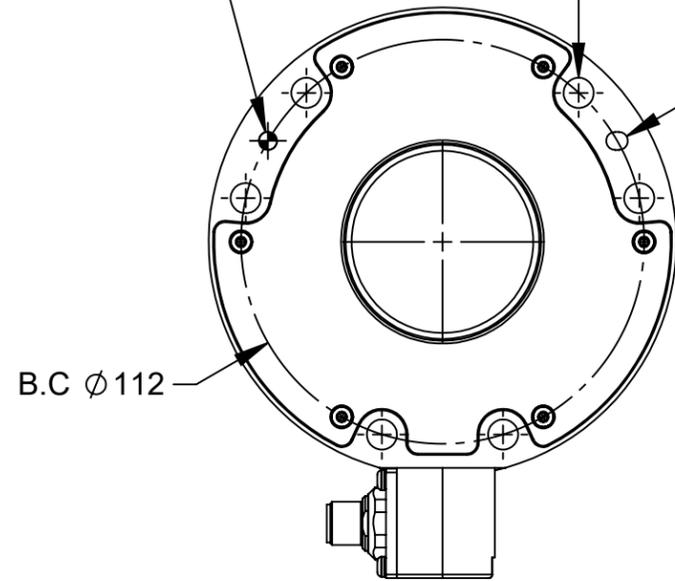


| REV. | DESCRIPTION | INITIATOR | DATE |
|------|--------------------|-----------|------------|
| 01 | Production Release | VV | 06/01/2023 |

ϕ 5.060 ∇ 8
 ϕ 5.034 ∇ 8
 Slip Fit Hole
 Customer Interface
 Note 2 & 4

6X ϕ 8.4 THRU
 \square ϕ 14.3 ∇ 10.7
 Customer Interface
 Note 2 & 4

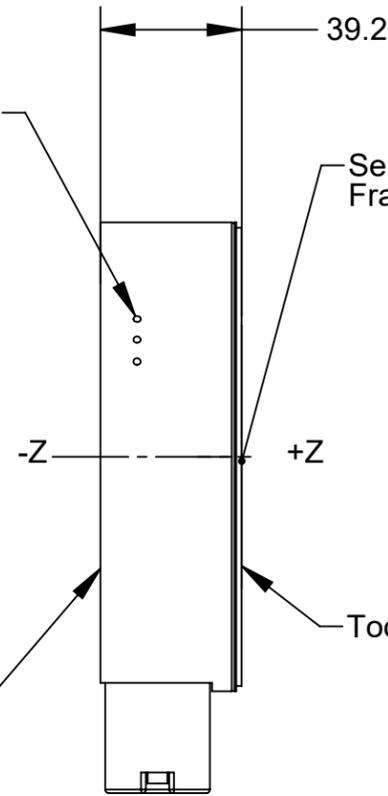
5.060 X 6 ∇ 8
 ϕ 5.034
 Slip Fit Slot
 Customer Interface
 Note 2 & 4



MAP SIDE

Indicator LED
 Location

Sensing Reference
 Frame Origin



SIDE VIEW

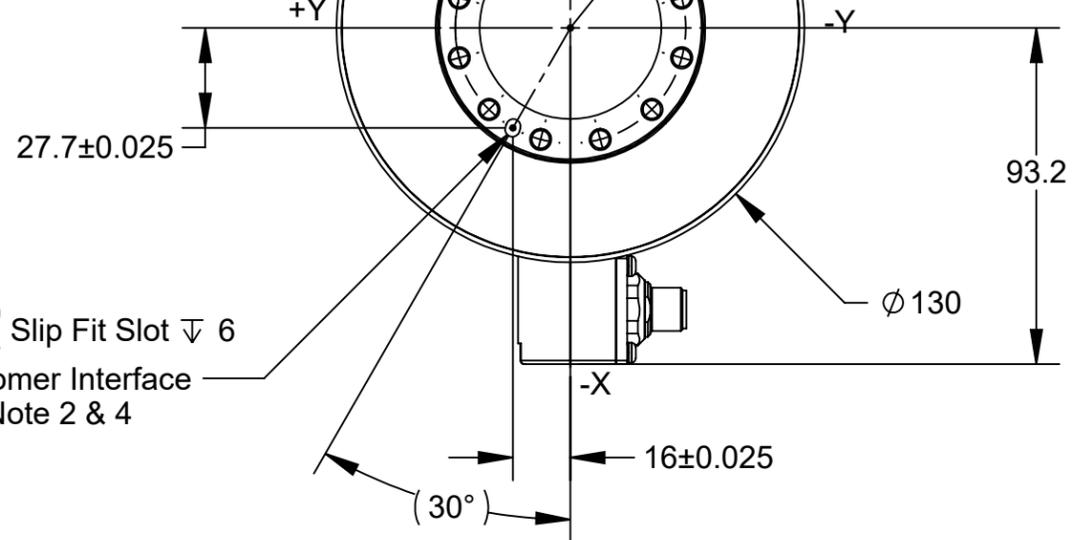
ϕ 4.059 Slip Fit ∇ 6
 ϕ 4.034
 Customer Interface
 Note 2 & 4

Through Hole
 Note 3

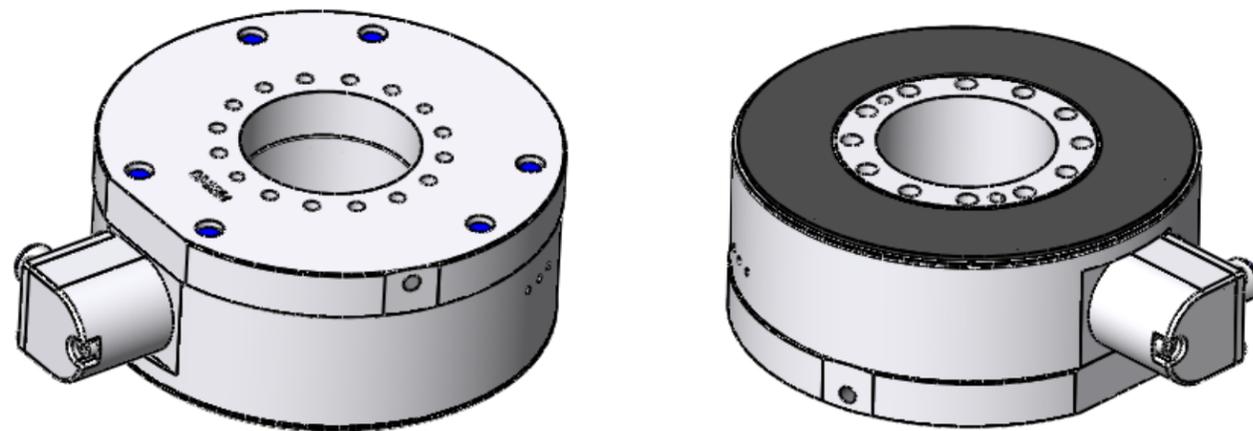
Sensing Reference
 Frame Origin

12X M6X1.0 Tap ∇ 12
 Equally Spaced
 Customer Interface
 Note 4

B.C. ϕ 64



TOOL SIDE



Mounting side shown facing up.
 9105-IP-2351 shown as an example;
 Not all kits will include this Interface Plate.

Notes:

1. Do not touch internal electronics or instrumentation. This could damage transducer and void the warranty.
2. Do not exceed interface depth. Doing so may cause damage and/or incorrect readings.
3. Through hole diameter of assembled kit may be affected by the required interface plate. See sheet 3 for more details.
4. Refer 9630-05-0006 for a fully defined mounting interface drawing.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



3rd ANGLE PROJECTION



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DRAWN BY: V.Vavilikolane, 06/07/2023

CHECKED BY: N.Damiano, 06/08/2023

TITLE

FANUC F/T Kits for Axia130 Transducer

PROJECT # 200603-1 SHEET 1 OF 3

| SCALE | SIZE | DRAWING NUMBER | REVISION |
|-------|------|----------------|----------|
| 1:2 | B | 9630-05-0010 | 01 |

| Axia130-M125 F/T Sensor | | | | |
|--|----------------------------|-------------|------------|-----------|
| Loading Characteristics | Fxy | Fz | Txy | Tz |
| Rated Range | ± 2000 N | ± 4000 N | ± 125 Nm | ± 125 Nm |
| Overload Rating | ± 10000 N | ± 20000 N | ± 620 Nm | ± 620 Nm |
| Effective Resolution | .625N | 0.625N | 0.025Nm | 0.025Nm |
| Stiffness (Calculated) | | | | |
| X-Axis & Y-Axis Forces (Kx, Ky) | 5.8x10 ⁷ N/m | | | |
| Z-Axis Force (Kz) | 8.9x10 ⁷ N/m | | | |
| X-Axis & Y-Axis Torques (Ktx, Kty) | 1.2x10 ⁵ Nm/rad | | | |
| Z-Axis Torque (Ktz) | 2.1x10 ⁵ Nm/rad | | | |
| Resonant Frequency (Sensor Only) | | | | |
| Fx, Fy, Tz | 2500 Hz | | | |
| Fz, Tx, Ty | 4000 Hz | | | |
| Physical Specifications (Sensor Only) | | | | |
| Center of Mass* | X = -0.15mm | Y = -3.92mm | Z = 0.8mm | |
| Material | Aluminum | | | |
| Weight | 0.86 kg | | | |

| Axia125-M300 F/T Sensor | | | | |
|--|----------------------------|-------------|-------------|-----------|
| Loading Characteristics | Fxy | Fz | Txy | Tz |
| Rated Range | ± 4000 N | ± 6000 N | ± 300 Nm | ± 300 Nm |
| Overload Rating | ± 20000 N | ± 30000 N | ± 1500 Nm | ± 1500 Nm |
| Effective Resolution | 1.667N | 1.667N | 0.07Nm | 0.07Nm |
| Stiffness (Calculated) | | | | |
| X-Axis & Y-Axis Forces (Kx, Ky) | 1.5x10 ⁸ N/m | | | |
| Z-Axis Force (Kz) | 2.2x10 ⁸ N/m | | | |
| X-Axis & Y-Axis Torques (Ktx, Kty) | 2.8x10 ⁵ Nm/rad | | | |
| Z-Axis Torque (Ktz) | 6.0x10 ⁵ Nm/rad | | | |
| Resonant Frequency (Sensor Only) | | | | |
| Fx, Fy, Tz | 2450 Hz | | | |
| Fz, Tx, Ty | 2900 Hz | | | |
| Physical Specifications (Sensor Only) | | | | |
| Center of Mass* | X = -0.8mm | Y = -0.08mm | Z = -0.32mm | |
| Material | Stainless Steel | | | |
| Weight | 1.88 kg | | | |

| Operational Specifications (All Sensor Models) | |
|--|-----------|
| Communication | RS422 |
| Supply Voltage | 12-30V DC |
| Maximum Power Consumption | 1.7W |
| System Resolution | 16 Bit |
| Max Data Rate | 4kHz |
| Operating Temperature | 0-65°C |
| IP Rating | IP67 |

*Measurements taken from Sensing Reference Frame Origin

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| | | | |
|--------------------------------------|--------------|---------------------------------------|----------|
| DRAWN BY: V.Vavilikolane, 06/07/2023 | | TITLE | |
| CHECKED BY: N.Damiano, 06/08/2023 | | FANUC F/T Kits for Axia130 Transducer | |
| PROJECT # 200603-1 | SHEET 2 OF 3 | SCALE | SIZE |
| | | 1:2 | B |
| | | DRAWING NUMBER | REVISION |
| | | 9630-05-0010 | 01 |

| | Name | Interface Plate # | Boss Size mm (d X h) | Recess Size mm (d x h) | Bolt Circle mm | Robot Fastener | Robot Fastener Torque Nm | Sensor Frame Z+ Offset mm | Through-Hole mm | Material |
|--------------|-------------------------------------|-------------------|-------------------------|---------------------------|-------------------|----------------|-----------------------------|------------------------------|--------------------|-----------------|
| Axia130-M125 | 9105-FTKIT-FANUC-BC40-AXIA130-M125 | 9105-IP-2350 | Ø 25 X 5 | - | 40 | 7X M6 | 10 | 53.75 | None | Aluminum |
| | 9105-FTKIT-FANUC-BC56-AXIA130-M125 | 9105-IP-2349 | - | Ø 62 X 5 | 56 | 14X M4 | 3 | 53.75 | 50 | Aluminum |
| | 9105-FTKIT-FANUC-BC64-AXIA130-M125 | 9105-IP-2351 | - | - | 64 | 14X M4 | 3 | 53.75 | 50 | Aluminum |
| Axia130-M300 | 9105-FTKIT-FANUC-BC100-AXIA130-M300 | 9105-IP-2352 | - | - | 100 | 10X M8 | 21 | 53.75 | 50 | Stainless Steel |
| | 9105-FTKIT-FANUC-BC125-AXIA130-M300 | 9105-IP-2435 | - | - | 125 | 8X M10 | 47 | 59.64 | 50 | Stainless Steel |

5. All kits will come with 6X M8 sensor fasteners to attach the sensor to the interface plate. These fasteners should be torqued to 28Nm.

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DRAWN BY: V.Vavilikolane, 06/07/2023

CHECKED BY: N.Damiano, 06/08/2023

TITLE
FANUC F/T Kits for Axia130 Transducer

PROJECT # 200603-1 SHEET 3 OF 3

| SCALE | SIZE | DRAWING NUMBER | REVISION |
|-------|------|----------------|----------|
| 1:2 | B | 9630-05-0010 | 01 |