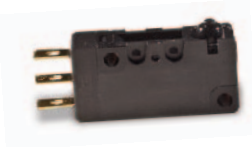


TFS Series

Sealed Miniature Snap-acting Switches



Features/Benefits

- IP40
- Reliable snap action mechanism
- Low cost - high performance
- RoHS compatible

Typical Applications

- Alarm devices / Home security
- Air conditioner
- Food processor
- Water heaters
- Industrial
- Forklifts



Specifications

CONTACT RATING / ELECTRICAL LIFE:

- 0.1A @ 125/250 V AC / 100,000 operations
- 3A @ 125/250 VAC / 25,000 operations
- 6A @ 125/250 VAC / 10,000 operations
- 10A @ 125/250 VAC / 10,000 operations

ELECTRICAL OPERATING FREQUENCY: 10-30 operations per min.

MECHANICAL LIFE: 10,000,000 operations

MECHANICAL OPERATING FREQUENCY: 120 operations per min.

INSULATION RESISTANCE: (at 500 VDC/minute) 100 M ohm min.

DIELECTRIC STRENGTH: 1500 VAC (50 -60 Hz)

OPERATING TEMPERATURE: -40°C to 85°C (with no icing)

STORAGE TEMPERATURE: -25°C to 85°C (with no icing)

STORAGE HUMIDITY: At 40°C max. 85% RH

OPERATING FORCE: 200 grams.

Materials

CASE: Nylon

COVER: PBT

ACTUATOR: Brass

MOVABLE CONTACTS: Silver alloy.

TERMINALS: Brass.

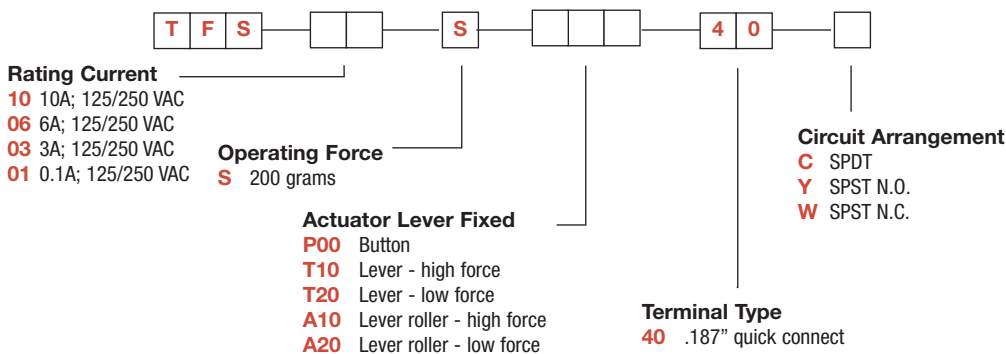
LEVER: Stainless steel

WIRE: PVC+CU

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

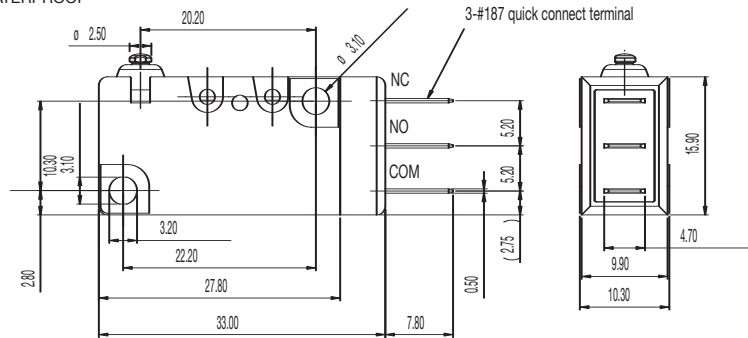
To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-73 thru J-75. For additional options not shown in catalog, consult Customer Service Center.



TFS Series Sealed Miniature Snap-acting Switches

SERIES

TFS SUB-MINIATURE SNAP-ACTING SWITCHES – WATERPROOF



ELECTRICAL RATING

OPTION CODE	RoHS COMPLIANT	RoHS COMPATIBLE	ELECTRICAL RATING
10	Yes	Yes	10A @ 125/250 V AC / 10,000 operations
06	Yes	Yes	6A @ 125/250 VAC / 10,000 operations
03	Yes	Yes	3A @ 125/250 VAC / 25,000 operations
01	Yes	Yes	0.1A @ 125/250 VAC / 100,000 operations



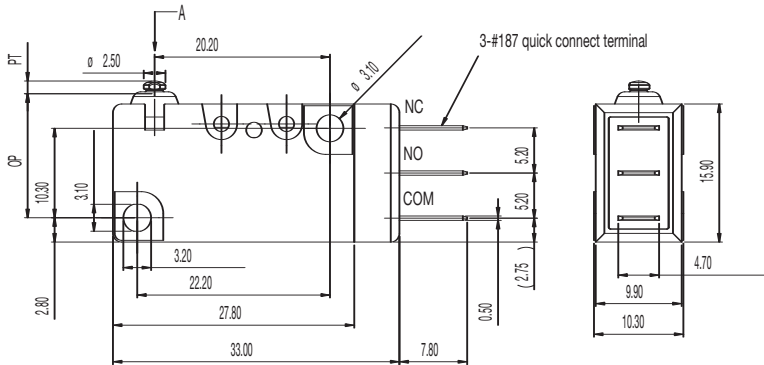
Snap-acting

OPERATING FORCE

OPTION CODE	BASIC SWITCH OPERATING FORCE
S	200 GRAMS

ACTUATOR

P00 BUTTON



Measure at Point "A"

Max. operating force	200 grams
Min. release force	30 grams
Operating position OP	14.7 ± 0.4 mm
Max. movement differential	0.4 mm
Min. over travel OT	1.0 mm
Max. pre-travel PT	1.2 mm



Third Angle Projection

C&K

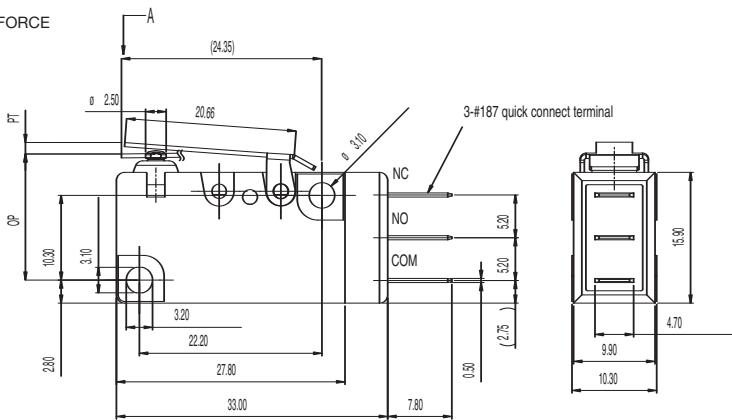
Dimensions are shown: mm
Specifications and dimensions subject to change

TFS Series

Sealed Miniature Snap-acting Switches

ACTUATOR

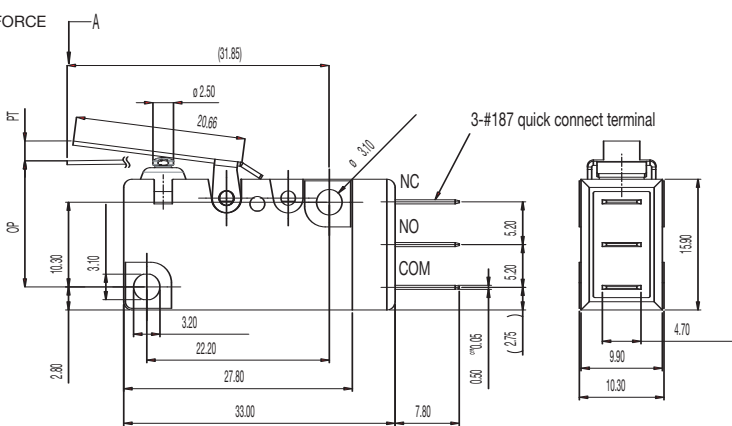
T10 LEVER, HIGH FORCE



Measure at Point “A”

Max. operating force	160 grams
Min. release force	25 grams
Operating position OP	15.1 ± 0.6 mm
Max. movement differential	0.6 mm
Min. over travel OT	1.1 mm
Max. pre-travel PT	2.6 mm

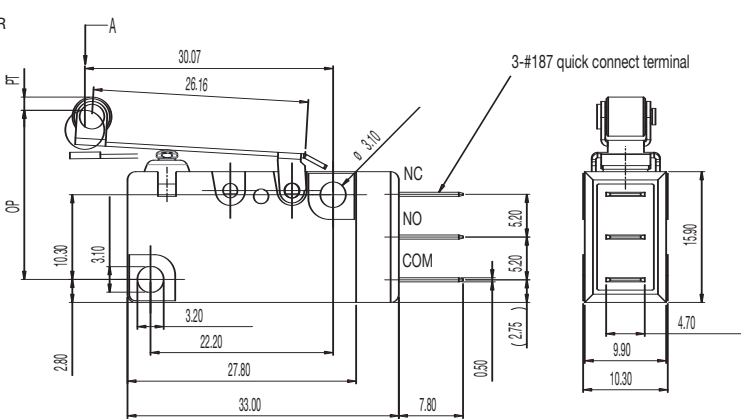
T20 LEVER, LOW FORCE



Measure at Point “A”

Max. operating force	90 grams
Min. release force	10 grams
Operating position OP	15 ± 1.1 mm
Max. movement differential	1.1 mm
Min. over travel OT	1.2 mm
Max. pre-travel PT	5.1 mm

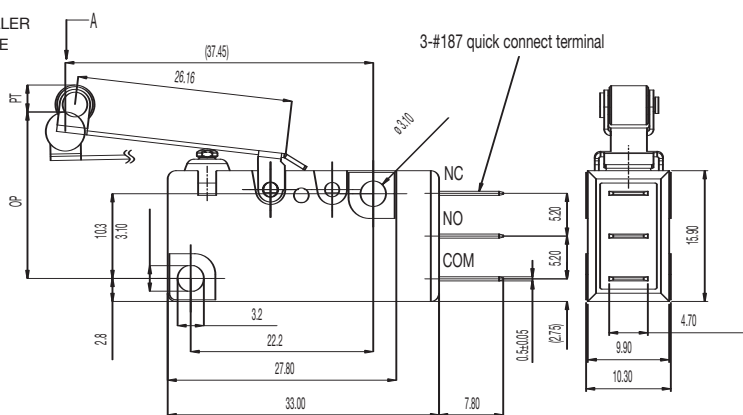
A10 LEVER ROLLER
HIGH FORCE



Measure at Point “A”

Max. operating force	130 grams
Min. release force	20 grams
Operating position OP	20.4 ± 0.7 mm
Max. movement differential	0.7 mm
Min. over travel OT	1.3 mm
Max. pre-travel PT	3.3 mm

A20 LEVER ROLLER
LOW FORCE



Measure at Point “A”

Max. operating force	70 grams
Min. release force	10 grams
Operating position OP	20.2 ± 1.2 mm
Max. movement differential	1.4 mm
Min. over travel OT	1.5 mm
Max. pre-travel PT	6.5 mm

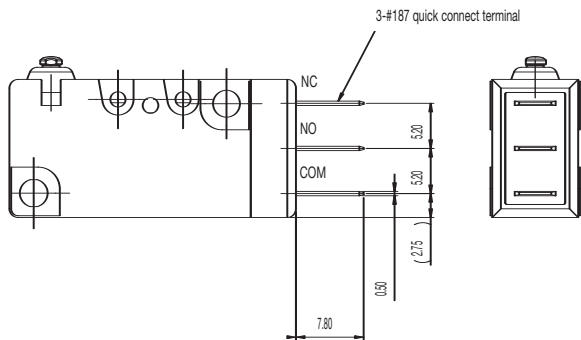


Dimensions are shown: mm
Specifications and dimensions subject to change

TFS Series Sealed Miniature Snap-acting Switches

TERMINAL TYPE

40 .187" QUICK CONNECT



CIRCUITRY

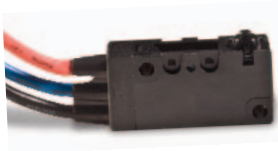
- C** SPDT (Single Pole, Double Throw)
- Y** SPST N.O. (Single Pole, Single Throw, Normally Open)
- W** SPST N.C. (Single Pole, Single Throw, Normally Closed)



Snap-acting

TFS Series

Sealed Miniature Snap-acting Switches (Water Proof)



Features/Benefits

- **IP67**
- **Reliable snap action mechanism**
- **Low cost - high performance**
- **RoHS compatible**

Typical Applications

- **Alarm devices / Home security**
- **Air conditioner**
- **Food processor**
- **Water heaters**
- **Industrial**
- **Forklifts**



Specifications

CONTACT RATING / ELECTRICAL LIFE:

- 0.1A @ 125/250 V AC / 100,000 operations
- 3A @ 125/250 VAC / 25,000 operations
- 6A @ 125/250 VAC / 10,000 operations
- 10A @ 125/250 VAC / 10,000 operations

ELECTRICAL OPERATING FREQUENCY: 10-30 operations per min.

MECHANICAL LIFE: 10,000,000 operations

MECHANICAL OPERATING FREQUENCY: 120 operations per min.

INSULATION RESISTANCE: (at 500 VDC/minute) 100 M ohm min.

DIELECTRIC STRENGTH: 1500 VAC (50 -60 Hz)

OPERATING TEMPERATURE: see wire type

STORAGE TEMPERATURE: -25°C to 85°C (with no icing)

STORAGE HUMIDITY: At 40°C max. 85% RH

OPERATING FORCE: 200 grams.

Materials

CASE: Nylon

COVER: PBT

ACTUATOR:PBT

MOVABLE CONTACTS: Silver alloy.

TERMINALS: Brass.

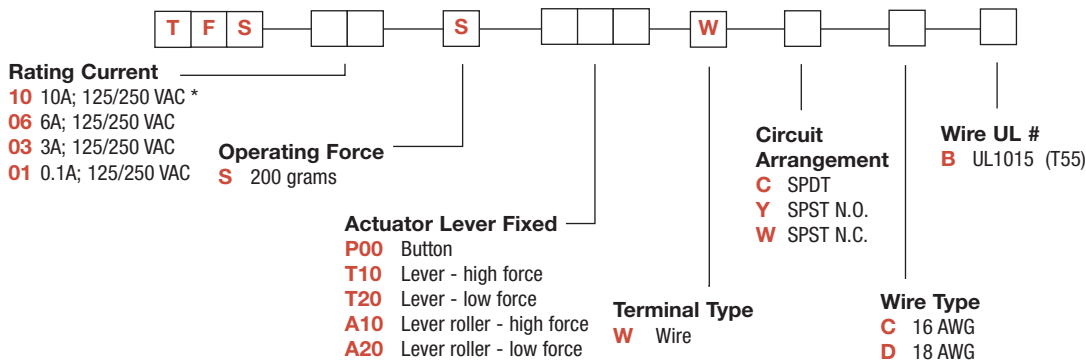
LEVER: Stainless steel

WIRE: PVC+CU

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-77 thru J-79. For additional options not shown in catalog, consult Customer Service Center.



* Note: 10A rating is only available with 16 AWG wires.

OPERATING TEMPERATURE

- 40°C to + 85°C (with UL1007 wire)
- 40°C to + 105°C (with UL1015 wire)
- 40°C to + 105°C (with UL1430 wire)
- 40°C to + 80°C (with UL1061 wire)
- 40°C to + 120°C (with UL1330 wire)

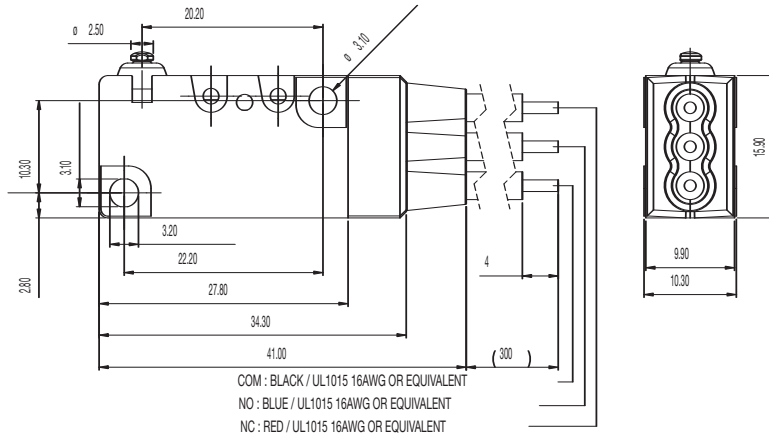


Dimensions are shown: mm
Specifications and dimensions subject to change

TFS Series Sealed Miniature Snap-acting Switches (Water Proof)

SERIES

TFS SUB-MINIATURE SNAP-ACTING SWITCHES



ELECTRICAL RATING

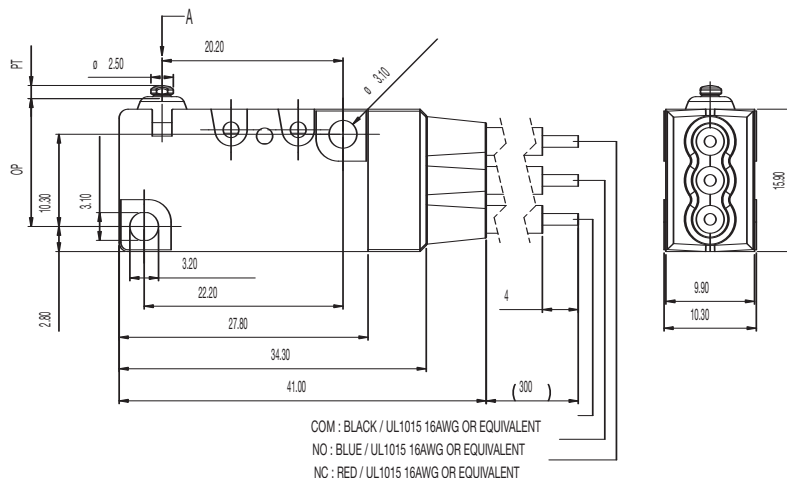
OPTION CODE	RoHS COMPLIANT	RoHS COMPATIBLE	ELECTRICAL RATING
10	Yes	Yes	10A @ 125/250 V AC / 10,000 operations
06	Yes	Yes	6A @ 125/250 VAC / 10,000 operations
03	Yes	Yes	3A @ 125/250 VAC / 25,000 operations
01	Yes	Yes	0.1A @ 125/250 VAC / 100,000 operations

OPERATING FORCE

OPTION CODE	BASIC SWITCH OPERATING FORCE
S	200 GRAMS

ACTUATOR

P00 BUTTON



Measure at Point "A"

Max. operating force	200 grams
Min. release force	30 grams
Operating position OP	14.7 ± 0.4 mm
Max. movement differential	0.4 mm
Min. over travel OT	1.0 mm
Max. pre-travel PT	1.2 mm



Dimensions are shown: mm
Specifications and dimensions subject to change

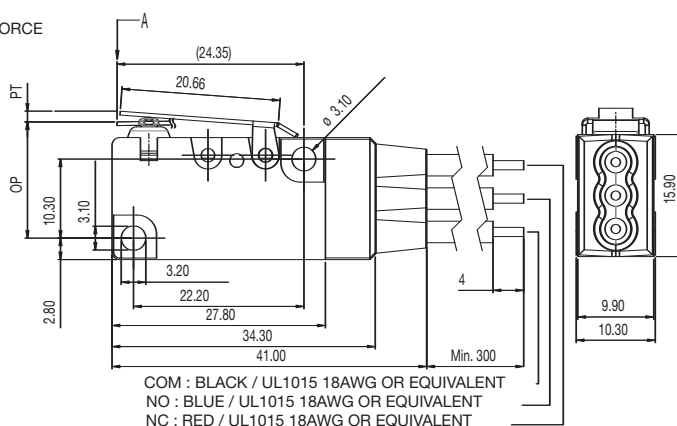


Snap-acting

TFS Series Sealed Miniature Snap-acting Switches (Water Proof)

ACTUATOR

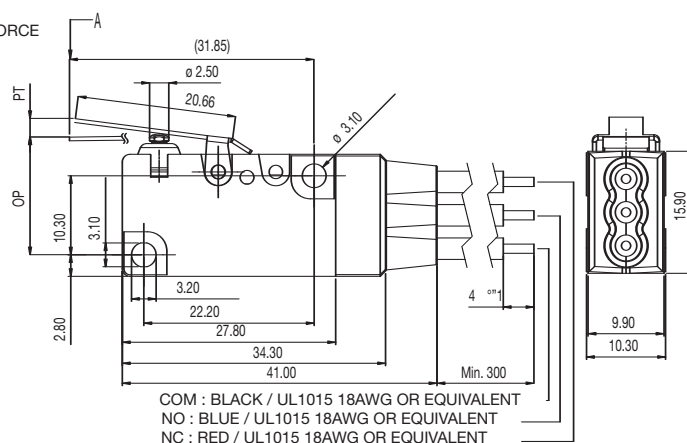
T10 LEVER, HIGH FORCE



Measure at Point "A"

Max. operating force	160 grams
Min. release force	25 grams
Operating position OP	15.1 ± 0.6 mm
Max. movement differential	0.6 mm
Min. over travel OT	1.1 mm
Max. pre-travel PT	2.6 mm

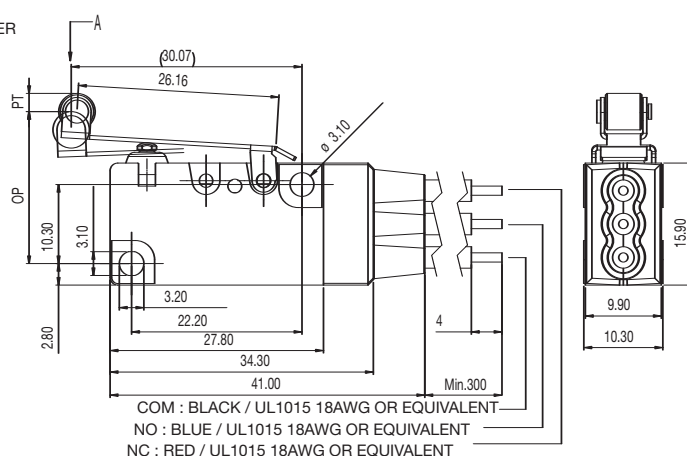
T20 LEVER, LOW FORCE



Measure at Point "A"

Max. operating force	90 grams
Min. release force	10 grams
Operating position OP	15 ± 1.1 mm
Max. movement differential	1.1 mm
Min. over travel OT	1.2 mm
Max. pre-travel PT	5.1 mm

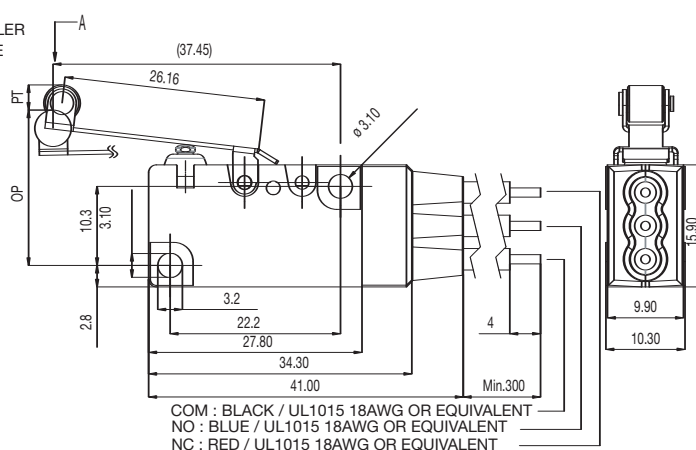
A10 LEVER ROLLER HIGH FORCE



Measure at Point "A"

Max. operating force	130 grams
Min. release force	20 grams
Operating position OP	20.4 ± 0.7 mm
Max. movement differential	0.7 mm
Min. over travel OT	1.3 mm
Max. pre-travel PT	3.3 mm

A20 LEVER ROLLER LOW FORCE



Measure at Point "A"

Max. operating force	70 grams
Min. release force	10 grams
Operating position OP	20.2 ± 1.2 mm
Max. movement differential	1.4 mm
Min. over travel OT	1.5 mm
Max. pre-travel PT	6.5 mm



Third Angle
Projection

Dimensions are shown: mm
Specifications and dimensions subject to change

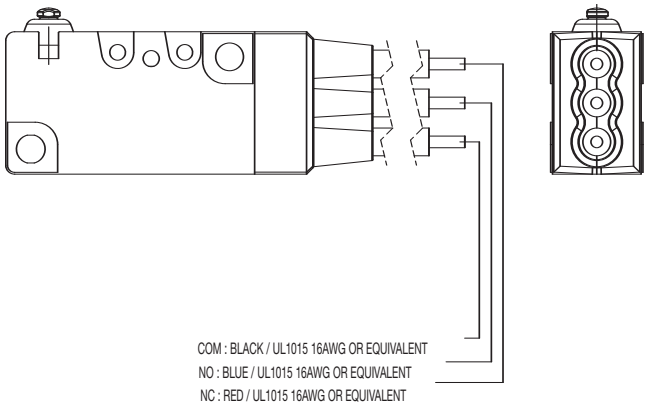
TFS Series

Sealed Miniature Snap-acting Switches (Water Proof)

TERMINAL TYPE

W

WIRE UL1015



CIRCUITRY

- C SPDT (Single Pole, Double Throw)
- Y SPST N.O. (Single Pole, Single Throw, Normally Open)
- W SPST N.C. (Single Pole, Single Throw, Normally Closed)

WIRE TYPE

- C 16 AWG
- D 18 AWG



Snap-acting

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

C&K Switches:

[TFS06ST20WCCB](#) [TFS06ST20WCDB](#) [TFS01SA10WYCB](#) [TFS01SA10WYDB](#) [TFS03SA20WCCB](#)