

## Application of Rotary sensor in the Endoscopy Equipment

Endoscopy is the insertion of a long, thin tube directly into the body to observe an internal organ or tissue in detail. It can also be used to carry out other tasks including imaging and minor surgery.

### Working principle:

Endoscope can be inserted into small incisions, for instance, in the knee or abdomen. Surgery is completed through a small incision and assisted with special instruments, such as the endoscope. Because modern endoscopy has relatively few risks, delivers detailed images, and is quick to carry out, it has proven incredibly useful in many areas of medicine. Basically, a typical endoscope uses fibre optics, which allow for effective transmitting of light. In this technique (fibre optics) light is transmitted through a flexible fibre of glass (transparent) known as optical fibre(s). The optical fibre allows for light to travel through curved paths, which makes one of the best systems to view spaces that would normally be difficult to reach.

Wherever the precise position is necessary the rotary sensors are used. **In the Endoscope system also, the rotary sensor is used to control the angle of rotation** by moving it in full 360 degrees. This makes the endoscope cable move in all directions and helps to take the clear image of the patient's body part that is to be examined.

