

Motion Sensors

Stopped Motion Monitor – ROTASTOP3
Self-contained



- Self-contained, no moving parts
- Universal voltage, two wire operation
- Simple, low-cost installation
- No contact with moving parts

L = 95, Dia. = M18 (overall)

The ROTASTOP SU1MZ is ideal for monitoring chain- or gear-driven machinery such as gearbox drives, screw conveyors etc. but is suitable for almost any application where stoppage detection is needed.

Supply	24 to 240V ac/dc	Target	18mm dia. target for maximum range
Ambient temperature	-15°C to +60°C	Time delay	4 sec.
Operating speed	15 to 3600 ppm	Start up delay	4 sec.
Protection	IP65	Cable	2 core, PVC sheathed, 2m length
Output	Normally closed when running	Indication	LED indication of input pulses and output energised
Output rating	1.6mA min, 200mA max. (volt drop 8V)	Enclosure	Moulded polycarbonate
Operating distance	8mm ferrous metal		

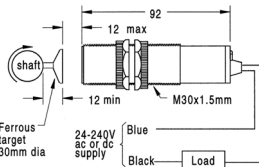
SEN281

Mfrs. List No.	Order Code	1+	5+	10+
SU1MZ	705-9220			

Underspeed Monitor – ROTASLIP
Self-contained



L = 92, Dia. = M30



Note: The load must have the same voltage rating as supply being used.

- Automatic calibration at 20% underspeed
- Microprocessor controlled
- Universal voltage, two wire operation
- No contact with moving parts

The ROTASLIP self-contained underspeed monitor detects slowdown or stoppage of rotating machinery. It is ideal for monitoring the rotation of belt conveyors, grain elevators, fans, mixers or grinders and is suitable for many other industrial applications.

Supply	24 to 240V ac	Operating distance	15mm, ferrous metal
Ambient temperature	-15°C to +60°C	Target	20mm dia. target for maximum range
Operating speed	10 to 3600 ppm	Startup delay	0 to 30 sec
Protection	IP65	Cable	2m, 2 core, PVC sheathed
Output	Normally closed at set speed	Accuracy	±2% or set speed
Output rating	1.6mA min, 200mA max. (volt drop 8V)	Indication	LED indication of input pulses and output energised
Output calibration	Automatic at 20% below nominal	Enclosure	Moulded polyester

SEN316

Mfrs. List No.	Order Code	1+	5+	10+
PU1TZ	706-0490			

Programmable Underspeed Monitor – ROTAMATIC
Self-contained



- Replaces existing limit switch packages
- Microprocessor controlled
- Automatic calibration at 20% underspeed
- Universal voltage operation
- Relay output

H = 40, W = 40, L (overall) = 132, Fixing centres = 60 30 (M6), Cable entry = 20mm tapped

The ROTAMATIC underspeed monitor is a microprocessor-controlled, self-contained unit capable of detecting over a wide speed range. It is ideal for monitoring the rotation of conveyors, elevators, fans, grinders and mixers and provides a relay output which can be used in stop circuits or alarm operation.

Supply	24 – 240V ac, 12 – 240V dc
Ambient temperature	-40°C to +70°C
Operating speed	10 to 3600 ppm
Protection	IP66
Output	SPCO relay 3A 240V ac, output energised at set speed
Output calibration	Automatic at 20% below set speed, pushbutton set
Operating distance	15mm, ferrous metal
Target	30mm dia. target for maximum range
Startup delay	0 to 30 sec
Termination	2m PVC cable
Accuracy	±2% of set speed
Indication	LED indication of input pulses and relay energised
Enclosure	Moulded glass filled polyester

SEN302

Mfrs. List No.	Order Code	1+	5+	10+
PU1DR	725-6280			

Gear Tooth Sensor



- Accurately senses the movement of ferrous metal targets up to 100kHz
- Reverse polarity protected and EMI resistant

Connections: Black/Brown = +ve
White = 0
Black = ve

Probe L = 31.8, Dia. = 17.9, Mounting hole dia. = 7.0, Centres = 22.0, Leads L = 140

Magnetically biased Hall effect device. The sensor contains a specially designed I.C. with discrete capacitor and biased magnet sealed in a probe type package.

Applications: Machine tool gearboxes, automotive, tachometers, generators, compressors, off road vehicles, flywheels and engine test beds.

Supply voltage	4.5 to 24V dc	Pulsed and reverse polarity transients	+60V dc, -40V dc
Supply current	10mA typ., 20mA max.	Sensing distance	2.0mm max.
Output	NPN open collector, 40mA max.		
Temperature range	-40°C to +150°C		

SEN199X

Mfrs. List No.	Order Code	1+	5+	10+	25+
IGT101DC	.731-900				

Hall Effect Vane Sensors



178-876 H = 10.9, W = 13.2, D = 19.1, Slot W = 2.5, Slot D = 7.4, Fixing centres = 14 (dia = 2.8)

178-877 H = 10.9, W = 13.2, D = 19.1, Slot W = 2.5, Slot D = 7.4, Fixing centres = 14 (dia = 2.8)

723-4806 PCB and base W = 19.8, D = 19.1, Fixing centres = 14 (dia. = 2.8)

- Useful as limit switch by operating with single large vane
- Useful as tachometer sensor by operating with toothed wheels
- Wide temperature range
- Suitable in dusty or high ambient light environment where an optical sensor would be suitable
- Transient and reverse polarity protection

Hall effect vane sensors include a Hall effect transducer and a magnet, and are operated by passing a ferrous vane through the gap between the two.

The sensor is housed in a miniature and rugged sealed package.

The connector terminated type has sensor and 4-pin connector mounted on PCB fitted onto base.

Supply voltage	4.5 to 26.5V dc	Current output	50mA
Supply current	5 to 18mA	Temperature range	-40°C to 150°C

SEN57X

Termination	Mfrs. List No.	Order Code	1+	10+	25+	100+
PCB	4AV20F	178-876				
Leadwire	4AV16F	178-877				
Connector	4AV20F-T2	723-4806				
Mating connector for 723-4806	46F527	135-2428				

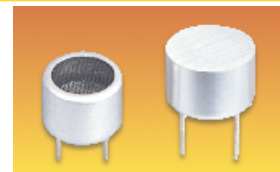
Ultrasonic Transducers



10mm Dia. Type
H = 6.6, dia. = 9.8
Leads L = 8.5, dia. = 0.5
Lead spacing = 4.8



10mm Housing Bracket
H = 19, W = 12, D = 16
Mtg = 4.5 dia.



16mm Dia. Type (Open)
H = 12, Dia. = 16
Leads L = 10, Dia. = 1.2
Lead spacing = 10



18mm Dia. Type (Enclosed)
H = 12, Dia. = 18
Leads L = 12.6, Dia. = 1.2
Lead spacing = 11.5

- Typical applications: remote control, proximity sensors, intruder alarms, motion detectors and data transmission
- Enclosed type can be used for outdoor installation or in a dusty atmosphere. Not recommended to be used under water
- Pair of housings are suitable for mounting 10mm dia. transducers. The housing enables the transducer to be aligned in a number of fixed positions relative to its mounting bracket, and is ideal for non-PCB applications