

TS Part Number Description

TS ☆ ★ □ ◆ △ ▲

Symbol	Symbol name	Specify
☆	Mounting hole	16: Φ16mm / 19: Φ19mm / 22: Φ22mm / 25: Φ25mm
★	Operator	H: High thin ring / A: Standard thin ring / D: Standard large ring / B: Finger location thin ring / C: Super flat Thin ring / E: Finger location Large ring / F: Super flat Large ring
□	Electrical function	10: NO Momentary (High level output type) / 10B: NO Momentary (Low level output type) / 01: NC Momentary (High level output type) / 01B: NC Momentary (Low level output type) / 10Z: NO Latching (High level output type) / 10ZB: NO Latching (Low level output type) / 01Z: NC Latching (High level output type) / 01ZB: NC Latching (Low level output type) / 10T30: NO type, no matter how long you press it, prolonged 30s / 01T30: NC type, no matter how long you press it, prolonged 30s / 10C30: NO type, prolonged no more than 30s, the close time according to how long you push it. / 01C30: NC type, prolonged no more than 30s, the close time according to how long you push it.
■	Wiring type	Y: wire leading(length 30cm), the length of the lead can be made to order.
◆	Housing material	SS: Stainless steel
△	LED color	Blank: Non-illum. 1 LED single light: NR Non-illum./red NG Non-illum./green NO Non-illum./orange NB Non-illum./blue NW Non-illum./white RN red/Non-illum GN green/Non-illum. ON orange/Non-illum. BN blue/Non-illum. WN white/Non-illum. 2 LED bi-color light: RG red/green RB red/blue BG blue/green WO white/orange GR green/red BR blue/red GB green/blue OW orange/white
▲	LED Voltage	Blank Non-illum. / 5VDC / 12VDC / 24VDC

Specification

Max. current/voltage rating: 500mA/24VDC

Operating voltage: 5VDC 12VDC 24VDC

Electrical endurance: 50 million cycles

Insulation Resistance: 600VDC 10MΩ

Operating temperature: -25~55℃

Protection level: IP67, IP69K, IK06(Stainless steel)

Terminal type: 22AWG, flat cable, cable length is about 30cm.

LED color: **R** **G** **Y** **B** **W**

LED Life: 40000 hours (Reference)

Dropping Way: Internal Resistor

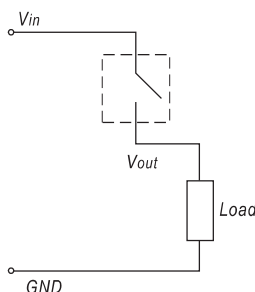
LED status:

1 LED: LED lights when the output circuit closes.

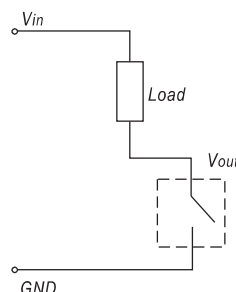
2 LED: When the output circuit open, first LED color lights Second LED lights when the output circuit closes.

Wiring instructions

Wiring diagram of switch high level output:



Wiring diagram of switch low level output.



Note: high level output is used to control positive (positive voltage);
The low level output is used to control the negative (negative voltage)

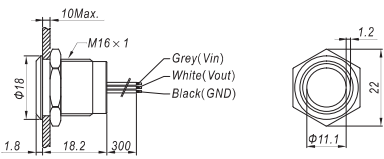
PART NUMBERS ON THIS DRAWING

MR-TS16A MR-TS16H MR-TS19A MR-TS22A MR-TS22D MR-TS25D

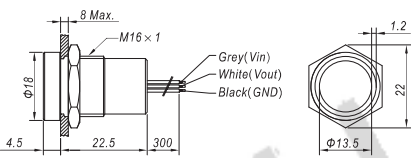
TOUCH SWITCH MR-TS SERIES		Micro-Ray	
PART NO	MR-TS		
DWG NO	MR-TS	SHEET 1 OF 4	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Φ 22mm Picture	Specifications	Dimensions
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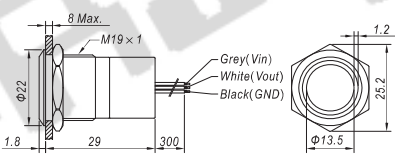
Mounting hole Φ16mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



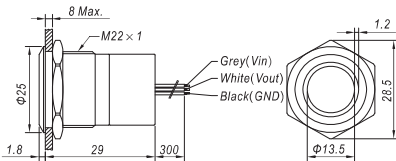
Mounting hole Φ16mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



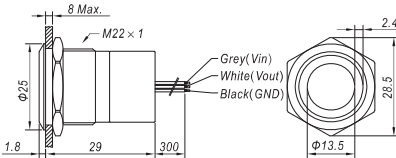
Mounting hole Φ19mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



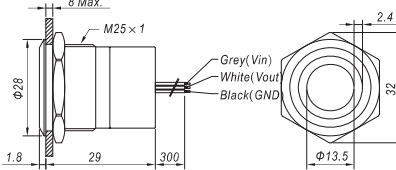
Mounting hole Φ22mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



Mounting hole Φ22mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



Mounting hole Φ25mm
Switch Rating 500mA / 24VDC
Illuminated type Ring illumination
Housing Material Stainless steel
Wire specification UL1430 22AWG
IP Degree IP67



PART NUMBERS ON THIS DRAWING
MR-TS16A MR-TS16H MR-TS19A MR-TS22A MR-TS22D MR-TS25D

TOUCH SWITCH		Micro-Ray	
MR-TS SERIES			
PART NO	MR-TS		
DWG NO	MR-TS	SHEET 2 OF 4	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Switch Functions	Non-Illuminated	1 LED		2 LED
OFF- Φ N) 10 NO-MOM High level output type)				
OFF- Φ N) 10B NO-MOM Low(level output type)				
ON- Φ FF) 01 NC-MOM High level output type)				
ON- Φ FF) 01B NC-MOM Low(level output type)				
OFF- Φ N) 10Z NO-Latching High level output type)				
OFF- Φ N) 10ZB NO-Latching Low(level output type)				
ON- Φ FF) 01Z NC-Latching High level output type)				
ON- Φ FF) 01ZB NC-Latching Low(level output type)				

PART NUMBERS ON THIS DRAWING
MR-TS16A MR-TS16H MR-TS19A MR-TS22A MR-TS22D MR-TS25D

TOUCH SWITCH MR-TS SERIES		Micro-Ray	
PART NO	MR-TS		
DWG NO	MR-TS	SHEET 3 OF 4	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22

Switch Functions	Non-Illuminated	1 LED		2 LED
OFF- ON) 10C30 NO type, prolonged no more than 30s, the close time according to how long you push it.				
ON- OFF) 01C30 NC type, prolonged no more than 30s, the close time according to how long you push it.				
OFF- ON) 10T30 NO type, no matter how long you press it, prolonged 30s				
ON- OFF) 01T30 NC type, no matter how long you press it, prolonged 30s				

Custom pattern

The following is part of the pattern number query if you need special patterns can be customized according to customer needs

1	2	3	4	5
31	32	33	34	35
6	7	8	9	0
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50

Custom head

The following is part of the custom head for the choice of special head or appearance can be customized according to customer needs

With finger button head	MR-TS25E (customized)
	MR-TS22B (customized)
	MR-TS22E (customized)
	MR-TS19B (customized)
Super Flat Head	MR-TS25F (customized)
	MR-TS22C (customized)
	MR-TS22F (customized)
	MR-TS19C (customized)

PART NUMBERS ON THIS DRAWING
MR-TS16A MR-TS16H MR-TS19A MR-TS22A MR-TS22D MR-TS25D

TOUCH SWITCH MR-TS SERIES		Micro-Ray	
PART NO	MR-TS		
DWG NO	MR-TS	SHEET 4 OF 4	REV A
UNITS: mm	SCALE: NTS - DO NOT SCALE	SIZE A4	DATE 2026-09-22