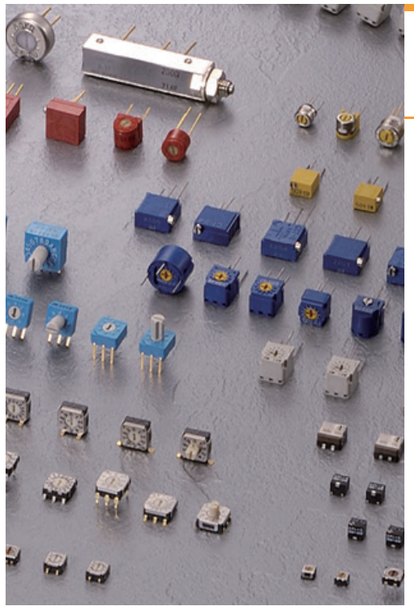


Electronic Components / Sensors
电子元器件、传感器

Switches
开关

NIDEC COPAL ELECTRONICS CORP.—P45

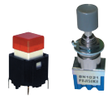
Our switch is widely used in various industrial equipment as means of setting for programs and circuits, and for operation switching on PCBs and panels. Available in a wide variety of switch types, including DIP switches, detect switches, toggle, push button, lever & rocker, slide, rotary switches, and more.

日本电产科宝电子提供各种开关，如囊括DIP开关，按键/照光式开关，检测开关，摇臂・摇杆开关，滑动开关，旋转选择开关等。基于我们多年来培育的独特接触技术和密封技术，已被各行各业广泛采用，并因其良好的业绩记录记录和高可靠性而受到高度评价。

DIP Switch(Slide/Rotary)
DIP开关（滑动型/旋转型）

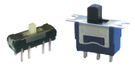
Lever & Rocker Switch
拨杆&翘板开关

Toggle Switch
摇头开关



Pushbutton Switch
按键开关

Detect Switch
限位开关



Slide Switch
滑动开关

Rotary Switch/Key Switch

Pressure Sensors
压力传感器

NIDEC COPAL ELECTRONICS CORP.—P45

Our pressure sensors, integrated production in-house from the semiconductor sensor elements to the final product. From the sensor module to built-in amplifier type, and even boasts a rich line-up such as the type which includes a switch function and digital display function. Our pressure sensors can measure a wide pressure ranges from positive pressure to high vacuum, and any pressure reference such as absolute pressure, gauge and differential pressure are compatible. The pressure mediums are available for non-corrosive/corrosive gases and liquids. Our pressure sensors are widely used in semiconductor manufacturing equipment, industrial equipment such as hydraulic equipment , as well as medical equipment, Analyzer and measuring equipment etc.

日本电产科宝电子的压力传感器从半导体传感器核心元件到最终产品都是由敝司一站式生产制造。从模组型到内置放大器型，具有开关功能和表示功能的类型等每种类型阵容丰富。善于针对客户的特殊用途要求，可以进行灵活对应的事业结构也是主要特征。近年，开始销售内置放大器的比例输出超小型和采用薄膜元件的可承受高真空・高温的传感器等正在扩大其业务领域。

Pressure Transducer
压力传感器（Module）

Pressure Transducer with Amp.
压力传感器内置放大器

Pressure Switch
压力开关

Pressure Gauge
压力显示计

Hand Held Digital Manometer
手持式压力液晶显示计

Indicator
压力指示器

Liquid Leak Sensors
漏液传感器

NIDEC COPAL ELECTRONICS CORP.—P45

This product is used for leak detection in semiconductor manufacturing equipment and other industrial equipment. Our unique optical design enables our product to detect leakage quickly and accurately without using a plate to control light disturbance.

日本电产科宝电子的漏液传感器在主体内部由发光元件和光接收元件组成。新的光学技术无需遮光板或单独的放大器即可实现高灵敏度，并且不会发生故障。

Liquid Leak Sensor
漏液传感器

Trimmer Potentiometers
微调电位器

NIDEC COPAL ELECTRONICS CORP.—P45

Our trimmer potentiometer with a reliable sealed structure, using the cermet to the resistive element, is used in a wide range of industrial fields, including communications equipment, measurement devices, computer peripherals, broadcasting equipment, power devices and medical equipment. These products feature low noise contact structure and at the same time are easy to set or adjust.

金属陶瓷用作电阻元件，所有产品都采用密封结构可以进行清洁。通过厚膜技术和接触技术等复杂的独特技术获得了高质量和高可靠性，并且凭借长期经验和市场评估，已经确立“微调电位器就是日本电产科宝电子”的坚实地位。

Single-turn
Surface Mount type
单旋转 表面贴装型

Multi-turn
Surface Mount type
多旋转 表面贴装型

Single-turn
Through hole type
单旋转 通孔型

Potentiometers
电位器

NIDEC COPAL ELECTRONICS CORP.—P45

Our potentiometers lineup features four types such as wirewound type, conductive plastic type and cermet type (all of these are contact types), and optical types. In addition, the contact types are structurally available in single-turn, multi-turn and rectilinear type. the other optical type boasts about a long service life by non-contact. Our potentiometers are widely used in measurement equipment, construction machinery, communication equipment, medical equipment, etc. as position and angle sensors.

日本电产科宝电子的电位器有电阻材质分类为线绕电阻型和导电塑料电阻型，瓷金电阻型，光学非接触型。利用精密线绕技术，来实现低噪音，寿命长。导电塑料型和瓷金电阻型使用光滑的涂层电阻，基本上提供无限的分辨率和长寿命。光学非接触型比接触式实现更长寿命 。

Cermet Potentiometer
瓷金电阻型电位器

Conductive Plastic Potentiometer
导电塑料电阻型电位器

Optical Potentiometer
光学非接触型电位器

NIDEC SERVO CORP.—P46

Angular detection using magnetic, optical and variable resistance techniques.

通过磁力、光、电阻变化检测角度。

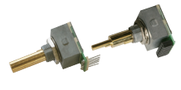
Rotary Encoders / Joystick Encoders
旋转编码器 / 操纵杆编码器

NIDEC COPAL ELECTRONICS CORP.—P45

Our rotary encoders lineup features optical and magnetic types. Optical models run from φ12 to φ30 mm and include small, light weight, and low cost models, as well as high resolution, and manual setting models. In addition, a multi-function device "Joystick Encoder" with joysticks, switches, and encoders in one package is available.

日本电产科宝电子的旋转编码器有两种类型，光学式和磁式，还提供尺寸小，重量轻，低成本的高分辨率类型和设定型。适用于工业机器人，数控机床，电梯，生产设备，金融终端设备，计算机外围设备等各种工业设备的角度，长度和转速测量中。操纵杆编码器是由操纵杆，光学编码器和按钮开关一体的多功能设备。

Joystick Encoder
操纵杆编码器



Settings Optical Rotary Encoder
光学式设定型旋转编码器

Industrial Encoders
工业用编码器

NIDEC SANKYO CORP.—P42

Magnetic type and used to produce AMR in house. With fine magnetized technology, Our magnetic encoder is achieved to an accuracy or an environment resistance as much as the optical type.

采用AMR的磁气编码器。结合精细的磁气技术，达到既有磁气式耐环境性能同时又具有光学式的精度。

Rotary Encoder
旋转编码器

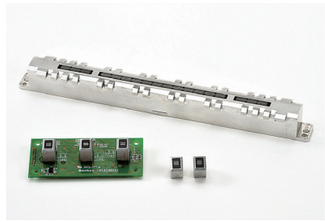
Linear Encoder
直线性编码器

Magnetic Quantity Sensors
磁量传感器

NIDEC SANKYO CORP.—P42

Product for bill validator. Enable to detect a material of magnetic ink by our development of the flux gate technology.

纸币鉴别用磁传感器。通过磁通门传感器技术术，可以获取在磁性墨水中含有的磁性体的材质信息。



Readout of Magnetic Ink, Authentication, Identification
读取磁性墨水、真伪鉴别、识别用

Attenuators
衰减器

NIDEC COPAL ELECTRONICS CORP.—P45

Our attenuator is a step-variable type used in the level adjustment of 600Ω audio signal systems, such as in telecommunications equipment.

适用于600Ω系语音播报装置的机械调整衰减量的步进式可变衰减器。

Step Variable type
步进型可变式衰减器

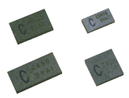
Resseable Circuit Fuses
过电流保护器

NIDEC COPAL ELECTRONICS CORP.—P45

This product can be used as repeatedly resettable overcurrent protective device, has PTC thermistor and semiconductor type. The PTC thermistor model used with polymer is available surface mount type in a rich line-up, is the most suitable overcurrent protection devices for the hot plug condition interface at plug and play and others, because the time to trip is slow properly, and it does not respond at surge current or rushcurrent condition. The semiconductor type is a high-speed response characteristics of within 1 μsec.

过电流保护元件，有自恢复保险丝和半导体元件型。自恢复保险丝有为聚合物高分子PTC。 聚合物高分子PTC，根据封装形式又可分为，有径向引线封装和表面贴装两种可选类型。半导体元件型以高速响应为特性。

Polymer PTC Thermistor
聚合物PTC可复位保险丝 P.R.C.P



Semiconductor type
半导体类型 C-FAP

Others
其他

NIDEC SANKYO CORP.—P42 NIDEC SERVO CORP.—P46

Image Scanner Units
图像扫描仪组件

It can be customized in accordance with applications such as reading of characters printed on checks and special characters for forgery prevention and reading of various types of ID cards such as passports and driver's licenses.

可用于阅读支票上所记载文字和防止伪造用特殊文字，读取护照和驾照等各种ID卡等，并根据客户要求定制。

Passport Readers / Various Image Readers
护照读卡器/各种图像读卡器用

Slip Rings
滑环（集流环）

Our slip ring offers the high transfer rate signal (1.5 Gbps max) with high reliable life (80M rotations max).

具备高速信号传输（最大1.5Gbps),以及长寿命（最大8000万次转动）的产品。