

# BELT SPEED SENSOR – PROXIMITY SWITCH

---

## DESCRIPTION

The belt speed sensor supplied with the belt scale is a proximity switch. It is used in conjunction with “flags” on a pulley, or specifically designed sprocket. It produces a square wave output, the frequency of which is proportional to the belt speed. A “pull-up” resistor is provided, which is installed in the belt speed sensor junction box. Sufficient flags must be installed so that the frequency output is not less than 10Hz at the slowest belt speed.

## MECHANICAL INSTALLATION

The installation of the proximity switch should be typically 3 mm to 5 mm from the metal flags. The maximum sensing distance of the switch supplied is 15 mm. The minimum clearance between the face of the switch and any metal past the flags should be twice the sensing distance (30 mm). Ensure that the face of the proximity switch will not come in contact with any of the flags. After adjustment tighten any locknuts.

## ELECTRICAL INSTALLATION

The proximity switch is provided with a three (3) core cable approximately two (2) metres long. Therefore the belt speed sensor junction box must be installed within its reach. The cable should be mechanically protected.

Refer to drawing “WTMW5-01-6” for termination details.

## PART NUMBER

The part number for the switch supplied is as follows:

**“Rhomborg R15-3015S-NO”**