### Product Characteristics for T and DD Series

Nom (ins)	OD (mm)	P	A	B	S	H	T
4"	114.3	1"	40	50	3/4"	85	40
5"	141.3	1"	40	50	1"	85	40
6"	168.3	1"	40	50	1 1/2"	85	40
8"	219.1	1 1/2"	40	70	2"	85	40
10"	273.0	2"	65	100	2 1/2 "	85	40
					3"	100	50

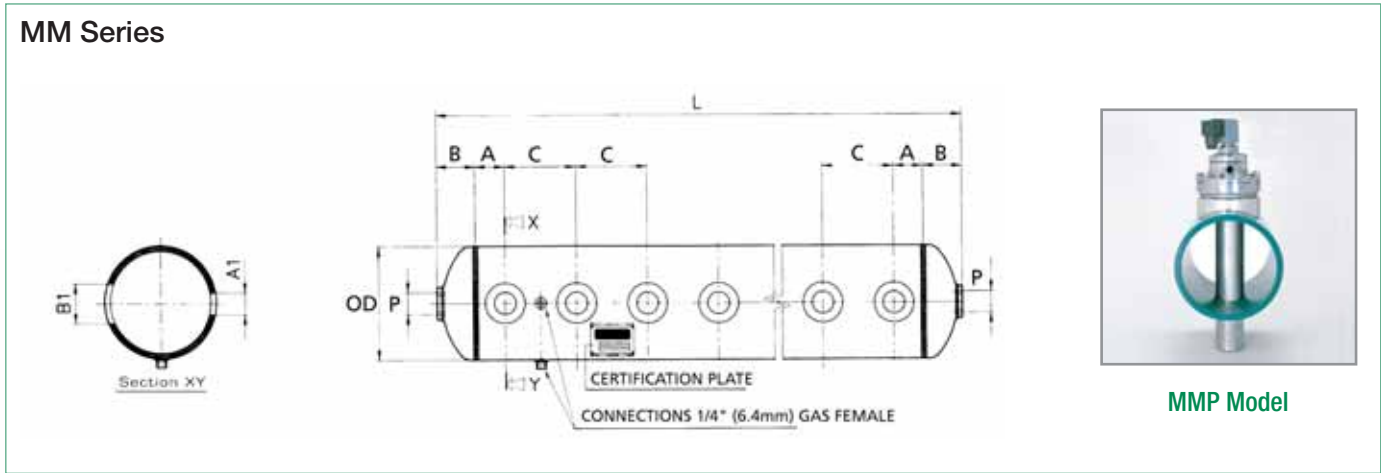
**Note:**

*Header length and diameter must provide sufficient air capacity to meet the required air flow through the nozzles on the blow tube. This capacity can be established by using the Go-Co sizing programme*

## MM Series

MM Series valves, as depicted below are of the "fully-immersed" variety and can suit both round and flat headers. They have an integral flange which seals against an adaptor which mates against the surface of the header).

Valve Model	Min. Header Dia **Inches	Pipe/Orifice Size		CV	KV
		Ins	mm		
CA 25MMD/RCA25MMD	5	1	25	30	25.8
CA25MMP/RCA25MMP	5	1	25	30	25.8
CA40MMD/RCA40MMD	6	1 1/2	38	51	43.8
CA40MMP/RCA40MMP	6	1 1/2	38	51	43.8



$$L = 2A + 2B + C(N-1)$$

N = No of Holes

C = Distance between hole centres

# Stub Centres (C) to be set by designer. Minimum distances are shown in table.

Tanks are painted in Goyen Green (PMS 349/RAI 6029) or standard primer.

Nom Diameter (ins)	OD (mm)	A1		B1	P	C (MIN) #	A	B
		MMP	MMD					
5	141.3	35.5	48.7	60.0	1"	90	50	50
6	168.3	50.0	61.0	75.5	1"	120	90	50

**Note:**


Header length and diameter must provide sufficient air capacity to meet the required air flow through the nozzles on the blow tube. This capacity can be established by using the Go-Co sizing programme

## FS Series

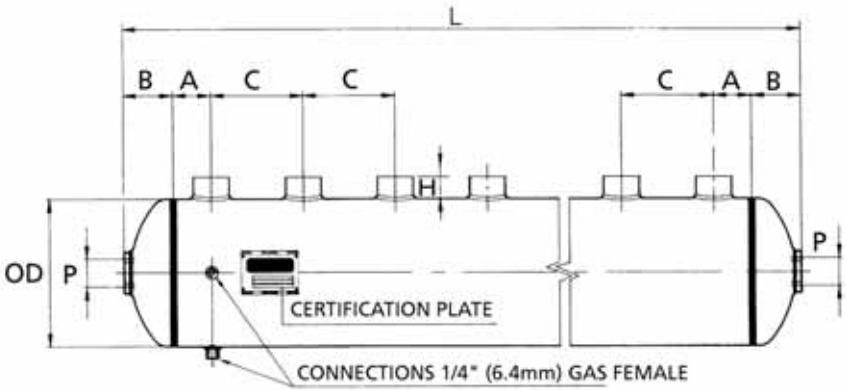
FS headers with welded flanges are not CE marked as the Goyen flange is non standard.  
 FS headers with camlock flanges can be supplied CE marked.

Valve Model	Minimum Header Diameter Camlock	Stub/Flat	Pipe/Orifice Size		CV	KV
			Ins	mm		
CA25FS/RCA25FS	6"	All	1	25	24	20.6
CA45FS/RCA45FS	6", 8", 10"	All	1 1/2"	40	53	46.5

**FS Series**



**CA model**



$L = 2A + 2B + C(N-1)$

*N* = No of Flanges

*C* = Distance between flanges

Centres (*C*) to be set by designer

Tanks are painted in Goyen Green (PMS 349/RAI 6029) or standard primer

(*H*) Dependent on flange type used

Nom (ins)	OD (mm)	P+	A	B
4"	114.3	1"	40	50
5"	141.3	1"	40	50
6"	168.3	1"	40	50
8"	219.1	1 1/2"	40	70
10"	273.0	2"	65	100

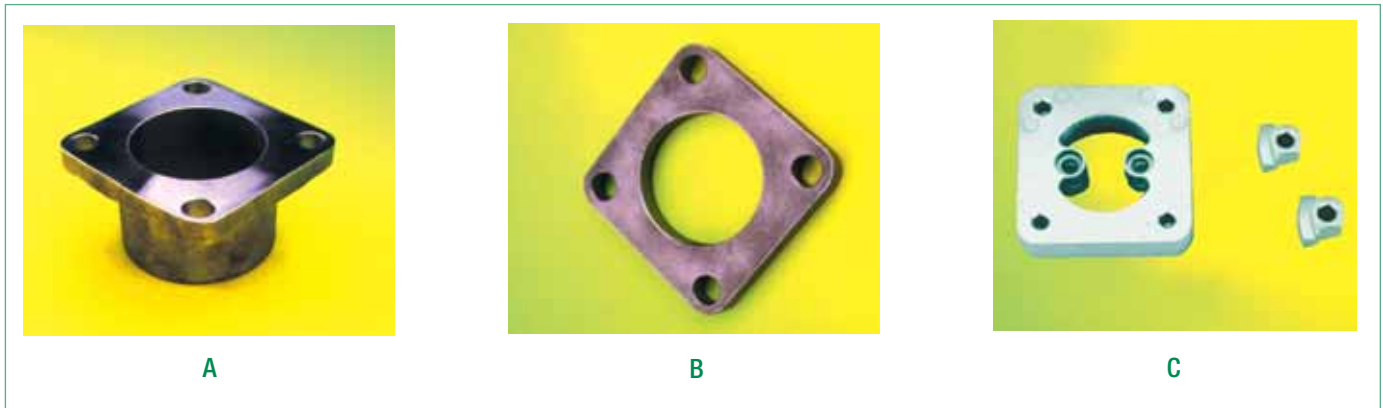
**Notes:**

+ header inlet should be capable of supplying sufficient air capacity to suit valve requirement

Header length and diameter must provide sufficient air capacity to meet the required air flow through the nozzles on the blow tube. This capacity can be established by using the Go-Co sizing programme

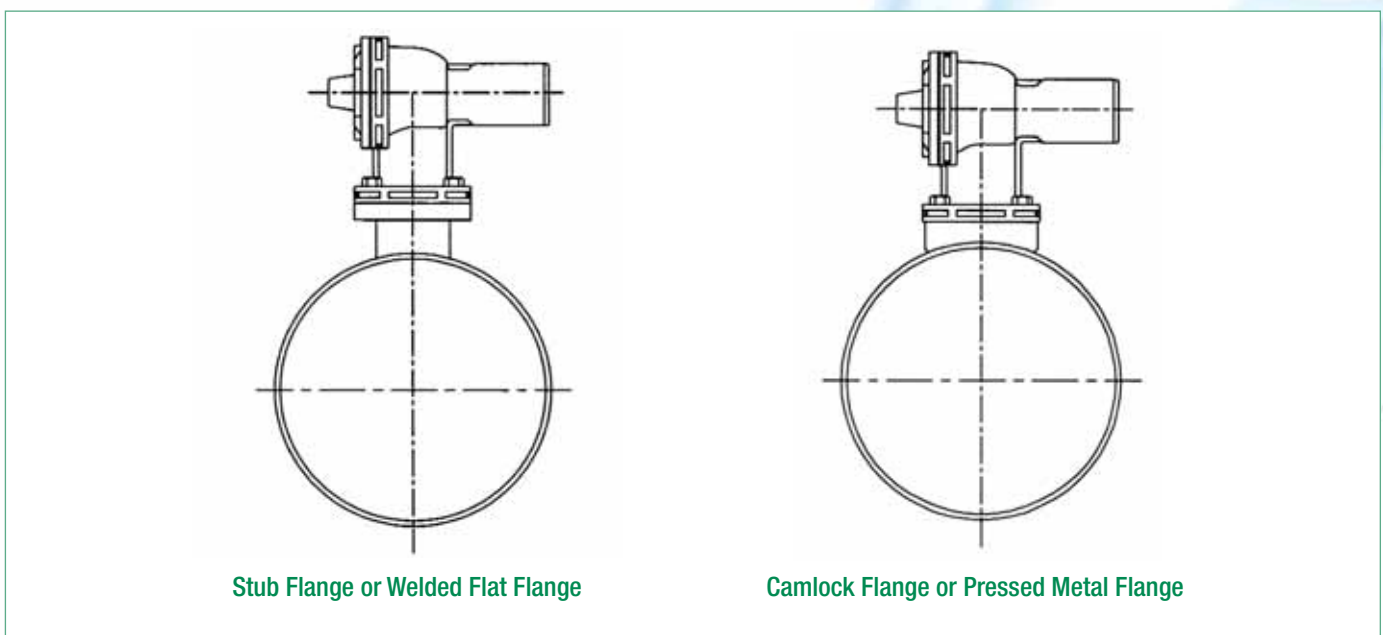
## FS Series - Flanges

The high flow performance valve with a flanged inlet and slide outlet can be mounted on a header tank using one of the following header mount flanges. There are three optional header mount flanges as shown below:



- A. The stub flange is welded to the header and is available to suit the 25FS and 45FS valves.
- B. The flat welded flange allows mounting to a stub pipe. It is available to suit 25FS and 45FS valves.
- C. Goyen's Camlock flange (patent applied for) provides fast, accurate installation of FS valves to round header tanks and is available for 25FS valves to fit 6" (168mm) round header tanks and for 45 FS valves to fit 6" (168mm), 8" (219mm) and 10" (272mm) headers. Prepare inlet flange and blowtube pipes to suit valve specification. Avoid installing valves underneath the tank.

## Cross Sections of Alternate Flange Installations



Stub Flange or Welded Flat Flange

Camlock Flange or Pressed Metal Flange

## How To Order Your Goyen Header Tank

The tank volume must be proportional to the output capacity of the installed diaphragm valve:

- Choose your Goyen diaphragm valve, according to needs ( see diaphragm valve product brochures)
- Define tank length
- Write down the tank code

## Order Code

	HT	6	0	FS	R	45	V12	3	20	A	P	
<b>HEADER TANK</b> HT-Header Tank	HT											<b>P</b> <b>O</b> PRESSURE GAUGE P = with pressure gauge O = without pressure gauge
<b>TANK DIAMETER</b> 4 = 4" 100 mm 5 = 5" 125 mm 6 = 6" 168 mm 8 = 8" 200 mm 10 = 10" 250 mm	4 5 6 8 10											<b>A</b> <b>B</b> AUTO DRAIN VALVE A = with auto drain B = without auto drain
<b>TANK STUB THREAD TYPE</b> 0 = no thread 1 = NPT 2 = R (BSP) ISO 7/1 3 = G (BSP) ISO 228/1 4 = Welded Flange 5 = Camlock Flange 6 = MM valve holes	0 1 2 3 4 5 6											<b>8</b> <b>10</b> <b>12</b> <b>15</b> <b>18</b> <b>22</b> <b>25</b> VALVE CENTRES * 8 = 3" 75 mm 10 = 4" 100 mm 12 = 5" 125 mm 15 = 6" 150 mm 18 = 7" 175 mm 20 = 8" 200 mm 22 = 9" 225 mm 25 = 10" 250 mm <small>* As recommended by the designer. For special requirements, please enclose a drawing</small>
<b>TYPE OF DIAPHRAGM VALVE</b> N = No valves fitted T = Threaded connection DD = Double dresser connection MM = Manifold mount FS = Flange/Slide connection	N T DD M M FS											<b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>4</b> ENCLOSURE SIZE (for remote valves only) 0 = No enclosure 1 = 5 pilot valve enclosure 2 = 6 pilot valve enclosure 3 = 8 pilot valve enclosure 4 = 12 pilot valve enclosure
<b>VALVE OPERATOR</b> R = RCA (Remote) C = CA (Integral)	R C											<b>V1</b> <b>to</b> <b>V12</b> NUMBER OF VALVES V12 = number of diaphragm valves on header tank – maximum 12
<b>VALVE SIZE</b> 20 = ¾" 20 mm 25 = 1" 25 mm 45 = 1 ½" 45 mm 50 = 2 ½" 62 mm 62 = 2 ½" 62 mm 76 = 3" 76 mm	20 25 45 50 62 76											



#### **Australia**

Head Office  
Goyen Controls Co Pty Ltd  
268 Milperra Road  
Milperra, NSW 2214

Telephone: 1800 805 372  
Facsimile: 1300 658 799

Queensland  
Telephone: 1800 805 372  
Facsimile: 1300 658 799

Victoria  
Telephone: 1800 805 372  
Facsimile: 1300 658 799

South Australia  
Telephone: 1800 805 372  
Facsimile: 1300 658 799

Western Australia  
Telephone: 1800 805 372  
Facsimile: 1300 658 799

#### **Asia**

Goyen Controls Co Pty Ltd  
Shanghai Representative Office  
1209 Greenland Business Centre  
1258 Yu Yuan Road  
Shanghai PC200050  
CHINA

Telephone: 86 21 5239 8810  
Facsimile: 86 21 5239 8812

Goyen Controls Co Pty Ltd  
73-M Jalan Mega Mendung  
Kompleks Bandar OUG  
58200 Kuala Lumpur MALAYSIA

Telephone: 60 37 987 6839  
Facsimile: 60 37 987 7839

Office: Singapore  
Tel/Facsimile: 65 6457 4549

#### **USA**

Goyen Valve Corporation  
1195 Airport Road  
Lakewood  
New Jersey 08701  
USA

Telephone: 1 732 364 7800  
Facsimile: 1 732 364 1356

#### **Europe**

Goyen Controls Co UK Ltd  
Unit 3B Beechwood  
Chineham Business Park  
Basingstoke, Hampshire, RG24 8WA  
UNITED KINGDOM

Telephone: 44 1256 817 800  
Facsimile: 44 1256 843 164

Tyco Umwelttechnik GmbH  
Im Petersfeld 6  
D-65624 Altendiez  
GERMANY

Telephone: 49 6432 1001/1002  
Facsimile: 49 6432 63810

Mecair S.r.l.  
Via per Cinisello 97  
20054 Nova Milanese  
Milano,  
ITALY

Telephone: 39 362 375 118  
Facsimile: 39 362 375 124