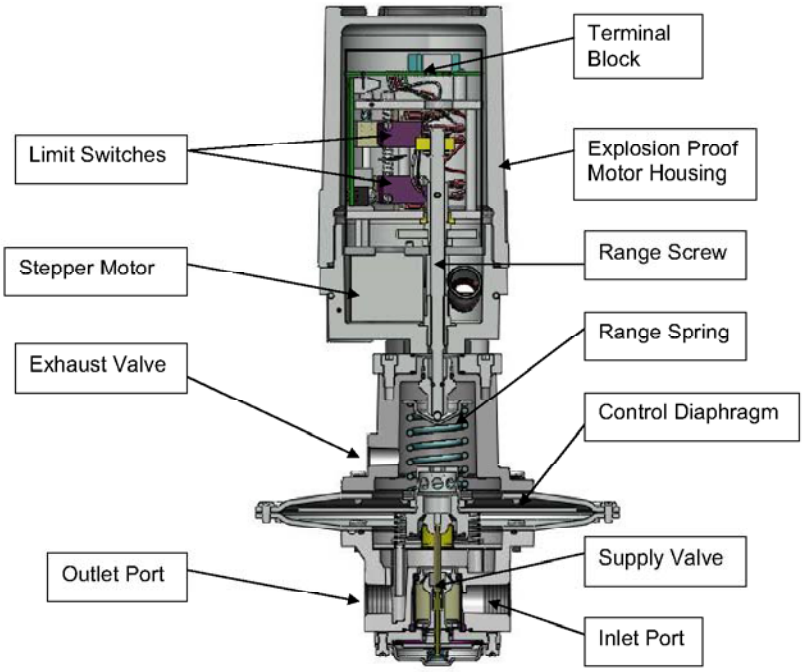
Model MP2400




## Explosion-Proof DC Pulse Input (XS)

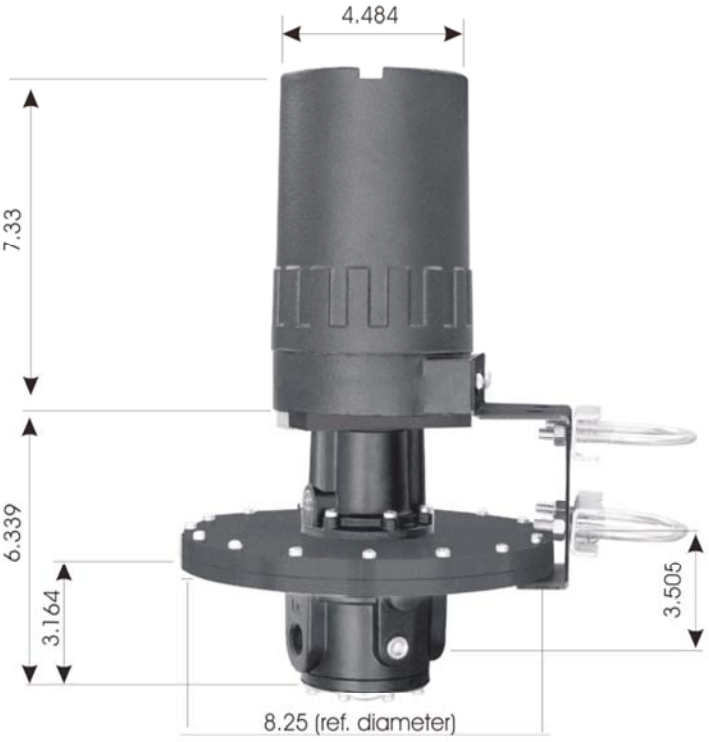
The Model 2400 M/P Converter is isolated from an explosive environment by enclosing in an explosion-proof housing. The Stepper Motor configuration is equipped with a clock generator positioned horizontally, which plugs into a vertically mounted translator board. The configuration includes limit switches.

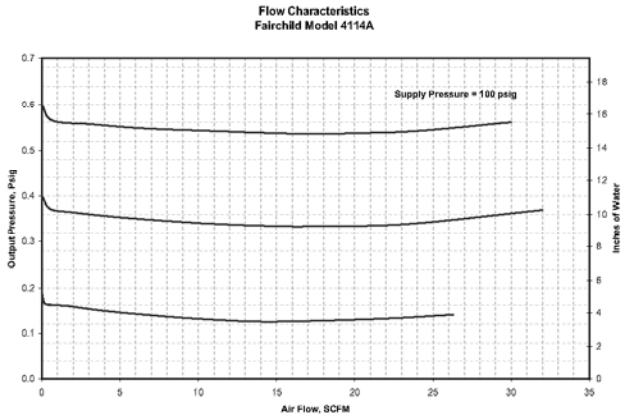
The Stepper Motor is mounted on the bottom of the motor assembly in the base of the explosion-proof housing. Wiring to the unit is made to a terminal board through a 1/2" - 14 NPT conduit fitting in the base of the housing.

The unit includes two single pole, double throw, double break limit switches.

Switches on the clock generator board allow selection of:

a) Internally or Externally powered controls loops.
b) Half-step or Full step mode.
c) High-Speed or Low-Speed operation.






## Specifications

**Supply Pressure**
20 psi continuous up to 150 psi max

**Range**
0-20" Water

**Consumption**
None Detected

**Power Supply**
12-24 VDC

**Materials**
Stainless Trim; Aluminum Housings

**Submersible to 6 feet**

## External Control Connections - Explosion-Proof (XS) Unit

The Explosion-Proof stepper motor unit is equipped with a Clock Generator and a Translator. Connections from an external Controller are made to the terminal clock on the Input Board as shown.

a) Controller with Isolated Loop Supply

| FROM | TO |
|---|---|
| External Controller | Input Board |
| +DC | TB-1 Term 1 |
| Switch Closure | TB-1 Term 3 (Increase) |
| Switch Closure | TB-1 Term 4 (Decrease) |

b) Controller with Dual Isolated Loop Supply

| FROM | TO |
|---|---|
| External Controller | Clock Generator DC Supply |
| Switch Closure | TB-1 Term 3 |
| | TB-1 Term 4 |
| | TB-1 Term 1 |

c) Controller using supply which powers Model 2400 as Control Loop Supply

| FROM | TO |
|---|---|
| External Controller | DC Supply Clock Generator |
| Switch Comm | |
| Switch Closure | TB-1 Term 3 |
| Switch Closure | TB-1 Term 4 |

## Catalog Information

**Catalog Number** 2 4 X F [S] [4B] [8A] [00] [2] [ ]

- DC Pulse ..... S
- Model 4000A ..... 4B
- DC Pulse Input with 24VDC Clock Generator Control ..... 8A
- DC Motor ..... 00
- FM Explosion-Proof Enclosure ..... 2
- Outlet on Right Standard ..... R
- FM Explosion-Proof Enclosure ..... L

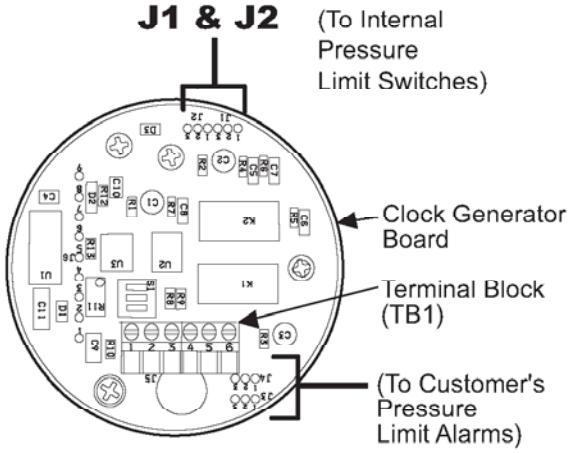



**Table 1**. Clock Generator PC Board Wiring Connections

| From Connector | Color | Function | To Closure |
|---|---|---|---|
| J1-1 | Green | Internal | Normally Open |
| -2 | White/Green | High Pressure | Normally Closed |
| -3 | Black | Limit Switch | Common |
| J2-1 | Red | Internal | Normally Open |
| -2 | White/Red | Low Pressure | Normally Closed |
| -3 | White/Black | Limit Switch | Common |
| J3-1 | Gray | Customer's | Common |
| -2 | White/Yellow | High Pressure | Normally Closed |
| -3 | Yellow | Limit Alarm | Normally Open |
| J4-1 | Brown | Customer's | Common |
| -2 | White/Orange | Low Pressure | Normally Closed |
| -3 | Orange | Limit Alarm | Normally Open |

FM Explosion Proof for CL1, DIV1, GRPS B, C & D and CL2, DIV1, GRPS E, F, G, NEMA 4X