



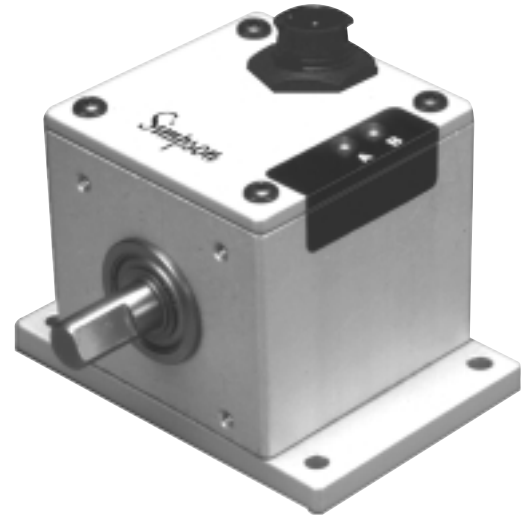
Dual Shaft Encoder

SE Quadrature Encoder

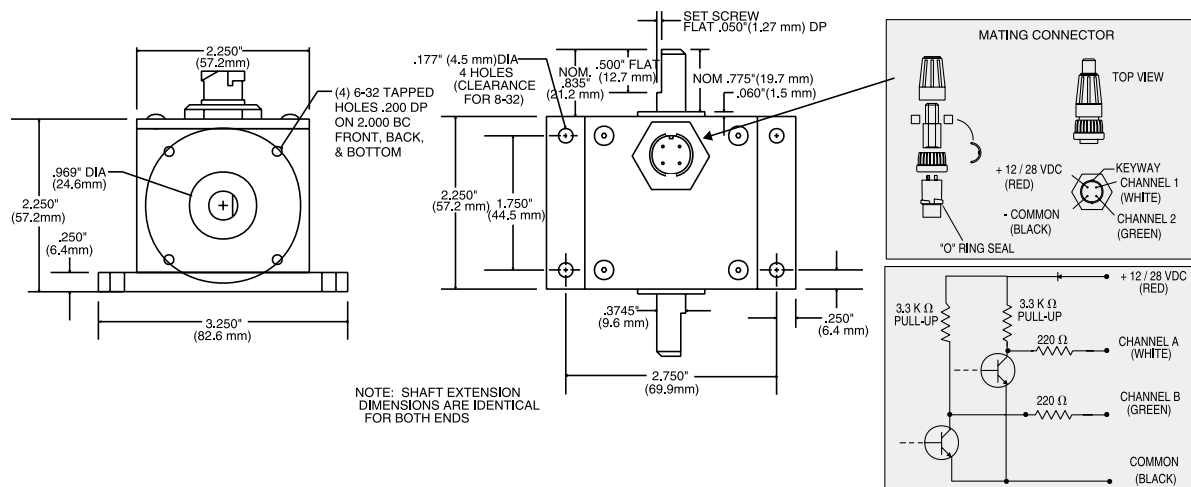
The SE Quadrature Dual-Shaft Encoders combine the most routinely-used features in one standard device, and are available with a selection of five different resolutions (pulses/revolution).

The cube-style unit uses an infrared light source and precision mechanical components to provide exact, repeatable counts. Mounting the encoder is quick and easy using the pre-drilled holes in the base flange, or the housing mounting holes located at each shaft output. This encoder can be used as a direct replacement for other brand encoders, with no blind holes to drill. The double-ended, flat-keyed shaft permits a choice of mounting positions. Chrome steel bearings provide 20% longer life than stainless steel bearings.

To aid in troubleshooting, LEDs are located directly on the body to instantly verify correct output operation. Quadrature output is standard and can be externally scaled to provide any engineering unit (RPM, angular position, feet/min., etc.). Gold-plated connectors ensure maximum signal transfer. Very low power consumption; typical current draw, 35mA @ 15VDC.

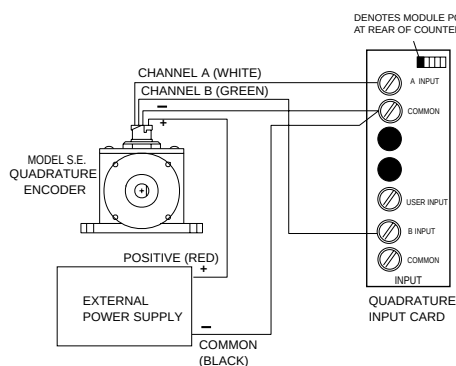


Installation and Wiring

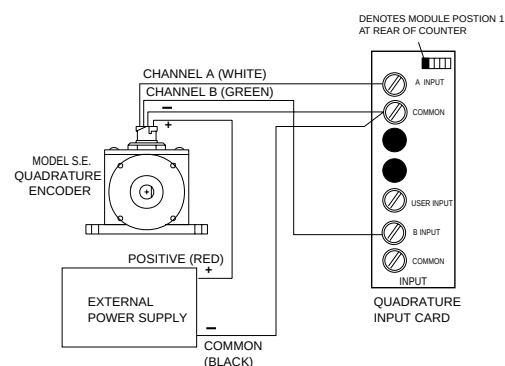


Wiring Examples

Connecting Quadrature Encoder using external power supply.



Connecting Quadrature Encoder using S660 Excitation Power Supply.



Specifications

DISPLAY

System OK LED,
operation/verification on trouble
shooting aid

INPUTS

12-28 VDC - 35mA@ 15VDC typical
High noise immunity
Short circuit protection
Reverse polarity protection

OUTPUT

Square wave with 50%
duty cycle 0 - 10,000 pulse/sec.

MECHANICAL

Housing--rugged anodized aluminum
Shaft Rotation--either direction
Shaft Speed--6,000 RPM max.
Shaft--stainless steel
Bearings--heavy-duty chrome steel
Load--30lbs. radial; 10lbs. axial

ENVIRONMENTAL

32°F to 149°F (0-65°C)

Ordering Information

SE Quadrature Encoders

<u>Pulses Per Revolution</u>	<u>Catalog No.</u>
60	SE-060
100	SE-100
120	SE-120
360	SE-360
600	SE-600

Accessories

Chariot



The Chariot, when connected to Simpson's SE Quadrature Encoder, allows length measurement and bi-directional counting. The Chariot is also compatible with most quadrature encoders and can be configured with one or two Measuring Wheels, as listed at the right. Includes mounting hardware, pivotal point and anodized aluminum frame.

Flexible Shaft Couplings

Size

0.250" to 0.250"
.375" to .375"
.3125" to .3125"
Package: .250", .375", .3125"
inserts allow coupling of two
different diameter shafts.



Catalog

46012

12" Measuring Wheels with Tires

Tire Durometer*

80A, black tire; longer service life:
plastics, metals.

83A, non-marking tire, for textiles,
medium textures.

92A, non-marking tire, for plastics, metals, coarse wood.

70A, non-marking tire, for soft textiles.



***Durometer:** Lower numbers are softer, stickier tires; higher numbers are harder, smoother tires.

Engineer's Notes

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