## MILL DUTY PRODUCTS

## Limit Switch

## (U)

## Application

Type 102TL Track Type Limit Switches are designed as pilot circuit devices for all heavy duty applications to limit travel or set up functions at predetermined positions.

## Operation

The contacts of these switches make and break very quickly due to the snap action of the toggle type operating mechanism. The operating arm is secured to a hollow outer shaft that fits over the camshaft. When the arm is tripped, it turns the outer shaft which actuates the toggle mechanism. The toggle mechanism does not change position until the operating lever is past the midpoint of its travel; then it snaps over and turns the camshaft quickly. Since the cams are fastened rigidly to the camshaft, they in turn impart snap action opening and closing to the contacts. Force to operate switch is approximately 25 inch-pounds.

## Angular Travel

Total angular travel of the arm from one tripped position to the other is $90^{\circ}$. However, the contacts are actuated when the arm moves $60^{\circ}$, the balance of the travel is to clear the arm so that the linear operator may pass over.

## Available Levers:



Part \# A102-054262
TLSF Straight Fork Lever


A102-460805A-1
TLSR Straight Roller Lever


Part \# A102-054261
TLS Rod or Chain Type Lever


Part \# 102-54260A TLF Roller Fork Lever


TLSF-11 or 22 with Straight Fork Lever
Features:

- Double Break removable Silver-to-Silver Contacts.
- Each contact may be independently changed from normally open to normally closed and vice versa without disassembly.
- Operating Arm adjustable on shaft.
- Oil impregnated bearings at contact finger pivot points.
- Cast weatherproof enclosure standard. Dust-tight and watertight enclosures are also available for all types.
- Contact wearing parts completely interchangeable with same parts in Type 101SD Master Switch, 101FS Foot Switch, and 102HL \& CHL Limit Switch.


TLF-22, 2 Contacts, Cover Removed

## Joslyn Clark

Type TL Snap Action - Limit Switch

| Type | Operating Lever | Contacts $^{2}$ | Standard Enclosure <br> Catalog No. | Dust-tight Enclosure <br> Catalog No | Watertight Enclosure <br> Catalog No. |
| :--- | :--- | :---: | :--- | :--- | :--- |
| TLS-11 | Rod or Chain | 1 | A102-80579A-1 | A102-80579A-2 | A102-80580A |
| TLS-22 | Rod or Chain | 2 | A102-80581A-1 | A102-80581A-2 | A102-80582A |
| TLSR-11 | Straight or Roller | 1 | A102-80591A-1 | A102-80591A-2 | A102-80592A |
| TLSR-22 | Straight or Roller | 2 | A102-80593A-1 | A102-80593A-2 | A102-80594A |
| TLF-11 | Roller Fork | 1 | A102-80575A-1 | A102-80575A-2 | A102-80576A |
| TLF-22 | Roller Fork | 2 | A102-80577A-1 | A102-80577A-2 | A102-80578A |
| TLSF-11 | Straight Fork | 1 | A102-80583A-1 | A102-80583A-2 | A102-80584A |
| TLSF-22 | Straight Fork | 2 | A102-80585A-1 | A102-80585A-2 | A102-80586A |

Note:

1. Includes limit switch complete with operating lever.
2. Contacts can be changed from open to close by rotating cam $180^{\circ}$.

Limit Switch Electrical Ratings

| 25 Amp - 600V AC Maximum |  |  |  |
| :--- | :---: | :---: | :---: |
| Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300. |  |  |  |
|  | Current - Amperes |  |  |
| Volts | Carry | Break | Inrush/ Make |
| $110-120 \mathrm{~V}$ AC | 25 | 6.0 | 6.0 |
| $220-240 \mathrm{~V}$ AC | 25 | 3.0 | 3.0 |
| $440-480 \mathrm{~V}$ AC | 25 | 1.5 | 1.5 |
| $550-600 \mathrm{~V}$ AC | 25 | 1.2 | 1.2 |
| $115-125 \mathrm{~V}$ DC | 10 | 2.2 | 2.2 |
| $230-250 \mathrm{~V}$ DC | 10 | 1.1 | 1.1 |

Approximate Outline Dimensions

TLSR Straight Roller Lever


TLSF Straight Fork Lever


TLS Rod or Chain Type Lever


TLF Roller Fork Lever


