



TEST REPORT

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Report Number: 1757-OCT1425-06

Project Number: 47186

Report Issued: October 14, 2025

Client: Schier Products
6455 Woodland Dr.
Shawnee, KS 66218

Source of Samples: Testing was witnessed by IAPMO staff at manufacturer's location.

Date of Testing: October 9, 2025

Sample Description: HDPE Grease Interceptor model: GB3-50

Reference Standard: Hydromechanical Grease Interceptors ASME A112.14.3-2022/CSA B481.1:22

Scope of Testing: To qualify the sample for compliance with the reference standard as a Type D (units indirectly connected, without an external flow control)

Conclusion: The sample tested is in compliance with the reference standard as a type D and cover rating of light duty (L) for 300 lb.

Status: IN COMPLIANCE

Approved by:

Sal Aridi- Director

This report replaces report number 1757-OCT1425-03, it was reissued to correct the model number on page 1 from GB3-50 (50 gpm) to GB3-50, in addition to some editorial corrections.

All testing and sample preparation for this report was performed under the continuous, direct supervision of IAPMO R&T Lab, unless otherwise stated. The statement of compliance is based on the test results compared to the standard specifications without considering measurement uncertainty. The observations, test results and conclusions in this report apply only to the specific samples tested and are not indicative of the quality or performance of similar or identical products. Only the Client shown above is authorized to copy or distribute the report, and then only in its entirety. If presented with a copy of a Test Report without the IAPMO R&T Lab watermark background, contact IAPMO R&T Lab for verification. Any use of the IAPMO R&T Lab name for the sale or advertisement of the tested material, product or service is prohibited absent the advance written consent of IAPMO R&T Lab.

4 Material Requirements: COMPLIED

4.1 General: Shall be constructed of materials that can sustain the anticipated use without braking cracking or leakage.

Findings: Constructed of HDPE corrosion proof material, no evidence of cracking or breaking during testing.

Testing:

6.1 Loading test for covers.- IN COMPLIANCE

6.1.1 Covers and top rims intended for sale in Canada shall be rated per table 2.

Findings: Diameter of cover is 21.5”, allowed deflection 1.075” Actual deflection is 0.875” at 600 lb load.

6.2 Leakage Requirements:

6.2.1 No leakage shall be observed during the rating Test

Findings: No leakage was observed – IN COMPLIANCE

6.2.2 Hydrostatic Test

6.2.2.2 Any decrease of water level greater than 0.5 inches shall constitute a failure

Findings: After 15 minutes at an inlet water level at 1.4 inches the water level did not drop more than 0.5 inches- IN COMPLIANCE

6.3 Rating Test

6.3.6.1 Media Analysis – COMPLIED

	Required	Result
Specific Gravity of Lard	0.870 to 0.880	0.878

6.3.6.2 Establishing Sink Compartment Capacity – COMPLIED

The size of each test compartment shall be established by means of the movable partitions so that the gross capacity of each compartment in gallons will be equal to 1.2 times the proposed flow rate in gallons per minute (gpm) of the interceptor to be tested. The gross sink capacity shall be calculated on the basis of length x width x depth of 12 in. (0.3 m) above the sink outlet flange.

Findings:

	Length (in)	Width (in)	Height (in)	Capacity Volume (gal)
Sink Dimensions	96	24	12	50

3.3.3 Establishing Vol. of Incremental Discharge – COMPLIED

Based on 10” water above sink outlet. The incremental discharge in gallons per compartment shall be equal to the proposed gallons per minute (gpm).

	Length (in)	Width (in)	Height (in)	Capacity Volume (gal)	Volume Required (gal)
Compartment 1	48	24	12	50	50
Compartment 2	48	24	12	50	50

6.3.6.4 Computation of Flow Rate – FOLLOWED

The flow rate from the sink was computed by timing the rate of drainage of the first 9 ½” of water from the sink compartment, measured from the 10” mark to the datum line ½” above the sink outlet flange.

6.3.6.4.1 Check Flow Rate Tests - COMPLIED

Compartment	Time (sec)	Time required (sec)
1	112	109-114
1	110	109-114
1	111	109-114
2	112	109-114
2	110	109-114
2	111	109-114

6.3.7 Rating Test Procedure - FOLLOWED

See Table 1 of the rating test.

6.3.7.2 Test Media – FOLLOWED

Certification tests were conducted with fresh, unused lard and water as defined and both within a temperature range from 150 °F to 160 °F.

6.3.7.3 Ratio of Lard to Water - FOLLOWED

The test lard was introduced into one compartment, during each incremental discharge, in the ratio of 1 lb. of lard for each 5 gallons of water in that compartment. Consequently, the proportion of lard to the total amount of water discharged from both sink compartments during each increment was 1 lb. for each 10 gallons respectively. The required amount of test lard, within the above temperature range, was weighed out and poured into the test compartment of the sink.

Findings: 10 lbs per increment used.

6.3.7.4 Test Increments – FOLLOWED

Each test increment consisted of the simultaneous discharge of water from both sink compartments and the lard from the test compartment.

During the first test increment, the lard was poured into compartment 1 while compartment 2 discharged clear water. During the second test increment the lard was poured into compartment 2 while the water in compartment 1 remained clear.

6.3.7.5 Flow Rates – FOLLOWED

The drainage period for each increment was gauged and timed on the basis of the flow from the compartment containing the clear water. The flow rate from the sink was computed and recorded for each increment. (See Table 1 of test report).

6.3.7.6 Efficiency Determinations (Minimum Grease Capacity) – COMPLIED

At the option of the manufacturer the efficiency determination was conducted at the interceptor's minimum grease capacity per Table 1 or at the interceptor's maximum grease capacity by determining the break down point.

Findings: Testing was performed at the maximum grease capacity. See section 6.3.7.7 of this report.

6.3.7.7 Efficiency Determinations (Maximum Grease Capacity) – FOLLOWED

The grease was removed from the skimming tank and the efficiency of the interceptor was computed at each intervals until the average efficiency reached 90% or less and/or the incremental efficiency reached 80% or less.

The testing was continued until the average efficiency reached 85% or less and/or the incremental efficiency reached 75% or less.

Maximum grease retention capacity was established at the increment preceding two successive increments in which either the average efficiency is less than 90% or the incremental efficiency is less than 80 %.

Findings: Refer to Table 1 at the end of this report.

6.3.7.7 Efficiency Determinations (Minimum Grease Capacity) - COMPLIED

The grease shall be removed from the skimming tank and the efficiency of the interceptor shall be computed at intervals of five increments or less until the average efficiency reaches approximately 93% and/or the incremental efficiency reaches approximately 85%. After this point has been reached, efficiency checks shall be made after each incremental discharge.

The testing was continued until the 29th increment.

The efficiency shall be established at the increment preceding the increment in which either the average efficiency is less than 90% or the incremental efficiency is less than 80%. If the average efficiency has not yet dropped below 90% or the incremental efficiency has not yet dropped below 80%, the efficiency shall be reported at the 12th increment.

Findings: Refer to Table 1 at the end of this report. The incremental efficiency at the 29th increment was 87.0 % and the average efficiency was 92.5%

6.3.7.9 Performance Requirements for Certification – COMPLIED

The interceptor shall conform with or exceed the following requirements at the breakdown point:

- (a) have an average efficiency of 90% or more
- (b) have an incremental efficiency of 80% or more
- (c) have retained not less than 2 lb of grease for each 1 gpm average flow rate as determined during the test

Findings: The breakdown point occur at run # 19.

		Required	Result
a	Average efficiency (%)	90 % or more	92.5%
b	Incremental efficiency (%)	80 % or more	87.0%
c	Had retained not less than 2 lbs of grease for each 1 gpm average flow rate (lb)	100 minimum	268.2 lb

6.3.7.10 Rated Capacities – COMPLIED

Standard rating flow rate and grease retention capacities for grease interceptors tested in accordance with the above procedure shall conform in their respective values as those expressed in Table 1.

Findings: Refer to section 6.3.7.9 and Table 1 of this report.

6.3.8 Skimming Procedure - FOLLOWED

The skimming procedure was initiated 5 minutes after the increment to be skimmed has discharged into the tank. The baffles were used alternately until the amounts of grease collected in the procedure are less than 1% by visual observation. Upon completion of the skimming procedure, water shall be drained from the bottom of the pail by means of a spigot. The remainder of the water was collected as describe in the procedure until only a few drops are observed. The lard is then weighed to the nearest ½ gram.

7 Marking and Literature

7.1 Labeling - COMPLIED

The product was permanently labeled with the following information:

- (a) Manufacturer's name
- (b) Model number
- (c) The applicable standard
- (d) Rated flow(s)
- (e) The removal efficiency
- (f) The grease retainment capacity
- (g) Cover Load classification (L)
- (h) Whether an external flow control is needed

7.2 Installation Components – COMPLIED

The grease interceptor was provided with complete installation instructions, including but not limited to the following:

- (a) Flow control and/or vent requirements
- (b) Separate trapping requirements
- (c) Elevation and accessibility requirements
- (d) Safety and health-related instructions
- (e) Cleanout locations
- (f) Instructions that show the clearances required for maintenance, cleaning, and hazard prevention
- (g) Cautions against installation in any manner except as tested and rated
- (h) Where a reducer is required on the outlet, it shall be eccentric with the flat on the bottom – not required.

7.5 Cover Marking-COMPLIED

For Units intended for sale in Canada the cover shall be marked permanently with:

Load classification in accordance with 6.1.1

If for outdoor use minimum and maximum temperatures tested

7.7 Maintenance and Cleaning Instructions - COMPLIED

The unit was provided with complete maintenance instructions including but not limited to the following:

- (a) Maintenance Instructions
- (b) Safety and health provisions
- (c) Cleaning instructions

Each grease interceptor was provided with service instructions and cleaning instructions which included a trouble-shooting guide as well as instructions for performing necessary servicing or for obtaining servicing.

TABLE 1 – Grease Interceptor Rating Test

"GB3" (50 gpm) Grease Interceptor					INCREMENTAL				ACCUMULATED			
Test No.	Grease Sink	Water Sink	Drop Time	Flow Rate (GPM)	Lbs added	Lbs skimmed	Lbs retained	Efficiency (%)	Lbs added	Lbs skimmed	Lbs retained	Efficiency (%)
1	1	2	112.2	50.8	10	0.11	9.89	98.9	10	0.11	9.89	98.9
2	2	1	112.3	50.8	10	0.53	9.47	94.7	20	0.64	19.36	96.8
3	1	2	111.4	51.2	10	0.41	9.59	95.9	30	1.05	28.95	96.5
4	2	1	112.5	50.7	10	0.43	9.57	95.7	40	1.48	38.52	96.3
5	1	2	112.2	50.8	10	0.52	9.48	94.8	50	2.00	48.00	96.0
6	2	1	112.4	50.7	10	0.42	9.58	95.8	60	2.42	57.58	96.0
7	1	2	112.2	50.8	10	0.52	9.48	94.8	70	2.94	67.06	95.8
8	2	1	112.3	50.8	10	0.54	9.46	94.6	80	3.48	76.52	95.7
9	1	2	111.8	51.0	10	0.58	9.42	94.2	90	4.06	85.94	95.5
10	2	1	111.5	51.1	10	0.55	9.45	94.5	100	4.61	95.39	95.4
11	1	2	112.2	50.8	10	0.64	9.36	93.6	110	5.25	104.75	95.2
12	2	1	111.8	51.0	10	0.66	9.34	93.4	120	5.91	114.09	95.1
13	1	2	112.3	50.8	10	0.50	9.50	95.0	130	6.41	123.59	95.1
14	2	1	112.5	50.7	10	0.82	9.18	91.8	140	7.23	132.77	94.8
15	1	2	112.1	50.8	10	0.75	9.25	92.5	150	7.98	142.02	94.7
16	2	1	111.6	51.1	10	1.09	8.91	89.1	160	9.07	150.93	94.3
17	1	2	112.7	50.6	10	0.78	9.22	92.2	170	9.85	160.15	94.2
18	2	1	112.8	50.5	10	0.66	9.34	93.4	180	10.51	169.49	94.2
19	1	2	111.8	51.0	10	0.73	9.27	92.7	190	11.24	178.76	94.1
20	2	1	111.0	51.4	10	0.76	9.24	92.4	200	12.00	188.00	94.0
21	1	2	112.6	50.6	10	1.08	8.92	89.2	210	13.08	196.92	93.8
22	2	1	113.1	50.4	10	1.08	8.92	89.2	220	14.16	205.84	93.6
23	1	2	112.0	50.9	10	0.80	9.20	92.0	230	14.96	215.04	93.5
24	2	1	112.0	50.9	10	1.05	8.95	89.5	240	16.01	223.99	93.3
25	1	2	111.8	51.0	10	1.00	9.00	90.0	250	17.01	232.99	93.2
26	2	1	113.0	50.4	10	1.04	8.96	89.6	260	18.05	241.95	93.1
27	1	2	111.6	51.1	10	1.30	8.70	87.0	270	19.35	250.65	92.8
28	2	1	112.4	50.7	10	1.18	8.82	88.2	280	20.53	259.47	92.7
29	1	2	110.5	51.6	10	1.30	8.70	87.0	290	21.83	268.17	92.5
30	2	1	111.8	51.0	10	2.33	7.67	76.7	300	24.16	275.84	91.9
31	1	2	112.1	50.8	10	2.04	7.96	79.6	310	26.20	283.80	91.5
32	2	1	112.8	50.5	10	2.92	7.08	70.8	320	29.12	290.88	90.9
33	1	2	113.1	50.4	10	3.59	6.41	64.1	330	32.71	297.29	90.1

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Figure 1 Sample Tested



Figure 2- Spec Sheet

SPECIFICATION NOTES

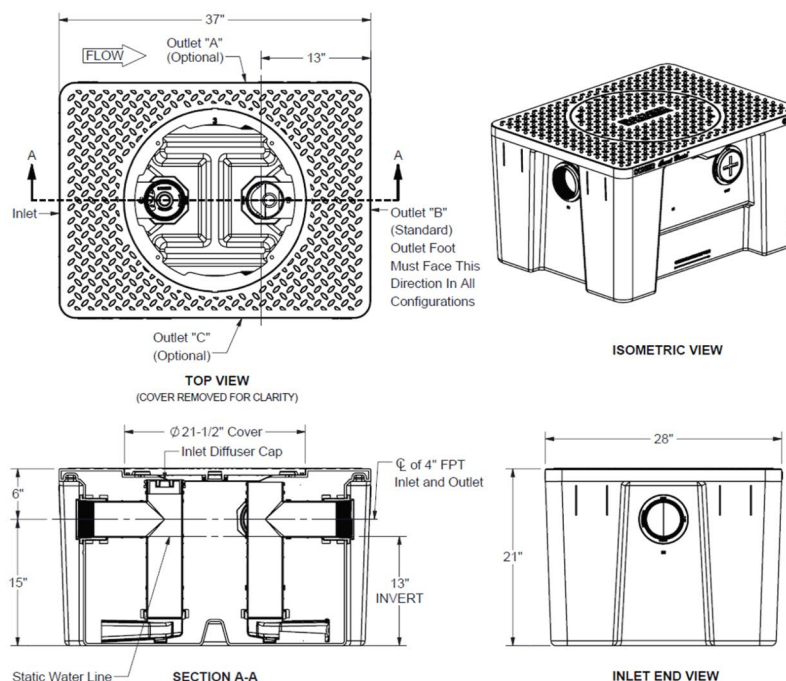
- (1) 4" FPT inlet/outlet with 4" plain end fittings
- (2) Unit weight: 69 lbs. For wet weight, add 335 lbs.
- (3) Maximum operating temperature: 150° F continuous
- (4) Liquid Capacity: 40 gal
Grease Capacity (50 GPM): 268.1 lbs (36.7 gal)
Solids Capacity: 1.9 gal
- (5) This unit does not require flow control for 50 GPM applications
- (6) For gravity drainage applications only
- (7) Do not use for pressure applications
- (8) Cover placement allows full access to tank for proper maintenance
- (9) Vent not required unless per local code
- (10) Engineered inlet and outlet diffusers with inspection ports are removable to inspect / clean piping
- (11) Integral air relief / anti-siphon / sampling access
- (12) Designed for indoor, on-floor, below-grade or low-profile under sink installations

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.

ENGINEER SPECIFICATION GUIDE

Schier Great Basin® grease interceptor model GB3 shall be lifetime guaranteed and made in USA of seamless, molded polyethylene with minimum 5/16" uniform wall thickness. Inlet diffuser cap shall be PVC. Interceptor shall be furnished for above or below-grade installation. This unit is certified for hydromechanical performance to ASME A112.14.3 (Type D) and CSA B481.1, with field cut riser system and three outlet options. Interceptor flow rate shall be 50 GPM. Interceptor grease capacity shall be 268.1 lbs (36.7 gal) @ 50 GPM. Cover shall provide water/gas-tight seal and have a minimum of 450 lbs load capacity.



SPECIFICATION SHEET

SCHIER	MODEL NUMBER	GB3
6455 Woodland Dr Shawnee, KS 66218 tel: 913-951-3300 fax: 913-951-3399 schierproducts.com Made in the U.S.A.	PART NUMBER	4070-001-05
	DESCRIPTION	GB3 GREASE INTERCEPTOR 50 GPM, 4" FPT INLET/OUTLET, WITH 4" PLAIN END FITTING ADAPTERS AND PEDESTRIAN-RATED COVER
	DRAWN BY	D. KLINE
	DATE	10/06/2025
	REV	A
	ECO	00152



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Figure 3 – Data Plate



Figure 4- Cover Rating

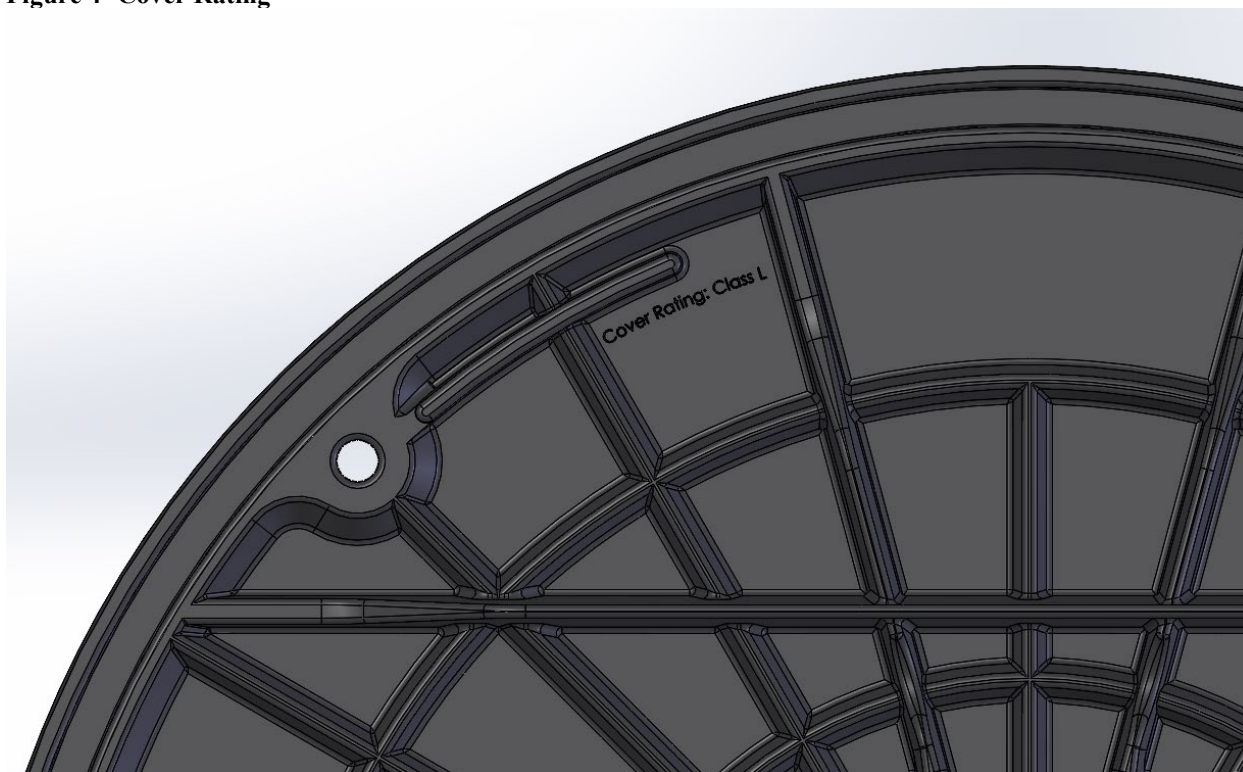


Figure 5- Cover tested



Figure 6- Sample Internals (Example)



Figure 7-Scoop Bottom (Example)

