

Short-body

Ultra Short Housing



| | | |
|--------------------------|-------------------------|---------------------------|
| Appearance | | |
| Mounting | Shielded | |
| Housing size | φ 6.5 | φ 6.5Y |
| Sensing distance | 1mm/2mm ± 10% | |
| Housing material | Stainless steel | |
| Operating voltage | 10~30V DC(Ripple < 10%) | |
| Voltage drop | < 1.5V | |
| Load Current , Max | 150mA | |
| Current consumption | < 10mA | |
| Leakage current | < 0.01mA | |
| Switch frequency | 2KHz | |
| Repeat accuracy | < 1.0% (Sr) | |
| Hysteresis | < 15% (Sr) | |
| Sensing surface material | PBT | |
| Operating Temperature | -25°C~+75°C | |
| Protective circuit | Short circuit | |
| Degree of protection | IP67 | |
| Model No. | NPN Normally open | TSSF6.5-01 / TSSF6.5-02 |
| | NPN Normally closed | TSSF6.5Y-01 / TSSF6.5-02 |
| | PNP Normally open | : PNP Normally open |
| Others | : PNP Normally closed | |



| | | |
|--------------------------|---------------------------------|------------------------|
| Appearance | | |
| Mounting | Shielded | |
| Housing size | M8 | M12 |
| Sensing distance | 1mm/2mm ± 10% | 2mm/4mm ± 10% |
| Housing material | Stainless steel | |
| Operating voltage | 10~30V DC(Ripple < 10%) | |
| Voltage drop | < 1.5V | |
| Load Current , Max | 150mA | |
| Current consumption | < 10mA | |
| Leakage current | < 0.01mA | |
| Switch frequency | 2KHz | |
| Repeat accuracy | < 1.0% (Sr) | |
| Hysteresis | < 15% (Sr) | |
| Sensing surface material | PBT | |
| Operating Temperature | -25°C~+75°C | |
| Protective circuit | Short circuit, except TSSF08-02 | |
| Degree of protection | IP67 | |
| Model No. | NPN Normally open | TSSF08-01 / TSSF08-02 |
| | NPN Normally closed | TSSF12-02 / TSSF12-04 |
| | PNP Normally open | : PNP Normally open |
| Others | : PNP Normally closed | |

Short-body

General Shot Housing



| | | | | | |
|--------------------------|-------------------------|----------------------|----------------------|----------------------|----------------------|
| Appearance | | | | | |
| Mounting | Shielded | | | | |
| Housing size | M8 | M12 | M18 | M30 | |
| Sensing distance | 1mm/2mm ± 10% | 2mm/4mm ± 10% | 5mm/8mm ± 10% | 10mm/16mm ± 10% | |
| Housing material | Stainless steel | | | | |
| Operating voltage | 10~30V DC(Ripple < 10%) | | | | |
| Voltage drop | < 1.5V | | | | |
| Load Current, Max | 150mA | | | | |
| Current consumption | < 10mA | | | | |
| Leakage current | < 0.01mA | | | | |
| Switch frequency | 2KHz | 2KHz/1Hz | 1KHz/500Hz | 300Hz/150Hz | |
| Repeat accuracy | < 1.0% (Sr) | | | | |
| Hysteresis | < 15% (Sr) | | | | |
| Sensing surface material | PBT | | | | |
| Operating Temperature | -25°C~+75°C | | | | |
| Protective circuit | Short circuit | | | | |
| Degree of protection | IP67 | | | | |
| Model No. | NPN Normally open | TSF08-01 / TSF08-02 | TSF12-02 / TSF12-04 | TSF18-05 / TSF18-08 | TSF30-10 / TSF30-16 |
| | Others | :NPN Normally open | :NPN Normally closed | :PNP Normally open | :PNP Normally closed |



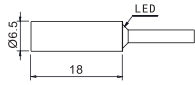
| | | | | | |
|--------------------------|-------------------------|----------------------|----------------------|----------------------|----------------------|
| Appearance | | | | | |
| Mounting | Unshielded | | | | |
| Housing size | M8 | M12 | M18 | M30 | |
| Sensing distance | 2mm/4mm ± 10% | 4mm/8mm ± 10% | 8mm/16mm ± 10% | 15mm/25mm ± 10% | |
| Housing material | Stainless steel | Nickle plated brass | | | |
| Operating voltage | 10~30V DC(Ripple < 10%) | | | | |
| Voltage drop | < 1.5V | | | | |
| Load Current, Max | 150mA | | | | |
| Current consumption | < 10mA | | | < 20mA | |
| Leakage current | < 0.01mA | | | | |
| Switch frequency | 2KHz/1KHz | 1KHz/500Hz | 500Hz/150Hz | 150Hz/100Hz | |
| Repeat accuracy | < 1.0% (Sr) | | | | |
| Hysteresis | < 15% (Sr) | | | | |
| Sensing surface material | PBT | | | | |
| Operating Temperature | -25°C~+75°C | | | | |
| Protective circuit | Short circuit | | | | |
| Degree of protection | IP67 | | | | |
| Model No. | NPN Normally open | TSN08-02 / TSN08-04 | TSN12-04 / TSN12-08 | TSN18-08 / TSN18-16 | TSN30-15 / TSN30-25 |
| | Others | :NPN Normally open | :NPN Normally closed | :PNP Normally open | :PNP Normally closed |

Short-body

Extra Shot Outer Casing-Dimensions (Unit:mm)

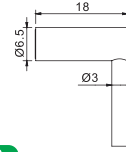
M6.5

TSSF6.5-01/02/03 □ □



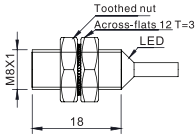
M6.5Y

TSSF6.5Y-01/02/03 □ □



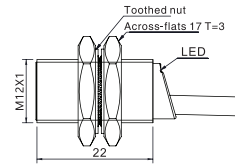
M8

TSSF08-01/02/03 □ □



M12

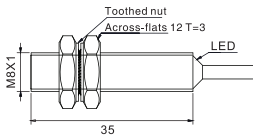
TSSF12-02/04/06 □ □



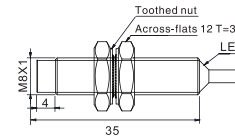
General-Dimensions (Unit:mm)

M8

TSF08-01/02 □ □

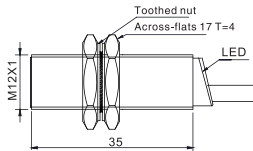


TSN08-02/04 □ □

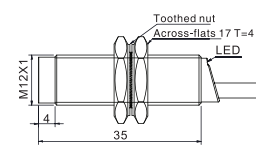


M12

TSF12-02/04 □ □

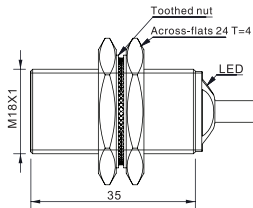


TSN12-04/08 □ □

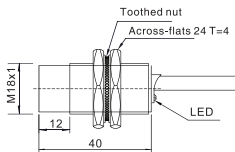


M18

TSF18-05/08 □ □

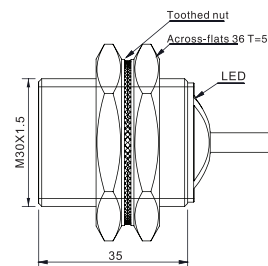


TSN18-08/16 □ □



M30

TSF30-10/16 □ □



TSN30-15/25 □ □

