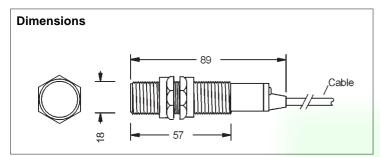
## **SPEED MONITORING RANGE**

A range of stopped motion, over or underspeed monitors, designed and manufactured in the UK by Synatel, available as self contained units or in modular form with separate proximity sensors. ATEX/IEC Ex units available for hazard areas.

## **ROTASTOP STOPPED MOTION SU1MZ(A)**

An 18mm dia unit, fully self contained, incorporating a proximity sensor and associated stopped motion circuitry. The unit detects a stud on a shaft and the output maintains it's 'on' state whilst the target is moving. Ideal for chain & gear driven shafts. For belt driven applications see PU1TZ(A)/PU1TR(A).





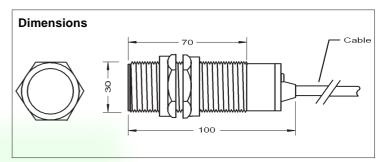
| SPECIFICATION - GENERAL |  |
|-------------------------|--|
| Supply                  | 24-240V ac/dc.                               |
| Operating Temp          | -15°C to +50°C.                              |
| Operating Speed         | 15-3600 PPM.                                 |
| I.P. Rating             | IP65.  |
| Operating Distance      | 8mm max (ferrous target - 18mm dia. min.)    |
| Output                  | Two wire FET. Maximum. current 200mA.        |
|                         | Vdrop= 8V maximum.                           |
| Output State            | Output ON (energised) while shaft running    |
|                         | and at least one pulse received within every |
|                         | 4 second.                                    |
| Time Delay              | 4 seconds. Output de-energises after this    |
|                         | time period if no input is detected.         |
|                         | Alternative delays available.                |
| Start-Up Delay          | On application of supply. Output energises   |
|                         | for 4 seconds to allow machinery to achieve  |
|                         | normal running speed.                        |
| Indication              | LED indication of input pulses and output    |
|                         | energised.                                   |
| Weight                  | 260g.  |

Note: **SU1MZ(A)** is also available with Gas Hazard approval - unit becomes **ID/E1MO(AG)**. Suitable for gas group 2B. Supply **must** be fused (see manual supplied with unit). All other details are as stated above.

## **ROTASLIP UNDERSPEED PU1TZ(A)/PU1TR(A)**

A 2 wire, FET output - PU1TZ(A) or a 5 wire, relay output - PU1TR(A) underspeed sensor. The unit detects a stud or bolt on a shaft and indicates a fault condition if input speed falls by 20% or more below set running speed.

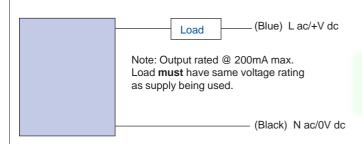




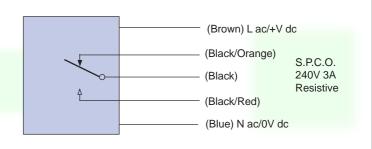
| SPECIFICATION - GENERAL        |   |
|--------------------------------|---|
| Supply-PU1TZ(A)                | 24-240V ac/dc.  |
| Supply-PU1TR(A)                | 12-240V dc/24-240V ac                                     |
| Operating Temp                 | -15°C to +50°C.   |
| Operating Speed                | 10-3600 PPM.  |
| I.P. Rating                    | IP65.   |
| Operating Distance             | 12mm max (ferrous target - 25mm dia. min.)                |
| Output-PU1TZ(A)                | Two wire FET. Maximum current 200mA.  Vdrop = 8V maximum. |
| Output-PU1TR(A)                | SPCO relay. 3A 240V ac max. Non-inductive.                |
| Output State                   | Output energised @ set running speed,                     |
|                                | de-energises if rotation falls 20% or more                |
|                                | below set speed.  |
| Calibration                    | Start-up delay and set running speed user                 |
|                                | programmable using a magnet                               |
| (supplied)                     | applied to a target area                                  |
| on body of sensor.             | Automatically   |
| calibrates to 20% under normal |   |
| running speed.                 |   |
| Start-Up Delay                 | Programmable start-up delay. Output                       |
|                                | energises for time period irrespective of                 |
|                                | incoming pulse signal, allows machine to                  |
|                                | achieve running speed. Max. 30 seconds.                   |
| Indication                     | LED indication of input pulses and output                 |
|                                | energised.  |
| Weight                         | 300g.   |

## Connections

2 wire SU1MZ(A) & PU1TZ(A) units



5 wire PU1TR(A) units



All dimensions shown in mm unless otherwise specified