

SEN324

Mfrs. List No.	Order Code	1+	25+	100+	250+	1000+
MS24	732-795					

Motion Switch, Non-Mercury



L = 5.6mm, Body dia. = 3.55mm,
Lead centres = 5.4mm,
Lead dia. = 0.5mm

- Hermetically sealed non toxic metal cased switch
- Designed to meet a wide range of low level switching applications
- Suitable for security, limit, keyfob activation, position and level sensing
- CW1600-3 can also be used as a tilt switch
- Miniature size
- Non-mercury contacts



Contacts can be open or closed depending on switch position.

Switching voltage	60V ac	Contact resistance	100mΩ
Switching current	0.1A	Operating temperature	-37°C to +100°C
Switching capacity	3VA	Case material	Steel Tin Plated
Max. differential angle	15°		

SEN371

Mfrs. List No.	Order Code	1+	50+	200+
CW1600-3	309-4789			

Adjustable Sensitivity Module



H = 20.3, W = 38 (body), 60 (overall), D = 32,
Fixing centres = 50.8 (Dia. = 4.7), Cable L = 300
Connections: Brown = 5V, Green = 0V, White = Output

- Module incorporates Assemtech MS24 high sensitivity non-mercury vibration/motion switch
- Desensitising circuit allows response of sensor to be reduced
- Sensitivity is adjustable by trimmer ensuring no output below set level
- Omni-directional motion sensing
- Output is referenced to 0V and can drive a transistor or similar device
- Unit is fully encapsulated

Supply voltage	5V dc	Output current	24mA @ 5V dc
Supply current	40mA max.	Operating temperature	-10°C to +70°C

SEN362

Mfrs. List No.	Order Code	1+	10+	25+	100+
MS24A/30	723-0424				

Shock/Linear Acceleration Switch



730-210: L = 6.8, Dia. = 4.6
Leads L = 11, Dia. = 0.5



984-541, 984-553: L = 10.9,
Dia = 4.85, Lead Ø = 0.5

- Robust construction with sealed contacts
- Easy fitting and proven reliability
- Particularly suited for use in monitoring of centrifugal forces and controlling spin speeds
- Industrial and medical centrifuge applications
- Electrical generating windmill applications
- Power switching in automotive applications, etc.

The switches are fitted with a spring loaded contact which closes when the switch detects shock or acceleration above its activation level. The contact will open again when acceleration decreases.

Switching voltage	24V ac max.	Contact resistance	10Ω max
Switching current	0.25A max.	Operating temperature	-20°C to +85°C

SEN245X

Activation Level	Mfrs. List No.	Order Code	1+	25+	100+	250+
5.0 ± 1.5G	ASLS5.0	730-210				
2.1 ± 1.0G	ASS/2.1	984-541				
5.5 ± 1.5G	ASS/5.5	984-553				

Shock Sensor, Plastic Case



H = 4.5, W = 34.4, Dia. = 24.0
Fixing centres = 29.0,
Hole dia = 2.2, Lead L = 40mm



- Senses mechanical shock, vibration or acceleration
- Output proportional to amount of G subjected to it, typically 40mV/G
- Applications: bank equipment protection, burgular alarms for vehicles, vending machines, shop windows, etc.

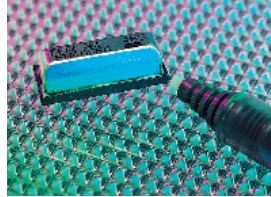
Piezo-electric ceramic sensor housed in a plastic case with flying lead connections.

Sensitivity	40mV/G (typ) @ 25°C	Insulation resistance	30MΩ (min) @ 100V dc
Capacitance	10,000 pF ± 30% @ 25°C, 1kHz	Operating temperature	-20°C to +60°C

SEN58

Mfrs. List No.	Order Code	1+	25+	100+	250+
PKS1-4A10	731-973				

Piezoelectric Vibrating Gyroscope – GYROSTAR



731-985: L = 58, W = 24, D = 24



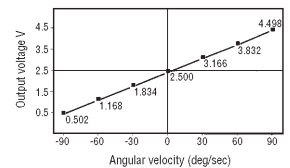
731-997: L = 21.5, W = 8.5, H = 7.6 (above PCB)
Pin spacing = 15.24 3.81

- Terminal Connections:
1. Supply voltage
 2. Comparative voltage
 3. Ground
 4. Sensor output

- Connections:
1. Vcc
 2. GND
 3. Vout

- High precision performance – a linear voltage output is produced proportional to the amount of angular velocity
- Available as compact low cost unit, or with additional signal conditioning, higher sensitivity and anti-vibration mount

Angular velocity - Output characteristics



GYROSTAR is a piezoelectric vibrating gyroscope, using an equilateral triangular vibrating unit and a new computation method. Clockwise rotation of the sensor about the angular longitudinal axis gives a voltage higher than reference voltage. Anti-clockwise rotation gives a voltage lower than the reference voltage.

	731-985	731-997
Supply voltage	+5.0V dc	+5V ± 0.5V dc
Supply current	5mA max	15mA max
Max-angular velocity (degree/sec)	± 90	± 90
Output at angular velocity = 0	+2.3V dc	2.5V dc
Output angular velocity = max	± 0.1V dc	± 2.0V dc
Scale factor	1.11mV/deg/sec	22mV/deg/sec
Linearity	± 5%	≤ ± 0.5% F.S. of max. angular velocity
Hysteresis	—	None
Drift	—	< 0.2%
Temperature coefficient of scale factor	± 20%	< 0.2% of max. ang. velocity/hour
Temperature offset	—	< 0.1% @ max. angular velocity
Response	50Hz	7Hz max
Output noise	—	Within 10mV rms
Operating temperature	-5°C to +60°C	-20°C to +60°C

SEN177

Mfrs. List No.	Order Code	1+	3+	10+	30+
ENC-05E	731-985				
ENV-05H-01	731-997				

Pyroelectric Infra-Red Detector



- Movement sensor, for example in infra-red intruder alarms
- Sensor incorporates an optical filter to reflect white or visible light
- Improved sensitivity and reduced white noise
- Suitable Fresnel lens arrays also available

731-950: H = 4.7, Dia = 9.1

Detector		Supply voltage	2.0-15.0Vdc
Sensitivity @ 500°K, 1Hz	4.3mVpp(typ.)	Viewing angle	45° 4 5°
Sensitivity balance	10% max	Element size	(2.0 1.0mm) 2
White noise level	200mVpp max	Operating temperature	-40°C to +70°C
Source voltage	0.2-2.5V		

Fresnel Lenses

108-231: A polyethylene volumetric Fresnel lens array for sensing movement of intruders over a wide area up to at least 12 metres, and typically mounted at a height of 2 metres. Focal length 25mm.
108-232: A polyethylene horizontal curtain Fresnel lens array for movement sensing up to at least 12 meters, and typically mounted close to ground level. Focal length 25mm.

Mfrs. List Nos: PF24 = 108-231 (C.O.I.L.), PF11HC = 108-232 (C.O.I.L.),
IRA-E700STO = 731-950 (Murata)

SEN58

	Order Code	1+	10+	25+	100+
Detector	731-950				
Volumetric lens	108-231				
Curtain lens	108-232				