



Your FUEL FILTER / WATER SEPARATOR Specialist



[www.griffinfilter.com](http://www.griffinfilter.com)

Product Guide  
2012



# About GRIFFIN GROUP



GRIFFIN group is a global provider of products and services for the filtration industry, utilizing proprietary technology developed from over 30 years of professional experience purifying petroleum-contaminated seawater. In 2003, GRIFFIN scientists developed **MICROBLOC**<sup>®</sup>, a revolutionary filtration technology, that is used exclusively in Griffin filtration systems. **MICROBLOC**<sup>®</sup> multigrade filtration media elements have tested to be 99.8% effective in separating water from diesel and bio-diesel fuels and can remove solid contaminants as small as 2 microns in size.

To best serve its customers, Griffin has developed an international distribution network. With Griffin group locations in Asia,

Africa, the Middle East, Europe and the Americas, Griffin filtration technology and support is available to customers worldwide.

Griffin manufactures its proprietary line of filtration systems as well as several OEM/OES products in its own factory. This factory houses production lines for metal die casting, injection molding and filtration product manufacturing. Griffin products include cast filter parts, filtration media, filter elements, as well as completed filters and water separator systems. Griffin's lab-tested filtration systems help save fuel, reduce maintenance costs, and prolong engine life.

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## **GRIFFIN Fuel Filter / Water Separators are ideal for:**

- Marine Engines
- Power Generators
- Fuel Storage Polishing
- Automotive Engines
- Construction / Earth Moving Equipment
- Agricultural / Forestry Equipment
- Biodiesel Applications

Especially your equipment using “**Green Engines**”

**MICROBLOC**<sup>®</sup> Technology



# GRIFFIN'S Technology.....



Four stage filtration process:

**GRIFFIN filters** remove contaminants and separate water using a four stage process.

## 1. CENTRIFUGAL STAGE:

Larger solid contaminants and free water are separated.

## 2. COALESCING STAGE:

Smaller water droplets and solid contaminants are filtered out by **MICROBLOC**<sup>®</sup> multigrade filtration media, causing them to coalesce together and fall into the collection bowl.

## 3. MICRO ACTION I STAGE:

Micro action filtration removes the smallest water droplets and solid contaminants from fuel.

## 4. MICRO ACTION II STAGE:

A second micro action filtration ensures nearly 100% pure fuel filtration.



**MICROBLOC**<sup>®</sup> Technology



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<b>Spin-on series</b>	<ul style="list-style-type: none"> <li>- G series, GP series, GBA series, GRE series &amp; elements</li> <li>- Parts</li> <li>- Filter aluminum parts</li> </ul>	<p>10 - 13</p> <p>14</p> <p>15</p>
<b>Turbine series</b>	<ul style="list-style-type: none"> <li>- Basic turbine S4 series (single) &amp; elements</li> <li>- Basic turbine S4 series (manifold) &amp; elements</li> <li>- Parts</li> </ul>	<p>16</p> <p>17</p> <p>18</p>

## Marine Filtration Products 19 - 27



<b>Spin-on series</b>	<ul style="list-style-type: none"> <li>- Marine gasoline spin-on series &amp; elements</li> </ul>	<p>20 - 21</p>
<b>Turbine series</b>	<ul style="list-style-type: none"> <li>- Marine turbine S4MA series (single) &amp; elements</li> <li>- Marine turbine S4MA series (manifold) &amp; elements</li> <li>- Marine turbine MAC series (single) &amp; elements</li> <li>- Marine turbine MAC series (manifold) &amp; elements</li> <li>- Marine turbine MAS series (single) &amp; elements</li> <li>- Marine turbine MAS series (manifold) &amp; elements</li> </ul>	<p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p>

## GFS Series & GLS Series 28



<b>Fuel filter / water separator system</b>	<ul style="list-style-type: none"> <li>- Single, manifold &amp; elements</li> </ul>
<b>Lube oil filter / water separator system</b>	<ul style="list-style-type: none"> <li>- Single &amp; elements</li> </ul>

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# MICROBLOC<sup>®</sup> The Clear Advantage



## 1. Separate Water From Fuel At 99.8% Efficiency

Water can cause injector nozzle and fuel pump corrosion, ending in equipment failure and downtime. Unfortunately, water vapor continuously condenses inside your fuel tank. Griffin Fuel Filter / Water Separators eliminate this worry by removing water and other contaminants from your fuel supply. All Griffin Fuel Filter / Water Separators use the same **MICROBLOC<sup>®</sup>** Multigrade Filtration Media technology. In moisture content tests conducted by PSB Corporation, Singapore on fuel samples taken from a fuel filter / water separator employing **MICROBLOC<sup>®</sup>** Multigrade Media, 99.8% effectiveness of water removal was found to be achieved after 30 minutes of operation of the fuel filter / water separator (test report reference: 57S055941 dated 7 Dec 2005). For more details, please contact your product distributor or representative.

## 2. Remove Damaging Contaminants

Even small, nearly invisible particles can damage injectors and pumps, reducing fuel efficiency, robbing power, or worse. Each refuelling adds millions of tiny contaminants to your fuel system. **MICROBLOC<sup>®</sup>** filters protect your engine from solid contaminants by filtering particles down to 2 microns in size. Elements are available in 2, 10, and 30 micron ratings.

## 3. High Capacity

**MICROBLOC<sup>®</sup>** elements provide multi-layered filtration. Corrugated filtration media means more surface area to trap contaminants.

## 4. Longer Filter Life

**MICROBLOC** elements don't need replacement as often as "will-fit" filter cartridges. **MICROBLOC<sup>®</sup>** filtration efficiency is up to 10 times greater than conventional media.

## 5. Built to Last

Griffin Fuel Filter / Water Separators are built to take on any filtration job. All Turbine Series filters are now available in marines come standard with S4 or S6 trim, Stainless Steel Hardware Equipped.

## 6. Easy To Replace

All **MICROBLOC<sup>®</sup>** replacement elements meet or exceed OEM specifications and are easy to replace without the use of special tools.

## 7. Enhance Engine Power

Griffin Fuel Filter / Water Separators enhance engine performance and reliability. You will feel your engine is more powerful and smoother after you install Griffin filters. Griffin filters will give your engine longer life.

## 8. Reduce Fuel Consumption

A cleaner running engine runs more efficiently, and uses less fuel. With current fuel prices, no one can afford dirty fuel and poor performance.

## 9. Environment Friendly

Clean Fuel means cleaner exhaust. Griffin Filters reduce exhaust pollution more effectively than other similar products.

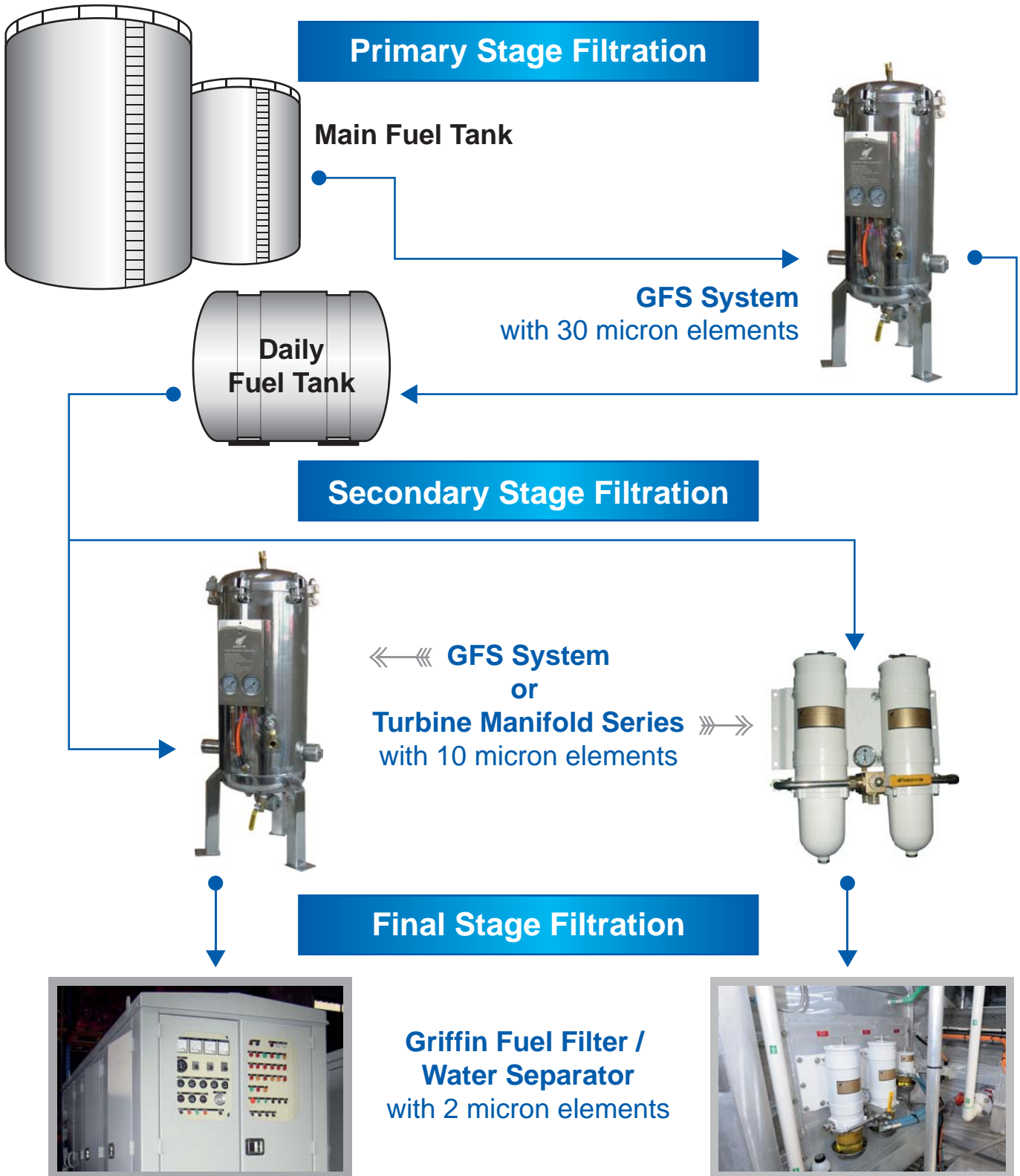
## 10. Best Performing, Most Cost-Effective Choice

Griffin Fuel Filter / Water Separators are the right choice for fuel filtration. Relying on research, science, and technology, rather than marketing hype, Griffin can offer products that meet and exceed the leading brands at a competitive prices. Griffin filtration systems with **MICROBLOC<sup>®</sup>** are simply the best performing and most cost-effective choice for your filtration needs.



**MICROBLOC<sup>®</sup>** Technology

# Typical Applications of GRIFFIN Fuel Filter / Water Separator Systems



MICROBLOC<sup>®</sup> Technology



# Completed Projects



## For Marine



## For Industrial



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## »» Industrial Filtration Products ««



*The Clear Advantage*

Spin-on Series  
Basic Turbine Series

# Industrial Filtration Products - Spin-on Series



## GP Series - with Integral Primer Pump



Model	GP460	GP341	GP227	GP170	GP454	GP360	GP350
Flow Rate	460 LPH / 122 GPH	341 LPH / 90 GPH	227 LPH / 60 GPH	170 LPH / 45 GPH	454 LPH / 120 GPH	360 LPH / 95 GPH	360 LPH / 95 GPH
Initial Clean Drop	9.7kPa	6.5kPa	2.7kPa	1.2kPa	5.9kPa	6.5kPa	2.7kPa
Fuel Port	3/4"SAE/18mm	3/8" NPT					
Integral Primer Pump	Yes						
Water Bowl	Yes						
Height	381mm	300mm	270mm	235mm	370mm	280mm	323mm
Width	124mm	124mm	124mm	124mm	124mm	124mm	124mm
Weight	1.9kg	1.7kg	1.6kg	1.4kg	1.9kg	1.6kg	1.7kg
Cross Reference	4120R	490R	460R	445R	VOLVO 1111068	D638-002-04a	A9794770015
Cross Element	R120S/R120T/ R120P VOLVO 111683, FS19591, FS19754	R90S/R90T/R90P, HINO-2340-1700, Mercedes Benz- A4570920001kZ, FS19551, FS19532	R60S/R60T/R60P, HINO-23401-1441, 460R, FS19687, FS1287	R45S/R45T/R45P, FS19734, FS19775	FS19753	A3760927301KZ	Mercedes Benz Caminhoes 712, 912, 914, 1215C, 1720 Eletronico (A384477015), 0070.131.005
Replacement Element	G46-2, G46-10, G46-30	G-34-2, G34-10, G34-30	G-22-2, G22-10, G22-30	G17-2, G17-10, G17-30	G45-2, G45-10, G45-30	G36-2, G36-10, G36-30	G35-2, G35-10, G35-30



PHT-SP

PCBHT-SP



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# Industrial Filtration Products - Spin-on Series



## G Series - without Integral Primer Pump



Model	G460	G341	G227	G170	G454	G360	G350
Flow Rate	460 LPH / 122 GPH	341 LPH / 90 GPH	227 LPH / 60 GPH	170 LPH / 45 GPH	454 LPH / 120 GPH	360 LPH / 95 GPH	360 LPH / 95 GPH
Initial Clean Drop	9.7kPa	6.5kPa	2.7kPa	1.2kPa	5.9kPa	6.5kPa	2.7kPa
Fuel Port	3/8" NPT						
Integral Primer Pump	N/A						
Water Bowl	Yes						
Height	360mm	280mm	255mm	215mm	350mm	258mm	301mm
Width	116mm						
Weight	1.8kg	1.6kg	1.4kg	1.3kg	1.8kg	1.5kg	1.6kg
Cross Reference	6120R	690R	660R	645R	VOLVO 1111068	D638-002-04a	A9794770015
Cross Element	R120S/R120T/ R120P VOLVO 111683, FS19591, FS19754	R90S/R90T/R90P, HINO-2340-1700, Mercedes Benz- A4570920001kZ, FS19551, FS19532	R60S/R60T/R60P, HINO-23401-1441, 460R, FS19687, FS1287	R45S/R45T/R45P, FS19734, FS19775	FS19753	A3760927301KZ	Mercedes Benz Caminhoes 712, 912, 914, 1215C, 1720 Eletronico (A3844777015), 0070.131.005
Replacement Element	G46-2, G46-10, G46-30	G-34-2, G34-10, G34-30	G-22-2, G22-10, G22-30	G17-2, G17-10, G17-30	G45-2, G45-10, G45-30	G36-2, G36-10, G36-30	G35-2, G35-10, G35-30



PHT-SP

PCBHT-SP

MICROBLOC® Technology



# Industrial Filtration Products - Spin-on Series



## GP Series (1/4" NPT fuel port) with Integral Primer Pump



## G Series (1/4" NPT fuel port) without Integral Primer Pump



Model	GP169	GP114	GP60	G57A	G57B
Flow Rate	170 LPH / 45 GPH	114 LPH / 30 GPH	60 LPH / 16 GPH	57 LPH / 15 GPH	
Initial Clean Drop	4.21kPa	2.14kPa	0.83kPa	1.03kPa	
Fuel Port	1/4"NPT / M14x1.5				
Integral Primer Pump	Yes			N/A	
Water Bowl	Yes				
Height	325mm	229mm	215mm	166mm	152mm
Width	103mm			81mm	
Weight	1kg	0.9kg	0.8kg	0.5kg	
Cross Reference	245R	230R	215R	120A	140R
Cross Element	R25T, R25S, R25P	R20T, R20S, R20P	R15T, R15S, R15P	R12T, R12S, R12P	
Replacement Element	G16-2, G16-10, G16-30	G11-2, G11-10, G11-30	G6-2, G6-10, G6-30	G5-2, G5-10, G5-30	



Model	G370
Flow Rate	370 LPH / 98 GPH
Initial Clean Drop	2.9kPa
Fuel Port	∅10 inner diameter hose
Integral Primer Pump	N/A
Water Bowl	Yes
Height	240mm
Width	153mm
Weight	1.1kg
Replacement Element	G37-2, G37-10, G37-30

Model	G95
Gasoline / Diesel	Both
Vacuum Installation	Yes
Pressure Installation	No
Max. PSI/kPa	No
Max. Flow Rate	95 LPH / 25 GPH
No. of Ports	2
Height	78mm
Width	85mm
Weight	0.2kg
Port Size Standard	1/4"
Clean Pressure Drop	0.25kPa
Cross Reference	035-RAC-159
Replacement Element	G9M



Water Separating  
Density Filter Media

PCB37

P9M



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# Industrial Filtration Products - Spin-on Series



**GBASeries (14 x 1.5mm fuel port)**  
without Integral Primer Pump  
working pressure 206kPa



**GBASeries (3/8"-18 fuel port)**  
without Integral Primer Pump  
working pressure 206kPa



Model	GBA100	GBA70	GBA45
Flow Rate	100 LPH / 27 GPH	70 LPH / 19 GPH	45 LPH / 12 GPH
Working Pressure	206kPa		
Fuel Port	14 x 1.5mm		3/8"-18
Integral Primer Pump	N/A		
Water Bowl	Yes		
Height	214mm	188mm	173mm
Width	102mm		
Weight	0.7kg	0.6kg	0.5kg
Cross Reference	Balwin BF884	Balwin BF7537	Balwin BF825, BF874
Replacement Element	GBA10-30, GBA10-10, GBA10-2	GBA7-30, GBA7-10, GBA7-2	GBA4-30, GBA4-10, GBA4-2



Model	GRE300
Gasoline / Diesel	Diesel
Vacuum Installation	Yes
Pressure Installation	No
Max. PSI/kPa	No
Max. Flow Rate	300 LPH / 80 GPH
No. of Ports	2
Height	230mm
Width	140mm
Weight	0.8kg
Port Size Standard	14 x 1.5mm
Clean Pressure Drop	103kPa
Cross Reference	Renault VIX3 3-710-857
Replacement Element	GBE30-80 (washable)



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# Industrial Filtration Products - Spin-on Series



## Parts



Item Code	Remark
<b>PCBHT-SP</b>	Clear bowl with heater for spin-on series, 12vdc / 24vdc
<b>PHT-SP</b>	Middle heater for spin-on series, 12vdc / 24vdc
<b>PCB-SP</b>	Clear bowl (can be used for G170, G227, G341, G350, G454 and their GP spin-on)
<b>PCB02-SP</b>	Clear bowl can be used for GP169, GP114, GP60, Racor, B32001
<b>PCB03-SP</b>	Clear bowl can be used for G460 and GP460
<b>PCB04-SP</b>	Clear bowl can be used for fleetguard, FS1242
<b>PCB05-SP</b>	Clear bowl can be used for G57A/B
<b>PPH-SP</b>	Head with AC pump (can be used for all Griffin spin-on)
<b>PH-SP</b>	Head without pump (can be used for all Griffin spin-on)
<b>PCB-MPL</b>	Clear bowl can be used for mann filter PL420/PL270
<b>PCB-RE3</b>	Clear bowl can be used for GRE300



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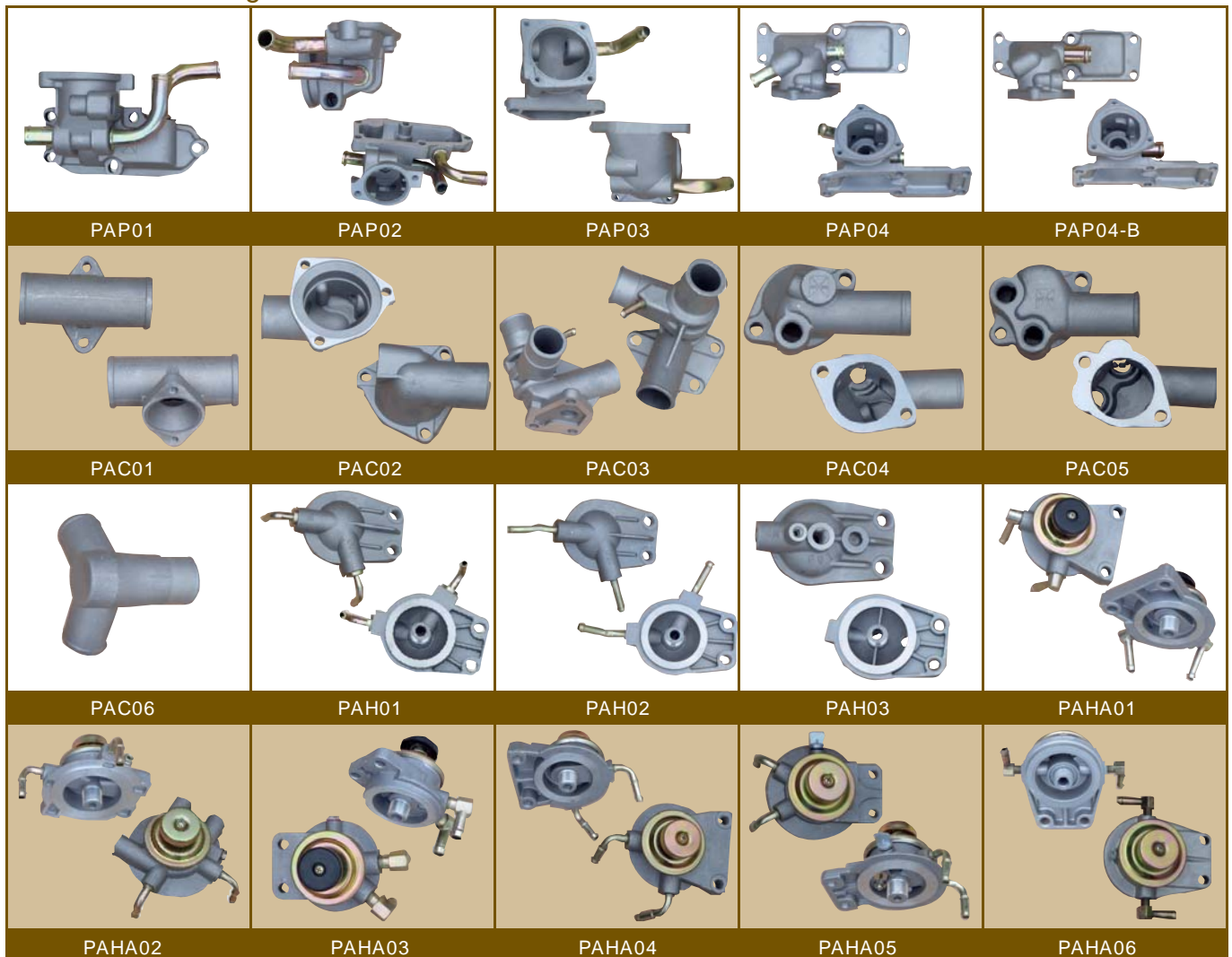
# Industrial Filtration Products - Filter Aluminum Parts



## Filter Seats



## Aluminum Mounting Heads



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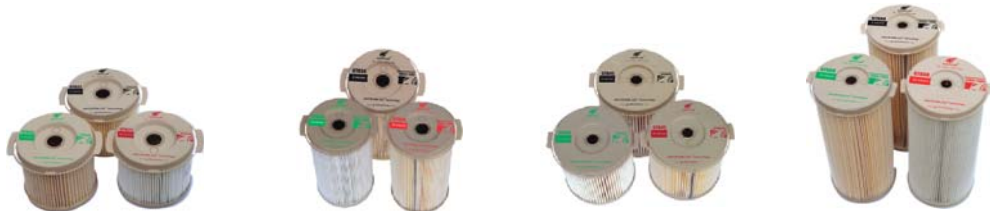
# Industrial Filtration Products - Turbine Series



## Basic Turbine S4 Series



Model	GTB228S4	GTB341S4	GTB455S4	GTB681S4
Fuel Port	3/4-16" UNF	7/8-14" UNF	3/4-16" UNF	7/8-14" UNF
Flow Rate	228 LPH / 60 GPH	341 LPH / 90 GPH	455 LPH / 120 GPH	681 LPH / 180 GPH
Service Clearance	102mm	127mm	165mm	254mm
Height	295mm	412mm	365mm	542mm
Width	115mm	152mm	115mm	152mm
Depth	122mm	178mm	122mm	178mm
Net Weight	1.3kg	3kg	1.9kg	5kg
Temperature	-20°C / +121°C			
Clean Pressure Drop	1.72kPa	2.4kPa	1.72kPa	3.4kPa
Max. Operating Pressure	103kPa			
Cross Reference	500FG	900FH, G900S4	-	1000FH, G1000S4
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Industrial Filtration Products - Turbine Series



## Basic Turbine Manifold DMS4 / TMS4 Series (with 304 stainless steel parts)

\*also available for S6 Series (with 316L stainless steel valve and parts)



Model	GTB228DMS4	GTB341DMS4	GTB455DMS4	GTB681DMS4	GTB681TMS4
Fuel Port	7/8"-14UNF				3/4"NPT
Flow Rate	454 LPH / 120 GPH	681 LPH / 180 GPH	910 LPH / 240 GPH	1363 LPH / 360 GPH	2043 LPH / 540 GPH
Service Clearance	102mm	127mm	254mm	254mm	254mm
Height	292mm	412mm	365mm	542mm	542mm
Width	472mm			476mm	
Depth	241mm	279mm	241mm	279mm	300mm
Net Weight	6.9kg	10.6kg	7.5kg	12.6kg	25kg
Temperature	-20°C / +121°C				
Clean Pressure Drop	4.83kPa	11.7kPa	4.83kPa	25.5kPa	
Max. Operating Pressure	103kPa				
Heat Device	Optional Parameters				
Water Probe	Optional Parameters				
Cross Reference	75/500FGX	75/900FHX, G900DM	75/900FHX	75/1000FHX, G1000DM	79/1000FHV, G1000TM
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Industrial Filtration Products - Turbine Series



## Parts



Item Code	Remark
<b>PFBE24-0.47</b>	Fitting for GTB228 / GTB455
<b>PFBE36-0.47</b>	Fitting for GTB341 / GTB681 / G900 / G1000
<b>PCB24M</b>	Clear bowl for GTB228 / GTB455 marine series
<b>PCB36M</b>	Clear bowl for GTB341 / GTB681 / G900 / G1000 marine series
<b>PCB24</b>	Clear bowl for GTB228 / GTB455
<b>PCB36</b>	Clear bowl for GTB341 / GTB681 / G900 / G1000
<b>PHDS24MA</b>	Heat deflector shield for marine GTB228MA / GTB455MA
<b>PHDS36MA</b>	Heat deflector shield for marine GTB341MA / GTB681MA / G900 / G1000
<b>PWDF-MA</b>	Bowl drain fitting for all the marine turbine series
<b>PAU2436</b>	Gauge for double manifold series valve
<b>PAU2436H</b>	Gauge with handle for single marine turbine series
<b>PSALM</b>	Alarm sensor for all the turbine series
<b>PCBHT24</b>	Clear bowl with heater for GTB228 / GTB455 series, 12vdc / 24vdc
<b>PCBHT36</b>	Clear bowl with heater for GTB341 / GTB681 series, 12vdc / 24vdc
<b>PSSK24</b>	Seal service kit for GTB228 / GTB455
<b>PSSK36</b>	Seal service kit for GTB341 / GTB681 / G900 / G1000



MICROBLOC® Technology



## ➤➤ Marine Filtration Products ◀◀



*The Clear Advantage*

Spin-on Series  
Turbine Series  
GFS & GLS Series

# Marine Filtration Products - Spin-on Series



## Marine Gasoline Spin-on Series



Model	GGF114	GGF227	GGF227MAC	GGF340	GGF340MAC	GGF454MAC
Fuel Port		1/4-18NPTF		3/8-18NPTF		1/2-14NPTF
Center Threads	M18x1.5	1-14		1-14		
Flow Rate	114LPH / 30 GPH	227LPH / 60 GPH		340 LPH / 90 GPH		454 LPH / 120 GPH
Service Clearance		25.4mm		25.4mm		
Height	166mm	238mm		280mm		264mm
Width	81mm	102mm		106mm		102mm
Depth	81mm	107mm		114mm		127mm
Net Weight	0.50kgs	0.90kgs	1.20kgs	1.40kgs		0.90kgs
Temperature		-40°C / +124°C		-40°C / +124°C		
Clean Pressure Drop	1.03kPa	4.23kPa		4.23kPa		1.03kPa
Max Pressure	7 PSI	-		-		
Bowl	Clear Bowl	Clear Bowl	Metal Bowl	Clear Bowl	Metal Bowl	
Cross Reference	120R-RAC-01	320R-RAC-01	320R-RAC-02	660-RAC-01	660R-RAC-02	3120R-RAC-32
Cross Element	S3240	S3227	S3228UL	S3232	S3232UL	
Replacement Element	GGF11	GGF22-10		GGF34-10		



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# Marine Filtration Products - Spin-on Series



## Marine Gasoline Spin-on Series Element with Bowl



Model	GGF35-805269-1B	GGF35-805269-1B-MAC	GGF502905B	GGF502905B-MAC
Center Threads	11/16"-16		1"-12	
Flow Rate	227 LPH / 60 GPH			
Service Clearance	25.4mm			
Height	171mm			
Width	95 Dia			
Depth	95 Dia			
Net Weight	0.54kgs		0.73kgs	
Temperature	-40°C / +124°C			
Clean Pressure Drop	4.23kPa			
Max Pressure	-			
Bowl	Clear Bowl	Metal Bowl	Clear Bowl	Metal Bowl
Cross Reference	Racor B32013, Aquapower 6001, Quicksilver 35-807172, Yamaha ABA-FUEL-FLTR, Baldwin BF791, Wix 33225, Sierra 18-7845	Racor B32020MAM, Aquapower 6031, Quicksilver 35-60494-1, Yamaha MAR-23452-00-00, Volvo 855686-0/-2, Sierra 1807850	Racor B32014, Aquapower 6040, OMC 502905	Racor B32021MAM, Aquapower 6040, OMC 174144
Cross Element	S3213	S3220	S3214	S3221
Replacement Element	GGF35-805269-1		GGF502905B	GGF502905



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# Marine Filtration Products - Turbine Series

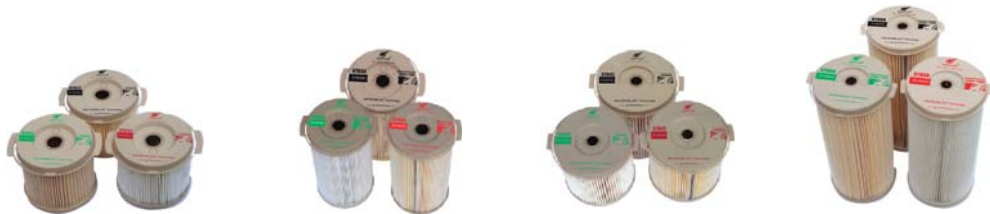


## Marine Turbine S4MA Series

Stainless Steel Parts, Clear Bowl with Heat Deflector Shield



Model	GTB228S4MA	GTB341S4MA	GTB455S4MA	GTB681S4MA
Fuel Port	3/4-16" UNF	7/8-14" UNF	3/4-16" UNF	7/8-14" UNF
Flow Rate	228 LPH / 60 GPH	341 LPH / 90 GPH	455 LPH / 120 GPH	681 LPH / 180 GPH
Service Clearance	89mm	127mm	165mm	254mm
Height	275mm	412mm	353mm	535mm
Width	120mm	145mm	117mm	147mm
Depth	125mm	160mm	122mm	165mm
Net Weight	1.3kg	2.2kg	1.6kg	2.9kg
Temperature	-20°C / +121°C			
Clean Pressure Drop	1.72kPa	2.4kPa	1.72kPa	3.3kPa
Max. Operating Pressure	103kPa			
Cross Reference	500MA	900MA, G900S4MA	-	1000MA, G1000S4MA
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



MICROBLOC® Technology

# Marine Filtration Products - Turbine Series



## Marine Turbine Manifold DMS4-MA / TMS4-MA Series Stainless Steel Parts, Clear Bowl with Heat Deflector Shield



Model	GTB228DMS4-MA	GTB341DMS4-MA	GTB455DMS4-MA	GTB681DMS4-MA	GTB681TMS4-MA
<b>Fuel Port</b>	7/8"-14UNF				3/4"NPT
<b>Flow Rate</b>	454 LPH / 120 GPH	681 LPH / 180 GPH	910 LPH / 240 GPH	1363 LPH / 360 LPH	2043 LPH / 540 GPH
<b>Service Clearance</b>	102mm	127mm	254mm	254mm	254mm
<b>Height</b>	275mm	412mm	353mm	542mm	525mm
<b>Width</b>	476mm				585mm
<b>Depth</b>	230mm	279mm	235mm	253mm	313mm
<b>Net Weight</b>	7.1kg	10.6kg	8.6kg	12.8kg	26.6kg
<b>Temperature</b>	-20°C / +121°C				
<b>Clean Pressure Drop</b>	4.83kPa	11.7kPa	4.83kPa	25.5kPa	
<b>Max. Operating Pressure</b>	103kPa				
<b>Heater</b>	Optional Parameters				
<b>Water Probe</b>	Optional Parameters				
<b>Cross Reference</b>	75/500MAX	75/900MAX, G900DMS4-MA	-	75/1000MAX, G1000DMS4-MA	79/1000MAV, G1000TMS4-MA
<b>Replacement Element</b>	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Marine Filtration Products - Turbine Series

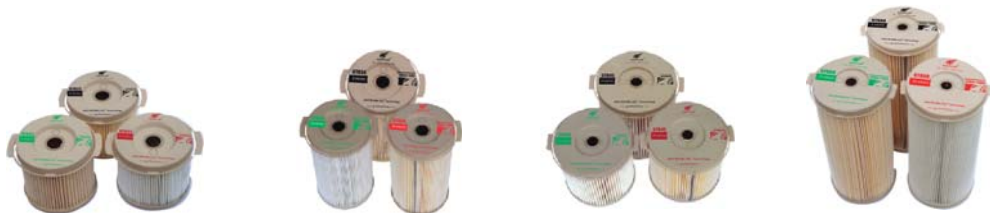


## Marine Turbine MAC Series

White Color, Metal Bowl with Stainless Steel Parts



Model	GTB228MAC	GTB341MAC	GTB455MAC	GTB681MAC
Fuel Port	3/4-16" UNF	7/8-14" UNF	3/4-16" UNF	7/8-14" UNF
Flow Rate	228 LPH / 60 GPH	341 LPH / 90 GPH	455 LPH / 120 GPH	681 LPH / 180 GPH
Service Clearance	89mm	127mm	165mm	254mm
Height	275mm	420mm	360mm	530mm
Width	120mm	145mm	117mm	147mm
Depth	125mm	160mm	122mm	165mm
Net Weight	1.7kg	3.1kg	2.3kg	3.2kg
Temperature	-20°C / +121°C			
Clean Pressure Drop	1.72kPa	2.4kPa	1.72kPa	3.3kPa
Max. Operating Pressure	103kPa			
Cross Reference	500MAM	900MAM, G900MAC	-	1000MAM, G1000MAC
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Marine Filtration Products - Turbine Series



## Marine Turbine Manifold DM-MAC / TM-MAC Series White Color, Metal Bowl with Stainless Steel Parts



Model	GTB228DM-MAC	GTB341DM-MAC	GTB455DM-MAC	GTB681DM-MAC	GTB681TM-MAC
Fuel Port	7/8"-14UNF				3/4"NPT
Flow Rate	454 LPH / 120 GPH	681 LPH / 180 GPH	910 LPH / 240 GPH	1363 LPH / 360 LPH	2043 LPH / 540 GPH
Service Clearance	102mm	127mm	254mm	254mm	254mm
Height	275mm	412mm	353mm	535mm	530mm
Width	476mm				585mm
Depth	230mm	248mm	235mm	253mm	313mm
Net Weight	7.1kg	10.6kg	8.2kg	13.4kg	26kg
Temperature	-20°C / +121°C				
Clean Pressure Drop	4.83kPa	11.7kPa	4.83kPa	25.5kPa	
Max. Operating Pressure	103kPa				
Heater	Optional Parameters				
Water Probe	Optional Parameters				
Cross Reference	75/500MAM	75/900MAM, G900DM-MAC	-	75/1000MAM, G1000DM-MAC	79/1000MAV, 1000TM-MAC
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Marine Filtration Products - Turbine Series

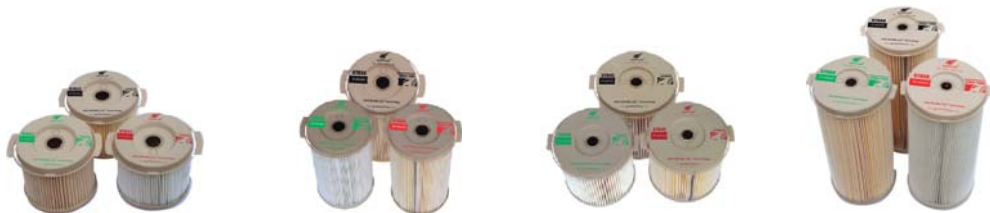


## Marine Turbine MAS Series

Fully Stainless Steel Assembly, ABS New Standard



Model	GTB228MAS	GTB341MAS	GTB455MAS	GTB681MAS
Fuel Port	3/4-16" UNF	7/8-14" UNF	3/4-16" UNF	7/8-14" UNF
Flow Rate	228 LPH / 60 GPH	341 LPH / 90 GPH	455 LPH / 120 GPH	681 LPH / 180 GPH
Service Clearance	89mm	127mm	165mm	254mm
Height	275mm	420mm	360mm	530mm
Width	120mm	145mm	117mm	147mm
Depth	125mm	160mm	122mm	165mm
Net Weight	2.5kg	4.2kg	3.4kg	5.8kg
Temperature	-20°C / +121°C			
Clean Pressure Drop	1.72kPa	2.4kPa	1.72kPa	3.3kPa
Max. Operating Pressure	103kPa			
Cross Reference	500MAM	900MAM	-	1000MAM
Replacement Element	GTB22-2 GTB22-10 GTB22-30	GTB34-2/G2040-2 GTB34-10/G2040-10 GTB34-30/G2040-30	GTB45-2 GTB45-10 GTB45-30	GTB68-2/G2020-2 GTB68-10/G2020-10 GTB68-30/G2020-30



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# Marine Filtration Products - Turbine Series



## Marine Turbine Manifold DM-MAS / TM-MAS Series Fully Stainless Steel Assembly, ABS New Standard



Model	GTB228DM-MAS	GTB341DM-MAS	GTB455DM-MAS	GTB681DM-MAS	GTB681TM-MAS
<b>Fuel Port</b>	7/8"-14UNF				3/4"NPT
<b>Flow Rate</b>	454 LPH / 120 GPH	681 LPH / 180 GPH	910 LPH / 240 GPH	1363 LPH / 360 LPH	2043 LPH / 540 GPH
<b>Service Clearance</b>	102mm	127mm	254mm	254mm	254mm
<b>Height</b>	275mm	412mm	353mm	535mm	530mm
<b>Width</b>	476mm				595mm
<b>Depth</b>	230mm	247mm	236mm	253mm	313mm
<b>Net Weight</b>	10.5kg	14kg	11.5kg	16.8kg	30.3kg
<b>Temperature</b>	-20°C / +121°C				
<b>Clean Pressure Drop</b>	4.83kPa	11.7kPa	4.83kPa	25.5kPa	
<b>Max. Operating Pressure</b>	103kPa				
<b>Heater</b>	Optional Parameters				
<b>Water Probe</b>	Optional Parameters				
<b>Cross Reference</b>	75/500MAM	75/900MAM	-	75/1000MAM	79/1000MAV
<b>Replacement Element</b>	GTB22-2	GTB34-2/G2040-2	GTB45-2	GTB68-2/G2020-2	GTB68-2/G2020-2
	GTB22-10	GTB34-10/G2040-10	GTB45-10	GTB68-10/G2020-10	GTB68-10/G2020-10
	GTB22-30	GTB34-30/G2040-30	GTB45-30	GTB68-30/G2020-30	GTB68-30/G2020-30



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# Marine Filtration Products - GFS & GLS Series



## GFS & GLS Series



Model	Diesel		Lube Oil
	GFS5000	GFS5000DM	GLS5K
Flow Rate	5000 LPH / 1321 GPH	10000 LPH / 2642 GPH	5000 LPH / 1321 GPH
Filtration Material	Diesel		Diesel, Gasoline, Lubricating or Hydraulic Oil
Operation Temperature	0 ~ 46°C		
Air Washing Pressure	0.4 MPa		
Working Pressure	0.05 ~ 0.15 MPa		
Weight	26kg	80kg	33kg
Size (mm)	370(Dia) x 936(H)	1090(L) x 354(W) x 1030(H)	403(Dia) x 970(H)
Body Materials	Stainless steel		
Replacement Element	GFS-EW510 (3 unit) 30 micron	GFS-EW510 (6 unit) 30 micron	GLS-EW510 (3 unit) 80 micron



**GFS-EW510**  
\*one time use



**GLS-EW510**  
\*washable element



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# Die Casting And Plastic Injection.....



## Griffin's Die Casting Production Line:

Griffin's factory is an ISO 9001:2008 certified factory. We have our own aluminum die casting production line. This production line produces all Griffin's filter die casting parts as well as the aluminum die casting parts for OEM's (Original Equipment Manufacturers) for their products. From designs to finished products, we provide completed machining and deburring, as well as extensive secondary operations to provide our customers with finished parts conforming to the highest standards. Other services we provide include:

- Molding
- Zinc Die Casting
- ZA Alloy Die Casting
- Machining
- Deburring
- CNC processing
- Brass Plating
- Chrome Plating
- Anodizing
- Painting
- Powder Paint



## Griffin's Plastic Injection Production Line:

From small parts to large parts, besides product Griffin's filter plastic clear bowls, Griffin's plastic injection production line products include auto parts, engine parts, agricultural products, kitchen products, toys, tools, promotional products, home and office products, kitchenware and much more.



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# Conversion Table



Pressure	
0.1 Bar	= 1.45 psi
0.12 Bar	= 1.74 psi
0.5 Bar	= 7.25 psi
1 Bar	= 14.5 psi
2 Bar	= 29 psi
2.5 Bar	= 36.25 psi
3 Bar	= 43.4 psi
5 Bar	= 72.5 psi
10 Bar	= 145 psi
14 Bar	= 203 psi
20 Bar	= 290 psi
25 Bar	= 362.5 psi
30 Bar	= 435 psi
35 Bar	= 507.5 psi
40 Bar	= 580 psi
100 Bar	= 1450 psi
200 Bar	= 2900 psi
300 Bar	= 4350 psi
400 Bar	= 5800 psi

Length	
10 mm	= 0.39 inch
20 mm	= 0.79 inch
30 mm	= 1.18 inch
40 mm	= 1.57 inch
50 mm	= 1.97 inch
60 mm	= 2.36 inch
70 mm	= 2.76 inch
80 mm	= 3.15 inch
90 mm	= 3.54 inch
100 mm	= 3.94 inch
150 mm	= 5.91 inch
200 mm	= 7.87 inch
250 mm	= 9.84 inch
300 mm	= 11.81 inch
350 mm	= 13.78 inch
400 mm	= 15.72 inch
450 mm	= 17.72 inch
500 mm	= 19.69 inch

Flow Rate	
10 L/min	= 2.64 gpm
20 L/min	= 5.28 gpm
30 L/min	= 7.93 gpm
40 L/min	= 10.57 gpm
50 L/min	= 13.21 gpm
60 L/min	= 15.85 gpm
70 L/min	= 18.49 gpm
80 L/min	= 21.14 gpm
90 L/min	= 23.78 gpm
100 L/min	= 26.42 gpm
150 L/min	= 39.63 gpm
200 L/min	= 52.84 gpm
250 L/min	= 66.05 gpm
300 L/min	= 79.26 gpm
350 L/min	= 92.47 gpm
400 L/min	= 105.68 gpm
450 L/min	= 118.89 gpm
500 L/min	= 132.10 gpm
600 L/min	= 158.52 gpm
700 L/min	= 184.94 gpm
800 L/min	= 211.36 gpm
900 L/min	= 237.78 gpm
1000 L/min	= 264.20 gpm

Conversion in Temperature	
-30°C	= -22°F
-10°C	= 14°F
0°C	= 32°F
10°C	= 50°F
30°C	= 86°F
50°C	= 122°F
80°C	= 176°F
100°C	= 212°F
120°C	= 248°F

Conversion in Hour	
100 L/hr	= 26.42 gph
110 L/hr	= 29.06 gph
120 L/hr	= 31.70 gph
130 L/hr	= 34.35 gph
140 L/hr	= 36.99 gph
150 L/hr	= 39.63 gph
160 L/hr	= 42.27 gph
170 L/hr	= 44.91 gph
180 L/hr	= 47.56 gph
190 L/hr	= 50.20 gph
200 L/hr	= 52.84 gph
300 L/hr	= 79.26 gph
400 L/hr	= 105.68 gph
500 L/hr	= 132.10 gph
600 L/hr	= 158.52 gph
700 L/hr	= 184.94 gph
800 L/hr	= 211.36 gph
900 L/hr	= 237.78 gph
1000 L/hr	= 264.20 gph

Conversion in Volume	
100 mm <sup>3</sup>	= 6.102 inch <sup>3</sup>
200 mm <sup>3</sup>	= 12.104 inch <sup>3</sup>
300 mm <sup>3</sup>	= 18.306 inch <sup>3</sup>
400 mm <sup>3</sup>	= 24.408 inch <sup>3</sup>
500 mm <sup>3</sup>	= 30.510 inch <sup>3</sup>
600 mm <sup>3</sup>	= 36.612 inch <sup>3</sup>
700 mm <sup>3</sup>	= 42.714 inch <sup>3</sup>
800 mm <sup>3</sup>	= 48.816 inch <sup>3</sup>
900 mm <sup>3</sup>	= 54.918 inch <sup>3</sup>
1000 mm <sup>3</sup>	= 61.020 inch <sup>3</sup>
5000 mm <sup>3</sup>	= 305.100 inch <sup>3</sup>
10,000 mm <sup>3</sup>	= 610.200 inch <sup>3</sup>



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Your **FUEL FILTER / WATER SEPARATOR** Specialist

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