PRODUCT DATASHEET

ES-SN-C00-S004-V002

Industrial Sensing Component

Multidimensional Tactile Sensors | Core Multidimensional Tactile Sensor Series

Product Overview

Industrial Sensing Component with measurement Accuracy 1 %FS, operating Temperature 0-50 °C and dimensions 18 × 13 × 10 mm.

Key Specifications

PARAMETER	VALUE	UNIT
Measurement Accuracy	1	%FS
Operating Temperature	0-50	°C
Dimensions	18 × 13 × 10	mm
Stray Magnetic Field Resistance	Chip-level magnetic resistance	
Flame Retardancy Rating	V-0 (UL94)	
Force Signals in Array	51	signals
Ingress Protection Rating	IP68	
Maximum Operating Current	200	mA
Maximum Output Frequency	1,000	Hz

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Measurement Repeatability	<0.5	%FS
Spatial Resolution	0.1	mm
Minimum Detectable Force	0.01	N
ELECTRICAL		
Maximum Operating Current	200	mA
Force Signals in Array	51	signals
Measurement Sampling Frequency	1,000,000	Hz
Measurement Output	Triaxial force array, triaxial resultant force, and triaxial torque	
Maximum Output Frequency	1,000	Hz
Maximum Tactile Signal Channels	Up to 717	channels
Torque Sensing	Any-point rotation-axis sensing supported	
MECHANICAL		
Surface Coverage	Front face and side curved edges	
INTERFACES		
Measurement Accuracy	1	%FS

Technical Specifications

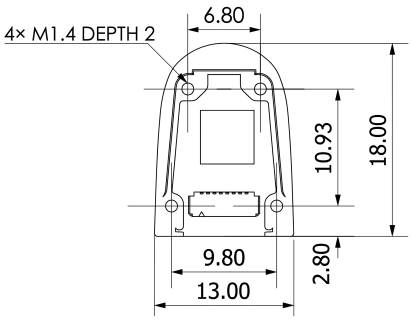
PARAMETER	SPECIFICATION	UNIT
ENVIRONMENTAL		
Operating Temperature	0-50	°C
Overload Temperature	-20-120	°C
Stray Magnetic Field Resistance	Chip-level magnetic resistance	
Flame Retardancy Rating	V-0 (UL94)	
SAFETY		
Ingress Protection Rating	IP68	
RELIABILITY		
Mechanical Cycle Life	>10 million measurement	cycles
Shock Overload	300	%
Safe Load	200	%
CONFIGURATION		
Dimensions	18 × 13 × 10	mm
ADDITIONAL SPECIFICATIONS		
Normal Force Range (Fz)	0-25	N
Tangential Force Range (Fxy)	±10	N

Dimensional & Integration Overview

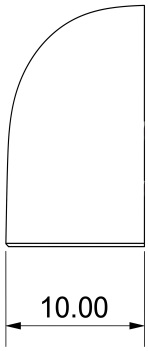
Mechanical Overview

PARAMETER	VALUE	UNIT
Surface Coverage	Front face and side curved edges	
Dimensions	18 × 13 × 10	mm

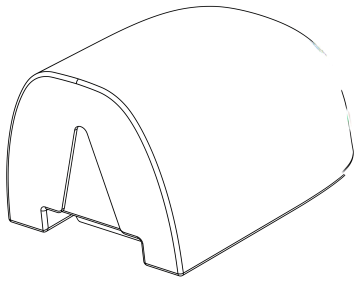
Dimensional Drawings



Mechanical View 1



Mechanical View 2



Mechanical View 3

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Upper mounting hole horizontal center distance	6.80 mm
	Threaded hole specification and depth	4 × M1.4 threaded holes, depth 2 mm
	Overall height	18.00 mm
	Mounting hole vertical center distance	10.93 mm
	Lower mounting hole center to bottom reference distance	2.80 mm
	Overall width	13.00 mm
Mechanical View 2	Side profile width	Width = 10.00 mm

View Product Online Request Engineering Data Request a Quote

01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.