



Culligan® Heavy Duty Commercial Filters

Apartments

Assisted Living

Cafeterias

Casinos

Educational Facilities

Food Service

Government

Grocery

Health Clubs

Hospitality/Lodging

Hospitals

Institutions

Laundry

Manufacturing Facilities

Office Buildings

Printing

Theme Parks

Travel Centers

Vehicle Wash



Culligan's Hi-Flo® 42 Commercial Filters

Standard Features

- 24 Volt Culligan's MVP™ Controller – Field programmable with a back-lit LCD display and UL listed 120v/24v transformer.
- Single, Duplex, Triplex, or Quad Configurations
- Regeneration initiation by choice of time clock, meter or differential pressure switch.
- Carbon Filters – For reduction of organics (flow rates up to 39gpm), or chlorine (flow rates up to 77gpm).
- Depth Filters – Flow rates up to 193gpm.
- Top-Mounted Control Valve – Keeps plumbing connections simple and adaptable. Full flow porting with rounded orifices and wide-open cartridges promote good flow characteristics and low pressure fluctuations.
- Corrosion resistant tanks – Made of fiberglass reinforced polyester (FRP) with additional reinforcement from continuous fiberglass overlap.

Trust The Water Experts®



Culligan's Hi-Flo® 42 Commercial Filters

Applications and Benefits

- Food and Beverage—Superior taste and increased cost savings.
- Drinking Water—Reduces turbidity and chlorine; improves taste and clarity.
- Boilers—Turbidity reduction, minimize sludge blowdown.
- Light Industry Processes—Reduces particulate matter.
- Pretreatment—For softeners, RO's and DI systems.
- Vehicle Wash—Turbidity reduction.

Options

- Patented Progressive Flow—Culligan's MVP™ controller can monitor flow demands, bringing additional tanks on-line or off-line as flows increase or decrease.
- Differential Pressure Switch
- Sample cocks and pressure gauges
- Separate source regeneration kits
- Skid mounting
- Flow meter

Warranty

Culligan's *Hi-Flo* 42 water filters are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, tanks carry a limited 5-year warranty.*

* See printed warranty for details. Culligan will provide a copy of the warranty upon request.

System Specifications

Pressure: 40–100 psig
207–690 kPa
Power: 120 VAC/24 VAC
50/60 Hz
Temperature: 40–120°F
4–49°C

Model		Water Quality						Backwash Flow Rate (GPM)	Valve Size (inches)
		Superior*		High**		Utility***			
		Flow Rate (GPM)	Pressure Loss (PSI)	Flow Rate (GPM)	Pressure Loss (PSI)	Flow Rate (GPM)	Pressure Loss (PSI)		
Depth Filters	HD-20T	22	4	33	8	44	14	30	2
	HD-24T	32	5	48	9	63	12	48	2
	HD-30T	50	7	74	11	99	15	70	2
	HD-36T	71	10	107	19	142	29	90	2
	HD-42T	97	14	145	32	193	58	135	2
Carbon Filters	HR-20T	9 ¹	1 ¹	14	2	18 ²	3 ²	20	2
	HR-24T	13 ¹	2 ¹	19	3	26 ²	4 ²	30	2
	HR-30T	20 ¹	2 ¹	30	4	40 ²	5 ²	48	2
	HR-36T	29 ¹	2 ¹	42	4	57 ²	7 ²	70	2
	HR-42T	39 ¹	3 ¹	58	6	77 ²	9 ²	90	2

* Superior – Best quality water with lowest pressure loss. Recommended for influent suspended solid loads up to and greater than 300 ppm.

** High – Very good quality water with increased pressure loss. Recommended for influent suspended solid loads less than 300 ppm.

*** Utility – Satisfactory quality water with greatest pressure loss. Shorter on line time between backwashing. Recommended for influent suspended solid loads less than 150 ppm.

¹ For Sediment and organic removal use the flow rates from the superior water quality column.

² For chlorine removal only, use the flow rates from the utility water quality column.

All pressure drop figures are based on new filter media and a water temperature of 60°F.

Depth filters are capable of 10 micron effluent water quality, whereas all other filter types are capable of 40 micron effluent water quality.

“Hey Culligan Man!”



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Printed in USA (2/06)

MOORE PART NO. 46903

The contaminants or other substances removed or reduced by this water treatment device are not necessarily in your water.

The product is covered by the following patents.
Controller Board Assembly: US 5351199, 5751598;
Canada 2090757; DE 69204445.0; KR 215487; JP 3226284
Filter: US 5073255, 5273070, 4534867

Products manufactured and marketed by Culligan International Company (Culligan) and its affiliates are protected by patents issued or pending in the United States and other countries. Culligan reserves the right to change the specifications referred to in this literature at any time, without prior notice. *Culligan*, Hey Culligan Man, Culligan Man, MVP, Hi-Flo and Trust The Water Experts are trademarks of Culligan International Company.



Culligan®

Softeners

- Hi-Flo® 2E
- CSM
- Hi-Flo® 55E
- Hi-Flo® 50

Filters

- Hi-Flo® 2E
- Hi-Flo® 42
- CSM
- Hi-Flo® 55E
- Hi-Flo® 50

Introducing the Culligan® MVP Electronic Controller

Multifunctional

- Sequences the regeneration process of water softeners or filtration systems
- Time, Volume, Aqua-Sensor®* or external device
- Can be used as a simple timer or more complex system integrator

Versatile

- Patented Progressive Flow** feature permits smaller systems to provide greater flow rates and treatment capacities
- Will adapt to many types of water softeners, filters or dealkalizers
- As many as 6 controls may be linked together, allowing for simple, future expansion
- Operates on 24 VAC

Programmable

- Time based regeneration schedule can be interval of days or hours or specific day of week
- Programmable trip point allows multiple units to be brought online or offline as flow demand increases or decreases
- Two auxilliary outputs and one input can be programmed to be active or inactive at any point of the regeneration process.



Culligan® MVP Designed With The Ease of 24-volt Operation.

corporate campuses
educational facilities
food service
grocery
hotel/hospitality
laundry
vehicle wash

Time of Day

Displays time in 12 hour (AM/PM) or 24 hour formats.

EEPROM

Saves programmed and statistical functions.

One-Touch Program Update

Update multiple controls through the touch of a button on the primary control.

Lock/Unlock

Allows the control to be easily locked out from inadvertent program changes or abuse.

Screen Blanking

Allows the screen to go blank once programming is complete (After 5 minutes of no keypad activity).

Power Source

Electrical power required for the control is 24-volt 50/60 Hz AC current. A plug-in transformer (120v/24v) is provided.

Program Beeper

Emits an audible beep when key pads are depressed to help identify valid (short beep) or invalid (3 short beeps) key pad touches. Can be enabled or disabled as desired.

Multi-Unit Communication Input/Output (RS485)

The communication input/output feature routinely recognizes when another controller within a multiple controller system is in a regeneration sequence, prohibiting the chance of multiple units

Additional MVP Features

- **Battery Backup** - The optional battery backup will maintain the time of day for a minimum of 4 weeks using a 3.6V 1/2AA-lithium type battery as supplied by Culligan.
- **Regeneration Start Delay** - A user determined number of hours (up to 9) can be input for the purpose of increasing time between multiple regeneration initiations.
- **Auxillary Input** - capable of accepting a remote signal from a dry contact device such as an operator push-button for the purpose of initiating the regeneration sequence.
- **Segmented Brine Draw/Rinse Cycle - Brine Reclaim Capability** - allows the user to configure the system for brine reclaim with a minimum of additional valves and/or other types of hardware.

“Hey Culligan Man!”

Culligan
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MooreWallace PART NO. 46968



* Aqua-Sensor: Patent # US 5,699,272

** Progressive Flow: Patent # US 5,060,167 , # US 5,351,199

Check for compliance with state and local laws and regulations. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

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Hi-Flo® 42

Automatic Depth Filters For Sediment Reduction

Specifications and Operating Data

Single Tank Models	Service Flow Rates ¹			Back-wash Flow ²	Pipe Size	Media Qty	Filter Tank Size	Approx. Ship. Weight
	Superior Quality	High Quality	Utility Quality					
	gpm @ psi drop	gpm @ psi drop	gpm @ psi drop					
	m³/hr @ kPa drop	m³/hr @ kPa drop	m³/hr @ kPa drop					
Fiberglass Tanks								
HDF-20T	22 @ 4	33 @ 8	44 @ 14	30	2	615	21 x 69	720
	5 @ 27.6	7.5 @ 55.2	10 @ 96.5	6.8	2	279	533 x 1,753	327
HDF-24T	32 @ 5	48 @ 9	63 @ 12	48	2	870	24 x 72	910
	7.3 @ 34.5	10.9 @ 62	14.3 @ 82.7	10.9	2	395	610 x 1,829	413
HDF-30T	50 @ 7	74 @ 11	99 @ 15	70	2	1230	30 x 72	1335
	11.4 @ 48.3	16.8 @ 75.8	22.5 @ 103	15.9	2	558	762 x 1,829	606
HDF-36T	71 @ 10	107 @ 19	142 @ 29	90	2	1895	36 x 72	2010
	16.1 @ 68.9	24.3 @ 131	32.2 @ 200	20.4	2	860	914 x 1,829	912

¹ Service flow rates are based on:

Superior (10 gpm/ft² - 24 m³/hr/m²) - Best quality effluent at specified flow. Lowest pressure loss. Recommended for suspended solids loads up to and greater than 300 ppm.

High (15 gpm/ft² - 37 m³/hr/m²) - Very good quality effluent at specified flow. Increased pressure loss. Recommended for suspended solids loads < 300 ppm.

Utility (20 gpm/ft² - 49 m³/hr/m²) - Satisfactory quality effluent at specified flow. Greatest pressure loss. Recommended for suspended solids loads of < 150 ppm.

² Backwash flow rates are based on 12-14 gpm/ft² (29-34 m³/hr/m²) using 50° F (10° C) water. A different backwash rate may be required depending upon water temperature.

NOTE: Operational, maintenance and replacement requirements are essential for this product to perform as advertised. Specifications shown are for single models. Also available in multiple tank configurations.



Commercial Systems

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Hi-Flo® 42

Automatic Cullar® Filters

For Dechlorination and Organic Adsorption

Specifications and Operating Data

Single Tank	Service Flow Rates		Back-wash Flow ³	Pipe Size	Media Qty	Filter Tank Size	Approx. Ship. Weight
	Taste, Odor & Organic Removal ¹	Dechlorination ²					
	gpm @ psi drop	gpm @ psi drop					
	m ³ /hr @ kPa drop	m ³ /hr @ kPa drop					
Models							
Fiberglass Tanks							
HRF-20T	9 @ 1	18 @ 3	20	2	6	21 x 69	470
	2 @ 6.9	4.1 @ 20.7	4.5	2	0.17	533 x 1,753	213
HRF-24T	13 @ 2	26 @ 4	30	2	8	24 x 72	555
	3 @ 13.8	5.9 @ 27.6	6.8	2	0.227	610 x 1,829	252
HRF-30T	20 @ 2	40 @ 5	48	2	12	30 x 72	820
	4.5 @ 13.8	9.1 @ 34.5	10.9	2	0.34	762 x 1,829	372
HRF-36T	29 @ 2	57 @ 7	70	2	18	36 x 72	1135
	6.6 @ 13.8	12.9 @ 48.3	15.9	2	0.51	914 x 1,829	515

¹ Service flow rates for taste, odor & organic removal are based on 5 gpm/ft² (12 m³/hr/m²).

² Service flow rates for dechlorination are based on 10 gpm/ft² (24 m³/hr/m²).

³ Backwash flow rates are based on 10 gpm/ft² (24 m³/hr/m²) using 50° F (10° C) water. A different backwash rate may be required depending upon water temperature or the type of carbon used.

NOTE: Operational, maintenance and replacement requirements are essential for this product to perform as advertised. Specifications shown are for single models. Also available in multiple tank configurations.



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Limited WARRANTY

Culligan® Hi-Flo® 2 and 2e Series, Hi-Flo® 52 series, Hi-Flo® 42 Series, Hi-Flo® 55e Series,
CSM Series and Hi-Flo® 50 Series

You have just purchased one of the finest water conditioners made. As an expression of our confidence in Culligan International Company products, this product is warranted to the original end-user, when installed in accordance with Culligan specifications, against defects in material and workmanship from the date of original installation, as follows:

For a period of ONE YEAR	The entire conditioner.
For a period of TWO YEARS	The control valve internal parts. The brine valve and its component parts. The salt storage container internal components.
For a period of FIVE YEARS	The control valve body, excluding internal parts. The fiberglass wound container(s), if so equipped*. The salt storage container(s), if so equipped. The epoxy-lined steel conditioner tank(s), if so equipped.
For a period of TWELVE YEARS	The conditioner tank, if it contains a plastic liner.

* The tank must be protected by a vacuum breaker device as described in the unit's operating manual. Damage to the tank caused by vacuum is not covered by this warranty. The unit must be used in operating conditions that conform to Culligan's recommended design guidelines. This warranty will not apply if the unit has been modified, repaired or altered by someone not authorized by Culligan.

If a part described above is found defective within the specified period, you should notify your independently operated Culligan dealer and arrange a time during normal business hours for the dealer to inspect the water conditioner on your premises. Any part found defective within the terms of this warranty will be repaired or replaced by the dealer. You pay only freight from our factory and local dealer charges.

We are not responsible for damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components), alteration, installation or operation contrary to our printed instructions, or by the use of accessories or components which do not meet Culligan specifications, is not covered by this warranty. Refer to the specifications section in the Installation and Operating manual for application parameters.

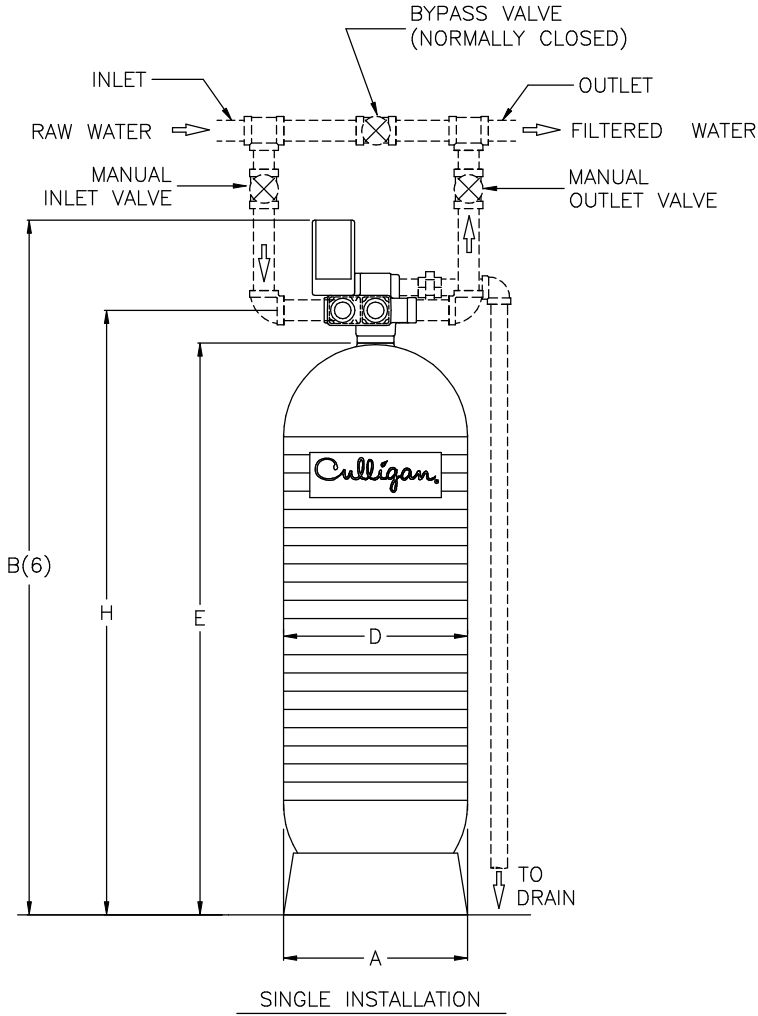
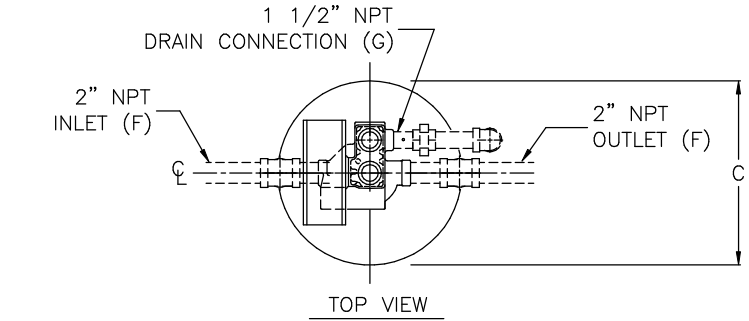
Our product performance specifications are furnished with each water conditioning unit. TO THE EXTENT PERMITTED BY LAW, CULLIGAN DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; TO THE EXTENT REQUIRED BY LAW, ANY SUCH IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE ONE-YEAR PERIOD SPECIFIED ABOVE FOR THE ENTIRE CONDITIONER. As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing this product. The quality of water supplies may vary seasonally or over a period of time, and your water usage rate may vary as well. Water characteristics can also differ considerably if this product is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us. Further, we assume no liability and extend no warranties, express or implied, for the use of this product with a nonpotable water source or a water source which does not meet the conditions for use described in the installation and operation manual(s) that accompany the equipment. OUR OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT OF THE FAILED PARTS OF THE WATER CONDITIONER, AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, GENERAL, OR OTHER DAMAGES.

Some states do not allow the exclusion of implied warranties or limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Similarly, some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Consult your telephone directory for your local independently operated Culligan dealer, or write Culligan International Company for warranty and service information.

CULLIGAN INTERNATIONAL COMPANY
One Culligan Parkway
Northbrook, Illinois 60062

- NOTES:
- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
 - (2) ALL DIMENSIONS ARE ± 1 INCH (25mm) AND SUBJECT TO CHANGE WITHOUT NOTICE.
 - (3) UNIONS SHOULD BE LOCATED ON INLET AND OUTLET CONNECTIONS OF CONTROL VALVE TO FACILITATE SERVICING.
 - (4) THE USE OF DISSIMILAR METALS IN A PIPING SYSTEM IS NOT RECOMMENDED. WHERE DISSIMILAR METALS MUST BE CONNECTED IN A WATER SYSTEM. THE USE OF NONCONDUCTIVE (DIELECTRIC) FITTINGS MAY REDUCE GALVANIC CORROSION.
 - (5) AN ELECTRICAL OUTLET SHOULD BE PROVIDED WITHIN FIVE FEET OF THE EQUIPMENT LOCATION.
 - (6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.
 - (7) TO PERMIT THE OBSERVATION OF THE DRAIN FLOW DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DIAMETER OF THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES.
 - (8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

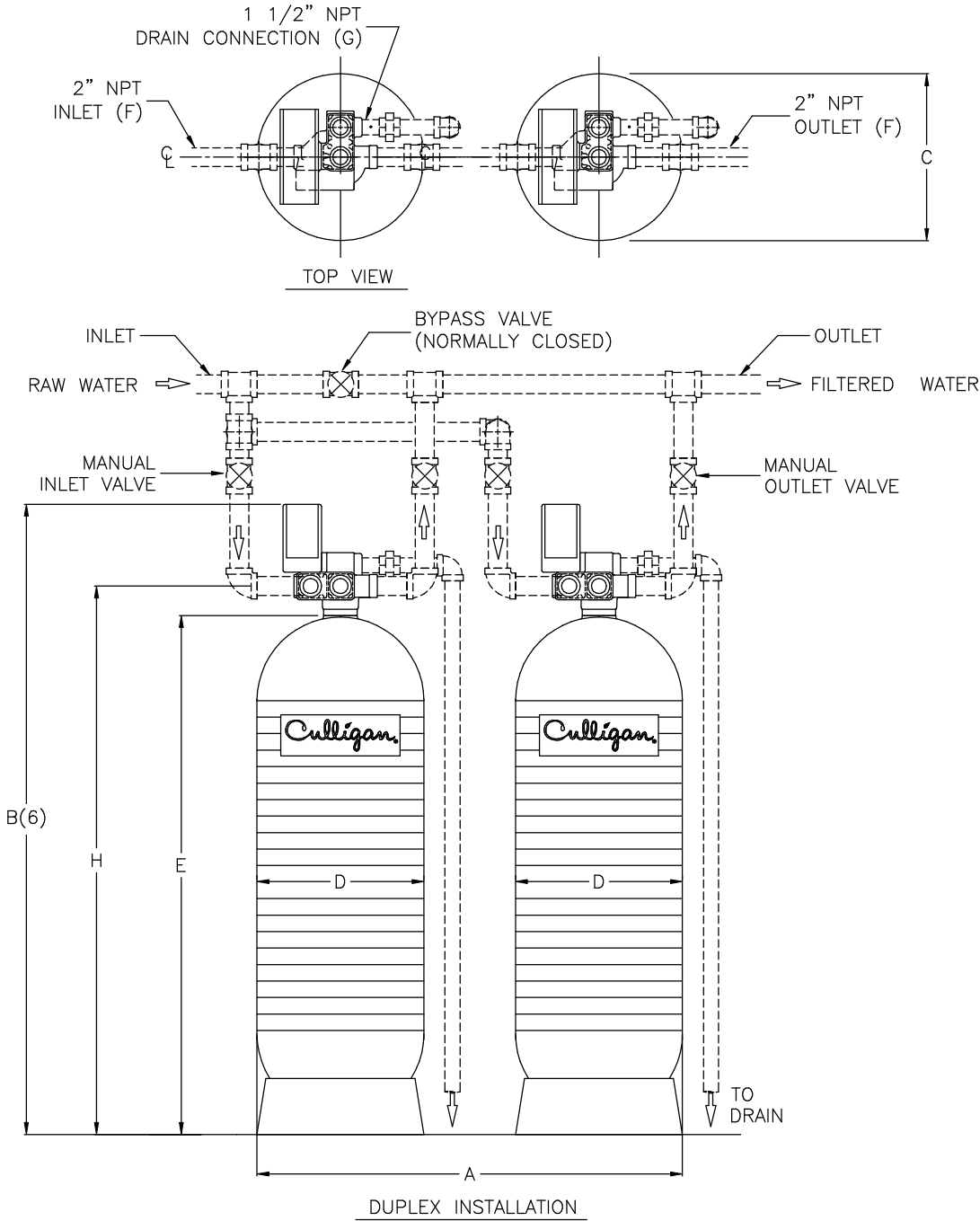
MODEL	DIMENSIONS (INCHES)								SUPERIOR QUALITY FLOW	HIGH QUALITY FLOW	UTILITY QUALITY FLOW	DRAIN FLOW	MIN. DRAIN PIPE SIZE	SIMPLEX OPER. WT.	SIMPLEX SHIP. WT.
	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	gpm @ DP	gpm @ DP	gpm @ DP	gpm	IN.	lbs.	lbs.
HDF-20-T	21	86	21	21	69	2.0	1.5	74	22 @ 4	33 @ 8	44 @ 14	30	1.5	857	720
HDF-24-T	24	88	24	24	72	2.0	1.5	76	32 @ 5	48 @ 9	63 @ 12	48	1.5	1297	910
HDF-30-T	30	96	30	30	72	2.0	1.5	84	50 @ 7	74 @ 11	99 @ 15	70	2	2043	1335
HDF-36-T	36	96	36	36	72	2.0	1.5	84	71 @ 10	107 @ 19	142 @ 29	90	2	2957	2010



DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					 ENGINEERED SYSTEMS NORTHBROOK, ILLINOIS PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.	NAME HI-FLO® 42 (FIBERGLASS) DEPTH FILTER SINGLE TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02	APP. BY:	SHEET 1 OF 1
						REF. NO.		
						PART NO. F42_F1_D		

- NOTES:
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 - (3) UNIONS SHOULD BE LOCATED ON INLET AND OUTLET CONNECTIONS OF CONTROL VALVE TO FACILITATE SERVICING.
 - (4) THE USE OF DISSIMILAR METALS IN A PIPING SYSTEM IS NOT RECOMMENDED. WHERE DISSIMILAR METALS MUST BE CONNECTED IN A WATER SYSTEM. THE USE OF NONCONDUCTIVE (DIELECTRIC) FITTINGS MAY REDUCE GALVANIC CORROSION.
 - (5) AN ELECTRICAL OUTLET SHOULD BE PROVIDED WITHIN FIVE FEET OF THE EQUIPMENT LOCATION.
 - (6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.
 - (7) TO PERMIT THE OBSERVATION OF THE DRAIN FLOW DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DIAMETER OF THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES.
 - (8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

MODEL	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	DUPLEX OPER. WT. lbs.	DUPLEX SHIP. WT. lbs.
HDF-20-T	54	86	21	21	69	2.0	1.5	74	22 @ 4	33 @ 8	44 @ 14	30	1.5	1714	1440
HDF-24-T	60	88	24	24	72	2.0	1.5	76	32 @ 5	48 @ 9	63 @ 12	48	1.5	2594	1820
HDF-30-T	72	96	30	30	72	2.0	1.5	84	50 @ 7	74 @ 11	99 @ 15	70	2	4086	2670
HDF-36-T	84	96	36	36	72	2.0	1.5	84	71 @ 10	107 @ 19	142 @ 29	90	2	5914	4020

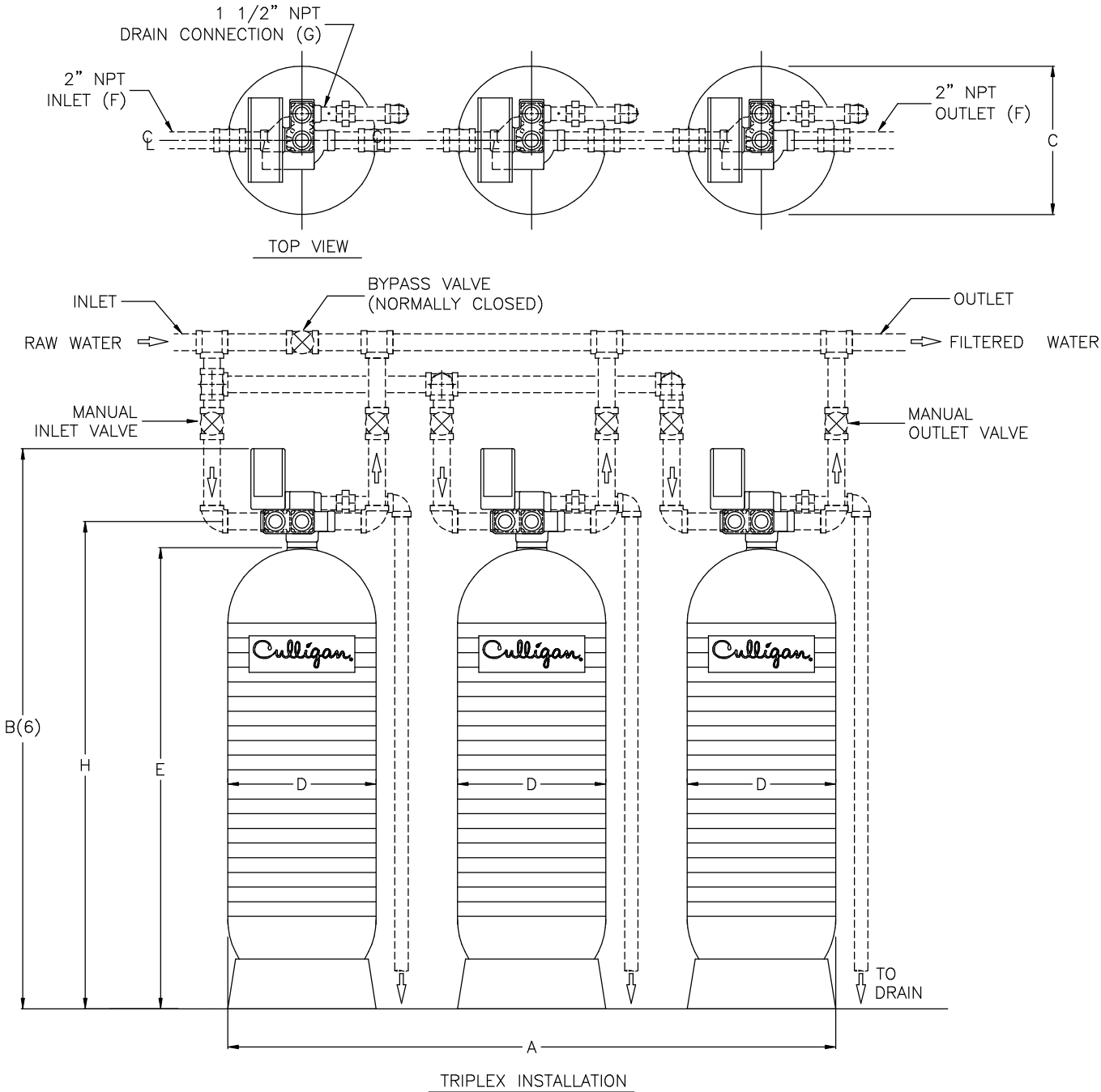



DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					<div>Culligan®</div> <div>ENGINEERED SYSTEMS</div> <div>NORTHBROOK, ILLINOIS</div> <div>PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.</div>	NAME HI-FLO® 42 (FIBERGLASS) DEPTH FILTER DUPLEX TECHNICAL DATA SHEET			
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02		APP. BY:	SHEET 1 OF 1
						REF. NO.		PART NO. F42_F2_D	

NOTES:

- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
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- (8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

MODEL	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	TRIPLEX OPER. WT. lbs.	TRIPLEX SHIP. WT. lbs.
HDF-20-T	87	86	21	21	69	2.0	1.5	74	22 @ 4	33 @ 8	44 @ 14	30	1.5	2571	2160
HDF-24-T	96	88	24	24	72	2.0	1.5	76	32 @ 5	48 @ 9	63 @ 12	48	1.5	3891	2730
HDF-30-T	114	96	30	30	72	2.0	1.5	84	50 @ 7	74 @ 11	99 @ 15	70	2	6129	4005
HDF-36-T	132	96	36	36	72	2.0	1.5	84	71 @ 10	107 @ 19	142 @ 29	90	2	8871	6030



DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					<div> ENGINEERED SYSTEMS NORTHBROOK, ILLINOIS</div> <div>PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.</div>	NAME HI-FLO® 42 (FIBERGLASS) DEPTH FILTER TRIPLEX TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02	APP. BY:	SHEET 1 OF 1
						REF. NO.		PART NO. F42_F3_D

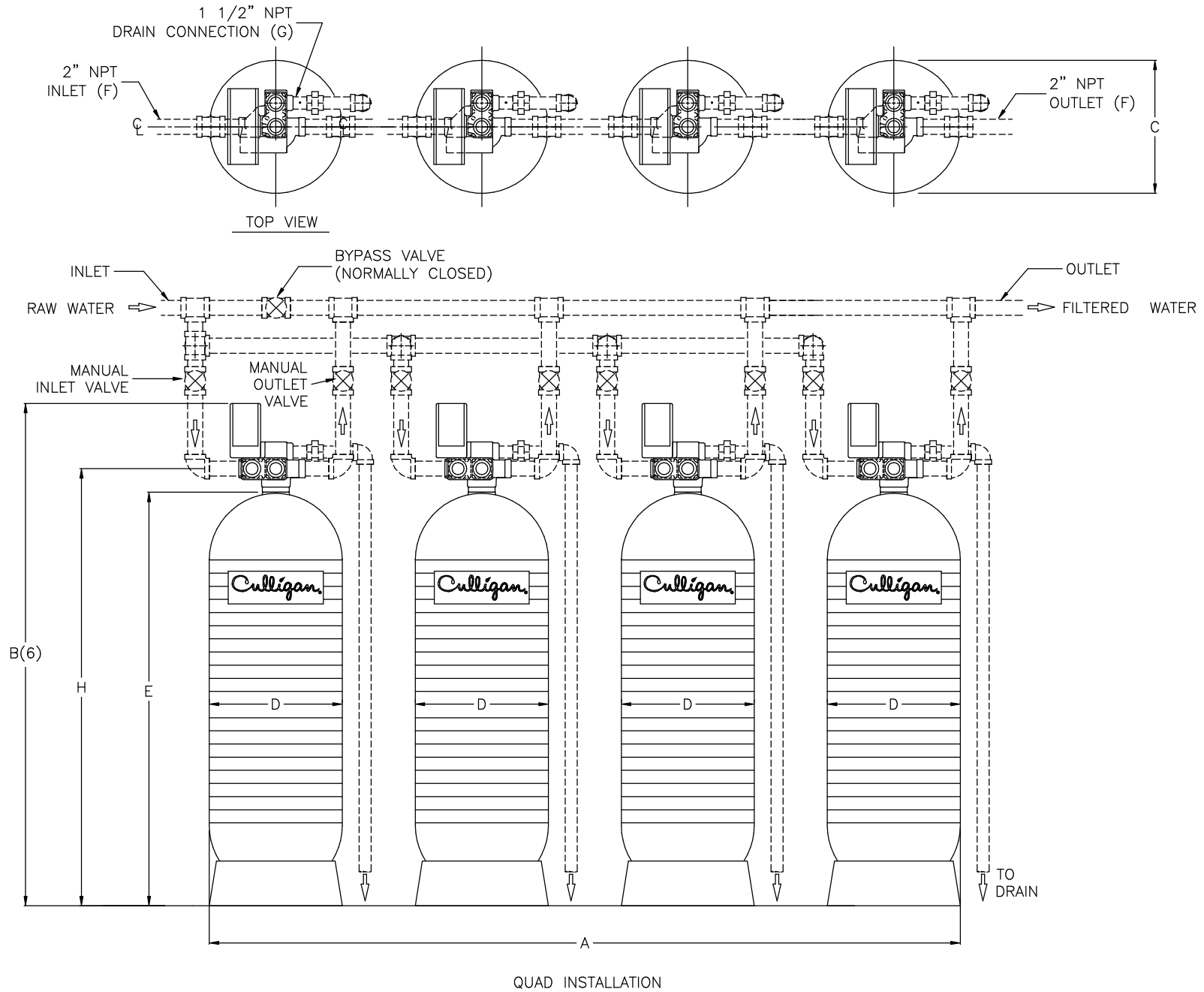
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(6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.

(7) TO PERMIT THE OBSERVATION OF THE DRAIN FLOW DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DIAMETER OF THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES.

(8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

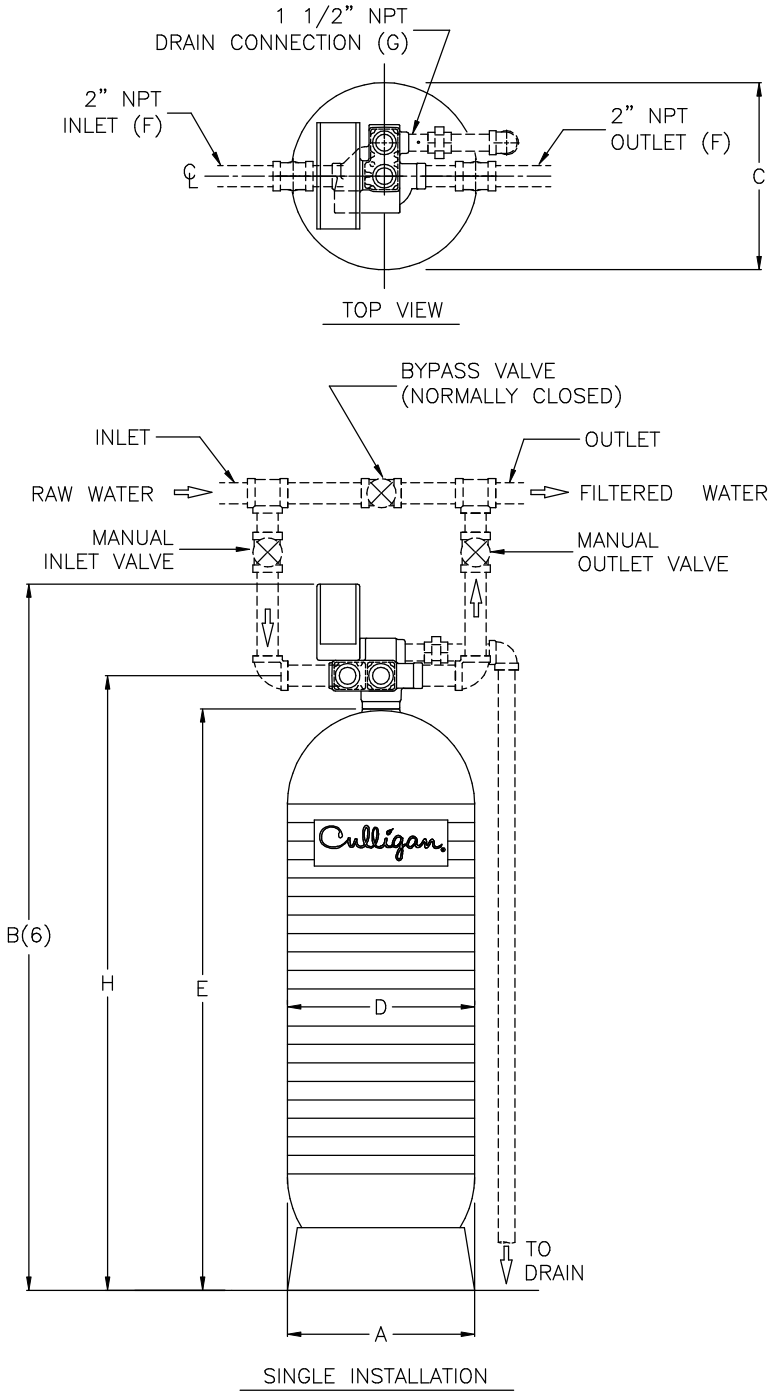
	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
MODEL	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	QUAD OPER. WT. lbs.	QUAD SHIP. WT. lbs.
HDF-20-T	120	86	21	21	69	2.0	1.5	74	22 @ 4	33 @ 8	44 @ 14	30	1.5	3428	2880
HDF-24-T	132	88	24	24	72	2.0	1.5	76	32 @ 5	48 @ 9	63 @ 12	48	1.5	5188	3640
HDF-30-T	156	96	30	30	72	2.0	1.5	84	50 @ 7	74 @ 11	99 @ 15	70	2	8172	5340
HDF-36-T	180	96	36	36	72	2.0	1.5	84	71 @ 10	107 @ 19	142 @ 29	90	2	11828	8040




DO NOT SCALE DRAWING TOLERANCES: $\pm 1/8"$ UNLESS OTHERWISE NOTED					 ENGINEERED SYSTEMS NORTHBROOK, ILLINOIS PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.	NAME HI-FLO® 42 (FIBERGLASS) DEPTH FILTER QUAD TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 7/1/03	APP. BY:	SHEET 1 OF 1
						REF. NO.	PART NO. F42_F4_D	

- NOTES:
- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
 - (2) ALL DIMENSIONS ARE ± 1 INCH (25mm) AND SUBJECT TO CHANGE WITHOUT NOTICE.
 - (3) UNIONS SHOULD BE LOCATED ON INLET AND OUTLET CONNECTIONS OF CONTROL VALVE TO FACILITATE SERVICING.
 - (4) THE USE OF DISSIMILAR METALS IN A PIPING SYSTEM IS NOT RECOMMENDED. WHERE DISSIMILAR METALS MUST BE CONNECTED IN A WATER SYSTEM. THE USE OF NONCONDUCTIVE (DIELECTRIC) FITTINGS MAY REDUCE GALVANIC CORROSION.
 - (5) AN ELECTRICAL OUTLET SHOULD BE PROVIDED WITHIN FIVE FEET OF THE EQUIPMENT LOCATION.
 - (6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.
 - (7) TO PERMIT THE OBSERVATION OF THE DRAIN FLOW DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DIAMETER OF THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES.
 - (8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

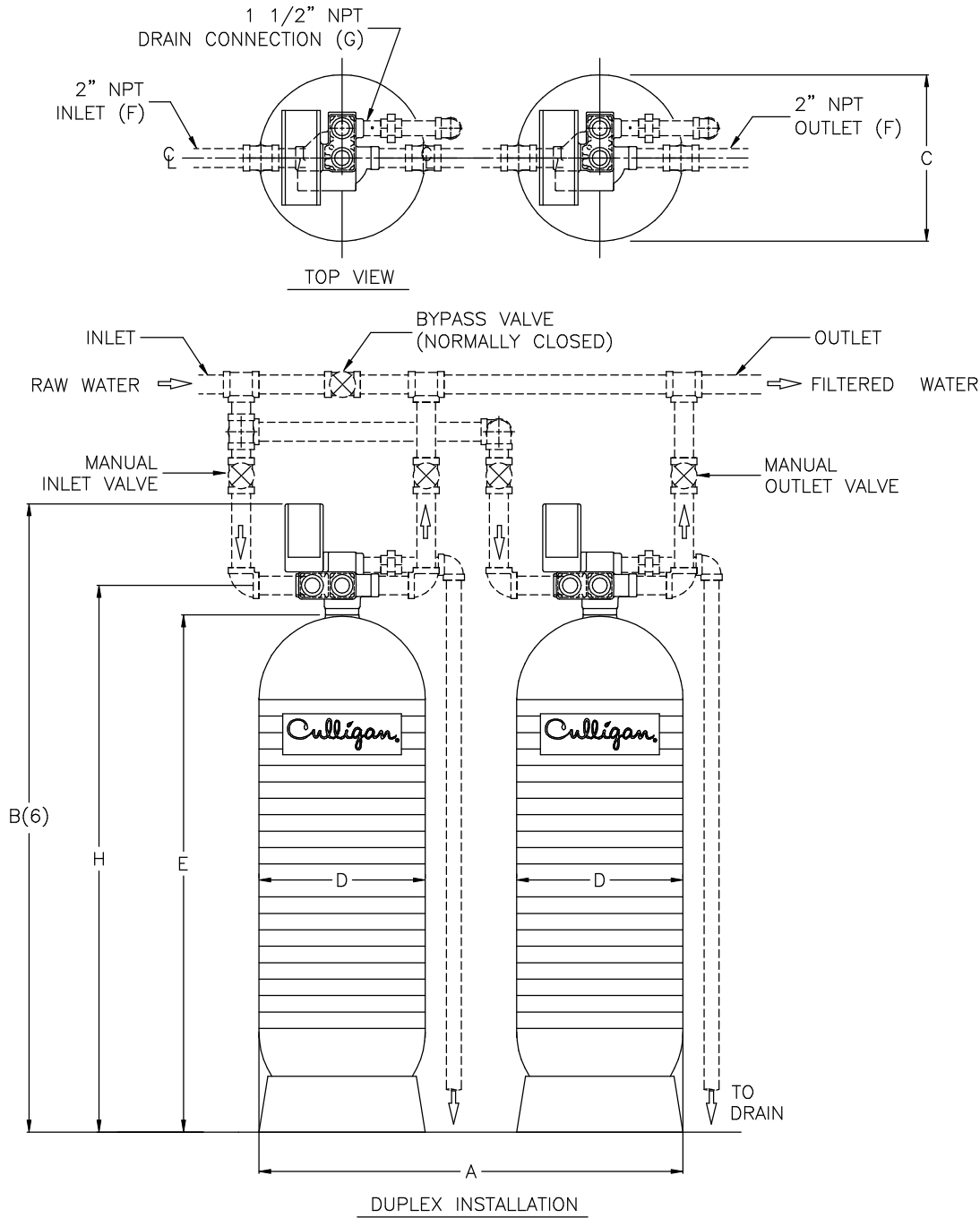
	DIMENSIONS (INCHES)														
MODEL	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	SIMPLEX OPER. WT. lbs.	SIMPLEX SHIP. WT. lbs.
HRF-20-T	21	86	21	21	69	2.0	1.5	74	9 @ 1	14 @ 2	18 @ 3	20	1.5	562	470
HRF-24-T	24	88	24	24	72	2.0	1.5	76	13 @ 2	19 @ 3	26 @ 4	30	1.5	931	555
HRF-30-T	30	96	30	30	72	2.0	1.5	84	20 @ 2	30 @ 4	40 @ 5	48	1.5	1489	820
HRF-36-T	36	96	36	36	72	2.0	1.5	84	29 @ 2	42 @ 4	57 @ 7	70	2	2108	1135



DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					 ENGINEERED SYSTEMS NORTHBROOK, ILLINOIS PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.	NAME HI-FLO® 42 (FIBERGLASS) CARBON FILTER SINGLE TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02	APP. BY:	SHEET 1 OF 1
						REF. NO. PART NO. F42_F1_C		

- NOTES:
- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
 - (2) ALL DIMENSIONS ARE ± 1 INCH (25mm) AND SUBJECT TO CHANGE WITHOUT NOTICE.
 - (3) UNIONS SHOULD BE LOCATED ON INLET AND OUTLET CONNECTIONS OF CONTROL VALVE TO FACILITATE SERVICING.
 - (4) THE USE OF DISSIMILAR METALS IN A PIPING SYSTEM IS NOT RECOMMENDED. WHERE DISSIMILAR METALS MUST BE CONNECTED IN A WATER SYSTEM, THE USE OF NONCONDUCTIVE (DIELECTRIC) FITTINGS MAY REDUCE GALVANIC CORROSION.
 - (5) AN ELECTRICAL OUTLET SHOULD BE PROVIDED WITHIN FIVE FEET OF THE EQUIPMENT LOCATION.
 - (6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.
 - (7) TO PERMIT THE OBSERVATION OF THE DRAIN FLOW DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DIAMETER OF THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES.
 - (8) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALL SIPHON BREAK ON DRAIN LINE. INSTALL VACUUM BREAKER ON INLET PIPING IF THE SERVICE LINE IS SUBJECT TO A VACCUM.

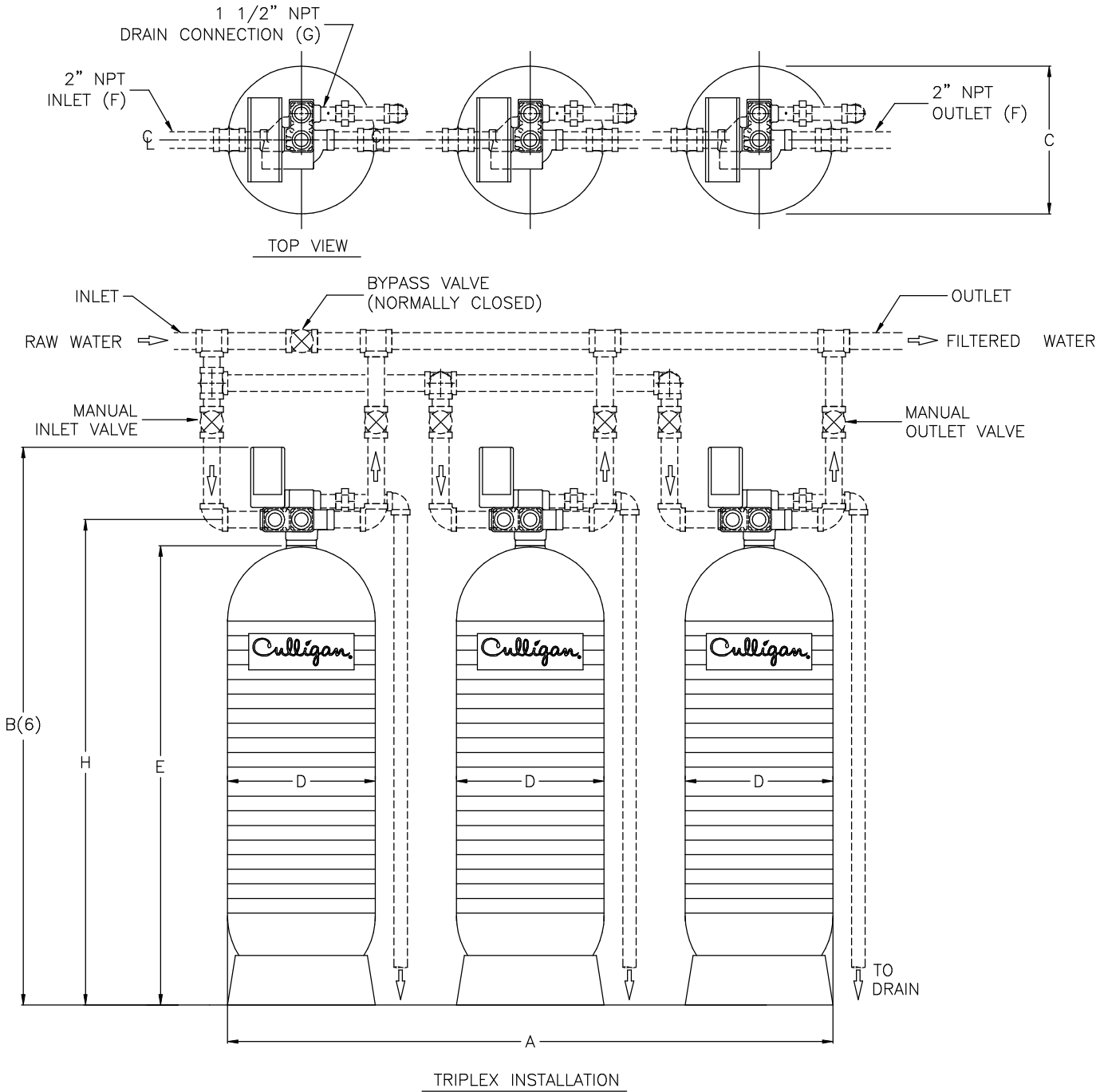
	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
MODEL	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	DUPLEX OPER. WT. lbs.	DUPLEX SHIP. WT. lbs.
HRF-20-T	54	86	21	21	69	2.0	1.5	74	9 @ 1	14 @ 2	18 @ 3	20	1.5	1124	940
HRF-24-T	60	88	24	24	72	2.0	1.5	76	13 @ 2	19 @ 3	26 @ 4	30	1.5	1862	1110
HRF-30-T	72	96	30	30	72	2.0	1.5	84	20 @ 2	30 @ 4	40 @ 5	48	1.5	2978	1640
HRF-36-T	84	96	36	36	72	2.0	1.5	84	29 @ 2	42 @ 4	57 @ 7	70	2	4216	2270




DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					<div>Culligan®</div> <div>ENGINEERED SYSTEMS</div> <div>NORTHBROOK, ILLINOIS</div> <div>PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.</div>	NAME HI-FLO® 42 (FIBERGLASS) CARBON FILTER DUPLEX TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02	APP. BY:	SHEET 1 OF 1
						REF. NO.		
						PART NO.		
						F42_F2_C		

- NOTES:
- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
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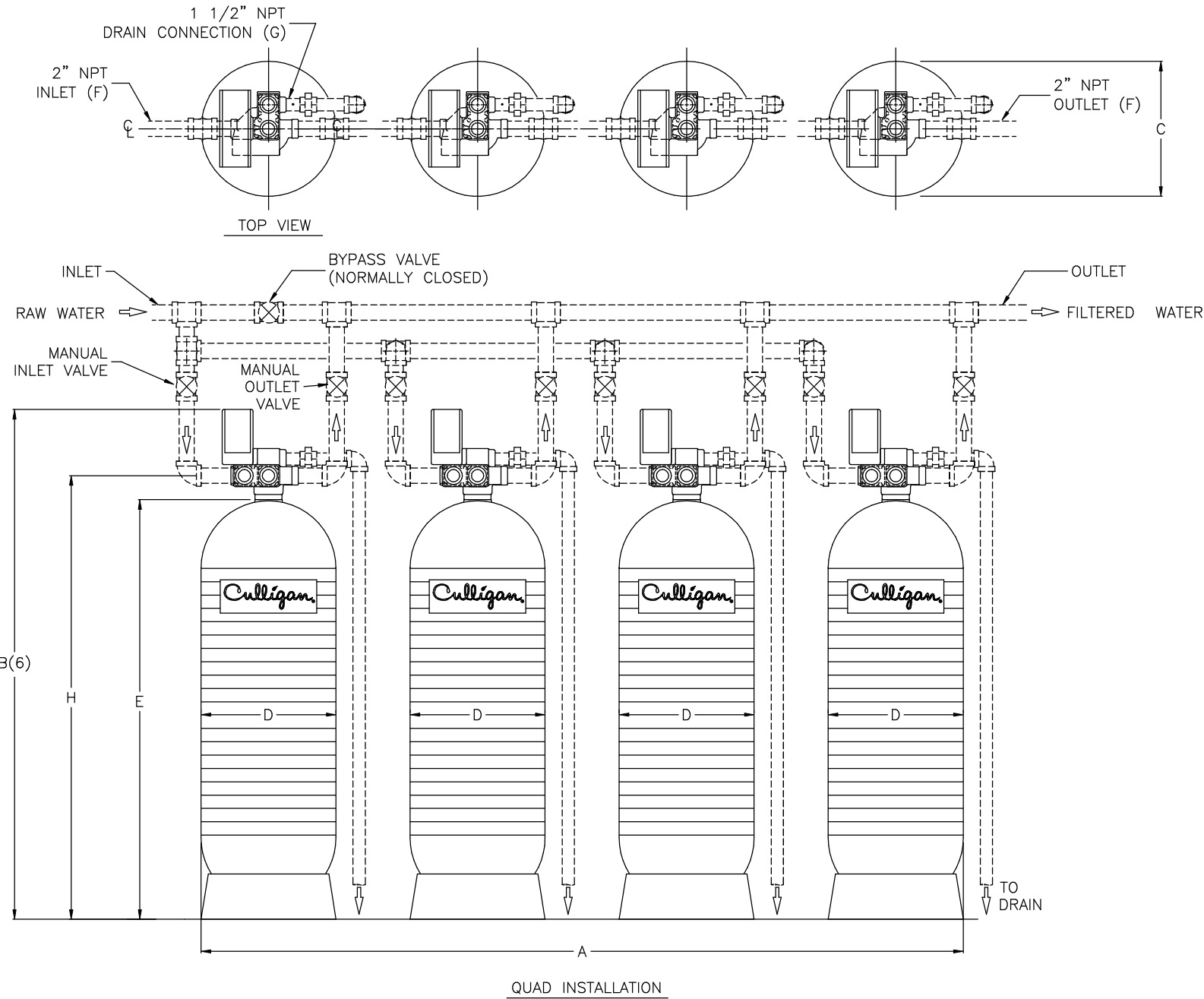
	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
MODEL	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	TRIPLEX OPER. WT. lbs.	TRIPLEX SHIP. WT. lbs.
HRF-20-T	87	86	21	21	69	2.0	1.5	74	9 @ 1	14 @ 2	18 @ 3	20	1.5	1686	1410
HRF-24-T	96	88	24	24	72	2.0	1.5	76	13 @ 2	19 @ 3	26 @ 4	30	1.5	2793	1665
HRF-30-T	114	96	30	30	72	2.0	1.5	84	20 @ 2	30 @ 4	40 @ 5	48	1.5	4467	2460
HRF-36-T	132	96	36	36	72	2.0	1.5	84	29 @ 2	42 @ 4	57 @ 7	70	2	6324	3405



DO NOT SCALE DRAWING TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED					 ENGINEERED SYSTEMS NORTHBROOK, ILLINOIS PRINT AND BILL OF MATERIAL ARE NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF CULLIGAN INTERNATIONAL CO.	NAME HI-FLO® 42 (FIBERGLASS) CARBON FILTER TRIPLEX TECHNICAL DATA SHEET		
Let.	Change	By	App	Date		DETAILED BY: KMR 10/11/02	APP. BY:	SHEET 1 OF 1
						REF. NO.		
						PART NO. F42_F3_C		

- NOTES:
- (1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.
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MODEL	DIMENSIONS (INCHES)								UNIT DATA PER TANK						
	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	SUPERIOR QUALITY FLOW gpm @ DP	HIGH QUALITY FLOW gpm @ DP	UTILITY QUALITY FLOW gpm @ DP	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	QUAD OPER. WT. lbs.	QUAD SHIP. WT. lbs.
HRF-20-T	120	86	21	21	69	2.0	1.5	74	9 @ 1	14 @ 2	18 @ 3	20	1.5	2248	1880
HRF-24-T	132	88	24	24	72	2.0	1.5	76	13 @ 2	19 @ 3	26 @ 4	30	1.5	3724	2220
HRF-30-T	156	96	30	30	72	2.0	1.5	84	20 @ 2	30 @ 4	40 @ 5	48	1.5	5956	3280
HRF-36-T	180	96	36	36	72	2.0	1.5	84	29 @ 2	42 @ 4	57 @ 7	70	2	8432	4540



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Let.	Change	By	App	Date		DETAILED BY: KMR 7/1/03	APP. BY:	SHEET 1 OF 1
						REF. NO.		PART NO. F42_F4_C