

可租借包含力传感器、评估电路板以及应用软件的套装。
You can evaluate with our evaluation kit including the sensor, MCU board & application software.

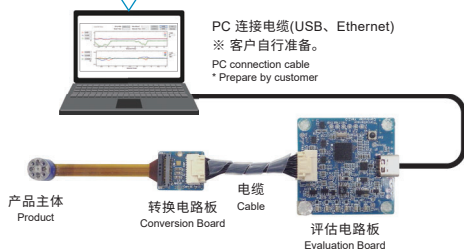
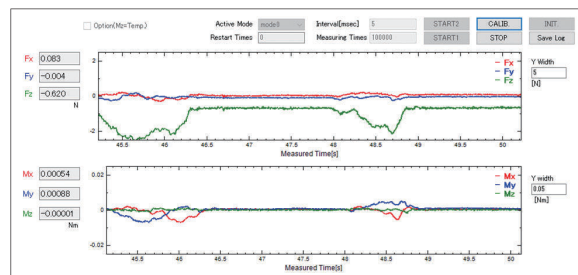
Application software for PC

- O/S: Windows®10、Windows®7
O/S: Windows®10, Windows®7

- 可记录数据
Data logging possible

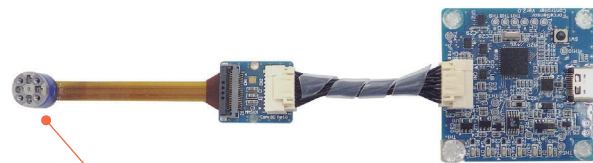
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* Windows® writes it as an abbreviation of Microsoft Windows® operating system.



外部通信 External communication

	USB	USB/Ethernet
尺寸 Size		
供电 Power supply	USB	DC 插座 DC jack
产品连接数 No. of connectable sensors	最多1个 Max. 1piece	最多5个 Max. 5pcs



传感器

- 6 维力传感器
- Analog Front End IC 内置(ADC)
- 温度补偿

6-Axis sensor including ADC with temperature compensation

- 连接线缆
(高弯曲性)
(15cm、30cm)
Lead cable
(High flexibility) (15cm, 30cm)
- 机器人线缆
(屏蔽线)
(30cm、60cm、150cm)
Robot cable
(Shielded cable) (30cm, 60cm, 150cm)

评估电路板(MCU)

- 传感器控制
- 6 轴矩阵演算
- 6 轴力、力矩数据输出

※ 可使用客户CPU计算。
Sensor control, 6-axis matrix operation, 6-axis force, torque data output
*Can be computing your CPU too.

- 1 传感器端口
(USB 输出类型)
1-sensor-port USB output type
- 5 传感器端口
(Ethernet输出类型)
5-sensor-port Ethernet output type

小型 6 维力传感器

Miniature 6-axis force torque sensor



小型化、轻量化

Mini size and light weight

MinebeaMitsumi
Passion to Create Value through Difference

美蓓亚三美株式会社
MinebeaMitsumi Inc.

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中文官网



公众号

小型 6 维力传感器

Miniature 6-axis force torque sensor

产品简介 Overview

- 3个力轴、3个力矩轴的6 维力传感器
6-axis force torque sensor with 3-axis of force & 3-axis of moment
- 最适用机械手
Optimal sensor for robot hand
- MEMS+ 弹性体的复合传感器
Composite sensor of MEMS & flexure element

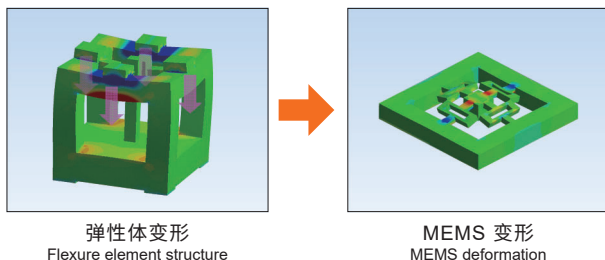
特长 Characteristics

- 小型化、轻量化6 维力传感器
Mini size and light weight 6-axis force torque sensor
- 数字输出
Digital output
- 减少多轴同时输入时的误差
Error reduction during simultaneous input of multiple axes

优势 Superiority

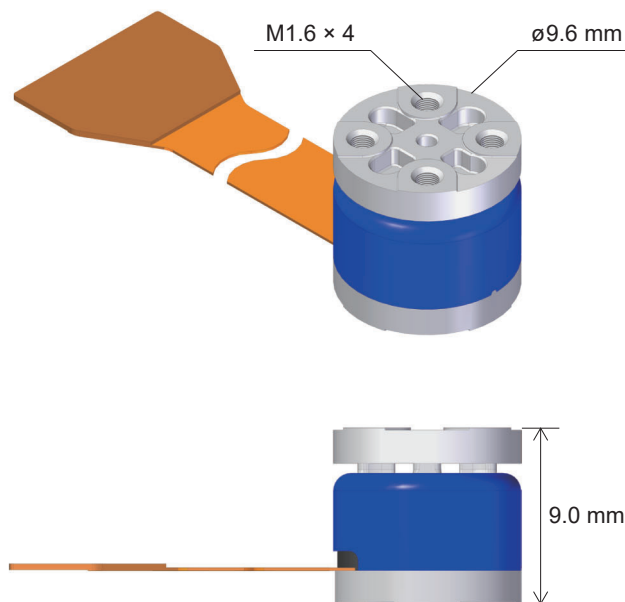
- 低漂移MEMS
Low drift MEMS
 - 减少安装变动的弹性体结构*
Flexure element structure with reduced variation during installation*
- * 已获得专利(专利6940037) * Patented JP, 6940037, B

原理图 Principle diagram



再现真实触感的技术

外形图 Dimensions



规格概要 Outline Specifications

尺寸(外径 × 高度) Size (Diameter × Height)	ø9.6mm × 9.0mm
重量 Weight	3g
额定负载(力、力矩) Load rating (Force, Moment)	40N, 0.4N·m
耐负载(力、力矩) Load Capacity (Force, Moment)	200N, 1.8N·m
实际分辨率 Effective Resolution	Fx, Fy / Fz 0.04NRMS / 0.06NRMS Mx, My / Mz 0.0004N·mRMS / 0.0008N·mRMS
接口 Interface	SPI
电源电压 Power-supply voltage	VDD 3.8V~14V VDDIO 1.14V~3.6V

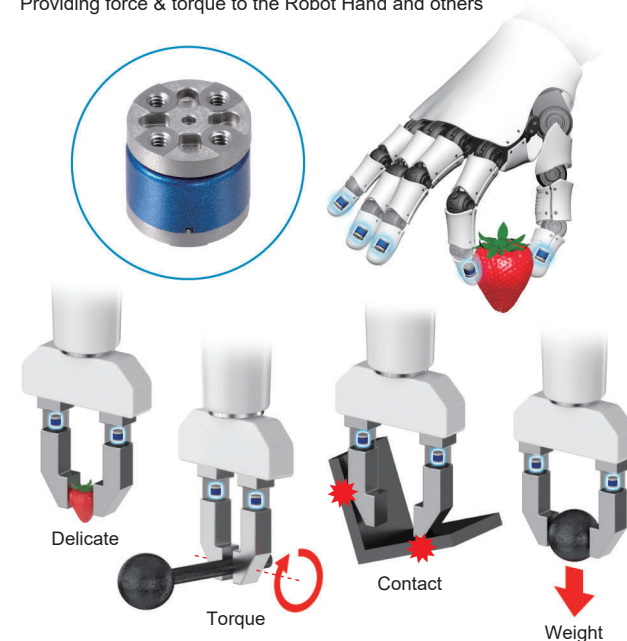
注)上述规格的变更恕不另行通知。
Specifications are subject to change without notice.

The technology to duplicate human sensing.

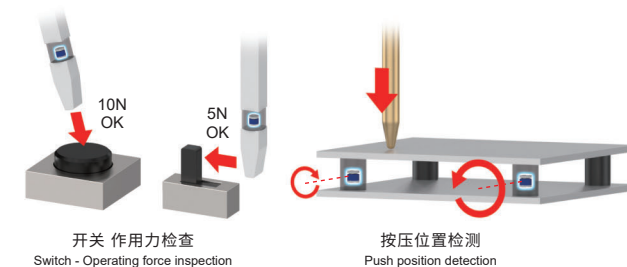
用途案例 Use case

① 机械手、夹持器 Robot Hand, Gripper

机械手可通过传感器感知力
Providing force & torque to the Robot Hand and others



② 检查工序 Inspection process



③ 触感数据化 Digitization of senses

将真实触感数据化
Data conversion of human senses

