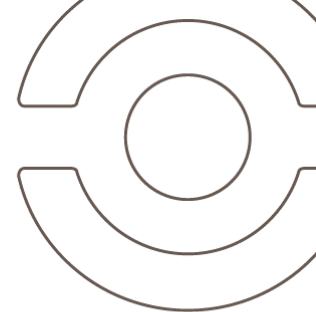




ACK-LR

Capacitive accelerometer Low 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.

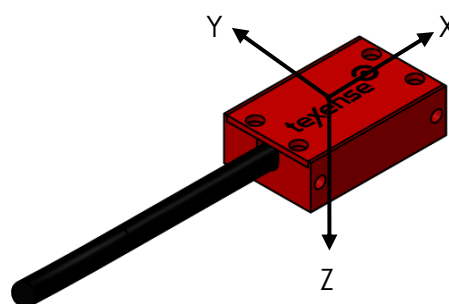
Measurement features			
Range		± 2 or ± 5	G
Sensitivity	Range ± 2 G	$1000 \pm 2\%$	mV/G
	Range ± 5 G	$400 \pm 2\%$	
Sensitivity Drift (20 to 80°C)		± 2.5	%
Signal at 0G		2.500 ± 0.050	V
Offset Drift (20 to 80°C)	Range ± 2 G	± 60	mV
	Range ± 5 G	± 30	
Cut-off frequency -3dB ($\pm 10\%$)	Min	10	Hz
	Default	65	
	Max	500	
Calibrator		LDS V406	
Resonance		5000	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		25x16x8	mm
Material		Aluminium	
Weight		15	g
Protection		IP66	
Environment			
Shock		1000	G
Insulation under 50V _{DC}		>55	M Ω
Operating Temp		-20 to +100	°C
Storage Temp		-40 to +125	°C

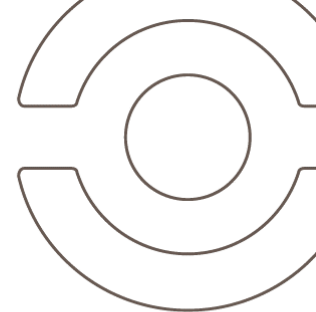
(1) Output signal is saturated to supply voltage – 0.350V. Thus, at 5V supply voltage, the outputs are limited to 4.650V. Offset and sensitivity are not changed as they are regulated.

Date		Operator	
Customer			
Order			
Product Ref	ACK-LR-#-X#-Y#-Z#-##		

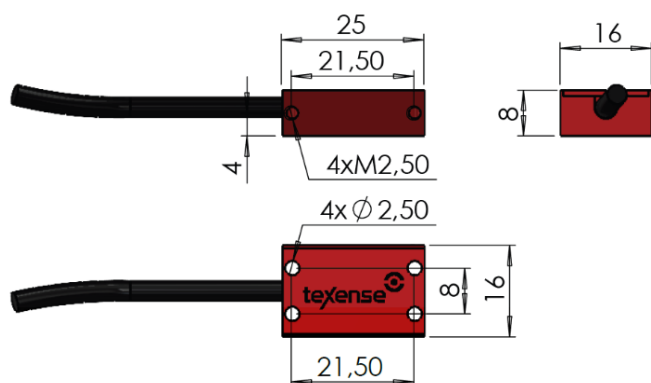
Sensor readings			
	X	Y	Z
Signal (V) @ -1G	...V	...V	...V
Signal (V) @ 0G	...V	...V	...V
Signal (V) @ +1G	...V	...V	...V
Sensitivity (mV/G)	...mV/G	...mV/G	...mV/G
Cut off frequency (Hz) at -3 dB	...Hz	...Hz	...Hz
Cross Axis (%)	...%	...%	...%

Calibration table		
Acceleration	Range 2G	Range 5G
	1000mV/G	400 mV/G
G	V	V
-5		0.500
-2.5		1.500
-2	0.500	1.700
-1	1.500	2.100
0	2.500	2.500
1	3.500	2.900
2	4.500	3.300
2.5		3.500
5		4.500





Mechanical drawing



Wiring

Cable				
26 AWG FEP tinned copper braided cable 250V 200°C				
Length: 1000mm		Tubing: 50mm		
Connector: on request				
Axis configuration			Wire color	Function
Number of axis	Total number of wires	Axis		
			Red	Supply
			Black	0V
1	3	X	White	X output
		Y	White	Y output
		Z	White	Z output
2	4	XY	White	X output
			Green	Y output
		YZ	White	Y output
			Green	Z output
		XZ	White	X output
			Green	Z output
3	5	XYZ	White	X output
			Green	Y output
			Yellow	Z output
-		-	Braid	-

Ordering information

Ordering ref:

ACK - LR - Nb Axis - XRange - YRange - ZRange - Cut off frequency

LR: Low range

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

N: Not wired
2: Range $\pm 2G$
5: Range $\pm 5G$

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

ex: ACK-LR-2-X2-YN-Z5-65:

- 2 axis:
 - X axis range $\pm 2G$
 - Z axis range $\pm 5G$
- 65Hz cut-off frequency at -3dB