## LIMIT SWITCH

## Application

Limit switches are ideal electrical control switches in mechanical and other industries. They are applicable to circuits of $50 / 60 \mathrm{~Hz}$, with voltage up to 500 VAC or DC control circuits with a voltage up to 600 V , and could convert a mechanical signal into an electrical signal for the purpose of controlling mechanical movement or performing sequential control.

Technical Data - TZ range 5A

| Operating speed | 5 mm to $50 \mathrm{~cm} / \mathrm{s}$ |
| :--- | :--- |
| Operating frequency | 120 operations $/ \mathrm{min}$ |
| Initial Contact resistance | $15 \mathrm{~m} \Omega \mathrm{max}$ |
| Insulation resistance | $100 \mathrm{~m} \Omega \mathrm{~min}$. (at 500 VDC ) |
|  | $1000 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between non-continuous terminals; |
| Dielectric strength | $1500 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between current-carrying and non-current-carrying parts and <br> between each terminal and ground |
| Vibration | 10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude |
| Shock | Approx. $300 \mathrm{~m} / \mathrm{s}^{2}$ (approx. 30 G 's) |
| Ambient temperature | Operating: -20 to $+60^{\circ} \mathrm{C}$ |
| Humidity | $<95 \%$ |
| Service life | Mechanical $-10,000,000$ operations min. |
| Electrical $-500,000$ operations min. |  |
| Weight | Approx. 130 to 190 g |
| Degree of protection | IEC IP65 |

## Outline and Dimension - TZ range 5A

## TZ-8104



TZ-8107



TZ-8112


TZ-8166


TZ-8169


TZ-8111


TZ-8122


TZ-8167

$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline \begin{array}{l}\text { Operating charaderisitics } \\ \text { Type }\end{array} & \text { TZ-8104 } & \text { TZ-8108 } & \text { TZ-8107 } & \text { TZ-8111 } & \begin{array}{l}\text { TZ-8112 } \\ \text { TZ-8122 }\end{array} & \text { IZ-8166 } \\ \text { TZ-8167 }\end{array}\right]$

## Technical Data - YXCK range 3A

| 2-pole contact terminal, quick | Metal head direcacting type | Metal stell roller direcacting type | Metal <br> thermoplastic roller tumbler directacting type | Adjustable length and thermoplastic roller tumbler type | Metal <br> thermoplastic <br> cylindrical <br> tumbler type <br> Diameter $=6 \mathrm{~mm}$ <br> length $=200 \mathrm{~mm}$ | Thermoplastic roller tumbler directacting type, single direction with horizontal movement | Multidirect ion type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mechanical life (million times) | 30 | 25 | 30 | 30 | 30 | 15 | 30 |
| Motion speed(m/s) | 0.5 | 1 1 | 1.5 | 1.5 | 1.5 | 1 | 1.5 |
| Protection degree | IP65 |  |  |  |  |  |  |
| Rated work characters | ALTIPAK AC 15; A 300(Ue=240V, Le=3A) ALTIVAR DC 13; Q 300(UE=250V, LE=0.27A) |  |  |  |  |  |  |
| Boundary dimensions: | 41*41*77 |  |  |  |  |  |  |
| Complete switch (2 poles $1 \mathrm{~N} / \mathrm{C}+1 \mathrm{~N} / \mathrm{O}$, quick) | YXCK-J161 <br> YXCK-J1161 | YXCK-J167 | $\begin{aligned} & \text { YXCK-J10511 } \\ & \text { YXCK-J10531 } \end{aligned}$ | YXCK-J10541 | YXCK-J10559 | YXCK-J121 | YXCK-J108 |

## Outline and Dimension - YXCK range 3A




YXCK-J121


YXCK-J108


YXCK-J161


ZCK M1ZCKD15



