

AC-CAP-PRO-MR

Capacitive accelerometer Medium Range

SN: A#####

Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

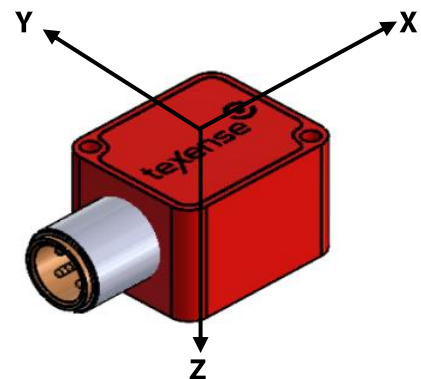
Measurement features		
Range	$\pm 10, \pm 15$ or ± 20	G
Sensitivity	Range $\pm 10G$	$200 \pm 2\%$
	Range $\pm 15G$	$133 \pm 2\%$
	Range $\pm 20G$	$100 \pm 2\%$
Sensitivity Drift (20 to 80°C)	± 2.5	%
Signal at 0G	2.500 ± 0.050	V
Offset Drift (20 to 80°C)	Range $\pm 10G$	± 40
	Range $\pm 15G$	± 30
	Range $\pm 20G$	± 20
Cut-off frequency -3dB ($\pm 10\%$)	Min	10
	Default	65
	Max	500
Calibrator	LDS V406	
Resonance	5500	Hz
Max Cross axis sensitivity	3	%
Electrical features		
Supply Voltage ⁽¹⁾	5 to 16	V
Supply Current	< 3	mA
Output Voltage ⁽¹⁾	0 – 5	V
Output Impedance	< 10	Ω
Max output load	5000	Ω
Mechanical features		
Dim	38x22x18	mm
Material	Aluminium	
Weight	19	g
Protection	IP66	
Environment		
Shock	1000	G
Insulation under 50V _{DC}	>100	M Ω
Operating Temp	-20 to +100	°C
Storage Temp	-40 to +125	°C

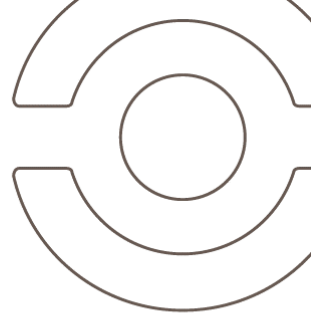
(1) Output signal is saturated to supply voltage – 0.350V. Thus, at 5V supply voltage, the outputs are limited to 4.650V. Offset and sensitivity are not changed as they are regulated.

Date		Operator	
Customer			
Order			
Product Ref	AC-CAP-PRO-MR-#-X#-Y#-Z#-##		

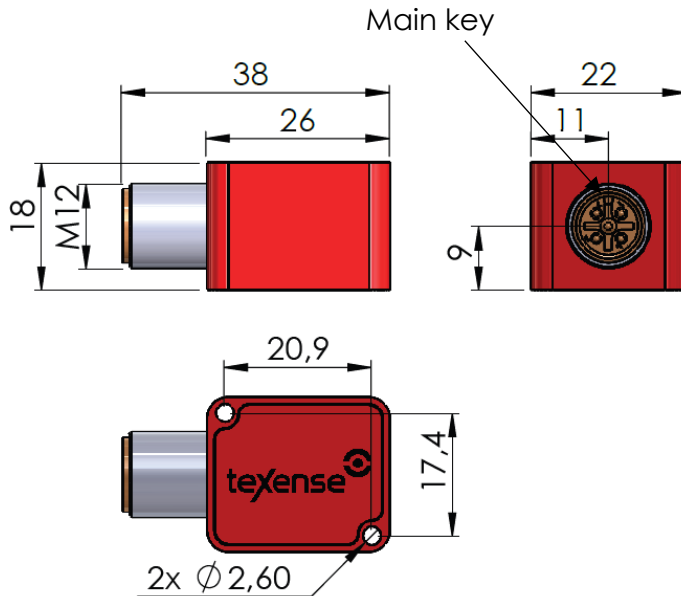
Sensor readings			
	X	Y	Z
Signal (V) @ -1G	...V	...V	...V
Signal (V) @ 0G	...V	...V	...V
Signal (V) @ +1G	...V	...V	...V
Sensitivity (mV/G)	...mV/G	...mV/G	...mV/G
Cut off frequency (Hz) at -3 dB	...Hz	...Hz	...Hz
Cross Axis (%)	...%	...%	...%

Calibration table			
Acceleration	Range 10G	Range 15G	Range 20G
	200 mV/G	133mV/G	100mV/G
G	V	V	V
-20			0.500
-15		0.500	1.000
-10	0.500	1.167	1.500
-5	1.500	1.833	2.000
0	2.500	2.500	2.500
+5	3.500	3.167	3.000
+10	4.500	3.833	3.500
+15		4.500	4.000
+20			4.500





Mechanical drawing



Pinout

Connector		
M12-A 5 pins connector		
Pin	Function	Comment
1	Supply	
2	0V	
3	Signal X	Not wired if XN code
4	Signal Y	Not wired if YN code
5	Signal Z	Not wired if ZN code

Ordering information

Ordering ref:

AC-CAP-PRO - *MR* - *Nb Axis* - *XRange* - *YRange* - *ZRange* - *Cut off frequency*

MR: Medium range

1: 1 axis
2: 2 axis
3: 3 axis

N: Not wired
10: Range ±10G
15: Range ±15G
20: Range ±20G

Cut off frequency -3dB in Hz
10: 10Hz (min)
...
65: 65Hz (default)
...
500: 500Hz (max)

ex: AC-CAP-PRO-MR-2-X10-YN-Z20-65:

- 2 axis:
 - X axis range ±10G
 - Z axis range ±20G
- 65Hz cut-off frequency at -3dB