

Instruction Sheet

102-415

LMB – LOFlo™ Mixing Block

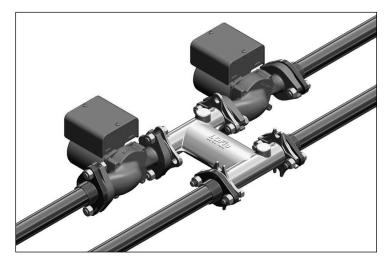
SUPERSEDES: July 1, 2012 EFFECTIVE: December 1, 2012

Plant I.D. 001-3970

GENERAL:

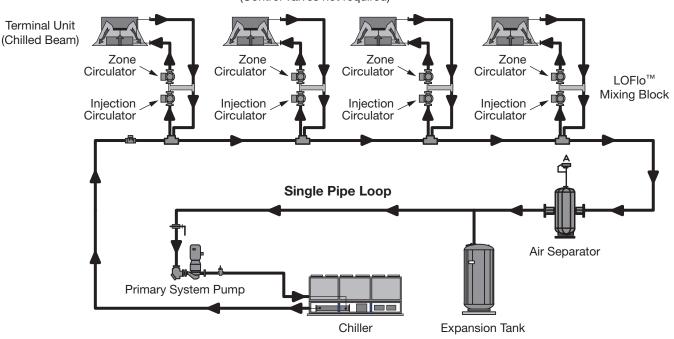
The Taco LOFIo™ Mixing Block (LMB) injection pumping represents a new threshold in energy efficiency in HVAC systems, especially chilled beams and radiant cooling systems and the ultimate in system flexibility. It can supply varying water temperatures to multiple uses, from the same piping system. In a chilled beam or radiant cooling system the LMB can supply high temperature chilled water (high 50's F) to chilled beams and radiant chilled ceilings and low temperature chilled water (low 40's F) to 100% dedicated outdoor air systems (DOAS) and fan coils for spot dehumidification from the same single pipe system.

This results in decreased installation costs and increased comfort since the system is self balancing and continual adjustment of balance valves is not required to achieve design flows and occupant comfort.



TYPICAL PIPING FOR COOLING:

Dedicated Coil Circulators (Control valves not required)



GETTING READY:

Ensure that the contents of this package are complete. If any of the contents are missing or damaged, please contact your local Taco sales representative for assistance.

Contents should include the following:

 One LOFlo[™] Mixing Block (LMB) consists of one stainless steel casting with two circulators attached.

APPLICATION:

The Taco LOFlo™ Mixing Block (LMB) is a complete injection mixing system. Integral to the unit is a variable speed injection circulator and a variable speed zone circulator. With only four piping connections needed, the LMB greatly reduces the time and space required for installation.

INSTALLATION OF LMB:

Step One - Mounting

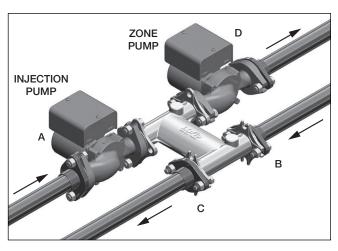
1. Mounting Position - The LOFlo™ Mixing Block (LMB) should be mounted with the circulator motor housing (and internal cartridge) horizontal.



2. Select a suitable location to mount the LMB that allows sufficient space for easy pipe connections.

Step Two - Piping Connections

- 1. Using proper piping practices, connect the supply from the primary piping system to the supply to the LMB (port A).
- 2. Using proper piping practices, connect the return to the primary system to the return from the LMB (port C).
- 3. Using proper piping practices, connect the supply to the terminal unit (chilled beam/chilled ceiling) to the supply from the LMB (port D).
- 4. Using proper piping practices, connect the return from the terminal unit (chilled beam/chilled ceiling) to the return to the LMB (port B).



Step Three - Filling

- 1. Fill system with tap water. The system must be filled before operating the circulator. The bearings are water lubricated and should not be allowed to operate dry. Filling the system will result in immediate lubrication of the bearings.
- 2. It is always good practice to flush a new system of foreign matter before starting the circulator. See Taco LoadMatch System Installation Instructions (Catalog #100-78) for proper cleaning, purging and operation of the LMB circulators.

Step Four - Electrical Connections

- 1. For circulator electrical connection procedures see instruction sheet 102-142 Variable Speed - Analog Signal (00-VV) - "00" and Load Match® Cartridge Circulators.
- 2. The LOFlo Mixing Block and its circulators do NOT contain any controllers or control applications. A building management system such as Taco iWorx is required. A 0-10V signal is required for the injection circulator. A 0-10V or ON/OFF signal is required for the zone circulator depending on the application. See also iWorx Chilled Beam Ceiling Controller Application Guides CHB1 and CHB2.

LIMITED WARRANTY STATEMENT

Taco, Inc. will repair or replace without charge (at the company's option) any Taco 00 Series circulator or circulator part which is proven defective under normal use within three (3) years from the date of manufacture.

In order to obtain service under this warranty, it is the responsibility of the purchaser to promptly notify the local Taco stocking distributor or Taco in writing and promptly deliver the subject product or part, delivery prepaid, to the stocking distributor. For assistance on warranty returns, the purchaser may either contact the local Taco stocking distributor or Taco. If the subject product or part contains no defect as covered in this warranty, the purchaser will be billed for parts and labor charges in effect at time of factory examination

Any Taco product or part not installed or operated in conformity with Taco instructions or which has been subject to misuse, misapplication, the addi-

tion of petroleum-based fluids or certain chemical additives to the systems, or other abuse, will not be covered by this warranty.

If in doubt as to whether a particular substance is suitable for use with a Taco product or part, or for any application restrictions, consult the applicable Taco instruction sheets or contact Taco at (401-942-8000).

Taco reserves the right to provide replacement products and parts which are substantially similar in design and functionally equivalent to the defective product or part. Taco reserves the right to make changes in details of design, construction, or arrangement of materials of its products without notification.

TACO OFFERS THIS WARRANTY IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FIT-NESS IS IN EFFECT ONLY FOR THE DURATION

OF THE EXPRESS WARRANTY SET FORTH IN THE FIRST PARAGRAPH ABOVE.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF TACO.

TACO WILL NOT BE LIABLE FOR ANY SPECIAL. INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF OR REPLACING DEFECTIVE REMOVING PRODUCTS.

This warranty gives the purchaser specific rights, and the purchaser may have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or on the exclusion of incidental or consequential damages, so these limitations or exclusions may not apply to you.

