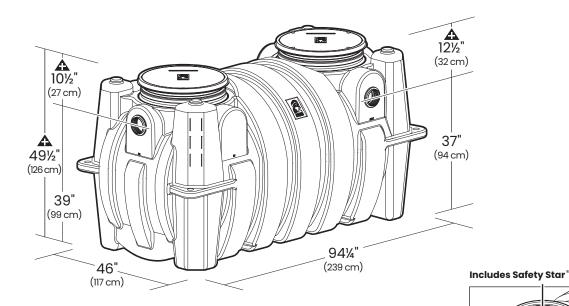
# SPECIFICATION AND SUBMITTAL

GB-500 100 GPM Great Basin™ Indoor/Outdoor Grease Interceptor





Adjustable cover adapters provide up to 4" of additional height.



This unit is certified to ASME A112.14.3 (Type C) and CSA B481.1 and includes an internal flow control. External flow control with vent not required.

# **SUBMITTAL**

#### **Standard**

**Location:** Indoor/outdoor **Installation:** Above/below grade Flow Rate: 100 GPM (6.3 L/s)

**Grease Capacity:** 

3,048 lbs. (1,383 kg), 418 gal. (1,583 L) **Solids Capacity:** 128 gal. (485 L) **Liquid Capacity:** 510 gal. (1,931 L)

Weight: 528 lbs. (239 kg)
Connections: 4" FPT with 4" plain end adapters,

single inlet and triple outlet

Covers: Cast iron covers, pickable 24" gas/water tight, H-20 rated, proof-load tested to 40,000 lbs. Access Restrictor: Safety Star® (450 lb. rating)

built into each cover adapter

### **Options**

- ☐ 6" plain end inlet/outlet (straight-through) with dual pumpout port connections
- ☐ 6" MPT inlet/outlet

(stainless steel, straight-through)

- ☐ -FO (fixed outlet)
- C24H2 Composite covers, bolted 24" gas/water tight,

# traffic load rated for 16,000 lbs.

#### **Accessories**

- ☐ **FCR2 (x2)** >4" 34" field cut risers ☐ **FCR2 (x4)** >34" - 64" field cut risers
- ☐ **FCR2 (x6)** >64" 94" field cut risers
- ☐ CA2 Adapter for 24" corrugated pipe riser
- ☐ **PP3** Pumpout port
- ☐ **AK1 (x2)** High Water Anchor Kit
- ☐ **AK2** High Water Anchor Kit
- ☐ **AGS2** Above grade support
- ☐ PLAIN-EA-24 2" plain end fitting ☐ PLAIN-EA-34 3" plain end fitting
- ☐ FPT-EA-34 4" x 3" FPT fitting
- FPT-EA-23 3" x 2" FPT fitting
- □ CC2 Integral membrane clamping collar kit

## **Approval**

Signature:	Date:		Company:
Specifying Engineer:		Engine	ering Firm:



**MODEL NUMBER: GB-500**  **DESCRIPTION: 100 GPM Polyethylene Grease Interceptor** 

PART #: 4075-001-01 DWG BY: B. Karrer DATE: 10/12/2020 FCO: REV:

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# SPECIAL PRECAUTIONS

For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty



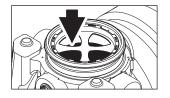
**WARNING!** DO NOT AIR TEST UNIT OR RISER SYSTEM!

Doing so may result in property damage, personal injury or death.

**CAUTION!** Do not install this unit in any manner except as described in these instructions.

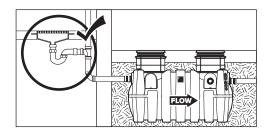
#### **Installation Instructions**

Installation instructions and additional components are included with the interceptor. Read all instructions prior to installation. This interceptor is intended to be installed by a licensed plumber in conformance with all local codes.



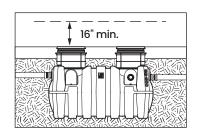
### **ODOR ALERT!**

Interceptor is not a sewer gas trap. All upstream fixtures must be trapped



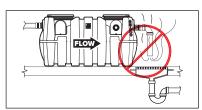
#### Install interceptor as close as possible to fixtures being served

Provide at least 16" clearance above unit for routine maintenance.



#### **ODOR ALERT!**

Do not install air gap on outlet side of interceptor.



#### **High Temperature Kitchen Water**

If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will weaken or deform PVC Schedule 40 pipe, poly drainage fixtures like interceptors and erode the coating of cast iron (leading to eventual failure).

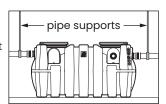
#### **Fully Support Base of Unit**

Install unit on solid, level surface in contact with the entire footprint of unit base



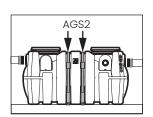
#### **Support Inlet and Outlet Piping**

For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.



#### **Above Grade Installation Support**

The wet weight of the interceptor combined with high temperature kitchen water creates the potential for tank deformation when installed above grade. Model GB-500 installed above grade must be installed with Above Grade Support Kit model AGS2 to maintain structural integrity.



#### DO NOT USE CAST IRON **COVERS IN ABOVE GRADE OR** INDOOR INSTALLATIONS

Use composite cover C24H2 for above grade installations





MODEL NUMBER: PART #: 4075-001-01

DWG BY: B. Karrer

**DESCRIPTION: 100 GPM Polyethylene Grease Interceptor** 

DATE: 10/12/2020 ECO: REV:

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# SPECIAL PRECAUTIONS

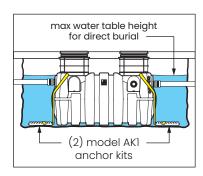
For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

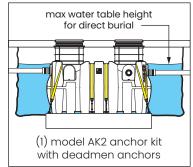
#### **Secure Cover Adapters**

Cover adapters must be secured to base units in above grade installations with increased head pressure conditions. Use cover adapter tie-downs included with Above Grade Support Kit model AGS2.

#### **High Water Table Installations**

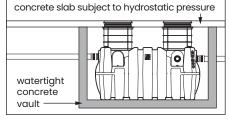
Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor). At risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water. Great Basin™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model GB-500 uses either two model AK1 anchor kits or one AK2 anchor kit.





# Hydrostatic/ **Pressure Slabs** When installed under a

hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.



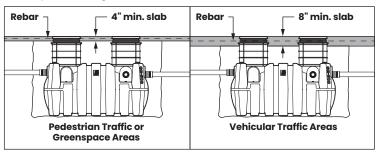
### **DO NOT COMPACT BACKFILL MECHANICALLY**

Compact by hand only

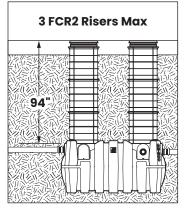


#### **Below Grade Installation Slab Requirements**

A concrete slab to finished grade with rebar is required when installing interceptor below grade.

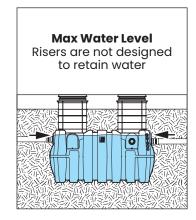


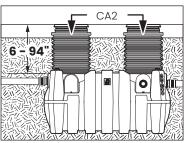
#### **Installations with Risers**



### **Corrugated Riser Pipe** Requirements

Riser adapter model CA2 must be used when installing interceptors using 24" diameter corrugated pipe as a riser. This will adequately embed the cover adapter in the concrete slab, preventing cover/cover adapture failure under traffic rated loads.







MODEL NUMBER:

**DESCRIPTION: 100 GPM Polyethylene Grease Interceptor** 

REV:

PART #: 4075-001-01 DWG BY: B. Karrer

DATE: 10/12/2020

ECO:

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# **SPECIFICATIONS**

#### **NOTES**

- 1. 4" FPT with 4" plain end adapters, single inlet and triple outlet
- 2. Unit weight w/cast iron covers: 528 lbs.; w/composite covers: 412 lbs. (For wet weight add 4,254 lbs.)
- 3. Maximum operating temperature: 150° F continuous
- 4. Capacities Liquid: 510 gal.; Grease: 3,048 lbs. Solids: 128 gal.
- 5. Built-in Flow control. For series installations, only install flow control on the first unit in the series if necessary.
- 6. For gravity drainage applications only.
- 7. Do not use for pressure applications.
- 8. Cover placement allows full access to tank for proper maintenance.
- Vent not required unless per local code.
- 10. Engineered inlet and outlet diffusers are removable to inspect / clean piping.

  11. Integral air relief / Anti-siphon /
- Sampling access.
- 12. Adjustable cover adapters provide up to 4" of additional height.
- 13. Fixed outlet models (-FO) have inlet and outlet permanently welded at the factory in the straight-through (B) positions.
- 14. Flow rates are based on 2-minute drain time.
- **15.** Safety Star®, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating)

#### **DIFFUSION FLOW TECHNOLOGY**

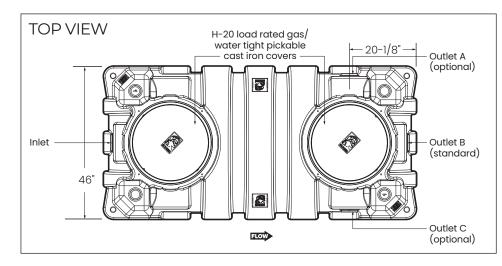
The inlet diffuser reduces turbulence, creates laminar flow and allows the entire tank volume to be utilized for efficient grease separation and minimal disturbance to existing grease and sediment layers. The integral air relief / anti-siphon at the outlet diffuser top allows pressure stabilization within the unit during operation. The outlet diffuser can easily be attached to any of the three outlets provided to ease job site piping layouts.

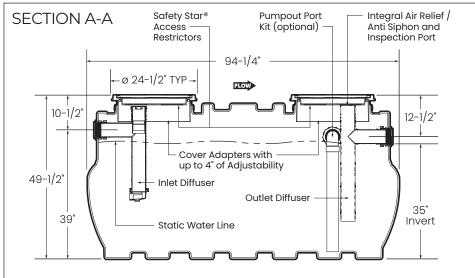
#### **ENGINEER SPECIFICATION GUIDE**

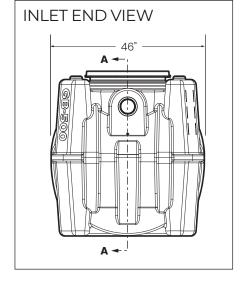
Schier Great Basin™ grease interceptor model # GB-500 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Flow control cartridge shall be PVC. Interceptor shall be furnished for above or below grade installation. Interceptor shall be certified to ASME A112.14.3 (Type C) and CSA B481.1, with adjustable cover adapters, Safety Star® access restrictor built into each cover adapter, built-in flow control and three outlet options. Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 3,048 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

#### **CERTIFIED PERFORMANCE**

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.







## Rated Grease Capacities for Units Piped in Series

No. of	Removal Efficiency		
Units in Series	100 GPM		
	95.3%		
2	6,096 lbs.		
3	9,144 lbs.		
4	12,192 lbs.		





**MODEL NUMBER:** GB-500

**DESCRIPTION: 100 GPM Polyethylene Grease Interceptor** 

PART #: 4075-001-01

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