



A United Industries, Inc. Company

Series
TFH

Project Specifications

141 GPM MAX FLOW RATE 100 PSI WORKING PRESSURE

Model Number	Base Dimensions	HP	Max GPM	TDH Ft.	Full Load Amp Draw								Media		Operating Weight in Lbs
					Single Phase				Three Phase				Area SqFt	Vol CuFt*	
					S.F.	115V	208V	230V	S.F.	208V	230V	460V			
TFH-18		1	35	65	1.15	12.0	6.6	6.0	1.15	3.2	3.6	1.8	1.8	4.0	
TFH-24	22" X 46"	1.5	65	50	1.0	17.0	8.8	8.5	1.15	4.4	4.2	2.1	3.14	7.0	2488
TFH-30	26" X 52"	3	100	45	1.0	-	14.0	14.2	1.15	8.1	8.0	4.0	5.0	9.0	2957
TFH-36	30" X 58"	3	141	58	1.15	34.0	-	17.7	1.0	-	8.6	4.3	7.0	14.0	3910

*1 Cubic foot of media = 100 lbs.

TOWER-FLO® Series TFH self-contained filter plants shall consist of the following major components: base, pump, motor, strainer, facepiping, valve, controls, and filter vessel. The system shall be shipped as a complete factory assembled and tested unit. Filter media shall be shipped with the unit for field installation.

Project: _____ Date: _____

The TOWER-FLO® Series TFH Model being specified for this project is a TFH-____ with a maximum filter rate of _____ GPM. ____ unit(s) is(are) specified and each unit shall be equipped with the following components:

COMPONENT SPECIFICATION

BASE ____ **Standard:** Structural steel channel and plate, primed and coated.

PUMP ____ **Standard:** Self-priming, close grain cast and machined brass volute, impeller, and pump-to-motor coupling; close coupled to the motor; and capable of _____ GPM at _____ feet TDH.

MOTOR ____ **Standard:** TEFC, heavy gauge rolled steel case, NEMA 56C frame, Class F insulation, double shielded prelubricated ball bearings; UL® and CSA® listed; _____ HP; and at the following VAC and phase:
 single phase ____ 120V, ____ 208V, ____ 230V,
 three phase ____ 208V, ____ 230V, ____ 460V,
 ____ **Option:** 575V.

STRAINER ____ **Standard:** Basket type, FRP body, ABS basket, clear lexan cover, held in place by stainless steel band clamp, 50 psi maximum.

FACEPIPING ____ **Standard:** Steel; backwash sight glass; influent / effluent pressure gauges, 0-160 psi, liquid-filled
 ____ **Addition:** Type 304 Stainless Steel (with brass or stainless steel valves).
 ____ **Addition:** Sch 80 PVC (with 24 VAC CPVC diverter valves).
 ____ **Addition:** CPVC (with 24 VAC CPVC diverter valves).

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COMPONENT SPECIFICATION

VALVES

- Standard:** Brass, 3-way ball valves, with electric actuation.
- Addition:** Stainless steel (with steel or stainless steel facepiping).
- Addition:** 24 VAC CPVC diverter valves (with PVC or CPVC facepiping).
- Addition:** Pneumatic actuation (with brass or stainless steel valves).

CONTROLS

- Standard, three phase or single phase, Automatic backwash operation:** UL® Listed control panel with: NEMA 3R enclosure; motor starter with thermal overload and short circuit protection; transformer to convert primary supply to 24 and 120 VAC control power; through-the-door power disconnect; programmable relay with adjustable timing controls for backwash steps; program protected internally against power failure; 30-second time delay in delta P switch circuit; 1-100 hour "re-setting" timer (ΔP switch closure or manual initiation resets timer) for backup backwash initiation; ΔP repeat closure shut-off and alarm; manual ON/OFF switch; manual backwash initiation switch; backwash counter; and differential pressure switch (external to the controls enclosure) for primary backwash initiation.
- Option:** Fresh water backwash from municipal water supply; includes facepiping modifications, flow control valve for field installation; end-user responsible for the addition of pressure regulator (maximum 30 psi) and/or backflow preventer, if required.
- Option:** Fresh water backwash from static water supply using pump to assist.
- Addition:** Backwash lockout between/among ____ units; to prevent simultaneous backwash of multiple filter units; 0-60 minute adjustable lockout time delay program; field connection between/among control panels by others.
- Addition:** Contacts for connection to BMS, additional specifications required from owner.
 - remote indication of common alarm.
 - remote indication of backwash in operation.
 - remote control of pump on/off with HOA switch.
 - other (be specific) _____.
- Option:** Manual backwash; ____ single-phase; ____ three-phase.

VESSEL

- Standard:** Carbon steel; 15-18 mil epoxy coated interior; Schedule 80 PVC and molded cyclo-lac internals; 11" X 15" access manway; 4" X 6" handhole; 100 psi working pressure; fitted with tank drain, influent and effluent pressure gauges, automatic air relief valve. Maximum flow rate _____ GPM at 20 GPM per square foot filter surface area.
- Addition:** Type 304 stainless steel
- Addition:** working pressures to 150 psi.

MEDIA

- Standard:** Quartzite or silica in nature, hard, not smooth, uniformity coefficient of 1.7, relative size of .45 to .55 mm, containing no more than 5% flat particles or more than 1% clay, loam dust, or other foreign material. Media weighs 100 lbs per cubic foot.

NOTE: Backwash flow rate, irrespective of water source, must be no less than 75% and no greater than 100% of the vessel's designed maximum gpm. Backwash duration is factory preset at 3 minutes and is field adjustable.