

FASTBATCH Multijet ADD ON **FASTBATCH** DI

MANUAL


INTRODUCTION


Complimenting the Dura Products FastBatch™ lineup, we are pleased to offer the MultiJet ADD ON and DI. This solution is designed to elevate your chemical transfer operations with unmatched accuracy and efficiency. Streamline your chemical batching with simultaneous multi-injection, pinpoint accuracy and automated operation. The FastBatch family takes the guesswork out of measurement, ensuring precision and reducing mixing and filling times by up to 75% in every application. This system can be implemented in two ways, as the name indicates, as an add on of additional pumps and meters to an existing FastBatch MultiJet or as a stand-alone, advanced FastBatch™ DI tower.


SAFETY INFORMATION

In accordance with safety regulations and best practices for handling agricultural chemicals, all personnel must adhere to the following PPE requirements:

 **Eye Protection:** Wear safety goggles or face shields to protect against chemical splashes and irritants.

 **Skin Protection:** Long-sleeved clothing, gloves (chemical-resistant), and pants should be worn to minimize skin exposure. Ensure that gloves fit properly and are approved for the chemicals being used.

 **Respiratory Protection:** When handling or applying chemicals that may produce vapors or aerosols, use a respirator that is appropriate for the level of exposure, as specified on the chemical label or safety data sheet (SDS).

 **Foot Protection:** Wear waterproof boots that cover the ankles to protect feet from chemical exposure.

Additional Equipment: Depending on the specific agricultural chemical and application methods, additional PPE such as aprons or full-body suits may be necessary. Always refer to the product label for specific PPE recommendations.

It is essential for all personnel to receive training on the safe handling of agricultural chemicals and the proper use of PPE. Regular inspections of PPE for damage and proper maintenance are also required to ensure maximum protection.

For any questions or clarifications regarding PPE use and safety while handling agricultural chemicals, please consult the SDS for the specific chemical.

PRODUCT OVERVIEW

Features

The FastBatch™ MultiJet ADD ON and FastBatch™ DI come with everything you need to make fast and accurate chemical batches.

- Dura 1" Electric Valves
- Protective Meter Lid and Trickle Charge Solar Panel
- Auto-Batch™ Chemical Batch Meters
- Dry Poppet Calibration Connections

The system seamlessly integrates the high-quality products you’ve come to trust from Dura Products. Each meter, pump, and valve are a standard product and can be replaced with conventional dealer stock should the need arise.

Specifications

Technical specifications (dimensions, weight, power requirements, etc.).

Overall dimensions 31" x 42" x 57"

System weight 264 lbs

Power 12VDC nominal (11-14 VDC operating) by way of lead acid or AGM automotive battery.
*10A external charge rate is recommended to maintain optimum performance.

Part Numbering

ORDERING INFORMATION	
PRODUCT #	DESCRIPTION
DPFB-MULT2V2-12ADD	2" 12VDC 2-Input Fastbatch Multijet Add-On Viton®
DPFB-MULT2V4-12ADD	2" 12VDC 4-Input Fastbatch Multijet Add-On Viton®
DPFB-MULT3V2-12ADD	3" 12VDC 2-Input Fastbatch Multijet Add-On Viton®
DPFB-MULT3V4-12ADD	3" 12VDC 4-Input Fastbatch Multijet Add-On Viton®
DPFB-MULT2E2-12ADD	2" 12VDC 2-Input Fastbatch Multijet Add-On EPDM
DPFB-MULT2E4-12ADD	2" 12VDC 4-Input Fastbatch Multijet Add-On EPDM
DPFB-MULT3E2-12ADD	3" 12VDC 2-Input Fastbatch Multijet Add-On EPDM
DPFB-MULT3E4-12ADD	3" 12VDC 4-Input Fastbatch Multijet Add-On EPDM

ORDERING INFORMATION	
PRODUCT #	DESCRIPTION
DPAB-DI2V-12	2" FastBatch DI System 12V Viton® 4 Pump Viton®
DPAB-DI2E-12	2" FastBatch DI System 12V EPDM 4 Pump EPDM
DPAB-DI3V-12	3" FastBatch DI System 12V Viton® 4 Pump Viton®
DPAB-DI3E-12	3" FastBatch DI System 12V EPDM 4 Pump EPDM

INSTALLATION INSTRUCTIONS

What Is Needed to Begin

- FastBatch™ MultiJet Add-On Skid Assembly or FastBatch™ DI
- Transfer Pump (if not purchased with unit)
- 12V Automotive Battery (recommend 750 CCA), alternator or charging method also required
- If static installation is required, additional use of a battery charger is needed.
Dura recommends the NOCO®, GenPro 10X1 if not purchased with the system.
- Chemical Totes, any additional chemical jugs and/or powders
- Hose to make water supply connection, note, less restriction means faster loading

Site Requirements, Equipment Setup, Plumbing Connections - General

The FastBatch MultiJet Add On and FastBatch™ DI is designed to withstand the conditions seen in typical outdoor use. They do not require additional protection from the elements. Like any equipment, storage under cover, while not in use, will extend the longevity of system components as well as preserve the original appearance.

Choose a suitable location in your shop or on a tender trailer for your FastBatch Venturi. Ensure it is fastened securely, stable and accessible. The use of 3/8" lag screws or bolts is recommended. When pairing with a complete Multijet, the Add-On may be inline or after a 90 degree turn. Sweep fittings are recommended for this type of installation.

Considerations should be taken to keep the system as level as possible, as well as reducing movement and vibration during use and transport. Additionally, adequate space should be provided to work in and around the system, keeping hoses tidy and eliminating trip hazards when possible.

It is recommended that the main hose connections in and out of the system be double clamped for added security.

SETUP INSTRUCTIONS

Secure the FastBatch Add On or FastBatch DI

Choose a suitable location in your shop or on a tender trailer for your FastBatch Add On or FastBatch DI. Ensure it is fastened securely, stable and accessible. We have provided mounting screw holes in the frame (See Fig.1).

Connect the Battery

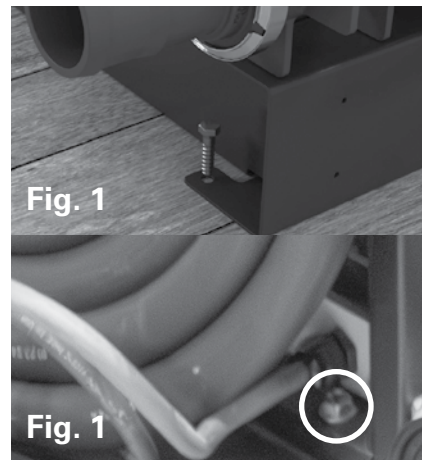
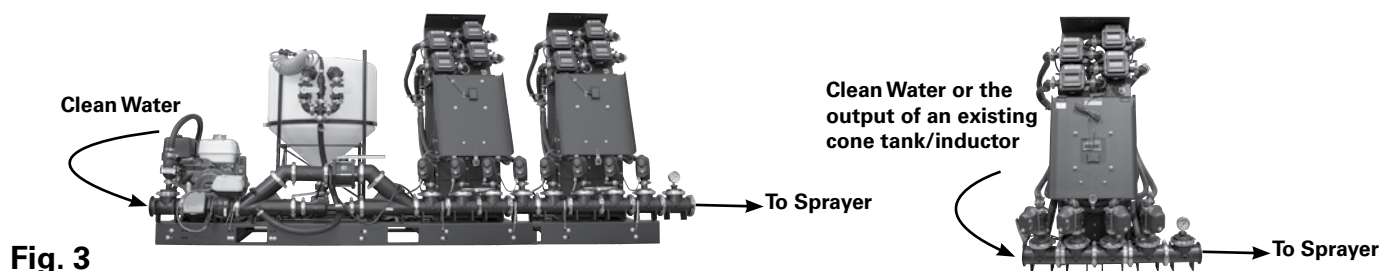
Place your 12V automotive battery in the tray provided (See Fig.2). Use the supplied alligator clips to connect the battery; Red to Positive, Black to Negative. Secure battery to tray.

Connect Chemical Totes

Connect your chemical totes to the injection system. Use the supplied 11' hoses with camlocks to connect at the tote's bottom valve. It's okay for the totes to be elevated above the system. The included Dura EV actuated valves will prevent leakage and eliminate the need for additional check valves. Ensure all chemical and water connections are secure. Verify that all clamps are snug and cam-locks are closed. Ensure chemical totes are vented by cracking the caps to avoid slowing injection.

Connect Water Supply

Make water connections at the end of the carrier manifold before the high flow meter (See Fig.3). This ensures the longest, trouble-free life for these components. Remember to keep plumbing as short and secure as possible, without tight turns or restrictions. Do not reduce 3" plumbing down to 2".



OPERATING INSTRUCTIONS

Calibrate Meters

Calibrate each of the Auto-Batch chemical meters with the associated chemicals intended to be mixed. ***Before starting the calibration process, make sure the 1" Dura electric valves are closed with the red indicator illuminated. Disconnect the associated Dura electric valve at its' Deutsch direct plug connection (See Fig. 4). This is imperative to prevent concentrated chemical from entering the injection manifold.***

For more information refer to the Dura Meter calibration guide and the meter calibration supplement at the end of this guide.

Set Batch Sizes

Configure each chemical amount per batch on the respective Auto-Batch Meters at the top of the pump and meter tower (See Fig.5).

Start Mixing

You are now ready to start making a hot load!



Open the induction bypass valve if equipped (See Fig. 6).

Start your carrier water batch with the 2" or 3" Auto-Batch High Flow Meter if equipped (see Fig. 7). The corresponding electric valve will open.

Open the water supply to the transfer pump. Make sure the pump housing fills. You may need to briefly open the outlet connection of the pump to achieve a complete prime.

Start your transfer pump.

Once full water flow is achieved, proceed to turn on the injection tower and start your chemical meter batches, largest volume first (See Fig.8).

Watch the injection manifold pressure. If above 12 PSI it can slow or even stop chemical injection. Transfer pump throttle reduction will reduce pressure (See Fig. 9). Additionally make sure all totes are vented to achieve full flow.

Induce liquid or powdered chemical at the induction cone tank if equipped.

The venturi will function best with the bypass valve throttled down or closed (See Fig.10). **Return the bypass to full open once induction is complete to expedite the balance of carrier water fill.**

Open the valve at the base of the tank and close the valve at the bottom of the chemical manifold (See Fig.11).

The jug rinse is on the left side of the cone tank (See Fig. 12). See Chemblade® user manual for safe operation and further details.

Be sure to run the swirl rinse on the right side of the cone tank after each chemical (See Fig. 13).

When the carrier batch is completed and closes the carrier valve, shut down your transfer pump. If no more batches will be made, close water and chemical tote valves.

Your hot load is now complete.

Additional Tips

Refer to detailed user manuals for troubleshooting and advanced settings.

Always follow safety guidelines when handling chemicals.

Chemical totes can be recirculated by running hose from the calibration dry poppet back into the top of the tote. Before turning on the pump, make sure the 1" Dura electric valves are closed, with the red indicator illuminated. Disconnect the associated Dura electric valve at its' Deutsch direct plug connection. This is imperative to prevent concentrated chemical from entering the injection manifold. See above image (Figure 3) for calibration as reference. Turn on the pump using manual control from the meter's menu. Be sure to adhere to the 30 minute max run-time.

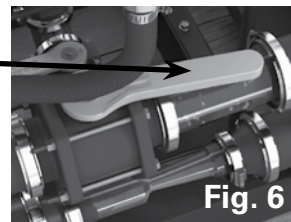


Fig. 6



Fig. 7



Fig. 8



Fig. 9

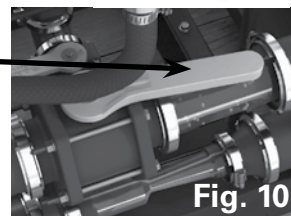


Fig. 10

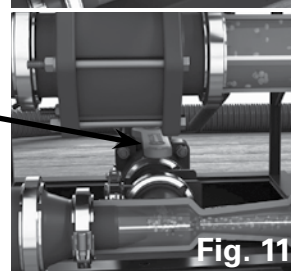


Fig. 11

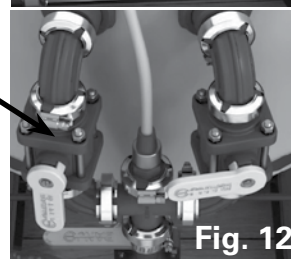


Fig. 12

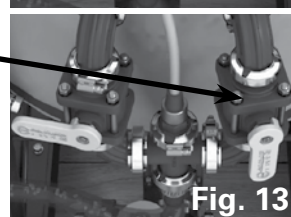


Fig. 13

MAINTENANCE

Routine Checks and Cleaning

Always be sure to rinse lines and system with clean water before extended storage or when changing chemicals.

At the end of each season be sure to winterize the system with RV antifreeze. Cycle each meter, pump, and valve to ensure a complete purge of water.

The FastBatch Add On and FastBatch DI are weatherproof systems that can be rinsed down with mild detergents or clean water. If a pressure washer is used, keep the nozzle at least 3 feet from all components to prevent damage.

WARRANTY

2-year comprehensive pump/meter warranty program, second to none in the industry.

- Warrants that all Dura Products equipment shall be free from defects in material and workmanship
- Equipment that falls under warranty period and parameters will be repaired or replaced and returned at no cost to the customer

RETURN GOODS AUTHORIZATION (RGA/MRGA)

- Call (317)984-4003 or email customerservice@duraproducts.com to request a Return Goods Authorization (RGA/MRGA) number
- Complete and sign RGA/MRGA form ensuring all contact details/return address are correct
- Follow shipping instructions per RGA/MRGA form
- SHIP TO: Dura Products
Warranty Department
504 Demoss Avenue
Arcadia, Indiana 46030

APPENDIX

Meter Calibration – Supplemental Information

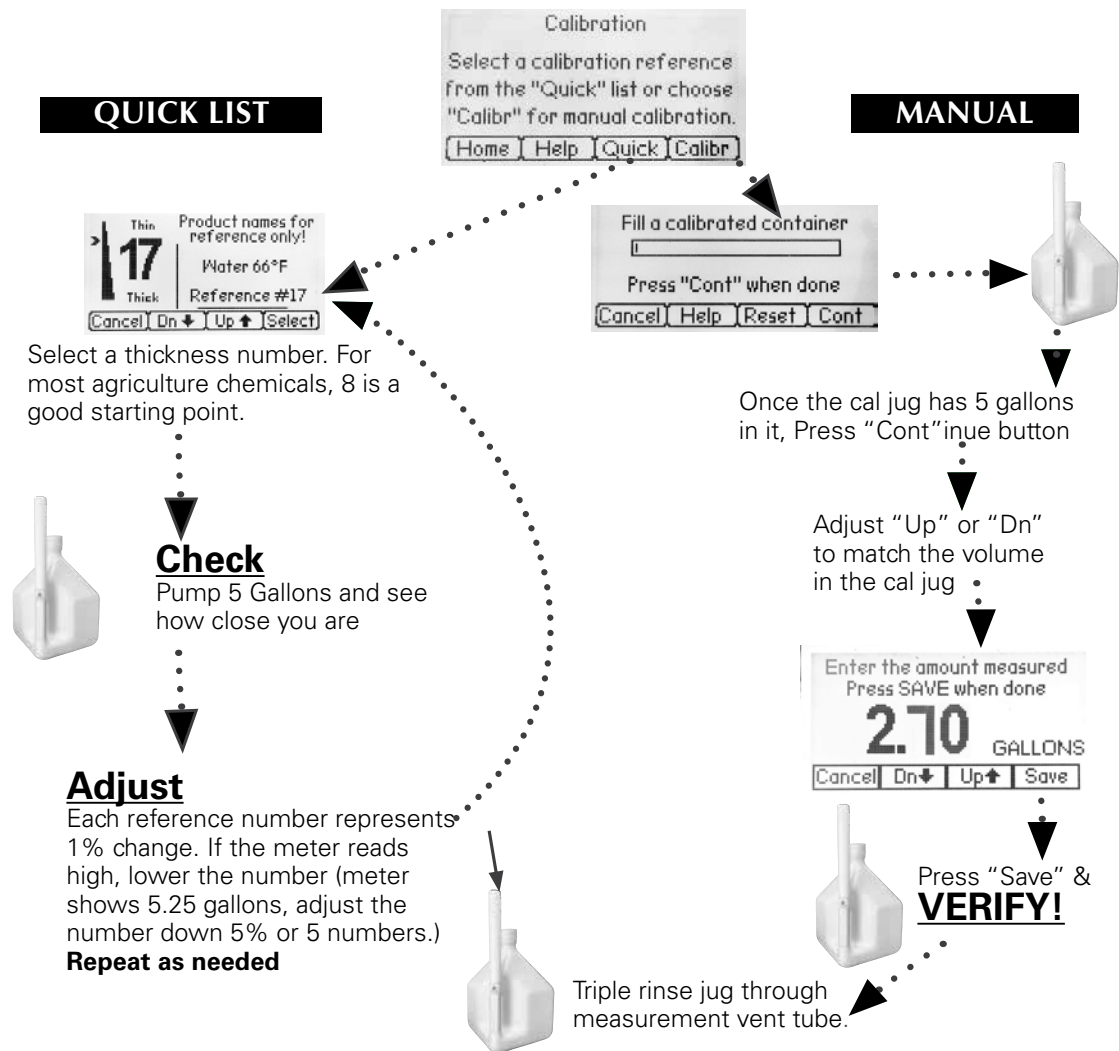
Meter calibration is critical for accurate fluid measurement. Variations in fluid characteristics, viscosity shift due to temperature changes, plumbing differences, and varying flowrates can affect the accuracy. An accurate measurement jug or scale is important to facilitate the verification and calibration process. The Dura Products calibration jug provides an accurate, economical calibration measure for water-based fluids in small volumes. For carrier water flow, fill a tote or other large container with at least 150 gallons, using weight to determine the amount measured. Your calibration will only be as accurate as your measuring method. Another factor in accurate calibration is system prime. Both the chemical and carrier meters will read air, as well as chemicals and water. Removing all the air from the system by priming before calibration will help ensure accuracy.

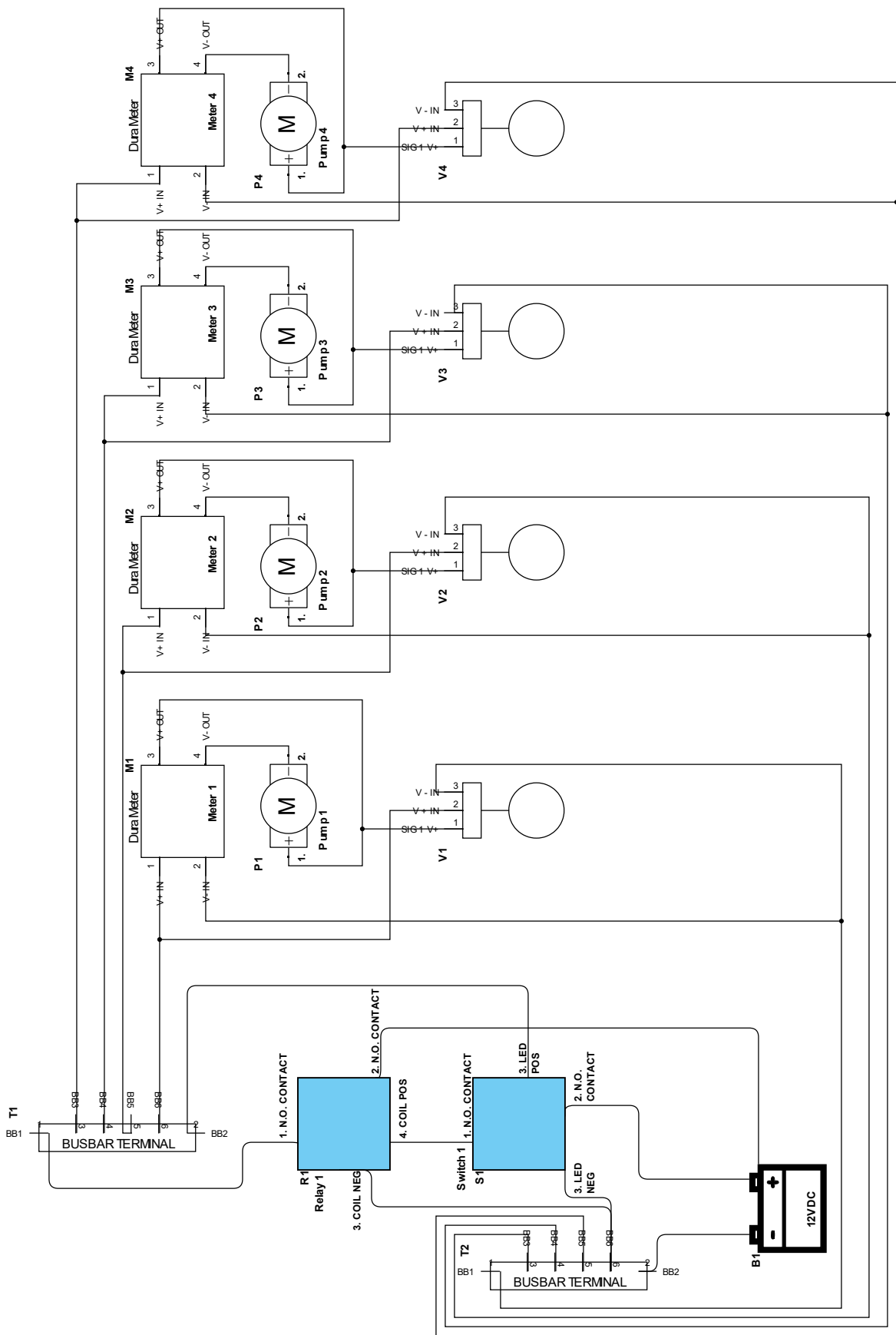
Before each use, make sure the container is clean, and with a calibration jug, that the scale-reading area is clear for best visibility of the fluid level. Place the container on a flat level surface. Recommended fill for a calibration jug is from the 3 to 5 gallon marker on the scale. Allow for any foaming action that may occur.

After filling the container with fluid to the desired mark, check the meter reading. The meter reading should match the dispensed units in the calibration container. If it does not, make adjustments per the instruction diagram below.

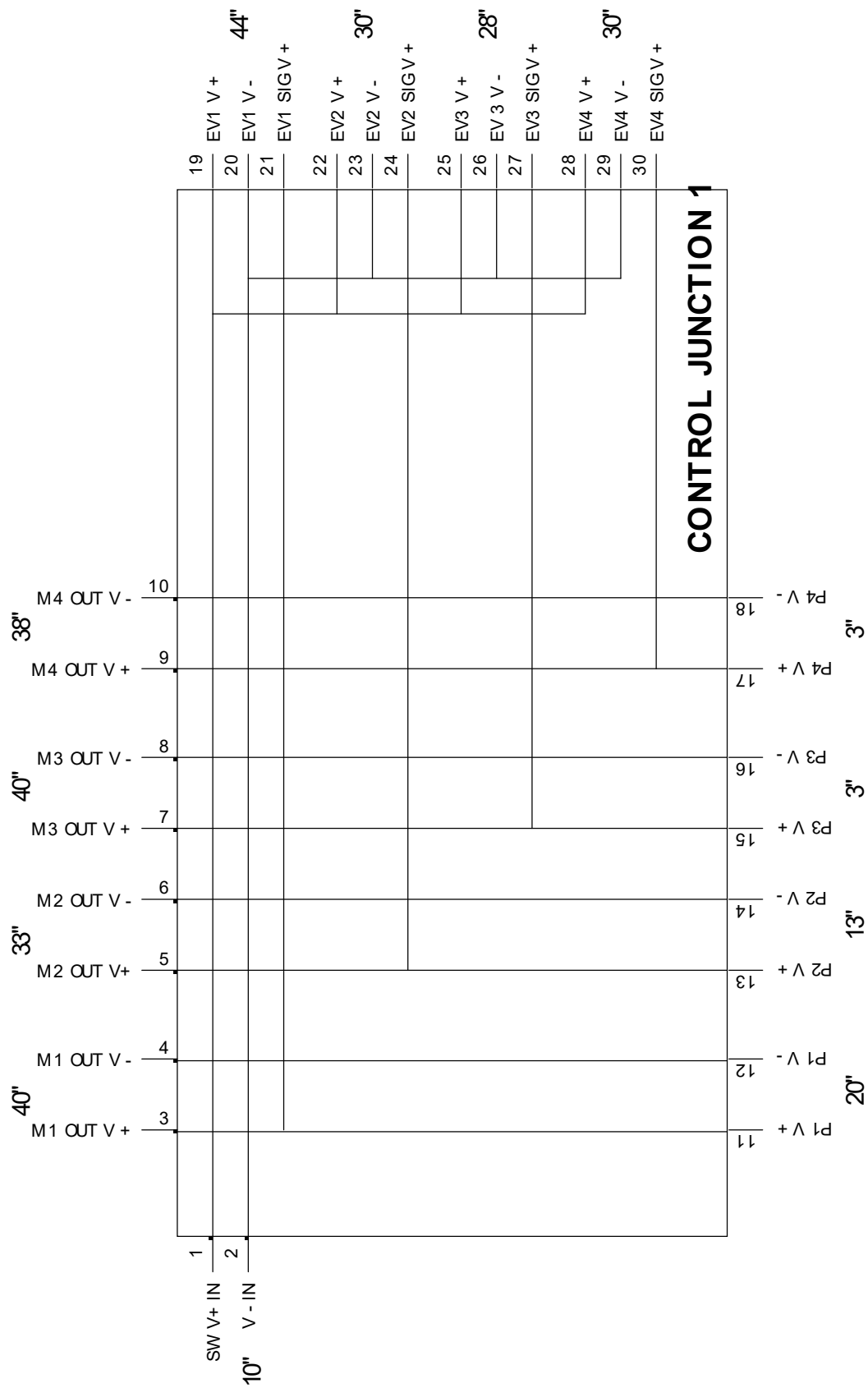
For the high flow meter, dispense no less than 150 gallons into a container, suitable to be weighed. Take the filled container weight, minus the empty weight in pounds, divide this by 8.34 (only applicable for water, 1 gallon of water ~ 8.34 pounds) to determine the number of gallons dispensed. Recalibrate the meter if the error margin between the meter reading and the container scale is not satisfactory.

See the diagram below for jug calibration of the 1" Dura chemical meter.

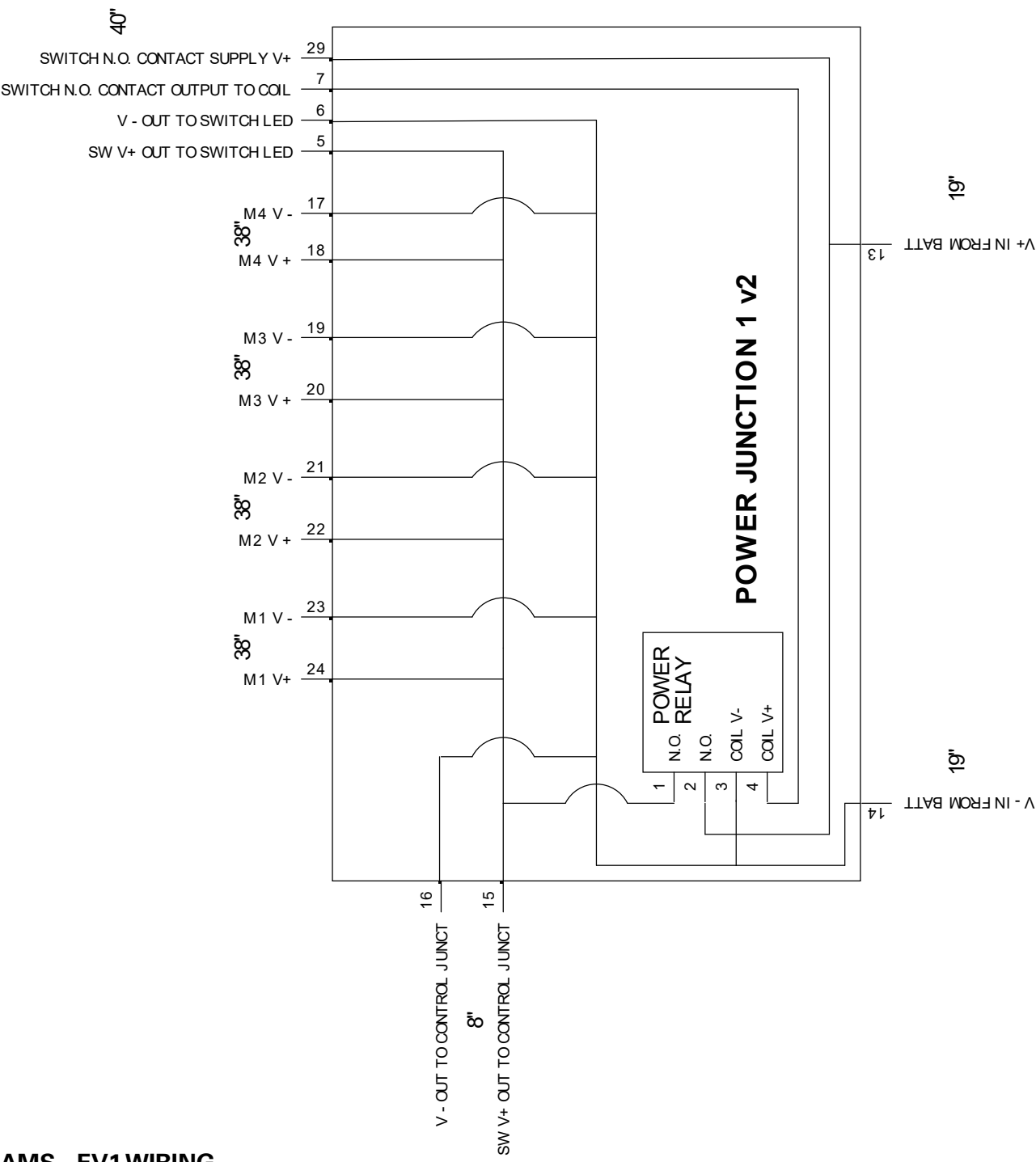




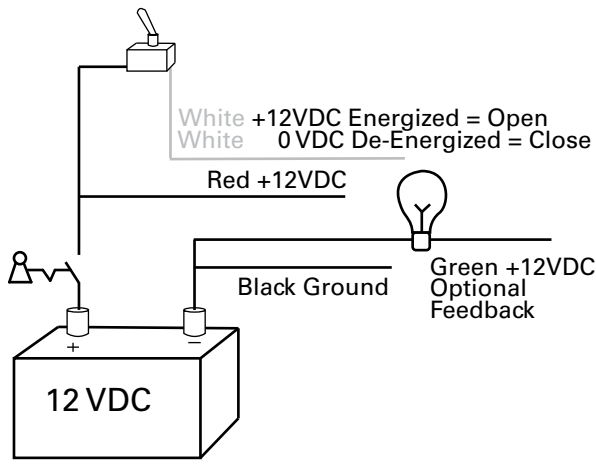
DIAGRAMS - CONTROL JUNCTION BOX SCHEMATIC



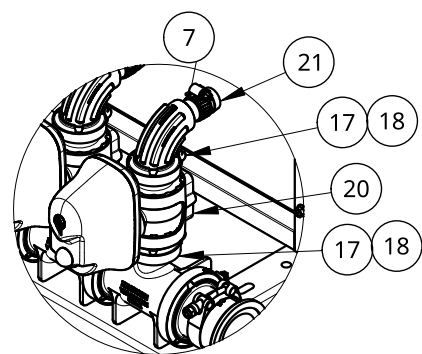
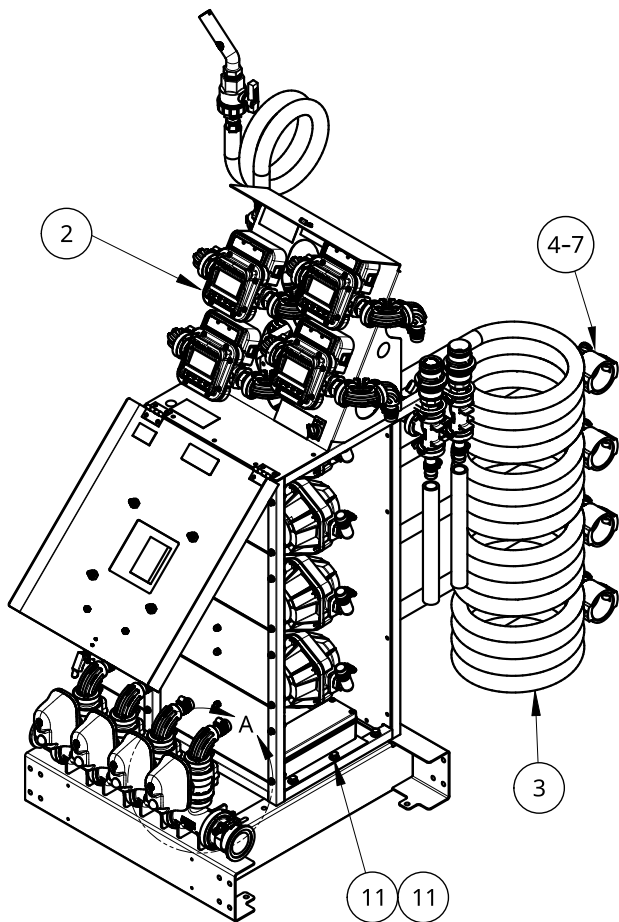
DIAGRAMS - POWER JUNCTION BOX SCHEMATIC



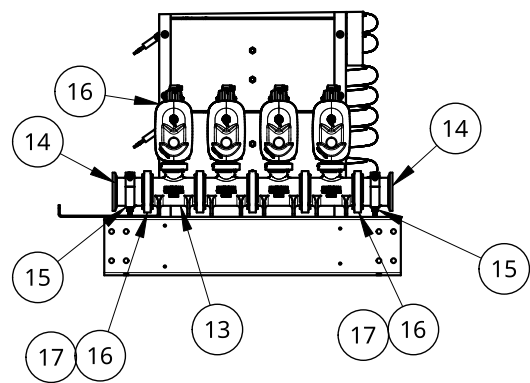
DIAGRAMS - EV1 WIRING



ASSEMBLY PRINTS - 2" FASTBATCH ADD-ON COMPLETE SYSTEM



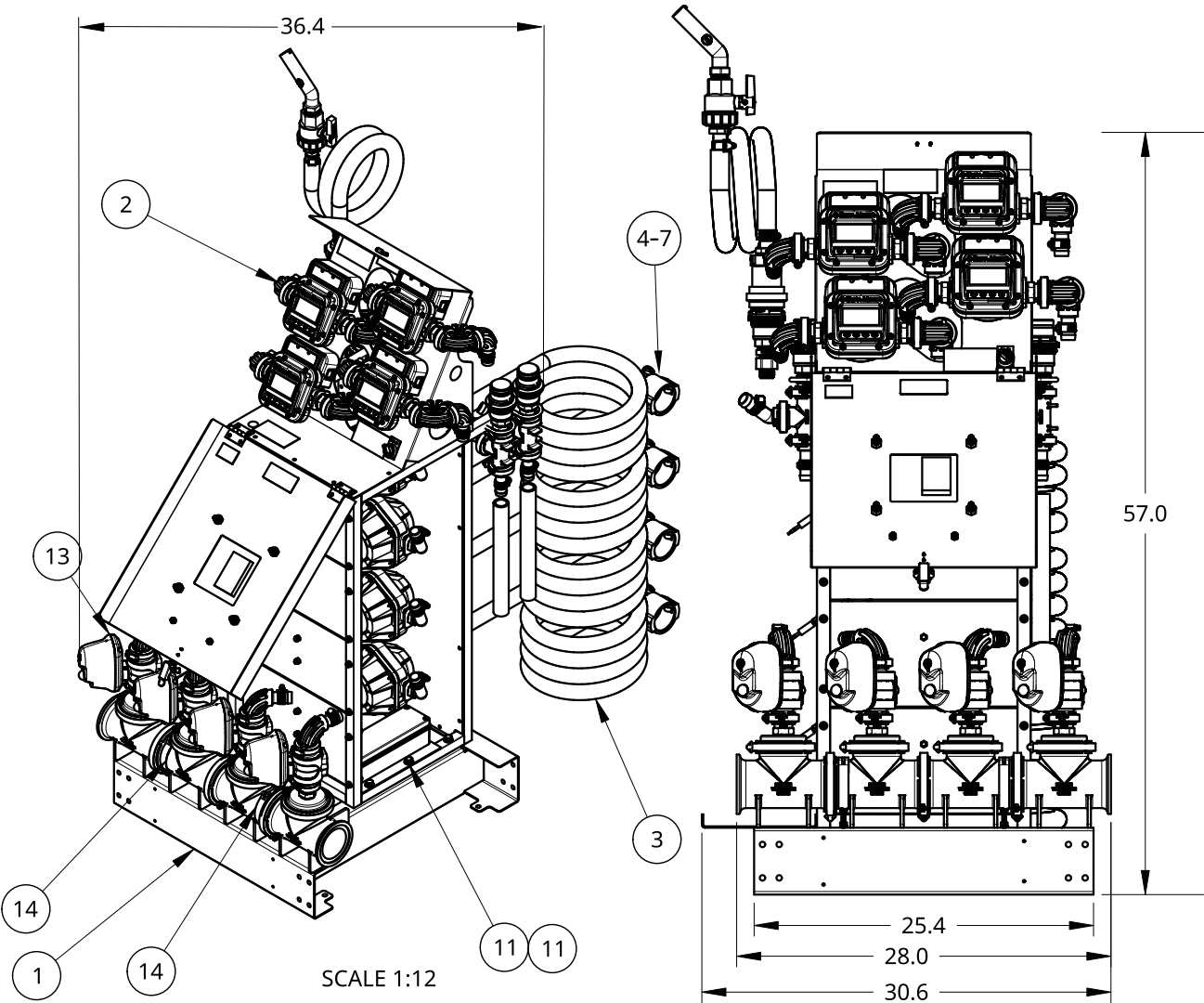
DETAIL A
SCALE 1:6



ORDERING INFORMATION

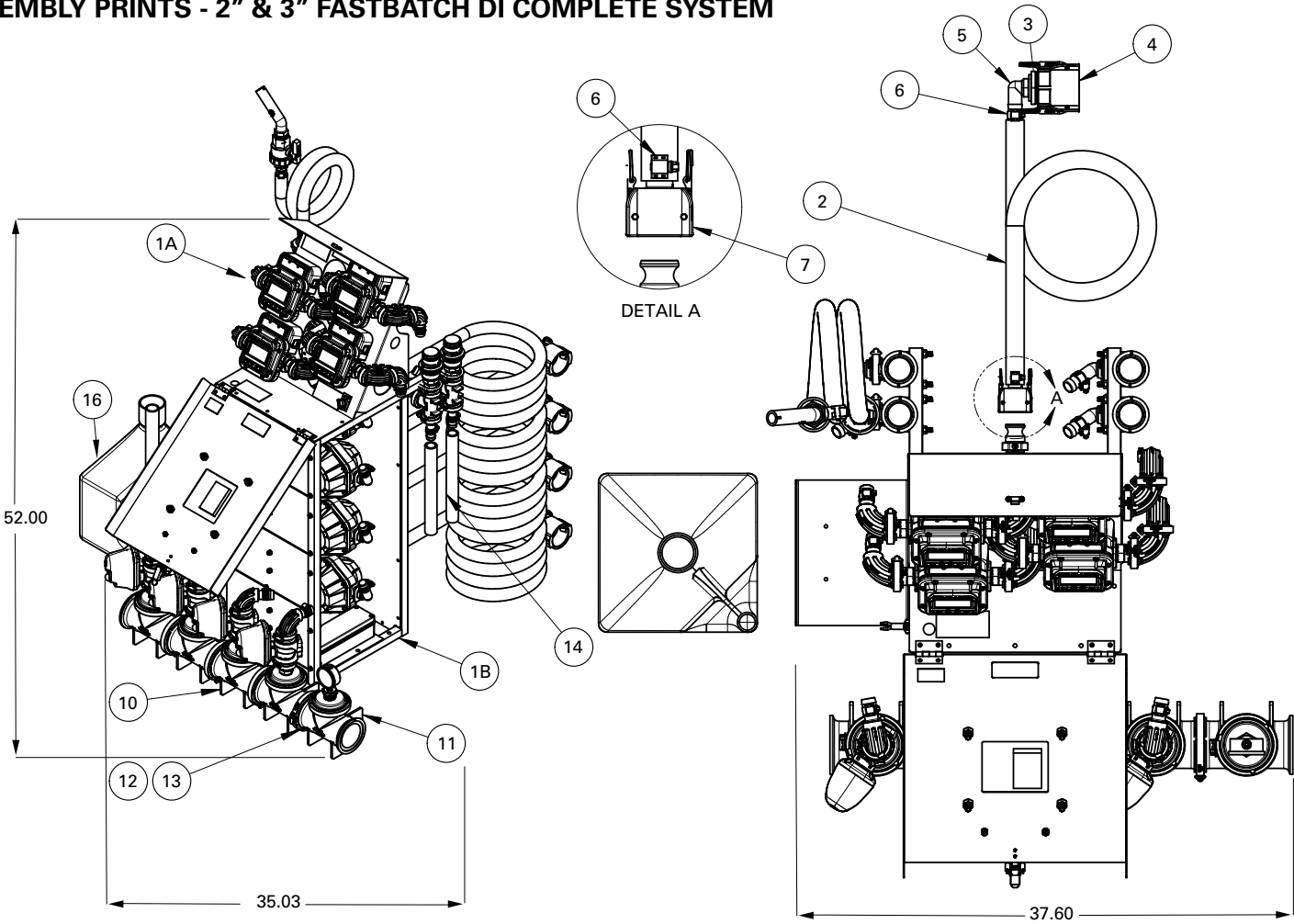
ITEM	2V4 QTY	2E4 QTY	2V2 QTY	2E2 QTY	PRODUCT #	DESCRIPTION
1	1	1	1	1	160-0006	MULTIJET ADD ON FRAME
2	1	0	0	0	161-0016-V4	4 METER ASSEMBLY VITON®
2	0	1	0	0	161-0016-E4	4 METER ASSEMBLY EPDM
2	0	0	1	0	161-0016-V2	2 METER ASSEMBLY VITON®
2	0	0	0	1	161-0016-E2	2 METER ASSEMBLY EPDM
3	4	4	4	4	DP-T4003/12-ERAW	1" HOSE (EPDM) QTY CUT TO 11FT
4	4	4	4	4	141-0042	2" MPT X 1" FPT REDUCING BUSHING
5	4	4	4	4	DP-TM20CLRAW	2" CAM LOCK
6	4	4	4	4	141-0037	1" 90° PLY HOSE BARB X MALE THREAD
7	12	12	12	12	DP-HC1000RAW	1" HOSE CLAMP
8	4	4	2	2	141-0031	1" FEMALE COUPLER CAMLOCK FITTING X 1" HOSE SHANK
11	6	6	6	6	100-0007	3/8" - 16 X 1 3/4" SS HEX FLANGE BOLT
12	6	6	6	6	101-0002	3/8" - 16 SS LOCK NUT
13	13	13	8	8	DP-T4003-ERAW	1" HOSE (EPDM) QTY =1'
14	2	2	2	2	141-0025	2" FULL PORT FLANGE COUPLING, 2 31/32" LONG
15	2	2	2	2	199-0004	FASTBATCH MANIFOLD MOUNT ASSEMBLY, 225
16	5	5	5	5	205-0014	2" FULL PORT FLANGE GASKET VITON®
17	5	5	5	5	209-0005	220 SERIES WORM SCREW CLAMP
18	8	0	4	0	205-0020	1" FLANGE GASKET VITON®
18	0	8	0	8	205-0013	1" FLANGE GASKET EPDM
19	8	8	8	8	209-0004	100 SERIES WORM SCREW CLAMP
20	4	4	4	4	141-0073	2" FULL PORT FLANGED TEE X 1" FLANGED TEE
21	4	4	4	4	DPEV-100	1" DURA ELECTRIC VALVE, 12 VDC, 0.8 SEC, ON/OFF
22	4	4	4	4	141-0008	1" FLANGE X HOSE SHANK SWEEP

ASSEMBLY PRINTS - 3" FASTBATCH ADD-ON COMPLETE SYSTEM



ORDERING INFORMATION						
ITEM	3V4 QTY	3E4 QTY	3V2 QTY	3E2 QTY	PRODUCT #	DESCRIPTION
1	1	1	1	1	160-0006	MULTIJET ADD ON FRAME
2	1	0	0	0	161-0016-V4	4 METER ASSEMBLY VITON®
2	0	1	0	0	161-0016-E4	4 METER ASSEMBLY EPDM
2	0	0	1	0	161-0016-V2	2 METER ASSEMBLY VITON®
2	0	0	0	1	161-0016-E2	2 METER ASSEMBLY EPDM
3	4	4	2	2	DP-T4003/12-ERAW	1" HOSE (EPDM) QTY CUT TO 11FT
4	4	4	2	2	141-0042	2" MPT X 1" FPT REDUCING BUSHING
5	4	4	2	2	DP-TM20CLRAW	2" CAM LOCK
6	4	4	2	2	141-0037	1" 90° PLY HOSE BARB X MALE THREAD
7	8	8	4	4	DP-HC1000RAW	1" HOSE CLAMP
8	4	4	2	2	141-0031	1" FEMALE COUPLER CAMLOCK FITTING X 1" HOSE SHANK
11	6	6	6	6	100-0007	3/8" - 16 X 1 3/4" SS HEX FLANGE BOLT
12	6	6	6	6	101-0002	3/8" - 16 SS LOCK NUT
13	1	0	0	0	161-0015-V4	3" DI EV PLUMBING 4 METER ASSEMBLY VITON®
13	0	1	0	0	161-0015-E4	3" DI EV PLUMBING 4 METER ASSEMBLY EPDM
13	0	0	1	0	161-0015-V2	3" DI EV PLUMBING 2 METER ASSEMBLY VITON®
13	0	0	0	1	161-0015-E2	3" DI EV PLUMBING 2 METER ASSEMBLY EPDM
14	2	2	2	2	199-0003	FASTBATCH MANIFOLD MOUNT ASSEMBLY, 325
15	12	12	6	6	DP-T4003-ERAW	1" HOSE (EPDM) QTY =1'

ASSEMBLY PRINTS - 2" & 3" FASTBATCH DI COMPLETE SYSTEM



ORDERING INFORMATION

ITEM	3V QTY	3E QTY	2V QTY	2E QTY	PRODUCT #	DESCRIPTION
1A	1	1	1	1	160-0002	FASTBATCH DI FRAME
1B	1	0	1	0	161-0016-V4	4 METER ASSEMBLY VITON®
1B	0	1	0	1	161-0016-E4	4 METER ASSEMBLY EPDM
2	4	4	4	4	DP-T4003/12-ERAW	1" HOSE (EPDM) QTY CUT TO 11FT
3	4	4	4	4	141-0042	2" MPT X 1" FPT REDUCING BUSHING
4	4	4	4	4	DP-TM20CLRAW	2" CAM LOCK
5	4	4	4	4	141-0037	1" 90° PLY HOSE BARB X MALE THREAD
6	8	8	8	8	DP-HC1000RAW	1" HOSE CLAMP
7	4	4	4	4	141-0031	1" FEMALE COUPLER CAMLOCK FITTING X 1" HOSE SHANK
10	1	0	0	0	161-0015-V4	3" DI EV PLUMBING 4 METER ASSEMBLY VITON®
10	0	1	0	0	161-0015-E4	3" DI EV PLUMBING 4 METER ASSEMBLY EPDM
10	0	0	1	0	161-0014-V4	2" DI EV PLUMBING 4 METER ASSEMBLY VITON®
10	0	0	0	1	161-0014-E4	2" DI EV PLUMBING 4 METER ASSEMBLY EPDM
11	1	1	0	0	161-0023	3" PRESSURE GAUGE PLUMBING ASSEMBLY
11	0	0	1	1	161-0022	2" PRESSURE GAUGE PLUMBING ASSEMBLY
12	1	1	0	0	205-0015	3" FLANGE GASKET EPDM
12	0	0	1	1	205-0014	2" FLANGE GASKET EPDM
13	1	1	0	0	209-0006	300 SERIES WORM SCREW CLAMP
13	0	0	1	1	209-0005	220 SERIES WORM SCREW CLAMP
14	13	13	13	13	DP-T4003-ERAW	1" HOSE (EPDM) QTY =1'
16	1	1	1	1	DP-CALJUG	5 GALLON CALIBRATION JUG



DURA PRODUCTS

Technology with Lasting Value

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Arcadia, IN 46030 | (317) 984-4003

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