

F SERIES SHAFT ROTATION SENSOR



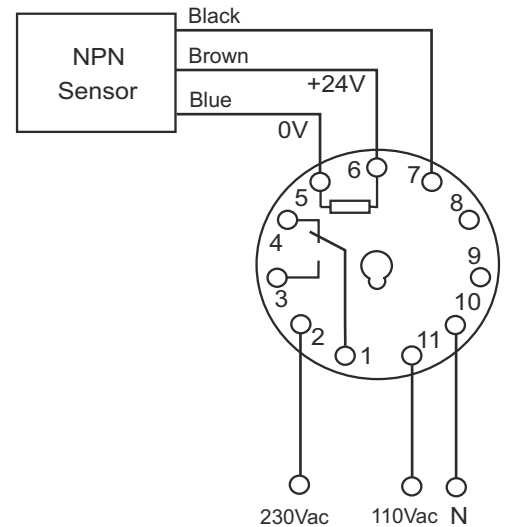
- Prevents access to rotating machinery
- Selectable time delay 1 to 30 seconds
- 110 or 230Vac supply options
- 5 A SPCO relay output

The FSRS shaft rotation sensor is specifically designed to prevent access to a normally rotating machine until it has slowed to a safe speed. An adjustable potentiometer on the fascia enables the sensor to be set for an appropriate minimum speed which may be considered as safe for the operator to gain access. If the sensor does not receive a pulse within the time set by the potentiometer, its output will energise and this signal can be used to disable a guard. By using the normally closed contacts the sensor becomes fail-safe in the event of loss of power.

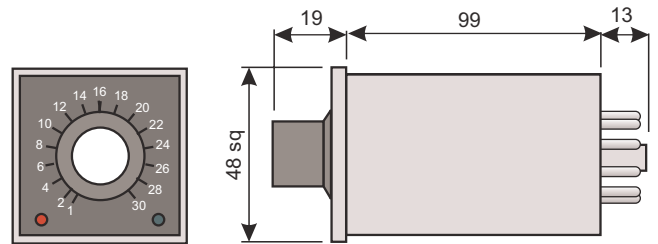
SPECIFICATION

Supply voltage :	110/230(220-240)Vac @ 50/60 Hz
Supply frequency:	50/60Hz
Power drain :	4VA
Time delay :	1 to 30 seconds
Sensing speed:	Calculated by $S_{min} = 60/nT$ rpm where n = No. of pulses per revolution T = time set on potentiometer
Min. Pulse width:	3 msec (for 50% duty cycle). To calculate the minimum 'flag' width (W_f) use the formula $W_f = r/10$ mm (50% duty) where r = radius of shaft
Input sensor:	Any volt-free contact (no bounce) or 3-wire active sensor with a power consumption of < 25mA at 24Vdc.
Output rating:	SPCO relay rated at 5A/240Vac /30Vdc resistive
Electrical life:	100,000 ops at rated load
Ambient range:	-10 to 50°C non-condensing
Approvals:	Conforms to CE emc EN50081-1 & EN50082-1 and low voltage EN61010-1 directives

CONNECTION DIAGRAM



DIMENSIONS



Panel Cut-out 45 x 45 mm⁺⁰/_{-0.5}

STANDARD ITEMS

Type	Part Number
Shaft Rotation Sensor	FSRST30SLP-110/230VAC
Wiring socket - panel mount	AZ511
Wiring socket - DIN rail	AZ611