

Submittal Data

| PROJECT: | Hurley Engineering Web Design Assist | UNIT TAG: | BP-1 | QUANTITY: | 1 |
|-----------------|--------------------------------------|------------------|----------------|-----------|---|
| | | TYPE OF SERVICE: | Domestic Water | | |
| REPRESENTATIVE: | Hurley Engineering Company | SUBMITTED BY: | | DATE: | |
| ENGINEER: | To Be Determined | APPROVED BY: | | DATE: | |
| CONTRACTOR: | To Be Determined | ORDER NO.: | | DATE: | |



HYDRO MULTI-B/E 3 CME10-1

Booster systems with frequency-controlled pumps

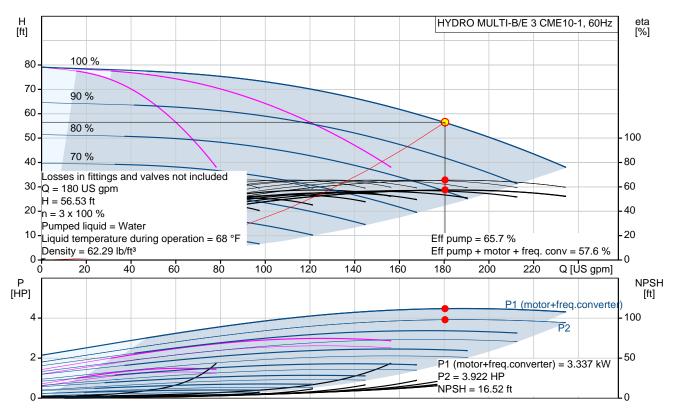
Product photo could vary from the actual product

| Conditions of Service | | | | |
|-----------------------|------------|--|--|--|
| Flow: | 180 US gpm | | | |
| Head: | 56.53 ft | | | |
| Efficiency: | 57.6 % | | | |
| Liquid: | Water | | | |
| Temperature: | 68 °F | | | |
| NPSH required: | 16.52 ft | | | |
| Viscosity: | | | | |
| | | | | |

Specific Gravity: 1.000

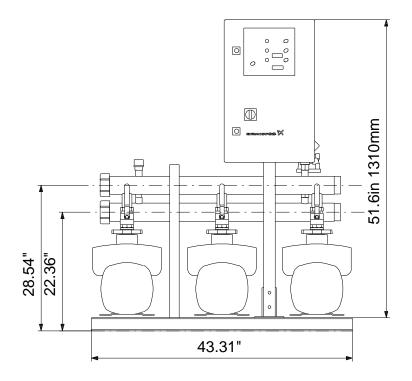
| Pump Data | | | | | |
|-----------------------------|-----------|--|--|--|--|
| Maximum operating pressure: | 145 psi | | | | |
| Liquid temperature range: | 32 140 °F | | | | |
| Pipe connection: | 2.5NPT | | | | |
| Product number: | 91149110 | | | | |
| | | | | | |

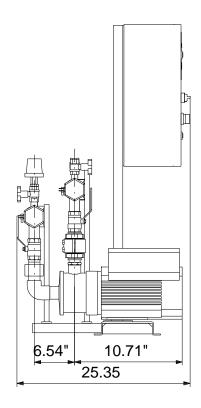
Motor Data Rated voltage: 200-240 V Main frequency: 60 Hz





Submittal Data





Materials:

Pump: EN-GJL-200

Manifolds: EN/DIN 1.4571/ AISI 316 TI



Date: 3/7/2019

Count | Description

HYDRO MULTI-B/E 3 CME10-1

Product No.: 91149110

Pressure booster system designed and manufactured by Grundfos.

Delivered on a common base plate, completely assembled and tested before it leaves the factory and ready for connection of water and electricity.

All pumps are Grundfos CME pumps with integrated frequency drives connected in parallel and operated in cascade.

The booster maintains a constant pressure through continuous adjustment of speed of the pumps and starting and stopping the pumps to meet the required flow.

The system consists of:

- -3 horizontal multistage pumps with integrated frequency converter, type CME10-1
- -A suction and a discharge manifold in EN/DIN 1.4571/ AISI 316 TI
- -One non-return valve per pump placed on the discharge side as standard.
- -Two isolating valves and a clamp ring per pump for easy service and inspection of the pumps.
- -Pressure sensor and gauge.
- -CU323 Pump controller for controlling parallel coupled pumps in cascade.

Optional equipment:

- -Redundant Primary Sensor
- -Water Shortage Protection
- -Non return valve on suction side.
- -Communication Modules for LON, BACnet, Modbus and GSM
- -Phase Failure monitoring
- -Beacon
- -Audible alarm
- -External transformer
- -High / Low Level alarm
- -System in operation indicating lamp
- -Alarm indicating lamp

Accessories:

- -Level Switch 5 meter cable
- -Level Switch 10 meter cable
- -Extra documentation

Functions and features of the CU323 Pump controller:

- -Constant pressure control
- -Automatic cascade control
- -Automatic alternation between pumps
- -Stop function
- -High Pressure Protection
- -Sensor Fault Protection
- -Motor Protection
- -Standby pumps
- -Automatic Display Lock
- -External Start / Stop (potential free contacts)
- -Easy to use HMI with 2 displays for set-point and process value
- -2 digital outputs,
- -Auto / manual control of pumps
- -Optional bus communication
- -Optional Safe Tank filling sequence
- -Optional monitoring of inlet pressure by means of inlet sensor

Technical data:

Rated Flow: 159 US gpm



Date: 3/7/2019

Count | Description

Rated Head: 64.64 ftLiquid temperature: 0 - 140 °FMax Pressure : 145 psi

Pump Material: EN-GJL-200

Shaft Seal: AQQE (SiC/SiC/EPDM)

Mains Supply: 200-240 V

Starting Method CME pump: electronically

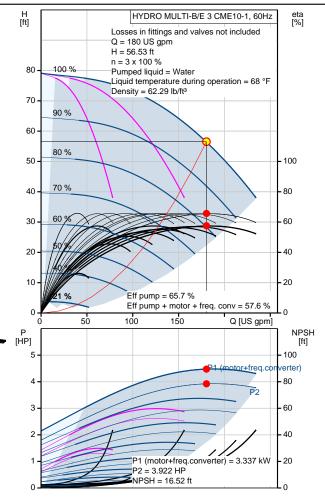
Power of CME pump: 1.5 HP

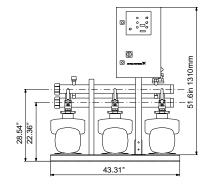
Size of manifold connection: 2.5NPT
Net Weight: 334 lb
Gross Weight: 557 lb

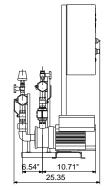


Date: 3/7/2019

| Description | Value | | | | |
|--------------------------------------|------------------------------|--|--|--|--|
| General information: | | | | | |
| Product name: | HYDRO MULTI-B/E 3 CME10-1 | | | | |
| Product No.: | 91149110 | | | | |
| EAN: | 5711490038613 | | | | |
| Technical: | | | | | |
| Actual calculated flow: | 180 US gpm | | | | |
| Min flow system: | 15.9 US gpm | | | | |
| Resulting head of the pump: | 56.53 ft | | | | |
| Head max: | 77.43 ft | | | | |
| Main pump name: | CME10-1 | | | | |
| Main pump Number: | 98395030 | | | | |
| Number of pumps: | 3 | | | | |
| Model: | A | | | | |
| Materials: | | | | | |
| Pump: | EN-GJL-200 | | | | |
| Manifolds: | EN/DIN 1.4571/ AISI 316 TI | | | | |
| Installation: | | | | | |
| Maximum operating pressure: | 145 psi | | | | |
| Pipe connection: | 2.5NPT | | | | |
| Liquid: | | | | | |
| Pumped liquid: | Water | | | | |
| Liquid temperature range: | 32 140 °F | | | | |
| Liquid temperature during operation: | 68 °F | | | | |
| Density: | 62.29 lb/ft ³ | | | | |
| Electrical data: | | | | | |
| Power (P2) main pump: | 1.5 HP | | | | |
| Main frequency: | 60 Hz | | | | |
| Rated voltage: | 1 x 200-240 V | | | | |
| Starting main: | electronically | | | | |
| Rated current of system: | 19.7 A | | | | |
| Controls: | | | | | |
| Control type: | E | | | | |
| Operation unit: | CU323-3 | | | | |
| Tank: | | | | | |
| Diaphragm tank: | No | | | | |
| Others: | | | | | |
| Net weight: | 334 lb | | | | |
| Gross weight: | 557 lb | | | | |
| Product range: | NAMREG | | | | |
| Custom tariff no.: | 8413.70.2040 | | | | |



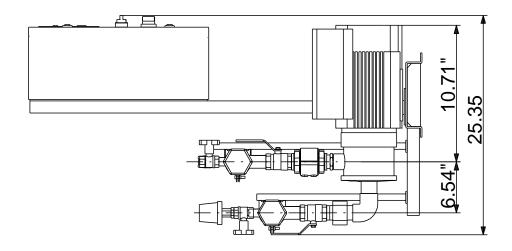


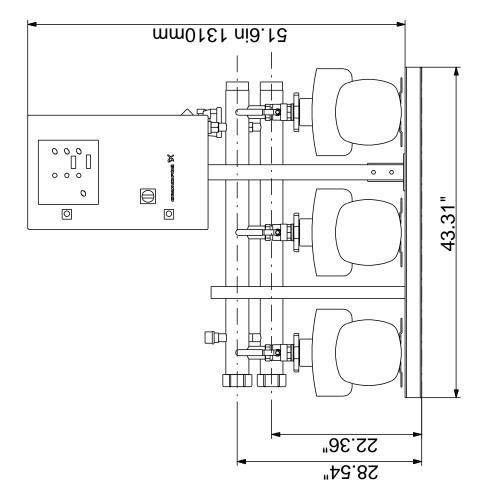




Date: 3/7/2019

91149110 HYDRO MULTI-B/E 3 CME10-1 60 Hz





Note! All units are in [mm] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.