

# S664 Frequency Counter







File # E199939

- Easily programmed from the front panel
- Remote Reset capability
- Input variety: Quadrature, Switch, TTL, CMOS, NAMUR, PNP, NPN
- Software functions include:

Password Display Scaling
Set Point Programming Decimal Point Selection

### Optional 12DCV Excitation

This counter offers a wide input frequency range from 1Hz to 35KHz, and four display ranges of 99.99Hz, 999.9Hz, 9999Hz, and 35KHz.

The easiest to use counter in the S660 counter series, the S664 offers 12 DCV, 100mA sensor excitation and requires no programming to use.

After the counter is mounted and wired, selecting the appropriate frequency range is the only setup required. One of four frequency ranges may be selected to measure from 1Hz to 35KHz.

## **Specifications**

DISPLAY

Type 4-digit, 7-segment, red LED

Height 0.56" (14.2mm)

Decimal Point Position according to scale selection
Count Direction "+" indication implied, "-" indication displayed

Display Range -999 to +9999

Output Indicators 1 and 2

**POWER REQUIREMENTS** 

**AC Voltages** 120, 240VAC, ±10%

Power Consumption 3VA

INPUT RATINGS

Current Sinking  $10K\Omega$ , 5% Resistor pull-up to (9.0 - 16DCV)  $\pm 10\%$ 

**Current Sourcing** 5.1K $\Omega$ , 5% Resistor pull-down to common

Minimum Pulse Width ~2µ:

Low Pass Filter <200Hz

 Low Bias
 VLT =  $1.6V \pm 10\%$  VUT =  $3.6V \pm 10\%$  

 High Bias
 VLT =  $5.0V \pm 10\%$  VUT =  $7.0V \pm 10\%$ 

Count Rate 35KHz (Pulse Max) 8.75KHz (Quadrature X4

Maximum Voltage Input Max)

A, B, and User

30DCV (Max)

**ENVIRONMENTAL** 

Operating Temp. 0°C to +40°C Storage Temp. 0°C to +60°C

**Relative Humidity** 0-80% non-condensing for temperatures less

than 32°C, decreasing linearly to 50% at 40°C

Ambient Temperature 25°C

Temp. Coefficient (per °C) ±100ppm/ °C Warmup Time 15 minutes

**MECHANICAL** 

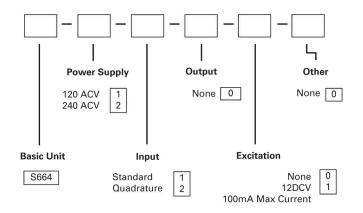
**Bezel** 3.93" x 2.04" x .52" (99.8mm x 51.8mm x 13.2mm)

**Depth** 3.24" (82.3mm)

Panel Cutout 3.62" x 1.77" (92mm x 45mm)

Case MaterialPBT-ABSWeight90z (255.1g)

## **Ordering Information**



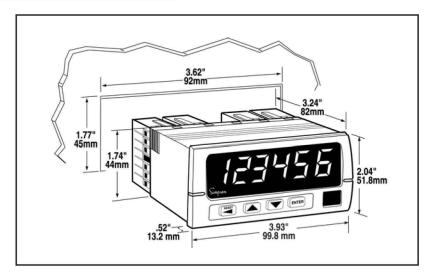
# **Counter Accessories**



# **Mounting Requirements**

The S660 series 1/8 DIN counters require a panel cutout of 1.77" (45mm) high by 3.62" (92mm) wide. To install the counter into a panel cutout, remove the clips from the side of the meter. Slide the meter through your panel cutout, then slide the mounting clips back on the meter. Press evenly to ensure a proper fit.

### Dimensions - S660, S661, S662, S663, S664



### Accessories



#### Chariot

The Chariot is used to mount most cubestyle quadrature encoders and measuring wheels. Made of anodized aluminum, the chariot includes mounting hardware and selectable pivotal points. Wheels, tires, and flexible shaft couplings are sold separately.

Catalog No. 46012



### Flexible Shaft Couplings

The one-piece flexible coupling connects the shaft of a cube-style encoder to an ancillary equipment shaft without worry of misalignment of rotary frequency. The coupling ensures minimum windup, minimum rotary oscillation, and no hysteresis.

46002

46003

2

<u>Description</u> <u>Catalog No.</u>

Coupling: For connecting an encoder to a 3/8" shaft Coupling package: For connecting an encoder to 1/4" or 5/16" diameter shaft\*

\*Package includes: One flexible coupling (1/2" I.D.) and three reducing inserts (1/4", 5/16", 3/8").



A Simpson 12" circumference anodized aluminum measuring wheel is the right choice to complete the setup of a length measurement system. Whether the application requires one or two, Simpson's measuring wheels will perform accurately and reliably throughout the measuring process.

Also included on the measuring wheel is a printed alignment scale which assists in the installation and measurement of the length measurement system.

Simpson offers four replaceable durometer tires that consist of a black tire that has a longer life span and three non marking tires. The three non marking tires are for delicate materials such as plastics, textiles, wood, metal and paper to prevent tearing, damage or marking of delicate materials.

Tire Durometer	Catalog No.
	40004

80A, black tire; longer service life for 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
46007

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