



GEOLINK[™]
FLOW CENTER

**FC1-GL, FC2-GL, FC1-FPT, FC2-FPT, FC1-FPTB,
FC2-FPTB, FCM2-3023, FCV1-GL, FCV2-GL, FCL1-5028,
FCL1-5038, FCL1-5055, FCL2-5028, FCL2-5038,
FCL2-5055, PML32-160, PML40-160, & PML40-240**

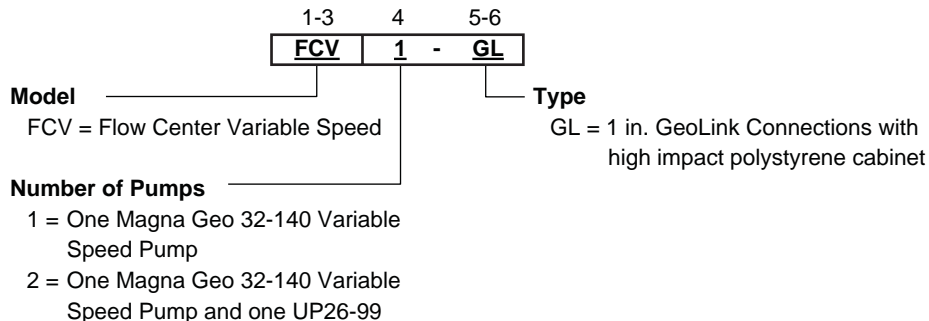
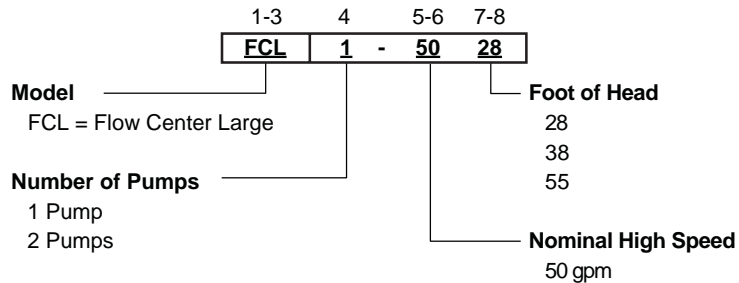
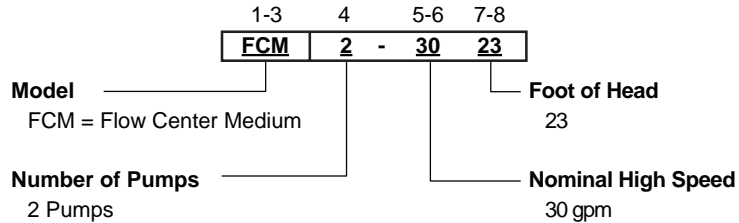
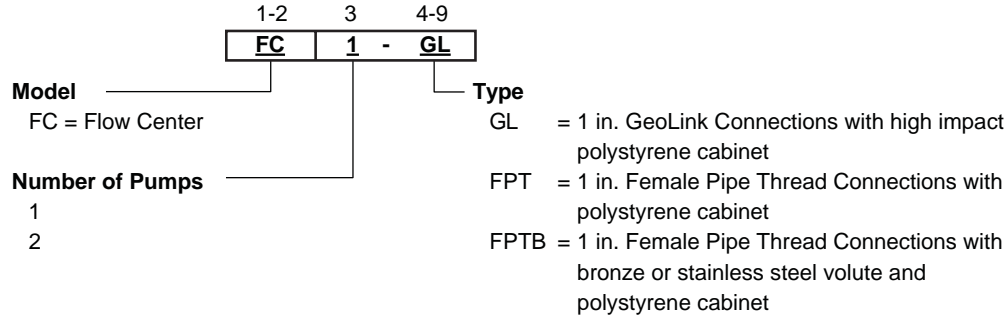
Submittal Data
English Language
IP/Metric Units
SD1547EW 08/17

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Model Nomenclature



Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Adapter Sets

Adapter Sets (Sets consist of 2 connectors)

PART NO.	DESCRIPTION	CONNECTION USE	FLOW CENTER TYPE
MA4INS	1 in. MPT to 1 in. INS (Hose Barb)*	Loop or unit side connection	FPT
MA5INS	1 in. MPT to 1-1/4 in. INS (Hose Barb)*	Loop or unit side connection	FPT
MA5PES	1 in. MPT to 1-1/4 in. PE (Socket Fusion)	Loop side connection	FPT
MA4SWV	1" MPT to 1" Swivel Union	Unit side connection	FPT
GL4INS	1 in. GeoLink fitting x 1 in. Hose Barb	Unit side connection	GL
GL4PES	1 in. GeoLink fitting x 1 in. Socket Fusion	Loop or unit side connection	GL
GL5PES**	1 in. GeoLink fitting x 1-1/4 in. Socket Fusion	Loop side connection	GL
GL-FP	1 in. GeoLink fitting x 1 in. cam lever elbow (male)	Flushing port connection	GL
GL5PESLM	2 in. GeoLink x 1-1/4 in. PE Fusion	Loop to flow center connection	FCM/L
GL6PESLM	2 in. GeoLink x 1-1/2 in. PE Fusion	Loop to flow center connection	FCM/L
GL8PESLM	2 in. GeoLink x 2 in. PE Fusion	Loop to flow center connection	FCM/L
GL-GHL	2 in GeoLink garden hose adapter for pump replacement	Flow center pump replacement	FCM/L
CK8L	2 in. MPT x 2 in. insert	Loop or unit side connection	FCM/L
GL6FPT	2 in. GeoLink fitting x 1-1/2 in. FPT	Loop or unit side connection	FCM/L
GL8FPT	2 in. GeoLink fitting x 2 in. FPT	Loop or unit side connection	FCM/L
GL-FPL	2 in. cam lever elbow (male) for flush port	Flushing port connection	FCM/L

NOTES: *Hose Clamps included with barbed adapter sets.

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

GL Flow Centers

General Specifications

Circulator(s) - Grundfos series UP26-99 pump with PES Composite (30% Glass Filled) impeller and epoxy coated cast iron pump volute.

Valving - Die cast, double O-ring, brass 3-way valve used for loop flushing and maintenance.

Cabinet - Casing of high impact polystyrene, gray.

Insulation - CFC-free, spray foam, comprised of polyurethane resin.

Electrical - Requires 208-230 volt single-phase power supply.

Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the WSHP unit or on the wall. Factory supplied mounting hardware is included.

Connections - Female gasketed insert connections provided for loop-side water and unit-side water connection.

Min. Entering Fluid Temperature - 20° F

Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5 psi

Max. Operating Pressure - 145 psi

Front View



Right Side View



Bottom View



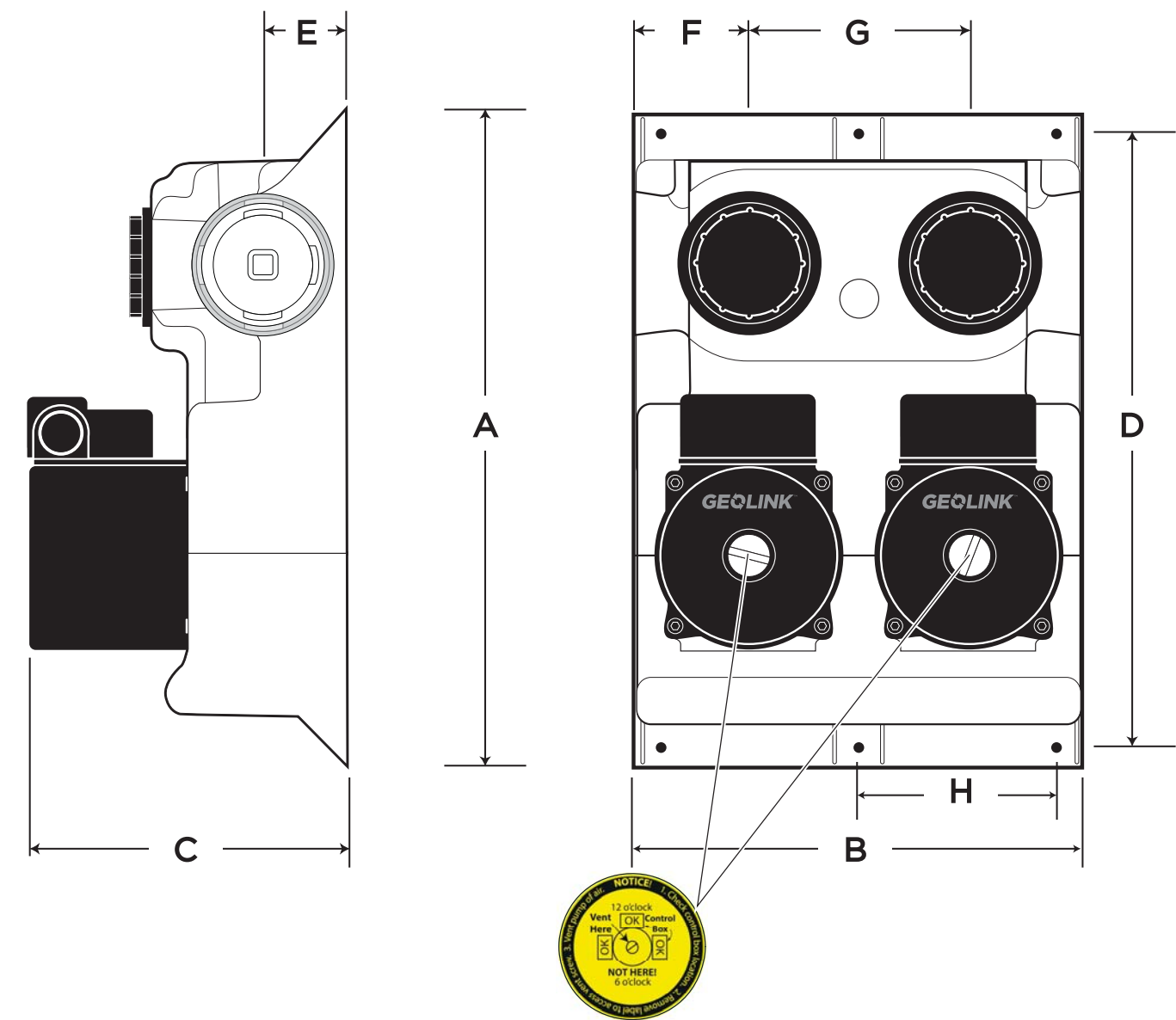
Top View



Contractor: _____ P.O.: _____
Engineer: _____
Project Name: _____ Unit Tag: _____

GL Flow Centers cont.

Dimensional Data



	A	B	C	D	E	F	G	H
INCHES	13.5	10.2	7.56	12.5	2.0	2.6	5.0	4.7
[CM]	[34.3]	[25.9]	[19.2]	[31.8]	[5.1]	[6.7]	[12.7]	[11.9]

TYPE	SHIPPING WEIGHT
FC1-GL	24 LBS
FC2-GL	30 LBS

Electrical Data

MODEL	VOLTS	AMPS	WATTS	HP	CAPACITOR
FC1-GL	230/60/1	1.07	246.1	0.17	2.5µF/380V
FC2-GL*	230/60/1	2.14	492.2	0.33	2.5µF/380V

*With both circulating pumps operating.

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

FPT and FPTB Flow Centers

General Specifications

Circulator(s) - Models FC1 FPT and FC2 FPT utilize a Grundfos series UP26-99 pump with PES Composite (30% Glass Filled) impeller and polyester powder coated cast iron pump volute
Models FC1 FPTB and FC2 FPTB utilize a Grundfos series UP26 pump with PES Composite (30% Glass Filled) impeller and bronze or stainless steel pump volute

Valving - Forged brass, 1.00" FPT 3-way valve used for loop flushing and maintenance

Cabinet - Casing of ABS plastic gray

Insulation - CFC-free, spray foam, comprised of polyurethane resin

Electrical - Requires 208-230 volt single-phase power supply
Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the WSHP unit or on the wall.
Factory supplied mounting hardware is included

Connections - Brass 1.00" female pipe thread connections provided for loop-side water and unit-side water connection

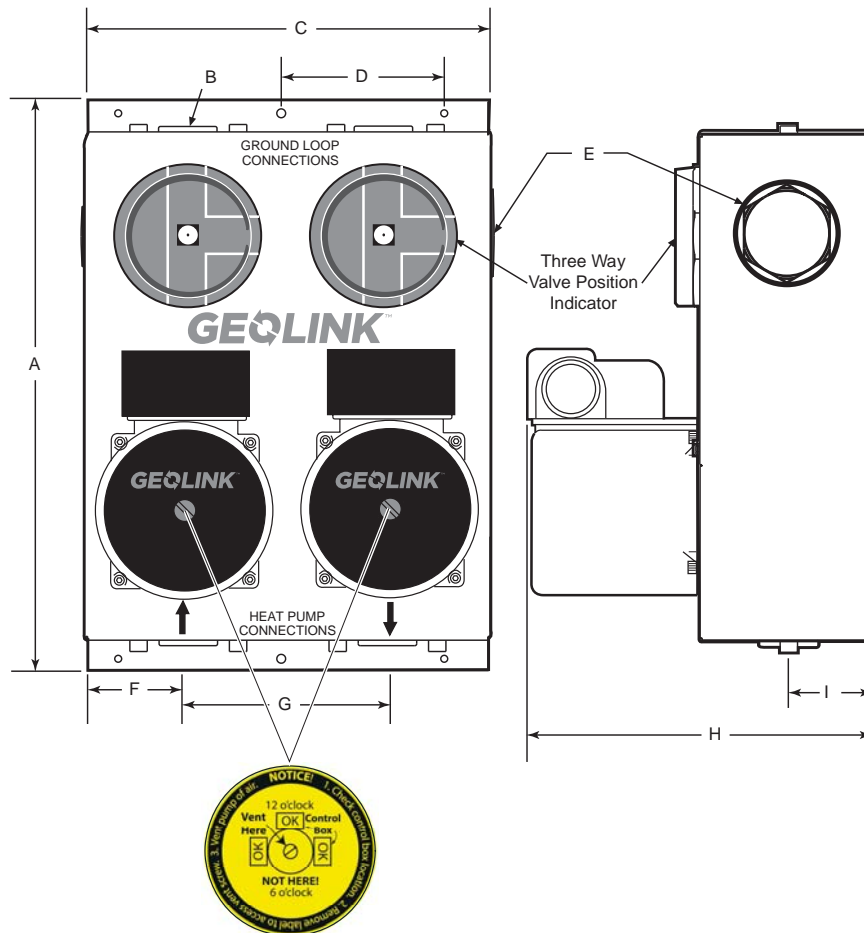
Min. Entering Fluid Temperature - 20° F

Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5 psi

Max. Operating Pressure - 145 psi

Dimensional Data



	A	B	C	D	E	F	G	H	I
INCHES	13.58	1 in. FPT Fittings (4 Typical)	12.38	4.25	1 in. FPT Access Ports	3.25	5.88	7.30	2.25
[CM]	[34.5]		[31.4]	[10.8]		[8.3]	[14.9]	[18.5]	[5.7]

TYPE	SHIPPING WEIGHT
FC1-FPT	24 LBS
FC2-FPT	30 LBS
FC1-FPTB	24 LBS
FC2-FPTB	30 LBS

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

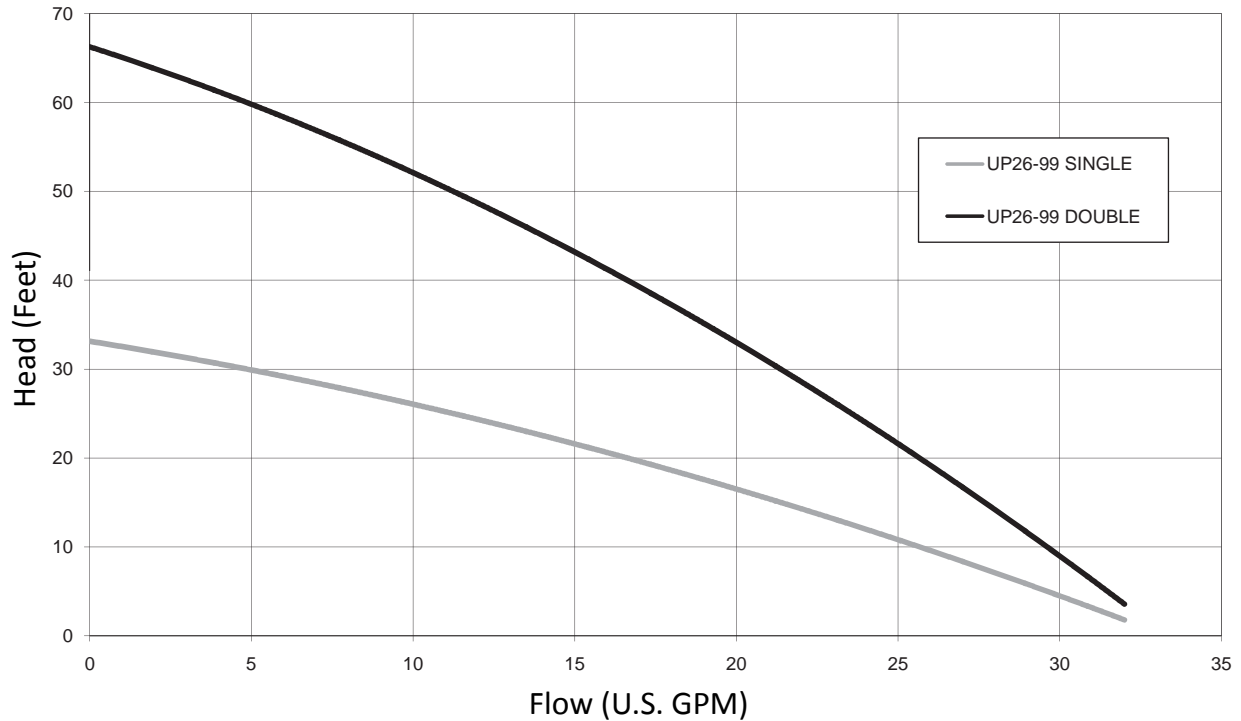
FPT and FPTB Flow Centers cont.

Electrical Data

MODEL	VOLTS	AMPS	WATTS	HP	CAPACITOR
FC1-FPT & FC1-FPTB	230/60/1	1.07	246.1	0.17	2.5μF/380V
FC2-FPT & FC2-FPTB*	230/60/1	2.14	492.2	0.33	2.5μF/380V

*With both circulating pumps operating.

Pump Curves for GL, FPT, and FPTB Flow Centers



Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

FCM Flow Centers

General Specifications

Circulator(s) - Model FCM2-3023 utilizes a Grundfos series UPS26-150 3-speed pump and polyester powder coated cast iron pump volute.

Valving - Forged brass, 2.00" Full-port 3-way valve used for loop flushing and maintenance.

Cabinet - Casing of galvanized steel, with a polyester powder coat finish.

Insulation - CFC-free, spray foam, comprised of polyurethane resin.

Electrical - Requires 230 volt single-phase power supply. Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the wall, extra bracing may be needed. Factory supplied mounting hardware is included.

Connections - Brass 2.00" XL double o-ring connections provided for loop-side water and unit-side water connection.

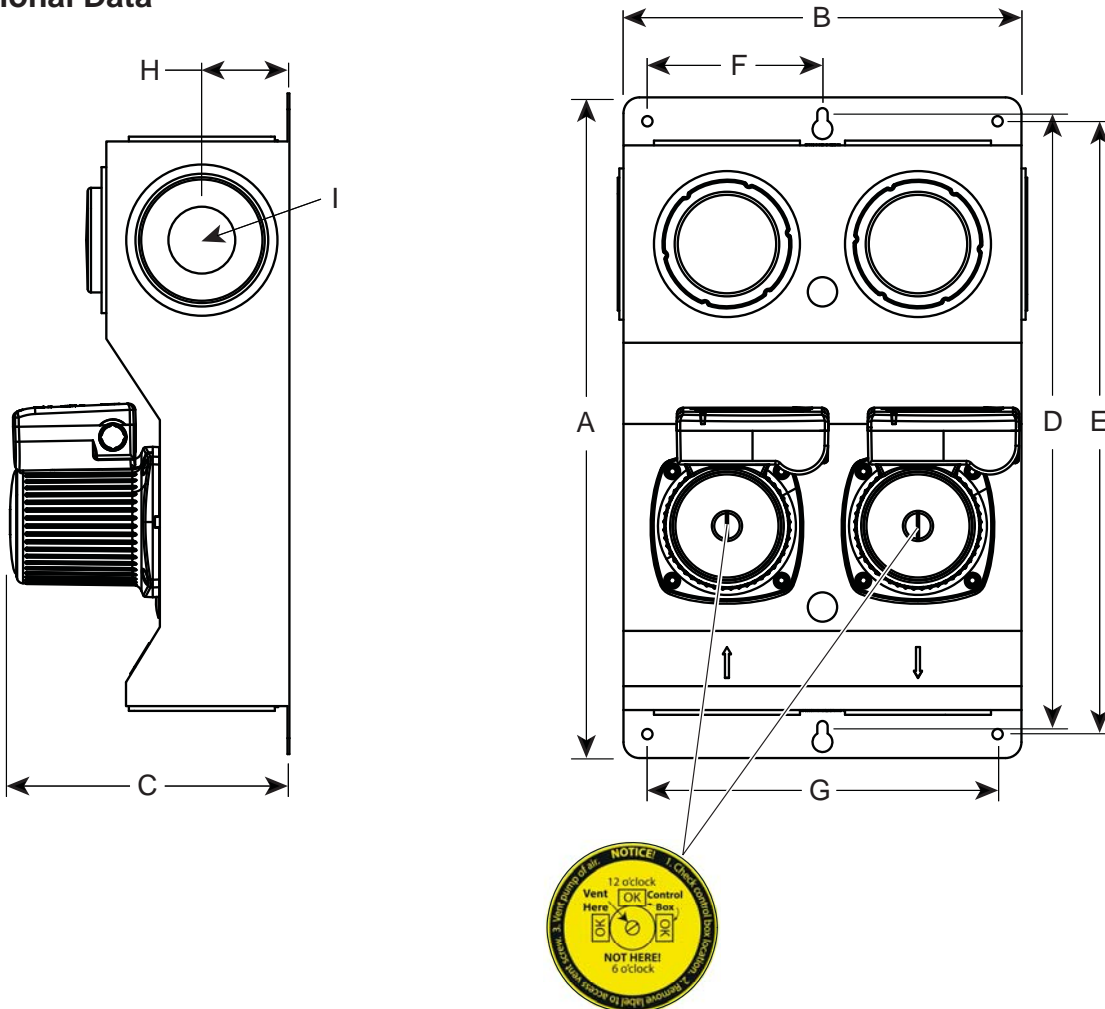
Min. Entering Fluid Temperature - 20° F

Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5.1 psi

Max. Operating Pressure - 145 psi

Dimensional Data



	A	B	C	D	E	F	G	H	I
INCHES	20.75	12.5	8.5	19.25	19.25	5.5	11.0	2.75	1/2 in. Drive Socket
[CM]	[52.7]	[31.8]	[21.6]	[48.9]	[48.9]	[14.0]	[27.9]	[7.0]	

TYPE	SHIPPING WEIGHT
FCM2-3023	50 LBS

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

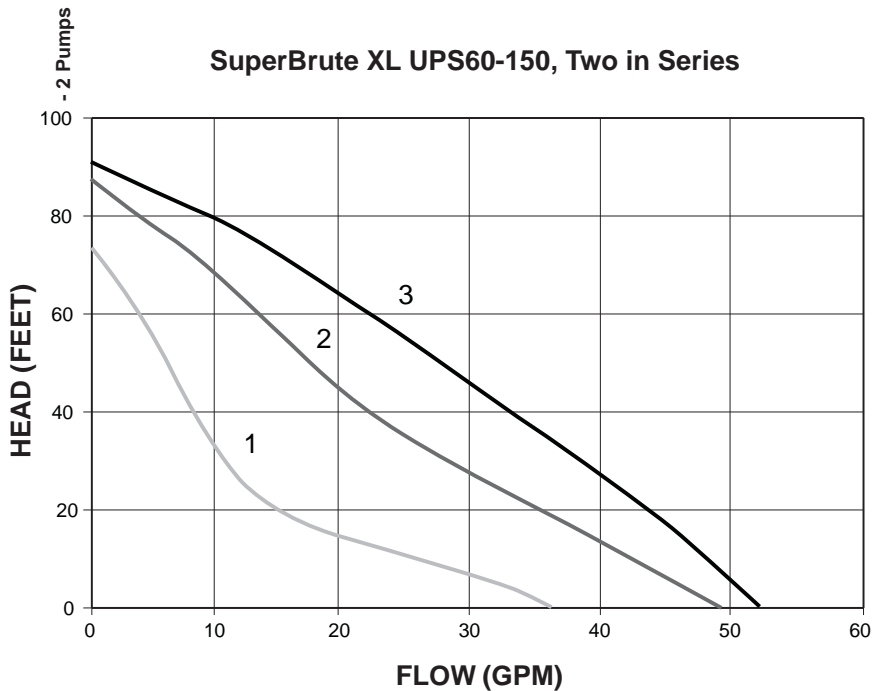
FCM Flow Centers cont.

Electrical Data

MODEL	MAX HP* (3 Speed)	Speed	RPM	Amps*	Watts*
FCM2-3023	1/6	3	3400	1.9	377
		2	3300	1.6	340
		1	3100	1.3	267

* Data is per pump

Pump Curve for FCM Flow Centers



Contractor: _____ P.O.: _____
 Engineer: _____
 Project Name: _____ Unit Tag: _____

FCV Flow Centers

General Specifications

Circulator(s) - Models FCV1 utilize a Grundfos series GEOMAGNA variable speed pump with PES Composite (30% Glass Filled) impeller and polyester powder coated cast iron pump volute.

Models FCV2 utilize a Grundfos series GEOMAGNA variable speed pump and a Grundfos series UP26-99 pump with PES Composite (30% Glass Filled) impeller and polyester powder coated cast iron pump volute.

Valving - Die cast, double O-ring, brass 3-way valve used for loop flushing and maintenance.

Cabinet - Casing of high impact polystyrene, gray.

Insulation - CFC-free, spray foam, comprised of polyurethane resin

Electrical - Requires 208-230 volt single-phase power supply

Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the WSHP unit or on the wall.

Factory supplied mounting hardware is included

Connections - Female gasketed insert connections provided for loop-side water and unit-side water connection

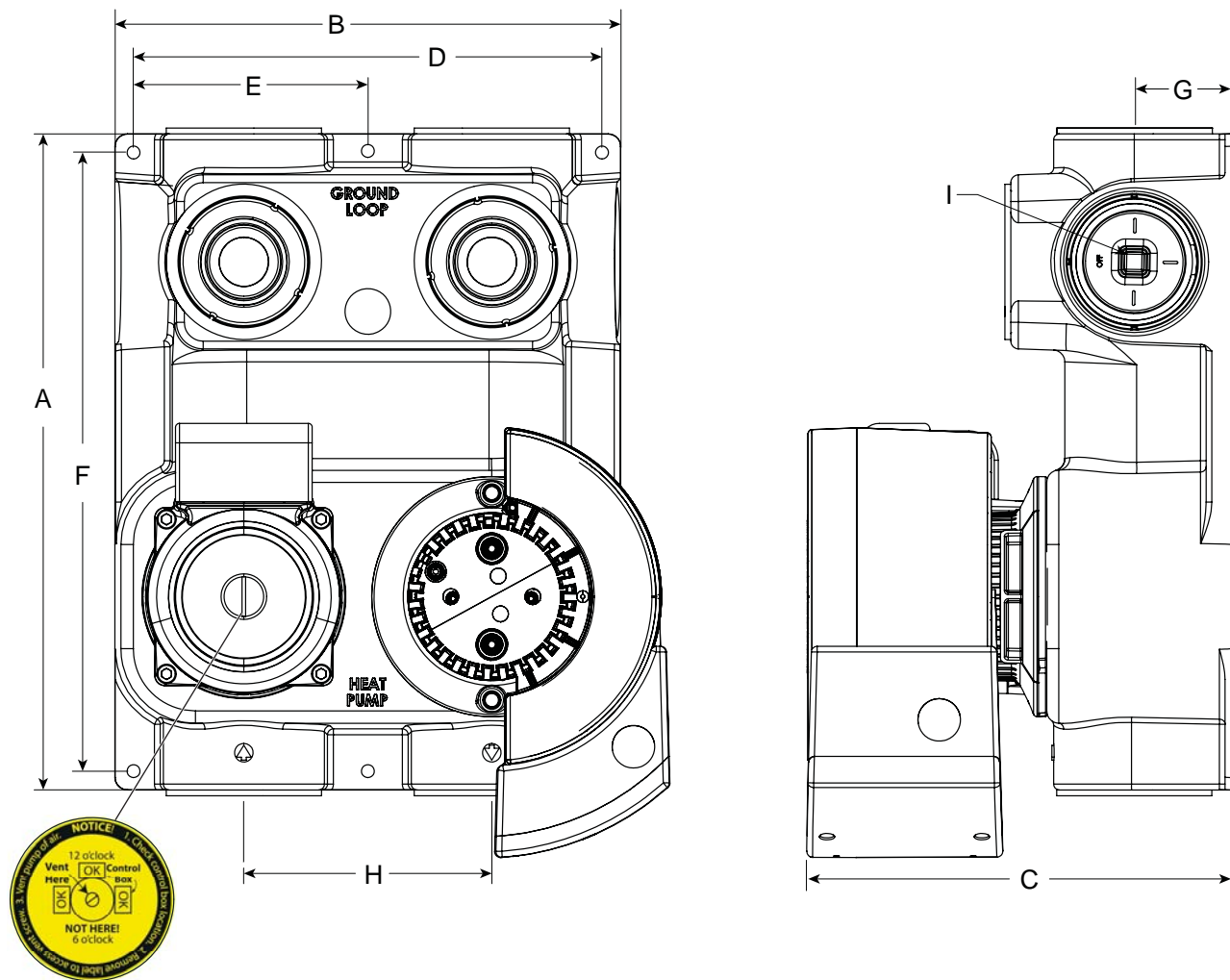
Min. Entering Fluid Temperature - 20° F

Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5 psi

Max. Operating Pressure - 145 psi

Dimensional Data



	A	B	C	D	E	F	G	H	I
INCHES	13.25	10.19	8.50	9.44	4.75	12.50	2.00	5.00	3/8 in. Socket
CM	33.6	25.9	21.6	24.0	12.0	31.7	5.00	12.7	

TYPE	SHIPPING WEIGHT
FCV1-GL	26 lbs [11.8 kg]
FCV2-GL	30 lbs [13.6 kg]

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

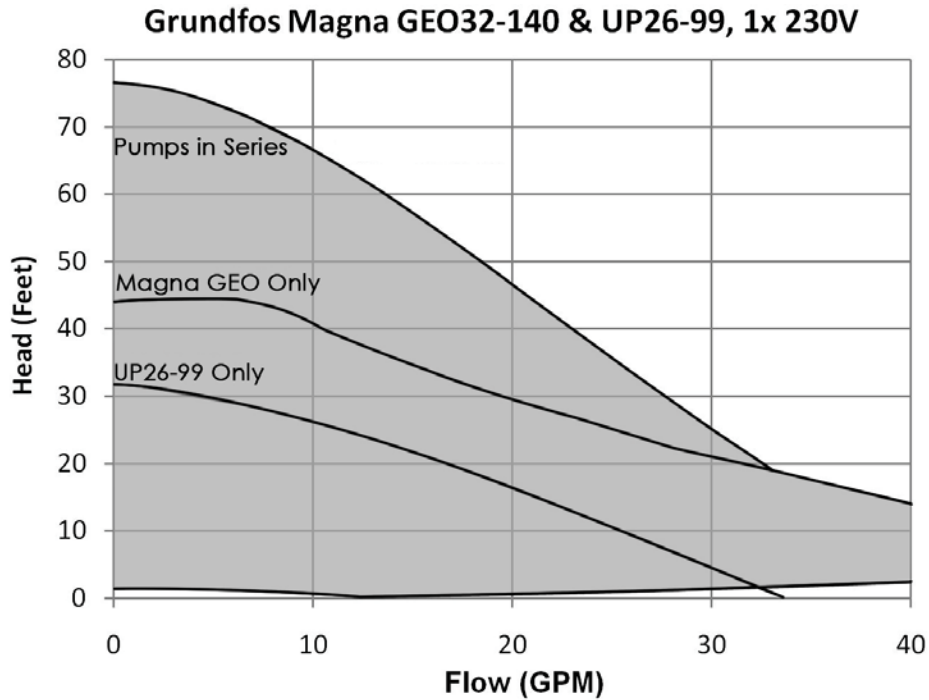
FCV Flow Centers cont.

Electrical Data

MODEL	PUMP MOTOR	VOLTS	AMPS	WATTS	CAPACITOR
FCV1-GL	Magna Geo	208-230/60/1	.09 - 1.7	120 - 210	N/A
FCV2-GL*	Magna Geo	208-230/60/1	.09 - 1.7	120 - 210	N/A
	UP26-99	208-230/60/1	1.07	246.1	2.5µF/380V

*With both circulating pumps operating.

Pump Curve for FCV Flow Centers



Performance range shown in gray

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

FCL Flow Centers

General Specifications

Circulator(s) - Models FCL1-5028 and FCL2-5028 utilize a Grundfos series UPS32-160 3-speed pump and polyester powder coated cast iron pump volute.

Models FCL1-5038 and FCL2-5038 utilize a Grundfos series UPS40-160 3-speed pump and polyester powder coated cast iron pump volute.

Models FCL1-5055 and FCL2-5055 utilize a Grundfos series UPS40-240 3-speed pump and polyester powder coated cast iron pump volute.

Valving - Forged brass, 2.00" Full-port 3-way valve used for loop flushing and maintenance

Cabinet - Casing of galvanized steel, with a polyester powder coat finish

Insulation - CFC-free, spray foam, comprised of polyurethane resin

Electrical - Requires 230 volt single-phase power supply. Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the wall, extra bracing may be needed. Factory supplied mounting hardware is included.

Connections - Brass 2.00" XL double o-ring connections provided for loop-side water and unit-side water connection.

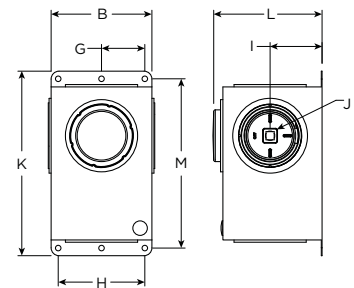
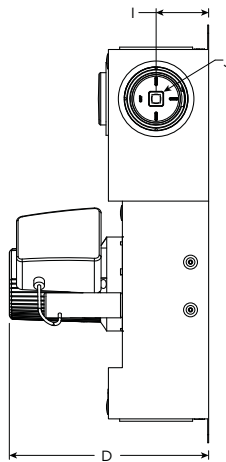
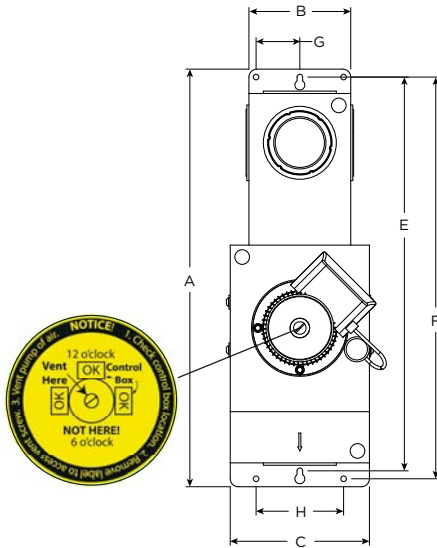
Min. Entering Fluid Temperature - 20° F

Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5.1 psi (for 5038)
11.6 psi (for 5028 and 5055)

Max. Operating Pressure - 145 psi

Dimensional Data - FCL1-5028



Flow Center	Item	Shipping Weight
FCL1-5028	Valve Cabinet	18.25 lbs
	Insulated Pump/Valve	70.0 lbs

Flow Center	GPM	Ft of Head	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M
FCL1	50	26	in	26.25	6.38	8.75	12.5	24.75	25.25	2.75	5.5	3.31	1/2" Drive Socket	11.75	6.88	10.75
			cm	66.7	16.3	22.2	31.8	62.9	64.1	7.0	14.0	8.4		29.8	17.5	27.3

Electrical Data

MODEL	MAX HP* (3 Speed)	Speed	RPM	Amps*	Watts*	Starting Amps*
FCL1-5028	3/4	3	3477	2.9	625	6.7
		2	3399	2.9	600	6.7
		1	3281	2.75	555	6.35

* Data is per pump

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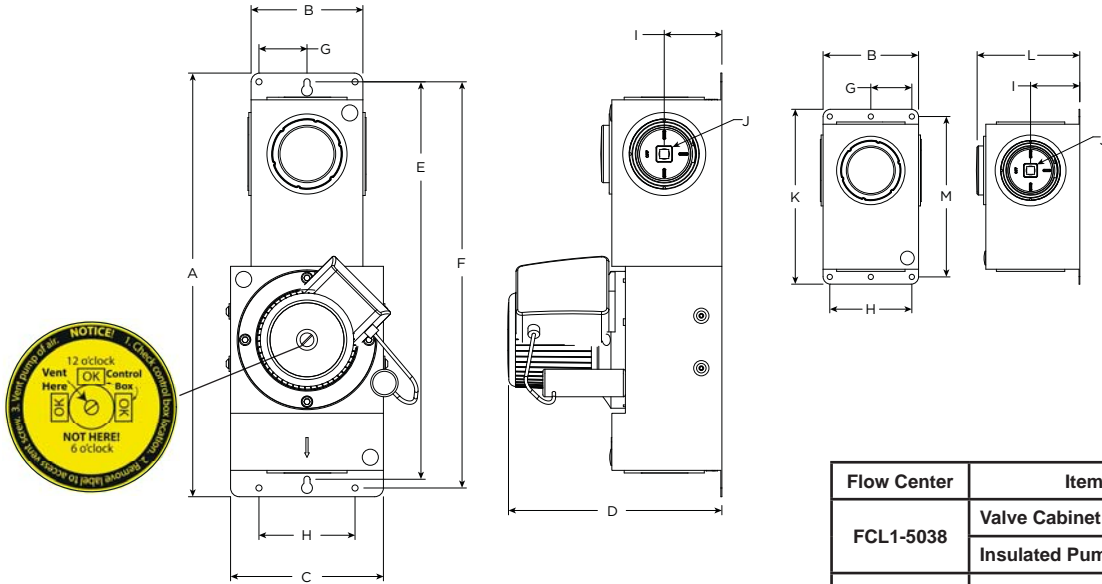
Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

FCL Flow Centers cont.

Dimensional Data - FCL1-5038 & FCL1-5055



Flow Center	Item	Shipping Weight
FCL1-5038	Valve Cabinet	18.25 lbs
	Insulated Pump/Valve	75.0 lbs
FCL1-5055	Valve Cabinet	18.25 lbs
	Insulated Pump/Valve	88.0 lbs

Flow Center	GPM	Ft of Head	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M
FCL1	50	35	in	24.25	6.38	8.75	12.19	22.75	23.25	2.75	5.5	3.31	1/2" Drive Socket	11.75	6.88	10.75
			cm	61.6	16.3	22.2	31.0	57.8	59.1	7.0	14.0	8.4		29.8	17.5	27.3
FCL1	50	48	in	26.25	6.38	8.75	12.56	24.75	25.25	2.75	5.5	3.31	1/2" Drive Socket	11.75	6.88	10.75
			cm	66.7	16.3	22.2	31.9	62.9	64.1	7.0	14.0	8.4		29.8	17.5	27.3

Electrical Data

MODEL	MAX HP* (3 Speed)	Speed	RPM	Amps*	Watts*	Starting Amps*
FCL1-5038	3/4	3	3463	4.20	890	9.30
		2	3202	3.75	760	8.30
		1	3055	3.45	690	7.64
FCL1-5055	1-1/2	3	3412	6.20	1350	11.80
		2	3322	5.55	1200	10.56
		1	3196	5.15	1100	9.80

* Data is per pump

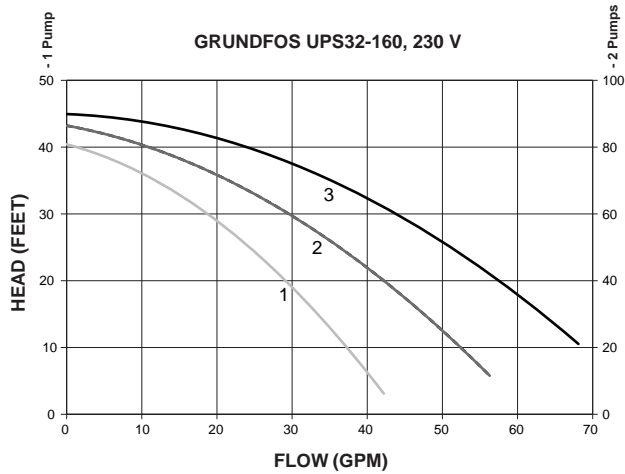
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Engineer: _____

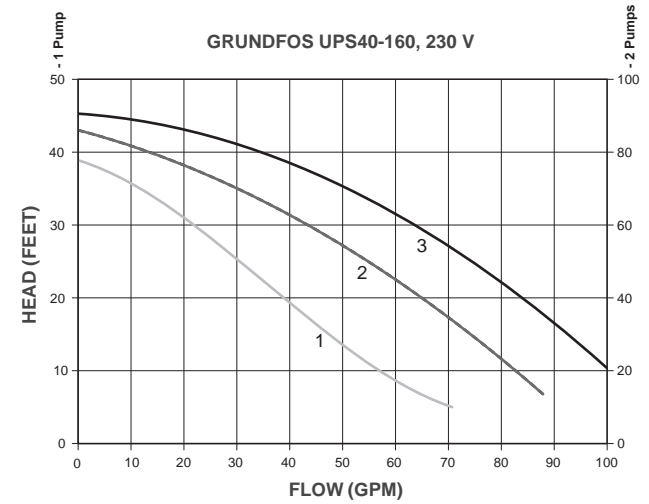
Project Name: _____ Unit Tag: _____

Pump Curves for FCL Flow Centers

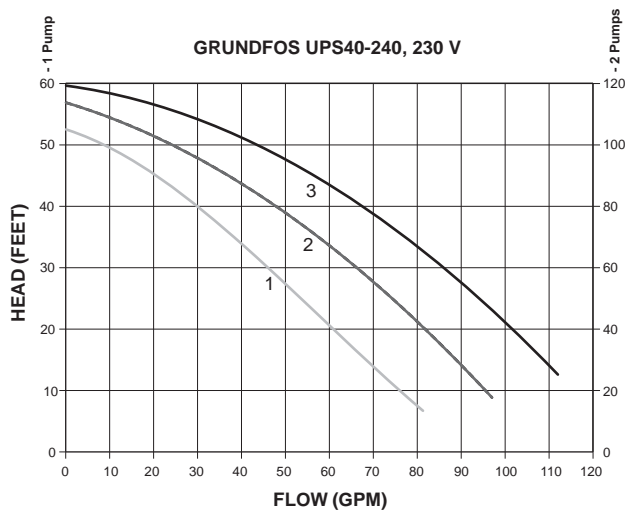
Pump Curve - FCL1-5028



Pump Curve - FCL1-5038



Pump Curve - FCL1-5055



Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

PML Load Side Pump Modules

General Specifications

Circulator(s) - Models PML32-160 utilize a Grundfos series UPS32-160 3-speed pump and polyester powder coated cast iron pump volute.

Models PML40-160 utilize a Grundfos series UPS40-160 3-speed pump and polyester powder coated cast iron pump volute.

Models PML40-240 utilize a Grundfos series UPS40-240 3-speed pump and polyester powder coated cast iron pump volute.

Cabinet - Casing of galvanized steel, with a polyester powder coat finish

Insulation - CFC-free, spray foam, comprised of polyurethane resin

Electrical - Requires 230 volt single-phase power supply. Factory installed electrical terminal box located on each circulator pump is provided for field wiring connections.

Mounting - May be located on the wall, extra bracing may be needed. Factory supplied mounting hardware is included.

Connections - Brass 2.00" XL double o-ring connections provided for loop-side water and unit-side water connection.

Min. Entering Fluid Temperature - 20° F

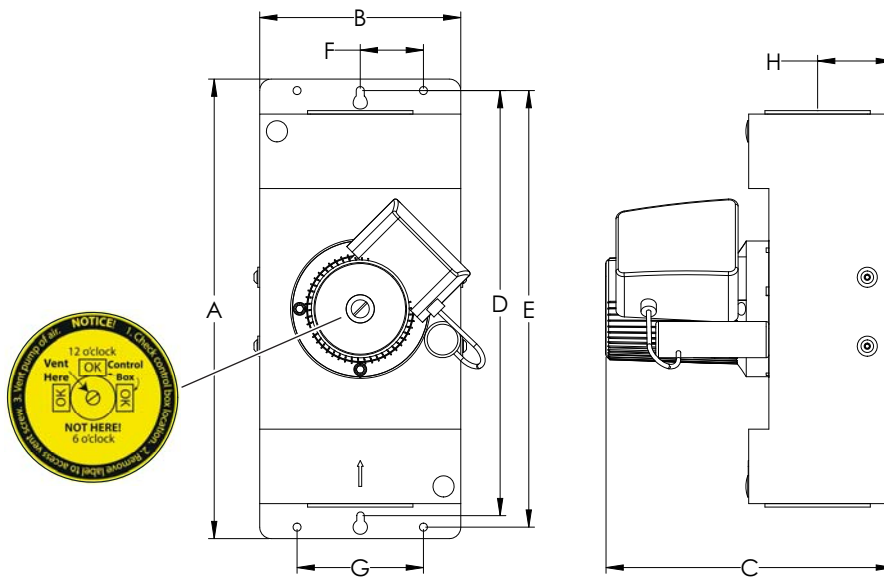
Max. Entering Fluid Temperature - 140° F

Min. Operating Pressure - 5.1 psi (for 5038)

11.6 psi (for 5028 and 5055)

Max. Operating Pressure - 145 psi

Dimensional Data - PML32-160



Module	Item	Shipping Weight
PML32-160	Pump Cabinet	65 lbs

Flow Center	GPM	Ft of Head	Unit	A	B	C	D	E	F	G	H
PML32-160	50	26	in	20	8.75	12.5	18.5	19	2.75	5.5	3.3125
			cm	50.8	22.2	31.8	47.0	48.3	7.0	14.0	8.4

Electrical Data

MODEL	MAX HP* (3 Speed)	Speed	RPM	Amps*	Watts*	Starting Amps*
PML32-160	3/4	3	3477	2.9	625	6.7
		2	3399	2.9	600	6.7
		1	3281	2.75	555	6.35

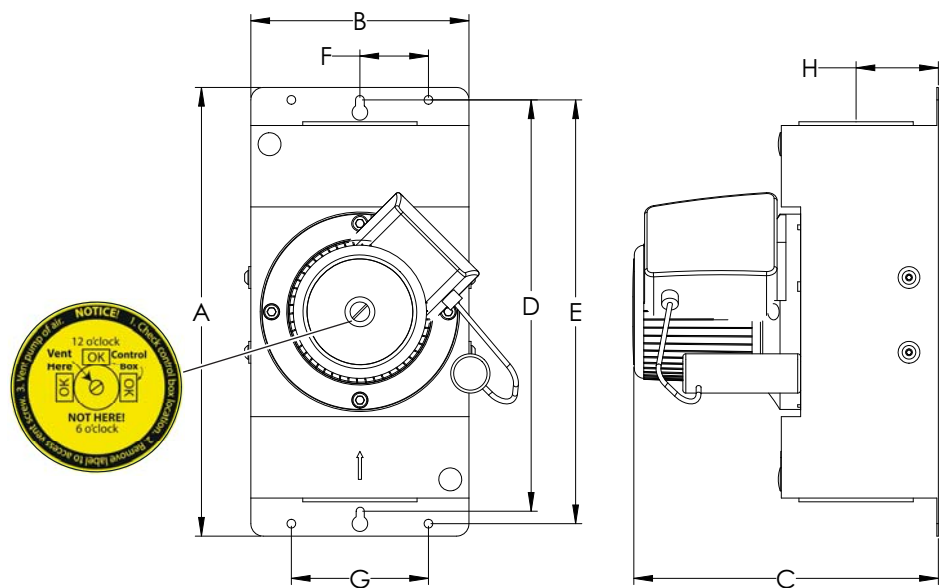
* Data is per pump

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Contractor: _____ P.O.: _____
Engineer: _____
Project Name: _____ Unit Tag: _____

PML Load Side Pump Modules cont.

Dimensional Data - PML40-160 & PML40-240



Flow Center	Item	Shipping Weight
PML40-160	Valve Cabinet	67 lbs
PML40-240	Valve Cabinet	78 lbs

Flow Center	GPM	Ft of Head	Unit	A	B	C	D	E	F	G	H
PML40-160	50	35	in	18	8.75	12.1875	16.5	17	2.75	5.5	3.3125
			cm	45.7	22.2	31.0	41.9	43.2	7.0	14.0	8.4
PML40-240	50	48	in	20.25	8.75	12.625	18.75	19.25	2.75	5.5	3.3125
			cm	51.4	22.2	32.1	47.6	48.9	7.0	14.0	8.4

Electrical Data

MODEL	MAX HP* (3 Speed)	Speed	RPM	Amps*	Watts*	Starting Amps*
PML40-160	3/4	3	3463	4.20	890	9.30
		2	3202	3.75	760	8.30
		1	3055	3.45	690	7.64
PML40-240	1-1/2	3	3412	6.20	1350	11.80
		2	3322	5.55	1200	10.56
		1	3196	5.15	1100	9.80

* Data is per pump

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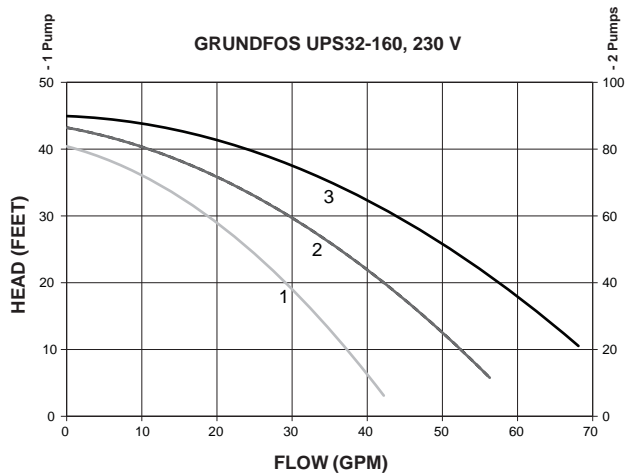
Contractor: _____ P.O.: _____

Engineer: _____

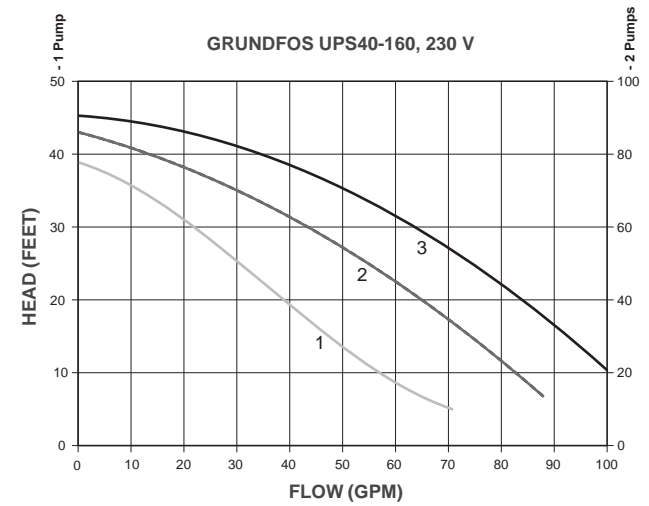
Project Name: _____ Unit Tag: _____

Pump Curves for PML Flow Centers

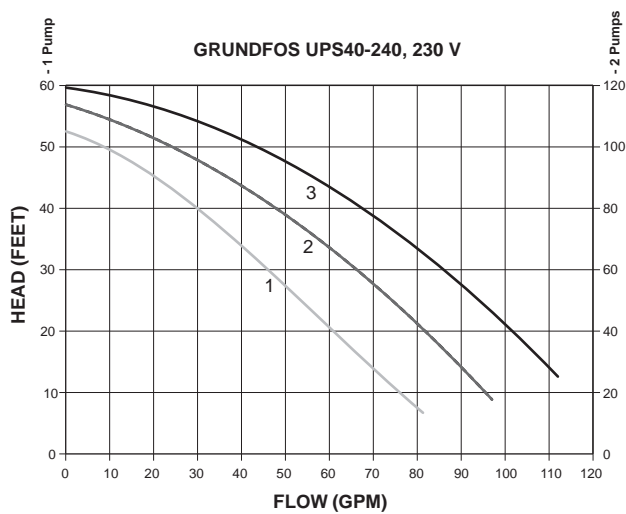
Pump Curve - PML32-160



Pump Curve - PML40-160



Pump Curve - PML40-240



Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Revision Guide

Pages:	Description:	Date:	By:
10	Updated Dimentional Data Diagram	05 Aug 2017	JM
Multiple	Added New Pump Venting Sticker Diagram	07 May 2013	DS
10-11	Added FCV Series Flow Centers	05 Nov 2012	DS
12-13	Corrected Foot of Head Values	05 Nov 2012	DS
15-17	Added PML Load Side Pump Modules	05 Nov 2012	DS
53	Added Revision Guide	05 Nov 2012	DS