

GLP Series

COALESCER CARTRIDGES

GAS - LIQUID

DIAMETER 70-116-140-152 mm



CHARACTERISTICS:

- Large diameter design for high flow-rate
- High filtering area
- Excellent separation efficiency
- Low initial (dry) and saturation (wet) pressure drop
- Reduced vessel dimension
- Lower restriction on annular velocity in between of the cartridges
- Flow direction from inside to outside
- Filter media available in fibreglass, polyolefin, polyester or polyamide
- Stainless steel or tinned steel hardware available
- Pall SeptraSol Plus retrofit available
- Metallic core for higher strength against pressure drop
- Wide range chemical compatibility
- Designed for hydrocarbon or water aerosol removal
- Special arrangement suitable for acid gas or for liquid amine and glycol coalescing
- Epoxy resin for end caps assembly
- Suitable for gas with liquids up to 1000 ppm (0.1%) without demister or vane extractor pre-separation
- Separation efficiency:
 - standard media: 99.98% aerosol $\geq 0.3 \mu\text{m}$ / 99.7% solids $\geq 0.3 \mu\text{m}$
 - XA media: 99.994% aerosol $\geq 0.3 \mu\text{m}$ / 99.98% aerosol $\geq 0.1 \mu\text{m}$
99.98% solids $\geq 0.1 \mu\text{m}$
- Liquid content downstream cartridges down to $< 0.01 \text{ ppm}$

MAIN APPLICATION:

- FINE CHEMICAL
- PETROCHEMICAL
- OIL & GAS
- POWER GENERATION
- GENERAL INDUSTRIES

- Reciprocating or screw compressors protection
- Gas turbine protection
- Regulating valves protection
- Catalysts and molecular sieves protection
- Burners protection
- Amine loss reduction
- downstream sweetening unit
- Glycol loss reduction
- downstream dehydration unit
- Amine unit contactor protection (reducing foam formation tendency)

ASCO FILTRI

a mott company

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TECHNICAL DATA

DIFFERENTIAL PRESSURE

Cartridge replacement:

1.03 bar @ 25 °C

Max. allowable:

2.41 bar @ 25 °C

WORKING TEMPERATURE

93 °C

160 °C (HT version)

CONSTRUCTION MATERIAL

Coalescing media:

- Fiberglass
- Polyester
- Polyolefin
- Polyamide

Support layers:

- Polyester
- Polyolefin
- Polyamide
- Fluoropolymer

External drain sock:

- Polyester
- Polyolefin
- Polyamide

Hardware:

- PP + inox core (only 2T3)
- Tinned steel
- 304 SS
- 316 SS

Gaskets:

- Buna-n
- EPDM
- Viton
- Silicone

DIMENSIONS

Diameter:

- OD 70 ID 36 mm (size 2T3)
- OD 116 ID 80 mm (size 336)
- OD 140 ID 106 mm (size 536)
- OD 152 ID 89 mm (size 640)
- OD 152 ID 112 mm (size L640)
- OD 152 ID 100 mm (P - T style)

Length:

- 30": 762 mm (size 2T3)
- 36": 915 mm (size 336 & 536)
- 40": 1016 mm (size 640 & L640)

FILTERING AREA

- 70/36x36": 0.90 m²
- 116/80x36": 1.30 m²
- 140/106x36": 1.70 m²
- 152/89x40": 4.16 m²
- 152/112x40": 2.00 m²
- 152/100x40": 2.60 m²

Flow-rate / Delta-P data:

Pressure	Flow-rate (Nm ³ /h)				
	640	L640	536	336	2T3
10 bar	4200	6300	3421	2890	750
20 bar	6000	9000	4425	4720	1100
40 bar	8900	13300	5604	6490	1700
60 bar	11800	17500	6845	8023	2100

Data are valid at the following conditions:

Fluid: natural gas with specific weight 0.69 kg/Nm³. Liquids: hydrocarbons with specific weight 700 kg/m³.

Liquid content: 100 ppmw. Temperature: 15 °C.

Delta-P on dry condition: 0.13 - 0.17 bar. Delta-P on saturated condition: 0.25 - 0.35 bar.

Recommended flow-rates should be reduced based on the process parameters: liquids type and quantity, liquids surface tension, presence of caustics, H₂S, amine, glycol, surfactants, etc.

Construction:

GLP series gas-liquid coalescer element are designed to removes water, carried-over amine aerosols and fine particulate contaminants from process gas, fuel gas, natural gas, methane, hydrogen and other technical gases.

The GLP series gas-liquid coalescer elements are manufactured with a series of high performance micro fiberglass, polypropylene, polyester or nylon coalescing media in a pleated configuration optimized for liquid separation. Specific media and support layers are also available for amine and glycol separation.

The selection of coalescing media combined with specific supports and final coalescing layer improves separation efficiency and minimize the dry pressure drop as well as the saturated pressure drop

Specific flow-rate correction factors:

For temperature different than 15 °C multiply the flow-rate by K_t coefficient.

°C	15	25	50	75	100	125	150	175
K _t	1.0	0.90	0.95	0.92	0.88	0.85	0.82	0.8

For specific weight different than 0.69 kg/Nm³ multiply the flow-rate by K₆ coefficient.

kg/Nm ³	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.3
K ₆	1.50	1.30	1.20	1.10	1.0	0.90	0.85	0.80	0.75	0.70

Contact us for any further information.

We reserve the right to change the data of this specification without notice.

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