

# 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 <sup>1</sup>	Nominal <sup>2</sup>	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 m<sup>3</sup>/h related to 1 bar<sub>a</sub> and 20 °C, compressed to 7 bar<sub>e</sub>. 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/2013; with optional differential pressure gauge ZD90GL and/or manual drain HV15. Optionally 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	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 <sub>e</sub>	with float drain, with or without differential pressure gauge
	20 bar <sub>e</sub>	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 <sup>3</sup>
Residual aerosol cont.	0.01 mg/m <sup>3</sup>
Filtration performance	99.9999 %
Differential press., dry	< 140 mbar <sub>e</sub>
Differential press., saturated	< 200 mbar <sub>e</sub>

### Quality assurance and warranty

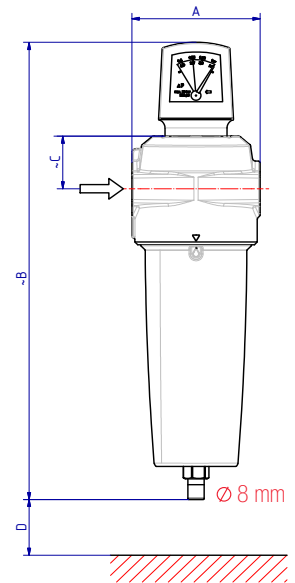
R&D, Manufacturing	DIN EN ISO 9001, DIN EN ISO 14001
Validation	ISO 12500-1, ISO 8573-1:2010 [1:--2]
Element	12 months guaranteed filtration performance in line with filter element service-life.
Housing	Corrosion warranty limited to the maximum housing lifetime of 10 years.

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### Dimensions [mm] and weights [kg]

Size	A	B	C	D	Weight
GL2XL	67	200	23	40	0.55
GL3XL	89	263	38	50	1.3
GL5XL	89	263	38	50	1.3
GL7XL	89	263	38	50	1.3
GL9XL	130	300	46	70	3.0
GL11XL	130	390	46	70	3.2
GL12XL	164	463	57	100	6.9
GL13XL	164	555	57	100	7.3
GL14XL	164	555	57	100	7.1
GL17XL	192	677	72	120	10.3
GL19XL	192	867	72	120	15.3



### Product key

Series	Size	Element type	Options <sup>1</sup>	Port <sup>2</sup>	<sup>1</sup> deviating from the standard only <sup>2</sup> 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<sub>e</sub>

Minimum operating pressure in bar <sub>e</sub>	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 <sub>e</sub>	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 m<sup>3</sup>/h for a minimum operating pressure of 4.3 bar<sub>e</sub>:  
285 m<sup>3</sup>/h x 1.32 = 376.2 m<sup>3</sup>/h – select size GL11 (see Table Performance overview).

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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
PD15NO	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

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

### US Product Information Centre

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

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