

GEO-FLO

2024

Product Catalog



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Flo-Link™ Flow Centers

Geo-Flo's most popular flow centers are available in a wide variety of combinations. Flo-Link double O-ring fittings provide leak-free union connections at the flow center, installed without tools. Geo-Flo's full port 3-way flushing and isolation valves are designed for the wide range of temperatures experienced in ground loop applications. The GPM series flow centers utilize reliable 3-way valves with the same features and benefits as the Flo-Link valves, but have threaded FPT connections.

| PRESSURIZED | | | | | | | |
|--|----------------------|-----------|----------|-------------|-----------|--------------------|-------------------|
| PN | PUMP | # PUMP(S) | SPEED | CONNECTION | VOLUTE | VALVE | CABINET/INSULATED |
| 1294 | UPS26-99 | 1 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1296 | UP26-116 | 1 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FL1L | UPMXL 25-124 | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FL2L | UPMXL 25-124 | 2 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FL1N | UPMXL 25-124 INV. | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| Flow centers above contain a set of 1-1/4" PE fusion X Flo-Link fittings (loop side) | | | | | | | |
| 1295 | UPS26-99 | 2 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1297 | UP26-116 | 2 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FL2M | UPS26-99/UPMXL | 2 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FL2P | UPS26-99/UPMXL INV. | 2 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| FLXL1D | SuperBrute UPS60-150 | 1 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| FLXL1E | VersaFlo UPS32-160 | 1 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| FLXL1F | VersaFlo UPS40-160 | 1 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| FLXL2D | SuperBrute UPS60-150 | 2 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| FLXL2E | VersaFlo UPS32-160 | 2 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| FLXL2F | VersaFlo UPS40-160 | 2 | THREE | Flo-Link XL | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |

NOTE: For hose kits see pages 19-22

Flo-Link series foamed flow centers:



FLXL1D



FLXL1E



FLXL2E



| PANEL MOUNT (Variable Speed Pre-Wired Packages-Panel Mounted) | | | | |
|--|-------------|-----------|------------------|-------------------------|
| PN | Flow Center | # PUMP(S) | Control | Connection |
| FL1L-PKT | FL1L | 1 | TEMPERATURE | Hose kit/PE connections |
| FL1L-PKB | FL1L | 1 | TEMPERATURE/FLOW | Hose kit/PE connections |
| FL2M-PKT | FL2M | 2 | TEMPERATURE | Hose kit/PE connections |
| FL2M-PKB | FL2M | 2 | TEMPERATURE/FLOW | Hose kit/PE connections |
| Kit includes all of the fittings necessary for connecting to the ground loop (1-1/4" PE fusion) and the heat pump. | | | | |
| For Heat pumps with double O-ring water connections, add on 3326 (1" FPT X FL double O-ring fitting set.) | | | | |



FL1L-PKT



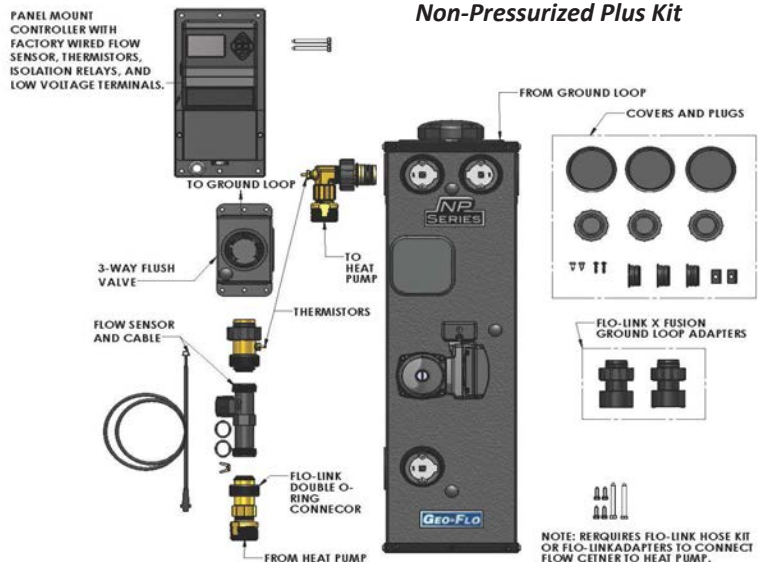
FL1L-PKB

Kit includes all of the fittings necessary for connecting to the ground loop (1-1/4" PE fusion) and the heat pump.

Flo-Link™/NP Base-Flow Centers

| NON-PRESSURIZED | | | | | | | |
|---|-------------------------|-----------|----------|------------|-----------|------------------------|-------------------|
| PN | PUMP | # PUMP(S) | SPEED | CONNECTION | VOLUTE | VALVE | CABINET/INSULATED |
| 1271 | UPS26-99 | 1 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1273 | UP26-116 | 1 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NP1L | UPMXL 25-124 | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NP1N | UPMXL 25-124 INV. | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1272 | UPS26-99 | 2 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1274 | UP26-116 | 2 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NP2M | UPMXL 25-124 + UPS26-99 | 2 | VS/THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NP2P | UPMXL 25-124 INV. | 2 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NP2L | UPMXL 25-124 | 2 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO, BR | PLASTIC/ YES |
| NON-PRESSURIZED BASE | | | | | | | |
| NPB1A | UPS26-99 | 1 | THREE | 1" Swivel | CAST IRON | ISOLATION BALL VLV, BR | PLASTIC/ YES |
| NPB2A | UPS26-99 | 2 | THREE | 1" Swivel | CAST IRON | ISOLATION BALL VLV, BR | PLASTIC/ YES |
| NPB1C | UP26-116 | 1 | SINGLE | 1" Swivel | CAST IRON | ISOLATION BALL VLV, BR | PLASTIC/ YES |
| NPB2C | UP26-116 | 2 | SINGLE | 1" Swivel | CAST IRON | ISOLATION BALL VLV, BR | PLASTIC/ YES |
| NON-PRESSURIZED PLUS | | | | | | | |
| (PNs include ground loop fittings (PE fusion x Flo-Link) and an additional insulated 3-way valve) | | | | | | | |
| 1338 | UPS26-99 | 1 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1340 | UP26-116 | 1 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NPP1L | UPMXL 25-124 | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NPP1N | UPMXL 25-124 INV. | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1339 | UPS26-99 | 2 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1341 | UP26-116 | 2 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NPP2M | UPS26-99/UPMXL | 2 | THREE/V3 | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NPP2P | UPS26-99/UPMXL INV. | 2 | THREE/V3 | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NON-PRESSURIZED PLUS KIT | | | | | | | |
| NPP1L-CKB | UPMXL 25-124 | 1 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| NPP2M-CKB | UPS26-99/UPMXL | 2 | THREE/V3 | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| Kit includes: Ground loop fittings (PE fusion x Flo-Link) and an additional insulated 3-way valve | | | | | | | |
| Requires: heat pump connections (See NP Plus Hose Kits, or Flo-Link adapters) | | | | | | | |

Non-Pressurized Base (NPB) Non-Pressurized (NP)



NOTE: For hose kits see pages 19-22

| NON-PRESSURIZED DUAL | | | | | | | |
|----------------------|--------------------------|-----------|----------|------------|-----------|---------------------|-------------------|
| PN | PUMP | # PUMP(S) | SPEED | CONNECTION | VOLUTE | VALVE | CABINET/INSULATED |
| 1304 | UPS26-99 | 2 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| 1307 | UP26-116 | 2 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD2LA | UPS26-99/UPMXL | 2 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD2NA | UPS26-99/UPMXL INV. | 2 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD2LL | UPMXL 25-124 | 2 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD2NN | UPMXL 25-124 INV. | 2 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| 1305 | UPS26-99 | 3 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| 1308 | UP26-116 | 3 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD3MA | UPS26-99+UPMXL, UPS26-99 | 3 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO, BR | SHEET METAL/ YES |
| NPD3ML | UPS26-99 + UPMXL | 3 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD3PN | UPS26-99 + UPMXL INV. | 3 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| 1306 | UPS26-99 | 4 | THREE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| 1309 | UP26-116 | 4 | SINGLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD4LL | UPMXL 25-124 | 4 | VARIABLE | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO,BR | SHEET METAL/ YES |
| NPD4LA | UPS 26-99 + UPMXL | 4 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO, BR | SHEET METAL/ YES |
| NPD4MA | UPS26-99 + UPMXL | 4 | THREE/VS | Flo-Link | CAST IRON | 3-WAY FLUSH/ISO, BR | SHEET METAL/ YES |

NOTE: For hose kits see pages 19-22

Non-Pressurized Dual (NPD)



| NP REPLACEMENT CAP | | |
|--------------------|--------------------------------|------|
| 4008 | CAP, REPLACEMENT FOR NP SERIES | EACH |

FPT Flow Centers- Insulated & Bracket

| PRESSURIZED FPT FLOW CENTERS | | | | | | | |
|------------------------------|-----------------|-----------|--------|------------|-----------|--------------------|-------------------|
| PN | PUMP | # PUMP(S) | SPEED | CONNECTION | VOLUTE | VALVE | CABINET/INSULATED |
| FP1B | UP26-99 | 1 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1027 | UPS26-99 | 1 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1055 | UP26-116 | 1 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1077 | UP26-116SF | 1 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1033 | UPS26-99 115v | 1 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1000 | UPS26-99 | 1 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/ NO |
| 1049 | UP26-116 | 1 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/ NO |
| 1085 | UP26-116SF | 1 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | ON BRACKET/ NO |
| 1004 | UPS26-99 115v | 1 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/ NO |
| 1037 | UPS26-99 | 1 | THREE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/ NO |
| 1057 | UP26-116 | 1 | SINGLE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/ NO |
| 1089 | UP26-116SF | 1 | SINGLE | 1" FPT | STAINLESS | ISO. VALVES | ON BRACKET/ NO |
| 1069 | UPS26-99 115v | 1 | THREE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/ NO |
| FP2B | UP26-99 | 2 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1028 | UPS26-99 | 2 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1056 | UP26-116 | 2 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1076 | UP26-116SF | 2 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1031 | UPS26-99 115V | 2 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1001 | UPS26-99 | 2 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/NO |
| 1050 | UP26-116 | 2 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/NO |
| 1082 | UP26-116SF | 2 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | ON BRACKET/NO |
| 1005 | UPS26-99 115V | 2 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | ON BRACKET/NO |
| 1038 | UPS26-99 | 2 | THREE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/NO |
| 1229 | UPS26-99 | 3 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1231 | UP26-116 | 3 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1235 | UP26-116SF | 3 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1233 | UPS26-99 115V | 3 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1045 | UPS26-99 | 3 | THREE | 1" FPT | CAST IRON | ISO VALVES | ON BRACKET/NO |
| 1230 | UPS26-99 | 4 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1232 | UP26-116 | 4 | SINGLE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1236 | UP26-116SF | 4 | SINGLE | 1" FPT | STAINLESS | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1234 | UPS26-99 115V (| 4 | THREE | 1" FPT | CAST IRON | 3-WAY FLUSH/ISO,BR | PLASTIC/ YES |
| 1046 | UPS26-99 | 4 | THREE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/NO |
| 1062 | UP26-116 | 4 | SINGLE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/NO |
| 1092 | UP26-116SF | 4 | SINGLE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/NO |
| 1071 | UPS26-99 115V | 4 | THREE | 1" FPT | CAST IRON | ISO. VALVES | ON BRACKET/NO |

NOTE: For hose kits see pages 19-22

Bracket flow centers:



GPM-1 UPS26-99, 230V Grundfos (3-speed), cast iron, iso valves



GPM-1 UPS26-99 115v Grundfos (3-speed), cast iron, On Bracket



GPM-2 UPS26-99 230v Grundfos (3-speed), cast iron, On Bracket

FPT Foamed flow centers:



GPM-1 UPS26-99 230v Grundfos (3-speed), cast iron, Foamed



GPM-2 UPS26-99 230v Grundfos (3-speed), cast iron, Foamed



GPM-3 UPS26-99 230v Grundfos (3 Speed), cast iron, Foamed

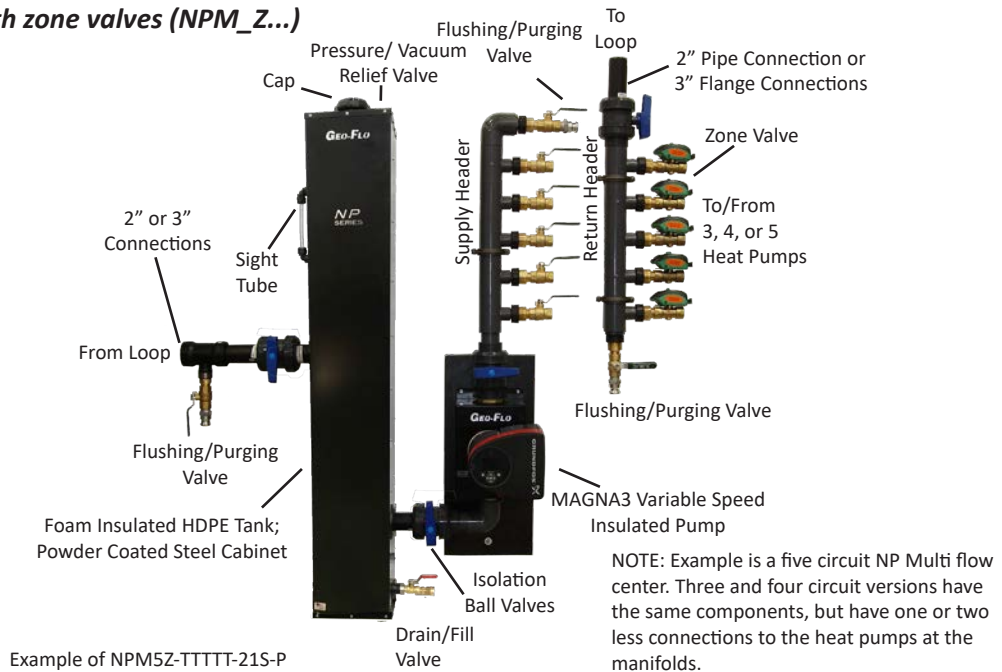
NPM-Flow Centers

Geo-Flo's NP Multi™ is an engineered solution designed to simplify your geothermal applications for multiple heat pumps by providing virtually all of the piping, flushing/purging valves, and pumps/zone valves for three to five heat pumps as part of a factory assembled package.

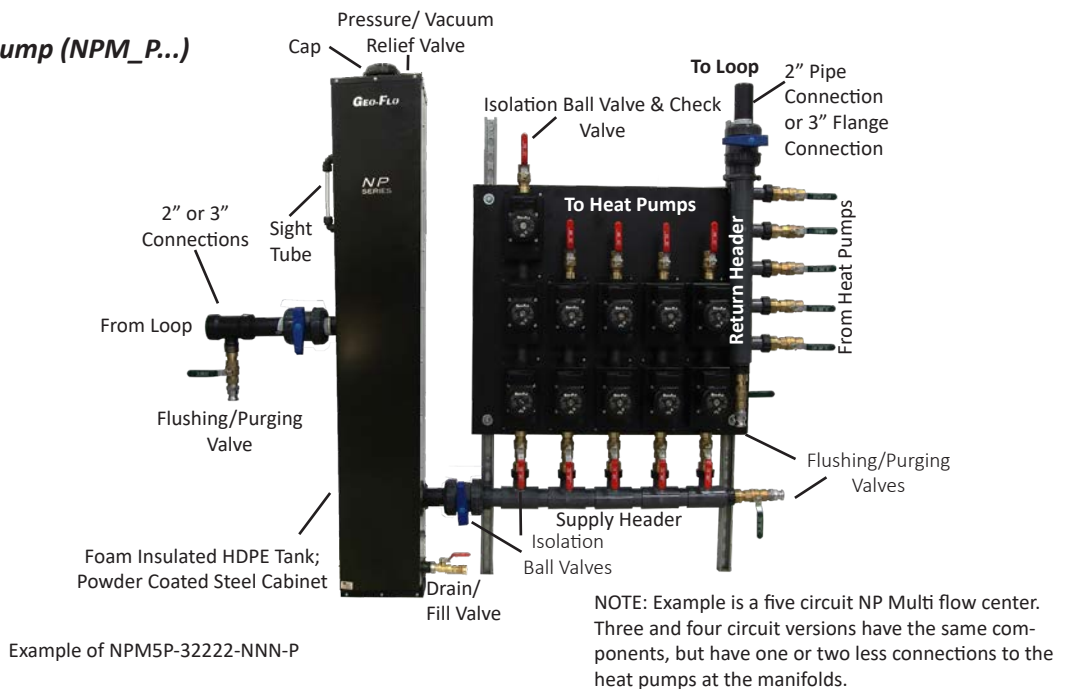
NP SERIES Multi Circuit

Each NP Multi (NPM) flow center consists of a HDPE fluid reservoir (tank) housed in a closed-cell foam-insulated, powder coated steel cabinet. The tank provides a water column to deliver the necessary suction head for the circulator pumps and to ensure a flooded pump volute to prevent the pumps from becoming air-locked. In addition, the reservoir's body is sized to create a low fluid velocity region allowing both air and sediment to separate from the fluid. The sealing cap ensures a closed system while providing integrated pressure and vacuum relief to prevent the reservoir from being over-pressurized or dropping below atmospheric pressure. Union ball valves are included on the tank's supply and return connections for ease of installation and tank isolation during start-up and/or servicing. A fill and drain ball valve at the base of the tank comes standard for initial filling as well as refilling, draining, and sediment removal. The flexible sight tube is useful for quickly determining the fluid level.

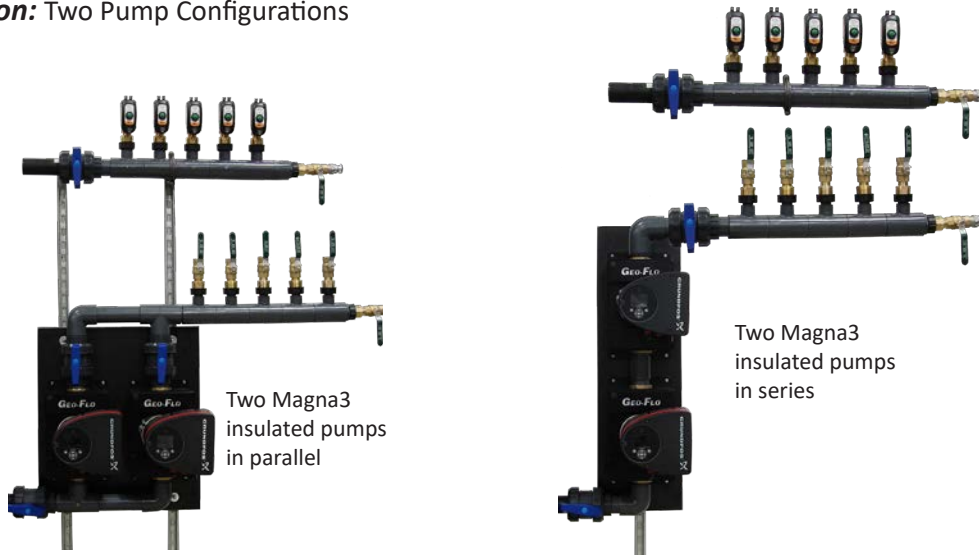
Variable speed pumping with zone valves (NPM_Z...)



Circulators for each heat pump (NPM_P...)



Premium Option: Two Pump Configurations



Two Magna3 insulated pumps in parallel

Two Magna3 insulated pumps in series

NOTE: Examples on this page are five circuit NP Multi flow centers. Two, three, and four circuit versions have the same components, but have less connections to the heat pumps at the manifolds.

Nomenclature

1 - 3 4 5 6 - 10 11 12,13 14
NPM **3** **Z** - **TTTNN** - **2** **2P** - **F**

rev. 26DEC2023

NP Multi

Number of Heat Pumps

- 2 = 2 Circuits
- 3 = 3 Circuits
- 4 = 4 Circuits
- 5 = 5 Circuits
- N = No Header (NPMNZ only)

System Type

- P = Circulator(s) for each heat pump
- Z = Zone valve for ea. heat pump (central variable speed pumping)

System Configuration

- Digit 6 = Heat Pump #1
 - Digit 7 = Heat Pump #2
 - Digit 8 = Heat Pump #3
 - Digit 9 = Heat Pump #4
 - Digit 10 = Heat Pump #5
- See Central Pumping or Distributed Pumping, below.

Central Variable Speed Pumping -- digit 5 = Z

- Use one of the following choices for digits 6 to 10:
 - T = 1" Taco Sentry zone valve (Cv = 8.9)
 - B = 1" Belimo zone valve (Cv = 30)
 - R = Remote valve at heat pump (header with isolation valves)
 - N = This circuit not used
- NOTE:** Circuit field connections are 1" FPT.

Distributed Pumping (circulator for heat pump) -- digit 5 = P (Notes 1,3,4)

- 1 = One UPS26-99
- 2 = Two UPS26-99
- 3 = Three UPS26-99 (Note 2)
- 4 = One UP26-116
- 5 = Two UP26-116
- 6 = Three UP26-116 (Note 2)
- A = One UPMXL 25-124
- B = UPMXL 25-124 + UPS26-99
- C = Two UPMXL 25-124
- D = One UPMXL 25-124 INV PWM
- E = UPMXL 25-124 INV + UPS26-99
- N = This circuit not used (use in digit 8, 9 and/or 10 for NPM2, NPM3, or NPM4)

Ground Loop Connections

- P = 2" Pipe connection* -- with flush valves
- F = 3" ANSI 150# 4-bolt flange -- with flush valves
- * Includes adapters for 2" HDPE pipe & 2" PVC glue

Central Variable Speed Pump

- NN = N/A (when digit 5 = P)
- 1S = Single insulated pump
- 2P = Two insulated pumps in parallel
- 2S = Two insulated pumps in series

Central Variable Speed Pump Model

- N = N/A (when digit 5 = P)
- 0 = Magna3 40-80 variable speed insulated pump (up to 23 ft. of hd. @ 30 gpm; up to 13 ft. of hd. @ 60 gpm)
- 1 = Magna3 40-120 variable speed insulated pump (up to 33 ft. of hd. @ 30 gpm; up to 24 ft. of hd. @ 60 gpm)
- 2 = Magna 3 40-180 variable speed insulated pump (up to 48 ft. of hd. @ 30 gpm; up to 35 ft. of hd. @ 60 gpm)

Series/Parallel Combinations (Magna3)

| | |
|------------------------|------------------------------|
| (2) 40-80 in parallel | up to 23 ft. of hd. @ 60 gpm |
| (2) 40-120 in parallel | up to 33 ft. of hd. @ 60 gpm |
| (2) 40-180 in parallel | up to 48 ft. of hd. @ 60 gpm |
| (2) 40-80 in series | up to 46 ft. of hd. @ 30 gpm |
| | up to 27 ft. of hd. @ 60 gpm |
| (2) 40-120 in series | up to 66 ft. of hd. @ 30 gpm |
| | up to 48 ft. of hd. @ 60 gpm |
| (2) 40-180 in series | up to 96 ft. of hd. @ 30 gpm |
| | up to 70 ft. of hd. @ 60 gpm |

NOTES:

1. Arrange circuits from the largest to the smallest number of pumps in series. For example, use two pumps in a series for circuit one, two pumps in series for circuit two, and one pump on circuit three.
2. If any circuit has 3 pumps in series, all other circuits must have at least two pumps in series.
3. You cannot mix UP26-99s and UP26-116s on the same NPM
4. Var. spd. pumps (options A to E) include PWM cable.
5. VS pump (UPMXL) options are limited to three consecutive circuits due to the powerhead/terminal box design. If you need more than (3) circuits with UPMXL pumps consult factory.

System Configuration Central Variable Speed Pump

Step #1: Choose Number of Heat Pumps

| Number of Heat Pumps | Digits 1 to 5 |
|----------------------|---------------|
| 2 | NPM2Z |
| 3 | NPM3Z |
| 4 | NPM4Z |
| 5 | NPM5Z |

NOTE: All connections to heat pumps are 1" FPT (supply & return headers).

Step #2: Choose Zone Valves for Each Circuit

| Zone Valves (Digits 6-10) | Digit 6 | Digit 7 | Digit 8 | Digit 9 | Digit 10 |
|---|---|---|--|--|---|
| | Heat Pump 1 | Heat Pump 2 | Heat Pump 3 | Heat Pump 4 | Heat Pump 5 |
| T = 1" Taco Geo Sentry (Cv = 8.9) | Choose T, B, or R for heat pump 1 (digit 6) | Choose T, B, or R for heat pump 2 (digit 7) | Choose T, B, R, or N for heat pump 3 (digit 8) | Choose T, B, R, or N for heat pump 4 (digit 9) | Choose T, B, R, or N for heat pump 5 (digit 10) |
| B = 1" Belimo, Cv =30 | | | | | |
| R = Remote valve | | | | | |
| N = Not used (digit 8, 9 and/or digit 10 for NPM2, NPM3, or NPM4) | | | | | |

Example: Digits 6 to 10 would be TTTTT for a NPM5Z with a Taco zone valve for each heat pump.

Step #3: Choose Central Pump Type

| Pump Type | Digit 11 |
|-------------------|----------|
| 1 = Magna3 40-120 | Choose |
| 2 = Magna3 40-180 | 1 or 2 |

Step #4: Choose Pump Configuration

| Pump Configuration | Digits 12 & 13 |
|--|----------------------|
| 1S = Single Insulated Pump w/Isolation Valves | Choose 1S, 2P, or 2S |
| 2P = 2 Insul. Pmps (Parallel) w/Isol. Valves & Check Vlv | |
| 2S = 2 Insul. Pumps (Series) w/Isolation Valves | |

Step #5: Choose Ground Loop Connections

| Ground Loop Connections | |
|-------------------------|--------------|
| 2" | 3" |
| Digit 14 = P | Digit 14 = F |

NOTE: 2" ground loop connections are HDPE fusion or PVC glue;
3" ground loop connections are ANSI 4-bolt flange type.

Step #6: Create Model number

From steps 1 through 5, model number may be completed (see model nomenclature for added dashes after digits 5, 10, and 13).

ZONING WITH CIRCULATORS

System Configuration Zoning with Circulators

Step #1: Choose number of heat pumps.

| Number of Heat Pumps | Digits 1 to 5 |
|----------------------|---------------|
| 2 | NPM2P |
| 3 | NPM3P |
| 4 | NPM4P |
| 5 | NPM5P |

NOTE: All connections to heat pumps are 1" FPT (supply & return headers).

Step #2: Choose pumps for each circuit.

| Distributed Pumping (Digits 6-10) | Digit 6 | Digit 7 | Digit 8 | Digit 9 | Digit 10 | Digits 11, 12, and 13 |
|--|---|---|---|---|--|--|
| | Heat Pump 1 | Heat Pump 2 | Heat Pump 3 | Heat Pump 4 | Heat Pump 5 | |
| 1 = One UPS26-99 | Choose 1 to E for heat pump 1 (digit 6) | Choose 1 to E for heat pump 2 (digit 7) | Choose 1 to E for heat pump 3 (digit 8) | Choose 1 to E for heat pump 4 (digit 9) | Choose 1 to E for heat pump 5 (digit 10) | Always NNN for Zoning with Circulators |
| 2 = Two UPS26-99 | | | | | | |
| 3 = Three UPS26-99 | | | | | | |
| 4 = One UP26-116 | | | | | | |
| 5 = Two UP26-116 | | | | | | |
| 6 = Three UP26-116 | | | | | | |
| A = One UPMXL 25-124* | | | | | | |
| B = UPMXL + UPS26-99* | | | | | | |
| C = Two UPMXL 25-124* | | | | | | |
| D = One UPMXL INV PWM* | | | | | | |
| E = UPMXL INV + UPS26-99* | | | | | | |
| N = Not used (digits 8, 9 and/or 10 for NPM2, NPM3, or NPM4) | | | | | | |

Example: Digits 6 to 10 would be 22222 for a NPM5P with two UPS26-99 pumps per heat pump.

NOTES:

1. Arrange circuits from the the largest to smallest number of pumps in series. For example, use two pumps in series for circuit one, two pumps in series for circuit two, and one pump on circuit three.
2. If any circuit has (3) UP26 pumps in series, all other circuits must have at least two UP26 pumps in series.
3. All UP26 pumps must be in the same family (e.g. all UPS26-99 or all UP26-116).

Step #3: Choose ground loop connections.

| Ground Loop Connections | |
|-------------------------|--------------|
| 2" | 3" |
| Digit 14 = P | Digit 14 = F |

NOTE: 2" ground loop connections are HDPE fusion or PVC glue;
3" ground loop connections are ANSI 4-bolt flange type.

Step #4: Create model number.

From steps 1 through 3, model number may be completed (see model nomenclature for added dashes after digits 5, 10, and 13).

*Use inverted profile for heat pumps with DXM2 controls; use standard profile for heat pumps with AXB controls or 24VAC controls. Heat pumps with 24VAC controls required a controller (P/N 3697 or 3698). Variable speed pumps (options A to E) include PWM cable.

Insulated Pumps/Bracketed Pumps-Flow Centers

| INSULATED PUMPS | | | | | | |
|-----------------|--------------------------------|-----------|----------|-----------|--------------------------|-------------------|
| PN | PUMPS | # PUMP(S) | SPEED | VOLUTE | VALVE SET- INCLUDED | CABINET/INSULATED |
| 1252 | UPS26-99 | 1 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| 1253 | UP26-116 | 1 | SINGLE | CAST IRON | N/A | SHEET METAL/ YES |
| 1269 | UPS26-99 115V | 1 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| 1285 | UPS26-99 | 1 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| 1285CV | UPS26-99 | 1 | THREE | CAST IRON | ISO. 1" FPT X FL W/CV | SHEET METAL/ YES |
| 1286 | UPS26-99 115V | 1 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| 1286CV | UPS26-99 115V | 1 | THREE | CAST IRON | ISO. 1" FPT X FL W/CV | SHEET METAL/ YES |
| 1383 | UPS26-116 | 1 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| 1384 | UPS26-99 | 1 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| FLP1A-DBC | UPS26-99 (1 PUMP, DBL CABINET) | 1 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| FLP1L | UPMXL 25-124 | 1 | VARIABLE | CAST IRON | N/A | SHEET METAL/ YES |
| FLP1L-4V | UPMXL 25-124 | 1 | VARIABLE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| FLP1N-4V | UPMXL 25-124 INV. | 1 | VARIABLE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| FLP1L-4V-CV | UPMXL 25-124 | 1 | VARIABLE | CAST IRON | ISO. 1" FPT X FL W/CV | SHEET METAL/ YES |
| FLP2A | UPS26-99 | 2 | THREE | CAST IRON | N/A | SHEET METAL/YES |
| FLP2A-4V | UPS26-99 | 2 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/YES |
| FLP2C-4V | UPS26-116 | 2 | THREE | CAST IRON | ISO. 1" FPT X FL | SHEET METAL/ YES |
| FLP2M | UPMXL + UPS26-99(| 2 | VS/THREE | CAST IRON | N/A | SHEET METAL/YES |
| 1360 | SuperBrute UPS60-150 | 1 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| FLP2A | UPS26-99 | 2 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| 1318 | UPS26-99 115V | 2 | THREE | CAST IRON | N/A | SHEET METAL/ YES |
| 1319 | VersaFlo UPS32-160 | 1 | THREE | CAST IRON | N/A REQUIRES FL XL FITT. | SHEET METAL/ YES |
| 1320 | VersaFlo UPS32-160 3X230 | 1 | THREE | CAST IRON | N/A REQUIRES FL XL FITT. | SHEET METAL/ YES |

BRACKETED PUMPS (ships disassembled)

| PN | PUMPS | # PUMP(S) | SPEED | VOLUTE | FLANGE SET- INCLUDED | CABINET/INSULATED |
|---------|---------------|-----------|-------|-----------|----------------------|-------------------|
| 9102-3F | UPS26-99 115V | 1 | THREE | CAST IRON | 3/4" FPT | ON BRACKET/ NO |
| 9102-4F | UPS26-99 115V | 1 | THREE | CAST IRON | 1" FPT | ON BRACKET/ NO |

PUMP MOUNTING BRACKETS

| | | |
|------|---|-------------|
| 4244 | Single Pump mounting bracket for UP/UPS 15&26 pumps | EACH |
| 3817 | Double Pump mounting bracket for UP/UPS 15&26 pumps | EACH |

UPMXL Add-On Kits

| PN | PUMPS | # PUMP(S) | SPEED | VOLUTE | FLANGE SET- INCLUDED | CABINET/INSULATED |
|---------|---------------|-----------|-------|-----------|----------------------|-------------------|
| 9102-3F | UPS26-99 115V | 1 | THREE | CAST IRON | 3/4" FPT | ON BRACKET/ NO |
| 9102-4F | UPS26-99 115V | 1 | THREE | CAST IRON | 1" FPT | ON BRACKET/ NO |

UP(S)26-99/UPS26-116



UPMXL 25-124



VersaFlo



Bracketed Pumps (Ships Disassembled)



FLP1L-FLK / FLP1L-FLE



Isolation Valves



Mounting Brackets



Magna3 Variable Speed Flow Centers

Our MAGNA3 variable speed (VS) flow center features the highly efficient Grundfos MAGNA3 permanent magnet ECM pump in a foam insulated housing coupled with our reliable 2", 3-way, 4-position flushing and service valve. Each M3F040-* flow center comes with a choice of 2" socket fusion or 2" FPT fittings for the ground loop and interior loop connections. This modular flow center comes with the valves separated from the insulated pump allowing the contractor the choice of where the flush valves are located with respect to the pump while separating the weight of the entire flow center to more manageable pieces.

rev. 12JAN2023

Nomenclature

1 - 3 4 - 10 11 12 13 14-15
M3F **040-120** **B** **C** **-** **FF**

Magna3 Insulated Pump Series

M3F = Magna3 Flow Center
 M3FH= Magna3 Flow Center High Head

Available Models

040-080
 040-120
 040-180

Voltage

B = 208-230/1/60 (all models)

Connection type (loop and building)

SF = 2" Socket Fusion
 FP = 2" NPT Female Pipe Thread
 FF = 2" Socket Fusion (Loop) 2" NPT Female (Building)

Options

- = Options in digits 14 and 15

Mounting Options

C = Standard product (cast iron volute***), factory-insulated cabinet, wall mounted



NOTE: MAGNA3 variable speed (VS) controls see page 37

Flow Centers-Magna3

| Part Number | Description |
|------------------|--|
| M3F040-080BC-SF | M3 FC 40-80, 208-230V, 2" HDPE SF CONNECTIONS |
| M3F040-080BC-FP | M3 FC, 40-80, 208-230V, CI, 2" FPT CONNECTIONS |
| M3F040-080BC-FF | M3 FC, 40-80, 208-230V, CI, 2" FPT BUILDING, 2" SF LOOP CONNECTIONS |
| M3F040-120BC-SF | M3 FC 40-120, 208-230V, 2" HDPE SF CONNECTIONS |
| M3F040-120BC-FP | M3 FC, 40-120, 208-230V, CI, 2" FPT CONNECTIONS |
| M3F040-120BC-FF | M3 FC, 40-120, 208-230V, CI, 2" FPT BUILDING, 2" SF LOOP CONNECTIONS |
| M3F040-180BC-SF | M3 FC, 40-180, 208-230V, CI, 2" HDPE SF CONNECTIONS |
| M3F040-180BC-FP | M3 FC, 40-180, 208-230V, CI, 2" FPT CONNECTIONS |
| M3F040-180BC-FF | M3 FC, 40-180, 208-230V, CI, 2" FPT BUILDING, 2" SF LOOP CONNECTIONS |
| M3FH040-080BC-SF | M3 FC, DOUBLE PUMP 40-080, 208-230V, CI, 2" HDPE SF |
| M3FH040-080BC-FP | M3 FC, DOUBLE PUMP 40-080, 208-230V, CI, 2" FPT |
| M3FH040-080BC-FF | M3 FC, DOUBLE PUMP 40-080, 208-230V, CI, 2" FPT BLDG, 2" SF LOOP |
| M3FH040-120BC-SF | M3 FC, DOUBLE PUMP 40-120, 208-230V, CI, 2" HDPE SF |
| M3FH040-120BC-FP | M3 FC, DOUBLE PUMP 40-120, 208-230V, CI, 2" FPT |
| M3FH040-120BC-FF | M3 FC, DOUBLE PUMP 40-120, 208-230V, CI, 2" FPT BLDG, 2" SF LOOP |
| M3FH040-180BC-SF | M3 FC, DOUBLE PUMP 40-180, 208-230V, CI, 2" HDPE SF |
| M3FH040-180BC-FP | M3 FC, DOUBLE PUMP 40-180, 208-230V, CI, 2" FPT |
| M3FH040-180BC-FF | M3 FC, DOUBLE PUMP 40-180, 208-230V, CI, 2" FPT BLDG, 2" SF LOOP |

NOTE: MAGNA3 variable speed (VS) controls see page 37



Magna3 Flow Center with 2" socket fusion connections



Magna3 Flow Center with FPT connections



Magna3 Flow Center with 2" socket fusion loop connections and FPT building connections

Magna3 Insulated Pump Features:

- Variable speed circulator with integrated controls (ECM motor) for larger installations (models up to 300 GPM)
- Wireless communication to backup pump
- Built-in differential pressure control
- Ready for central pump, primary-secondary, or one-pipe systems
- 2", 3", and 4" connections, depending upon model
- Ball or butterfly isolation valves included (optional check valve for two-pump primary/backup installation)
- Dual head models (65, 80 and 100 series)
- Foam insulated cabinet for condensation protection
- Wall mounted for space savings/floor mounting option for larger models
- BMS options (BACnet, LON, Modbus)
- Factory configurable flow direction (larger models)

Magna3 Insulated Pumps



Magna3 40 series Insulated Pump with 2" isolation ball valves



LEFT: Magna3 65 series Insulated Pump with 2" isolation ball valves

RIGHT: Magna3 Dual Head Insulated Pump with 3" or 4" isolation butterfly valves (65, 80, 100 series)



| Nomenclature | 1 - 3 | 4 - 10 | 11 | 12 | 13 | 14-15 |
|--------------|-------|---------|----|----|----|-------|
| | M3D | 065-150 | B | F | - | HR |

rev. 03OCT2017

Magna3 Insulated Pump Series

M3S = Single insulated pump
 M3C = Single insul. pump w/check valve
 M3D = Dual head insulated pumps
 M3H = High head insul. pumps (two pumps in series)

Available Models*

| | |
|---------|---|
| 040-080 | 065-150 |
| 040-120 | 080-100 |
| 040-180 | 100-120 |
| 065-120 | *Not all models available in all configurations (see table, next page). |

Voltage

A = 115/1/60 (up to 065-120 only)
 B = 208-230/1/60 (all models)

Flow Direction (M3D, M3H only)**

HR = Horz. mounting, flow to the right
 HL = Horz. mounting, flow to the left
 VR = Vert. mounting, push/pull, "from loop" on the right (M3H models)
 VL = Vert. mounting, push/pull, "from loop" on the left (M3H models)
 Blank (M3D) = Vertical flow**

**See table on next page for available models.

Options

- = Options in digits 14 and 15
 = No options (nothing after digit 12)

Mounting Options

C = Standard product (cast iron volute***), factory-insulated cabinet, wall mounted
 F = Standard product (cast iron volute***), factory-insulated cabinet, floor mounting stand††
 ***Call for stainless steel options.
 ††Models 065 and larger only

NOTE: MAGNA3 variable speed (VS) controls see page 37

Magna 3 Insulated Pumps-Flow Centers

| MAGNA3 INSULATED PUMPS | | | | | | |
|------------------------|---------------|-----------------------|---------------------------------------|--------------------------------|--------------------------------|------------------|
| Model | Mounting* | M3S | M3C | M3D | M3H | Field Connection |
| | | Single Insulated Pump | Single Insulated Pump w/Check Valve** | Dual Head*** Insulated Pump | High Head*** Insulated Pump | |
| 40-80 | Wall Mounted | M3S040-080AC | M3C040-080AC | | M3H040-080AC | 2" NPT FEMALE |
| | | M3S040-080BC | M3C040-080BC | | M3H040-080BC | |
| 40-120 | Wall Mounted | M3S040-120AC | M3C040-120AC | | M3H040-120AC | |
| | | M3S040-120BC | M3C040-120BC | | M3H040-120BC | |
| 40-180 | Wall Mounted | M3S040-180AC | M3C040-180AC | | M3H040-180AC | |
| | | M3S040-180BC | M3C040-180BC | | M3H040-180BC | |
| 65-120 | Wall Mounted | M3S065-120AC | M3C065-120AC | | M3H065-120AC | |
| | | M3S065-120BC | M3C065-120BC | | M3H065-120BC | |
| | Floor Mounted | | | | M3H065-120BF-VL | |
| | | | | | M3H065-120BF-VR | |
| | | | | | M3H065-120BF-HL | |
| | | | | | M3H065-120BF-HR | |
| 65-150 | Wall Mounted | M3S065-150BC | M3C065-150BC | M3D065-150BC | M3H065-150BC | |
| | Floor Mounted | | | M3D065-150BF | M3H065-150BF-VL | |
| | | | | | M3H065-150BF-VR | |
| | | | | | M3H065-150BF-HL | |
| | | | | M3H065-150BF-HR | | |
| 80-100 | Wall Mounted | M3S080-100BC | | M3D080-100BC | M3H080-100BC | |
| | Floor Mounted | M3S080-100BF | | M3D080-100BF | M3H080-100BF-VL | |
| | | | | M3D080-100BF-HL | M3H080-100BF-VR | |
| | | | | M3D080-100BF-HR | M3H080-100BF-HL | |
| | | | | | M3H080-100BF-HR | |
| 100-120 | Wall Mounted | M3S100-120BC | | M3D100-120BC | M3H100-120BC | |
| | Floor Mounted | M3S100-120BF | | M3D100-120BF | M3H100-120BF-VL | |
| | | | | M3D100-120BF-HL | M3H100-120BF-VR | |
| | | | | M3D100-120BF-HR | M3H100-120BF-HL | |
| | | | | | M3H100-120BF-HR | |

*All insulated pumps with digit 12= "C" include isolation valves and insulated cabinets, designed for wall-mounting. Larger pumps are available with floor stand.

**Check valve required when piping two pumps in parallel. Dual head pumps include built in check valve in volute.

***M3D and M3H insulated pumps with floor stand option may be mounted vertically or horizontally.

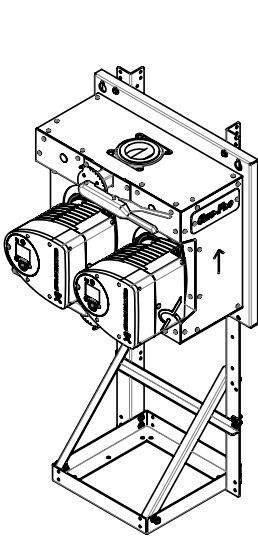
Standard configuration for M3D is vertical. Optional configuration is horizontal (HL, HR) except M3D065-150.

M3H may be vertical (VL,VR) or horizontal (HL,HR). See flow illustrations on next page.

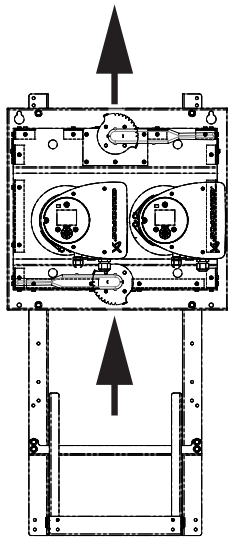
NOTE: MAGNA3 variable speed (VS) controls see page 37



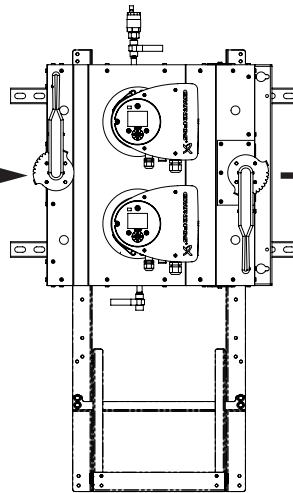
Magna3 Insulated Pump Flow Options



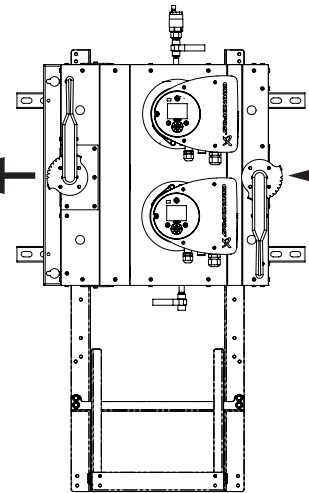
Isometric view of Magna3 insulated pump with floor stand (shown: M3D065-150BF)



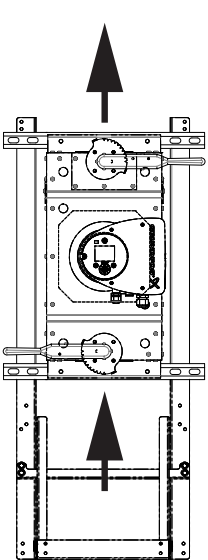
M3D dual head insulated pumps, vertical flow (shown: M3D065-150BF)



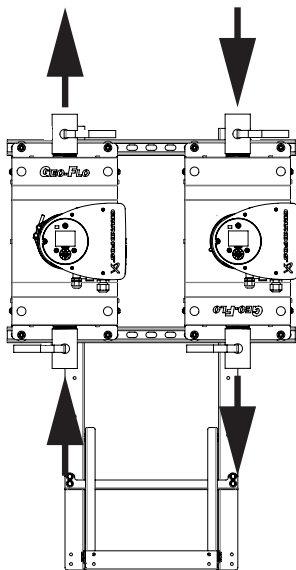
M3D dual head insulated pumps, horizontal right flow (shown: M3D100-120BF-HR) NOTE: M3D065-150 not available with HR flow, use P/N 4596 to adapt plumbing to required direction.



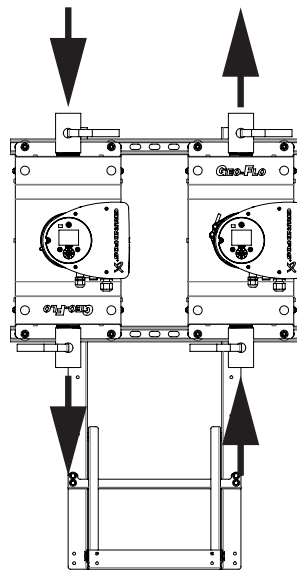
M3D dual head insulated pumps, horizontal left flow (shown: M3D100-120BF-HL)



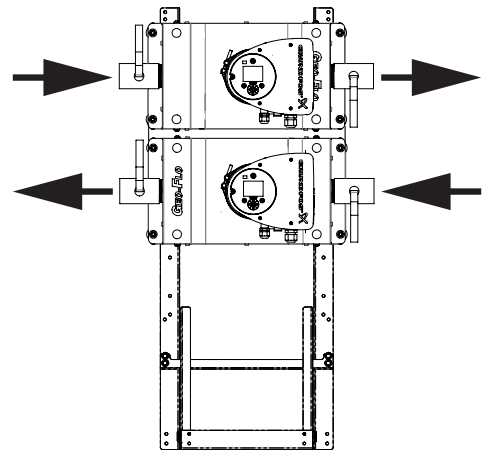
M3S single insulated pump with floor stand (shown: M3S080-100BF)



M3H high head insulated pumps, vertical right flow (shown: M3H065-150BF-VR)

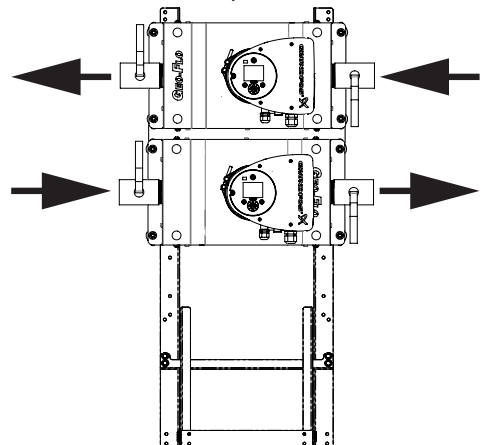


M3H high head insulated pumps, vertical left flow (shown: M3H065-150BF-VL)



Top: M3H high head insulated pumps, horizontal right flow (shown: M3H065-150BF-HR)

Bottom: M3H high head insulated pumps, horizontal left flow (shown: M3H065-150BF-HL)



Replacement Pumps/Blank Off Plates/Repair Kits-Flow Centers

| REPLACEMENT PUMPS | | | | |
|---|--|----------|----------|-----------|
| It is not normally practical to change the volute in a foamed-in flow center. PNs with "NV" at the end indicates that the replacement pump is the pump head only and does not include the volute. | | | | |
| PN | PUMP | VOLTAGE | SPEED | VOLUTE |
| 8900NV | UP26-99 | 208-230V | SINGLE | NONE |
| 8900 | UP26-99F | 208-230V | SINGLE | CAST IRON |
| 9425NV | UPS26-99 | 208-230V | THREE | NONE |
| 9428 | UPS26-99F | 208-230V | THREE | CAST IRON |
| 9405NV | UP26-116 | 208-230V | SINGLE | NONE |
| 9405 | UP26-116F | 208-230V | SINGLE | CAST IRON |
| 9104NV | UPS26-99 | 115V | THREE | NONE |
| 9104 | UPS26-99F | 115V | THREE | CAST IRON |
| 9440 | UP26-99SF | 115V | SINGLE | STAINLESS |
| 9435 | UP26-116SF | 208-230V | SINGLE | STAINLESS |
| 9417 | VersaFlo UPS32-160 | 230V | THREE | CAST IRON |
| 9451 | UPS15-58FC | 115V | THREE | CAST IRON |
| 8994 | VersaFlo UPS40-160 | 230V | THREE | CAST IRON |
| 9418 | SuperBrute XL UPS60-150 | 208-230V | THREE | CAST IRON |
| 9457 | UPMXL 25-124 | 208-230V | VARIABLE | CAST IRON |
| 9458 | UPMXL 25-124 INV. | 208-230V | VARIABLE | CAST IRON |
| 9441 | Magna3 40-80 | 208-230V | VARIABLE | CAST IRON |
| 9444 | Magna3 40-120 | 208-230V | VARIABLE | CAST IRON |
| 9452 | Magna3 40-180 | 115V | VARIABLE | CAST IRON |
| 9432 | Magna3 40-180 | 208-230V | VARIABLE | CAST IRON |
| 9449 | Magna3 65-120 | 208-230V | VARIABLE | CAST IRON |
| 9433 | Magna3 65-150 | 208-230V | VARIABLE | CAST IRON |
| CALL | Magna3 80-100 | 208-230V | VARIABLE | CAST IRON |
| 9448 | Magna 3 100-120 | 208-230V | VARIABLE | CAST IRON |
| 9462 | WILO STRATOS MAXO 1.25x3-35 | 115/230V | VARIABLE | CAST IRON |
| 9463 | WILO STRATOS MAXO 1.25x3-52 | 230V | VARIABLE | CAST IRON |
| 9464 | WILO STRATOS MAXO 1.5x3-52 | 230V | VARIABLE | CAST IRON |
| 9465 | WILO STRATOS MAXO 2x3-35 | 230V | VARIABLE | CAST IRON |
| 9466 | WILO STRATOS MAXO 2x3-50 | 115/230V | VARIABLE | CAST IRON |
| 9467 | WILO STRATOS MAXO 3x3-52 | 230V | VARIABLE | CAST IRON |
| 9468 | WILO STRATOS MAXO 1.25x3-30 | 230V | VARIABLE | CAST IRON |
| 9469 | WILO STRATOS MAXO 1.25x3-20 | 115/230V | VARIABLE | CAST IRON |
| REPLACEMENT PUMP-FLUSH CART | | | | |
| 9424 | Munro 1.5 HP 115V/208- 230V | | | SINGLE |
| REPLACEMENT PUMP-GEO-BOOSTER | | | | |
| 9423 | Geo-Booster replacement pump | | | |
| BLANK-OFF PLATES | | | | |
| 3480 | Blank-off Plate Kit, Flo-Link Double O-ring flow centers | | | |
| 3479 | Blank-off Plate Kit, 1" FPT flow centers | | | |

Replacement pump head "NV"
(No Volute) part numbers

8900/9405/9428



9457/9458

8994/9417



9418

Magna3



9423

9424



3479/3480



REPAIR KITS

| | |
|------|---|
| 2938 | Repair Kit, Composite Valve, Flo-Link Double O-ring |
| 3518 | Repair Kit, Brass Valve, Flo-Link Double O-ring |
| 3341 | Repair Kit, Brass Valve, FPT Connections |
| 3519 | Repair Kit, XL Valve, Flo-Link XL Double O-ring |

3341





3518

3519





2938








Geo-Flo hose kits significantly cut installation time by providing all of the fittings needed to connect a geothermal heat pump to a Geo-Flo flow center. Available in 3/4" to 2" sizes, as well as with Flo-Link and Flo-Link XL fittings.

| HOSE KITS | | | |
|--------------------------------|------------------------|--------|---|
| Heat Pump Connection | Flow Center Connection | PN | KIT CONTENTS |
| <u>3/4 FPT</u> | <u>1" FPT</u> | 1100 | Kit Contains: (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1" MPT x 1" hose barb (flow center connection) (PN 2146) (2) Elbow, 3/4" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 2265) (8) Stainless steel hose clamps (PN 2943)  |
| | | 1101 | Kit Contains: (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1" MPT x 1" hose barb (flow center connection) (PN 2146) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943) Notes: Kit available without hose (PN 3813)  |
| <u>1" FPT or 1" Swivel</u> | <u>1" FPT</u> | 1101CV | 1101 hose kit with check valve at flow center connection |
| | | 1181 | Kit Contains: (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) Flo-Link x 1" hose barb (flow center connection) (PN 2913) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943) Notes: 1. For heat pumps with 3/4" connections use swivel adapter fitting (PN 3731) 2. Kit available without hose (PN 3814)  |
| | <u>Flo-Link</u> | 1181CV | 1181 hose kit with check valve at flow center connection |
| <u>Flo-Link</u> | <u>Flo-Link</u> | 1354 | Kit Contains: (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) Flo-Link x 1" hose barb (flow center connection) (PN 2913) (2) Elbow, Flo-Link x 1" hose barb w/ PT port (heat pump connection) (PN 3263) (8) Stainless steel hose clamps (PN 2943)  |
| | | 1354CV | 1354 hose kit with check valve at flow center connection |

Hose Kits

| Heat Pump Connection | Flow Center Connection | PN | KIT CONTENTS |
|----------------------------|------------------------|------|--|
| <u>1" FPT or 1" Swivel</u> | <u>Flo-Link</u> | 1347 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (3) Insulating boot (PN 3459) (3) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1/4" brass plug (PN 3711) (1) Flo-Link x 1" hose barb (flow center connection) (PN 3384) (1) Flo-Link elbow x 1" hose barb (flow center connection) (PN 3262) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943) <p>Notes: Compatible with NP Plus flow centers and heat pumps with 1" FPT connections</p>  |
| <u>Flo-Link</u> | <u>Flo-Link</u> | 1346 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (3) Insulating boot (PN 3459) (3) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1/4" brass plug (PN 3711) (1) Flo-Link x 1" hose barb (flow center connection) (PN 3384) (1) Flo-Link elbow x 1" hose barb (flow center connection) (PN 3362) (2) Elbow, Flo-Link x 1" hose barb w/ PT port (heat pump connection) (PN 3263) (8) Stainless steel hose clamps (PN 2943) <p>Notes: Compatible with NP Plus flow centers and heat pumps with Flo-Link double O-ring connections.</p>  |
| <u>1" FPT or 1" Swivel</u> | <u>PE FUSION</u> | 1263 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1-1/4" PE Fusion x 1" hose barb (flow center connection) (PN 3665) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943)  |
| | <u>1-1/4" PVC</u> | 1291 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1-1/4" PVC socket x 1" hose barb (flow center connection) (PN 3831) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943)  |

| | | | |
|----------------------------|---------------------------|------|---|
| <u>1" FPT or 1" Swivel</u> | <u>1" MPT</u> | 1280 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1/4" brass plug (PN 3711) (2) 1" MPT x 1" hose barb w/ PT port (flow center connection) (PN 3929) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943)  |
| | <u>Flo-Link</u> | 1281 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) Flo-Link x 1" HB w/ PT port w/ 1/4" brass plug (flow center connection) (PN 3385) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943)  |
| | <u>1-1/4" PE W/VALVES</u> | 1337 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1" ID black hose (PN 2950) (2) Insulating boot (PN 3459) (2) Insulating boot cap (PN 3466) (2) 1/4" MPT PT Plug (PN 2143) (2) 1-1/4" PE x 1" hose barb with iso. valve (flow center connection) (PN 4580) (2) Elbow, 1" MPT x 1" hose barb w/ PT port (heat pump connection) (PN 3447) (8) Stainless steel hose clamps (PN 2943) |
| <u>1-1/4" FPT</u> | <u>1-1/4" FPT</u> | 1251 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1-1/4" ID black hose (PN 3559) (2) 1/4" MPT PT Plug (PN 2143) (2) 1-1/4" MPT x 1-1/4" HB (flow center connection) (PN 3557) (2) Elbow, 1-1/4" MPT x 1-1/4" hose barb w/ PT port (heat pump connection) (PN 3556) (8) Stainless steel hose clamps (PN 4524)  |
| | <u>Flo-Link</u> | 1385 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (1) 12 ft. 1-1/4" ID black hose (PN 3559) (2) 1/4" MPT PT plug (PN 2143) (2) Flo-Link x 1-1/4" HB (flow center connection) (PN 2942) (2) Elbow, 1-1/4" MPT x 1-1/4" hose barb w/ PT port (heat pump connection) (PN 3556) (8) Stainless steel hose clamps (PN 4524)  |
| | <u>Flo-Link XL</u> | 1261 | <p>Kit Contains:</p> <ul style="list-style-type: none"> (2) 8 ft. 1-1/4" ID black hose (PN 3559) (2) 1/4" MPT PT Plug (PN 2143) (2) Flo-Link XL x 1-1/4" HB (flow center connection) (PN 3652) (2) Elbow, 1-1/4" MPT x 1-1/4" hose barb w/ PT port (heat pump connection) (PN 3556) (8) Stainless steel hose clamps (PN 4524) <p>Notes: Compatible with SuperBrute XL, VersaFlo, and Magna3 flow centers</p>  |

Bulk Hose and Clamps

| Heat Pump Connection | Flow Center Connection | PN | KIT CONTENTS |
|----------------------|------------------------|----------|---|
| 2" FPT | Flo-Link XL | 3477 | Kit Contains: (2) 8 ft. 2" ID black hose (PN 3418) (2) 1/4" MPT PT Plug (PN 2143) (2) Flo-Link XL x 2" hose barb (flow center connection) (PN 3397) (2) Elbow, 2" MPT x 2" hose barb w/ PT port (heat pump connection) (PN 3449) (10) Stainless steel hose clamps (PN 3417) Notes: Compatible with SuperBrute XL, VersaFlo, and Magna3 flow centers |
| | | 3477CV | 3477 hose kit with check valve at flow center connection |
| | | 3477-MPT | 3477 hose kit with 2" MPT at flow center connection |
| | Flo-Link XL | 3478 | Kit Contains: (2) 8 ft. 2" ID wire-reinforced hose (PN 3418) (2) 1/4" MPT PT Plug (PN 2143) (1) Flo-Link XL x 2" hose barb (flow center connection) (PN 3475) (1) Flo-Link XL x 2" MPT (flow center to strainer connection) (PN 3476) (1) 2" Wye strainer (PN 3462) (1) 2" MPT x 2" hose barb (PN 3416) (2) Elbow, 2" MPT x 2" hose barb w/ PT port (heat pump connection) (PN 3449) (8) Stainless steel hose clamps (PN 3417) Notes: Compatible with SuperBrute XL, VersaFlo, and Magna3 flow centers |

| BULK HOSE | | |
|-------------|--|--------------|
| Part Number | Description | U.O.M |
| 2945 | 1" ID Black 150 psi hose, 10 ft. length | LENGTH |
| 2950 | 1" ID Black 150 psi hose, 12 ft. length | LENGTH |
| 3216 | 1" ID Black 150 psi hose, 50 ft. length | LENGTH |
| 3418 | 2" ID Black 200 psi hose, 8 ft. length | LENGTH |
| 2139 | 1" ID Black 150 psi hose, 450 ft. roll | ROLL |
| 3559 | 1-1/4" ID Black 150 psi hose, 400 ft. roll | ROLL |
| 4499 | 1" ID Red 200 psi hose, 450 ft. roll | ROLL/LENGTH |
| 4519 | 1-1/4" ID Red 200 psi hose, 400 ft. roll | ROLL/ LENGTH |



| HOSE CLAMPS (STAINLESS STEEL) | | | |
|-------------------------------|------|-------------------------|------|
| STAINLESS STEEL | 3540 | SIZE 06 (5/16"-7/8") | EACH |
| | 2943 | SIZE 20 (3/4"-1-3/4") | EACH |
| | 3558 | SIZE 28 (1-1/4"-2-1/4") | EACH |
| | 3417 | SIZE 40 (2"-3") | EACH |

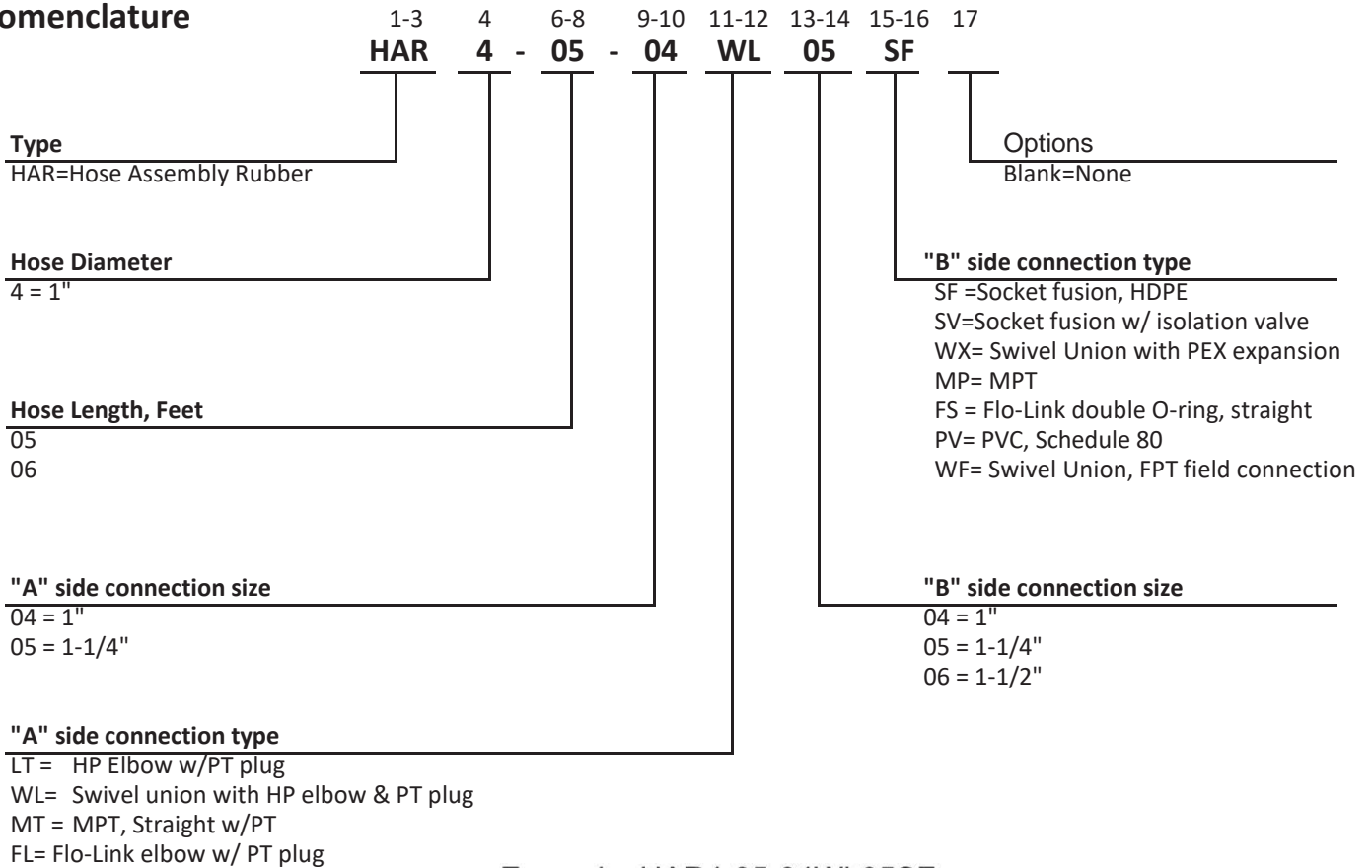


Pre-assembled hose kits are the fast and professional way to provide a flexible connection between a geothermal heat pump and flow center or any other piping connection. The assemblies consist of reinforced rubber hose with factory crimped brass ferrules on your choice of adapter fittings. These assemblies are similar to stainless steel hose kits used in commercial applications without the high cost and additional stiffness.

| ASSEMBLED HOSE KITS | | | | | | |
|---------------------|--------------------|------------------|---------------------|-----------------------------------|---------------------|-----------------------------|
| Part Number | Hose Diameter (in) | Hose length (ft) | "A" Connection Size | "A" Connection Type | "B" Connection Size | "B" Connection Type |
| HAR4-05-04LT04MP | 1" | 5' | 1" | HP Elbow w/PT plug | 1" | MPT |
| HAR4-05-04LT06WX | | | | | 1-1/2" | Swivel Union w/Pex |
| HAR4-05-04WL05SF | | | | | 1-1/4" | Socket Fusion, HDPE |
| HAR4-05-04WL05SV | | | | Swivel union w/HP elbow & PT plug | 1-1/4" | Socket Fusion w/ iso. Valve |
| HAR4-05-04WL06SF | | | | | 1-1/2" | Socket Fusion, HDPE |
| HAR4-05-04WL06SV | | | | | 1-1/2" | Socket Fusion w/ iso. Valve |
| HAR4-05-04WL06WX | | | | | 1-1/2" | Swivel Union w/Pex |

NOTE: Not all options are available. Call for items not specifically listed.

Nomenclature



Example: HAR4-05-04WL05SF



Flo-Link™-Fittings

| FLO-LINK FITTINGS | | | |
|-------------------|--|---------|----------|
| PN | DESCRIPTION | U.O.M. | MATERIAL |
| 2913 | FL X 1" HOSE BARB | SET | BRASS |
| 3490 | FL X 1" HOSE BARB W/CHECK VALVE | SET | |
| 3490-HALF | FL X 1" HOSE BARB W/CHECK VALVE | EACH | |
| 3385 | FL X 1" HOSE BARB W/1/4" FPT PORT | SET | |
| 2942 | FL X 1-1/4" HOSE BARB | SET | |
| 3769 | FL X 1-1/4" HOSE BARB W/1/4" FPT PORT | SET | |
| 3072 | FL X 1" MPT | SET | |
| 3389 | FL X 1" MPT W/1/4" FPT PORT | SET | |
| 3498 | FL (FEMALE) X 1" MPT | SET | |
| 3326 | FL X 1" FPT | SET | |
| 3471 | FL (FEMALE) X 1" MPT | EACH | |
| 4143 | FL X 1" FPT W/CHECK VALVE | SET | |
| 4143-HALF | FL X 1" FPT W/CHECK VALVE | EACH | |
| 3885 | FL X 1-1/4" FPT | SET | |
| 3144 | FL X 1-1/8" SWEAT W/1/4" FPT PORT* | SET | |
| 4720 | FL X 1-1/2" PEX EXP | SET | |
| 2914 | FL X MALE CAM ADAPTER | SET | |
| 3203 | FL X MALE GARDEN HOSE ADAPTER | SET | |
| 4742 | FL X FL COUPLER | EACH | |
| 3248 | FL X FEMALE GARDEN HOSE ADAPTER | SET | |
| 3263 | FL ELBOW X 1" HOSE BARB W/1/4" FPT PORT* | SET | |
| 3255 | FL ELBOW X 1" MPT W/1/4" FPT PORT* | SET | |
| 3433 | FL Coupler | EACH | |
| 3924 | FL ELBOW X 1" PE FUSION W/1/4" FPT PORT* | SET | |
| 3096 | FL X 3/4" PE SOCKET FUSION | SET | |
| 2912 | FL X 1" PE PE SOCKET FUSION | SET | |
| 2911 | FL X 1-1/4" PE SOCKET FUSION | SET | |
| 2911-10X | FL X 1-1/4" PE SOCKET FUSION BULK PACK | 10 SETS | |
| 3917 | FL X 1-1/4" PE PIPE | SET | |
| 3243 | FL X 40MM PIPE | SET | PVC |
| 3425 | FL X 1-1/4" PVC SOCKET | SET | |

Flo-Link fittings provide a reliable way to connect Flo-Link double O-ring flow centers and heat pumps. The fittings are simply inserted into the female port and secured by hand-tightening the nut. These fittings are available in a variety of materials and styles to allow connection to any type of hose or pipe.

*PT Plug Not Included



Flo-Link XL fittings provide a reliable way to connect Flo-Link XL double O-ring products including SuperBrute XL, VersaFlo, and Magna3 insulated pumps and flow centers. The fittings are simply inserted into the female port and secured by hand-tightening the nut. These fittings are available in a variety of materials and styles to allow connection to any type of hose or pipe.

| FLO-LINK XL FITTINGS | | | |
|----------------------|---------------------------------------|--------|-----------|
| PN | DESCRIPTION | U.O.M. | MATERIAL |
| 3652 | FL XL X 1-1/4" HOSE BARB | SET | BRASS |
| 3397 | FL XL X 2" HOSE BARB | SET | |
| 3655 | FL XL X 1-1/4" MPT | SET | |
| 3476 | FL XL X 2" MPT | EACH | |
| 3318 | FL XL X 2" FPT | SET | |
| 3395 | FL XL X 2" SWEAT | SET | |
| 3380 | FL XL X 1" CAM | SET | ALUMINIUM |
| 3486 | FL XL X 1-1/2" CAM | SET | |
| 3485 | FL XL X 1" FEMALE GARDEN HOSE ADAPTER | SET | |
| 3463 | FL XL X 1-1/4" PE SOCKET FUSION | SET | HDPE |
| 3464 | FL XL X 1-1/2" PE SOCKET FUSION | SET | |
| 3465 | FL XL X 2" PE SOCKET FUSION | SET | |
| 4772 | FL XL X FL XL | EACH | |



3395



3318



3476/3655



3463/3464/3465



3485



3380/3486



3652/3397



4772

Fittings

| ALL FITTINGS | | | |
|------------------------------|----------------------------|--|--------|
| MATERIAL | PN | DESCRIPTION | U.O.M. |
| HOSE BARB (HB) | | | |
| | Flo-Link (FL) | | |
| BRASS | 2913 | FL X 1" HB | SET |
| | 3490 | FL X 1" HB W/CHECK VALVE | SET |
| | 3385 | FL X 1" HB W/1/4" FPT PORT | SET |
| | 2942 | FL X 1-1/4" HB | SET |
| | 3769 | FL X 1-1/4" HB W/ PT PORT | SET |
| | Flo-Link XL (FL XL) | | |
| | 3652 | FL XL X 1-1/4" HB | SET |
| | 3397 | FL XL X 2" HB | SET |
| | Hose Barb | | |
| BRONZE | 4738 | 1" HB X 1-1/4" HB | EACH |
| | MPT | | |
| BRASS | 4310 | 3/4" MPT X 3/4" HB | EACH |
| BRONZE | 4739 | 3/4" MPT X 1" HB | EACH |
| BRASS | 2146 | 1" MPT X 1" HB | EACH |
| | 3929 | 1" MPT X 1" HB W/1/4" FPT PORT | EACH |
| | 4505 | 1" MPT X 1" HB W/CHECK VALVE | EACH |
| | 2147 | 1" MPT X 1-1/4" HB | EACH |
| | 3557 | 1-1/4" MPT X 1-1/4" HB | EACH |
| | 4514 | 1-1/4" MPT X 1-1/4" HB W/ CHECK VALVE | EACH |
| | 3416 | 2" MPT X 2" HB | EACH |
| | PVC | | |
| PVC | 3831 | 1-1/4" PVC Glue X 1" HB | SET |
| MPT | | | |
| | Flo-Link (FL) | | |
| BRASS | 3072 | FL X 1" MPT | SET |
| | 3389 | FL X 1" MPT W/1/4" FPT PORT | SET |
| | 3498 | FL (FEMALE) X 1" MPT | SET |
| | Flo-Link XL (FL XL) | | |
| | 3655 | FL XL X 1-1/4" MPT | SET |
| | 3476 | FL XL X 2" MPT | EACH |
| | SWIVEL | | |
| | 3731 | 1" SWIVEL X 3/4" MPT | SET |
| | 3732 | 1" SWIVEL X 1" MPT | SET |
| | 3726 | 1-1/4" SWIVEL X 1-1/4" MPT | SET |
| 3771 | 1-1/4" SWIVEL X 1-1/4" MPT | EACH | |
| 4323 | 1-1/4" SWIVEL X 1" MPT | SET | |
| 4544 | 1" SWIVEL X 1/2" MPT | SET | |
| WATER HEATER ADAPTERS | | | |
| BRASS | 3721 | 1" Straight Mechanical Thread X 1" Female SWIVEL | SET |
| | CAM | | |
| ALUMINUM | 3666 | 1" CAM X 1" MPT -Note: For Flushing | EACH |



| <u>FPT</u> | | | |
|--|----------------------------|---|------|
| | <u>Flo-Link (FL)</u> | | |
| BRASS | 3326 | FL X 1" FPT | SET |
| | 4143 | FL X 1" FPT W/CHECK VALVE | SET |
| | 3885 | FL X 1-1/4" FPT | SET |
| | <u>Flo-Link XL (FL XL)</u> | | |
| | 3318 | FL XL X 2" FPT | SET |
| <u>SWEAT</u> | | | |
| | <u>Flo-Link (FL)</u> | | |
| BRASS | 3144 | FL X 1-1/8" SWEAT W/1/4" FPT PORT | SET |
| | <u>Flo-Link XL (FL XL)</u> | | |
| | 3395 | FL XL X 2" SWEAT | SET |
| | <u>SWIVEL</u> | | |
| | 3844 | 1" SWIVEL X 7/8" SWEAT *REQUIRES GASKET PN 3717 | SET |
| | 3845 | 1" SWIVEL X 1-1/8" SWEAT *REQUIRES GASKET PN 3717 | SET |
| <u>CAM</u> | | | |
| | <u>Flo-Link (FL)</u> | | |
| HDPE | 2914 | FL X MALE CAM ADAPTER | SET |
| | <u>Flo-Link XL (FL XL)</u> | | |
| ALUMINUM | 3380 | FL XL X 1" CAM | SET |
| | 3486 | FL XL X 1-1/2" CAM | SET |
| <u>GARDEN HOSE</u> | | | |
| | <u>Flo-Link (FL)</u> | | |
| BRASS | 3203 | FL X MALE GARDEN HOSE ADAPTER | SET |
| | 3248 | FL X FEMALE GARDEN HOSE ADAPTER | SET |
| | <u>Flo-Link XL (FL XL)</u> | | |
| | 3485 | FL XL X 1" FEMALE GARDEN HOSE ADAPTER | SET |
| <u>ELBOWS</u> | | | |
| <u>PT PLUGS</u> | | | |
| BRASS | 2143 | 1/4" PT PLUG | EACH |
| | 2144 | 1/2" PT PLUG | EACH |
| | 3711 | 1/4" PLUG | EACH |
| Note: Use w/ FL or threaded fittings that have a 1/4" FPT port, where a PT plug is not needed. | | | |

Flo-Link X FPT



Flo-Link XL X FPT



2143



2144



3711



Elbows-Fittings

| | Flo-Link (FL) | | |
|----------|---------------|---|------|
| BRASS | 3263 | FL ELBOW X 1" HB W/1/4" FPT PORT | SET |
| | 3255 | FL ELBOW X 1" MPT W/1/4" FPT PORT | SET |
| PE/BRASS | 3924 | FL ELBOW X 1" PE FUSION W/1/4" FPT PORT | SET |
| | MPT | | |
| BRASS | 4309 | 3/4" MPT X 3/4" HB W/1/4" FPT PORT | EACH |
| | 2265 | 3/4" MPT X 1" HB W/1/4" FPT PORT | EACH |
| | 3447 | 1" MPT X 1" HB W/1/4" FPT PORT | EACH |
| | 3481 | 1" MPT X 1" FPT W/1/4" PT PLUGS | SET |
| | 3448 | 1" MPT X 1" FPT W/ PT PORT | EACH |
| | 3556 | 1-1/4" MPT X 1-1/4" HB W/1/4" FPT PORT | EACH |
| | 3660 | 1-1/4" MPT X 1-1/4" HB W/1/4" PT PLUGS | SET |
| | 3500 | 1-1/4" MPT X 1-1/4" FPT W/1/4" FPT PORT | SET |
| | 3499 | 1-1/4" MPT X 1-1/4" FPT W/1/4" FPT PORT | EACH |
| | 3449 | 2" MPT X 2" HB W/1/4" FPT PORT | EACH |
| | 3482 | 2" MPT X 2" HB W/1/4" PT PLUGS | SET |
| FOAM | 3461 | INSULATING BOOT SET FOR 1" ELBOWS | SET |

3255



3263



3924



3461



2265/3447/3449/3556/4309



3499/3448



3482/3660



3481/3500



PE FUSION

| | Flo-Link (FL) | | | |
|------|---------------------|---------------------------------|---------|--|
| HDPE | 3096 | FL X 3/4" PE FUSION | SET | |
| | 2912 | FL X 1" PE FUSION | SET | |
| | 2911 | FL X 1-1/4" PE FUSION | SET | |
| | 2911-10X | FL X 1-1/4" PE FUSION BULK PACK | 10 SETS | |
| | Flo-Link XL (FL XL) | | | |
| | 3463 | FL XL X 1-1/4" PE FUSION | SET | |
| | 3464 | FL XL X 1-1/2" PE FUSION | SET | |
| | 3465 | FL XL X 2" PE FUSION | SET | |

| PE FUSION ADAPTERS | | | |
|-------------------------|------------|--|------|
| | HOSE BARB | | |
| HDPE/BRASS | PFA34HB | 3/4" SOCKET FUSION X 1" HB | EACH |
| | PFA44HB | 1" SOCKET FUSION X 1" HB | EACH |
| | PFA54HB | 1-1/4" SOCKET FUSION X 1" HB | EACH |
| | PFA64HB | 1-1/2" SOCKET FUSION X 1" HB | EACH |
| | MPT | | |
| HDPE/BRASS | PFA33M | 3/4" SOCKET FUSION X 3/4" MPT | EACH |
| | PFLA33M | ELBOW, 3/4" SOCKET FUSION X 3/4" MPT | EACH |
| | PFA34M | 3/4" SOCKET FUSION X 1" MPT | EACH |
| | PFLA34M | ELBOW, 3/4" SOCKET FUSION X 1" MPT | EACH |
| | PFA44M | 1" SOCKET FUSION X 1" MPT | EACH |
| | PFA53M | 1-1/4" SOCKET FUSION X 3/4" MPT | EACH |
| | PFA54M | 1-1/4" SOCKET FUSION X 1" MPT | EACH |
| | PFA54M-CV | 1-1/4" SOCKET FUSION X 1" MPT W/ CHECK VALVE | EACH |
| | PFA55M | 1-1/4" SOCKET FUSION X 1-1/4" MPT | EACH |
| | PFA64M | 1-1/2" SOCKET FUSION X 1" MPT | EACH |
| | PFA66M | 1-1/2" SOCKET FUSION X 1-1/2" MPT | EACH |
| | PFA88M | 2" SOCKET FUSION X 2" MPT | EACH |
| | FPT | | |
| HDPE/BRASS | PFA31F | 3/4" SOCKET FUSION X 1/4" FPT | EACH |
| | PFA32F | 3/4" SOCKET FUSION X 1/2" FPT | EACH |
| | PFLA33F | ELBOW, 3/4" SOCKET FUSION X 3/4" FPT | EACH |
| | PFA88F | 2" SOCKET FUSION X 2" FPT | EACH |
| PE FUSION ADAPTERS TEES | | | |
| HDPE/BRASS | PFTA332F | 3/4" FUSION X 3/4" FUSION X 1/2" FPT | EACH |
| | PFTA442F | 1" FUSION X 1" FUSION X 1/2" FPT | EACH |
| | PFTA4MS2F4 | 1" MPS X 1/2" FPT X 1" FUSION | EACH |
| | PFTA4MS32F | 1" MPT X 3/4" FUSION X 1/2" FPT | EACH |
| | PFTA4MS42F | 1" MPT X 1" FUSION X 1/2" FPT | EACH |
| | PFTA551F | 1-1/4" FUSION X 1-1/4" FUSION X 1/4" FPT | EACH |
| | PFTA881F | 2" FUSION X 2" FUSION X 1/4" FPT | EACH |
| | PFTA854M | 2" FUSION X 1-1/4" FUSION X 1" MPT | EACH |
| | PFTA884M | 2" FUSION X 2" FUSION X 1" MPT | EACH |

Socket Fusion X Hose Barb



Socket Fusion X MPT



Fusion Adapter Tee



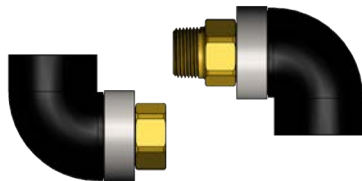
Socket Fusion X Flo-Link



Socket Fusion X FPT



Socket Fusion Elbows



PE Fusion/Elbows-Fittings

| FUSION COUPLINGS | | | |
|------------------|----------|----------------------------------|------|
| HDPE | PFC33 | 3/4" X 3/4" | EACH |
| | PFC43 | 1" X 3/4" | EACH |
| | PFC44 | 1" X 1" | EACH |
| | PFC53 | 1-1/4" X 3/4" | EACH |
| | PFC54 | 1-1/4" X 1" | EACH |
| | PFC55 | 1-1/4" X 1-1/4" | EACH |
| | PFC64 | 1-1/2" X 1" | EACH |
| | PFC65 | 1-1/2" X 1-1/4" | EACH |
| | PFC66 | 1-1/2" X 1-1/2" | EACH |
| | PFC84 | 2" X 1" | EACH |
| | PFC85 | 2" X 1-1/4" | EACH |
| | PFC86 | 2" X 1-1/2" | EACH |
| | PFC88 | 2" X 2" | EACH |
| | 3895 | BUTT FUSION REDUCER, 3" X 2" IPS | EACH |
| | 4254 | BUTT FUSION REDUCER, 4" X 3" IPS | EACH |
| FUSION ELBOWS | | | |
| HDPE | PFL33 | 3/4" X 3/4" | EACH |
| | PFL33S | 3/4" X 3/4" STREET | EACH |
| | PFL43 | 1" X 3/4" | EACH |
| | PFL44 | 1" X 1" | EACH |
| | PFL44-45 | 1" X 1" 45° | EACH |
| | PFL44S | 1" X 1" STREET | EACH |
| | PFL53 | 1-1/4" X 3/4" | EACH |
| | PFL54 | 1-1/4" X 1" | EACH |
| | PFL55 | 1-1/4" X 1-1/4" | EACH |
| | PFL55-45 | 1-1/4" X 1-1/4" 45° | EACH |
| | PFL55S | 1-1/4" X 1-1/4" STREET | EACH |
| | PFL66 | 1-1/2" X 1-1/2" | EACH |
| | PFL66-45 | 1-1/2" X 1-1/2" 45° | EACH |
| | PFL88 | 2" X 2" | EACH |
| FUSION CAPS | | | |
| HDPE | PFP3 | 3/4" | EACH |
| | PFP4 | 1" | EACH |
| | PFP5 | 1-1/4" | EACH |
| | PFP6 | 1-1/2" | EACH |
| | PFP8 | 2" | EACH |

Fusion Coupling



Fusion Caps



Fusion Elbow, Street



Fusion Elbow



| <u>FUSION TEES</u> | | | |
|-------------------------------------|----------------------|--|---------|
| HDPE | PFT333 | 3/4" X 3/4" X 3/4" | EACH |
| | PFT444 | 1" X 1" X 1" | EACH |
| | PFT533 | 1-1/4" X 3/4" X 3/4" | EACH |
| | PFT544 | 1-1/4" X 1" X 1" | EACH |
| | PFT553 | 1-1/4" X 1-1/4" X 3/4" | EACH |
| | PFT554 | 1-1/4" X 1-1/4" X 1" | EACH |
| | PFT555 | 1-1/4" X 1-1/4" X 1-1/4" | EACH |
| | PFT664 | 1-1/2" X 1-1/2" X 1" | EACH |
| | PFT666 | 1-1/2" X 1-1/2" X 1-1/2" | EACH |
| | PFT853 | 2" X 1-1/4" X 3/4" | EACH |
| | PFT854 | 2" X 1-1/4" X 1" | EACH |
| | PFT855 | 2" X 1-1/4" X 1-1/4" | EACH |
| | PFT864 | 2" X 1-1/2" X 1" | EACH |
| | PFT883 | 2" X 2" X 3/4" | EACH |
| | PFT884 | 2" X 2" X 1" | EACH |
| | PFT885 | 2" X 2" X 1-1/4" | EACH |
| | PFT888 | 2" X 2" X 2" | EACH |
| <u>PRE-ASSEMBLED FUSION HEADERS</u> | | | |
| HDPE | PH53X3 | 1-1/4" X (3) 3/4" circuits | EACH |
| | PH54X3 | 1-1/4" X (4) 3/4" circuits | EACH |
| | PH55X3 | 1-1/4" X (5) 3/4" circuits | EACH |
| | PH56X3 | 1-1/4" X (6) 3/4" circuits | EACH |
| <u>PE PIPE</u> | | | |
| | <u>Flo-Link (FL)</u> | | |
| HDPE | 3917 | FL X 1-1/4" PE PIPE | SET |
| <u>PVC</u> | | | |
| | <u>Flo-Link (FL)</u> | | |
| PVC | 3425 | FL X 1-1/4" PVC GLUE | SET |
| | 3425-10X | FL X 1-1/4" PVC GLUE BULK PACK | 10 SETS |
| <u>COMPRESSION FITTINGS</u> | | | |
| HDPE | PCA55F | 1-1/4" Compression X 1-1/4" FPT | EACH |
| HDPE/PVC | PCC55PVC | 1-1/4" HDPE Compression X 1-1/4" PVC Compression | EACH |

Pre-Assembled Fusion Headers



Fusion Tees



Compression Fittings



| VALVES | | |
|---|--|--|
| BRASS, FULL PORT BALL VALVES | | |
| 3543 | 1/4" FPT X 1/4" FPT | |
| 4848 | 1/4" FPT X 1/4" MPT | |
| 3705 | 1/2" FPT X 1/2" MPT | |
| 4312 | 3/4" FPT X 3/4" MPT | |
| 3968 | 1" FPT X 1" FPT | |
| 3786 | 1" FPT X 1" MPT | |
| 3787 | 1-1/4" FPT X 1-1/4" MPT | |
| 3576 | 1-1/2" FPT X 1-1/2" FPT | |
| 3706 | 1-1/2" FPT X 1-1/2" MPT | |
| 3575 | 2" FPT X 2" FPT | |
| 3707 | 2" FPT X 2" MPT | |
| 4676 | 1" FPT X 1" CAM | |
| 4016 | 2" ISOLATION W/CHECK, 2" FPT X FLO-LINK XL | |
| 4580 | VALVE, 1" FULL PORT, 1-1/4" SOCKET FUSION X 1" HOSE BARB | |
| FUSION BALL VALVES | | |
| PFV33 | 3/4" X 3/4" | |
| PFV44 | 1" X 1" | |
| PFV55 | 1-1/4" X 1-1/4" | |
| PFV88 | 2" X 2" | |
| PFV55U | 1-1/4" X 1-1/4", true union | |
| PFV88U | 2" X 2", true union | |
| BUTTERFLY VALVES | | |
| 3919 | Valve, Butterfly, 3" flange, CI Body, Al Brnz Disc, NBR Seat | |
| 3925 | Valve, Butterfly, 4" flange, CI Body, Al Brnz Disc, NBR Seat | |
| Note: Valve design eliminates the need for a gasket | | |
| CHECK VALVES | | |
| 3918 | Check Valve, 2" FPT, Spring, Brass, NBR Seat | |
| 3490 | Fitting set, FL X 1" HB w/check valve | |
| 4143 | Fitting set, FL X 1" FPT w/ check valve | |
| 4505 | Fitting, 1" MPT X 1" HB w/ Check Valve | |
| 5185 | Fitting, 1" HB x 1" HB w/ check valve | |
| PFA54M-CV | Fusion adapter (each), 1-1/4" SF X 1" MPT w/ check valve | |

Brass Ball Valves



5185



3490



4143



PFV88




Butterfly Valves



STAINLESS FULL PORT BALL VALVES AND ASSEMBLIES

| | |
|----------------|--|
| BV4-4H4H-SS | VALVE, 1" FULL PORT, 1" HB X 1" HB, STAINLESS |
| BV5-5H5H-SS | VALVE, 1-1/4" FULL PORT, 1-1/4" HB X 1-1/4" HB, STAINLESS |
| BV4-PF-4B4B-SS | VALVE, 1" STAINLESS, POLY FUSION 1" X 1" PE PIPE |
| BV5-PF-5B5B-SS | VALVE, 1-1/4" STAINLESS, POLY FUSION 1-1/4" X 1-1/4" PE PIPE |
| BV4-PF-4S4S-SS | VALVE, 1" STAINLESS, POLY FUSION 1" SOCKET FUSION X 1" SOCKET FUSION |
| BV5-PF-5S5S-SS | VALVE, 1-1/4" STAINLESS, POLY FUSION 1-1/4" SOCKET FUSION X 1-1/4" SOCKET FUSION |



| FLO-LINK ISOLATION VALVES | | | |
|---|------|--|---|
| SETS | 3790 | FL X 1" FPT | 3790: 1" FPT 4066: 1" FPT w/chk vlv 3875: 1 1/4" FPT  |
| | 4144 | FL X 1" FPT W/CHECK VALVE (SINGLE ASSEMBLY) | |
| | 4066 | FL X 1" FPT W/CHECK VALVE (SET) | |
| | 3875 | FL X 1-1/4" FPT | |
| | 3792 | FL XL X 2" FPT | |
| | 2534 | 1" FPT Isolation Valve, Standard Port, no handle | |
| | 2535 | 1-1/4" FPT Isolation Valve, Standard Port, no handle | |
| | 2270 | 1" FPT Isolation Valve, Flanged, Full Port | |
| | 4500 | Valve, Flange X 1" FPT, Brass | |
| DUAL UNIT CONNECTION KITS | 3970 | FL Dual Unit Connection Kit | |
| | 4243 | FL XL Dual Unit Connection Kit | |
| FLANGE ADAPTERS | | | |
| SETS | 2135 | 1" FPT, Cast Iron, Black | |
| | 2238 | 1-1/4" FPT, Cast Iron, Black | |
| KITS | 3494 | 1-1/4" SWT, UP15&UP26 | |
| | 3495 | 1-1/2" SWT, UP15&UP26 | |
| | 3445 | 1-1/2" SWT, UPS40 | |
| | 3446 | 2" SWT, UPS40 | |
| | 3528 | 1" FPT, Cast Iron, Wilo | |
| FUSION | 3893 | 2" flange x 2" IPS DR11 HDPE pipe* | |
| | 3896 | 3" flange x 3" IPS DR11 HDPE pipe* | |
| | 4252 | 4" flange x 4" IPS DR11 HDPE pipe* | |
| *Requires backup ring and gasket/hardware kit | | | |
| BACK UP RING | 3894 | Back up ring for 2" flange (3893) | |
| | 3897 | Back up ring for 3" flange (3896) | |
| | 4253 | Back up ring for 4" flange (4252) | |
| HARDWARE | CALL | Gasket/Hardware kit for 2" flange (3893) | |
| | CALL | Gasket/Hardware kit for 3" flange (3896) | |
| | CALL | Gasket/Hardware kit for 4" flange (4252) | |
| | 4244 | Single Pump mounting bracket for UP/UPS 15&26 pumps | |
| | 3817 | Double Pump mounting bracket for UP/UPS 15&26 pumps | |

Dual Unit Connection Kits



2135/2238



Mounting Brackets



2534/2535



4500



Fusion Flange Adapter (shown with backup ring)



3445/3494/3495



2270



3446



| FLUSH VALVES AND ASSEMBLIES | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|----------|------------------------|---|--------|-----|--------|---|--------|-----|--------|---|--------|----|---------|----|---------|----|----------|----|----------|
| MOUNTING HARDWARE INCLUDED | 4702 | Single, 3-way, 4 position flush/iso. Valve, Insulated cab., Brass | Flo-Link Connections (Requires 2 FL adapter fittings and FL flush adapters) | | | | | | | | | | | | | | | | | | | | |
| | 3514 | Single, 3-way, 4 position flush/iso. Valve, Insulated cab., Composite | | | | | | | | | | | | | | | | | | | | | |
| | 3522 | Double, 3-way, 4 position flush/iso. Valve, Insulated cab., Brass | | | | | | | | | | | | | | | | | | | | | |
| | 1199 | 2", 3-way, 4 position flush/iso. Valve, Insulated cab. Brass (Requires:(2) FL XL adapter fittings & FL XL flush adapt.) | | | | | | | | | | | | | | | | | | | | | |
| | FLC32S | 3" flushing assembly | | | | | | | | | | | | | | | | | | | | | |
| | FLC42S | 4" flushing assembly | | | | | | | | | | | | | | | | | | | | | |
| | 2480 | 2480 Underground Flushing Kit Contains: (2) Brass 3-way flushing valve (1) Pro series box with lid (4) Socket fusion coupling, 1-1/4" (4) Socket fusion fittings, 1" MPT x 1-1/4" fusion (4) PE pipe nipples, 1-1/4" long | | | | | | | | | | | | | | | | | | | | | |
| ZONE VALVES | | | | | | | | | | | | | | | | | | | | | | | |
| | VMT3F-OP | Taco geo open loop vlv, brass 3/4" FPT, 24V w/end switch, Cv = 10.3** | <table border="1"> <thead> <tr> <th>U.S. GPM</th> <th>Recommended Minimum Cv</th> </tr> </thead> <tbody> <tr><td>3</td><td>2 to 3</td></tr> <tr><td>4.5</td><td>3 to 4</td></tr> <tr><td>6</td><td>4 to 6</td></tr> <tr><td>7.5</td><td>6 to 8</td></tr> <tr><td>9</td><td>7 to 9</td></tr> <tr><td>10</td><td>8 to 10</td></tr> <tr><td>12</td><td>9 to 12</td></tr> <tr><td>15</td><td>11 to 15</td></tr> <tr><td>18</td><td>13 to 18</td></tr> </tbody> </table> <p>Table 1: Recommend Min. Cv Higher Cv = lower pressure drop.</p> | U.S. GPM | Recommended Minimum Cv | 3 | 2 to 3 | 4.5 | 3 to 4 | 6 | 4 to 6 | 7.5 | 6 to 8 | 9 | 7 to 9 | 10 | 8 to 10 | 12 | 9 to 12 | 15 | 11 to 15 | 18 | 13 to 18 |
| | U.S. GPM | Recommended Minimum Cv | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 2 to 3 | | | | | | | | | | | | | | | | | | | | | |
| | 4.5 | 3 to 4 | | | | | | | | | | | | | | | | | | | | | |
| | 6 | 4 to 6 | | | | | | | | | | | | | | | | | | | | | |
| | 7.5 | 6 to 8 | | | | | | | | | | | | | | | | | | | | | |
| | 9 | 7 to 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 8 to 10 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 9 to 12 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 11 to 15 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | 13 to 18 | | | | | | | | | | | | | | | | | | | | | | |
| VMT3F-CL | Taco geo closed loop vlv, brass 3/4" FPT, 24V w/end switch, Cv = 10.3** | | | | | | | | | | | | | | | | | | | | | | |
| VMT4F-OP | Taco geo open loop vlv, brass 1" FPT, 24V w/end switch, Cv = 8.9** | | | | | | | | | | | | | | | | | | | | | | |
| VMT4F-CL | Taco geo closed loop vlv, brass 1" FPT, 24V w/end switch, Cv = 8.9** | | | | | | | | | | | | | | | | | | | | | | |
| VMSPR | Powerhead for older (orange) VMSBZ Valves | | | | | | | | | | | | | | | | | | | | | | |
| VMBBN4F-SR | Belimo B225+LFR24-S+NC/FO motorized ball vlv, nickle plated brass 1" FPT, spring rtn, 24V w/end sw, Cv=30** | | | | | | | | | | | | | | | | | | | | | | |
| VMBBN5F-SR | Belimo B232+AFR24-S+NC/FO motorized ball vlv, nickle plated brass 1-1/4" FPT, spring rtn, 24V w/end sw, Cv=37** | | | | | | | | | | | | | | | | | | | | | | |
| **Choose valve based upon Cv (Flow Coefficient) for flow rate (see Table 1). Higher Cv = lower pressure drop. | | | | | | | | | | | | | | | | | | | | | | | |



| FLOW REGULATORS FOR OPEN LOOP SYSTEMS | | |
|---------------------------------------|----------|-------|
| 3/4" FPT x 3/4" FPT | VFR33F-2 | 2 GPM |
| | VFR33F-3 | 3 GPM |
| | VFR33F-4 | 4 GPM |
| | VFR33F-5 | 5 GPM |
| | VFR33F-6 | 6 GPM |
| | VFR33F-7 | 7 GPM |
| | VFR33F-8 | 8 GPM |
| | VFR33F-9 | 9 GPM |

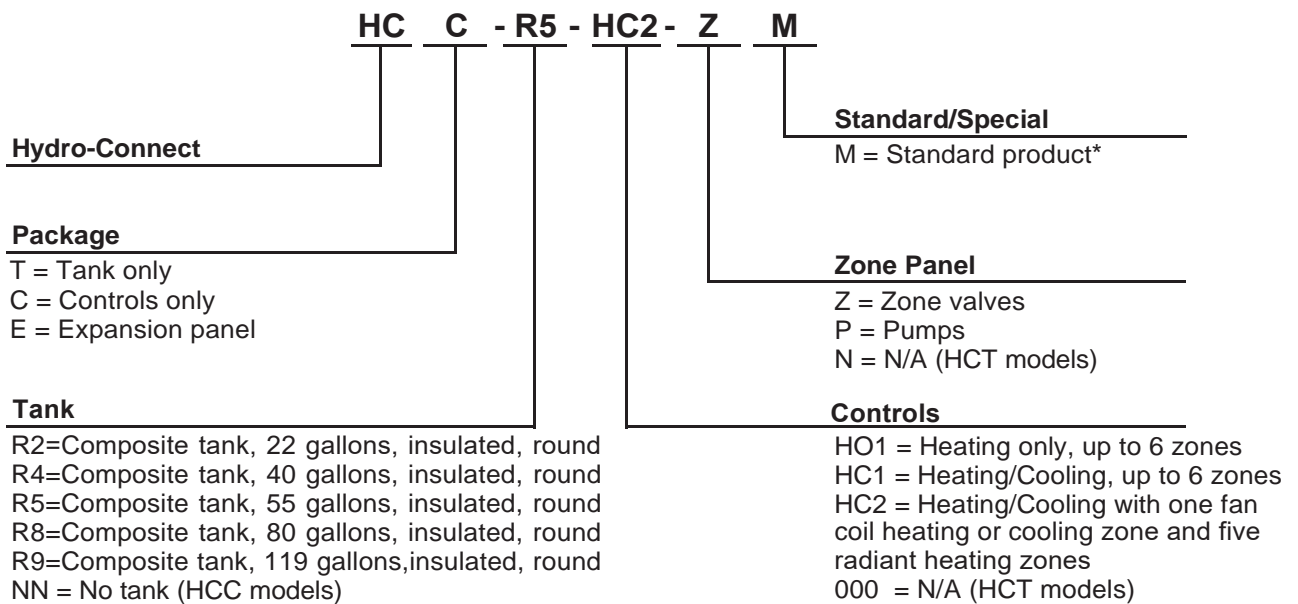


3-way, 4 position flush/iso.valve

| | | | |
|--------------------|------------------|--------------------|--|
| 1199 | 3522 | 3514/4702 | FLC32S/FLC42S 3" and 4" flushing assembly: HDPE body, HDPE fusion connections to/from ground loop and building, 2" brass ball valve flushing connections, butterfly isolation valves (sold as a set, as shown) |
| | | | |
| Zone Valves | Belimo | Taco | |
| | Open Loop | Closed Loop | |

Geo-Flo’s HCT Buffer Tanks are used with geothermal water-to-water heat pumps, air-to-water heat pumps, boilers, and other hot- and chilled-water hydronic systems requiring a buffer tank. These HCT’s feature a composite tank that will never corrode, and factory installed, brass, union fluid connections. The tank is insulated with a high R-value urethane foam and covered with a high-impact plastic jacket that resists scratches, dents and condensation formation.

Nomenclature: Buffer Tanks and Hydronic Controls

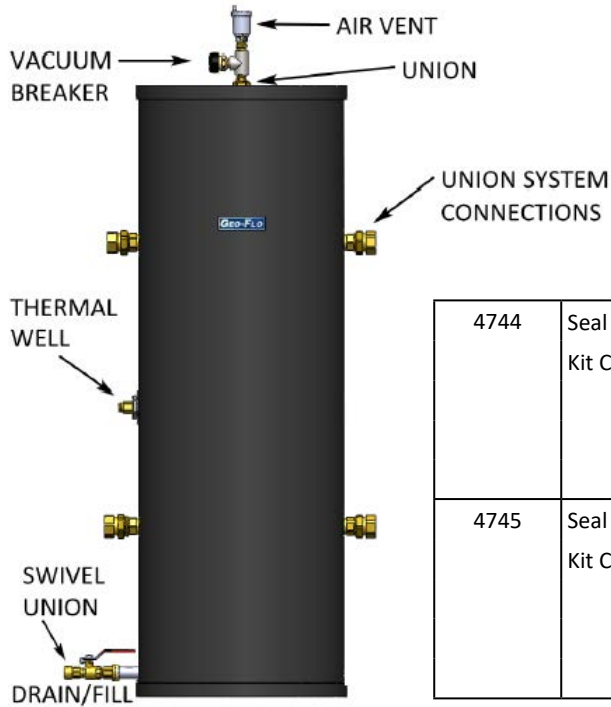


* Standard HCC and HCE products provided with controls mounted on a melamine composite panel. All HCE products provided with controls mounted on a melamine composite panel.

| BUFFER TANKS | | |
|--------------|---------------|----------------------------|
| HCT TANK | HCT-R2-000-NM | HC Buffer Tank, 22 gallon |
| | HCT-R4-000-NM | HC Buffer Tank, 40 gallon |
| | HCT-R5-000-NM | HC Buffer Tank, 55 gallon |
| | HCT-R8-000-NM | HC Buffer Tank, 80 gallon |
| | HCT-R9-000-NM | HC Buffer Tank, 119 gallon |



Hydro-Connect Controls (HCC)-Controls



| BUFFER TANK REPLACEMENT PARTS | |
|-------------------------------|---|
| 4695 | Vacuum breaker, 1/2 MPT |
| 4697 | Auto air vent, 1/2" FPT and 3/4" NPT |
| 4730 | Vacuum breaker and Auto Air Vent Assembly |

| | | |
|------|--|--|
| 4744 | Seal Kit for HCT-R2/4/5 Kit Contains: (1) 1" swivel fitting gasket (1) Replacement O-Ring (air separator assembly) (4) Replacement O-Ring (buffer tank connections-fittings) | |
| 4745 | Seal Kit for HCT-R8/9 Kit Contains: (1) 1" swivel fitting gasket (1) Replacement O-Ring (air separator assembly) (4) Replacement O-Ring (buffer tank connections-fittings) | |

CONTROL PANEL



| HYDRO-CONNECT CONTROLS | | |
|------------------------|---------------|---|
| HCC CONTROLS | HCC-NN-HO1-PM | Heating Only, Pump Controls |
| | HCC-NN-HO1-ZM | Heating Only, Zone Valve Controls |
| | HCC-NN-HC1-PM | Heating/Cooling, Pump Controls |
| | HCC-NN-HC1-ZM | Heating/Cooling, Zone Valve Controls |
| | HCC-NN-HC2-PM | Heating/Cooling with Fan Coil, Pump Controls |
| | HCC-NN-HC2-ZM | Heating/Cooling with Fan Coil, Zone Valve Control |
| EXPANSION PANELS | | |
| HCE EXPANSION PANELS | HCE-NN-HO1-PM | HC Expansion Panel for HO1, Pump Controls |
| | HCE-NN-HO1-ZM | HC Expansion Panel for HO1, Zone Valve Controls |
| | HCE-NN-HC1-PM | HC Expansion Panel for HC1, Pump Controls |
| | HCE-NN-HC1-ZM | HC Expansion Panel for HC1, Zone Valve Controls |
| | HCE-NN-HC2-PM | HC Expansion Panel for HC2, Pump Controls |
| | HCE-NN-HC2-ZM | HC Expansion Panel for HC2, Zone Valve Controls |
| HBX CONTROLLER | | |
| HBX CONTROLLER | 5005 | CONTROLLER, HBX ECO-0600 |


| MAGNA 3 EXTERNAL CONTROLLER AND ACCESSORIES | |
|---|---|
| EXTERNAL CONTROLLER FOR MAGNA3 | |
| 4062 | UPC GEO external controller, 0-10VDC output Use external controller for Magna3 Delta-T control for primary-secondary applications to provide heating and cooling Delta-T set points. |
| 3986 | 10k thermistor, 1/4" NPT insertion type (4062 controller requires two thermistors) |
| 3760 | AC wall adapter for 4062 (Optional if 24VAC is available near 4062 controller location) |
| 3807 | Barrel connector for 3760 (Optional if 24VAC is available near 4062 controller location) |
| BMS INTERFACE MODULES FOR MAGNA3/ DONGLE FOR GRUNDFOS GO | |
| CIM100 | LonWorks Network Interface Module |
| CIM200 | Modbus RTU Network Interface Module |
| CIM300 | BACnet MS/TP Network Interface Module |
| PUMP ENABLE CONTROL-Pump off unless at least one heat pump is calling | |
| 3808 | Pump enable control (up tp 5 units w/ one insulated pump or flow center", NEMA enclosed |
| MAGNA 3 ACCESSORIES | |
| 4313 | Temperature sensor, Grundfos, RPI w/1/2" adapter for delta T |



| VARIABLE SPEED CONTROLLER KITS | |
|--------------------------------|---|
| 3697 | Temperature Control - (2) 1/4" MPT immersion thermistors included |
| 3698 | Flow and Temperature Control -Hose barb Hose kit connections 1"HB (also available as 1" MPT) (Thermistors and flow sensor included) |
| 3766 | Flow and Temperature Control -PVC Glue PVC connections 1" PVC Glue (also available as 1" MPT) (Thermistors and flow sensor included) |

Variable Speed Controller Kits



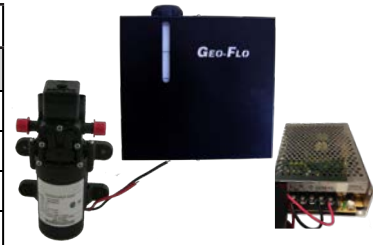
| 0-10V TO PWM CONTROLLER | | |
|---|--|---|
| 4841 | Controller, ECM, 0-10 VDC to PWM, W/ enclosure | |
| DUAL UNIT KIT/FLOW CENTER SHARING/PUMP ENABLE RELAY | | |
| 3561 | Pump sharing relay (2 units; 1 flow center) |  |
| 3562 | Pump sharing relay (2 units; 1 flow center) w/ NEMA enclosed | |

Geo-Booster/Geo-Prime/Geo-Gooser-Air, Dirt, and Pressure Management

AIR, DIRT, AND PRESSURE MANAGEMENT

GEO-BOOSTER

| | |
|------|---|
| 3551 | Geo-Booster (loop pressurization system, 35 psig) |
| 9423 | Geo-Booster replacement pump |
| 3535 | Geo-Booster power supply |
| 3432 | Cap, 2-1/4, GEO-BOOSTER & GEO-PRIME |



WYE STRAINER- Bronze- #20 mesh, 304 SS strainer

| | |
|------|------------|
| 3656 | 1-1/4" FPT |
| 3462 | 2" FPT |



GEO-GOOSER

| | |
|------|---------------------------------------|
| 3502 | Geo-Gooser loop pressurization device |
|------|---------------------------------------|



GEO-PRIME

| | |
|------|----------------|
| 1245 | Geo-Prime Tank |
|------|----------------|



GHS HYDRAULIC SEPARATOR

All flange connections are standard ANSI Class 150 flanges. (gaskets and hardware not included)

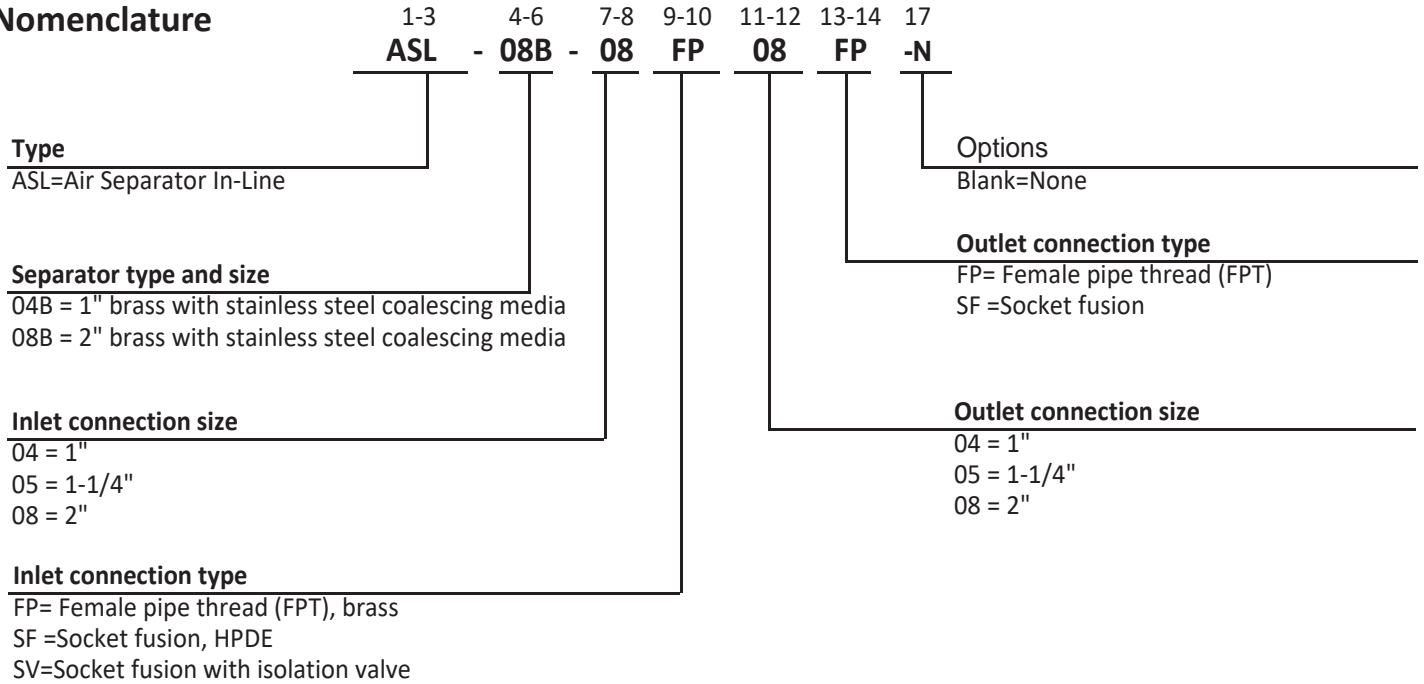
Flow rate on each side of hydraulic separator, not combined flow

| Part Number | Left Connections | Right Connections | Max. Flow Rate |
|-------------|------------------|-------------------|----------------|
| GHS-06-2F2F | 2" Flange | 2" Flange | 40 U.S. GPM |
| GHS-06-2F2N | | 2" NPT female | |
| GHS-06-2F2P | | 2" HDPE pipe | |
| GHS-06-2N2F | 2" NPT female | 2" Flange | |
| GHS-06-2N2N | | 2" NPT female | |
| GHS-06-2N2P | | 2" HDPE pipe | |
| GHS-06-2P2F | 2" HDPE pipe | 2" Flange | |
| GHS-06-2P2N | | 2" NPT female | |
| GHS-06-2P2P | | 2" HDPE pipe | |
| GHS-06-3F3F | 3" Flange | 3" Flange | 90 U.S. GPM |

Air, Dirt, and Pressure Management-Air Separators

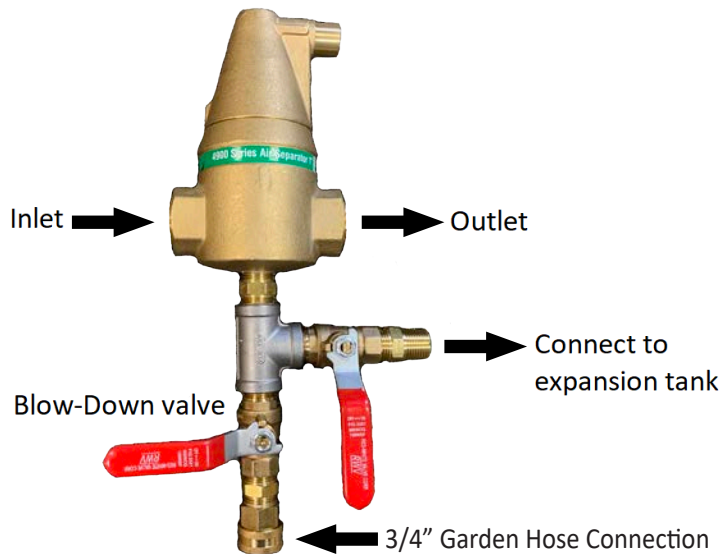
Geo-Flo's air separators eliminate any air that remains in the loop after system startup or maintenance. The stainless steel coalescing media inside the separator even traps small micro-bubbles and vents all air to the atmosphere preventing issues with system performance including noise and pump damage. The factory assembled air separators include a blow-down valve to allow dirt particles captured in the media to be removed, and a convenient connection for an expansion tank or water/anti-freeze make-up system such as the Geo-Booster.

Nomenclature



| AIR SEPARATORS | | | | | |
|------------------|-------------------------|------------------|----------------------------|-------------------|-------------------|
| Part Number | Separator Type and Size | Inlet conn. Size | Inlet conn. Type | Outlet conn. Size | Outlet conn. Type |
| ASL-04B-04FP04FP | 1" | 1" | FPT | 1" | FPT |
| ASL-04B-05SF05SF | 1" | 1-1/4" | Socket Fusion | 1-1/4" | Socket Fusion |
| ASL-04B-05SV05SF | 1" | 1-1/4" | Socket Fusion W/ISO. Valve | 1-1/4" | Socket Fusion |
| ASL-08B-08FP08FP | 2" | 2" | FPT | 2" | FPT |
| ASL-08B-08SF08SF | 2" | 2" | Socket Fusion | 2" | Socket Fusion |

NOTE: Not all options are available.
Call for items not specifically listed.



Example of ASL-04B-04FP04FP
Geo-Flo Corporation

Expansion Tanks-Air, Dirt, and Pressure Management

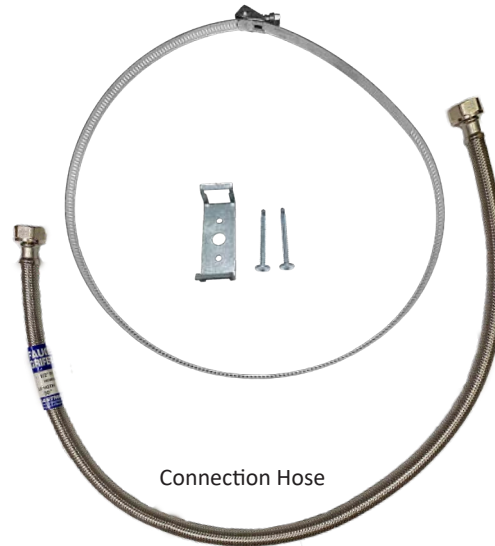
Expansion tanks are typically used on geothermal systems to prevent the system pressure from dropping too low when the HDPE loop pipe expands during cooling season (heat rejected to the loop). Geo-Flo recommends installing a thermal break between the system connection and any steel expansion tank to prevent the tank from sweating and corroding. For more detailed information on expansion tanks for geothermal systems, see the Literature link on our website www.geo-flo.com.

| EXPANSION TANKS | | | |
|-----------------|-----------------------------------|--------------------|----------------------|
| PN | DESCRIPTION | CAPACITY (GALLONS) | CONNECTION SIZE |
| 3230 | Expansion Tank, HDPE, .75 GAL | .75 | 1-1/4" socket fusion |
| ETN-FX-HTX15 | Expansion Tank, NON-ASME, 2.1 GAL | 2.1 | 1/2" MPT |
| ETN-FX-HTX30 | Expansion Tank, NON-ASME, 4.8 GAL | 4.8 | |
| ETN-FX-HTX60 | Expansion Tank, NON-ASME, 6 GAL | 6 | |
| ETN-FX-HTX90 | Expansion Tank, NON-ASME, 15 GAL | 15 | 3/4" MPT |



Expansion Tanks

Mounting Kits



Connection Hose



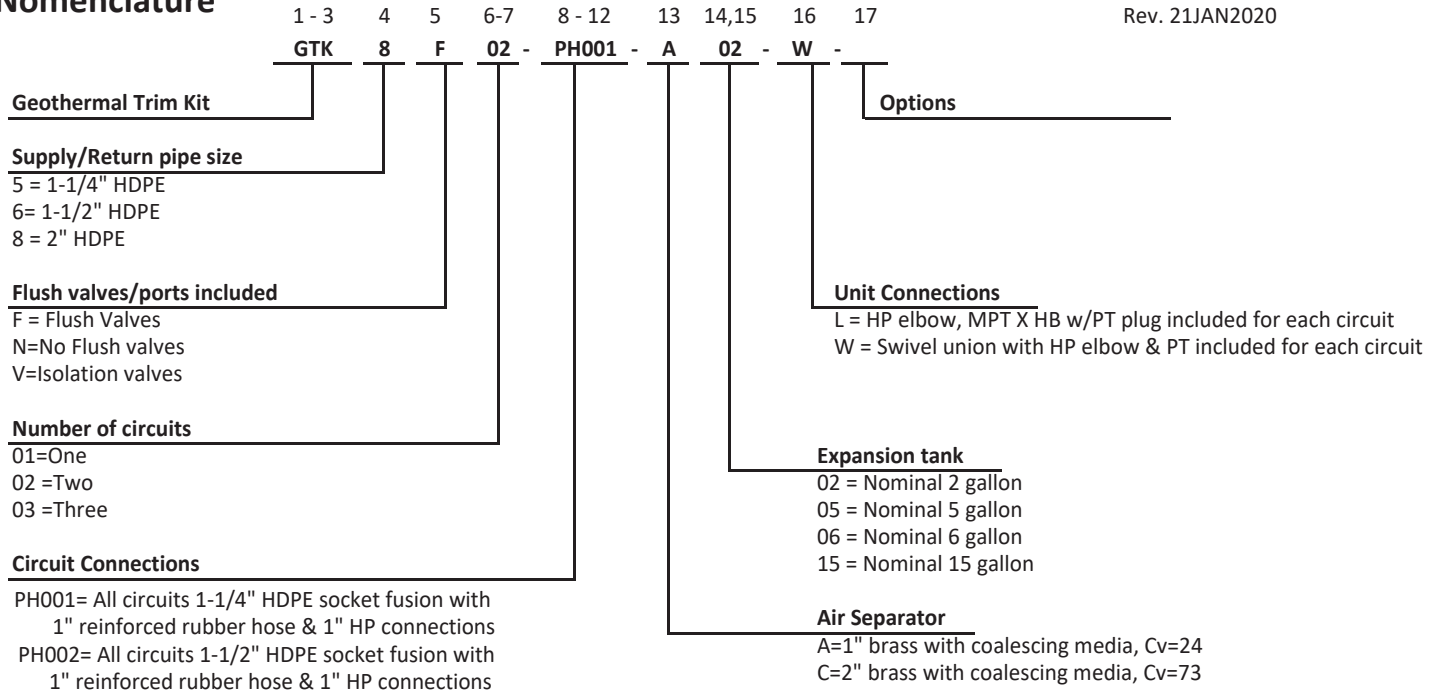
3230

| MOUNTING KITS | | |
|------------------|--|--|
| PN | Description | Compatible Expansion Tank |
| 4579 | Expansion Tank Mounting Kit | ETN-FX-HTX15 |
| 4680 | Expansion Tank Mounting Kit. 4.4-7.6G | ETN-FX-HTX30 |
| | | ETN-FX-HTX60 |
| | | ETN-FX-HTX90 |
| CONNECTION HOSES | | |
| 4645 | Hose, 1/2" FIP X 1/2" FIP, 30" long, PVC core, Stainless Steel braid | ETN-FX-HTX15 ETN-FX-HTX30 ETN-FX-HTX60 |

Geothermal Trim Kits (GTKs) are assemblies of all of the components necessary to properly maintain a geothermal system. These GTKs include flush/isolation valves, an air separator, an expansion tank, and required fittings to connect to the ground loop and heat pump. The multi-circuit GTKs include factory fused and assembled headers with check valves saving hours of field labor.

Nomenclature

Rev. 21JAN2020



Notes:

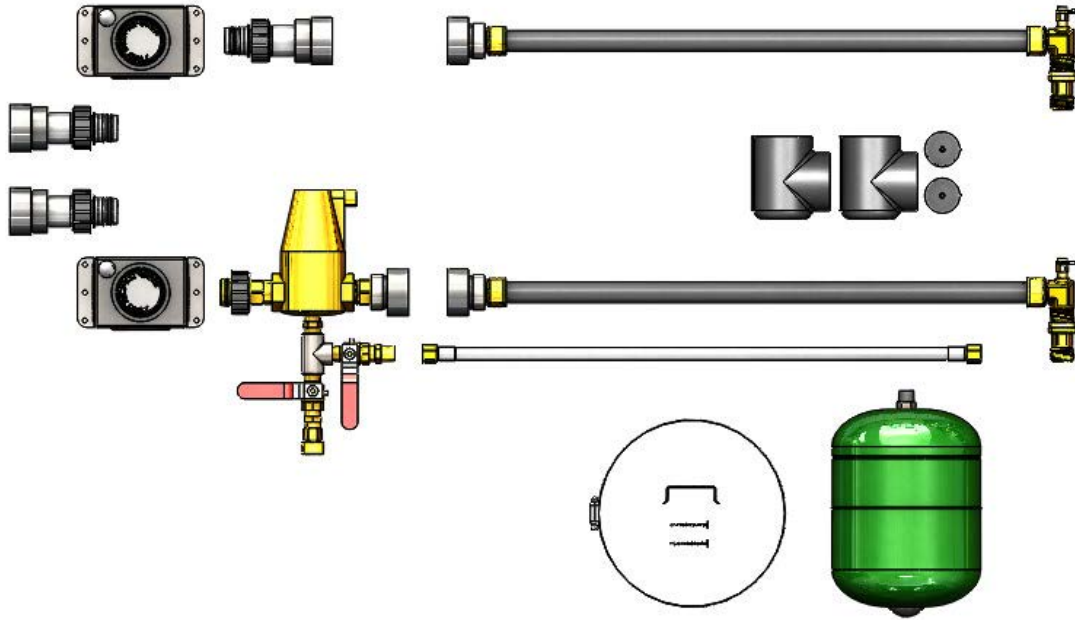
1. Circuits on return header have check valve included.
2. All circuits have isolation valves on supply and return headers.
3. HP Elbow size based on circuit connections.
4. GTK5 & 6 use 1" 3-way valves, and 1" air separator; GTK8 uses 2" 3-way valves and 2" air separator

| GEOHERMAL TRIM KITS (GTK) | | | | | | | |
|---------------------------|-------------------------|------------------------------|---------------|------------------|---------------|----------------|--|
| PART NUMBER | SUPPLY/RETURN PIPE SIZE | FLUSH VALVES/ PORTS INCLUDED | # OF CIRCUITS | CIRCUIT CONNECT. | AIR SEPARATOR | EXPANSION TANK | UNIT CONNECT. |
| GTK5F01-PH001-A02-W | 1-1/4" HDPE | FLUSH VALVES | 1 | 1-1/4" HDPE | 1" | 2 GAL | SWIVEL UNION W/ HP ELBOW & PT INCLUDED PER CIRCUIT |
| GTK5V01-PH001-A02-W | 1-1/4" HDPE | ISO. VALVES | | SOCKET FUSION | | | |
| GTK6F01-PH001-A02-W | 1-1/2" HDPE | FLUSH VALVES | | 1-1/2" HDPE SF | | | |
| GTK6F01-PH002-A02-W | 1-1/2" HDPE | FLUSH VALVES | | 1-1/4" HDPE SF | | | |
| GTK6V01-PH001-A02-W | 1-1/2" HDPE | ISO. VALVES | | 1-1/2" HDPE SF | | | |
| GTK6V01-PH002-A02-W | 1-1/2" HDPE | ISO. VALVES | | 1-1/2" HDPE SF | | | |
| GTK8F02-PH001-C05-W | 2" HDPE | FLUSH VALVES | 2 | 1-1/4" HDPE | 2 | 5 GAL | CIRCUIT |
| GTK8F03-PH001-C05-W | 2" HDPE | FLUSH VALVES | 3 | SOCKET FUSION | | | |

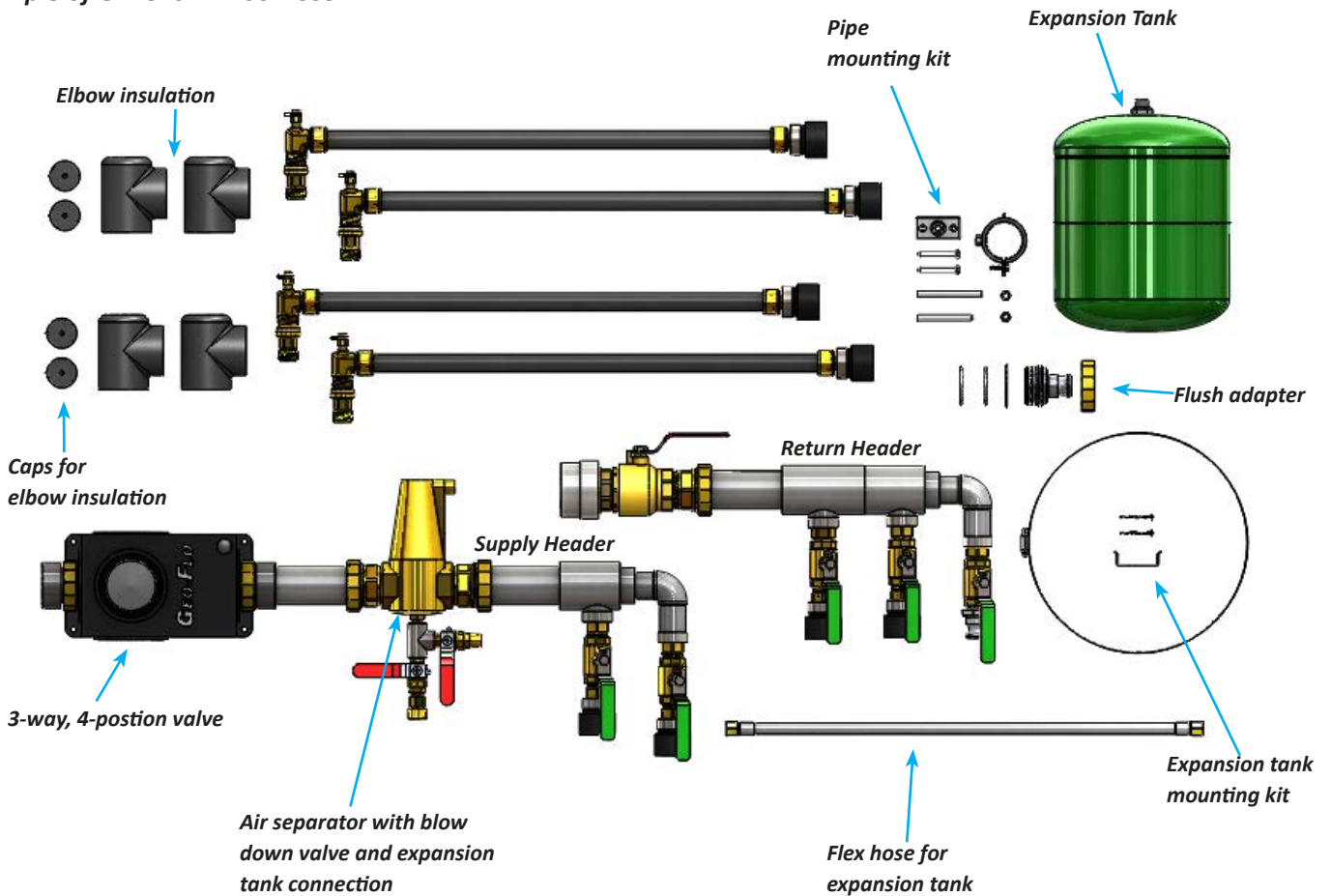
NOTE: Not all options are available. Call for items not specifically listed.

Geothermal Trim Kits

Example of GTK6F01-PH002-A02-W

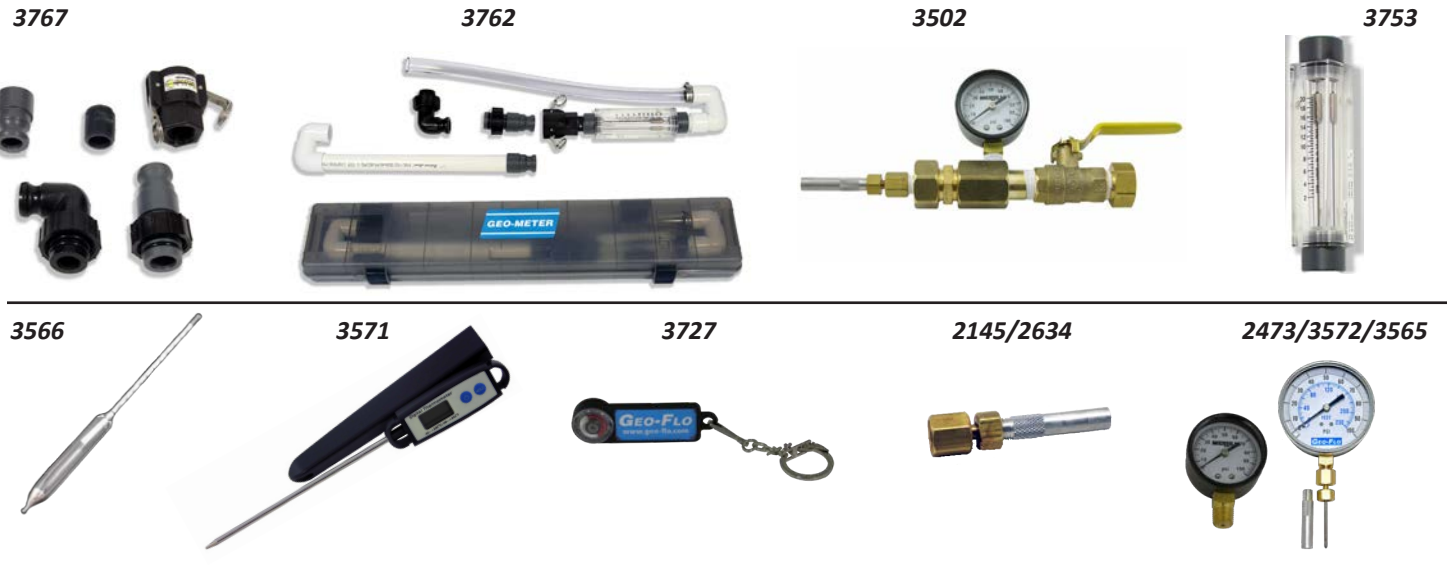


Example of GTK8F02-PH001-C05-W



| TOOLS | | | |
|--------------------------------------|--|---|------|
| <u>LOOP TOOLS AND ACCESSORIES</u> | | | |
| Loop Tools | 3762 | Mechanical (variable area) flow meter tool | EACH |
| | Contains: Tool with fittings, 90° CAM X FL adapter, straight CAM X FL adapter, competitor adapter, and carrying case | | |
| | 3767 | Adapter kit for competitor flow meter tool (allows competitor tool to be used with NP flow centers) | EACH |
| | 3753 | Variable area flow meter, 2 to 20 GPM, 1" FPT | EACH |
| | 3502 | Geo-Gooser loop pressurization device | EACH |
| <u>PRESSURE GAUGES, 0-100 PSIG</u> | | | |
| 0-100 psig | 2473 | 2" dial | EACH |
| | 5171 | 3.5" dial | EACH |
| | 3565 | 3.5" dial w/ PT adapter | EACH |
| <u>GAUGE ADAPTER PT PLUG W/GUARD</u> | | | |
| | 2634 | 1/16" Gauge adapter PT Plug with guard | EACH |
| | 2145 | 1/8" Gauge adapter PT Plug with guard | EACH |
| | 3571 | Thermometer, digital w/case | EACH |
| | 3566 | Hydrometer | EACH |
| | 3727 | AC Magnetic Field indicator | EACH |

Loop Tools and Accessories



Flushing and Service Kits-Tools

| FLUSHING AND SERVICE KITS | | | |
|---------------------------|------|--|-----|
| Flushing and Service Kits | 3509 | Geo-Gooser and flush kit Includes: (1) Geo-Gooser (PN 3502) (2) FL X Garden hose (female) adapter (PN 3248) (2) 1" MPT X FL female (PN 3471) | KIT |
| | 3553 | Geo-Gooser and flush kit with CAM elbows Includes: (1) Geo-Gooser (PN 3502) (2) FL X Garden hose (female) adapter (PN 3248) (2) 1" MPT X FL female (PN 3471) (1) Set of CAM level male 90° (flush fitting) (PN 2914) | KIT |
| | 3798 | Geo service kit Includes: (1) Geo-Gooser (PN 3502) (1) Pressure gauge with needle adapter (PN 3585) (1) Thermometer (PN 3571) (1) Hydrometer (alcohols) with case (PN 3566) | KIT |
| | 3564 | Geo-Service and flush kit Includes: (1) Geo-Gooser (PN 3502) (2) FL X Garden hose (female) adapter (PN 3248) (2) 1" MPT X FL female (PN 3471) (1) Pressure gauge with needle adapter (PN 3565) (1) Thermometer (PN 3571) (1) Hydrometer (alcohols) with case (PN 3566) (1) Set of CAM level male 90° (flush fitting) (PN 2914) | KIT |

Flushing Service Kits

3509 3553



3798 3564



The Geo-Flo Flush Cart is the professional's choice to purge air and flush debris from residential and light commercial geothermal ground loops. The Flush Cart includes all the important features required to safely flush and purge the loop including power flushing, power draining, pump and dump, and debris filtering. Its compact design utilizes standard components which allows for easy field service. The 1.5 HP self-priming 115V pump is mounted above the cart's axle, providing a well balanced system that is easy to maneuver.

| FLUSH CART | | | |
|----------------------------|------|---|------|
| Flush Carts | 3789 | Flush Cart w/ 10ft. hoses, 1" CAM fittings (loop side) & 1-1/4" ball valves Note: Available without ball valves (pn 3563) | EACH |
| FLUSH CART ACCESSORIES | | | |
| Flush Cart Hose Assemblies | 3639 | (2) 10ft hoses, 1" CAM fittings (loop side) | EACH |
| | 3788 | (2) 10ft hoses, 1" CAM fittings (loop side), 1-1/4" ball valves | EACH |
| | 4786 | (2) 10ft <i>rubber</i> hoses, 1" CAM fittings (loop side), 1-1/4" ball valves | EACH |
| | 3793 | (2) 20ft hoses, 1-1/2" CAM fittings (loop side) | EACH |
| | | Note: Ships with (2) CAM male X male adapters. 20 ft hose assembly set may be used as an extension set or with FL XL flow centers | |
| Filter bags | 3832 | 1 micron | EACH |
| | 3594 | 100 micron | EACH |
| Fittings (for flushing) | 3666 | 1" CAM X 1" MPT | EACH |
| Pump Motor | 4967 | MOTOR, MUNRO LP150BG, 1-1/2 HP, 1 x 115/230 V, 2 CAP | EACH |
| Gasket Kit (Munro) | 4970 | GASKET KIT, SQUARE AND DIFFUSER, MUNRO LP SERIES | EACH |



Flush cart hoses with 1-1/4" ball valves

3788

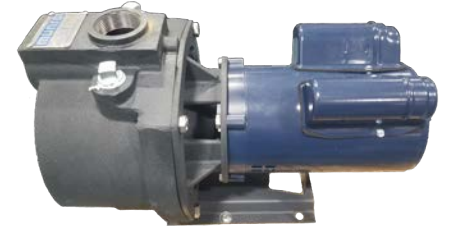


Flush cart accessories/replacements

3666

Filter Bags

Munro Pump (Replacement PN 9424)



Flush Cart

Fusion Tool Kits-Tools

Geo-Flo assembles professional fusion tool kits, and provides all the tools necessary for a successful geothermal heat pump installation. Geo-Flo's socket fusion tools, designed for fusing polyethylene piping and fittings, offer reliability, compact design and temperature control for success in the heat fusion process. Features include a precision machined heater body, well-insulated handle, temperature adjustment and thermometer.



| FUSION TOOL KITS | | | |
|------------------|----------|--|-----|
| Fusion tool kit | TFK35 | 3/4" and 1-1/4" Includes: Complete fusion tool set (3/4" and 1-1/4") Heating tool with bag, socket faces, cold rings, chamfer tools, tool box, 1-1/4" ratchet cutter, digital thermometer, thermocouple | KIT |
| | TFK45 | 1" and 1-1/4" Includes: Complete fusion tool set (1" and 1-1/4") Heating tool w/ cover, socket faces, cold rings, chamfer tool, tool box, 1-1/4" ratchet cutter, digital thermometer, thermocouple | KIT |
| | TFK358 | 3/4", 1-1/4", and 2" Complete fusion tool set (3/4", 1-1/4", and 2") Heating tool with bag, socket faces, cold rings, chamfer tools, tool box, up to 2" ratchet cutter, digital thermometer, thermocouple | KIT |
| | TFK345 | 3/4", 1", and 1-1/4" Includes: Complete fusion tool set (3/4", 1", and 1-1/4") Heating tool with bag, socket faces, cold rings, chamfer tools, tool box, 1-1/4" ratchet cutter, digital thermometer, thermocouple | KIT |
| | TFK34568 | 3/4", 1", 1-1/4", 1-1/2" and 2" Includes: Complete fusion tool set (3/4", 1", 1-1/4", 1-1/2" and 2") Heating tool with bag, socket faces, cold rings, chamfer tools, tool box, up to 2" ratchet cutter, digital thermometer, thermocouple | KIT |

| FUSION TOOLS | | | |
|-------------------------------------|--------|---|------|
| Fusion Heater Tools/ Accessories | TFH1 | Heat Fusion Tool- single face | EACH |
| | TFH1-R | Heat Fusion Tool- single face, Reconditioned | EACH |
| | TFH2 | Heat Fusion Tool- double face | EACH |
| | TFH2-R | Heat Fusion Tool- double face, Reconditioned | EACH |
| | TFHB | Fusion tool heater bag | EACH |
| | TFT | Fusion Timer | EACH |
| | TMB | Fusion tool mounting bracket | EACH |
| | TFHK-H | Fusion Iron Tool- double handle | EACH |
| | 5206 | Digital Thermometer, thermocouple, dual channel | EACH |
| | 5208 | Thermocouple, Type K, flat probe | EACH |
| | TTDT1 | Digital thermometer and Thermocouple- Kit | EACH |
| Fusion Rebuild Kit | TFHK-1 | Heat fusion tool kit - Rebuild single face | EACH |
| | TFHK-2 | Heat fusion tool kit - Rebuild double face | EACH |
| | 5090 | Thermometer, PT50, 150-750F | EACH |
| Socket Faces | TSF3 | 3/4" IPS | SET |
| | TSF4 | 1" IPS | SET |
| | TSF5 | 1-1/4" IPS | SET |
| | TSF6 | 1-1/2" IPS | SET |
| | TSF8 | 2" IPS | SET |
| Cold Ring Vice Grip Clamp | TCR3 | 3/4" IPS | EACH |
| | TCR4 | 1" IPS | EACH |
| | TCR5 | 1-1/4" IPS | EACH |
| | TCR6 | 1-1/2" IPS | EACH |
| | TCR8 | 2" IPS | EACH |
| Chamfer Tool | TCG3 | 3/4" IPS | EACH |
| | TCG4 | 1" IPS | EACH |
| | TCG5 | 1-1/4" IPS | EACH |
| | TCG6 | 1-1/2" IPS | EACH |
| | TCG8 | 2" IPS | EACH |
| Replacement Blades | TCGB | Replacement blade for all depth gauge/chamfer tools | EACH |
| Pipe Cutters | TPC4 | PE, PEX, & rubber hose cutter - up to 1" | EACH |
| | TPC5 | PE ratchet cutter, up to 1-1/4" | EACH |
| | TPC8 | PE ratchet cutter, up to 2" | EACH |



Miscellaneous

| MISCELLANEOUS | |
|-----------------------|---------------------------------------|
| POND LOOP SPACED COIL | |
| 3647 | Pond loop spaced coil, 3/4" PE X 300' |

Spaced coils are designed to enhance convective flow through the coil via factory-installed spacers. The assembly is bound with nylon ties, and strapped to pallet for shipping. These coils are typically 0.5 to 1 ton [1.76 to 3.52 kW] of heat rejection/heat absorption capacity per coil (must be verified with Pond Coil Calculator at www.geo-flo.com).



| EQUIPMENT PADS- high density rubber equipment pads | |
|--|--|
| 4055 | 24" x 36", boxed- individual |
| 4056 | 28" x 36", boxed- individual |
| 4027 | 24" x 36", bulk- 30 piece minimum/multiples-pallet |
| 4028 | 28" x 36", bulk- 30 piece minimum/multiples-pallet |

Geo-Flo's geothermal equipment pads are made of high density SBR recycled rubber, which provides a high degree of vibration and sound absorption for compressor-bearing units installed indoors.

Equipment Pad Features:

- Absorbs low frequency sound/vibration (particularly suited for compressors)
- Environmentally friendly recycled material (SBR bonded black recycled rubber)
- High density (60 lbs/cu. ft.)
- Anti-skid texture
- Non-porous, both sides
- Rated for packaged unit weight (very little compression)



Geothermal System Design Calculators are available free of charge on the website at www.geo-flo.com. This comprehensive suite of calculators provides geothermal and hydronic design tools, concentrating on the hydronic portions of the system. From pressure drop calculation to pump sizing to flushing requirements, the design suite is just the starting point for services continually being developed. Calculators available on the website are as follows:

Geo-Flo Calculators

| | | | | |
|-----|---------------------------|-------------------------|---------------------|---------------------|
| ALL | PRESSURE DROP CALCULATORS | PUMP SIZING CALCULATORS | SERVICE CALCULATORS | GENERAL CALCULATORS |
|-----|---------------------------|-------------------------|---------------------|---------------------|

| PRESSURE DROP CALCULATORS | | | |
|-----------------------------|----------------------------|---------------------------|---------------------------------|
| SINGLE UNIT | TWO UNIT (NPD) FLOW CENTER | SINGLE UNIT INSIDE HEADER | TWO UNITS ONE FLOW CENTER |
| MULTI-UNIT, CENTRAL PUMPING | MULTI-UNIT NPM FLOW CENTER | PIPE SEGMENT | MULTI-UNIT, DISTRIBUTED PUMPING |
| LOAD SIDE CALCULATOR | RADIANT FLOOR CALCULATOR | | |

| PUMP SIZING CALCULATORS | |
|-------------------------|--------------------|
| PUMP SIZING CALCULATOR | PUMP SIZING MAGNA3 |

| SERVICE CALCULATORS | | | |
|-------------------------|-----------------------|--------------------------------|-----------------------|
| CV CALCULATOR | FLUSH CART CALCULATOR | HEAT PUMP FLOW RATE CALCULATOR | HE-HR CALCULATOR |
| FLOW RATE-PRESSURE DROP | REYNOLDS NUMBER | ANTIFREEZE ADDITION CALCULATOR | ANTIFREEZE CALCULATOR |

| GENERAL CALCULATORS | | | |
|------------------------|---------------------------|--------------------------------------|----------------------|
| BUFFER TANK CALCULATOR | EXPANSION TANK SIZING-GEO | EXPANSION TANK SIZING-RADIANT SYSTEM | POND COIL CALCULATOR |

GEO-FLO CORPORATION WARRANTY STATEMENT

Geo-Flo Corporation produces flow centers for many O.E.M. customers (geothermal heat pump manufacturers), as well as for HVAC distributors and commercial representatives. Warranties vary by O.E.M., and are not stated in this document. For warranty coverage and details, owners should contact their installing contractor. Contractors should contact their HVAC distributor, commercial representative, or heat pump manufacturer for warranty information.

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www.geo-flo.com

2024 Catalog

Doc # N/A 2024 Catalog
REV.0/8JAN2024

Geo-Flo Corporation
905 Williams Park Drive
Bedford, Indiana 47421, U.S.A.

| | |
|---------------------|---------------------|
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| Toll Free: | 800-784-8069 |
| Fax: | 888-477-8829 |

Geo-Flo Corporation is continually working to improve its products. As a result, the design and specifications of products in this catalog may change without notice and may not be as described herein. For the most up-to-date information, please visit our website, or contact our Customer Service department. Statements and other information contained in this document are not express warranties and do not form the basis of any bargain between the parties, but are merely Geo-Flo's opinion or commendation of its products.

REV.0/8JAN2024

Updates Table

| Date | Description of Changes | Pages |
|--|---|----------------------------|
| MAR2024 | Updated photo for PN 3565 | 43 |
| | Replaced PN 4514 with 5185 on the table, & 3918 pic with 5185 | 32 |
| | Removed (OBSOLETE) PN 3920, added 4500 to the table and pic | 33 |
| | Updated pic and added PN FLC32S/FLC42S | 34 |
| | Updated pics for PNs 3760 & 3807 | 37 |
| | Updated pic for PN ASL-04B-04FP04FP | 39 |
| | Updated pic for PN 4579 | 40 |
| | Updated Geothermal Trim Kits (GTKs) Nomenclature | 41 |
| | Added individual PNs to Flushing and Service Kits | 44 |
| | Updated photo for the Fusion Tool Kits, added to the tablePN TFK45 | 46 |
| | Added Fusion Rebuild Kit to the table PNs TFHK-1, TFHK-2, TFHK, TFK-TB, TFT, TFHK-H, 5090 & pics of PNs TFHK-2, 5090, TFKTB on the side | 47 |
| | FEB2024 | Changed to 2024 cover page |
| Removed PN FL2N | | 2 |
| Added PNs NPB1C & NPB2C | | 4 |
| Update NMP Nomenclature | | 9 |
| Added on FLP1L-FLE & FLP1L-FLK table and photos, Removed PN 1317 (OBSOLETE) replaced with FLP2A | | 12 |
| Moved page title from the left to the right of the page | | 13 |
| Moved page title from the right to the left of the page | | 14 |
| Corrected second PN from M3H065-120AC to M3H065-120BC | | 16 |
| Removed PN 8951 from pic, added PN 9452 & discription to table | | 18 |
| Added individual PNs to kit contents items, added connectionto text | | 19-22 |
| Corrected hose size from 10ft to 12ft for PN 1181 | | 19 |
| On PN 1281, added brass plug with Flo-Link x 1" HB w/PT port for PN 3385, added photos for PNs 1280 & 1281 | | 21 |
| Corrected hose from 1-1/4" to 2" for PN 3477, corrected elbow count from 1 to 2 and hose clamps from 8 to 10 for PN 3478 | | 22 |
| Updated the HAR Hose Assembly Rubber nomenclature, added PNs HAR4-05-04LT06WX & HAR4-05-04WL06WXto the table | | 23 |
| Added PNs 3433 & 4143-HALF to the table, & 3433 photo | | 24 |
| Added PN 3771 to table | | 26 |
| Removed from table (OBSOLETE) PN 3320 | | 27 |
| Removed from table and photos (OBSOLETE) PN 3450 & 3483 | | 28 |
| Corrected PN from PFAL33M to PFLA33M & PFAL33F to PFLA33F, Removed from table (OBSOLETE) PN PFTA4M32F & PFTA4M42F and replaced them with PFTA4MS32F & PFTA4MS42F, then added to the table PN PFTA4MS2F4, PFA64HB, PFA34M, PFLA34M, PFA54M & PFA66M | | 29 |
| Added PNs PFC64, PFC66, PFC86, PFL44-45, PFL54, PFL66, PFL66-45, PFP6 to the table | | 30 |

Updates Table Overflow (do not print this page)

| | | |
|-----------------|--|-----------|
| FEB2024 | Added PNs PFT664, PFT666, PFT853, PFT854, PFT864, PFT883, Moved Fusion Caps table and photo to page 30, Added 3721 photo | 31 |
| JAN2024 | Updated all dates and REV from 2023 to 2024 | Various |
| Oct2023 | Corrected description of the 1297 from UP26-99 to UP26-116. | 2 |
| SEPT2023 | Updated images of the 3766, 3698, 3697 | 37 |
| | Flipped descriptions between PN 3726 & 4323 | 26 |
| FEB2023 | Added hose kit PNs 1280, 1281, 1337, 3477CV, 3477-MPT | 21,22 |
| | Added valve PNs 4144, 4580, BV4-4H4H-SS, BV5-5H5H-SS, BV4-PF-4B4B-SS, BV5-PF-5B5B-SS, BV4-PF-4S4S-SS, BV5-PF-5S5S-SS | 32,33 |
| | Added Flow Center PNs FL1N, FL2L, FLP1A-DBC, FLP1L, FLP2M, FLP2A, FLP2A-4V, FLP2C-4V, FP1B, FPP1U-115-4V, NPD4LL | 12 |
| | Added Magna3 Flow Center High Head Option PNs | 14,16 |
| | Added Wilo Stratus Pumps PN (9462-9469) | 18 |
| | Added Flush Cart PNs 4786, 4967, 4970 | 45 |
| | Added fusion fittings- PFA31F, PFC65, PFV55 | Various |
| | Added misc. PNs 4008, 3817, 4730, 4772, 5005 | Various |
| | Updated Flush Cart to black | 45 |
| | Updated fusion product pictures | 46,47 |
| | Updated catalog cover | Cover |
| FEB2021 | Added PN 4841 Controller, Ecm, 0-10 Vdc To Pwm, W/ Enclosure | 37 |
| | Added PN 4848 Valve, 1/4" MPT X 1/4" FPT, Brass | 32 |
| | Added NP Basic line | 4 |
| | Added PNs TFK345 AND TFK34568 | 46 |
| | Added PNs 9102-3F and 9102-4F | 12 |
| | Added Magna3 Variable Speed Low Centers | 1+ |
| | Changed layout | Various |
| | Updated cover design | Cover |
| JUL2020 | Obsoleted PNs 9104-3/4F; Replaced with 9102-3/4F | 15 |
| MAY2020 | Updated NPM graphics | 7 |
| | Updated NPM nomenclature | 8 |
| MAR/ APR2020 | Added PNs VMT3F-CL and VMT4F-CL | 31 |
| | Updated descriptions of fittings w/ 1/4" PT plug or w/1/4" FPT ports | 21, 23-25 |
| | Corrected descriptions of PNs NP2M/NP2P | 6 |
| 14FEB2020 | Added PNs PFEAB54M, PFTA854M, FLP1L-4V-CV | Various |
| | Replaced CAD graphics | Various |
| | Corrected descriptions for PNs 3318 and 3320 | 22 |

Updates Table Overflow (do not print this page)

| | | |
|-----------|--|----------|
| 16JAN2020 | Updated catalog to reflect UPMXL/Magna Geo switch over | Various |
| | Added Assembled Hose Kit line to catalog | 19-20 |
| | Updated Buffer Tanks and Hydro Connect Controls | 32-33 |
| | Added Air Separator line to catalog | 36 |
| | Added Geothermal Trim Kit line to catalog | 38-39 |
| | Total catalog update (formatting) | All |
| 14JAN2019 | Removed PICCV valves from catalog | 41 |
| | Added hose kit 1263 | 46 |
| | Updated hose clamp description to stainless steel | 45,46,47 |
| | Removed part numbers 9451-3F and 9451-4F from catalog | 63 |
| | Updated various product pictures | Various |
| | Removed M3D065-150 BF-HL from catalog | 38,39 |
| | Added note for horizontal flow (use pn 4596) | 38,39 |
| | Updated "flo-link" to "FL"-added note to reflect | 48,50,51 |
| | Added note indicating XL FL Fittings are not included | 59 |
| | Updated Belimo Zone Valve pictures | 41 |
| | Removed "NEW" from parts no longer considered "new" | Various |
| | Changed "triton style" to "electrofusion style" | 48 |
| | Updated Controller kits with new flow sensor | 8 |
| | Updated product pictures | Various |
| | Formatting changes, new color scheme, new cover | Various |
| | Updated index to reflect above changes | 73-78 |

Updates Table Overflow (do not print this page)

| | | |
|--|--|---------|
| 14NOV2017 | Formatting changes, new valves section, product updates | Various |
| | Misc. corrections to typos, part # updates | Various |
| | Add Magna GEO options to NP Multi with circulators | 21,23 |
| | Reformatted Magna3 section, added drawings & accessories | 37 |
| | Added 3" & 4" flushing assemblies | 40 |
| | Added commercial accessories (expansion tanks, air separators, etc.) | 44 |
| | Updated Flo-Link x Flo-Link hose kit part #; added hose kit w/check vlv | 45 |
| | Updated 1/4" brass plug to hex drive (changed P/N from 3027 to 3711) | 51 |
| | Added 1" MPT x 1-1/4" swivel adapter set | 51 |
| | Updated picture of 2146 1" MPT x 1" hose barb | 52 |
| | Added 3/4" thread x hose barb adapter and elbow | 51,52 |
| | Added 1-1/4" and 2" union fusion ball valves | 52 |
| | Added pump mounting brackets for UP/UPS 15 & 26 pumps | 53 |
| | Added 1-1/4" FPT flange set | 53 |
| | Added HDPE tee, 2" fusion x 2" fusion x 1" MPT (MPT is on tee side) | 55 |
| | Added fusion x thread elbows | 55 |
| | Added SuperBrute insulated pump | 59,62 |
| | Added bracketed pumps for heating only systems | 63 |
| 30DEC2016 | Updated table for heat pump controls to reflect NP series product updates (addition of NP Plus and NPV Plus Kit) | 8 |
| | Added NP Plus flow centers | 13,14 |
| | Removed 1326 and 1327 NPV Kits (replaced by NPV Plus Kits) | 14 |
| | Added 1285CV (insulated pump w/built-in check valve) | 39 |
| | Pricing updates on Belimo valves | 39 |
| | Added 4" flange x HPDE fusion adapter and backup ring | 43 |
| | Corrected P/N of Flo-Link x Flo-Link hose kit (changed to 3278) | |
| | Discontinued NP hose kit, p/N 3829 (replaced by NP Plus and standard hose kit) | 46 |
| | Added hose kits 1346 & 1347 for NP Plus | 46 |
| | Added 4066 Flo-Link x 1" FPT isolation valve set with check valve | 47 |
| | Added 3769 Flo-Link x 1-1/4" hose barb w/fitting for P/T port | 47 |
| | Added 4243 Dual unit connection kit for Flo-Link XL flow centers | 50 |
| | Added 5254, Butt fusion coupling, 4" x 3" IPS | 52 |
| | Added PFA32F, fusion adapter, 3/4" socket fusion x 1/2" FPT | 53 |
| | Pricing updates on pond coils | 53 |
| Updated picture of 3514 valve box | 54 | |
| Updated picture of flush cart hoses | 61 | |
| Added Magna GEO inverse profile replacement pump | 65 | |

Updates Table Overflow (do not print this page)

| | | |
|--|---|----------|
| 08JUN2016 | Updated NP Multi options to include two circuit version | 18-22 |
| | Updated header picture for NP Multi with 2 pumps in series | 19 |
| | Added Magna3 High Head Options (M3H) | 36,37 |
| | Part # of 10k thermistor changed from 3684 to 3986 | 37 |
| | Updated picture of 1284 insulated pump | 38,55,58 |
| | Added new hose kit, P/N 3279 (Flo-Link dbl O-ring @ heat pump) | 43 |
| | Moved additional hose lengths/rolls from page 49 to page 45 | 45,49 |
| | Added Flo-Link x 1" FPT adapter set with check valve (P/N 4143) | 46 |
| | Moved dual unit connection kit from page 53 to page 49. | 49,53 |
| | Moved swivel x MPT connectors from page 53 to page 49. | |
| | Added 1-1/4" fusion x 3/4" MPT adapter (P/N PFA53M) | 52 |
| | Added Magna3 replacement pumps | 65 |
| | Updated Calculators information to include new additions | 67 |
| | Updated index to reflect above changes | 70 |
| 30DEC2015 | Updated "about Geo-Flo" | 4 |
| | Added NP Multi Series flow centers | 18 |
| | Added Dual Head Magna3 pump curves | 29 |
| | Added 1/4", 1/2", 1", and 1-1/4" ball valves | 42 |
| | Updated picture of Flo-Link XL to 1" CAM adapter to latest picture | 48 |
| | Updated picture of 1" MPT x 1-1/4" barb to latest picture | 50 |
| | Added 1-1/4" MPT x 1-1/4" barb and 2" MPT x 2" barb adapters | 50 |
| | Added 2 to 20 gpm flow meter | 50,61 |
| | Updated picture of flow regulator to latest picture | 50 |
| | Updated part number of insulated pump from 1338 to 1286CV | 59 |
| | Updated flush cart features (added feature allows loop pressure drop measurement) | 60 |
| | Added Geo Service Kit and Geo Service/Flush Kit to Tools section | 61 |
| | Added Geo-Booster replacement pump and power supply | 64 |
| | Updated Calculators information to include new additions | 66 |
| Updated index to reflect above changes | 69 | |

Updates Table Overflow (do not print this page)

| | | |
|--|---|-------------|
| 26JUN2015 | Updated Geo-Booster picture with new black cabinet | 6,11 |
| | Added compatibility chart/info. for variable speed flow centers | 8 |
| | Added inverse profile variable speed flow centers | 8,10,14,17 |
| | Moved Magna GEO flow center var. spd. controllers to one page | 8,10,14,17 |
| | Added NP Dual variable speed flow centers | 17 |
| | Updated Magna3 pictures | 31 |
| | Added external controller for Delta-T for primary-secondary applic. | 32 |
| | Added dongle for iPhone/Android for use with Grundfos GO | 32 |
| | Updated Belimo valve offering | 33 |
| | Updated pictures of various items | 37,41,47,48 |
| | Added 1/4" brass plug | 44 |
| | Added equipment mounting pads | 49 |
| | Added Hydro-Connect Integrated buffer tank and accessories | 51-54 |
| | Updated bronze replacement pump to stainless steel | 59 |
| | Updated Design Calculators with new information | 61 |
| | Added index | 64 |
| 30DEC2014 | Updated 115V UP26-99 (sngl spd) pumps to UPS26-99 (3-spd) | Various |
| | Added note about transition to black cabinet for Geo-Booster | 6, 10 |
| | Added NPV Kits | 12 |
| | Added pump curves for NPD series flow centers | 19 |
| | Added commercial application section | 25 |
| | Added Grundfos Magna3 part numbers/model nomenclature | 29 |
| | Added insulated pumps/zone valves to commercial section | 31 |
| | Added GHS series hydraulic separators | 32 |
| | Added commercial fittings/adapters to commercial section | 35 |
| | Added Flo-Link x 1-1/4" pipe (use with Triton style fittings) | 39 |
| | Added Flo-Link x 1" fusion elbow w/PT tap | |
| | Part # change from 3390 to 3929 (1" MPT x 1" hose barb w/PT ftg) | 42 |
| | Added 3" x 2" butt fusion coupling | 44 |
| | Added 2" fusion ball valve and 2" fusion x 2" FPT adapter | 45 |
| | Added 1-1/4" compression fittings | 46 |
| | Added dual unit connection kit for Flo-Link flow centers | |
| | Added pressure gauge with 2" dial | 49 |
| | Added gauge adapter with 1/16" diam. needle | |
| | Added UPS26-99 3-speed 115V replacement pump | 52 |
| | Added UP26-116SF (stainless steel volute) replacement pump | |
| Updated Design Calculators to include new commercial Calculators | 54 | |

Updates Table Overflow (do not print this page)

| | | |
|--|---|-----------|
| 03APR2014 | Updated 230V UP26-99 (sngl spd) pumps to UPS26-99 (3-spd) | Various |
| | Updated insulated pumps to black cabinets | 7, 10, 36 |
| | Flow center P/Ns 1294 through 1299 now include a set of 1-1/4" PE fusion by Flo-Link adapters. | 9 |
| | New lower price for Geo-Booster (P/N 3551) | 10, 23 |
| | Added NP series with bronze volute option (1 & 2 pump versions) | 12 |
| | Added Flo-Link x 1-1/4" FPT adapter set (P/N 3885) | 28 |
| | Added Flo-Link x 1-1/4" isolation valve set (P/N 3875) | 28 |
| | Changed 1" hose roll (P/N 2139) from 400 ft. to 450 ft. roll (price per foot did not change) | 31 |
| | Added Taco Geo Sentry motorized ball valves | 32 |
| | Added PFA34HB (3/4" socket fusion x 1" hose barb) | 34 |
| | Added isolation valve set and flange set pictures | 42 |
| 27DEC2013 | Misc. formatting changes, typo fixes, minor updates | Various |
| | Added Flo-Link Service Kits | 29 |
| | Added 1-1/4" fitting sets (P/N 3660 & 3556) | 31 |
| | Updated flush cart replacement filter description | 37 |
| | Added warranty statement | 45 |
| 15OCT2013 | Added important note about white to black cabinet changeover and UP26-99 single speed to UPS26-99 3-speed pump changeover | 1 |
| | Updated "About Geo-Flo" time line | 4 |
| | Updated pressurized flow centers to black cabinet | 5-9 |
| | Updated Geo-Prime tank to black cabinet | 7, 10 |
| | Added panel mount variable speed flow center | 8 |
| | P/Ns 1027, 1028, 1229, and 1230 changed from single speed to 3-speed pump (UPS26-99) | 9 |
| | P/Ns 1000, 1001, 1023, and 1252 changed from single speed to 3-speed pump (UPS26-99) | 10 |
| | Added NP series dual circuit flow center | 13 |
| | Added Grundfos Magna3 Performance curves | 19 |
| | Added info. about new Magna3 insulated pumps | 24 |
| | Corrected typo in gray headers (FPT-->MPT) | 25, 26 |
| | Added 1-1/4" wye strainer | 31 |
| | Added FPT version of motorized solenoid valve | |
| | Removed grout as a Geo-Flo product offering | 34 |
| | P/Ns 1037, 1038, 1045, 1046 changed from single speed to 3-speed pump (UPS26-99) | 35 |
| Added info. on ETL listing for flush cart | 36 | |
| Corrected typo for UPS26-99 replacement pump part number | 40 | |
| Added blank-off plates (for converting from 2 to 1 pump flow cntr) | 41 | |

Updates Table Overflow (do not print this page)

| Date | Description of Changes | Pages |
|---|--|---------|
| 08JUL2013 | Added note about transition to black cabinets | Various |
| | Added product pictures | 8, 9 |
| | Added 50Hz NP series flow centers | 11 |
| | Added Wilo Stratos 2 x 3-35 commercial flow center | 19 |
| | Added insulating boot set | 23 |
| | Added NP series hose kit | |
| | Added Flo-Link x 40mm PE pipe adapter set | 24 |
| | Added Flo-Link XL isolation valve sets | 25 |
| | Added new 1-1/4" PVC glue x 1" hose barb set | 27 |
| | Corrected VFR part numbers | |
| | Updated isolation flange module pictures (new powder-coated rails) | 31 |
| | Added large insulated pumps for load-side of water-to-water units | |
| | Added one (1) micron filter to flush cart options | 32 |
| | Updated picture of item # 3727 | 33 |
| | Added new replacement pumps without volutes | 36 |
| | Added additional flange kits and flow center valve repair kits | 37 |
| Updated Calculator information to include new Calculators | 38 | |
| 11APR2013 | Discontinued digital flow meter tool | 10, 11 |
| | Added Wilo Stratos insulated pumps with isolation valves | 20 |
| | Added 2" valve box | |
| | Added connection kits without hose (listed with 1101 & 1181) | 21 |
| | Added Flo-Link x 1" FPT isolation valve set | 23 |
| | Added fusion adapter tee, 2" fusion x 2" fusion x 1/4" FPT | 28 |
| | Added fusion adapter, 1" socket fusion x 1" MPT | |
| | Added pump enable relay (up to 5 units) | 29 |
| | Added Wilo external off interface module | |
| | Updated insulated pumps to include isolation valves | 30 |
| | Added Magna GEO insulated (var. spd.) pump with isolation valves | |
| | Corrected part number for water heater adapters | |
| | Added hose assembly with 1-1/2" loop side CAM fittings | 31 |
| | Added AC Magnetic Field Indicator tool | 32 |
| Added Wilo replacement pumps | 35 | |
| 30JAN2013 | Added hoses with 1-1/4" ball valves for flush cart | 31 |
| | Added gauge adapter for P/T plug | 32 |
| | Added 1" MPT x 1" CAM adapter | 32 |
| | Added replacement blade for chamfer tools | 33 |
| | Added UPS26-99 to replacement pump section | 35 |
| | Added flange sets | 35 |
| 14JAN2013 | First published | All |

