

ESSE Series

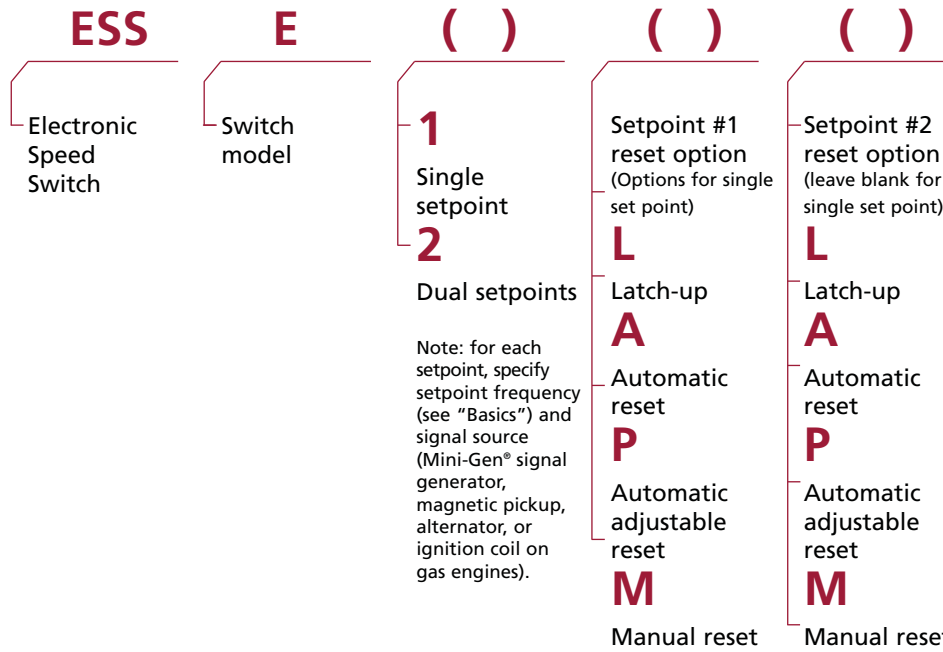
Single or dual switches to monitor and control critical speed functions. Applications include crank disconnect or overspeed protection on diesel engines, transmission shift inhibiting, and PTO protection.



Features:

- Standard or reverse relay operation
- Field adjustable set and reset switch points
- High noise immunity
- Latch, automatic, manual or adjustable resets (automatic or latch are field selectable)
- Reverse polarity protection
- Mini-Gen® signal generator, magnetic pickup, alternator or ignition coil for signal input
- Test circuit (trips at 67% ± 10% of setpoint)
- Potted for in-field reliability, exposed applications, and hostile environments
- Field selectable setpoint range

Order Information: Complete the following model descriptions to build your Order No.



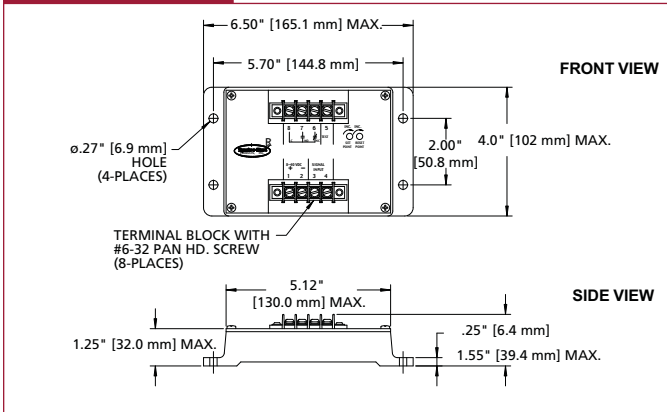
When you order: Also specify speed range 1 or 2 from the chart below.

	Standard Inputs	Ignition Input
1	80-2500 Hz	10-250 Hz
2	325-10,000 Hz	20-500 Hz

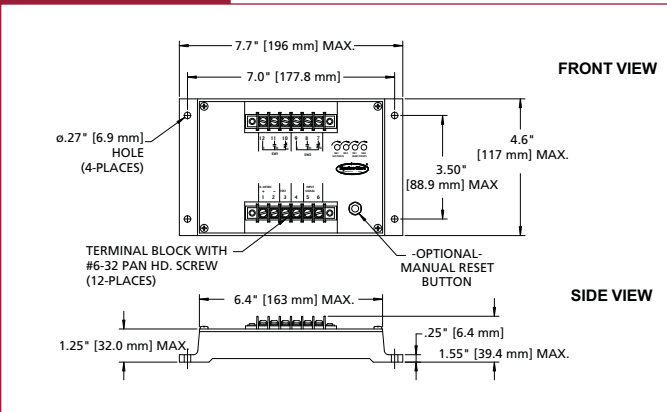
E.E.C. Directive Compliance: All parts supplied by Woodward are classified as components, and therefore are not "CE" marked. Please contact factory direct for details on specific product compliance with 89/336/EEC and 89/392/EEC directives.

ESSE Series

ESSE-1



ESSE-2



Electrical Specifications:

Power Input	8-40 VDC (40-80 VDC optional on ESSE-2)	
Power Supply	900 volts for 100 microseconds (exponential decay)	
Transient Protection	900 volts for 100 microseconds (exponential decay)	
Reverse Polarity Protection	1000 VDC	
Maximum Current for ESSE-1	12 Volt	24 Volt
	Operating: 125 mA	140 mA
	Standby: 30 mA	45 mA
Maximum Current for ESSE-2	12 Volt	24 Volt
	Operating: 200 mA	220 mA
	Standby: 30 mA	45 mA
Signal Input	Minimum: 1.2 VRMS	
	Maximum: 130 VRMS	
	Impedance: 33K ohms (nominal)	
Relay Contact Ratings	Resistive Load: 0.1 to 10 A 28 VDC	
	Inductive Load: 0.1 to 8 A 28 VDC	
Overspeed Response Time	100 milliseconds (typical)	
Setpoint Reset	Automatic (80% to 90% of setpoint) Automatic Adjustable (25% to 95% of setpoint) Electrical Latch Manual Reset	
Setpoint Stability	For an input voltage range of 9V to 40V and for a temperature range of +14°F to +185°F (-10°C to +85°C), the ESSE Series shall typically be less than 1% or 8 Hz, whichever is greater. The unit performs to -40°F (-40°C).	

Mechanical Specifications:

Operating Temperature	-40°F to +185°F (-40°C to +85°C)	
Vibration	4 G's from 20 to 500 Hz	
Shock	4 foot drop test	
Case	Cast aluminum 1/4" wall thickness Potted electronics for environmental protection Nickel-plated terminals - humidity and salt spray resistant	
Weight	of ESSE-1	1.4 lbs (.5 kg)
	of ESSE-2	1.9 lbs (0.9 kg)

Specifications are for reference only.