

Key Features

- Compatible with all variable-speed drives
- Master, Ratio-Follower, and Index-Follower modes
- Keypad/display menus and features
- Diagnostics for easy troubleshooting.
- Switch-input & NPN functions
- Serial Modbus communications
- Multiple Set-points



Description

The Electro-Sensors Model MS322 is a powerful and versatile tool for building numerous closed-loop processes. Closed-loop control capabilities include speed and phase control, electronic line shaft/gearing, event synchronization, and bi-directional control. The MS332 accepts quadrature encoder signals and almost any type of index/event sensor signal. The controller also provides the encoder/sensor power, which makes the MS332 ideal for new or existing systems. The MS332 supplies an isolated 0 ± 10 VDC speed reference signal to the drive, making it compatible with virtually any variable speed drive (AC, DC, or Servo).

Description

Index Follower

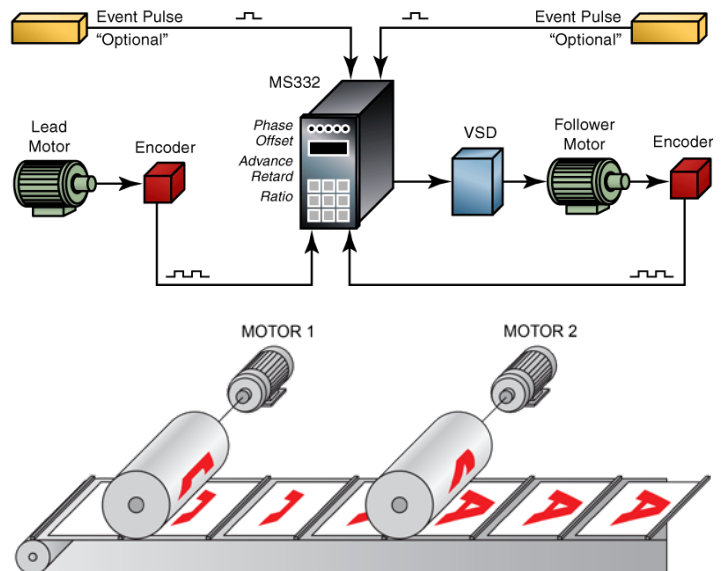
- The MS332 automatically phases the feedback and lead event pulses to precisely synchronize events.
- Encoders and Shaft Speed Sensors work together error free.
- Feedback, lead, and event-pulse signals input to the MS332.
- Event pulses are commonly generated by proximity and photoelectric sensors, although other sources may be used.
- The follower phase set-point may be entered or determined by advancing/decrementing the set-point on-the-fly.

Ratio Follower

- The MS332 achieves true electronic gearing by precisely setting the follower ratio to master speed, resulting in zero cumulative error.
- Encoders and Shaft Speed Sensors work together error free.
- Feedback and lead signals input to the MS332
- Master Speed Ratio may be entered and changed on-the-fly.

Master

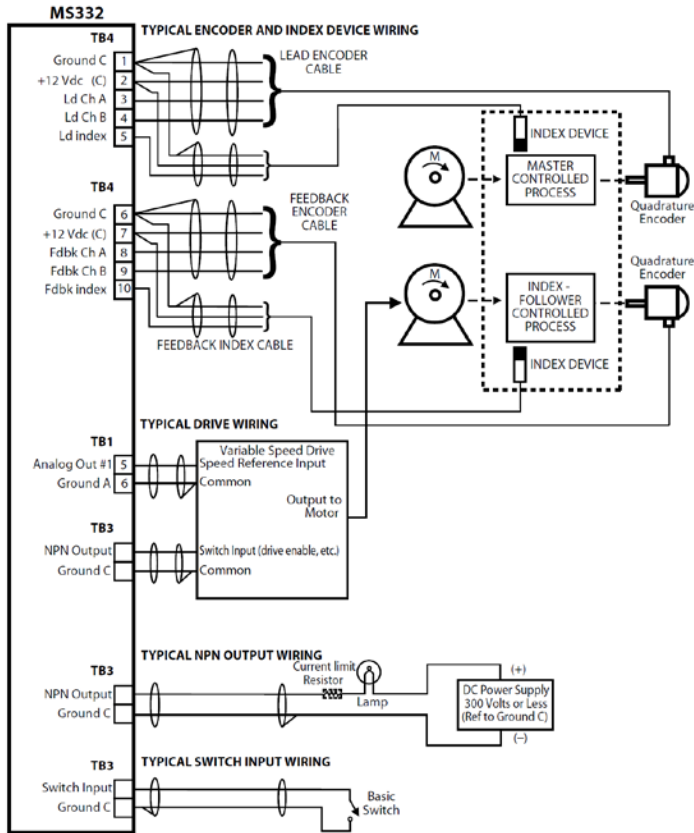
- The MS332 maintains the desired set-point speed.
- Feedback signal inputs to the MS332
- The user may easily change the set point by entering the desired new value into the front panel keyboard.



Typical Applications

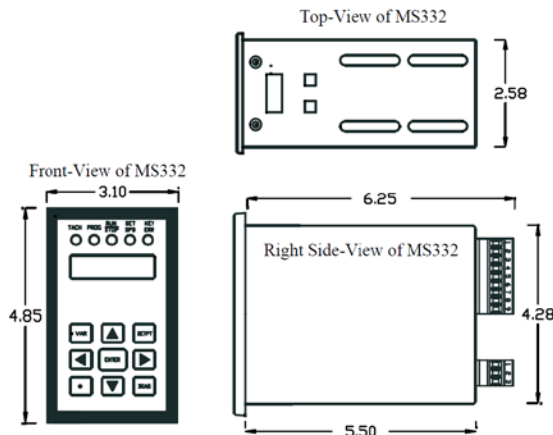
- Packaging Machinery
- Centercore and Surface Winders
- Winding Machinery
- Ovens and Fans
- Pumps
- Extruders
- Printing Presses
- Replacement for some MS196 Units

MS332 Wiring Diagram



Ordering

Model Description	Part Number
MS332 115 VAC	952-000000
MS332 230 VAC	952-000002
Accessories	
MS332 Faceplate Kit	725-000012



MS332 Specifications

Input Power	
Voltage	115 or 230 Vac, 50 - 60 Hz
Fuse	115 Vac: 200 mA, 5x20mm, slo-blo 230 Vac: 100 mA, 5x20mm, slo-blo
Sensor Inputs	
Sensor Supply	12 Vdc @ 300mA Max
Sensor Input	Single-ended NPN, PNP, Line-Driver, TTL, CMOS
Trigger Levels	2V (Logic Low), 3V (Logic High)
Encoder Type	Quadrature Incremental
Encoder Frequency	1 Hz - 70 kHz
Analog Output	
Signal Range	-11.5 to +11.5 Vdc (max swing)
Resolution	Signed 12 Bits (8192 steps)
Calibration	Digital (No Pots)
Transistor Outputs	
Quantity, Type	4, Open-Collector NPN
Rating	0.625 W (max.), 300 V (max.)
Switch Inputs	
Quantity, Type	8, Shorting (pull to ground C)
Serial Communications	
Protocol	Modbus RTU
Data Types	16/32-bit integer, 32-bit float
Operational	
Accuracy	Zero Cumulative Error (Follower) 0.01% of Speed set-point (Master)
Set-points	4 per operating mode
Mechanical/Environment	
Operating Temperature	0° - 70° C (32° - 158° F)
Panel Cutout Dimensions	2.6" W x 4.3" H

Specifications subject to change without notice.

Customization

If one of our standard products does not meet your specifications, please call one of our applications specialists. Many of our products can be customized to fit specific needs.

Additional Information

Please call Electro-Sensors for more information.