

Elektro Pneumatik

Oleh:

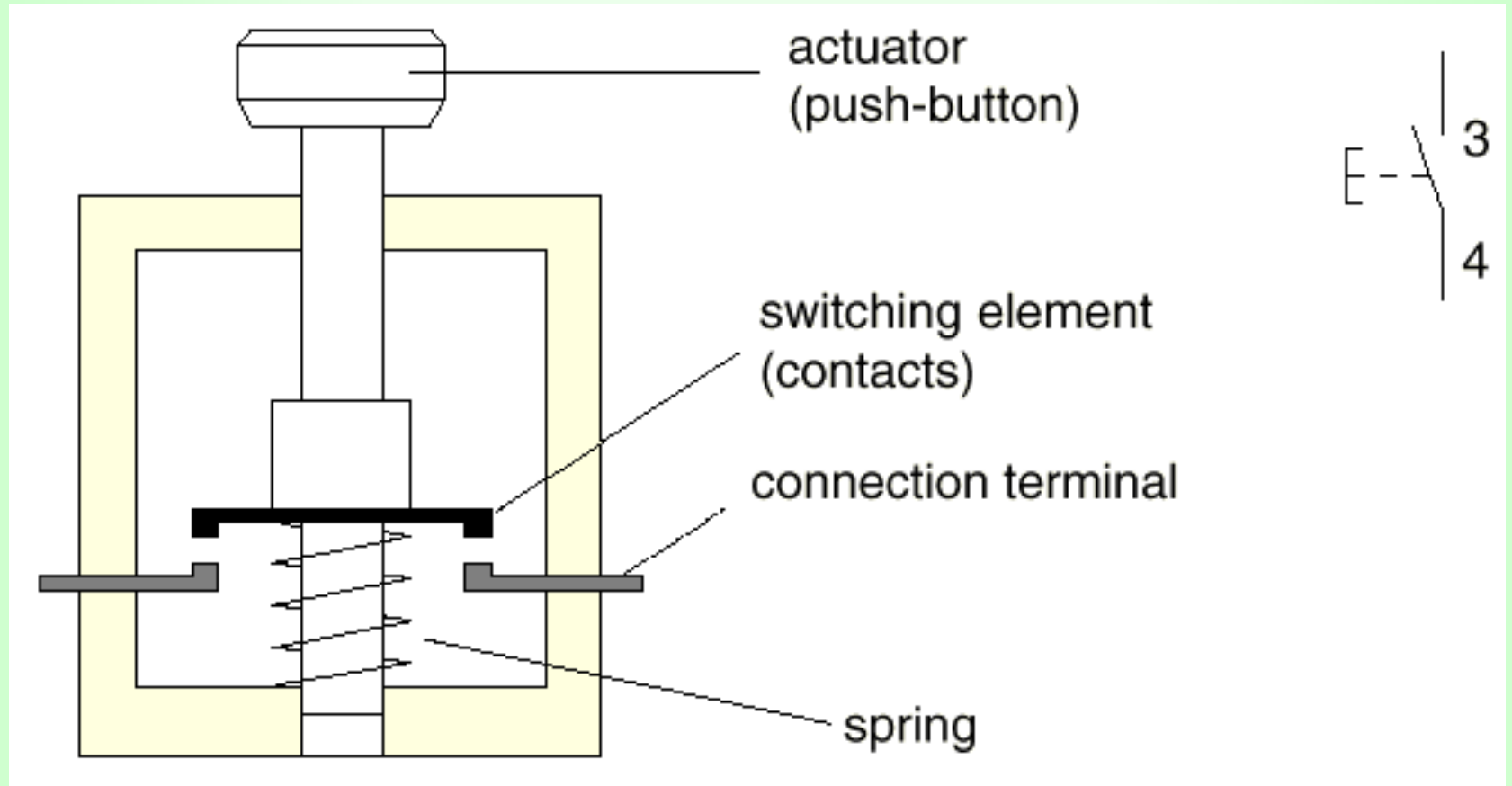
Totok Heru TM.

MATERI

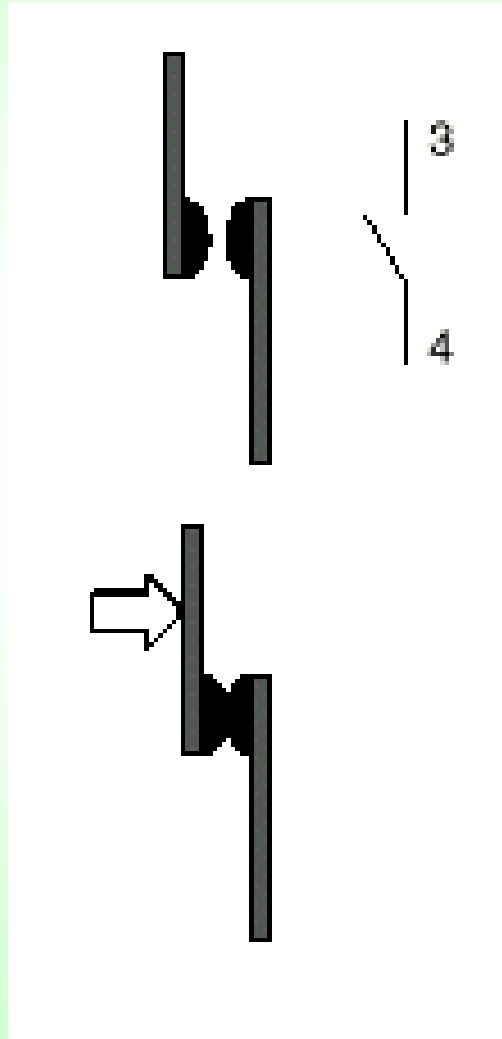
- ❖ RANGKAIAN ELEKTRIK DASAR
- ❖ FUNGSI LOGIKA DASAR
- ❖ PERBANDINGAN RANGKAIAN ELEKTRIK DAN PNEUMATIK
- ❖ PEMAHAMAN DAN PENGGAMBARAN SIMBOL KOMPONEN ELEKTRIK SESUAI DENGAN STANDARISASI **DIN 61082**
- ❖ PEMAHAMAN DAN PENGGAMBARAN SIMBOL KOMPONEN PNEUMATIK SESUAI DENGAN STANDARISASI **ISO 1219**
- ❖ CARA KERJA KOMPONEN DAN RANGKAIAN ELEKTROPNEUMATIK SEDERHANA
- ❖ PENGENALAN KOMPONEN ELEKTROPNEUMATIK YANG UMUM DIGUNAKAN
- ❖ PENGGAMBARAN DIAGRAM RANGKAIAN ELEKTRO-PNEUMATIK SESUAI DENGAN STANDARISASI **DIN 61082**



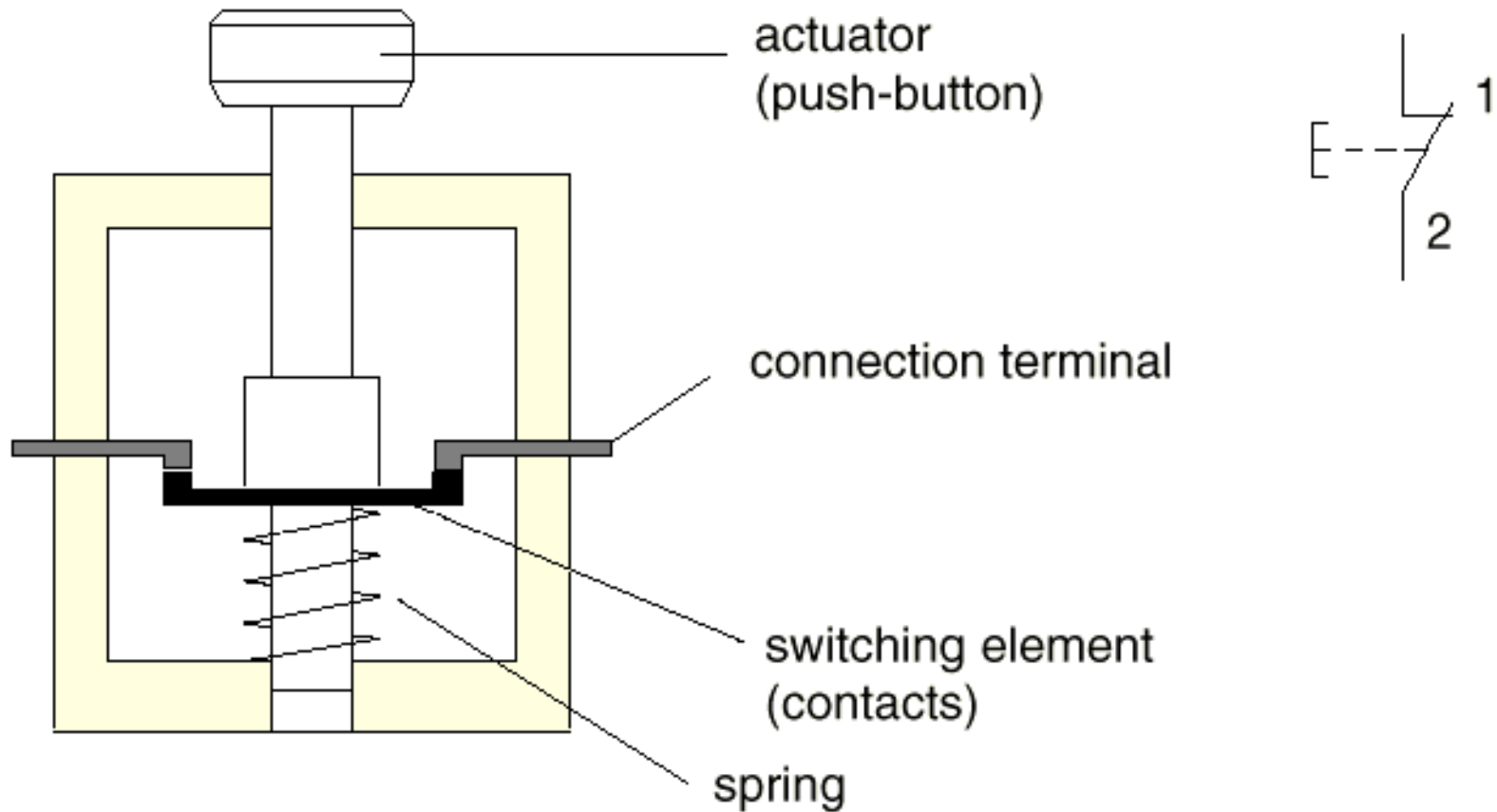
Normally open switch



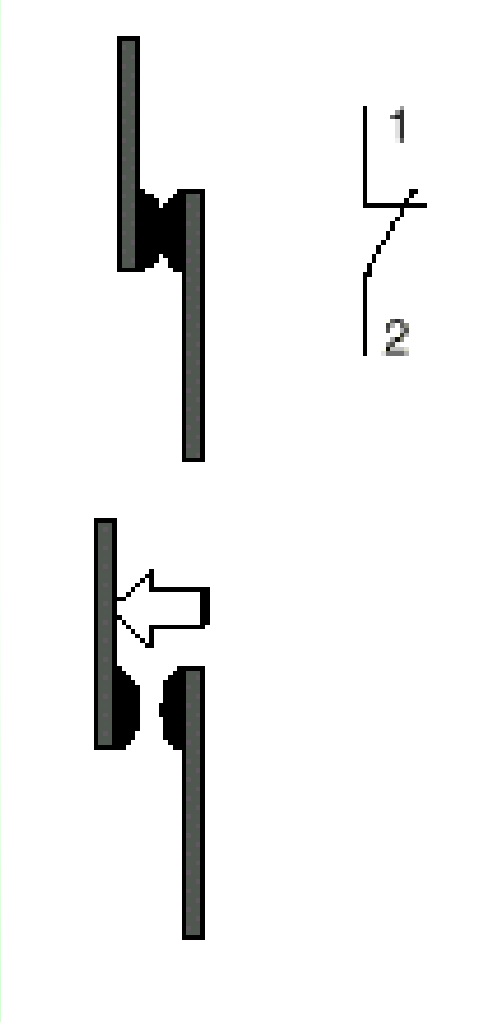
Normally Open Contact



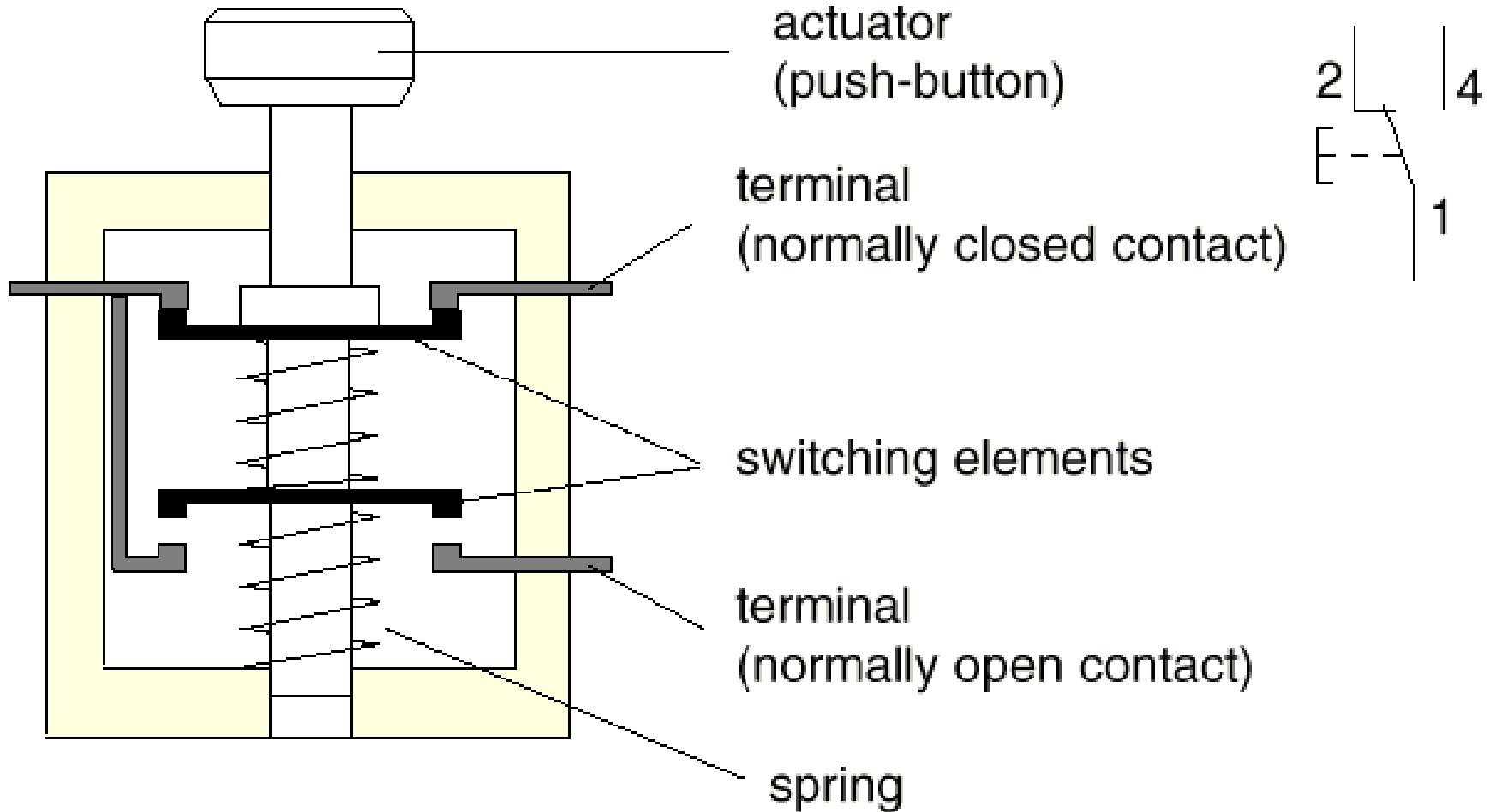
Normally closed switch



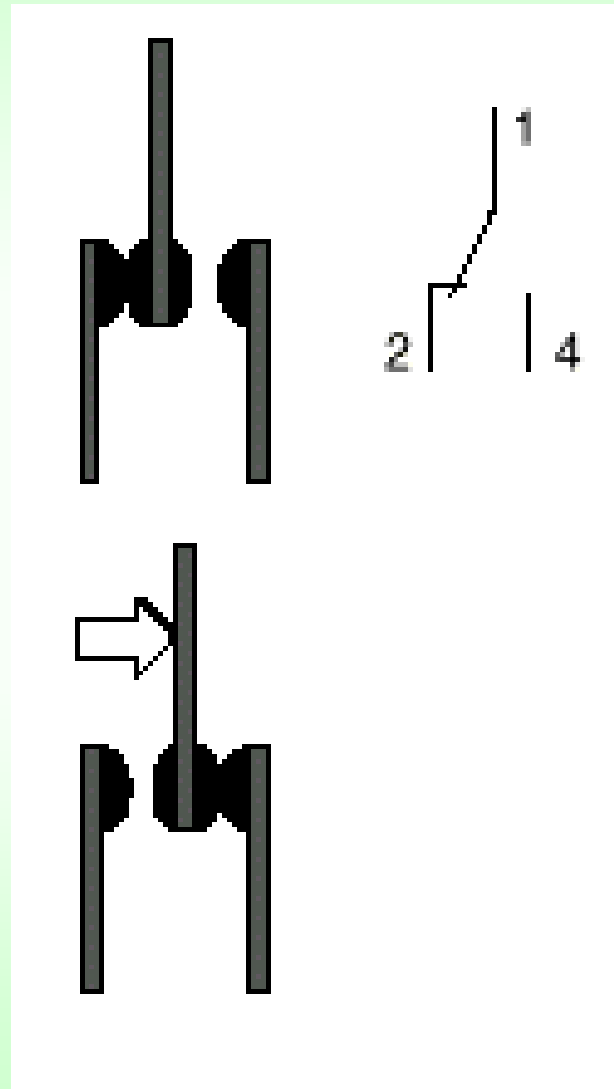
Normally Closed Contact



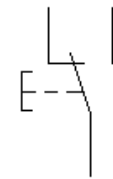
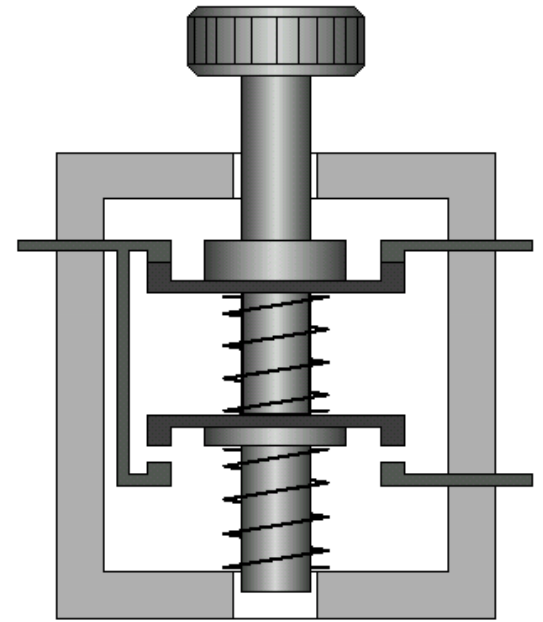
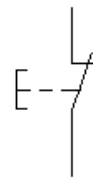
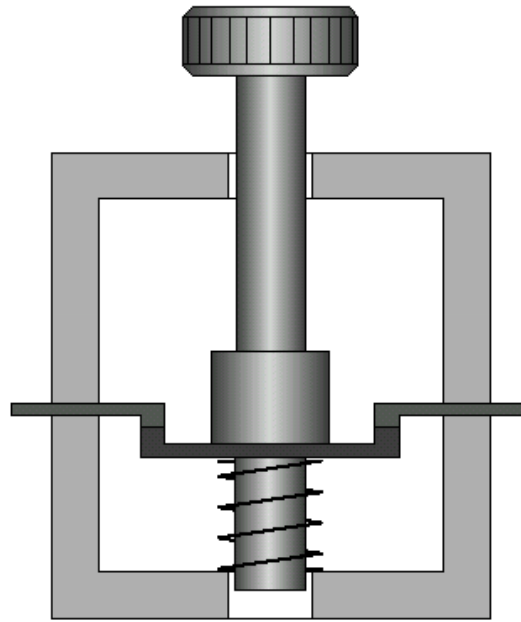
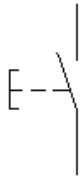
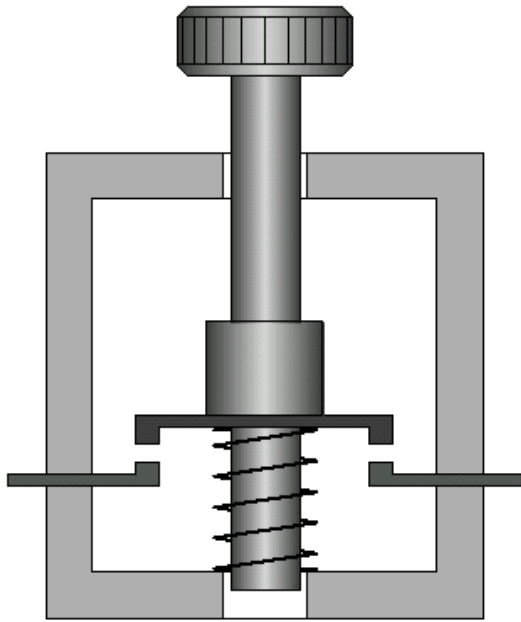
Changeover switch



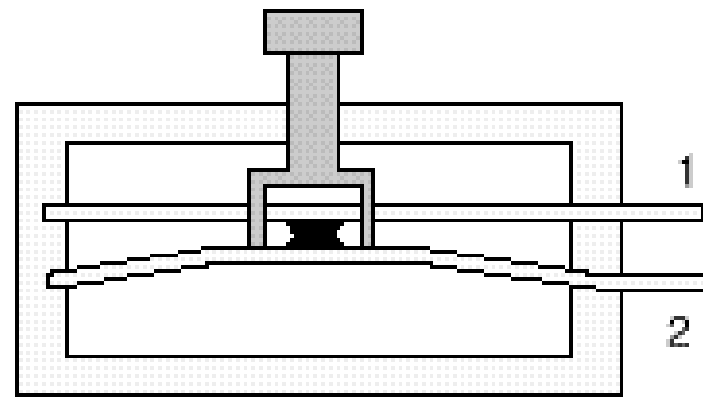
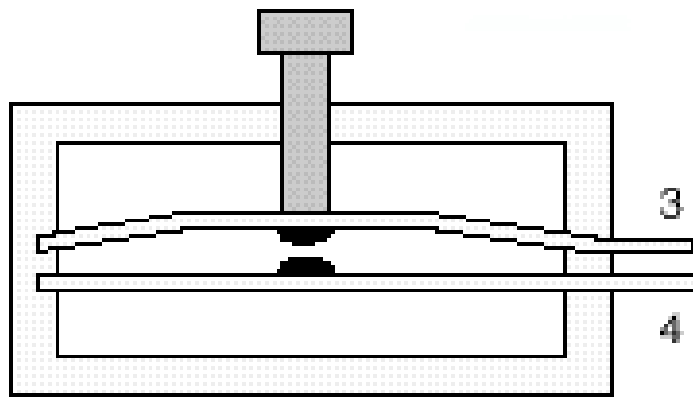
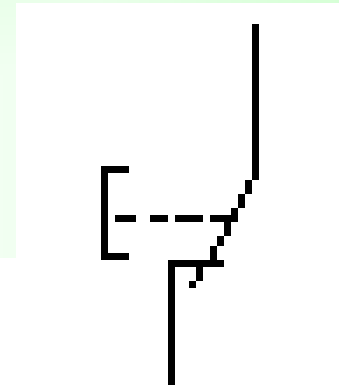
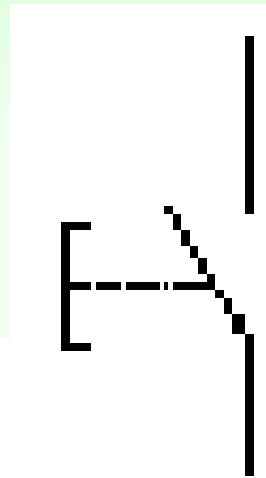
Changeover Contact



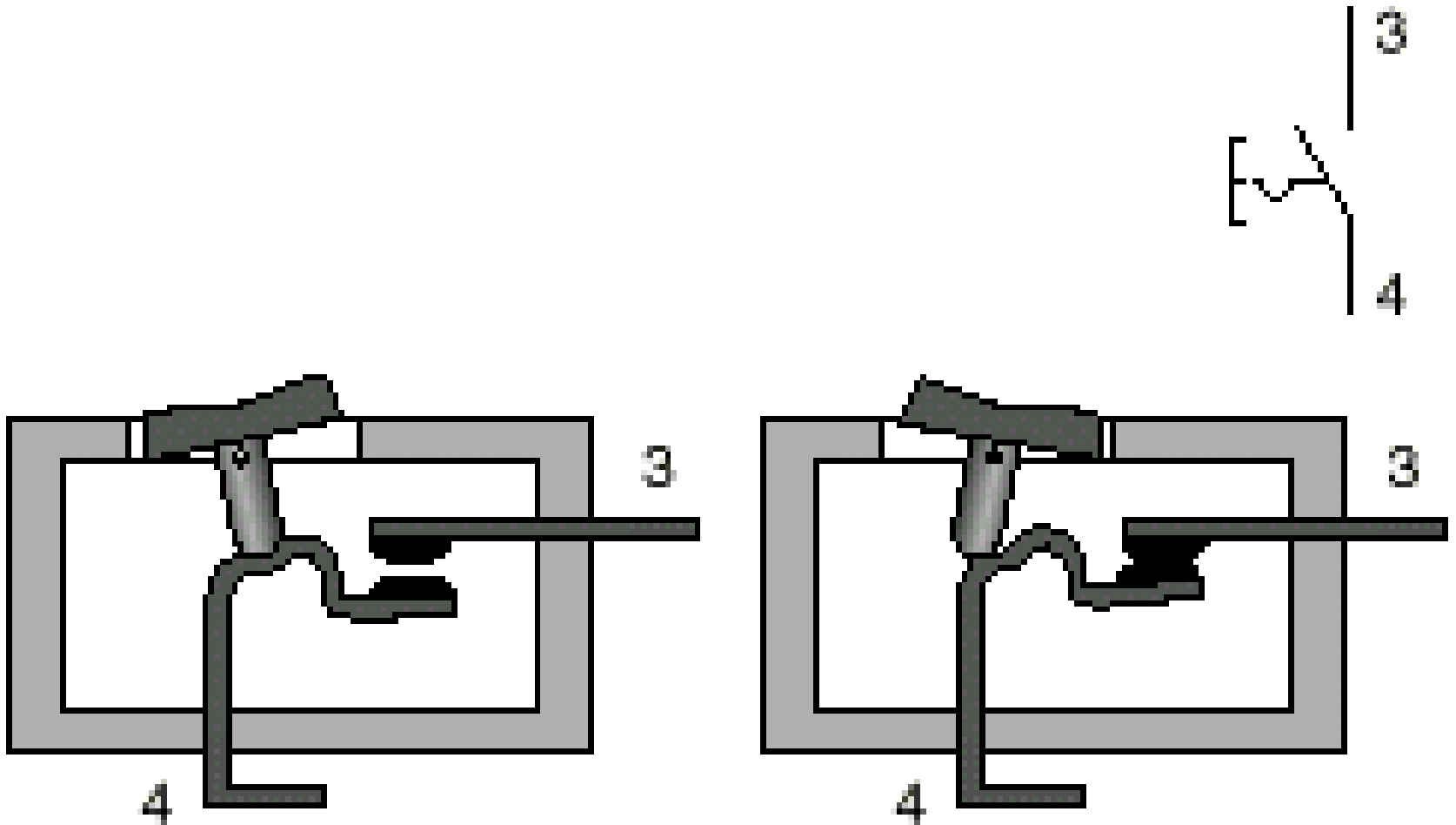
Switches



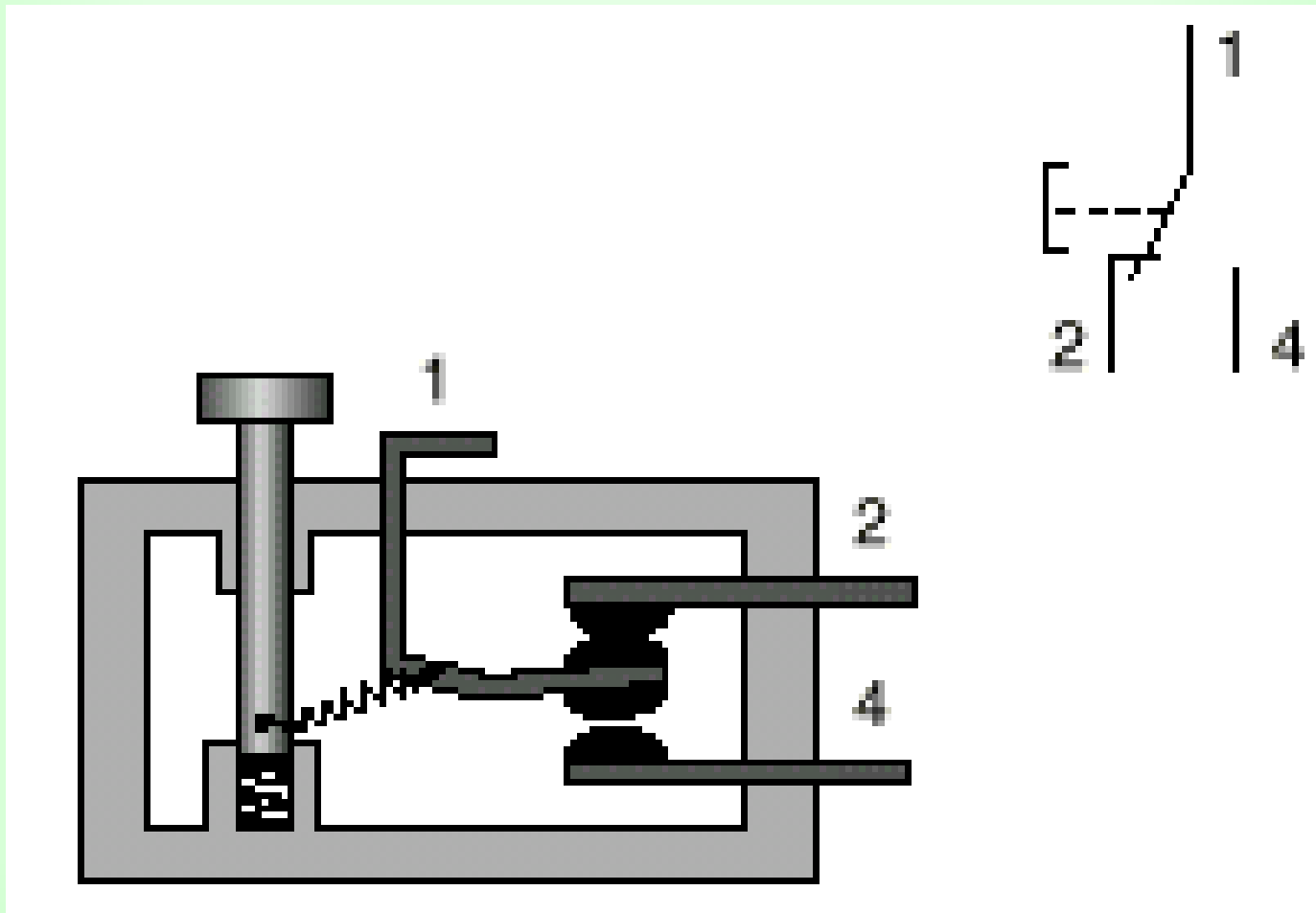
Switches



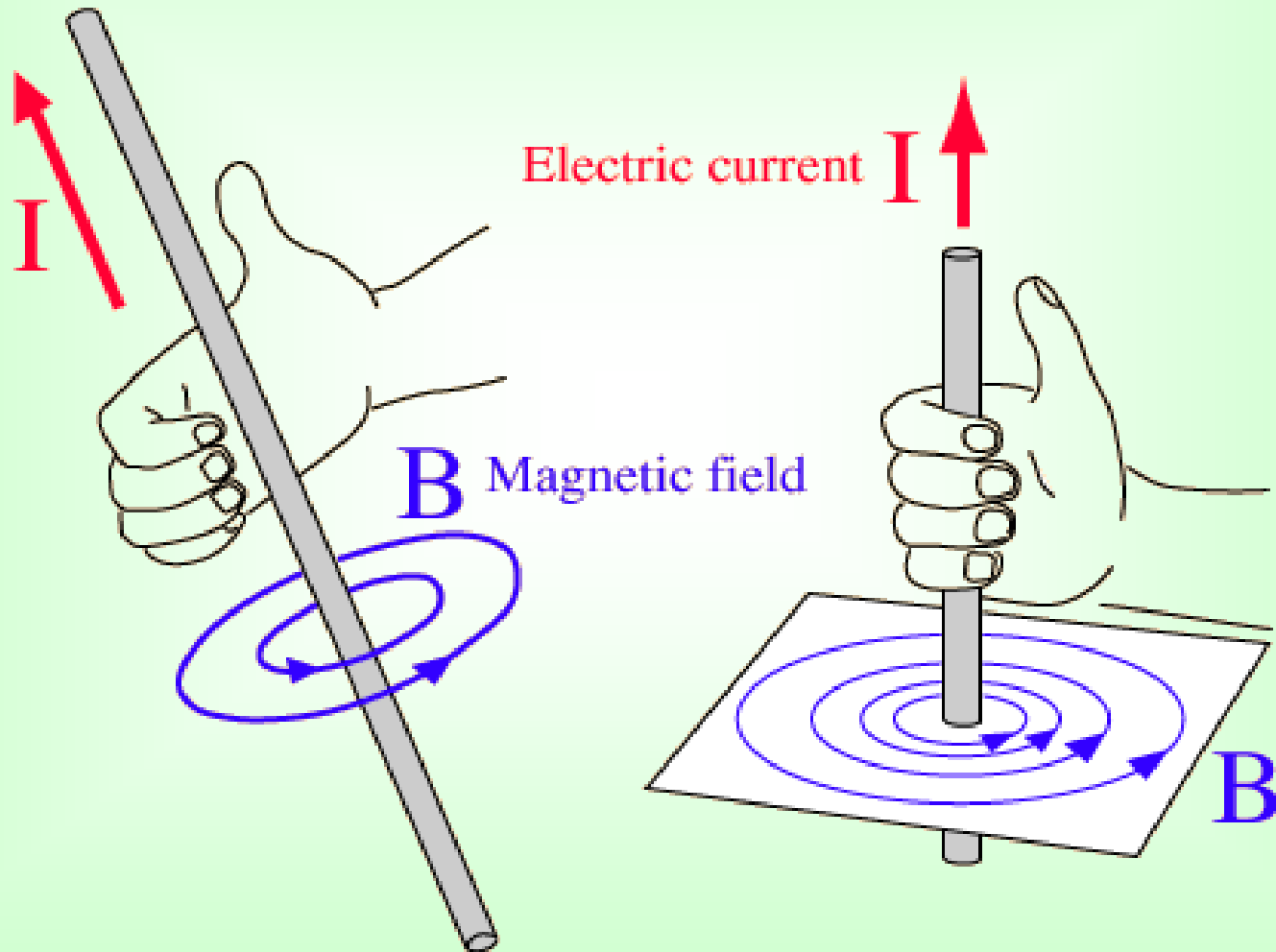
Sustained Normally Open Switch



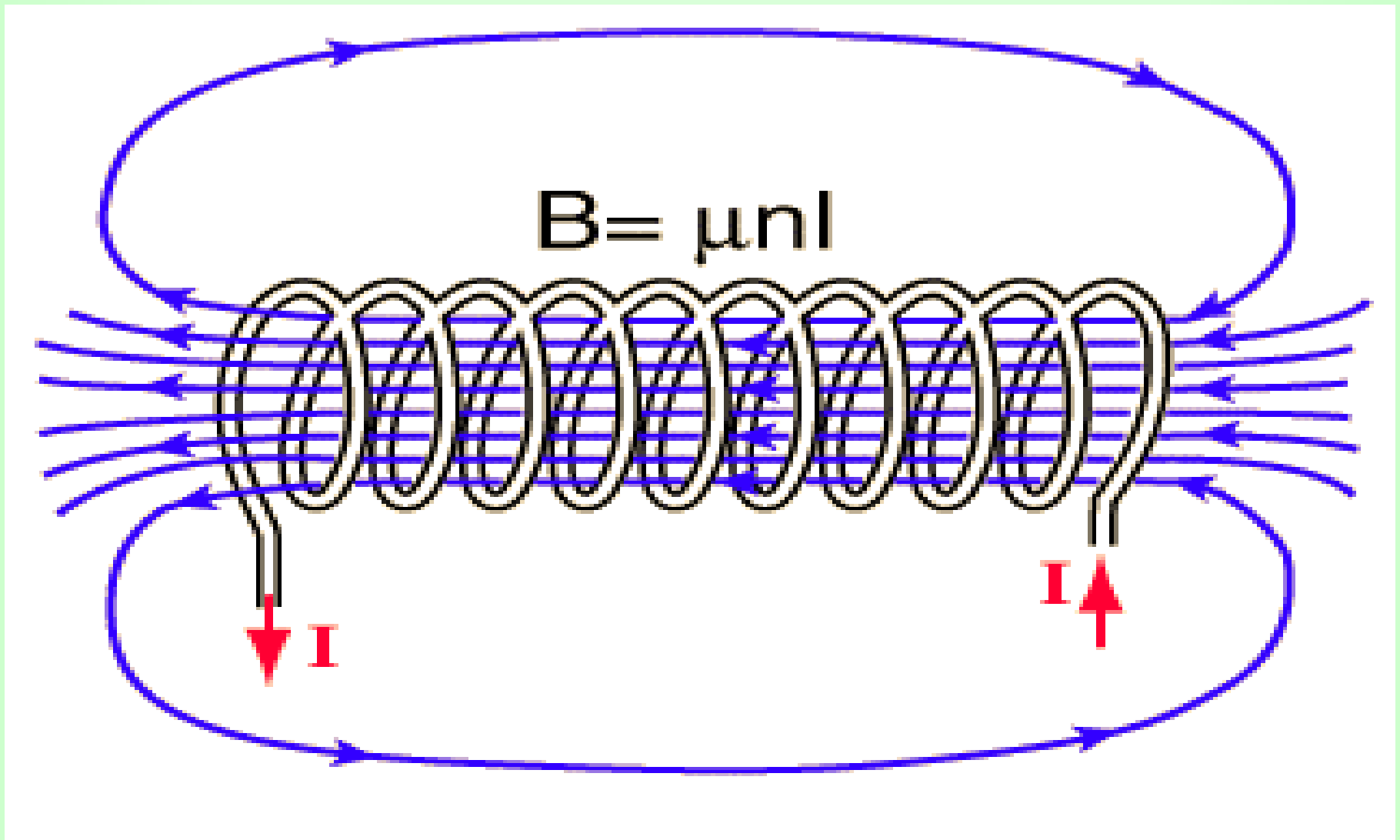
Changeover Switch



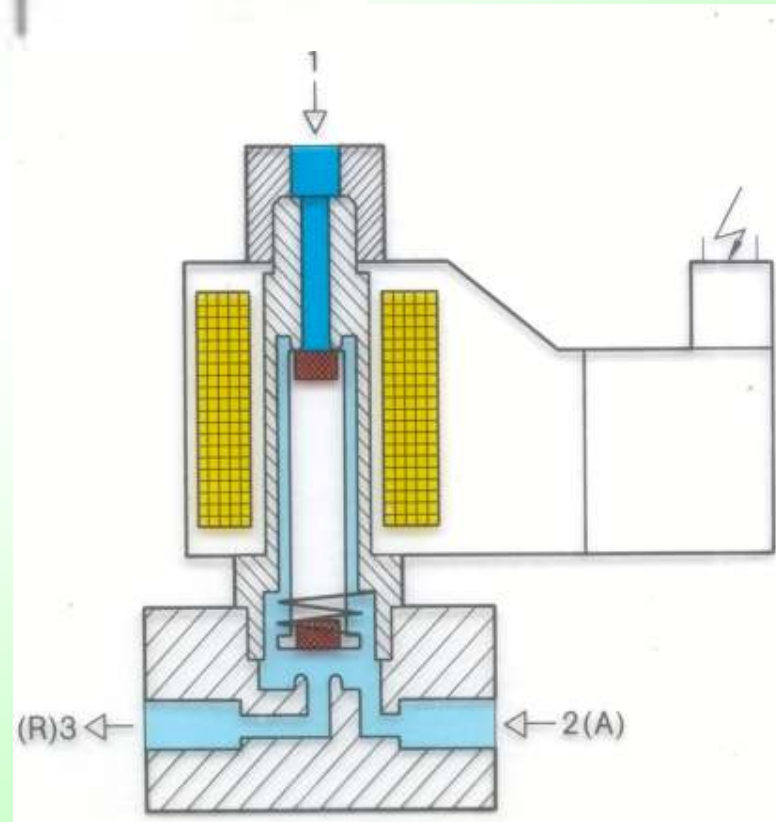
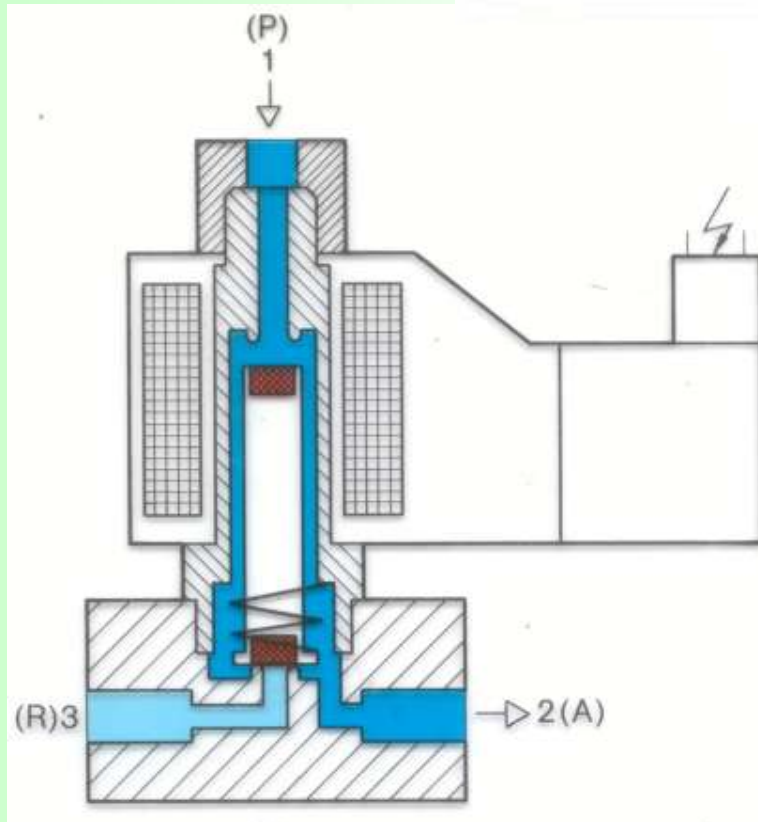
Prinsip kerja solenoid



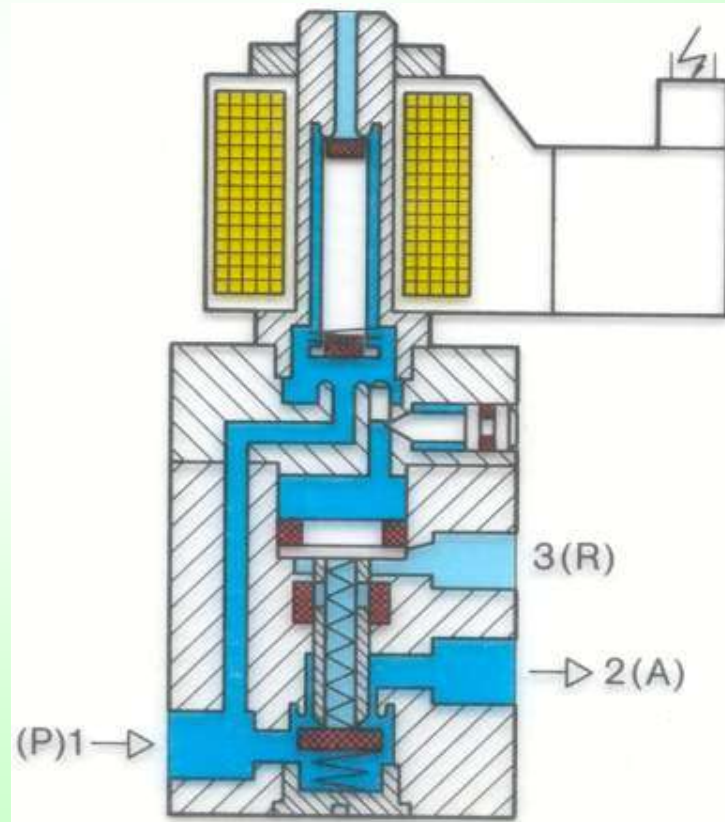
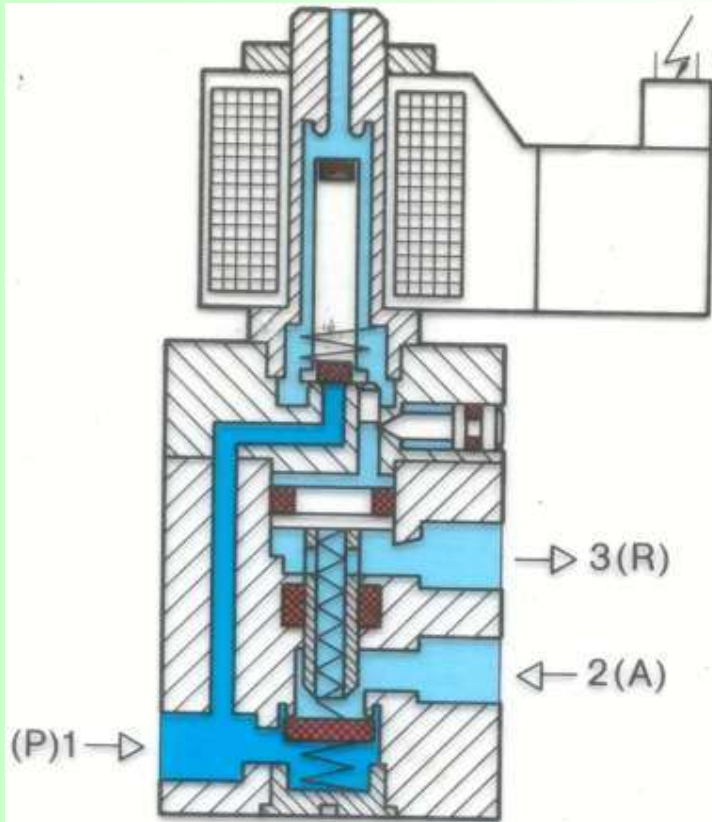
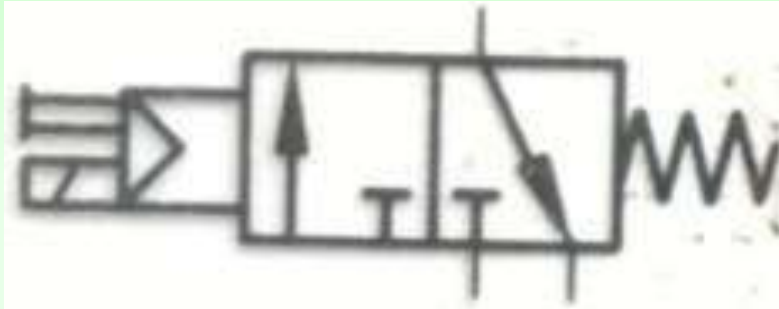
Prinsip kerja solenoid



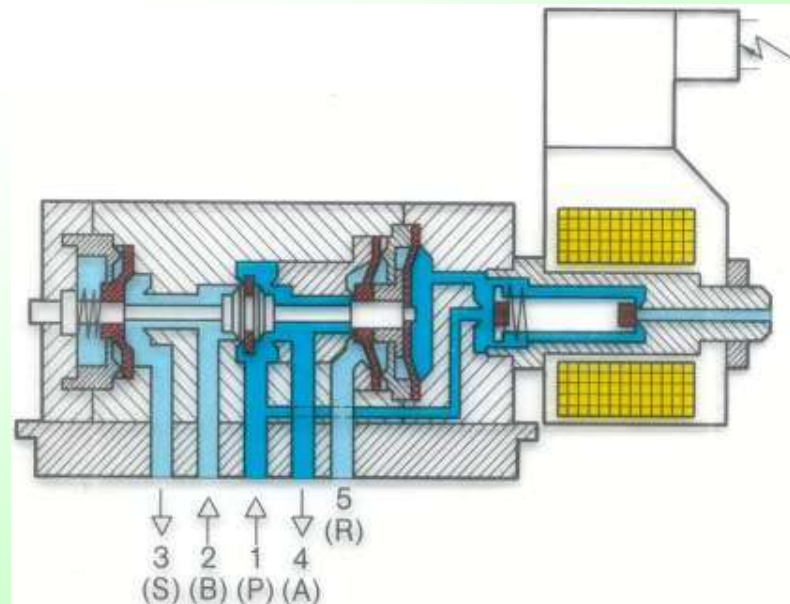
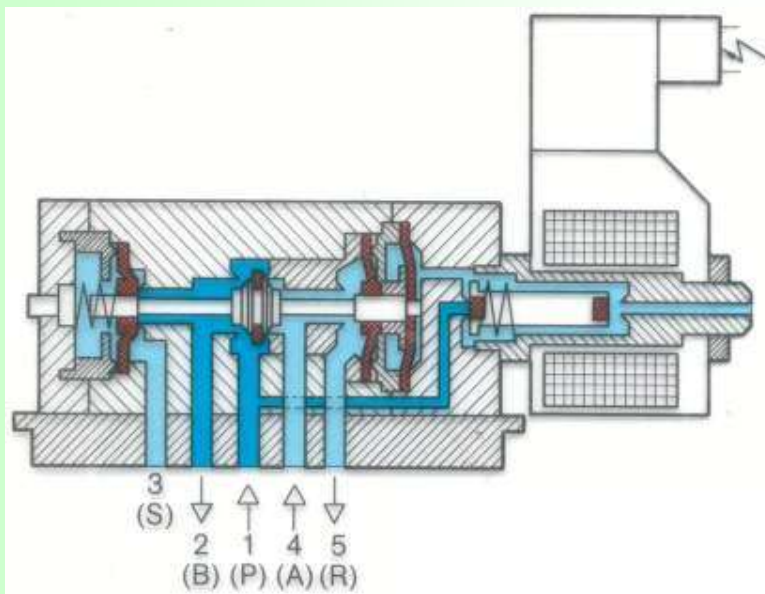
Katup 3/2, normally open



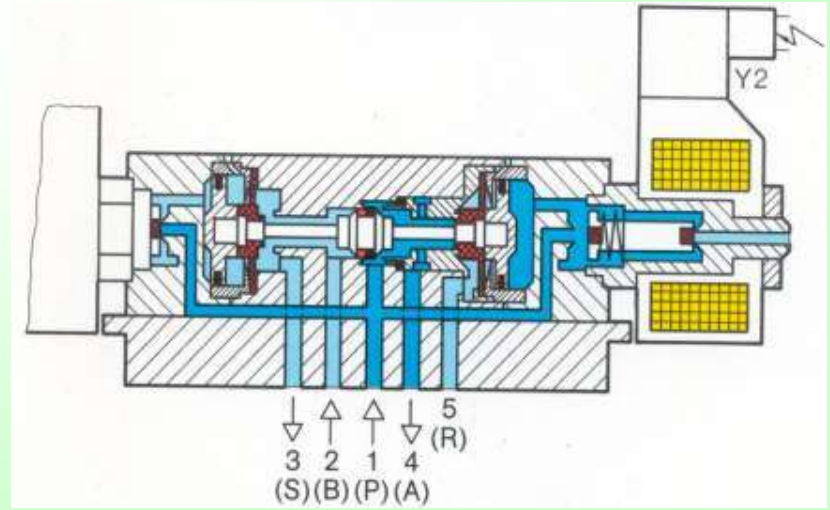
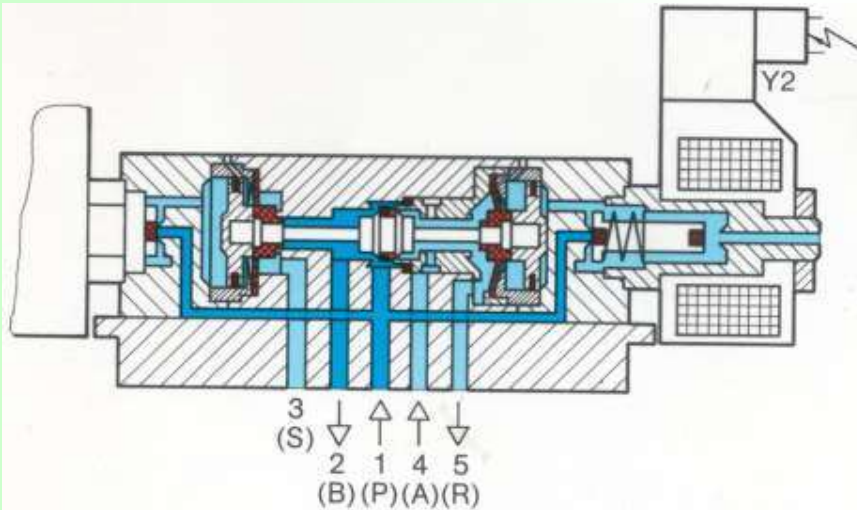
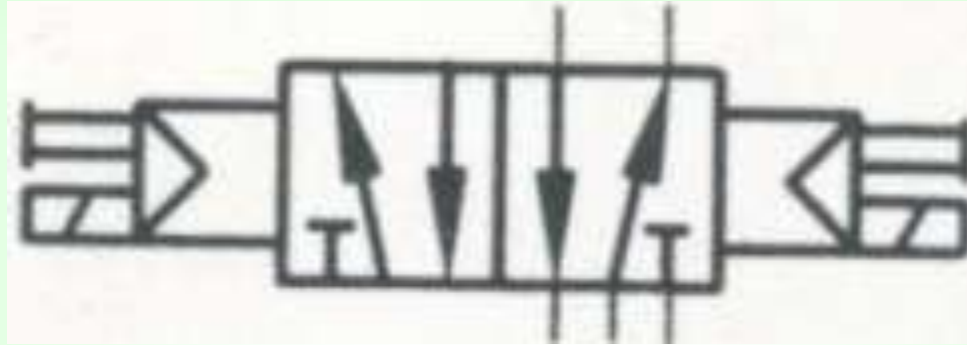
Katup 3/2 dengan pilot, normally closed



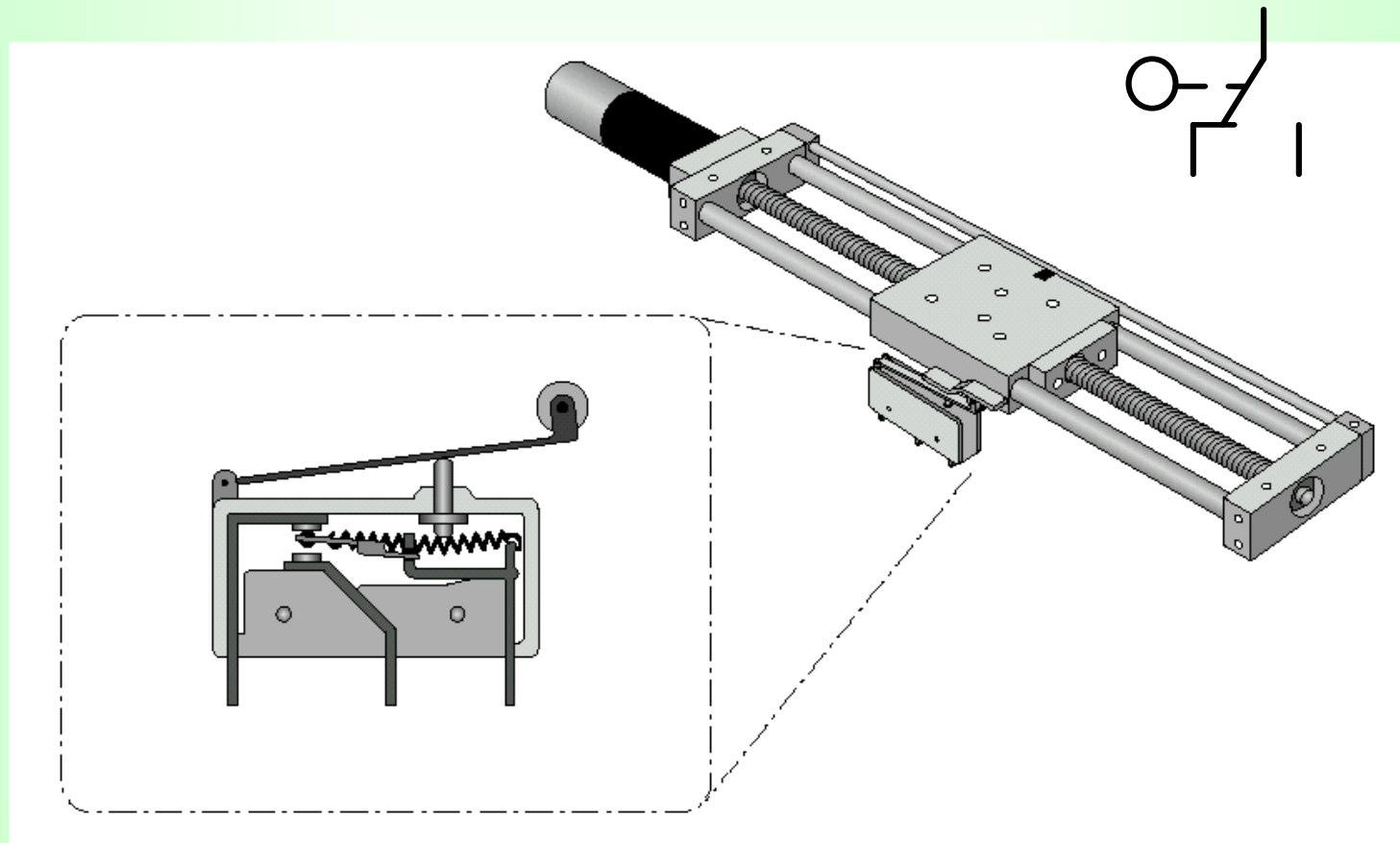
Katup 5/2 dengan pilot, solenoid tunggal



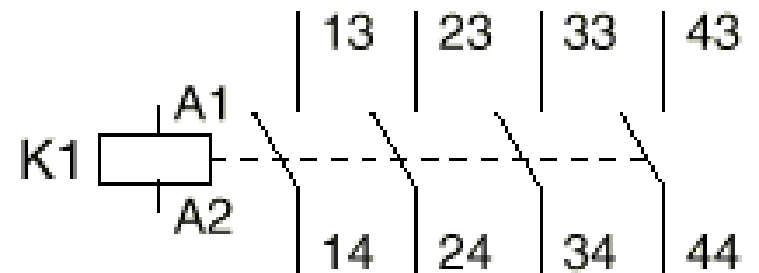
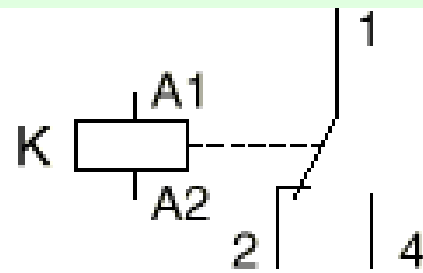
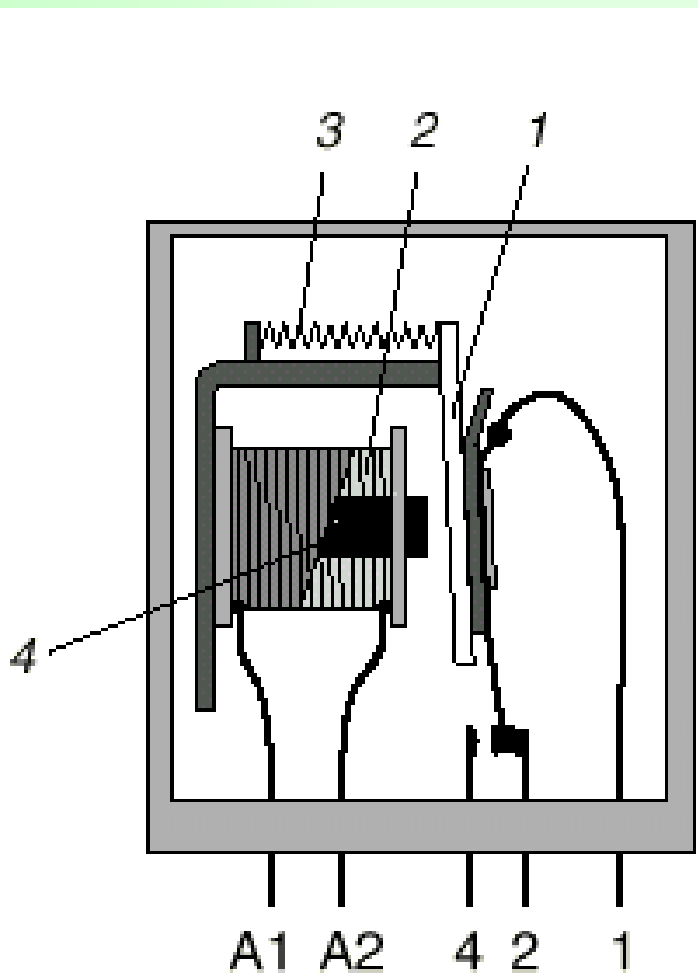
Katup 5/2 dengan pilot, solenoid ganda



Mechanical Limit Switch (Roller)



Relay

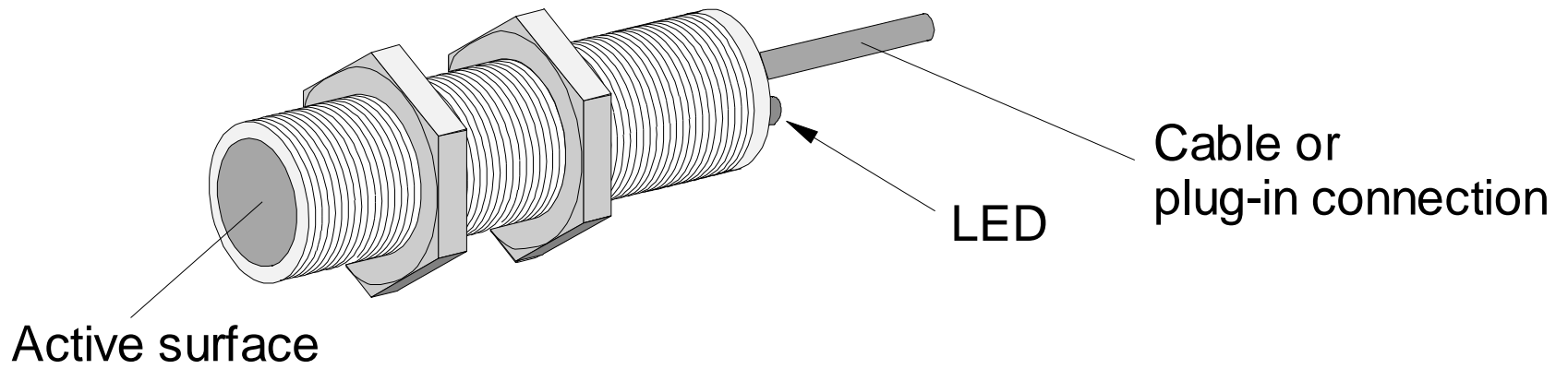


Relay

Karakteristik Relay

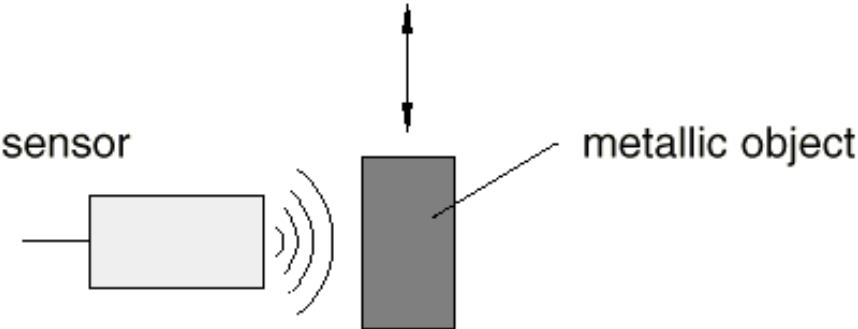
- Perawatan rendah
- Menambah/mengurangi jumlah kontak
- Dapat dipakai pada tegangan yang bervariasi
- Kecepatan operasi yang relatif tinggi. Mis. Waktu kontak yang singkat
- Dapat digunakan sebagai memory (Holding/Latching)

Inductive Sensors

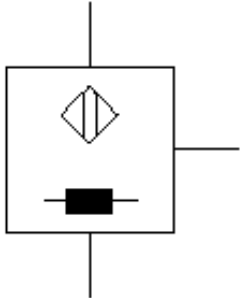


Inductive Sensors

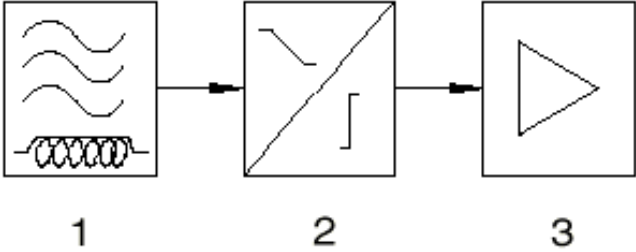
schematic illustration



graphic symbol



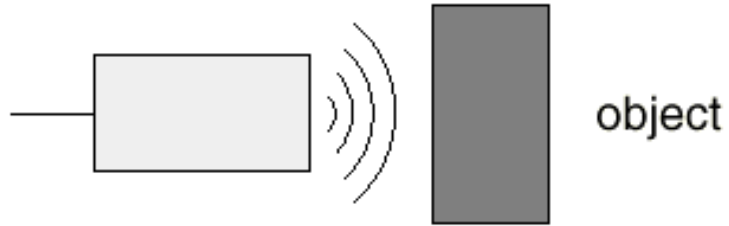
function circuit diagram



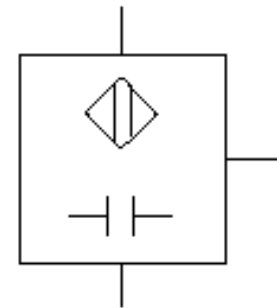
Capacitive Sensors

capacitive proximity sensor

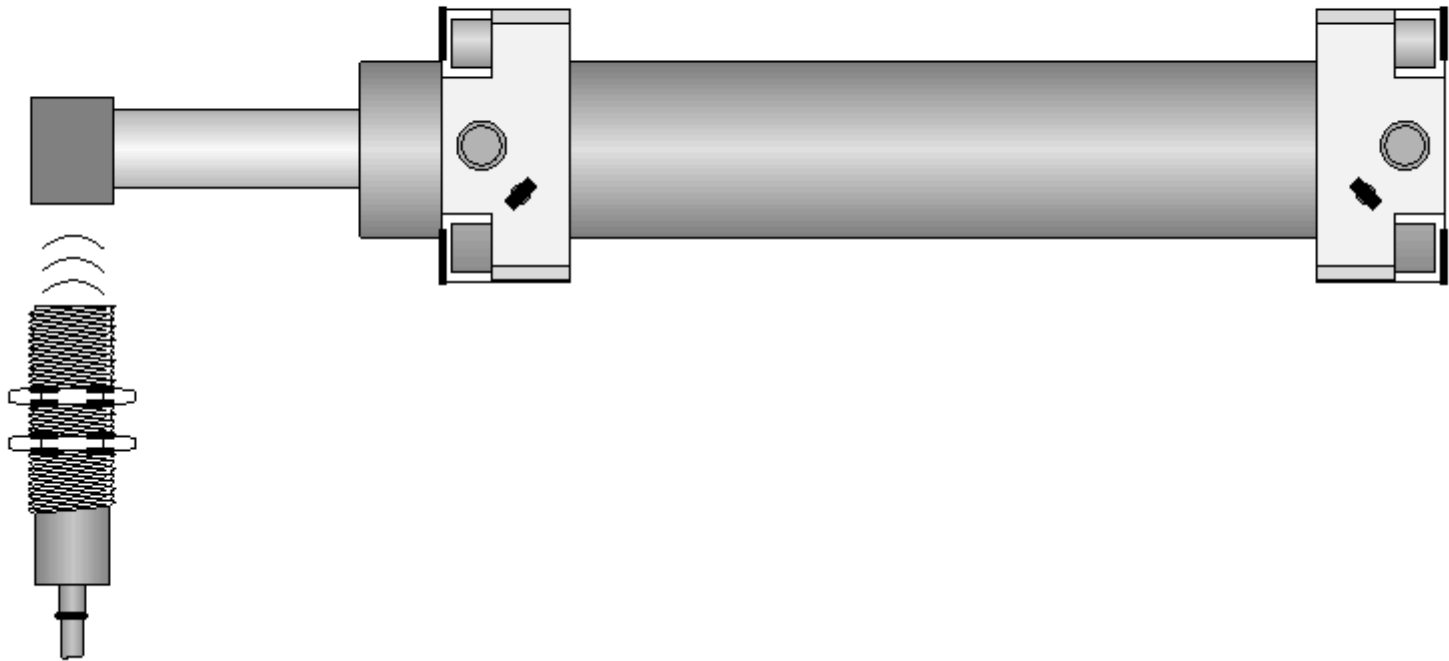
schematic illustration



graphic symbol

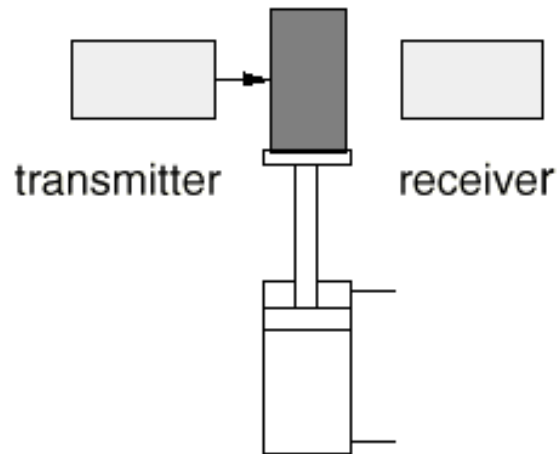
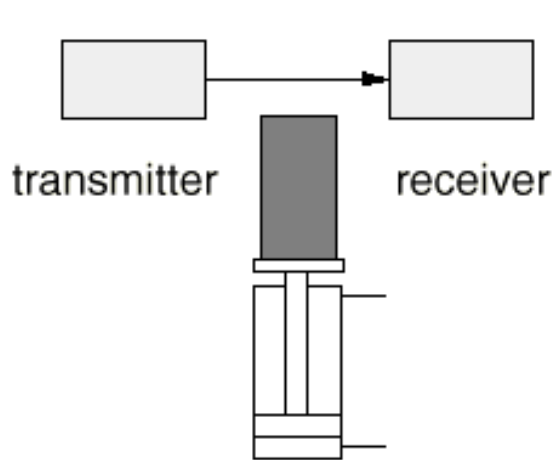


Inductive Sensors

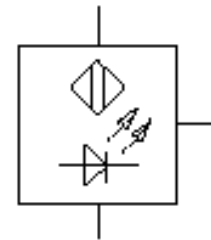


Through Beam Sensors

schematic illustration

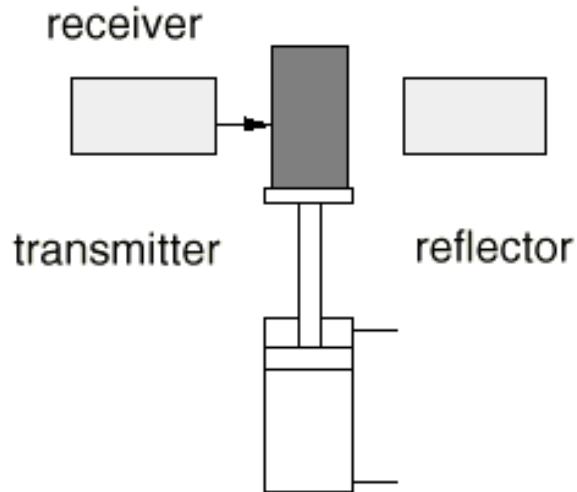
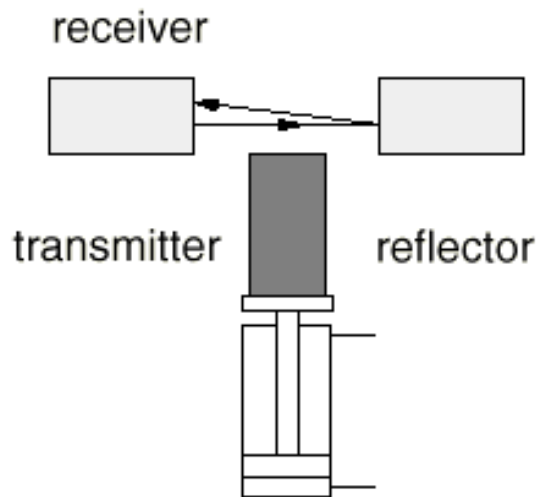


graphic symbol

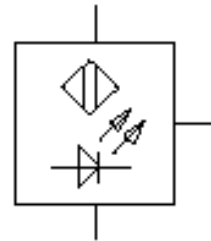


Retro-Reflective Sensors

schematic illustration

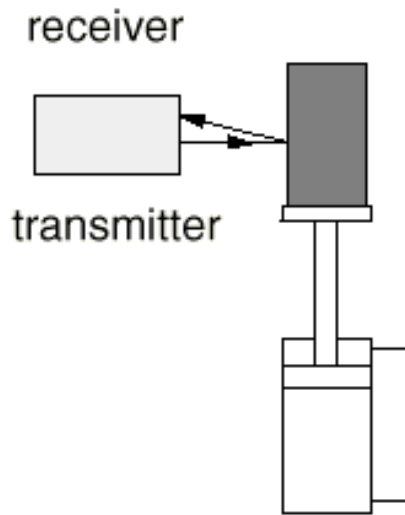
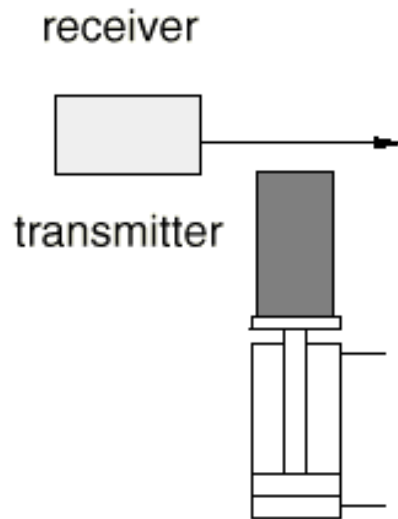


graphic symbol

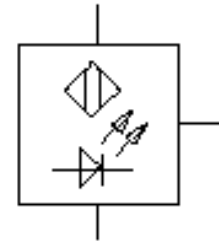


Diffuse Sensors

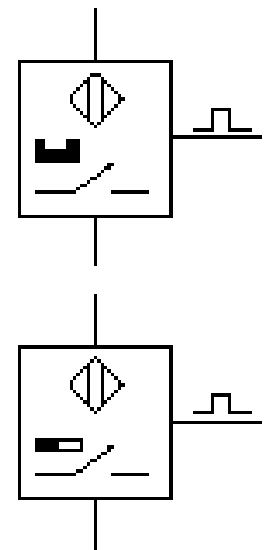
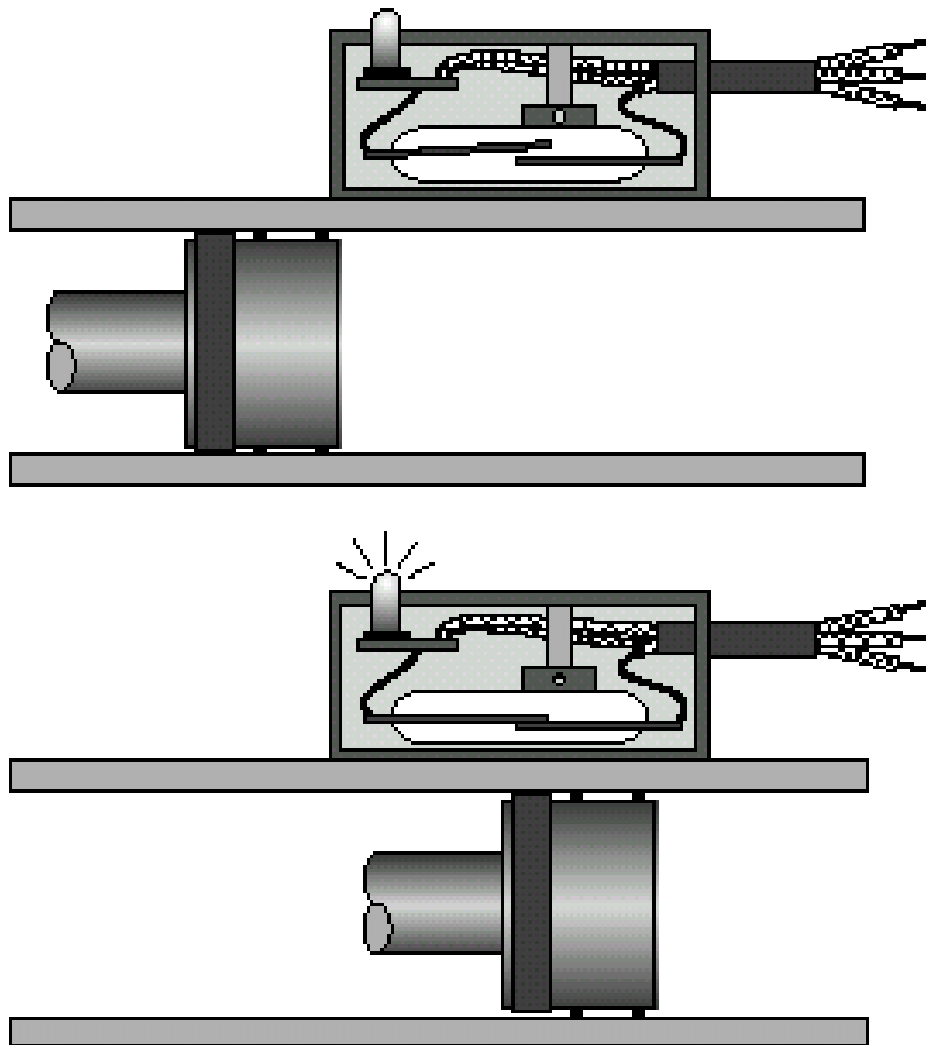
schematic illustration



graphic symbol



Reed Switches



Thankyou!