

GX SERIES 1/2020 FRP MOLDED BASKET STRAINER



The Fluidtrol GX Series is a non-metallic housing inline basket strainer engineered for general water through moderately corrosive industrial water systems.

Wetted surfaces are comprised of FRP (Fiberglass Reinforced Plastic with High Quality Vinyl Ester Resin), PVC and EPDM. This composite construction offers the highest corrosion resistance along with the structural integrity to last a project lifespan of 20-30 years.

Face to

Pressure Rating: 75 psi Max Temp: 140 F Service Fluid: Mild Corrosive



ITEM	PART	MATERIAL
1	FLANGE	PVC
2	GASKET	O-RING
3	T-HANDLE	SS316
4	COVER	FRP
5	VENT	1⁄2" FPT IN COVER
6	BODY	FRP
7	BASKET	1⁄8" PERF ss316
8	DRAIN	PVC NPT INLET SIDE

FRP construction can reduce costs in shipping, installation, and servicing with lighter weight components. This is possible without sacrificing strength because FRP has strength to weight ratio approximately 4 times that of steel. FRP has excellent electrical insulation properties.

The standard basket is SS316- 1/8" Perforations, but many options exist for clients requiring a different filtration level or material of construction. Contact Fluidtrol if custom configurations or dimensions are required.

Center

	PN	Strainer Size	Face (inch) A	Line (inch) B	Height (inch) C	Weight (lbs)
	GX186102031	2	11 3/4	10 5/8	18 1/8	33
	GX186103031	3	11 3/4	10 5/8	18 1/8	34
	GX186104031	4	14	11 3/4	20 1/8	39
	GX186105031	5	171/2	16 1/4	25 1/4	55
	GX186106031	6	17 1/2	16 1/4	25 1/4	57
1	GX186108031	8	20	213/4	33 1/4	82
	GX186110031	10	22	23 1/4	371/4	108
	GX186112031	12	271/2	31 7/8	45 3/4	185
	GX186114031	14	37	33	47 1/2	220
	GX186116031	16	41	37 1/4	55	260
	GX186118031	18	45	39 1/2	58	300
Part of the second	GX186120031	20	45	42 1/4	60 3/4	330



WWW.FLUIDTROL.COM

888-551-0511

FLUIDTROL PROCESS TECHNOLOGIES, INC. 3460 STANWOOD BLVD HUNTSVILLE, AL 35811



Basket Area / Inlet Area 18.8 15.6 17.1 18.0 12.6 11.3 10.2 10.1 13.0 11.1 9.9 9.9



GX SERIES FRP MOLDED BASKET STRAINER

Rugged Design for Easiest Maintenance

Customer Committed

30+ years in Strainer Manufacturing 20 year housing Lifespan 98+% Customer Satisfaction **Immediate US Customer Support** Support parts ship next day



Ergonomic Remove the basket without bending over. All nuts, bolts, and gaskets stay attached, and the lid stores on its shelf.



Durable Quick Release Solid 316 SS T-Handle allows toolless maintenance without gauling or breaking

Dependable

Corrosive barrier bonded to non-rusting FRP housing does not require painting



888-551-0511 WWW.FLUIDTROL.COM

FLUIDTROL PROCESS TECHNOLOGIES, INC. 3460 STANWOOD BLVD HUNTSVILLE, AL 35811





Strong 316 SS or PVC Baskets will handle worst case loading.



1/2020

SPC-FRP-003: SPECIFICATION FOR MOLDED FIBERGLASS REINFORCED PLASTIC (FRP) BASKET STRAINERS MADE FOR INDUSTRIAL WATER SYSTEMS- GX SERIES

1. SCOPE

The molded fiberglass reinforced plastic basket strainer shall be designed for the suction or discharge side of water and chemical systems. These strainers are designed for easy operation, assuming maintenance personnel have limited training and minimal tools to clean the basket. Baskets are designed to remove all foreign objects larger than basket perforation size.

2. DESIGN REQUIREMENTS

- 2.1. Configuration
 - 2.1.1. Strainer type shall be flanged basket
 - 2.1.2. Effluent shall be in-line with the influent
 - 2.1.3. Height, drain port, basket size, and face-face dimensions shall be interchangeable with Fluidtrol GX series design

2.2. Flanges

- 2.2.1. Flanges shall allow easy installation into piping system by limiting rotational nozzle stress and flange bolt hole misalignments
 - 2.2.1.1. Flanges 12" and smaller shall be ANSI 150# Van Stone type- PVC SCH80.
 - 2.2.1.2. Flanges 14" and larger shall be fabricated- dual laminate.
- 2.2.2. Flange material shall be PVC Cell Class 23447-B ASTM D-1784

2.3. Basket

- 2.3.1. Basket material shall be 316 Stainless Steel- or as specified.
- 2.3.2. Basket perforation shall be 1/8" on 3/16" centers- or as specified.
- 2.3.3. Basket shall have handle welded to body, capable of holding 50lbs of debris
- 2.3.4. Basket shall be able to withstand 15 psi pressure drop across the perforated wall
- 2.3.5. Basket open area shall be a minimum of 4 times greater than influent cross-section area

2.4. Basket Maintenance

- 2.4.1. No tools shall be required to remove the lid
- 2.4.2. The lid shall be molded FRP with a minimum thickness of 1" and flexural strength greater than 15,000 psi
- 2.4.3. Lid attachment shall be with 316 Stainless Steel Tee Handles / Swing Bolts
- 2.4.4. Gasket grooves shall be in the strainer body to prevent accidental misplacement
- 2.4.5. Basket shall self-center and remove in one simple motion
- 2.4.6. Basket shall be suspended to ensure positive seal at the basket flange
- 2.4.7. Vent plugs shall allow for gas removal without lid removal
- 2.4.8. Drain plugs shall be minimum 1 inch off floor to prevent plugging from debris

2.5. Operating Conditions

- 2.5.1. Normal operating temperature is 75 deg F with no effect on longevity
- 2.5.2. Maximum fluid temperature shall be 140 deg F with reduced pressure rating
- 2.5.3. Normal operating pressure is 2 psi suction
- 2.5.4. Maximum operating pressure is 75 psi with no surge
- 2.5.5. Maximum suction pressure is 14 psig vacuum
- 2.6. Test Pressure
 - 2.6.1. Hydrostatic testing of the assembled strainer at 85 psig shall be conducted on every unit.
- 2.7. Materials of Construction
 - 2.7.1. Gaskets shall be EPDM or Silicone
 - 2.7.2. Shell shall be FRP with high grade, corrosive resistant vinyl ester resign matrix
 - 2.7.3. Strainer shall be constructed from components certified to NSF/ANSI 61
 - 2.7.4. Exterior shall have UV protective inhibitors to maximize service life
 - 2.7.5. Flanges shall be PVC Cell class 23447-B, ASTM D-1784
- 3. CONSTRUCTION
 - 3.1. Manufacturer shall have minimum five year service history in industry
 - 3.2. Manufacturer shall maintain as-built dimensions of each strainer
 - 3.3. Manufacturer shall be ISO 9001:2008 Certified
 - 3.4. Manufacturer shall supply minimum one year warranty on lids, baskets, and gaskets to cover defect in material or workmanship
 - 3.5. Manufacturer shall supply minimum five year warranty on FRP shell to cover defect in material or workmanship
 - 3.6. Approved manufacturer
 - 3.6.1. Fluidtrol Process Technologies, Inc. www.fluidtrol.com







6 " Strainer



8 "Strainer



10 " Strainer

30

40

% BASKET FOULING

50

60

70

-300 gpm -600 gpm 80







40 % OPEN AREA PERFORATION PATTERN- STANDARD 1/8" OR 1/4"

5.00

4.00

3.00

2.00

1.00

0.00

5.00

0

10

20

PRESSURE DROP (PSI)



PRESSURE DROP PROFILES

0.00

ò

% BASKET FOULING

 3400 gpm 4300 gpm

40 % OPEN AREA PERFORATION PATTERN- STANDARD 1/8" OR 1/4"

0.00

% BASKET FOULING

1/2020

→ 2800 gpm → 3400 gpm