

SUPERIOR ELECTRIC
BUFFERED TRANSLATOR
SLO-SYN[®]



SLO-SYN® Buffered Translator

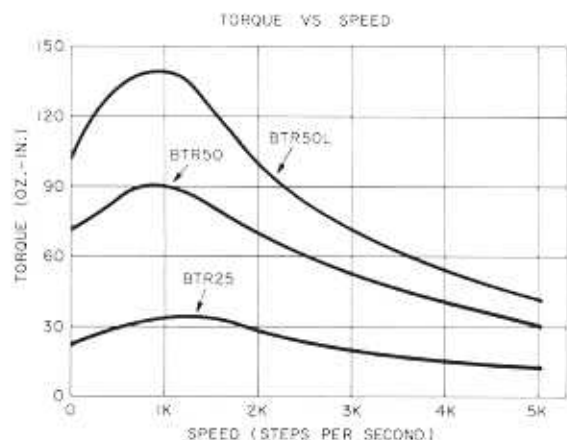
- ACCEPTS CONSTANT FREQUENCY PULSES TO 5K
- REQUIRES NO ACCELERATION OF INPUT PULSE RATE

- READILY INTERFACES WITH COMPUTERS
- STEPPING RATE MATCHES INPUT PULSE RATE

The SLO-SYN Buffered Translator is designed to drive a SLO-SYN Stepping Motor in response to commands from a computer, digital control or other device which operates on a fixed pulse rate. Acceleration and deceleration are not required from the pulse source. The translator stores the incoming pulses and feeds the pulses to the motor, automatically accelerating and decelerating at a rate compatible with the response characteristics of the motor. The motor is driven one step for each pulse received from the control unit at rates to 5000 steps per second. The Buffered Translator is available with any of three motors to meet different speed-torque requirements.

SPEED

Figure 1 shows torque vs. speed characteristics for the three buffered translator models. The curves show the loads which the motors will drive at various speeds. Acceleration and deceleration to and from these speeds are provided automatically by the control unit.



SPEED VS. TORQUE CHARACTERISTICS

FIGURE 1

TRIGGERING REQUIREMENTS

The buffered translator is triggered by a voltage pulse. Each pulse will cause the unit to drive the motor one step. Normally, the triggering voltage pulse range is +10 to +15 volts descending to 0. Other triggering levels can be provided on request.

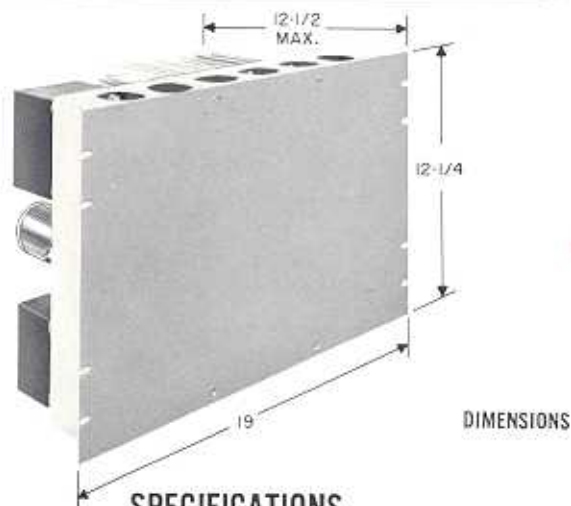
The buffered translator will send a Busy signal to the controller while it is acting on pulses received. When it has completed the

move, a Not Busy signal will be sent to the controller. The Busy and Not Busy signals are logic level +15 volts through a 1.5K ohm resistor.

MODELS

The buffered translator is available in three models, depending on the drive motor desired. Model designations and the stepping motor provided with each model are listed in the chart.

| BUFFERED TRANSLATOR MODEL | MOTOR SUPPLIED |
|---------------------------|----------------|
| BTR25 | HS25 |
| BTR50 | HS50 |
| BTR50L | HS50L |



SPECIFICATIONS

SLO-SYN BUFFERED TRANSLATORS

MOUNTING

rack mounting — can also be mounted horizontally on a bench with front panel removed

INPUT

105-125 volts, 3.5 amperes

SPEED RANGE

0 to 5000 steps per second

EXTERNAL TRIGGERING PULSE

+10 to +15 volts descending to 0 volts equivalent to logic 1

TEMPERATURE

operating: 0°C to 40°C
storage: -55°C to 85°C

The right to make engineering refinements on all products is reserved. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

THE
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COMPANY

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