



**mecair** 6 & 8" TANKS WITH 1½" VALVES

# HEADER TANK SOLUTIONS

---

# HEADER TANK SOLUTIONS

6 & 8" TANKS WITH 1½" VALVES

---

## PENTAIR CLEAN AIR SYSTEMS SOLUTIONS BY GOYEN & MECAIR

*Engineering partnerships since 1935*

Clean Air Systems, through leading global brands Goyen and Mecair, have provided engineering partnerships since 1935 to some of the world's leading Reverse Pulse Filter Manufacturers. These valued partnerships service the power generation, cement, steel, general manufacturing and bulk solids handling industries.

Pentair Clean Air Systems is a world-class leader in providing you with quality products through design leadership and customer-beneficial partnerships. With a global footprint in manufacturing, sales and distribution offices, we partner with and provide solutions to leading Original Equipment Manufacturers right through to the end user globally.

Our customers are supported by our engineering expertise, innovative designs, high-quality and industry-leading products in the filter cleaning systems solutions market. This is supported by our range of quality products including diaphragm valves, header tanks, cleaning systems components, pulse cleaning controllers, emissions monitoring and Tribo electric products.

With quality being one of core strengths we are accredited with CSA, UL, CE, ATEX and ISO 9001, and our focus on environmental solutions means that we are ISO14001 accredited.

We support this process through our specialised software GOCO as part of our consultation and provide additional performance testing and modelling using computational fluid dynamics to ensure we:

- Eliminate risk in your systems
- Minimise your operating costs
- Increase your filter life.

Goyen and Mecair's advanced application expertise, along with our wide product range and global reach, has allowed us to maintain our valuable long-term customer partnerships based on innovation, experience and engineering trust.

## MARKETS SERVED

- Power
- Chemical/Processing
- Pharmaceutical
- Manufacturing
- Agriculture
- Food & Beverage Processing
- Infrastructure

# HEADER TANK SOLUTIONS

6 & 8" TANKS WITH 1½" VALVES

The 1.5" port Mecair Full Immersion 512G and 514G Series technologies are high-performance filter cleaning systems delivering high filter cleaning flow rates and precise control of air consumption through the use of a super-responsive diaphragm assembly. These systems are widely implemented throughout industrial air filtration applications as well as for self-cleaning gas turbine intake filter systems. The Full Immersion is available with stainless steel or carbon steel tanks, in a variety of surface treatments, to meet PED or ASME certifications as required.

## BENEFITS

- Exceptional service life
- Suitable for bag, cartridge and envelope filters
- Available with remote pilot or integral pilot arrangements
- High-quality precision seal and premium fabric-reinforced Nitrile diaphragm
- Proven longevity under typical operating conditions

## TANK CERTIFICATIONS AVAILABLE

- 97/23/EC (PED)
- ASME VIII div.1 (U\_Stamp; UM\_Stamp)
- TR CERTIFICATION
- 94/9/EC ATEX DIRECTIVE



## CODES & TECHNICAL CHARACTERISTICS

### Part Number Code:

**S E 14 C 2 0 N04 P180 M 5**

#### End caps

- S** Flat (Mecair name plate)
- G** Flat (Goyen name plate)

#### Valve

- E** VEM – Remote pilot
- N** VNP – Integral pilot

#### Valve size and tank

- 12** 1.5" single-stage valve, 8" tank
- 14** 1.5" dual-stage valve, 8" tank
- 62** 1.5" single-stage valve, 6" tank
- 64** 1.5" dual-stage valve, 6" tank

#### Pilot/Exhaust Thread Type

- 0** NPT
- 1** RC } Cover 3/8"
- 2** G }

#### Diaphragm material

- 0** Nitrile membrane, Akulon seat, Standard Temp (-40°C to +82°C)
- 1** Viton membrane, Viton rubberised seat, Aggressive service (-40°C to +232°C)
- 4** Low temperature, Nitrile membrane, Polyethylene seat, Low temp: -60°C to +82°C

#### Voltage options (Only if integrally piloted)

- 3** Dual rating: 110 V DC  
220/240 V 50/60 Hz
- 4** Dual rating: 48 V DC  
115 V 50/60 Hz
- 5** Dual rating: 24 V DC  
48 V 50/60 Hz
- 6** Dual rating: 12 V DC  
24 V 50/60 Hz

#### Solenoid (Only if integrally piloted)

- M** SB4 Series

#### Pitch

140 Minimum

#### # valves

N01, N02, etc.

# HEADER TANK SOLUTIONS

6 & 8" TANKS WITH 1½" VALVES

## DIAPHRAGM KIT NUMBERS

**514G & 564G Kit**      **512G & 562G Kit**

K514G                      K512G

## VALVE CONSTRUCTION

Top cover	Diecast aluminium (E-coat black)
Body	Diecast aluminium (E-coat black)
Pilot base	Aluminium (anodised)
Pilot	Stainless steel
Diaphragm	Nitrile (standard) Viton (optional)
Diaphragm seat	Nylon (standard)
Bolts	Stainless steel
Diaphragm backing disk	Stainless steel
Diaphragm spring	Stainless steel

TYPE	PORT SIZE	No. DIAPH.	VALVE PRESSURE RANGE (BAR)		COIL	KV	CV
			min.	max.			
VEM512G	1.5"	1	1	8.6	NO	51	59
VEM514G	1.5"	2	1	8.6	NO	52	60
VNP512G	1.5"	1	1	8.6	YES	51	59
VNP 514G	1.5"	2	1	8.6	YES	52	60
VEM562G	1.5"	1	1	8.6	NO	51	59
VEM564G	1.5"	2	1	8.6	NO	52	60
VNP 562G	1.5"	1	1	8.6	YES	51	59
VNP 564G	1.5"	2	1	8.6	YES	52	60

## ELECTRICAL CHARACTERISTICS – SOLENOID

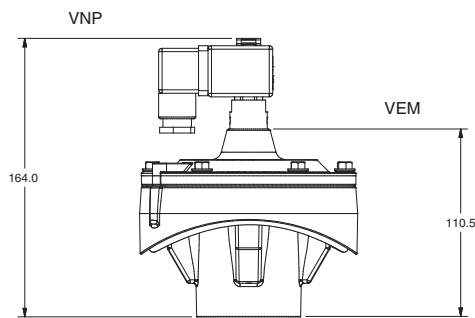
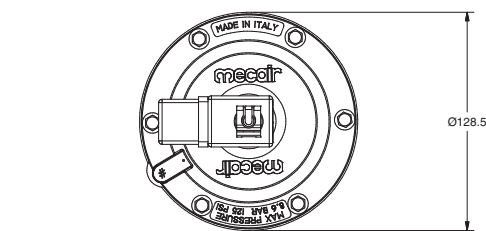
DIN socket connector	PG9 connection
DIN socket specification	EN175301 – 803 / A/ISO 4400
DIN socket optional	94/9/CE ATEX ii 3GD T6
Isolation Class DIN socket	VDE0110 – 1/89
Electrical protection	IP65 EN60529
Voltage range	12V DC (–5%, +20%) 18W 24V DC (–5%, +20%) 18W 48V DC (–10%, +20%) 18W 110V DC (–10%, +20%) 18W 24V 50/60 Hz (–10%, +20%) 38/31 VA 48V 50/60 Hz (–10%, +20%) 41/32 VA 115V 50/60 Hz (–10%, +20%) 63/53 VA 220/240V 50/60 Hz (–10%, +20%) 46/37 VA

## TANK CHARACTERISTICS

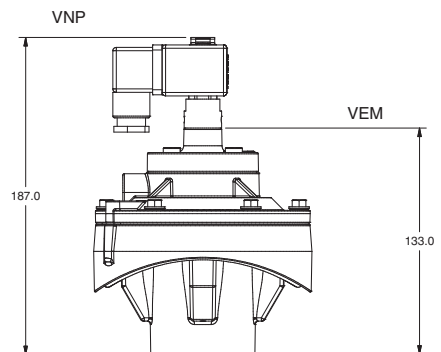
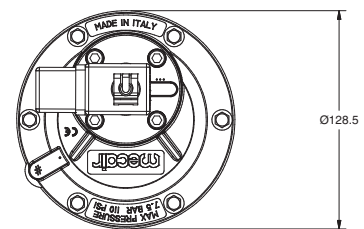
Carbon steel	–10°C to 70°C
Stainless steel	–20°C to 70°C
Pressure range	1 bar to 8.0 bar

When specifying the system, check temperature and pressure limits for tank, diaphragm and solenoids.

Different temperature ranges may be available; please consult your options with Mecair.



512G



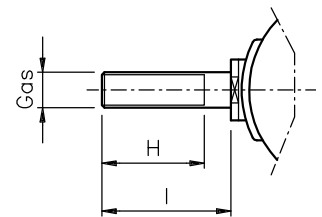
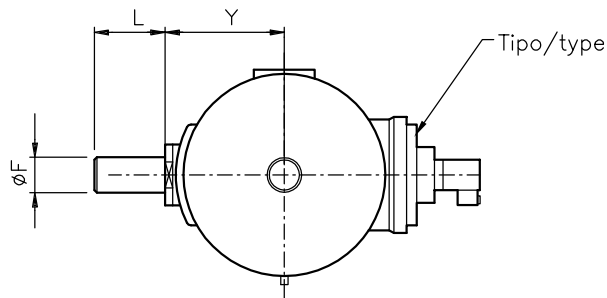
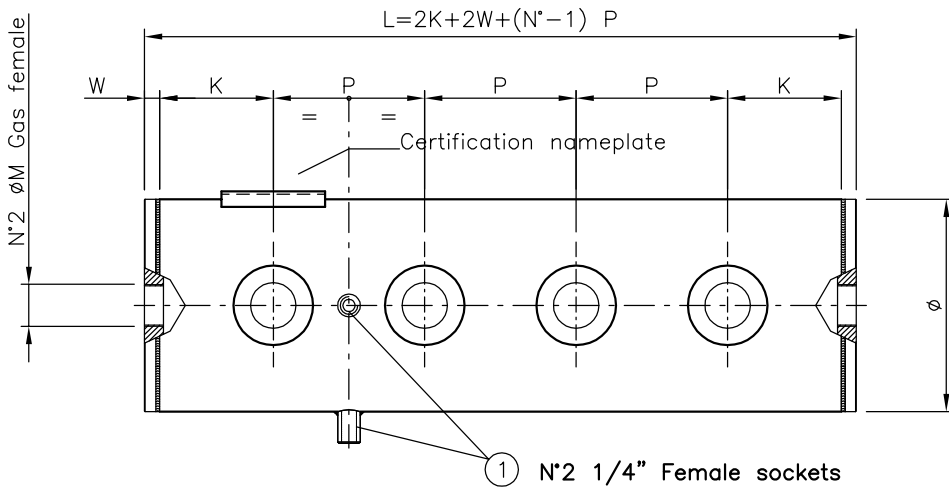
514G

# HEADER TANK SOLUTIONS

6 & 8" TANKS WITH 1½" VALVES

## TANK DIMENSIONS TABLE

Ø TANK	Ø VALVE	P min.	K min.	W	Ø M	TO BE COMPLETED BY CUSTOMER		
						P DISTANCE REQUIRED	N NUMBER OF VALVES	K OPTIONAL
DN6"	1.5"	135	90	12	1"			
DN8"	1.5"	135	90	16	1.5"			



Valve Blowpipe

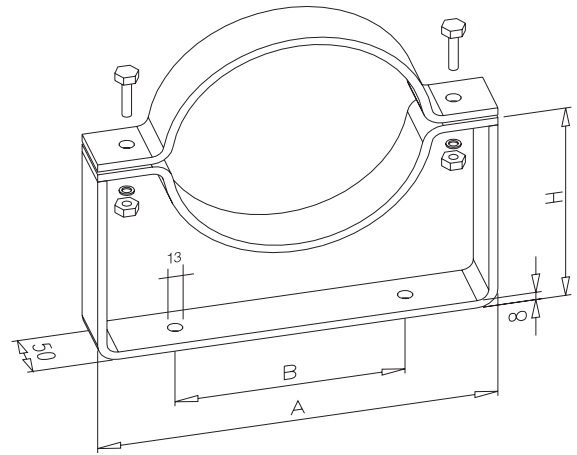
Ø TANK	Ø F	Y	SHORT UNTHREADED	L	LONG UNTHREADED	L	LONG THREADED	Ø G GAS	H	I
DN6"	48.3	106	TS564	60	TL564	120	TF564	1.5"	110	120
DN8"	48.3	131	TS514	60	TL514	120	TF514	1.5"	110	120

# HEADER TANK SOLUTIONS

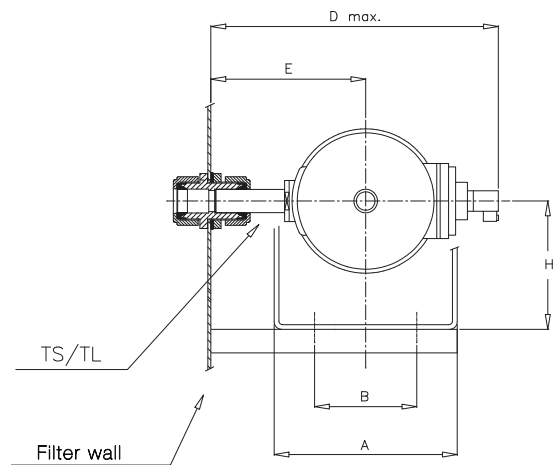
6 & 8" TANKS WITH 1½" VALVES

## BRACKET AND OUTLET PIPES CONFIGURATIONS

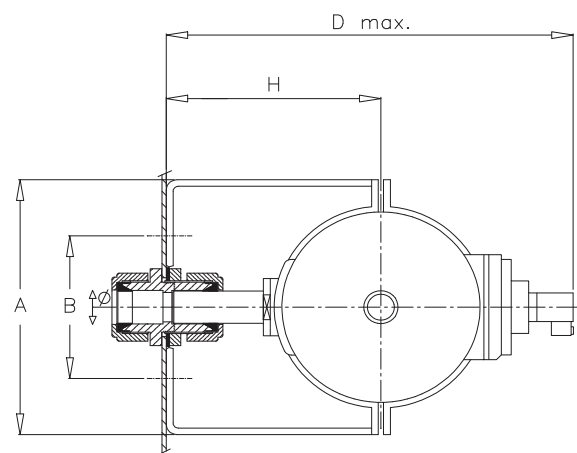
DN TANK	TYPE OF BRACKET	A	B	H
6"	TH06	292	150	200
	TM06	292	150	170
	TB06	292	150	109
8"	TH08	348	200	270
	TM08	348	200	210
	TB08	348	200	134



DN TANK	TYPE OF BRACKET	VALVE BLOWPIPE	E	D max.	VALVE BLOWPIPE	E	D max.
6"	TH06	TS564	175	425	TL564	212	465
	TM06	TS564	175	425	TL564	212	465
	TB06	TS564	175	425	TL564	212	465
8"	TH08	TS514	210	460	TL514	270	520
	TM08	TS514	210	460	TL514	270	520
	TB08	TS514	210	460	TL514	270	520



DN TANK	TYPE OF BRACKET	D max.	VALVE BLOWPIPE	Ø
6"	TM06	420	TS564	1"
	TH08	520	TL514	1½"
8"	TM08	460	TS514	1½"





CLEANAIRSYSTEMS.COM

© 2014 Pentair Clean Air Systems reserves the right to change product designs and specifications without notice.