

PRODUCT DATASHEET

ES-SN-C30-S001-V006

Industrial Sensing Component

Six Axis Force Sensors | Six Axis Force Sensor Series

Product Overview

Industrial Sensing Component with torque Range (Mz) 5 N·m, torque Range (Mxy) 5 N·m and force Range (Fxy) 150 N.

Key Specifications

PARAMETER	VALUE	UNIT
Torque Range (Mz)	5	N·m
Torque Range (Mxy)	5	N·m
Force Range (Fxy)	150	N
Measurement Axes	6	axes
Communication Interface	Ethernet; EtherCAT; RS-485; analog output	
Operating Temperature	-10 to +55	°C
Power Consumption	1.5	W
Force Range (Fz)	200	N
Mass	259	g

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Nonlinearity	0.5	%FS
Resolution (Mxy)	0.01	%FS
Resolution (Fz)	0.01	%FS
Resolution (Fxy)	0.01	%FS
Resolution (Mz)	0.01	%FS
Axis Crosstalk	2	%FS
Overload Capacity	350	%
ELECTRICAL		
Communication Interface	Ethernet	
	EtherCAT	
	RS-485	
	Analog output	
Power Consumption	1.5	W
Maximum RS-485 Output Data Rate	2200	Hz

Technical Specifications

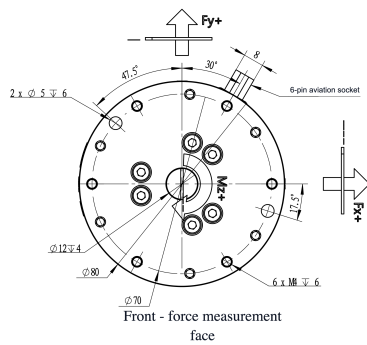
PARAMETER	SPECIFICATION	UNIT
ELECTRICAL		
Maximum Output Data Rate	2700	Hz
External Connector Type	Cold-pressed terminal	
MECHANICAL		
Mass	259	g
Housing Material	Aluminum Alloy	
ENVIRONMENTAL		
Operating Temperature	-10 to +55	°C
Ingress Protection	IP64; IP67 customization available	
CONFIGURATION		
System Architecture	Digital output with adapter	
Dimensions	26 × 80 (diameter)	mm
ADDITIONAL SPECIFICATIONS		
Torque Range (Mz)	5	N·m
Torque Range (Mxy)	5	N·m
Force Range (Fxy)	150	N
Measurement Axes	6	axes
Force Range (Fz)	200	N

Dimensional & Integration Overview

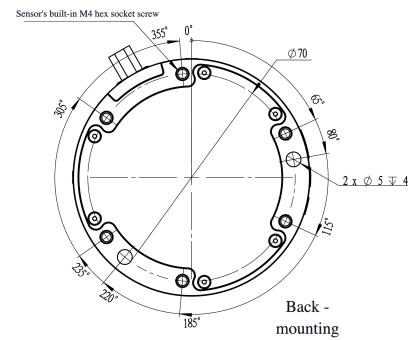
Mechanical Overview

PARAMETER	VALUE	UNIT
Mass	259	g
Housing Material	Aluminum Alloy	
Dimensions	26 × 80 (diameter)	mm

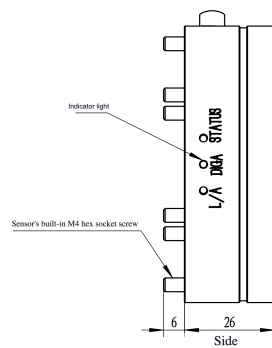
Dimensional Drawings



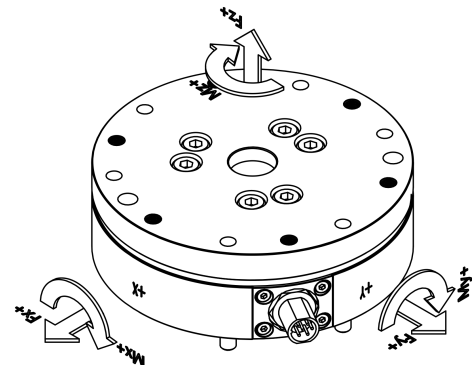
Mechanical View 1



Mechanical View 2



Mechanical View 3



Slfx



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Positive Y force direction	Fy+ direction indicator
	Angular position	30 degrees
		47.5 degrees
	Counterbore holes quantity diameter and depth	2 holes, diameter 5, depth 6
	Positive Z moment direction	Mz+ moment direction indicator
	Angular position	17.5 degrees
	Positive X force direction	Fx+ direction indicator
	Hole diameter and depth	Diameter 12, depth 4
	Outer diameter	Diameter 80
	Threaded mounting holes quantity size and depth	6 x M4 threaded holes, depth 6
	Pitch circle diameter	Diameter 70 pitch circle
	View title	Front force measurement face view

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 2	Sensor built-in screw note	Sensor's built-in M4 hex socket screw
	Mounting angular position	0 degrees angular position
		355 degrees angular position
	Outer diameter	Diameter 70 mm
	Mounting angular position	305 degrees angular position
		80 degrees angular position
	Hole specification	2 holes, diameter 5 mm, depth 4 mm
	Mounting angular position	115 degrees angular position
		220 degrees angular position
	View or mounting face label	Back mounting surface view
	Mounting angular position	185 degrees angular position
Mechanical View 3	Indicator light callout	Indicator light
	Sensor built-in M4 hex socket screw	Sensor's built-in M4 hex socket screw
	Side view right length dimension	26 mm
	Side view left offset dimension	6 mm
	View label	Side view

[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.