

PRODUCT DATASHEET

ES-SN-C30-S001-V004

Industrial Sensing Component

Six Axis Force Sensors | Six Axis Force Sensor Series

Product Overview

Industrial Sensing Component with torque Range (Mz) 20 N·m, torque Range (Mxy) 20 N·m and force Range (Fxy) 600 N.

Key Specifications

PARAMETER	VALUE	UNIT
Torque Range (Mz)	20	N·m
Torque Range (Mxy)	20	N·m
Force Range (Fxy)	600	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)	800	N
Mass	269	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

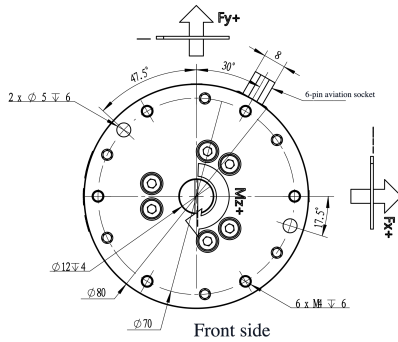
PARAMETER	SPECIFICATION	UNIT
ELECTRICAL		
Maximum Output Data Rate	2700	Hz
External Connector Type	Cold-pressed terminal	
MECHANICAL		
Mass	269	g
Housing Material	Aluminum Alloy	
ENVIRONMENTAL		
Operating Temperature	-10 to +55	°C
Ingress Protection	IP64; IP67 customization available	
CONFIGURATION		
System Architecture	Digital output with adapter	
Dimensions	26 × 80 (diameter)	mm
ADDITIONAL SPECIFICATIONS		
Torque Range (Mz)	20	N·m
Torque Range (Mxy)	20	N·m
Force Range (Fxy)	600	N
Measurement Axes	6	axes
Force Range (Fz)	800	N

Dimensional & Integration Overview

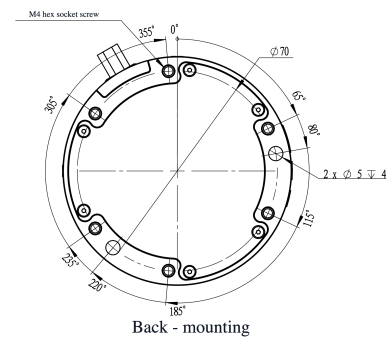
Mechanical Overview

PARAMETER	VALUE	UNIT
Mass	269	g
Housing Material	Aluminum Alloy	
Dimensions	26 × 80 (diameter)	mm

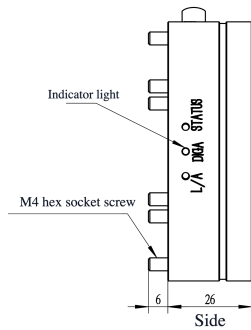
Dimensional Drawings



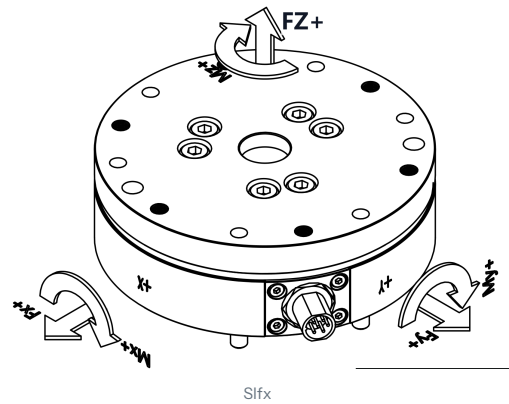
Mechanical View 1



Mechanical View 2



Mechanical View 3



Slfx



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Positive Y force direction	Fy+ direction marker
	Top angular position	30 degrees
	Two diameter 5 holes depth 6	2 × Ø5 holes, depth 6
	Positive Z moment direction	Mz+ moment direction marker
	Right-side angular position	17.5 degrees
	Positive X force direction	Fx+ direction marker
	Diameter 12 hole depth 4	Ø12 hole, depth 4
	Outer diameter	Ø80
	Six M4 threaded holes depth 6	6 × M4 threaded holes, depth 6
	Mounting pitch circle diameter	Ø70 pitch circle
	View label	Front side view

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 2	Supplied screw note	M4 hex socket screw
	Angular position	0 degrees
		355 degrees
	Outer diameter	Diameter 70 mm
	Angular position	305 degrees
		80 degrees
	Hole quantity, diameter and depth	2 holes, diameter 5 mm, depth 4 mm
	Angular position	115 degrees
		220 degrees
		185 degrees
	View title	Back mounting view
Mechanical View 3	M4 hex socket screw	
	Side local protrusion dimension	6 mm
	Side main body thickness dimension	26 mm
	View name	Side view

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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.