

## ANALOG TO FREQUENCY CONVERTER FOR SOLENOID VALVES

### GENERAL DESCRIPTION

The ARO Analog to Frequency Converter transforms a 0 - 5 VDC or 4 - 20 mA command signal (power supply and signal must have a common ground) into a variable frequency output. This variable output can be used to control any solenoid operated valve, including the solenoid actuation kit for air operated diaphragm pumps. This use converts any standard air operated diaphragm pump into a proportionally controllable unit. The converter allows the user the ability to control the speed of an air operated diaphragm pump by setting the frequency which is proportional to the command input signal. The unit will attach directly to any 22 mm DIN solenoid unit. The unit is sold in 5 different preset ranges for user convenience. All models can be recalibrated to the users specifications, with minimum and maximum settings anywhere from 0 - 500 cycles per minute.

<b>94717-50</b>	0 - 50 cycles per minute
<b>94717-100</b>	0 - 100 cycles per minute
<b>94717-150</b>	0 - 150 cycles per minute
<b>94717-200</b>	0 - 200 cycles per minute
<b>94717-250</b>	0 - 250 cycles per minute

### SPECIFICATIONS

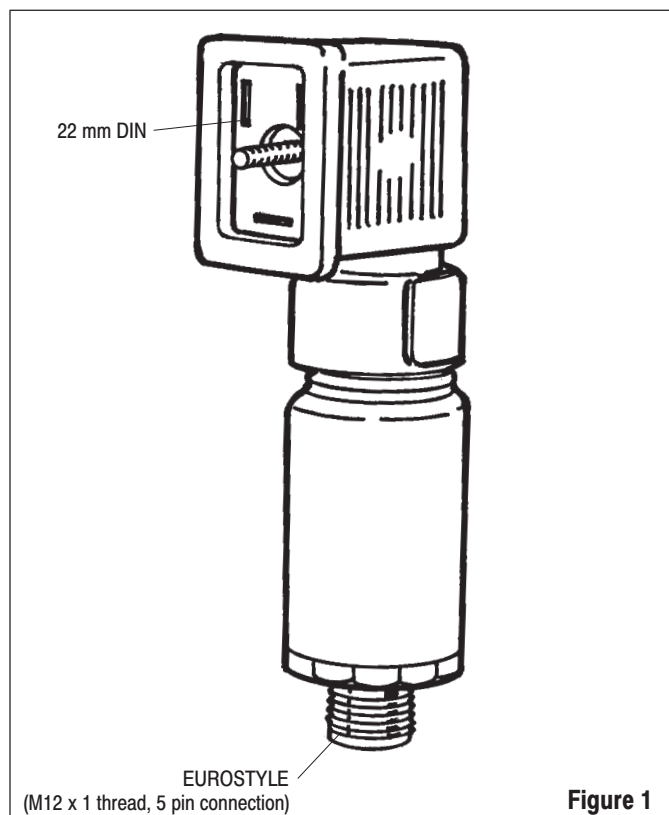
Command Signal . . . . .	4 - 20 mA* / 0 - 5 VDC**
Operating Voltage . . . . .	24 VDC
Feedback Signal . . . . .	20 mA maximum sinking
Maximum Coil Current . . . . .	350 mA

\* 4 - 20 mA must be sourcing current.

\*\* Command signal and power supply must have a common ground.

### TYPICAL APPLICATIONS

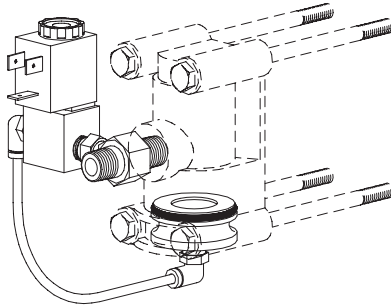
- Remote speed control
- Batching (control the pump cycles and therefore control their displacement).
- Any on - off solenoid application



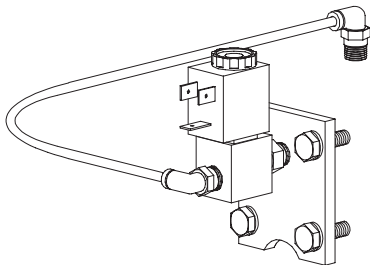
## 94717-X ANALOG TO FREQUENCY CONVERTER

**USE ONE OF THE FOLLOWING SOLENOID ACTUATED PUMP KITS IN CONJUNCTION WITH AN ARO PUMP TO COMPLETE YOUR PACKAGE.**

67165-1 (for 1/2" port pumps)

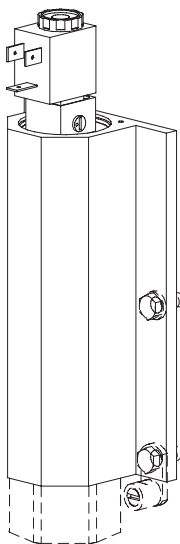


67166-1 (for 1", 1-1/2" metallic and 1", 1-1/2" and 2" non-metallic port pumps)

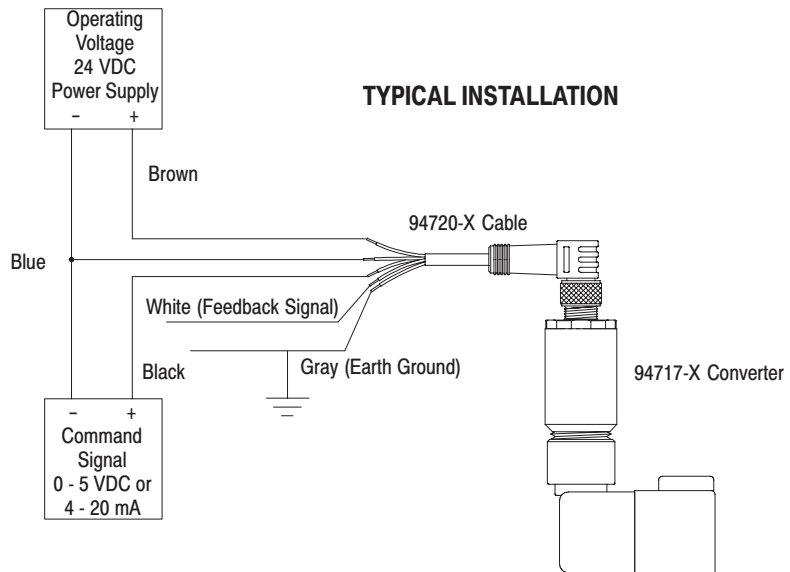


NOTE: Will not work with 1" 3:1 ratio pump.

67277-1 (for 2" and 3" metallic port pumps)

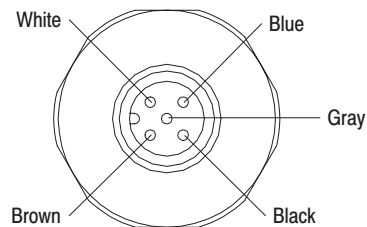


### TYPICAL INSTALLATION



### TYPICAL PUMP / CONVERTER SETUP

#### PINOUT (Male)



- White - Pulse Feedback
- Blue - 0 VDC
- Gray - Earth
- Black - Command Input
- Brown - 24 VDC Power Supply

**NOTE: Command signal and power supply must have a common ground.**

67277-X  
Solenoid  
Actuation  
Kit

94717-X Analog to  
Frequency Converter

94720-X Command Cable

#### COMMAND CABLE

PART NO.	LENGTH
94720-2	2 meters
94720-4	4 meters

**Figure 2**