

Limit switch with Plunger Actuation.

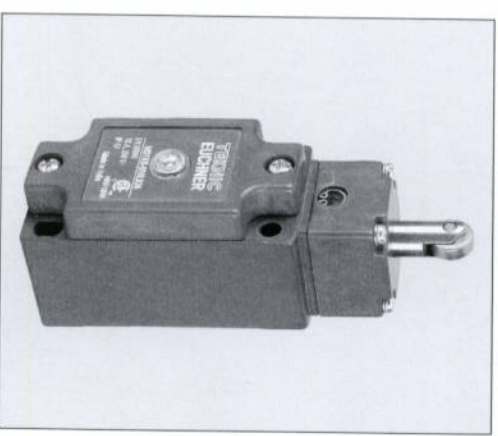
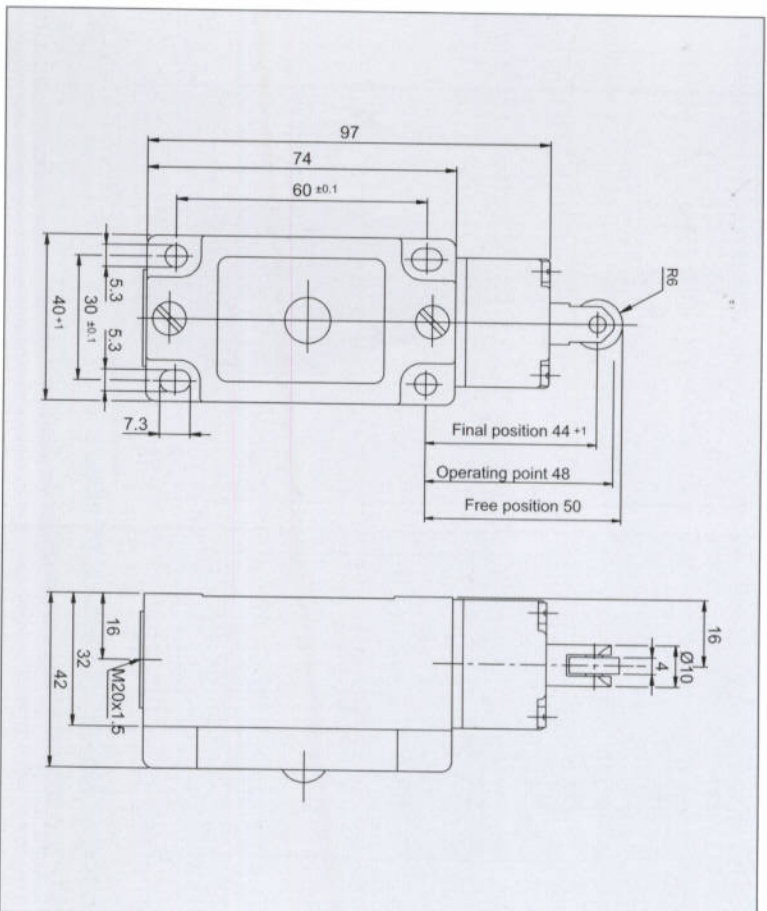
RG (Plastic Roller)

RS (Steel Roller)

Approvals :



### Dimensional Details



| Parameters                                      | Value                                                    |                                             | Unit              |
|-------------------------------------------------|----------------------------------------------------------|---------------------------------------------|-------------------|
| Housing Material                                | Anodised die-cast alloy                                  |                                             |                   |
| Degree of protection according to IEC 60529     | IP67                                                     |                                             |                   |
| Installation position                           | Optional                                                 |                                             |                   |
| Mechanical service life                         | 30x10 <sup>6</sup> switching cycles                      |                                             |                   |
| Ambient temperature                             | -25 to +80                                               |                                             | °C                |
| Switching Element                               | ES 510                                                   | SK 3131 H                                   |                   |
| Contact Element                                 | 1NO + 1NC                                                | 2NO + 2NC                                   |                   |
| Switching Principle                             | Snap action                                              | Slow action                                 |                   |
| Contact gap according to VDE 0660               | 2 x 0.5                                                  | 2 x 2                                       | mm                |
| Contact material                                | Silver alloy AgNi10, gold flashed                        |                                             |                   |
| Connection type                                 | Captive screw terminals with self lifting clamping discs |                                             |                   |
| Cable cross section , maximum                   | 2 x 1.5                                                  |                                             | mm <sup>2</sup>   |
| Utilization category according to IEC 60947-5-1 | AC-15 Ue 230V Ie 6A ,<br>DC-13 Ue 24V Ie 6A              | AC-15 Ue 230V Ie 4A ,<br>DC-13 Ue 24V Ie 4A |                   |
| Rated Insulation Voltage Ui                     | 250                                                      |                                             | V                 |
| Rated Impulse Withstand Voltage Uimp            | 2.5                                                      |                                             | kV                |
| Switching Voltage , minimum                     | 12                                                       |                                             | VDC               |
| Switching current min at 12 VDC                 | 10                                                       |                                             | mA                |
| Contact closing time                            | <4                                                       |                                             | ms                |
| Contact bounce time                             | <3                                                       |                                             | ms                |
| Short Circuit Protection (fuse)                 | 10                                                       | 4                                           | A                 |
| <b>Actuator</b>                                 | <b>RG</b>                                                | <b>RS</b>                                   |                   |
| Approach speed , max.                           | 20                                                       |                                             | m/min             |
| Approach speed , min.                           |                                                          | 20                                          | m/min             |
| Pretravel before switch point                   |                                                          | 2                                           | °                 |
| Operating Point reproducibility                 |                                                          | ±0.1                                        | °                 |
| Movement Differential                           |                                                          | 0.7                                         | °                 |
| Operating Force                                 |                                                          | 15                                          | N                 |
| Switching Frequency max                         |                                                          | 300                                         | min <sup>-1</sup> |

### Ordering Table :

|     |    | Without LED | With LED 24 V DC | With LED 220 V AC |
|-----|----|-------------|------------------|-------------------|
| NG1 | RG | ES-510      | NG1RG-510-M      | NG1RG-510L220-M   |
| NZ1 |    | SK-3131     | NZ1RG-3131-M     | -                 |
| NG1 |    | ES-510      | NG1RS-510-M      | NG1RS-510L220-M   |
| NZ1 | RS | SK-3131     | NZ1RS-3131-M     | -                 |