





ATEX Approved
2 Wire Underspeed Monitor
PU1TZ(A)

Relay O/P Underspeed Monitor PU1DR(A)

ATEX, group II, Category 2,Dust, Temperature T100°C

Synatel ATEX approved underspeed monitors are available in two formats.

Both units incorporate a proximity sensor and associated underspeed circuitry, all in the same package. No additional equipment is required other than a suitable target for detection.

The **Rotaslip** is a two wire, 30 mm dia. threaded version with 2 metres of cable and locknuts for mounting purposes, this unit is designed to be wired in series with a suitable load (relay, small contactor etc.).

The **Rotamatic** is a Limit switch style DIN enclosure with relay output and can be connected directly into control circuitry of conveyor systems or to inputs of PLC's etc.

Both units are calibrated by applying a magnet (supplied) to a target area on the unit. Start-up time delay can also be set in the same manner. Once the units are correctly programmed, they will remember their settings, even if the power is removed. The outputs operate at 20% below the set running speed of the machinery.

A simple fixing device is available "The Whirligig" - (see datasheet D7001) which allows quick and easy fitting of these sensors to rotating shafts. Requiring only a M12 threaded hole, no additional targets or guarding is required. Also available is the 'Magcon' for magnetically attaching the Whirligig without drilling. Ask for details.

- \* 2 wire-24-240V ac/dc supplies Relay-12-240V dc, 24-240V ac supplies
- Fully encapsulated & sealed for use in the most arduous conditions
- \* Output operates at 20% below normal set running speed.

SPECIFICATION		
	PU1DR(A)	PU1TZ(A)
SUPPLY	24 - 240V ac 50/60Hz, 12 - 240V dc.	24-240V dc/ac 50/60Hz
OPERATING SPEED	10 - 3,600 Pulses per Minute.	
ENCLOSURE	NOPLA	
REPEAT ACCURACY	<2%	
OUTPUT	Voltage free single pole relay contact rated 3A 240V ac non ind.	FET rated @ 200 mA max.
OUTPUT STATE	Relay normally energised with shaft rotating at correct speed.	Output normally energised with shaft rotating at correct speed.
START-UP DELAY	Programmable delay 0-30 seconds, initiated by application of supply.	
TERMINATION	Supplied with 2 metres PVC cable.	
LED INDICATION	LED indication of input pulses and output relay energised.	
WEIGHT	350 gms.	190 gms.
CALIBRATION	Automatic calibration by applying a magnet (supplied) to a calibration point.	
SENSING RANGE	12mm max - ferrous target.	
TARGET	Metal protrusion, (ideally min 30mm diameter).	

## **HOW TO ORDER:-**

SPECIFY **PU1DR(A)** FOR RELAY OUTPUT MODEL OR **PU1TZ(A)** FOR 2 WIRE MODEL.

## APPROVAL/CERTIFICATION

 $\langle \xi_x \rangle$  BAS01ATEX2364X for PU1TZ(A)

 $\langle E_X \rangle$  BAS01ATEX2365X for PU1DR(A) II 2D T100°C Tamb -15°C to +50°C IP65



Detection & Control in Action

