

**STG SERIES****BI-FLOW  
FILTER DRIERS**

(GreenTech range: for fluids GROUP 1 according to Directive 2014/68/EU or GROUP A3/A2L according to ANSI-ASHRAE 34-2016)

**FEATURES**

- HIGH EFFICIENT IN MOISTURE ABSORPTION, FILTERING IMPURITY, ACID, PAINT REMAINS AND MUD REMOVAL
- HYBRID DESICCANT
- DURABLE AND SOLID FILTER CORES
- FILTERING FINENESS: 20µm
- CORROSION RESISTANT PAINTING CAN SURVIVE SALT SPRAY TEST OF 500 HOURS
- CONNECTION TYPE: SOLDER

**GENERAL SPECIFICATIONS**

- Applicable for HC, HFC, HFO refrigerants such as: R290, R1234ze(E), R1234yf, R447A, R452B, R454B, R454C
- Ambient temperature min./max.: -30°C / +70°C
- Medium temperature TS min./max.: -30°C / +120°C
- Max. operating pressure PS: 4,83 MPa (48,3 bar)
- Installation position: preferably installed in liquid line
- Certifications: UL/CSA and PED declaration (all products have been covered by Art.4.3 PED Directive 2014/68/EU)

**TECNHICAL PARAMETERS** *Desiccant Selection Table*

	Medium Type	80% 3Å Desiccant and 20% Active Alumina	100% 3Å Desiccant
Refrigerant	HC	Applicable	Applicable
	HFC	Applicable	Applicable
	HFO	Applicable	Applicable
Oil <sup>3</sup>	Mineral oil or AB	Applicable	Applicable
	Pure POE or PAG	Applicable	Applicable
	POE or PAG with additive	Not Applicable	Applicable

**Note:** When the systems use oil with additive, it is not recommended to use a core with alumina

# BI-FLOW FILTER DRIERS



## Model Designation Legend

<b>1</b>	<b>Product Code</b>	<b>Filter Drier Series</b>	
	STG	Indicates bidirectional filter drier	
<b>2</b>	<b>Filter Core</b>	<b>Structure and Material</b>	
	B	Solid core, 100%3Å desiccant	
	F	Solid core, 80% 3Å desiccant and 20% active alumina	
<b>3</b>	<b>Internal Volume</b>	<b>Expressed in [ inch<sup>3</sup> ]</b>	<b>Expressed in [ cm<sup>3</sup> ]</b>
	03	3	49
	05	5	82
	08	8	131
	16	16	262
	30	30	492
<b>4</b>	<b>Connection Size</b>	<b>Pos. 5 shows "0": Solder [inch]</b>	
	02	1/4	
	25	5/16	
	03	3/8	
	04	1/2	
	05	5/8	
	06	3/4	
	07	7/8	
	09	1 1/8	
	<b>Connection Size</b>	<b>Pos. 5 shows "1": Solder [mm]</b>	
	06	6	
	(08) *	(5/16" version can be used e.g. STG-B08 <b>250</b> )	
	10	10	
	12	12	
	(16) *	(5/8" version can be used e.g. STG-B16 <b>050</b> )	
(22) *	(7/8" version can be used e.g. STG-B16 <b>070</b> )		
28	28		
<b>5</b>	<b>Pipe Connection</b>	<b>Type</b>	
	0	Solder with inch connections	
	1 *	Solder with metric connections	
<b>6</b>	<b>Version Number</b>	<b>Description</b>	
	901	Standard product	

**Note:** \* Solder connections which fit to metric and inch are marked with inch product codes e.g. 8, 16 and 22 mm.

# BI-FLOW FILTER DRIERS



## MODEL DESIGNATION EXAMPLE

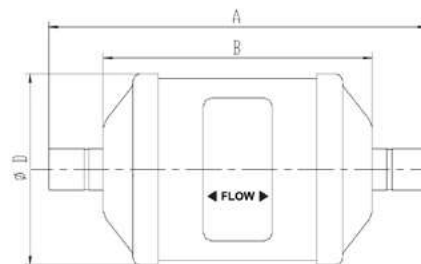
Position Number						According to Model Designation Legend
1	2	3	4	5	6	
STG	B	05	06	1	901	Bidirectional filter drier
STG	<b>B</b>	05	06	1	901	Solid filter core with 100% 3Å desiccant
STG	B	<b>05</b>	06	1	901	3 inch <sup>3</sup> internal volume
STG	B	05	<b>06</b>	1	901	When Pos. 5 is "1": connection size 6mm
STG	B	05	06	<b>1</b>	901	Solder connection metric
STG	B	05	06	1	<b>901</b>	Standard product

## GENERAL CHARACTERISTICS OF STG-B FILTER - SOLDER CONNECTION

Filter	Model [inch]	Part Number (multi package)* [inch]	Model [mm]	Part Number (multi package)* [mm]	Nominal Volume		Connection		Dimensions & Weight <sup>1)</sup>				PED Category <sup>2)</sup>
					[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	Solder		ØD [mm]	B [mm]	A [mm]	Weight [g]	
							[inch]	[mm]					
STGB052s	STG-B05 020-901	10235005902	STG-B05 061-901	10235007602	5	82	1/4	6	69	76	114	450	Art. 4.3
STGB053s	STG-B05 030-901	10235006002	STG-B05 101-901	10235007802	5	82	3/8	10	69	76	114	450	Art. 4.3
STGB054s	STG-B05 040-901	10235006102	STG-B05 121-901	10235007902	5	82	1/2	12	69	76	124	450	Art. 4.3
STGB082s	STG-B08 020-901	10235006202	STG-B08 061-901	10235007702	8	131	1/4	6	69	98	136	580	Art. 4.3
STGB0825s	STG-B08 250-901	10235007402	STG-B08 250-901	10235007402	8	131	5/16	8	69	98	136	580	Art. 4.3
STGB083s	STG-B08 030-901	10235006302	STG-B08 101-901	10235008002	8	131	3/8	10	69	98	136	580	Art. 4.3
STGB084s	STG-B08 040-901	10235006402	STG-B08 121-901	10235008102	8	131	1/2	12	69	98	146	580	Art. 4.3
STGB163s	STG-B16 030-901	10235006602	STG-B16 101-901	10235008202	16	262	3/8	10	81	118	156	900	Art. 4.3
STGB164s	STG-B16 040-901	10235006502	STG-B16 121-901	10235008402	16	262	1/2	12	81	118	166	900	Art. 4.3
STGB165s	STG-B16 050-901	10235006702	STG-B16 050-901	10235006702	16	262	5/8	16	81	118	166	900	Art. 4.3
STGB167s	STG-B16 070-901	10235006802	STG-B16 070-901	10235006802	16	262	7/8	22	81	118	178	900	Art. 4.3
STGB303s	STG-B30 030-901	10235006902	STG-B30 101-901	10235008302	30	492	3/8	10	81	193	231	1700	Art. 4.3
STGB304s	STG-B30 040-901	10235007002	STG-B30 121-901	10235008502	30	492	1/2	12	81	193	241	1700	Art. 4.3
STGB305s	STG-B30 050-901	10235007102	STG-B30 050-901	10235007102	30	492	5/8	16	81	193	241	1700	Art. 4.3
STGB306s	STG-B30 060-901	10235007202	-	-	30	492	3/4	-	81	193	253	1700	Art. 4.3
STGB307s	STG-B30 070-901	10235007302	STG-B30 070-901	10235007302	30	492	7/8	22	81	193	253	1700	Art. 4.3
STGB309s	STG-B30 090-901	10235007502	STG-B30 281-901	10235010202	30	492	1 1/8	28	81	193	263	1700	Art. 4.3

**Note:**

- 1) Dimensions are rounded up to integral mm
- 2) PED Directive 2014/68/EU. Category evaluated considering product as a "vessel"



Solder Connection

# BI-FLOW FILTER DRIERS

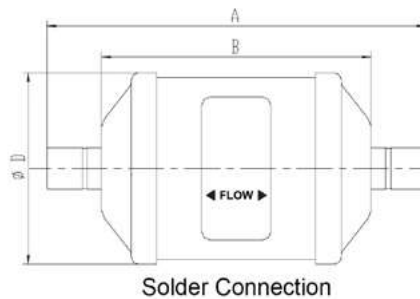


## GENERAL CHARACTERISTICS OF STG-F FILTER - SOLDER CONNECTION

Filter	Model <sup>1)</sup> [inch]	Part Number (multi package)* [inch]	Model <sup>1)</sup> [mm]	Part Number (multi package)* [mm]	Nominal Volumen		Connection		Dimensions & Weight <sup>2)</sup>				PED Category <sup>3)</sup>
							Solder		ØD	B	A	Weight	
					[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
STGF052s	STG-F05 020-901	10235010302	STG-F05 061-901	10235010602	5	82	1/4	6	69	76	114	450	Art. 4.3
STGF053s	STG-F05 030-901	10235010402	STG-F05 101-901	10235010702	5	82	3/8	10	69	76	114	450	Art. 4.3
STGF054s	STG-F05 040-901	10235010502	STG-F05 121-901	10235010802	5	82	1/2	12	69	76	124	450	Art. 4.3
STGF082s	STG-F08 020-901	10235011202	STG-F08 061-901	10235011602	8	131	1/4	6	69	98	136	580	Art. 4.3
STGF0825s	STG-F08 250-901	10235011302	STG-F08 250-901	10235011302	8	131	5/16	8	69	98	136	580	Art. 4.3
STGF083s	STG-F08 030-901	10235011402	STG-F08 101-901	10235011702	8	131	3/8	10	69	98	136	580	Art. 4.3
STGF084s	STG-F08 040-901	10235011502	STG-F08 121-901	10235011802	8	131	1/2	12	69	98	146	580	Art. 4.3
STGF163s	STG-F16 030-901	10235012202	STG-F16 101-901	10235012602	16	262	3/8	10	81	118	156	900	Art. 4.3
STGF164s	STG-F16 040-901	10235012302	STG-F16 121-901	10235012702	16	262	1/2	12	81	118	166	900	Art. 4.3
STGF165s	STG-F16 050-901	10235012402	STG-F16 050-901	10235012402	16	262	5/8	16	81	118	166	900	Art. 4.3
STGF167s	STG-F16 070-901	10235012502	STG-F16 070-901	10235012502	16	262	7/8	22	81	118	178	900	Art. 4.3
STGF303s	STG-F30 030-901	10235013902	STG-F30 101-901	10235013102	30	492	3/8	10	81	193	231	1700	Art. 4.3
STGF304s	STG-F30 040-901	10235014002	STG-F30 121-901	10235013202	30	492	1/2	12	81	193	241	1700	Art. 4.3
STGF305s	STG-F30 050-901	10235014102	STG-F30 050-901	10235014102	30	492	5/8	16	81	193	241	1700	Art. 4.3
STGF306s	STG-F30 060-901	10235014202	-	-	30	492	3/4	-	81	193	253	1700	Art. 4.3
STGF307s	STG-F30 070-901	10235012902	STG-F30 070-901	10235012902	30	492	7/8	22	81	193	253	1700	Art. 4.3
STGF309s	STG-F30 090-901	10235013002	STG-F30 281-901	10235013402	30	492	1 1/8	28	81	193	263	1700	Art. 4.3

**Note:**

- 1) Delivery time on request
- 2) Dimensions are rounded up to integral mm
- 3) PED Directive 2014/68/EU. Category evaluated considering product as a “vessel”



## BI-FLOW FILTER DRIERS



### SELECTION TABLE

Model	Capacity <sup>1) 2)</sup> [kW]		
	R290	R1234yf	R1234ze(E)
STGB052s	9	5.45	6.6
STGB053s	20.1	12.1	14.7
STGB054s	30.4	18.4	22.3
STGB082s	10.7	6.45	7.85
STGB0825s	19.2	11.6	14.1
STGB083s	21	12.6	15.3
STGB084s	31.2	18.85	23
STGB163s	24	14.5	17.6
STGB164s	36.8	22.2	27
STGB165s	41.6	25	30.4
STGB167s	51.4	31	37.6
STGB303s	30.4	18.4	22.3
STGB304s	37.6	22.7	27.5
STGB305s	43.2	26	31.6
STGB306s	48.3	29	35.2
STGB307s	56.6	34	41.4
STGB309s	66	39.8	48.3

### SELECTION TABLE

Model	Capacity <sup>1) 2)</sup> [kW]		
	R290	R1234yf	R1234ze(E)
STGF052s	9	5.45	6.6
STGF053s	20.1	12.1	14.7
STGF054s	30.4	18.4	22.3
STGF082s	10.7	6.45	7.85
STGF0825s	19.2	11.6	14.1
STGF083s	21	12.6	15.3
STGF084s	31.2	18.85	23
STGF163s	24	14.5	17.6
STGF164s	36.8	22.2	27
STGF165s	41.6	25	30.4
STGF167s	51.4	31	37.6
STGF303s	30.4	18.4	22.3
STGF304s	37.6	22.7	27.5
STGF305s	43.2	26	31.6
STGF306s	48.3	29	35.2
STGF307s	56.6	34	41.4
STGF309s	66	39.8	48.3

**Note:** 1) the above data is based on clean system at ideal conditions; with impurities, accumulated in the filter, the capacity may decrease  
 2) given capacity is for all available types of connection for the same model: solder [inch] and equivalent solder [mm]

### SELECTION FORMULAS

Filter Driers for liquid line are manufactured in compliance with ARI Standard 710. Flow rate of liquid refrigerant at a differential pressure of 0,07bar (1psi) is indicated by kW which is based on the temperature of liquid refrigerant 30°C (86°F), the evaporating temperature of refrigerant is -15°C (5°F).

## STG SERIES

# BI-FLOW FILTER DRIERS

(Standard range: for fluids GROUP 2 according to Directive 2014/68/EU or GROUP A1 according to ANSI-ASHRAE 34-2016)

The filter driers of series STG are used in refrigeration system with bidirectional flow to absorb moisture and acid in the system and to filter out the impurities.



## FEATURES

- HIGH EFFICIENT IN MOISTURE ABSORPTION, FILTERING IMPURITY, ACID, PAINT REMAINS AND MUD REMOVAL
- HYBRID DESICCANT
- DURABLE AND SOLID FILTER CORES
- FILTERING FINENESS: 20µm
- CORROSION RESISTANT PAINTING CAN SURVIVE SALT SPRAY TEST OF 500 HOURS
- CONNECTION TYPE: FLARE OR SOLDER

## GENERAL SPECIFICATIONS

- Applicable for all common HCFC, HFC, HFO refrigerants such as: R22, R134a, R404A, R407C, R410A, R507, R407A/F, R448A/R449A, R452A, R450A/R513A
- Ambient temperature min./max.: -30°C / +70°C
- Medium temperature TS min./max.: -30°C / +120°C
- Max. operating pressure PS: 4,83 MPa (48,3 bar)
- Installation position: preferably installed in liquid line
- Certifications: UL/CSA and PED declaration

## TECNHICAL PARAMETERS *Desiccant Selection Table*

	Medium Type	80% 3Å Desiccant and 20% Active Alumina	100% 3Å Desiccant
Refrigerant	HFC	Applicable	Applicable
	HCFC	Applicable	Applicable
	HC	Applicable	Applicable
Oil <sup>3</sup>	Mineral oil or AB	Applicable	Applicable
	Pure POE or PAG	Applicable	Applicable
	POE or PAG with additive	Not Applicable	Applicable

**Note:** When the systems use oil with additive, it is not recommended to use a core with alumina

## BI-FLOW FILTER DRIERS



### Model Designation Legend

1	Product Code	Filter Drier Series	
	STG	Indicates bidirectional filter drier	
2	Filter Core	Structure and Material	
	B	Solid core, 100%3Å desiccant	
	F	Solid core, 80% 3Å desiccant and 20% active alumina	
3	Internal Volume	Expressed in [ inch <sup>3</sup> ]	Expressed in [ cm <sup>3</sup> ]
	03	3	49
	05	5	82
	08	8	131
	16	16	262
	30	30	492
4	Connection Size	Pos. 5 shows "0": Solder [inch]	Pos. 5 shows "4": SAE Flare [inch]
	02	1/4	1/4
	25	5/16	-
	03	3/8	3/8
	04	1/2	1/2
	05	5/8	5/8
	06	3/4	3/4
	07	7/8	7/8
	09	1 1/8	-
	Connection Size	Pos. 5 shows "1": Solder [mm]	
	06	6	
	(08) *	(5/16" version can be used e.g. STG-B08 <b>250</b> )	
	10	10	
	12	12	
	(16) *	(5/8" version can be used e.g. STG-B16 <b>050</b> )	
	(22) *	(7/8" version can be used e.g. STG-B16 <b>070</b> )	
28	28		
5	Pipe Connection	Type	
	0	Solder with inch connections	
	1 *	Solder with metric connections	
	4	SAE flare connections	
6	Version Number	Description	
	901	Standard product	

**Note:** \* Solder connections which fit to metric and inch are marked with inch product codes e.g. 8, 16 and 22 mm.

# BI-FLOW FILTER DRIERS



## MODEL DESIGNATION EXAMPLE

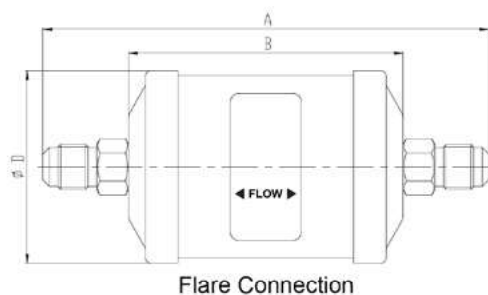
Position Number						According to Model Designation Legend
1	2	3	4	5	6	
<b>STG</b>	B	05	06	1	901	Bidirectional filter drier
STG	<b>B</b>	05	06	1	901	Solid filter core with 100% 3Å desiccant
STG	B	<b>05</b>	06	1	901	5 inch <sup>3</sup> internal volume
STG	B	05	<b>06</b>	1	901	When Pos. 5 is "1": connection size 6mm
STG	B	05	06	<b>1</b>	901	Solder connection metric
STG	B	05	06	1	<b>901</b>	Standard product

## GENERAL CHARACTERISTICS OF STG-B FILTER - FLARE CONNECTION

Filter	Model	Part Number (multi package)*	Nominal Volume		Connection	Dimensions & Weight <sup>1)</sup>				PED Category <sup>2)</sup>
			[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	SAE Flare	ØD	B	A	Weight	
					[inch]	[mm]	[mm]	[mm]	[g]	
STGB052	STG-B05 024-901	10235009002	5	82	1/4	69	76	123	450	Art. 4.3
STGB053	STG-B05 034-901	10235009102	5	82	3/8	69	76	137	450	Art. 4.3
STGB054	STG-B05 044-901	10235009202	5	82	1/2	69	76	145	450	Art. 4.3
STGB082	STG-B08 024-901	10235008702	8	131	1/4	69	98	145	580	Art. 4.3
STGB083	STG-B08 034-901	10235008802	8	131	3/8	69	98	159	580	Art. 4.3
STGB084	STG-B08 044-901	10235008902	8	131	1/2	69	98	167	580	Art. 4.3
STGB163	STG-B16 034-901	10235009302	16	262	3/8	81	118	179	900	Art. 4.3
STGB164	STG-B16 044-901	10235009402	16	262	1/2	81	118	187	900	Art. 4.3
STGB165	STG-B16 054-901	10235008602	16	262	5/8	81	118	196	900	Art. 4.3
STGB303	STG-B30 034-901	10235009502	30	492	3/8	81	193	254	1700	Art. 4.3
STGB304	STG-B30 044-901	10235009602	30	492	1/2	81	193	262	1700	Art. 4.3
STGB305	STG-B30 054-901	10235009702	30	492	5/8	81	193	271	1700	Art. 4.3
STGB306	STG-B30 064-901	10235009802	30	492	3/4	81	193	271	1700	Art. 4.3

**Note:**

- 1) Dimensions are rounded up to integral mm
- 2) PED Directive 2014/68/EU





# BI-FLOW FILTER DRIERS

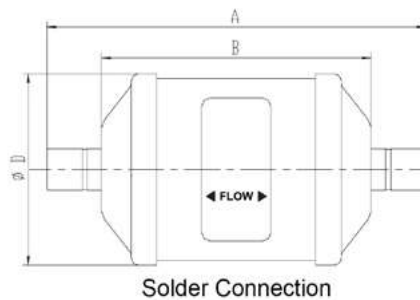


## GENERAL CHARACTERISTICS OF STG-B FILTER - SOLDER CONNECTION

Filter	Model [inch]	Part Number (multi package)* [inch]	Model [mm]	Part Number (multi package)* [mm]	Nominal Volume		Connection		Dimensions & Weight <sup>1)</sup>				PED Category <sup>2)</sup>
							Solder		ØD	B	A	Weight	
					[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
STGB052s	STG-B05 020-901	10235005902	STG-B05 061-901	10235007602	5	82	1/4	6	69	76	114	450	Art. 4.3
STGB053s	STG-B05 030-901	10235006002	STG-B05 101-901	10235007802	5	82	3/8	10	69	76	114	450	Art. 4.3
STGB054s	STG-B05 040-901	10235006102	STG-B05 121-901	10235007902	5	82	1/2	12	69	76	124	450	Art. 4.3
STGB082s	STG-B08 020-901	10235006202	STG-B08 061-901	10235007702	8	131	1/4	6	69	98	136	580	Art. 4.3
STGB0825s	STG-B08 250-901	10235007402	STG-B08 250-901	10235007402	8	131	5/16	8	69	98	136	580	Art. 4.3
STGB083s	STG-B08 030-901	10235006302	STG-B08 101-901	10235008002	8	131	3/8	10	69	98	136	580	Art. 4.3
STGB084s	STG-B08 040-901	10235006402	STG-B08 121-901	10235008102	8	131	1/2	12	69	98	146	580	Art. 4.3
STGB163s	STG-B16 030-901	10235006602	STG-B16 101-901	10235008202	16	262	3/8	10	81	118	156	900	Art. 4.3
STGB164s	STG-B16 040-901	10235006502	STG-B16 121-901	10235008402	16	262	1/2	12	81	118	166	900	Art. 4.3
STGB165s	STG-B16 050-901	10235006702	STG-B16 050-901	10235006702	16	262	5/8	16	81	118	166	900	Art. 4.3
STGB167s	STG-B16 070-901	10235006802	STG-B16 070-901	10235006802	16	262	7/8	22	81	118	178	900	Art. 4.3
STGB303s	STG-B30 030-901	10235006902	STG-B30 101-901	10235008302	30	492	3/8	10	81	193	231	1700	Art. 4.3
STGB304s	STG-B30 040-901	10235007002	STG-B30 121-901	10235008502	30	492	1/2	12	81	193	241	1700	Art. 4.3
STGB305s	STG-B30 050-901	10235007102	STG-B30 050-901	10235007102	30	492	5/8	16	81	193	241	1700	Art. 4.3
STGB306s	STG-B30 060-901	10235007202	-	-	30	492	3/4	-	81	193	253	1700	Art. 4.3
STGB307s	STG-B30 070-901	10235007302	STG-B30 070-901	10235007302	30	492	7/8	22	81	193	253	1700	Art. 4.3
STGB309s	STG-B30 090-901	10235007502	STG-B30 281-901	10235010202	30	492	1 1/8	28	81	193	263	1700	Art. 4.3

**Note:**

- 1) Dimensions are rounded up to integral mm
- 2) PED Directive 2014/68/EU



# BI-FLOW FILTER DRIERS

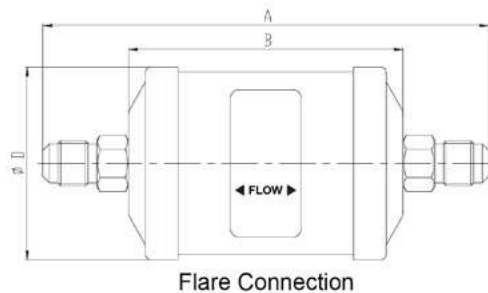


## GENERAL CHARACTERISTICS OF STG-F FILTER - FLARE CONNECTION

Filter	Model <sup>1)</sup>	Part Number (multi package)*	Nominal Volume		Connection	Dimensions & Weight <sup>2)</sup>				PED Category <sup>3)</sup>
			[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	SAE Flare	ØD	B	A	Weight	
					[inch]	[mm]	[mm]	[mm]	[g]	
STGF052	STG-F05 024-901	10235010902	5	82	1/4	69	76	123	450	Art. 4.3
STGF053	STG-F05 034-901	10235011002	5	82	3/8	69	76	137	450	Art. 4.3
STGF054	STG-F05 044-901	10235011102	5	82	1/2	69	76	145	450	Art. 4.3
STGF082	STG-F08 024-901	10235011902	8	131	1/4	69	98	145	580	Art. 4.3
STGF083	STG-F08 034-901	10235012002	8	131	3/8	69	98	159	580	Art. 4.3
STGF084	STG-F08 044-901	10235012102	8	131	1/2	69	98	167	580	Art. 4.3
STGF163	STG-F16 034-901	10235014902	16	262	3/8	81	118	179	900	Art. 4.3
STGF164	STG-F16 044-901	10235015002	16	262	1/2	81	118	187	900	Art. 4.3
STGF165	STG-F16 054-901	10235015102	16	262	5/8	81	118	196	900	Art. 4.3
STGF303	STG-F30 034-901	10235013802	30	492	3/8	81	193	254	1700	Art. 4.3
STGF304	STG-F30 044-901	10235013502	30	492	1/2	81	193	262	1700	Art. 4.3
STGF305	STG-F30 054-901	10235013602	30	492	5/8	81	193	271	1700	Art. 4.3
STGF306	STG-F30 064-901	10235013702	30	492	3/4	81	193	271	1700	Art. 4.3

**Note:**

- 1) Delivery time on request
- 2) Dimensions are rounded up to integral mm
- 3) PED Directive 2014/68/EU



# BI-FLOW FILTER DRIERS

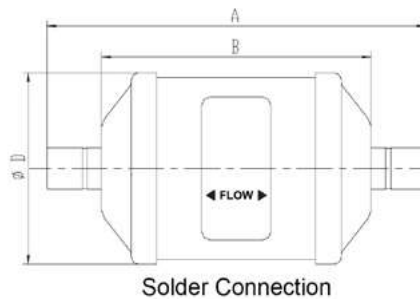


## GENERAL CHARACTERISTICS OF STG-F FILTER - SOLDER CONNECTION

Filter	Model <sup>1)</sup> [inch]	Part Number (multi package)* [inch]	Model <sup>1)</sup> [mm]	Part Number (multi package)* [mm]	Nominal Volumen		Connection		Dimensions & Weight <sup>2)</sup>				PED Category <sup>3)</sup>
							Solder		ØD	B	A	Weight	
					[inch <sup>3</sup> ]	[cm <sup>3</sup> ]	[inch]	[mm]	[mm]	[mm]	[mm]	[g]	
STGF052s	STG-F05 020-901	10235010302	STG-F05 061-901	10235010602	5	82	1/4	6	69	76	114	450	Art. 4.3
STGF053s	STG-F05 030-901	10235010402	STG-F05 101-901	10235010702	5	82	3/8	10	69	76	114	450	Art. 4.3
STGF054s	STG-F05 040-901	10235010502	STG-F05 121-901	10235010802	5	82	1/2	12	69	76	124	450	Art. 4.3
STGF082s	STG-F08 020-901	10235011202	STG-F08 061-901	10235011602	8	131	1/4	6	69	98	136	580	Art. 4.3
STGF0825s	STG-F08 250-901	10235011302	STG-F08 250-901	10235011302	8	131	5/16	8	69	98	136	580	Art. 4.3
STGF083s	STG-F08 030-901	10235011402	STG-F08 101-901	10235011702	8	131	3/8	10	69	98	136	580	Art. 4.3
STGF084s	STG-F08 040-901	10235011502	STG-F08 121-901	10235011802	8	131	1/2	12	69	98	146	580	Art. 4.3
STGF163s	STG-F16 030-901	10235012202	STG-F16 101-901	10235012602	16	262	3/8	10	81	118	156	900	Art. 4.3
STGF164s	STG-F16 040-901	10235012302	STG-F16 121-901	10235012702	16	262	1/2	12	81	118	166	900	Art. 4.3
STGF165s	STG-F16 050-901	10235012402	STG-F16 050-901	10235012402	16	262	5/8	16	81	118	166	900	Art. 4.3
STGF167s	STG-F16 070-901	10235012502	STG-F16 070-901	10235012502	16	262	7/8	22	81	118	178	900	Art. 4.3
STGF303s	STG-F30 030-901	10235013902	STG-F30 101-901	10235013102	30	492	3/8	10	81	193	231	1700	Art. 4.3
STGF304s	STG-F30 040-901	10235014002	STG-F30 121-901	10235013202	30	492	1/2	12	81	193	241	1700	Art. 4.3
STGF305s	STG-F30 050-901	10235014102	STG-F30 050-901	10235014102	30	492	5/8	16	81	193	241	1700	Art. 4.3
STGF306s	STG-F30 060-901	10235014202	-	-	30	492	3/4	-	81	193	253	1700	Art. 4.3
STGF307s	STG-F30 070-901	10235012902	STG-F30 070-901	10235012902	30	492	7/8	22	81	193	253	1700	Art. 4.3
STGF309s	STG-F30 090-901	10235013002	STG-F30 281-901	10235013402	30	492	1 1/8	28	81	193	263	1700	Art. 4.3

**Note:**

- 1) Delivery time on request
- 2) Dimensions are rounded up to integral mm
- 3) PED Directive 2014/68/EU. Category evaluated considering product as a “vessel”



# BI-FLOW FILTER DRIERS



## SELECTION TABLE

Model	Capacity [ kW ] <sup>1) 3)</sup>					Moisture Absorption (gram H <sub>2</sub> O)									
	R134a	R404A	R22	R407C <sup>2)</sup>	R410A	R134a		R404A		R407C <sup>2)</sup>		R22			
		R507A				R507A		R410A		R410A		R410A		R410A	
						75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
						23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C	23,9°C	51,7°C
STGB052s	7,4	5,3	7,7	7,7	7,7	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB052	7,4	5,3	7,7	7,7	7,7	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB053s	16,5	11,6	16,9	16,5	16,9	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB053	16,5	11,6	16,9	16,5	16,9	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB054s	25,0	17,6	25,3	25,0	25,3	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB054	25,0	17,6	25,3	25,0	25,3	4,3	4,0	4,1	3,8	3,7	3,4	4,1	3,7		
STGB082s	8,8	6,0	8,8	8,8	8,8	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB082	8,8	6,0	8,8	8,8	8,8	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB0825s	15,8	10,9	16,2	15,8	16,2	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB083s	17,2	12,0	17,6	17,2	17,6	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB083	17,2	12,0	17,6	17,2	17,6	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB084s	25,7	17,9	26,4	26,0	26,4	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB084	25,7	17,9	26,4	26,0	26,4	9,8	9,0	9,2	8,6	8,5	7,8	9,2	8,5		
STGB163s	19,7	13,7	20,0	19,7	20,0	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB163	19,7	13,7	20,0	19,7	20,0	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB164s	30,2	21,5	30,9	30,6	30,9	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB164	30,2	21,5	30,9	30,6	30,9	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB165s	34,1	23,9	34,8	34,5	35,2	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB165	34,1	23,9	34,8	34,5	35,2	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB167s	42,2	29,9	42,9	42,6	43,3	17,6	16,3	16,6	15,5	15,2	14,0	16,6	14,2		
STGB303s	25,0	17,6	25,3	25,0	25,7	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB303	25,0	17,6	25,3	25,0	25,7	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB304s	30,9	21,8	31,7	31,7	32,0	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB304	30,9	21,8	31,7	31,7	32,0	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB305s	35,5	25,0	36,2	35,9	36,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB305	35,5	25,0	36,2	35,9	36,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB306s	39,6	28,1	40,1	39,7	40,4	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB306	39,6	28,1	40,1	39,7	40,4	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB307s	46,4	32,4	47,1	46,8	47,5	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		
STGB309s	54,2	38,0	55,2	54,5	55,6	41,3	38,4	38,9	36,5	35,9	32,9	39,1	33,1		

- Note:**
- 1) The above data is based on filter driers with inch connections and clean system at ideal conditions; with impurities accumulated in the filter, the capacity may decrease.
  - 2) R407C data based on dew point conditions
  - 3) given capacity is for all available types of connection for the same model: flare/solder [inch] and equivalent solder [mm]

## BI-FLOW FILTER DRIERS



### SELECTION TABLE

Model	Capacity <sup>1) 2)</sup> [kW]						
	R407A	R407F	R448A	R449A	R452A	R450A	R513A
STGB052	7.1	7.85	7.15	7.05	5.4	6.85	6.15
STGB053	15.9	17.5	15.9	15.7	12.1	16.5	13.7
STGB054	24	26.5	24.1	23.8	18.3	23.3	20.8
STGB082	8.45	9.3	8.5	8.35	6.45	8.2	7.3
STGB0825	15.2	16.7	15.2	15	11.55	14.7	13.1
STGB083	16.5	18.2	16.6	16.4	12.6	16	14.3
STGB084	24.7	27.3	24.7	24.5	18.8	23.8	21.4
STGB163	19	20.8	19	18.7	14.4	18.3	16.4
STGB164	29	32	29	28.7	22.1	28	25
STGB165	32.7	36	32.8	32.5	25	31.6	28.4
STGB167	40.6	44.6	40.6	40.2	30.8	39.2	35
STGB303	24	26.4	24.1	23.8	18.3	23.3	20.7
STGB304	29.7	32.7	29.7	29.4	22.6	28.7	25.6
STGB305	34.2	37.5	34.2	33.8	26	33	29.5
STGB306	38	42	38.2	37.8	29	36.8	33
STGB307	44.6	49	44.6	44	34	43	38.6
STGB309	52	57.5	52.4	51.7	39.6	50.2	45

**Note:** 1) the above data is based on clean system at ideal conditions: with impurities accumulated in the filter, the capacity may decrease  
 2) given capacity is for all available types of connection for the same model: flare/solder [inch] and equivalent solder [mm]

### SELECTION FORMULAS

Filter driers for liquid line are manufactured in compliance with ARI Standard 710. Maximum flow rate of liquid refrigerant at a differential pressure of 0,07bar (1psi) is indicated by kW (ton) which is based on the temperature of liquid refrigerant 30°C (86°F), the evaporating temperature of -15°C (5°F) and the following mass flow:

- 0,40 kg/min/kW (3.1 lb/min/ton) R134a
- 0,53 kg/min/kW (4.1 lb/min/ton) R404A, R507A
- 0,39 kg/min/kW (3.0 lb/min/ton) R22, R407C
- 0,36 kg/min/kW (2.8 lb/min/ton) R410A

**Note:** Data on water absorption is based on the following EPD (method: ASHRAE Standard 63.1):

- 60ppm R22
- 50ppm R134a
- 50ppm R404A
- 50ppm R407C
- 50ppm R410A
- 50ppm R507A