



Parker Hannifin Manufacturing Germany GmbH & Co. KG
Gas Separation and Filtration Division EMEA

Im Teelbruch 118

D-45219 Essen

Internet: www.parker.com/hzd

E-Mail: zander@parker.com

Telefon: 0049 (0)2054/934-0

Fax: 0049 (0)2054/934-164

A Division of Parker Hannifin Corporation

Microfilter for Technical Gases

TGA 104–118,	16–50 bar
TGH 104–118,	100–450 bar
TGS 214–232,	16–100 bar
TGE 308–326,	16–100 bar



purgas[®]

Operating Instructions

Revision 01—2016/ EN
398H271902

Assembly Drawings

TGA 104–118, 16 bar and 25–50 bar

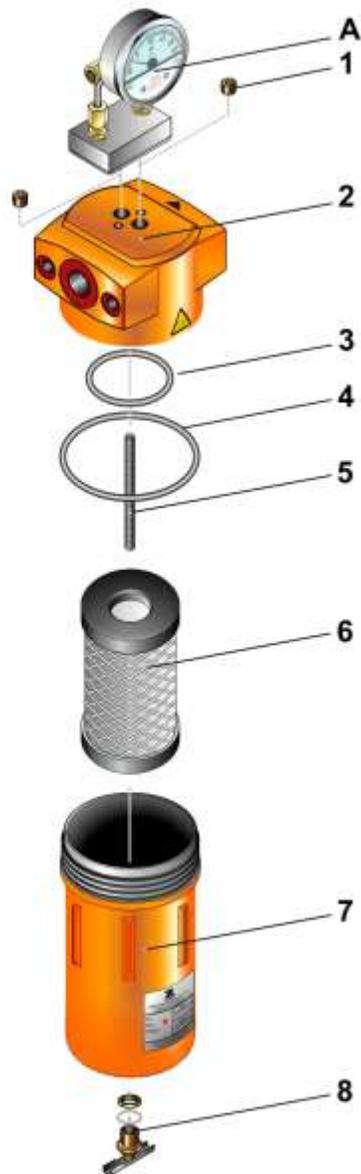
Item	Description
1	Locking screw
2	Upper housing
3	Filter element O-ring
4	Housing O-ring
5	Threaded rod
6	Filter element
7	Lower housing
8	16 bar Manual drain HV01-TG
—	25–50 bar: Manual drain EV05-TG
—	16 bar ATEX: Manual drain EV05-TG

Optional

A	Differential pressure gauge HZD80/50RTGG with adapter block
B	Earthing lugs (for ATEX compliant filters)
—	Condensate drain 11LD (16–25 bar)



Total view



Exploded view

Technical information

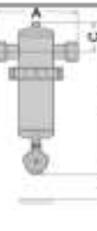


Note:

The temperature class as per ATEX depends on the temperature of the infed gas. The TG filters are generally suited for any temperature class because they do not feature a thermal source.

Filter types

TGA 102–118, 16–50 bar										
Type	Capacity (m ³ /h)	Connection (G/DN)	Dimensions (mm)				Weight (kg)			Element
			A	B	C	D	PN 16	PN 25	PN 50	
TGA 104	depending on the medium, upon request	G 1/4	87	201	21	75	1,0	0,8	0,8	TA 50_
TGA 106		G 3/8	87	201	21	90	1,0	1,2	1,2	TA 70_
TGA 108		G 1/2	87	271	21	160	1,2	1,2	1,2	TA 90_
TGA 110		G 3/4	130	306	43	135	3,8	1,4	1,4	TB 10_
TGA 112		G 1	130	406	43	235	4,5	4,1	4,1	TB 20_
TGA 114		G 1 1/2	130	506	43	335	5,0	4,9	4,9	TB 30_
TGA 116		G 1 1/2	130	706	43	525	6,4	5,0	5,0	TB 50_
TGA 118		G 2	164	751	48	520	9,6	6,6	6,6	TC 50_
TGH 104–118, 100–350 bar*										
Type	Capacity (m ³ /h)	Connection (G/DN)	Dimensions (mm)				Weight (kg)			Element
			A	B	C	D	PN 100	PN 250	PN 350	
TGH 104	depending on the medium, upon request	G 1/4	85	330	25	100	3,3	3,3	3,3	TA 50_
TGH 106		G 3/8	85	330	25	115	3,4	3,4	3,4	TA 70_
TGH 108		G 1/2	85	395	25	185	3,9	3,9	3,9	TA 90_
TGH 110		G 3/4	116	445	25	170	11,0	14,0	19,0	TB 10_
TGH 112		G 1	116	530	25	270	12,4	17,4	21,6	TB 20_
TGH 114		G 1 1/2	125	640	33	335	16,5	21,5	28,0	TB 30_
TGH 116		G 1 1/2	125	900	33	560	21,0	30,0	40,0	TB 50_
TGH 118		G 2	155	925	45	565	31,0	47,0	62,0	TC 50_

TGS 214–232, 16–100 bar									
Type	Capacity (m ³ /h)	Connection (G/DN)	Dimensions (mm)				Weight** (kg)	Quantity/element	
			A	B	C	D			
TGS 214	depending on the medium, upon request	DN 50	380	931	167	315	31,0	1/TC 50_	
TGS 216		DN 65	380	1180	175	530	38,0	1/TC 75_	
TGS 218		DN 80	420	1180	175	530	42,0	1/TD 60_	
TGS 220		DN 80	440	1320	205	530	44,0	1/TD 75_	
TGS 222		DN 100	500	1440	230	550	101,0	2/TC 75_	
TGS 224		DN 100	500	1440	230	550	102,0	3/TC 75_	
TGS 226		DN 150	640	1590	280	550	136,0	4/TC 75_	
TGS 228		DN 150	790	1650	300	550	220,0	6/TC 75_	
TGS 230		DN 200	790	1730	340	550	252,0	8/TC 75_	
TGS 232		DN 200	840	1780	360	550	353,0	10/TC 75_	
TGE 308–326, 16–100 bar									
Type	Capacity (m ³ /h)	Connection (G/DN)	Dimensions (mm)				Weight** (kg)	Element	
			A	B	C	D			
TGE 308	depending on the medium, upon request	G 3/4	151	300	55	85	3,0	TE 09_	
TGE 314		G 1 1/2	198	400	75	140	4,2	TE 13_	
TGE 316		G 2	233	570	80	280	7,1	TE 14_	
TGE 320		G 2 1/2	275	875	110	530	12,5	TE 18_	
TGE 322		G3	289	1135	110	780	13,9	TE 19_	
TGE 324		DN 80	350	739	145	410	32,6	TEL 19_	
TGE 326		DN 100	430	742	198	490	45,0	TEL 20_	

Specification of elements

Degree of filtration	Element type	Filtration efficiency ^{a)}	Temperature (°C)
Strainer filter	S	95 % ($\geq 1 \mu\text{m}$)	1–120
Coarse filter	P	99,99 % ($3 \mu\text{m}$)	1–60
	PL12	>99 % ($12/25 \mu\text{m}$)	1–120
	PL25		
	PL12-HTCR	>99 % ($12/25 \mu\text{m}$)	1–120
	PL25-HTCR		
	EPL01	>99 % ($1 \mu\text{m}$)	1–120
Fine filter	C	99,9999 % ($1 \mu\text{m}$) $\leq 0,5 \text{ mg/m}^3$	1–80
Ultra-fine filter	CF	99,99999 % ($0,01 \mu\text{m}$) $\leq 0,01 \text{ mg/m}^3$	1–80
Super-ultra-fine filter	CSF	$\geq 99,99999 \%$ ($0,01 \mu\text{m}$) $\leq 0,001 \text{ mg/m}^3$	1–80
High temperature range HTNX ^{b)}	C/CF/CSF		1–120
High temperature range HPCR ^{b)}	C/CF/CSF		1–120

** for 16 bar. Weights for other pressures on request.

Degree of filtration	Element type	Filtration efficiency ^{a)}	Temperature (°C)
Cartridge ^{c)}	TKM	Molecular mesh filling	1–55
	TKA	Charcoal filling	1–40
	CS	Soda lime filling	1–40
	OX	Carulite filling	1–40
	SG	Silica gel filling	1–40
	Special	Special fillings	as per filling

^{a)} for media with a mixture density of 9.56 kg/m³, flow rate < 0.5 m/s, mineral oil

^{b)} available as C, CF and CSF elements. Filtration degree depends on the element type.

^{c)} for TGA1 and TGH1 series only

Spare parts and options

Spare part ordering

Please specify the correct order code (see the filter designation on the type label) when ordering spare parts.

Available options

- Differential pressure gauge HZD80/50RTG... and HZDE80/350RTG...*
- Various manual drain valves
- Various wall mounts
- O-rings made of different materials (FPM, EPDM, NBR, VMQ, PTFE)

Other options and accessories upon request.



The control of electronic accessories for ATEX-compliant filters must be intrinsically safe.

* with electronic switch contact.