

192 GPM MAX FLOW RATE 150 PSI WORKING PRESSURE @ 150°F

Model #	Max GPM	Standard Plumbing Connections	PIV Plumbing Connections	Vol Sand Ft³	Operating Weight in Lbs.	PMC HP
TFCL-12	20	3/4"	1-1/4"	1.5	330	1/2
TFCL-20	43	1-1/4"	1-1/4"	4.0	800	1
TFCL-24	65	1-1/2"	1-1/2"	5.0	1200	1.5
TFCL-30	100	2"	2"	7.0	1800	3
TFCL-36	141	2-1/2"	2"	10.0	2300	na
TFCL-42	192	3"	na	18.0	3500	na

*1 Ft³ of media = 100 lbs. Operating Weight based on **Standard** TFCL

TOWER-FLO® Series TFCL filter systems shall consist of the following major components: a vertical pressure vessel, valves, facepiping, controls with programmable timer or programmable relay for automatic operation. Filter media shall be shipped with the unit for field installation. Backwash is timer initiated and is from city water supply.

TFCL units can be configured as follows:

- STANDARD:** pilot pressure actuated diaphragm valves;
- PIV:** Positive Isolation Valving which completely isolates the actuation of the valves on the system side connections from the actuation of the valves on the city water and drain connections;
- PMC:** either of the above valving with the addition of a Pump, Motor, and motor Controls;
- PORTABLE:** TFCL-12 OR TFCL-20 ONLY, in any of the three above arrangements, on a caster-wheeled base, with or without steam hoses having wolf style quick connections.

Project: _____ Date: _____

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

COMPONENT SPECIFICATION

- VESSEL**
 - ___ **Standard:** Carbon steel; 15-18 mil epoxy interior coating; exterior coating of two-part epoxy primer finished with two-part industrial and marine grade polyurethane; 150 psi working pressure at 150° F; access through top head opening; threaded influent and effluent; air release coupling in top head with automatic air release valve; type 304 stainless steel internals.
 - ___ **Option:** Type 304 stainless steel vessel.
 - ___ **Option:** Working pressures to 300 psi.
 - ___ **Option:** Working temperatures to 200°F.
- VALVES**
 - ___ **Standard:** Automatic, diaphragm type, cast iron bodied, pilot control valves actuated by electronic solenoids.
 - ___ **Option:** **PIV:** positive isolation valve arrangement; 2 sets of bronze 2-way ball valves, _____", with stainless steel linkage and _____ VAC electric actuators to positively isolate system and backwash water sources. NOTE: Not available on TFCL-42.
- FACEPIPING**
 - ___ **Standard:** Class 150 malleable iron fittings; influent pressure gauge, backwash sight glass.
- CONTROLS**
 - ___ **Standard:** Automatic backwash operation; control panel with: NEMA 3R enclosure; seven day programmable timer with an LCD time display; minimum 14 daily on/off operations poles; 15A at 125 VAC, 60 Hz.
 - ___ **Option:** Manual backwash operation (bronze ball valves with handles, no actuators).
 - ___ **Option:** **PIV:** Panel with user adjustable timer settings for customized valve operation requirements while isolating system and backwash water sources.

COMPONENT SPECIFICATION

- ___ **Option:** **PMC: Three phase or single phase,** Automatic backwash control panel, UL® and cUL® Labeled, in a NEMA 4X fiberglass enclosure including: motor starter with thermal overload and short circuit protection; fuseless branch and control circuit protection; transformer to convert primary supply to 120 VAC control power; through-the-door disconnect; programmable relay with program of operation, 7-year battery backup and external memory card backup; HOA switch for pump motor; primary backwash initiation by user adjustable timer or manual backwash initiation pushbutton; backwash counter; and contacts for ΔP repeat closure shut-off and alarm, common alarm (motor trip indication), remote indication of backwash operation, and remote backwash initiation.
 - ___ **Option:** **PIV and PMC: Three phase or single phase,** Automatic backwash control panel, same as **PMC** panel above, with **PIV** user adjustable timer settings for customized valve operation requirements: transformer to convert primary supply to 120 and 24 VAC control power.
- PUMP:**
- ___ **Option:** **PMC: TFCL-12, thru -30:** Self-priming; close grain cast and machined brass volute, impeller, and pump-to-motor coupling; 316 stainless steel impeller shaft; close coupled to a TEFC motor; and capable of ___ GPM at ___ feet TDH.
 - ___ **Option:** **PMC:** other pump as follows: _____
- MOTOR:**
- ___ **Option:** **PMC: TFCL-12 thru -30:** 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, phase and Hz: _____.
 - ___ **Option:** **PMC:** other motor as follows: _____
 - ___ **Option:** 575V.
- BASE:**
- ___ **Standard or PIV:** Structural steel plate, primed and coated.
 - ___ **Option:** **PMC:** Structural steel channel, primed and coated.
 - ___ **Option:** **PIV or PMC:** Portable, casted base, structural steel channel, primed and coated. NOTE: TFCL-12 and TFCL-20 units only.
 - ___ **Option:** **PIV or PMC: Portable:** Quick connect wolf couplings, four male ends factory installed on valve connections, and eight female ends, one on each end of four 25' steam hoses: ___ 1"; ___ 1-1/4"
- 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.

NOTE: Standard connection for pilot pressure to the standard diaphragm valves is to the municipal water supply used for backwashing. If system pressure is greater than municipal supply pressure at the point of installation, the system will not operate properly. In installations where system pressure is greater than municipal pressure, make the pilot connection to system water.