IAPMO EGS

5001 East Philadelphia Street
Ontario, California – USA 91761-2816

Ph: 909.472.4100 | Fax: 909.472.4150
http://www.iapmo.org

Report Number: 1562-16016-003 **Project No.:** 24654

Report Issued: February 29, 2016

Client: Bestway Inflatables & Material Corp.
No. 3065 Cao An Road
Shanghai, China 201812

Contact: Mr. Ke October

Source of Samples: The samples were sent by Bestway Inflatables & Material Corp., and received by IAPMO EGS in good condition on March 2, 2015, March 3, 2015, March 5, 2015, March 6, 2015, April 2, 2015, April 9, 2015, May 13, 2015 and May 27, 2015.

Date of Testing: March 6, 2015 to August 20, 2015. Dye and Entrapment Test was conducted at client's facility from June 1, 2015 to June 5, 2015.

Sample Description: Portable, storable pool set.

Model Nos.: See pg. 2 for complete list

See Table 1 for pool set differences.

Scope of Testing: The purpose of the testing was to determine if the sample tested portable, storable pool set met requirements of EN 16713-2 Issued February, 2016 entitled, "Domestic swimming pools — Water systems — Part 2: Circulation systems – Requirements and test methods."

CONCLUSION: **The samples tested of the Portable, storable pool set models listed above from Bestway Inflatables & Material Corp. COMPLY with the applicable requirements of EN 16713-2 Issued February, 2016 entitled, "Domestic swimming pools — Water systems — Part 2: Circulation systems – Requirements and test methods." Note that Annexes were not considered since they are considered informative only.**

By our signatures below we certify that all the testing and sample preparation for this report was performed under continuous, direct supervision of IAPMO EGS unless stated otherwise.

Tested by,

Jason Tsan, Test Evaluation Technician

Reviewed by,

Tony Zhou, VP-Engineering

Pool Set Model Nos.:

56377	56386*
56563	56566
56571	56574
56382	56384
56583	56586
56369*	56371
56411	56424*
56409*	56441
56442	56555
56456*	56457
56558	56481
56390	56465
56466	56562
56470	56471
56474	56475*
56408*	56416
56418	56379
56414	56420*
56550	56595
56598	56422
56444	56478
56561	56483
56484	56434*
56488	56438
56451	56452
56462	56427*
56464	56447
56461*	56448*
57268*	57270
57272	57274
57277	57321
57313	57316
57280*	57289
57291*	57294

* Representative models subjected to testing.

Standard: **EN 16713-2**

Section Tested/Evaluated:

4.1 Filtration system design
4.2 Filtration system nominal flow rate
4.3 Extraction of pool water
4.5 Introduction of pool water
4.6 Pipe work
4.7 Pumps
4.8 Information to the user and to the installer
5.0 Test method
5.1 Dye test
5.2 Entrapment test
5.3 Hair entrapment test
5.4 Obstruction test for floor outlets suction grilles
5.5 Evaluation of centrifugal pumps intended for filtration and/or circulation purposes
5.6 Test Report

Test Results: All tests and evaluations were conducted per the written procedures in the specified standard.

EN 16713-2

4 Requirements

4.1 Filtration system design - **FOLLOWED**

The components of the hydraulic system were sized or designed or available in sufficient number to meet the maximum performance requirements of the filtration unit (pump and filter).

4.2 Filtration system nominal flow rate – **COMPLIED**

The filtration system nominal flow rate was designed according to the pool size, pool volume, shape, load and location in order to achieve sufficient water removal from the pool and distribution of water back into the pool. The circulation system ensured the greatest possible mixing of the water in the pool basin.

The filtration system had a sufficient nominal flow rate to allow the total volume of water contained in the pool to be recycled in no longer than 8 h.

Findings: See Tables 1 and 2 for detailed test results on representative models and its construction.

4.3 Extraction of pool water

4.3.1 General - **FOLLOWED**

The majority of the pollution within a swimming pool is found in the top layer of the pool water and therefor good surface water removal during pool operation is essential for efficient filtration and treatment of the water. Other systems can also be used to help the efficiency of the removal of the complete water volume (e.g. bottom main drain, etc.).

4.3.2 Overflow channel **– NOT APPLICABLE**

Findings: Pool sets are not provided with any overflow channel.

4.3.2.3 Water balance tank – **NOT APPLICABLE**

Findings: Pool sets are not provided with any water balance tank.

4.3.3 Skimmer

4.3.3.1 General - **FOLLOWED**

With a skimmer, the water will be removed of one or more positions at the pool.

A flow rate ratio of approx. 2/3 through the skimmers and approx. 1/3 through the bottom drain(s) or additional outlets is recommended. The hazard of suction at the main drain(s) according to 4.4 shall be considered.

Findings: Pool sets models that include a skimmer are use as singular inlet device to pump.

4.3.3.2 Installation of skimmers – **NOT APPLICABLE**

When installing more than one skimmer, the skimmers was installed to ensure balanced flow in each skimmer.

Findings: Pool sets models that include a skimmer are use as singular inlet device to pump.

4.3.3.3 Skimmers in outdoor pools - **COMPLIED**

The positioning of skimmers should be opposite to the main wind direction.

Findings: Manual has instruction which indicates that positioning of pool set with skimmers should be opposite of the main wind direction.

4.3.3.4 Construction requirements – **COMPLIED**

In case the skimmer lid can be walked on, the lid has to withstand the mechanical load. The skimmer lid shall be installed securely to prevent unintentional removal.

Findings: All skimmers are installed in an evaluated vertical and will not be walked on. The placement of the ladder in the pool shall be indicated in installation instruction to be away from skimmer.

4.3.4 Main drain - **COMPLIED**

The main drain used in combination with surface water extraction for filtration purposes. One or more main drains can be installed in a pool. The main drain as pool drain is installed on the deepest area of the basin.

Findings: Main drains are located on the side of the pool however it meets the water turnover circulation requirement as confirmed through testing.

4.4 Risk of suction entrapment – **COMPLIED**

4.4.1 General – **COMPLIED**

Suction devices was designed and installed so as to minimize the potential for entrapment of the user. The water speed at fully submerged suction outlets was less than 0.5 m/s. Hair Entrapment tests was conducted on suction devices. In addition, for pool set model provided with single grille outlet system, the suction fitting construction was a raised grilles domed opposite to the flow direction, with prevalent peripheral suction. The height of the dome was at least 10% of the main dimension.

Findings: See Tables 1 and 2 for detailed test results on representative models and its construction. See Figs. 1 and 2 for suction outlets construction.

4.4.2 Suction chamber for floor and wall water outlets – **NOT APPLICABLE**

Findings: No suction chambers were provided with pool sets.

4.4.3 Skimmers - **COMPLIED**

Skimmer was effectively vented to atmosphere through openings in the lid or through a separate vent pipe.

Findings: For pool sets models provided with skimmers, the lids are provided with a vented opening. See Fig. 10 for details.

4.5 Introduction of pool water – **COMPLIED**

Water returning to the pool tank under pressure assisted the general movement of water in the pool. The number of inlet was sufficient to take 100 % of the nominal flow rate of filtration system. The water speed at pool inlet was greater or equal to 2 m/s.

The number and location of the inlet was ensure an equal and efficient water distribution in order to avoid water stagnation as verified in the water distribution during the dye test.

Findings: See Tables 1 and 2 for detailed test results on representative models and its construction.

4.5.2 Introduction of pool water at reduced filtration flow rate – **NOT APPLICABLE**

Findings: The pumps used in pool sets can only be operated at single speed type.

4.5.3 Air and water operated leisure feature – **NOT APPLICABLE**

Findings: The pool sets are not provided with any air and water operated leisure feature.

4.6 Pipe work – **COMPLIED**

The pipework and fittings used in any circulation system was sized to take the nominal flow rate of filtration system and to minimize frictional head losses. The material was non-corroding and in general terms suitable for the head pressure in the system and the water speed does not exceed 3 m/s within the circulation pipe work at the pressure side. To avoid a potential cavitation risk it is recommended that water speed at the suction side of the pump is lower than the water speed at the pressure side taking into account pump suction behavior and manufacturer's recommendations. All above-ground pipe runs were adequately support.

Findings: See Water Speed at Pool Inlets column in Table 1 for details on representative models. Pipe works and fittings are of proprietary design and determined suitable for intended application. See Figs. 3 and 4 for jet construction.

4.7 Pumps – **COMPLIED**

4.7.1 Principle

This section contains requirements for pumps intended for filtration and/or circulation and/or water leisure features in domestic swimming pools. Pumps are elements subjected to CE marking, therefore this section shall be read and interpreted in conjunction with the current regulation.

Findings: Pump models 58381(GS), 58383(GS), 58386(GS), 58399(GS) , 58389(GS), 58381(EU), 58383(EU), 58386(EU), 58391(EU), 58397(EU), 58400(EU), 58404(EU), 58402(EU), 58389(EU) and 58366(EU) are marked CE compliant on nameplate label.

4.7.2 General - **COMPLIED**

Finding: The pool sets are intended for pump combination as indicated in Table 1. The filtration system is provided with cartridge or filter compartment to prevent objects from fouling the impeller in pump. Parts of the pump that needs servicing were easily accessible.

4.7.3 Hydrostatic pressure test – COMPLIED

The pump and parts of it that contain water under pressure were subjected to hydrostatic pressure test at 150 % of the maximum gauge pressure by the pump.

Findings: At the conclusion of the test, there was no evidence of rupture, leakage, burst or permanent deformation on any part of the pump.

Pump Model	Maximum Operating Pressure (PSI)	Results
58381(GS)	2.4	COMPLIED
58383(GS)	2.6	COMPLIED
58386(GS)	2.6	COMPLIED
58399(GS)	5.5	COMPLIED
58389(GS)	3.5	COMPLIED

58381(EU)	2.4	COMPLIED
58383(EU)	2.6	COMPLIED
58386(EU)	2.6	COMPLIED
58391(EU)	10.8	COMPLIED
58397(EU)	4.2	COMPLIED
58400(EU)	8.2	COMPLIED
58402(EU)	8.2	COMPLIED
58404(EU)	8.0	COMPLIED
58389(EU)	3.5	COMPLIED
58366(EU)	10.2	COMPLIED

4.7.4 Resistance of materials - **COMPLIED**

The pump materials used was suitable for the chemical and mechanical influence within swimming pool water treatment.

Findings: Acceptance was based on material review and CE compliance marking on product.

4.7.5 Performance characterization

4.7.5.1 Head vs. flow rate curve – **NOT APPLICABLE**

For each pump and model, the manufacturer shall provide, on demand, the differential dynamic head vs. flow rate curves. The testing procedure shall be conducted as specified in EN ISO 9906:2013, Annex A, considering monobloc pumps with a nominal power rate less than 10 kW. If not otherwise agreed upon between the manufacturer and purchaser, the tolerance factors shall be the following:

Findings: Applicable requirement is not considered applicable since the scope of the EN ISO 9906:2013 is intended for typical centrifugal construction pumps that are intended to be interchangeable for pools. Bestway's product are prepackaged, portable and storable pool sets (intended for use with only the pump included) and uses proprietary design hoses to ensure that only their prepackage pump can be used in their pool system.

4.7.5.2 Power drawn vs. flow rate curve - **NOT APPLICABLE**

For each pump and model, the manufacturer shall provide, on demand, the active power drawn from the electrical supply for its operation during the whole working range as defined in its head-flow curve. This data shall be presented drawing active power against flow rate.

Testing procedure and representation shall be carried out according to EN ISO 9906:2013, 4.2.

Findings: Applicable requirement is not considered applicable since the scope of the EN ISO 9906:2013 is intended for typical centrifugal construction pumps that are intended to be interchangeable for pools. Bestway's product are prepackaged, portable and storable pool sets (intended for use with only the pump included) and uses proprietary design hoses to ensure that only their prepackage pump can be used in their pool system.

4.7.5.3 Total efficiency vs. flow rate curve - **NOT APPLICABLE**

For each pump and model, the manufacturer shall provide, on demand, the total efficiency (hydraulic power discharged by the pump vs. electrical power) during the whole working range as defined in its head-flow curve. This data shall be presented drawing total efficiency against flow rate.

Testing procedures and representation shall be carried out according to EN ISO 9906:2013, 4.4.2.

Findings: Applicable requirement is not considered applicable since the scope of the EN ISO 9906:2013 is intended for typical centrifugal construction pumps that are intended to be interchangeable for pools. Bestway's product are prepackaged, portable and storable pool sets (intended for use with only the pump included) and uses proprietary design hoses to ensure that only their prepackage pump can be used in their pool system.

4.7.6 Self-priming performance – **NOT APPLICABLE**

A pump designated as self-priming shall be capable to re-prime itself during its normal operation. Whenever a self-priming performance is claimed, self-priming performance shall be verified in accordance to 5.5.3.

Findings: Pumps are not self-priming type.

4.7.7 Endurance running test **- COMPLIED**

Pump and parts of it shall withstand a continuous running test according to 5.5.5.

Findings: See Section 5.5.5 for test details.

4.7.8 Cyclical endurance test **– COMPLIED**

Pump and parts of it did withstand a cyclical test according to 5.5.6.

Findings: See Section 5.5.6 for test details.

4.7.9 Installation requirements

4.7.9.1 General - **COMPLIED**

The installation of the pump was done according to the manufacturer's instructions provided in, either the installation manual or user's manual.

Findings: Installation instructions were provided in pool set manual.

4.7.9.2 Electrical Installation **– COMPLIED**

Implemented in accordance with the manufacturer's instructions, the electrical installation of the pump or any electrical circulation devices related to the pool, complied with the requirements of valid national requirements. These devices complied with electrical product standards or valid national requirements.

Findings: Acceptance was based on manual review and CE compliance marking on product.

4.8 Information to the user and to the installer - **COMPLIED**

The manufacturer provided with each pump a manual. The manual included written information and at least one drawing for the proper installation, use and safety of the product.

Instructions for the consumer shall contain information, including, but not limited to, the following:

- Mind all the safety requirements and recommendations described in the manual;
- In case of doubt on the pump or any circulation devices, contact a qualified installer, or the manufacturer/importer/distributor;
- The water circulation installation shall comply with the European as well as national/local regulations, especially when dealing with electrical issues;
- In case a massage hose can be connected to the water inlet, the manufacturer shall warn the consumer of the potential danger of the jet when aimed at somebody above water level. He shall especially mention the risk for injury to the eyes;
- Any change of valve position, pump size, grille size can cause a change of the flow and the suction velocity can be increased;
- the address or telephone number where the consumer/installer can obtain additional information during the installation in the event of problems.

Findings: The manual was reviewed and determined to comply with above applicable requirement. Note that the pool set is a packaged portable, storable type with dedicated circulation system and pump.

5 Test methods

5.1 Dye Test – **COMPLIED**

The test methods noted in Section 5.1 were followed.

Finding: See Tables 1 and 2 for detailed test results on representative models and its construction.

5.2 Entrapment Test – **COMPLIED**

Any accessible circulation equipment shall fulfill the general entrapment requirements in accordance with EN 16582-1.

Finding: All accessible circulation equipment (i.e. skimmer, suction outlets, jets) were reviewed for compliance to EN 16582-1.

5.3 Hair entrapment test – **COMPLIED**

The test methods noted in Section 5.3 were followed.

Findings: Testing was conducted on On Site Test. All hair pulls did not exceed 15 N. See Table 1 for detailed results.

5.4 Obstruction test for outlet suction grilles – **NOT APPLICABLE**

Findings: All suction outlets were installed vertically.

5.5 Evaluation of pumps intended for pool water filtration and/or pool water circulation purposes

5.5.1 Principle – **FOLLOWED**

5.5.2 General Comments on apparatus and test conditions - **FOLLOWED**

5.5.3 Self-priming performance – **NOT APPLICABLE**

Findings: Pumps intended for pool sets are not self-priming type.

5.5.4 Hydrostatic pressure test – **FOLLOWED**

Pump and parts of it that contain water under pressure was capable of withstanding a hydrostatic pressure test at 150 % of the maximum pressure deployed by the pump (pressure at flow = 0). Findings: See Section 4.7.3 for test result details.

5.5.5 Endurance running test **– COMPLIED**

Pumps and parts of them shall withstand a continuous running test of at least 3,000 hours.

Findings: Testing in progress. The pumps did not experience any malfunctions, which could compromise the expected application or the safety of use.

Pump Model	Hours of continuous operations	Results
58381(GS)	3000 hrs	No malfunctions
58383(GS)	3000 hrs	No malfunctions
58386(GS)	3000 hrs	No malfunctions
58399(GS)	3000 hrs	No malfunctions
58389(GS)	3000 hrs	No malfunctions
58381(EU)	3000 hrs	No malfunctions
58383(EU)	3000 hrs	No malfunctions
58386(EU)	3000 hrs	No malfunctions
58391(EU)	3000 hrs	No malfunctions
58397(EU)	3000 hrs	No malfunctions
58400(EU)	3000 hrs	No malfunctions
58402(EU)	3000 hrs	No malfunctions
58404(EU)	3000 hrs	No malfunctions
58389(EU)	3000 hrs	No malfunctions
58366(EU)	3000 hrs	No malfunctions

5.5.6 Cyclical endurance test - **COMPLIED**

Pump and parts of it withstood a cyclical test for at least 10,000 cycles of operation. The test methods in Section 5.5.6 were followed.

Findings: At the conclusion of testing, there was no evidence of rupture, leakage, burst or permanent deformation on any part of the pump and strainer or mechanical and electrical failure.

Pump Models	Cycles Completed	Results
58381(GS)	10,000	Complied
58383(GS)	10,000	Complied
58386(GS)	10,000	Complied
58399(GS)	10,000	Complied
58389(GS)	10,000	Complied
58381(EU)	10,000	Complied
58383(EU)	10,000	Complied
58386(EU)	10,000	Complied
58391(EU)	10,000	Complied
58397(EU)	10,000	Complied
58400(EU)	10,000	Complied
58402(EU)	10,000	Complied
58404(EU)	10,000	Complied
58389(EU)	10,000	Complied
58366(EU)	10,000	Complied

5.6 Test Report – **FOLLOWED**

Findings: The test report guidelines were followed in issuance of test report.

Test Equipment Used		
Instrument ID	Description	Calibration Due Date
1279	Pocket Colorimeter	
941	Force Gauge	10/31/2015
1244	Measuring Tape	11/6/2015
1254	Stopwatch	8/18/2016
996	Pressure Gauge	11/4/2015
1200	Pressure Gauge	11/11/2015
1027	Flow Meter	4/10/2016
12	Ohaus scale	7/31/2015
1150	Thermocouple	6/24/2015

Table 1 – Pool Set Models Tested

No.	Pool Set Model No.	Pool Set Description	Pump Model/ Filter Type	Pool Volume (Gallon)	Circulation System flow measured (Gallon Per Hour) / Pump Nominal Flow Rate measured (Gallon Per Hour)	Turn over time for Pool Set (Hours, Max. 8 hrs)	Water Speed at fully submerged outlets (≤0.5 m/s)/Suction outlet model / Opening Area*	Hair Entrapment Results (Max. <15 N)**	Water Speed at Pool Inlets (≤2.0 m/s) / Jet model/Opening Area***	Dye Test Result	Test Date
1	56386	15' x 36" Round, Hydrium Splasher Pool Set	58383 / Cartridge	3305	612 / 660	5.4	0.24 m/s	Pull Force: 4.0 N, 4.2 N and 4.1 N	1.72 m/s	Complied	7/1/2015
2	56369	20' x 12' x 48" Hydrium Oval Pool Set	58400 / Sand	6284	1332 / 1320	4.7	N/A	Pool is provided with skimmer. Testing was not conducted.	1.38 m/s	Complied	7/3/2015
3	56424	157"x83"x32" 5700L Family Splash Frame Pool Set	58381 / Cartridge	1467	264 / 330	5.6	0.1 m/s	Pull Force: 4.2 N, 4.0 N and 4.0 N	0.90 m/s	Complied	7/3/2015
4	56409	113"x79"x39.5" Power Steel Rectangular Frame Pool Set	58381 / Cartridge	1295	264 / 330	4.9	0.1 m/s	Pull Force: 4.0 N, 4.1 N and 4.0 N	0.90 m/s	Complied	7/2/2015
5	56456	162"x79"x48" Power Steel Rectangular Frame Pool Set	58383 / Cartridge	2327	612 / 660	3.8	0.24 m/s	Pull Force: 4.3 N, 4.3 N and 4.2 N	1.72 m/s	Complied	7/2/2015
6	56475	24'x12'x52" Power Steel Rectangular Frame Pool Set	58404 / Sand	8258	1332 / 1380	5.5	0.34 m/s	Pull Force: 4.3 N, 4.3 N and 4.1 N	1.50 m/s	Complied	7/3/2015
7	56408	10'x30" Round, Steel Pro Frame Pool Set	58381 / Cartridge	1175	264 / 330	4.5	0.1 m/s	Pull Force: 4.3 N, 4.2 N and 4.2 N	0.90 m/s	Complied	7/1/2015
8	56420	12'x48" Round, Steel Pro Frame Pool Set	58383 / Cartridge	2961	612 / 660	4.8	0.24 m/s	Pull Force: 4.2 N, 4.1 N and 4.0 N	1.72 m/s	Complied	7/3/2015

9	56434	15'x36" Round, Steel Pro Frame Pool Set	58383 / Cartridge	3305	612 / 660	5.4	0.24 m/s	Pull Force: 4.3 N, 4.2 N and 4.01 N	1.72 m/s	Complied	7/1/2015
10	56427	18'x52" Round, Power Steel Frame Pool Set	58389 / Cartridge	7297	1140 / 1140	6.4	0.26 m/s	Pull Force: 4.2 N, 4.3 N and 4.3 N	1.20 m/s	Complied	7/2/2015
11	56461	18'x12'x48" Steel Pro Frame Pool Set	58386 / Cartridge	3957	630 / 720	6.3	0.24 m/s	Pull Force: 4.2 N, 4.32 N and 4.1 N	1.77 m/s	Complied	7/2/2015
12	56448	16'x10'x42" Power Steel Frame Pool Set	58386 / Cartridge	3591	630 / 720	5.7	0.24 m/s	Pull Force: 4.3 N, 4.2 N and 4.0 N	1.77 m/s	Complied	7/2/2015
13	57268	8'x26" Round, Fast Set Pool Set	58381 / Cartridge	627	264 / 330	2.4	0.1 m/s	Pull Force: 4.2 N, 4.0 N and 4.1 N	0.9 m/s	Complied	7/1/2015
14	57280	15'x36" Round, Fast Set Pool Set, Includes pool cover and ground cloth	58383 / Cartridge	3305	612 / 660	5.4	0.24 m/s	Pull Force: 4.2 N, 4.3 N and 4.2 N	1.72 m/s	Complied	7/1/2015
15	57291	18'x48" Round, Fast Set Pool Set	58389 / Cartridge	6662	1140 / 1140	5.9	0.26 m/s	Pull Force: 4.3 N, 4.4 N and 4.3 N	1.2 m/s	Complied	7/2/2015

* Water Speed at fully submerged outlets was calculated using circulation system flow divide suction fitting opening areas.
**Hair Entrapment Test – Tested on site. No adjustment of pump made during testing. Since pool set uses proprietary hoses and specific pump models, only configuration as indicated in table were tested.
*** Water Speed at Pool Inlets was calculated using the higher of the circulation system flow or pump nominal flow rate divide jet opening areas.

Table 2 – Pool Set Models – Critical Construction Details

Model No.		Fitting Dimension (distance from each other; in)	Suction Height (in.)	Inlet Height (in.)	Hose Length (in.)	Suction Fitting Model	Jet Model	Hose ID Size (in.)
1.	56386	62 in.	24 in.	24 in.	118 in.	F4078	F4081	1.2 in.
2.	57280	73 in.	21 in.	23 in.	118 in.	F4078	F4081	1.2 in.
3.	57268	70 in.	9 in.	12 in.	118 in.	F4078	F4081	1.2 in.
4.	56434	42 in.	17.5 in.	25 in.	118 in.	F4078	F4081	1.2 in.
5.	56408	75 in.	15 in.	22 in.	118 in.	F4078	F4081	1.2 in.
6.	56448	52 in.	24 in.	30 in.	118 in.	F4078	F4081	1.2 in.
7.	56409	46 in.	23 in.	28.5 in.	118 in.	F4078	F4081	1.2 in.
8.	56461	43 in.	27.5 in.	29 in.	118 in.	F4078	F4081	1.2 in.
9.	57291	75 in.	29.5 in.	34.5 in.	118 in.	F4077	F4080	1.5 in.
10.	56427	75 in.	37 in.	42.5 in.	118 in.	F4077	F4080	1.5 in.
11.	56456	46 in.	32 in.	37 in.	118 in.	F4078	F4081	1.2 in.
12.	56420	37 in.	28.5 in.	35.5 in.	118 in.	F4078	F4081	1.2 in.
13.	56369 w/ skimmer model P6762	76 in.	38 in.	35 in.	118 in.	-	-	1.2 in.
14.	56424	41 in.	5 in.	22.5 in.	118 in.	F4078	F4081	1.2 in.
15.	56475	44 in.	34.5 in.	39.5 in.	118 in.	F4077	F4080	1.5 in.

Photos or Tested samples:

Fig. 1 - Suction Outlet Model F4077, Measured Opening Area is 0.00461944 m^2.

Fig. 2 - Suction Outlet Model F4078, Measured Opening Area is 0.0027228 m^2.

Fig. 3 – Jet model F4080 (larger); Measured Opening Area is 0.001024 m^2.

Fig. 4 – Jet model F4081 (smaller), Measured Opening Area is 0.000373 m^2.

Fig. 5 - Model 56386

Fig. 6 – Model 57280

Fig. 7 – Model 57268

Fig. 8 – Model 56434

Fig. 9 – Model 56408

Fig. 9 – Model 56448

Fig. 10 – Model 56409

Fig. 11 – Model 56461

Fig. 12 – Model 57291

Fig. 13 – Model 56427

Fig. 14 – Model 56456

Fig. 15 – Model 56420

Fig. 16 – Model 56369 w/skimmer

Fig. 17 – Model 56424

Fig. 18 – Model 56475

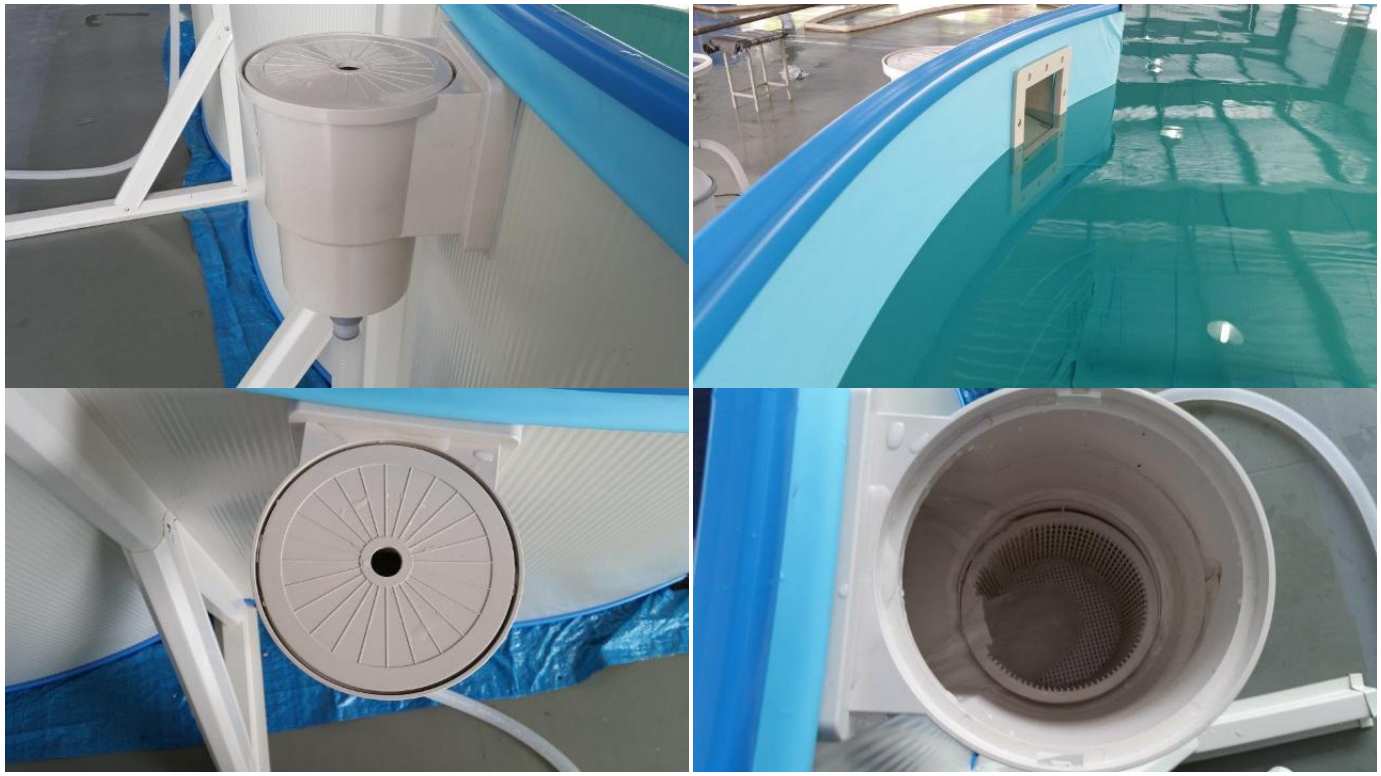

Fig. 19 – Skimmer Model P6762

Skimmer Dimension	Opening	Height	Width at top	Width at bottom
	5 ¼ in. by 5 ½ in.	10 ½ in.	8 1/8 in.	6 in.