

Product - Specification

GL Plus-Filter Series – Element Type AP



Parker domnick hunter, High-performance GL-series filters, containing AP grade filter elements are designed for the surface-active adsorption of oil vapours. They reliably remove oil odours from pre-dried compressed air or compressed nitrogen gas where a grade XLP filter is installed upstream.

Innovative filter housing and filter element design leads to optimum flow characteristics at minimum pressure drops: This results in cost savings throughout the operating lifetime of the filter element at reliable levels of filtration performance.

High-capacity filter element media, impregnated with activated carbon granulate, guarantees high affinity at constantly low differential pressure. This efficiency is additionally supported by deep-pleating technology enabling 4.5 times more effective filtration surface area when compared with conventional filter elements.

The light-weight, compact construction, ensures a requirement for minimum clearance below the filter bowl for element removal. The simple method of installing the filter element into the filter bowl, in conjunction with a secure, airtight housing closure avoids installation errors and prevents by-pass between the contaminated and clean enclosures. The inlet-port is clearly marked by an aluminium feature above and below the opening signifying the correct direction of flow through the filter element.



Performance overview:

Model	Port Size ¹	Nominal ²	Element
GL2AP	1/4	36	CP1008AP
GL3AP	3/8	55	CP2010AP
GL5AP	1/2	72	CP2010AP
GL7AP	3/4	108	CP2020AP
GL9AP	1	216	CP3025AP
GL11AP	1 1/2	396	CP3040AP
GL12AP	1 1/2	576	CP4040AP
GL13AP	2	792	CP4050AP
GL14AP	2 1/2	1188	CP4065AP
GL17AP	2 1/2	1548	CP5065AP
GL19AP	3	2232	CP5080AP

1: Port size as per DIN ISO 228 (BSP-P) or ANSI B 1.20.1 (NPT-F)

2: Flow rates in m³/h related to 1 bar_a and 20 °C, compressed to 7 bar_a. Where the minimum operating pressure deviates, the actual flow rate must be multiplied with the respective correction factor f (see the respective table) to determine the required nominal flow rate and the appropriately required filter model.

Scope of supply:

Ready-to-install filter, complete with filter element and manual drain HV15.

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Materials Housing

Upper/lower housing	Aluminium alloy with alochrome coating, outside powder coating
Sealing materials	NBR

Materials Element

Filter fleece	Fibre fabric enriched with grains of activated charcoal
Supporting net	Polypropylene
Outer sleeve	–
Support screens	Stainless steel
End caps	Glass fibre reinforced polyamide
Adhesive	Epoxy resin
Sealing materials	NBR

Area of application Filter

Max. operat. pressure	20 bar _e	with manual drain
Operating temperature	1.5 to +50 °C	with manual drain

Performance data Element

Flow medium	Compressed air and gaseous nitrogen		
Filtration	Oil vapours		
Flow direction	from inside to outside		
Upstream filter required	ZLP+XLP	Downstream filter required	ZLP
Particle size	n/a		
Residual oil content	0.003 mg/m ³		
Filtration performance	n/a		
Differential press., dry	< 70 mbar _e		
Differential press., saturated	not applicable		

Quality assurance and warranty

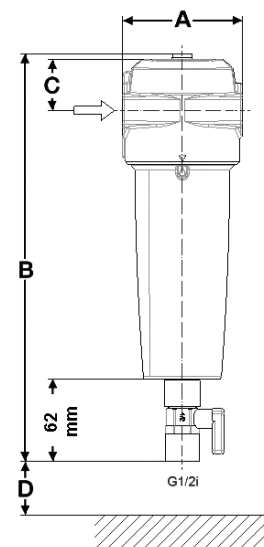
R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 8573-1:2010 [1:-:1], ISO 8573-5
Element	Filtration performance is dependent upon the quantity of oil vapour, the relative humidity and the compressed air temperature. Filter element replacement is recommended after 650 hours of operation.
Housing	Corrosion warranty limited to the maximum housing lifetime of 10 years

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Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2AP	67	243	23	40	0.75
GL3AP	89	305	38	50	1.5
GL5AP	89	305	38	50	1.5
GL7AP	89	305	38	50	1.5
GL9AP	130	344	46	70	3.2
GL11AP	130	434	46	70	3.4
GL12AP	164	506	57	100	7.1
GL13AP	164	598	57	100	7.5
GL14AP	164	598	57	100	7.3
GL17AP	192	720	72	120	10.5
GL19AP	192	910	72	120	15.5



Product key

Series	Size	Element type	Options ¹	Port ²	¹ deviating from the standard only ² or NPT-F only
GL	2 up to 19	A P		-N	
Examples					
GL	7	A P			Standard design G3/4i (BSP-P) port with manual drain
GL	17	A P		-N	2 1/2" NPT-F port with manual drain

Replacement filter element

Type	Scope of delivery
CP1008AP up to CP5080AP	Contains respective spare element and suitable O-ring for the housing.

Correction factors f according to actual minimum operating pressure in bar_e

Minimum operating pressure in bar _e	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	7,5	8	8,5	9
Correction factor f	2,65	2,16	1,87	1,67	1,53	1,41	1,32	1,25	1,18	1,13	1,08	1,04	1,00	0,97	0,94	0,91	0,88
Minimum operating pressure in bar _e	9,5	10	10,5	11	11,5	12	12,5	13	13,5	14	14,5	15	16	17	18	19	20
Correction factor f	0,86	0,84	0,82	0,80	0,78	0,76	0,75	0,73	0,72	0,71	0,69	0,68	0,66	0,64	0,62	0,61	0,59

Example for a maximal flow rate of 285 m³/h for a minimum operating pressure of 4.3 bar_e:
285 m³/h x 1.32 = 376.2 m³/h – select size GL11 (see Table Performance overview).

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Accessories

Oil indicator		
Model	Function	suitable for
OP01	Oil indicator	GL3 up to GL19

Wall mount (incl. combination accessories where applicable)		Fixation for filter combinations	
Model	suitable for	Model	suitable for
BF/GL2	GL2, single stage	BFS/GL2/2	GL2, two-stage filter combination
BF/GL2/2	GL2, two-stage filter combination	BFS/GL2/3	GL2, three-stage filter combination
BF/GL2/3	GL2, three-stage filter combination	BFS/GL3-GL7/2	GL3 up to GL7, two-stage filter combination
BF/GL3-GL7	GL3 up to GL7, single stage	BFS/GL3-GL7/3	GL3 up to GL7, three-stage filter combination
BF/GL3-GL7/2	GL3 up to GL7, two-stage filter combination	BFS/GL9-GL11/2	GL9 up to GL11, two-stage filter combination
BF/GL3-GL7/3	GL3 up to GL7, three-stage filter combination	BFS/GL9-GL11/3	GL9 up to GL11, three-stage filter combination
BF/GL9-GL11	GL9 up to GL11, single stage	BFS/GL12-GL14/2	GL12 up to GL14, two-stage filter combination
BF/GL9-GL11/2	GL9 up to GL11, two-stage filter combination	BFS/GL12-GL14/3	GL12 up to GL14, three-stage filter combination
BF/GL9-GL11/3	GL9 up to GL11, three-stage filter combination	BFS/GL17-GL19/2	GL17 up to GL19, two-stage filter combination
BF/GL12-GL14	GL12 up to GL14, single stage	BFS/GL17-GL19/3	GL17 up to GL19, three-stage filter combination
BF/GL12-GL14/2	GL12 up to GL14, two-stage filter combination		
BF/GL12-GL14/3	GL12 up to GL14, three-stage filter combination		
BF/GL17-GL19	GL17 up to GL19, single stage		
BF/GL17-GL19/2	GL17 up to GL19, two-stage filter combination		
BF/GL17-GL19/3	GL17 up to GL19, three-stage filter combination		

EMEA Product Information Centre

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