

Product - Specification

GL Filter Series – Element Type A



Brief Description

Parker Zander, High-performance GL-series filters, containing A 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 XL 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
GL2A	1/4	36	CP1008A
GL3A	3/8	55	CP2010A
GL5A	1/2	72	CP2010A
GL7A	3/4	108	CP2020A
GL9A	1	216	CP3025A
GL11A	1 1/2	396	CP3040A
GL12A	1 1/2	576	CP4040A
GL13A	2	792	CP4050A
GL14A	2 1/2	1188	CP4065A
GL17A	2 1/2	1548	CP5065A
GL19A	3	2232	CP5080A

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. Option-ally available without a drain (in this case, not ready-to-install).

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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 or without drain
Operating temperature	1.5 to +50 °C	with manual drain or without drain

Performance data Element

Flow medium	Compressed air and gaseous nitrogen		
Filtration	Oil vapours		
Flow direction	from inside to outside		
Upstream filter required	ZL+XL	Downstream filter required	ZL
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	no data		

Quality assurance and warranty

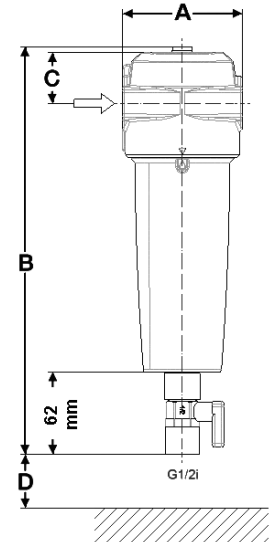
R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 8573-1:2010 [1:-:1], ISO 8573-5
Element	Filtration performance is dependent upon the quantity of oil vapour, the relative humidity and the compressed air temperature. Filter element replacement is recommended after 650 hours of operation.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

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GL Filter Series – Element Type A

Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2A	67	243	23	40	0.75
GL3A	89	305	38	50	1.5
GL5A	89	305	38	50	1.5
GL7A	89	305	38	50	1.5
GL9A	130	344	46	70	3.2
GL11A	130	434	46	70	3.4
GL12A	164	506	57	100	7.1
GL13A	164	598	57	100	7.5
GL14A	164	598	57	100	7.3
GL17A	192	720	72	120	10.5
GL19A	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	OA	-N	
Examples					
GL	7	A			Standard design G3/4i (BSP-P) port with manual drain
GL	17	A	OA	-N	2 1/2" NPT-F port, no drain (open port)

Replacement filter element

Type	Scope of delivery
CP1008A up to CP5080A	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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GL Filter Series – Element Type A

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		

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US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com

Product - Specification

GL Filter Series – Element Type VL



Brief Description

Parker Zander, High-performance GL-series filters, containing VL grade filter elements are designed as depth-filters for the reliable remove of 3 µm solid particulate and exhibit a filtration performance of 99,95% in compressed air or compressed nitrogen gas.

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.

Highly-efficient, borosilicate nano-fibre media with a voids volume of 96% ensures high dirt-holding capacity 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
GL2VL	1/4	36	CP1008VL
GL3VL	3/8	55	CP2010VL
GL5VL	1/2	72	CP2010VL
GL7VL	3/4	108	CP2020VL
GL9VL	1	216	CP3025VL
GL11VL	1 1/2	396	CP3040VL
GL12VL	1 1/2	576	CP4040VL
GL13VL	2	792	CP4050VL
GL14VL	2 1/2	1188	CP4065VL
GL17VL	2 1/2	1548	CP5065VL
GL19VL	3	2232	CP5080VL

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_e. 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 float drain ZK15NO/KN; with optional differential pressure gauge ZD90GL and/or manual drain HV15. Optionally available without a drain (in this case, not ready-to-install)

Product-Specification

GL Filter Series – Element Type VL

Materials Housing

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

Materials Element

Filter fleece	Borosilicate nanofibre, surface coated
Supporting net	Polypropylene
Outer sleeve	Polyester fibre, surface coated
Support screens	Stainless steel
End caps	Glass fibre reinforced polyamide
Adhesive	Epoxy resin
Sealing materials	NBR

Area of application Filter

Max. operat. pressure	16 bar _e	with float drain, with or without differential pressure gauge
	20 bar _e	with manual drain or without drain
Operating temperature	1.5 to 80 °C	with float drain, with or without differential pressure gauge
	1.5 to 100 °C	with manual drain or without drain

Performance data Element

Flow medium	Compressed air and gaseous nitrogen
Filtration	Solid particulate
Flow direction	from inside to outside
Upstream filter required	no data
Particle size	3 µm
Residual oil content	99.95 %
Filtration performance	< 70 mbar _e
Differential press., dry	no data
Differential press., saturated	no data

Quality assurance and warranty

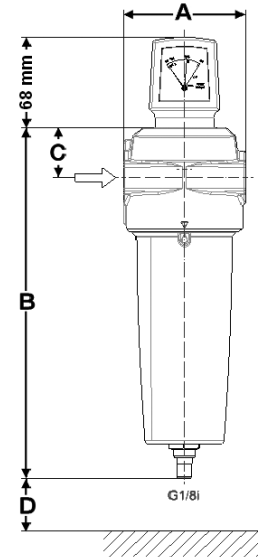
R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 8573-1:2010 [3:-: -]
Element	12 months guaranteed filtration performance in line with filter element service-life
Housing	Corrosion warranty limited to the maximum housing lifetime of 10 years

Product-Specification

GL Filter Series – Element Type VL

Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2VL	67	208	23	40	0.55
GL3VL	89	270	38	50	1.3
GL5VL	89	270	38	50	1.3
GL7VL	89	270	38	50	1.3
GL9VL	130	309	46	70	3.0
GL11VL	130	399	46	70	3.2
GL12VL	164	471	57	100	6.9
GL13VL	164	563	57	100	7.3
GL14VL	164	563	57	100	7.1
GL17VL	192	685	72	120	10.3
GL19VL	192	875	72	120	15.3



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	VL	D H OA	-N	
Examples					
GL	7	VL			Standard design G3/4i (BSP-P) port with float drain
GL	3	VL	DH		G3/8i (BSP-P) port with differential pressure gauge and manual drain fitted
GL	17	VL	OA	-N	2 1/2" NPT-F port, no drain (open port)

Replacement filter element

Type	Scope of delivery
CP1008VL up to CP5080VL	Contains respective spare element and suitable O-ring of 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 × 1.32 = 376.2 m³/h – select size GL11 (see Table Performance overview).

Product - Specification

GL Filter Series – Element Type VL

Accessories

Differential pressure gauge fitted			
Model	Function	Suitable for	Product key
ZD90GL	Mechanical differential pressure gauge	GL3 up to GL19	D

Other differential pressure gauges available as loose accessories.

Drain fitted			
Model	Function	Suitable for	Product key
ZK15NO/KN	Internal float drain (standard)	GL2 up to GL19	–
HV15	Manual drain	GL2 up to GL19	H
Open	Without drain	GL2 up to GL19	OA

Other drains available as loose accessories.

Mounting kits for drains				
Model	Filter port	Drain port	Suitable for filter	Suitable for drain
MK-G15-G10	G1/2a	G3/8a	GL2 up to GL19	Trap22
MK-G15-G10I	G1/2a	G3/8i	GL2 up to GL19	ED3002
MK-G15-G15	G1/2a	G1/2a	GL2 up to GL19	ED2010, ED3004 up to ED3100
MKG15-G20	G1/2a	G3/4a	GL2 bis GL19	ED2020 und ED2060

No mounting kit required for float drain ZB1D since G1/2a fitting is integrated.

Wall mounting (incl. combination accessories where applicable)		Fixing-kits	
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		

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US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com

Product - Specification

GL Filter Series – Element Type XL



Brief Description

Parker Zander, High-performance GL-series filters, containing XL grade filter elements are designed as depth-filters for the reliable remove of 0,01 µm solid particulate and exhibit a filtration performance of 99,9999% in compressed air or compressed nitrogen gas. 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.

Highly-efficient, borosilicate nano-fibre media with a voids volume of 96% ensures high dirt-holding capacity 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
GL2XL	1/4	36	CP1008XL
GL3XL	3/8	55	CP2010XL
GL5XL	1/2	72	CP2010XL
GL7XL	3/4	108	CP2020XL
GL9XL	1	216	CP3025XL
GL11XL	1 1/2	396	CP3040XL
GL12XL	1 1/2	576	CP4040XL
GL13XL	2	792	CP4050XL
GL14XL	2 1/2	1188	CP4065XL
GL17XL	2 1/2	1548	CP5065XL
GL19XL	3	2232	CP5080XL

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_e. 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 float drain ZK15NO/KN; with optional differential pressure gauge ZD90GL and/or manual drain HV15. Optionally available without a drain (in this case, not ready-to-install).

Product-Specification

GL Filter Series – Element Type XL

Materials Housing

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

Materials Element

Filter fleece	Borosilicate nanofibre, surface coated
Supporting net	Polypropylene
Outer sleeve	Polyester fibre, surface coated
Support screens	Stainless steel
End caps	Glass fibre reinforced polyamide
Adhesive	Epoxy resin
Sealing materials	NBR

Area of application Filter

Max. operat. pressure	16 bar _e	with float drain, with or without differential pressure gauge
	20 bar _e	with manual drain or without drain
Operating temperature	1.5 to 80 °C	with float drain, with or without differential pressure gauge
	1.5 to 100 °C	with manual drain or without drain

Performance data Element

Flow medium	Compressed air and gaseous nitrogen
Filtration	Liquid and solid particulate
Flow direction	from inside to outside
Upstream filter required	ZL
Particle size	0,01 µm
Aerosol intake contents	10 mg/m ³
Residual aerosol cont.	0.01 mg/m ³
Filtration performance	99.9999 %
Differential press., dry	< 140 mbar _e
Differential press., saturated	< 200 mbar _e

Quality assurance and warranty

R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 12500-1, ISO 8573-1:2010 [1:-:2]
Element	12 months guaranteed filtration performance in line with filter element service-life.
Housing	Corrosion warranty limited to the maximum housing lifetime of 10 years.

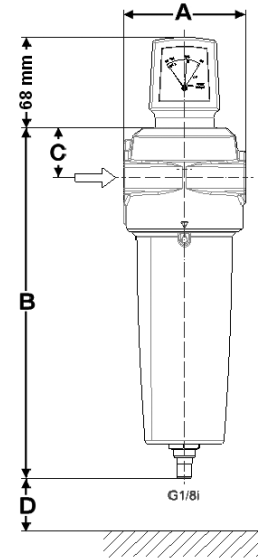


Product-Specification

GL Filter Series – Element Type XL

Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2XL	67	208	23	40	0.55
GL3XL	89	270	38	50	1.3
GL5XL	89	270	38	50	1.3
GL7XL	89	270	38	50	1.3
GL9XL	130	309	46	70	3.0
GL11XL	130	399	46	70	3.2
GL12XL	164	471	57	100	6.9
GL13XL	164	563	57	100	7.3
GL14XL	164	563	57	100	7.1
GL17XL	192	685	72	120	10.3
GL19XL	192	875	72	120	15.3



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	XL	D H OA	-N	
Examples					
GL	7	XL			Standard design G3/4i (BSP-P) port with float drain
GL	3	XL	DH		G3/8i (BSP-P) port with differential pressure gauge and manual drain fitted
GL	17	XL	OA	-N	2 1/2" NPT-F port, no drain (open port)

Replacement filter element

Type	Scope of delivery
CP1008XL up to CP5080XL	Contains respective spare element and suitable O-ring of 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).

Product - Specification

GL Filter Series – Element Type XL

Accessories

Differential pressure gauge fitted			
Model	Function	suitable for	Product key
ZD90GL	Mechanical differential pressure gauge	GL3 up to GL19	D

Other differential pressure gauges available as loose accessories.

Drain fitted			
Model	Function	suitable for	Product key
ZK15NO/KN	Internal float drain (standard)	GL2 up to GL19	–
HV15	Manual drain	GL2 up to GL19	H
Open	Without drain	GL2 up to GL19	OA

Other drains available as loose accessories.

Mounting kits for drains				
Model	Filter port	Drain port	Suitable for filter	Suitable for drain
MK-G15-G10	G1/2a	G3/8a	GL2 up to GL19	Trap22
MK-G15-G10I	G1/2a	G3/8i	GL2 up to GL19	ED3002
MK-G15-G15	G1/2a	G1/2a	GL2 up to GL19	ED2010, ED3004 up to ED3100
MKG15-G20	G1/2a	G3/4a	GL2 up to GL19	ED2020 and ED2060

No mounting kit required for float drain ZB1D since G1/2a fitting is integrated.

Wall mounting (incl. combination accessories where applicable)		Fixing-kits	
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, zweistufige Filterkombination	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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US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com

Product - Specification

GL Filter Series – Element Type ZL



Brief Description

Parker Zander, High-performance GL-series filters, containing ZL grade filter elements are designed as depth-filters for the reliable remove of 1 µm solid particulate and exhibit a filtration performance of 99,925% in compressed air or compressed nitrogen gas. 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.

Highly-efficient, borosilicate nano-fibre media with a voids volume of 96% ensures high dirt-holding capacity 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
GL2ZL	1/4	36	CP1008ZL
GL3ZL	3/8	55	CP2010ZL
GL5ZL	1/2	72	CP2010ZL
GL7ZL	3/4	108	CP2020ZL
GL9ZL	1	216	CP3025ZL
GL11ZL	1 1/2	396	CP3040ZL
GL12ZL	1 1/2	576	CP4040ZL
GL13ZL	2	792	CP4050ZL
GL14ZL	2 1/2	1188	CP4065ZL
GL17ZL	2 1/2	1548	CP5065ZL
GL19ZL	3	2232	CP5080ZL

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_e. 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 float drain ZK15NO/KN; with optional differential pressure gauge ZD90GL and/or manual drain HV15. Optionally available without a drain (in this case, not ready-to-install).

Product-Specification

GL Filter Series – Element Type ZL

Materials Housing

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

Materials Element

Filter fleece	Borosilicate nanofibre, surface coated
Supporting net	Polypropylene
Outer sleeve	Polyester fibre, surface coated
Support screens	Stainless steel
End caps	Glass fibre reinforced polyamide
Adhesive	Epoxy resin
Sealing materials	NBR

Area of application Filter

Max. operat. pressure	16 bar _e	with float drain, with or without differential pressure gauge
	20 bar _e	with manual drain or without drain
Operating temperature	1.5 to 80 °C	with float drain, with or without differential pressure gauge
	1.5 to 100 °C	with manual drain or without drain

Performance data Element

Flow medium	Compressed air and gaseous nitrogen	
Filtration	Liquid and solid particulate	
Flow direction	from inside to outside	
Upstream filter required	WS (in case of wall flow)	
Particle size	1 µm	
Aerosol intake contents	40 mg/m ³	
Residual aerosol cont.	0.6 mg/m ³	
Filtration performance	99.925 %	
Differential press., dry	< 70 mbar _e	
Differential press., saturated	< 140 mbar _e	

Quality assurance and warranty

R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 12500-1, ISO 8573-1:2010 [2:-:3]
Element	12 months guaranteed filtration performance in line with filter element service-life
Housing	Corrosion warranty limited to the maximum housing lifetime of 10 years.

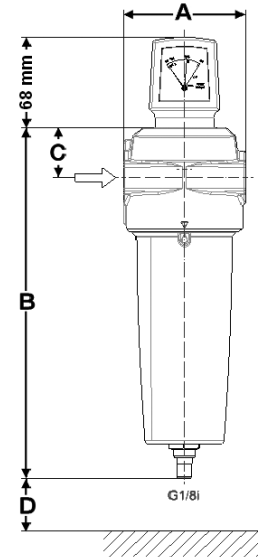


Product-Specification

GL Filter Series – Element Type ZL

Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2ZL	67	208	23	40	0.55
GL3ZL	89	270	38	50	1.3
GL5ZL	89	270	38	50	1.3
GL7ZL	89	270	38	50	1.3
GL9ZL	130	309	46	70	3.0
GL11ZL	130	399	46	70	3.2
GL12ZL	164	471	57	100	6.9
GL13ZL	164	563	57	100	7.3
GL14ZL	164	563	57	100	7.1
GL17ZL	192	685	72	120	10.3
GL19ZL	192	875	72	120	15.3



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	ZL	D H OA	-N	
Examples					
GL	7	ZL			Standard design G3/4i (BSP-P) port with float drain
GL	3	ZL	DH		G3/8i (BSP-P) port with differential pressure gauge and manual drain fitted
GL	17	ZL	OA	-N	2 1/2" NPT-F port, no drain (open port)

Replacement filter element

Type	Scope of delivery
CP1008ZL up to CP5080ZL	Contains respective spare element and suitable O-ring of 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).

Product - Specification

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Accessories

Differential pressure gauge fitted			
Model	Function	suitable for	Product key
ZD90GL	Mechanical differential pressure gauge	GL3 up to GL19	D

Other differential pressure gauges available as loose accessories.

Drain fitted			
Model	Function	suitable for	Product key
ZK15NO/KN	Internal float drain (standard)	GL2 up to GL19	–
HV15	Manual drain	GL2 up to GL19	H
Open	Without drain	GL2 up to GL19	OA

Other drains available as loose accessories.

Mounting kits for drains				
Model	Filter port	Drain port	Suitable for filter	Suitable for drain
MK-G15-G10	G1/2a	G3/8a	GL2 up to GL19	Trap22
MK-G15-G10I	G1/2a	G3/8i	GL2 up to GL19	ED3002
MK-G15-G15	G1/2a	G1/2a	GL2 up to GL19	ED2010, ED3004 up to ED3100
MKG15-G20	G1/2a	G3/4a	GL2 up to GL19	ED2020 and ED2060

No mounting kit required for float drain ZB1D since G1/2a fitting is integrated.

Wall mounting (incl. combination accessories where applicable)		Fixing-kits	
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		

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