

LP Filter Housing

For use with Mantec Ceramic Filters

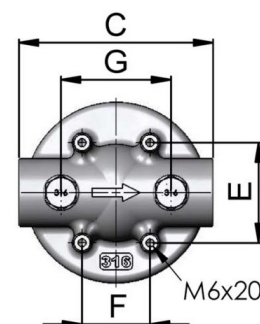
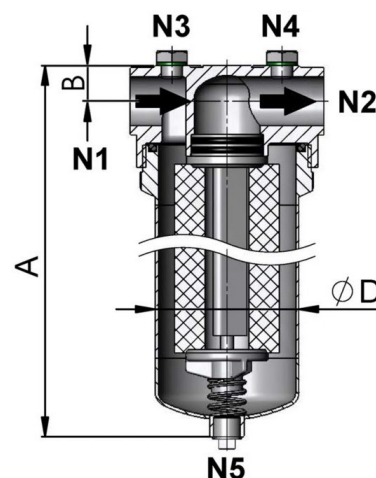


Mantec offers a range of stainless steel filter housings to meet the demands of process air / gas and liquid filtration requirements. They are effective at removing solids from water, chemical, petroleum and other industrial processes via a specially selected ceramic element.

Housing Specification (Screwed Closure) ‡

Material Head / Body	AISI 316 Stainless Steel
Gaskets	FPM O-Ring
Vent Gaskets	Klingsil® C-4400
Connections (N1/N2)	Rp 1" Female
Vents (N3/N4)	Rp 1/4" with plug
Drain (N5)	Rp 3/8" with plug
Design Code	PED 97/23/EC Group 2 Liquids (SEP)
Max Pressure	12 bar
Design Temperature	-10 to 80°C

‡ also available with Clamped Closure



Filters

To suit Mantec's ceramic filters 10" x 2¾" x 2"-OBE

The Filter Housing is suitable for use with Mantec's porous ceramic filters of controlled pore size, available in a range of grades as shown on page 2.

Gas and Air Filtration

Mantec Filtration has many years experience in the manufacture and selection of ceramic filters for gas / air filtration. Our range of porous ceramic elements and filter units meet industrial demands for an effective and highly efficient filter to remove solids and traces of free oil and water from compressed air, gas lines and industrial processes.

Liquid Filtration

Liquid filtration is presented with similar problems to air and gas when faced with high temperatures and aggressive acidic conditions. Ceramic elements prove to be reliable and cost effective solutions to removing solids from water, chemical and petrochemical products, and other processes.

Dimensions (mm)						
A	B	C	D	E	F	G
367	22	120	Ø88.9	62	42	68

(Continued on page 2)

Ceramic Filters

for use with LP Filter Housing



Mantec's ceramic filters 10" x 2 $\frac{3}{4}$ " x 2"-OBE are suitable for use with The LP Filter Housing.

Mantec Filtration has a range of standard ceramic materials. Each has its unique characteristics and capabilities. The materials used most commonly are Pyrolith and Coralith, aluminosilicate particles bonded by glass.

Pyrolith and Coralith can withstand hot and cold acids (not hydrofluoric acid or acid fluorides), alkaline solutions up to pH9 and hot gases up to 900°C.

Chemical Composition

Pyrolith

SiO₂ 57%

Al₂O₃ 36%

Trace Elements

Coralith

SiO₂ 10%

Al₂O₃ 85%

Trace Elements

Nominal Retention (microns)

Ceramic Element Grade	P3	P4	P5	P6	P8	P9	
	C3	C4	C5	C6	C8	C9	C0
Air/Gas Duties Retention (microns)	50	30	20	10	3	1	0.3
Liquid Duties Retention (microns)	150	60	40	20	6	2	1

Capacities for Air / Gas Duties

	Ceramic Grade	Pipeline Pressure	
		50 psi	100 psi
Flow Rate (Nm ³ /hour) Δ	P6 / C6	107	190
	C0	27	48

Δ Based on free air with a pressure differential of 1 psi.

Capacities for Water / Liquid Duties

Liquid Duties Ceramic Element Grade	P4	P5	P6	P8	P9	
	C4	C5	C6	C8	C9	C0
Flow Rate (litres/hour) ϕ	5340	3512	2165	691	380	80

ϕ When clean with a pressure differential of 2 psi.

Filter Cleaning and Replacement

The cleaning properties of an element are dependent on the contaminate and the conditions. Normal methods of cleaning are surface brushing, back flushing or cleaning with a suitable solvent solution. With depth filter media, cleaning only usually removes surface contaminate with particles trapped in the pores being difficult to remove. Once the pressure drop across the filter reaches an unacceptable level, and cleaning has failed to restore the flow, then the filters should be replaced.

Replacement filters are available from Mantec Filtration
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