



JS1000 Joystick Base

Mobile Machine Management

The JS1000 joystick base is an element of the flexible, powerful, expandable, and affordable joystick family of mobile machine management products. Sauer-Danfoss has developed the JS1000 to meet the harsh operating requirements of today's mobile machine market. Combine the JS1000 joystick base with a standard or custom grip to configure a complete joystick solution.

Rugged Compact Design

The unique design of the JS1000 joystick base incorporates contactless Hall effect sensors into a simple, compact and rugged mechanical construction for the most demanding applications. It is ideally suited for low clearance and armrest mounting, and yet withstands the most punishing environments.

Environmental Sealing

The JS1000 joystick base is designed and tested for use in harsh out of cab environments. It meets IP-67 environmental protection above the panel mounting and IP-67 below the panel mount if the vent plug is installed. The vent plug is a base option. If it is not ordered, the base is not protected from below-panel particulate and moisture ingress.

Local Address:



COMPLIANT

JS1000, available with multiple grip configurations.

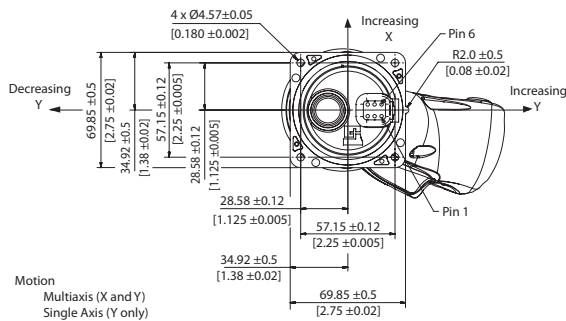
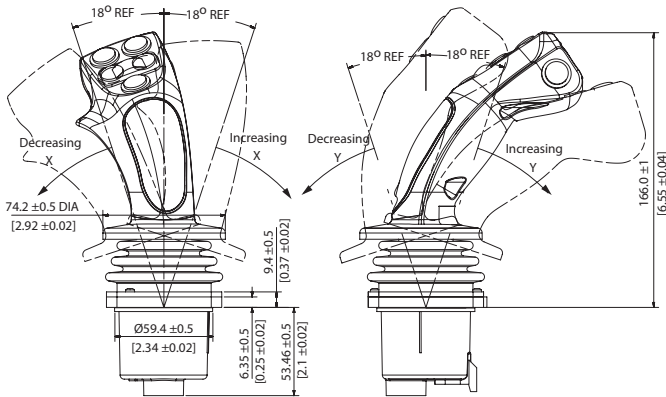
Features and Options

- Non-contacting hall effect sensing
- Single or dual axis
- X – Y axis guided or non-guided feel
- Spring return to center
- Choice of two centering spring forces
- Operating life > 10 million cycles per axis
- Two output options:
 - 0.5 to 4.5 Vdc
 - CAN 2.0 B, J1939 protocol
- IP-67 environmental sealing above panel (grip dependent)
- IP-67 environmental sealing below panel with vent plug installed (base dependent)
- Integrated 6 pin Deutsch® DTM connector
- Multiple grip options:
 - Ball grip
 - Grip with proportional rocker switch
 - Grip with proportional banana switch
 - PRO style ergonomic grip, which offers a wide variety of configurable switch and proportional rocker functions
 - Custom designed grips to meet specific user requirements

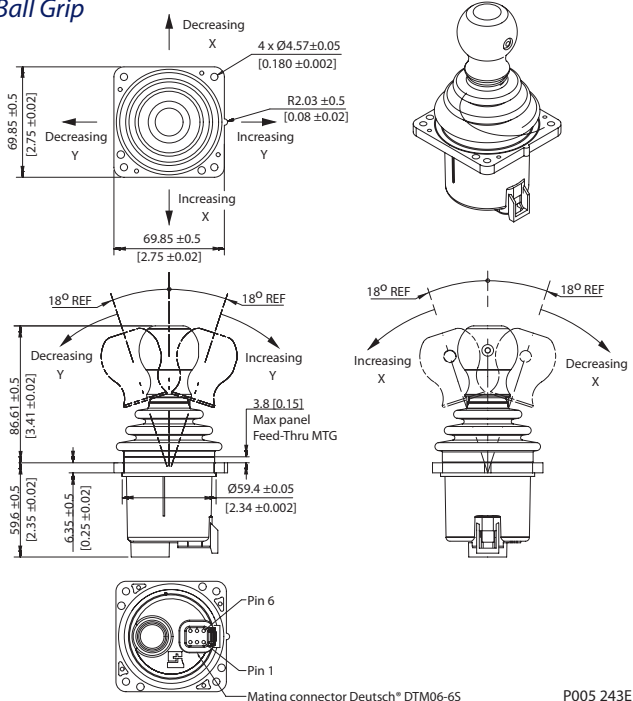
See Sauer-Danfoss publication *JS1000, JS6000 Joystick Grips Technical Information*, **520L0872** for more information.

Dimensions and Installation Details

PRO Grip



Ball Grip



Grip mounting dimensions in millimeters [inches].

Specifications

Electrical Characteristics

Sensor type	Hall effect
Resolution	Infinite
Supply voltage (Vs)	Analog output: 5 ± 0.5 Vdc CAN: 9 to 36 Vdc
Output	Analog: 0.5 to 4.5 Vdc nominal CAN: 2.0 B, J1939 protocol
Current consumption	25 mA PRO grip = 150 mA

Mechanical Characteristics

Lever mechanical angle	±18° on axis
Operating life	> 10 million cycles
Vibration	5 Gs RMS
Shock	50 Gs
Weight (base without grip)	0.38 kg [0.838 lb]

Environmental Parameters

Operating temperature	-40°C to 80°C [-40°F to 176°F]
Storage temperature	-40°C to 85°C [-40°F to 185°F]
Protection	Above panel ball grip: IP-67 Below panel: IP-67 with vent plug installed
EMI/RFI rating	100 V/m

Pinout and Wiring Information

Pin	CAN	Analog
Pin 1	Ground	Ground
Pin 2	Power	Power
Pin 3	CAN high	X output signal
Pin 4	CAN low	Y output signal
Pin 5	CAN shield	Rocker switch
Pin 6	No connection	No connection

Mating Connector Assemblies

Type	Sauer-Danfoss ordering number
6 pin Deutsch® connector bag assembly	10101551
6 pin connector with 400 mm [15.75 in] leads	10101557

Comprehensive technical information: *JS1000 Joystick Base Technical Information*, **520L0826**
Sauer-Danfoss product literature is online at: www.sauer-danfoss.com