

Head Office
Ringway Control & Automation
ABN 47 087 315 179
4 Lady Penrhyn Dr,
Unanderra, NSW 2526
products@ringway.com.au
Ph 02 4255 4300 Fax 02 42718990

Mackay Office
Ringway Materials Handling
Unit 10 Woodman Pde,
Mackay, QLD 4740
products@ringway.com.au
Ph 07 49524001 Fax 07 49522216



# SPEED TRANSDUCER

P/N - SPEEDSENS

# ROTARY SPEED MEASUREMENT TRANSDUCER

# **DESCRIPTION:**

The Ringway Speedsens is a three-wire device that converts rotary speed into a proportional 4-20mA DC output signal. The sensing electronics are housed in a 'spun' stainless steel body with a turned ABS plastic bearing housing. The keyed input shaft is robustly supported by 2 sealed ball bearings and can be friction wheel driven or directly connected to the rotating equipment by mechanical means (e.g. flexible coupling). The output signal has a very fine resolution making it ideal for accurate process control and measurement. The input shaft speed measuring limits are between 60 and 3600 RPM. Speedsens units can be calibrated to give a 20mA output signal for a given input shaft speed by adjusting a simple 'span' pot under a screw at the rear of the unit.

To achieve calibration over such a wide range of input speeds the transducer has two basic gain settings, G1 for low speed applications and G2 for medium to high speed applications. The gains are 'jumper' selectable on the internal electronics card. The default setting is G2, which suits most applications. If the output of the unit is over range at full speed and cannot be spanned back, the jumper position may be on G1.

# **FEATURES:**

- Simple, robust and functional.
- High resolution output
- Wires directly to PLC Analog Card no signal conditioning cost effective
- Easy connection

# **APPLICATIONS:**

The Speedsens transducer provides a means for high resolution and accurate rotary speed measurement that is also cost-effective. Ringway and its customers have applied the unit to accurate speed measurement for conveyors to provided smooth acceleration control and belt slip protection. Sensors are generally mounted to be 'wheel driven' by running them on top of gearbox output couplings or other smooth slow moving surfaces.

# **BRIEF TECHNICAL SPECIFICATIONS:**

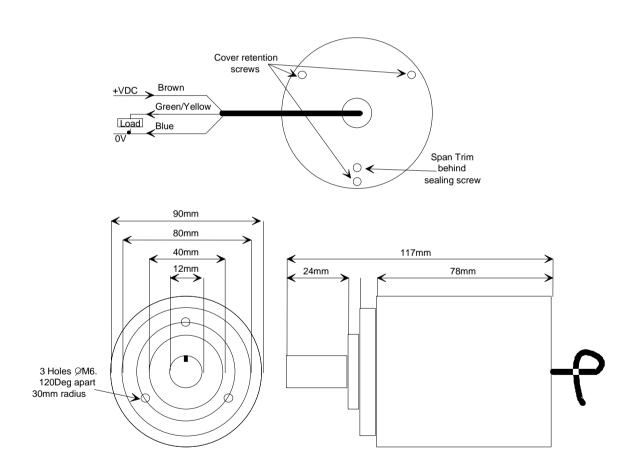
Power Supply: 16 to 24V dc @ 55mA + output current

Output: 4-20mA

Output Load: 450 Ohms maximum

**Body Dimensions:** 117mm long & 90mm diameter

Wheel: 120mm diameter
Shaft: 12mm diameter



**SPEEDSENS CONNECTION & DIMENSION DIAGRAM**