

Activated by the touch of a finger, our **Capacitive Switches** are ideal for many repetitive applications requiring a **rugged sealed** and **easy** to use switch solution.



- ⊞ Sealed to IP68 and IP69K
- ⊞ Momentary or latching functions
- ⊞ Large or thin ring illumination options
- ⊞ Long life operation – 50 million of cycles
- ⊞ 16, 19, 22 or 25mm diameter options
- ⊞ Easy to use and clean
- ⊞ Extremely robust and durable – IK10 rated
- ⊞ No operating force required – ideal for repetitive applications
- ⊞ Activated by the touch of a finger – even with surgeon gloves
- ⊞ Natural, black and red anodised options as well as 316L stainless steels

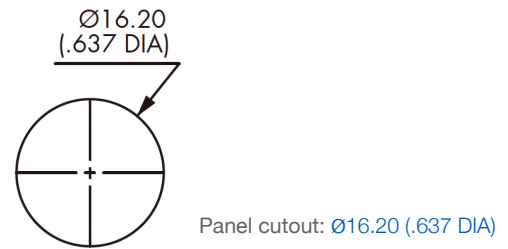


Specification

MC16

Type	Momentary / Latching
Materials	Case: Aluminium, Anodised and Stainless Steel Multi-wire leads section 0.22mm ² (length 300mm)
Maximum Current / Voltage Rating:	500mA at 5V, 12V or 24VDC
Supply Voltage	5, 12 or 24 VDC
Contact Resistance	20mΩ
LED state for output image option	1 LED: The LED is ON when output is closed. 2 LEDs: First colour is ON when the output is open. Second colour is ON when the output is closed.
Actuating force, typically	Zero Newton's (Touch Sensitive)
Life cycle	>50 Million

Panel Cutout Dimensions



Environmental Specification

Sealing	IP68 (2m depth for >30mins) IP69K
Operating temperature	-25°C to +55°C
RoHS	Compliant

Circuit Specification

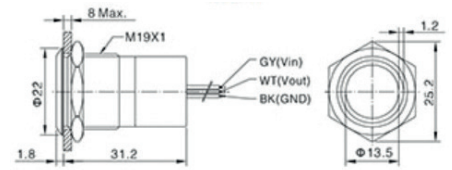
See wiring diagrams on page 326

19mm Illuminated



MC19

- Illuminated
- 300 mm lead

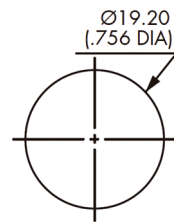


Specification

MC19

Type	Momentary / Latching
Materials	Case: Aluminium, Anodised and Stainless Steel Multi-wire leads section 0.22mm ² (length 300mm)
Maximum Current / Voltage Rating:	500mA at 5V, 12V or 24VDC
Supply Voltage	5, 12 or 24 VDC
Contact Resistance	20mΩ
LED state for output image option	1 LED: The LED is ON when output is closed. 2 LEDs: First colour is ON when the output is open. Second colour is ON when the output is closed.
Actuating force, typically	Zero Newton's (Touch Sensitive)
Life cycle	>50 Million

Panel Cutout Dimensions



Panel cutout: $\varnothing 19.20$ (.756 DIA)

Environmental Specification

Sealing	IP68 (2m depth for >30mins) IP69K
Operating temperature	-25°C to +55°C
RoHS	Compliant

Circuit Specification

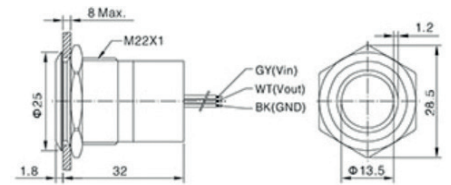
See wiring diagrams on page 326

22mm Illuminated



MC22

- Illuminated
- 300 mm lead

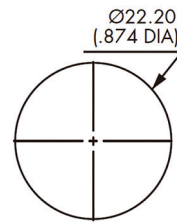


Specification

MC22

Type	Momentary / Latching
Materials	Case: Aluminium, Anodised and Stainless Steel Multi-wire leads section 0.22mm ² (length 300mm)
Maximum Current / Voltage Rating:	500mA at 5V, 12V or 24VDC
Supply Voltage	5, 12 or 24 VDC
Contact Resistance	20mΩ
LED state for output image option	1 LED: The LED is ON when output is closed. 2 LEDs: First colour is ON when the output is open. Second colour is ON when the output is closed.
Actuating force, typically	Zero Newton's (Touch Sensitive)
Life cycle	>50 Million

Panel Cutout Dimensions



Panel cutout: Ø22.20 (.874 DIA)

Environmental Specification

Sealing	IP68 (2m depth for >30mins) IP69K
Operating temperature	-25°C to +55°C
RoHS	Compliant

Circuit Specification

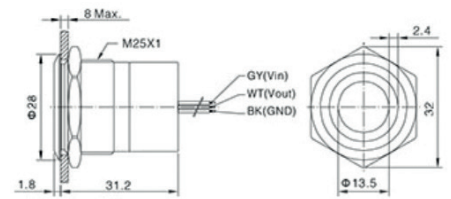
See wiring diagrams on page 326

25mm Illuminated



MC25

- Illuminated
- 300 mm lead

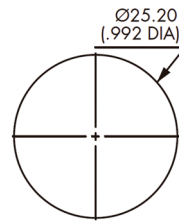


Specification

MC25

Type	Momentary / Latching
Materials	Case: Aluminium, Anodised and Stainless Steel
	Multi-wire leads section 0.22mm ² (length 300mm)
Maximum Current / Voltage Rating:	500mA at 5V, 12V or 24VDC
Supply Voltage	5, 12 or 24 VDC
Contact Resistance	20mΩ
LED state for output image option	1 LED: The LED is ON when output is closed. 2 LEDs: First colour is ON when the output is open. Second colour is ON when the output is closed.
Actuating force, typically	Zero Newton's (Touch Sensitive)
Life cycle	>50 Million

Panel Cutout Dimensions



Panel cutout: Ø25.20 (.992 DIA)

Environmental Specification

Sealing	IP68 (2m depth for >30mins) IP69K
Operating temperature	-25°C to +55°C
RoHS	Compliant

Circuit Specification

See wiring diagrams on page 326

Part No System

MC	XX	X	X	X	XX	XX
Series MC-Capacitive Switch	Switch Size 16 = 16mm 19 = 19mm 22 = 22mm 25 = 25mm	Switch Function M = Momentary L = Latching	Switch Status O = Normally Open C = Normally Closed	Colour / Material B = Black Anodised R = Red Anodised S = Stainless Steel	LED Colours GN = GREEN (1 LED) RD = RED (1 LED) AM = AMBER (1 LED) RG = RED + GREEN (2 LEDS) GR = GREEN + RED (2 LEDS) Blank = Non-illuminated	Voltage 05 = 5VDC 24 = 24VDC * No Suffix = 12VDC

Note:
 2 LED's option: when the output circuit open, first LED color lights. Second LED lights when the output circuit closes

Examples:
 MC16MOSRD = 16mm, Stainless Steel, Momentary Normally Open, Red Illumination, 12VDC
 MC22LOBRG24 = 22mm, Black Anodised, Catching Normally Open, Red and Green Illumination, 24VDC

Circuit Specifications

Wiring Diagrams				Legend
	1 LED		2 LEDS	
	Output Indicator	Output Indicator	Output Indicator	
OFF-ON (momentary) Normally Open				Grey Vin Black black GND White Vout Wire colours may vary. Always refer to the label on the switch.
ON-OFF (momentary) Normally Closed				
OFF-ON (latching) Normally Open				
ON-OFF (latching) Normally Closed				

Other switches are available upon request*

Unlike traditional switches Piezo switches have **no moving mechanical parts** making them **extremely durable**, withstanding millions of actuations and requiring little to no maintenance.



Piezo Switches
16mm Stainless Steel

Non Illuminated

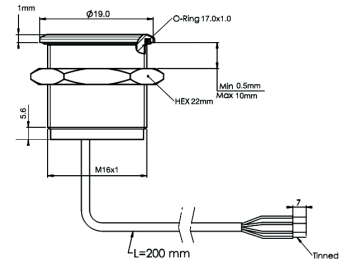


16MM Stainless Steel Non Illuminated



MPZ016

- Non Illuminated
- 20 cm lead
- Flathead or Guided profile



Specification

MPZ016

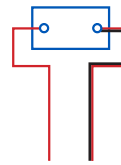
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance "ON"	<1Ω
Switch Resistance "OFF"	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration resistance	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

Circuit Specification

16MM Stainless Steel Non Illuminated



Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

Piezo Switches
19mm Stainless Steel

Illuminated and Non Illuminated

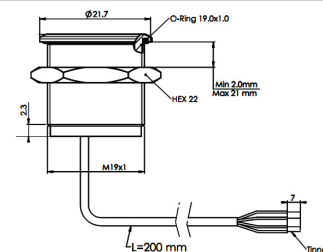


19MM Stainless Steel Illuminated

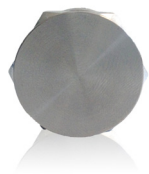


MPZI019

- Blue Illumination
- 20 cm lead
- Flathead

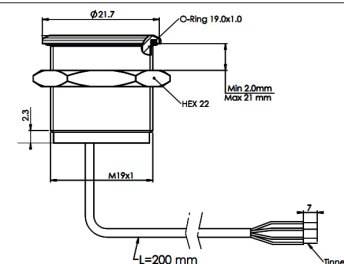


19MM Stainless Steel Non Illuminated



MPZ019

- Non Illumination
- 20 cm lead
- Flathead



Specification

MPZ019, MPZI019

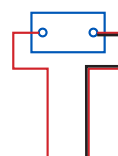
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance "ON"	<1Ω
Switch Resistance "OFF"	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

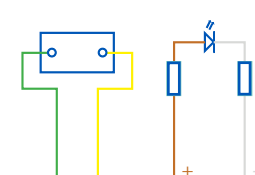
Circuit Specification

19MM Stainless Steel Non Illuminated



Switch voltage 24V AC/DC
 Switch Current 1A Max
 Power Supply 24V AC/DC

19MM Stainless Steel Illuminated



Switch voltage 24 V AC/DC
 Switch Current 1A Max
 Colour* Illuminated 24V AC/DC
 Power Supply 24V AC/DC

Piezo Switches 22mm Stainless Steel

Illuminated and Non Illuminated

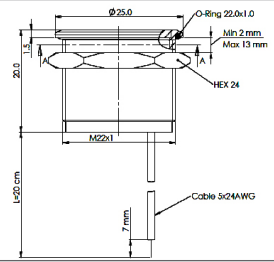


22MM Stainless Steel Non Illuminated



MPZ022

- Non Illumination
- 20 cm lead
- Flathead

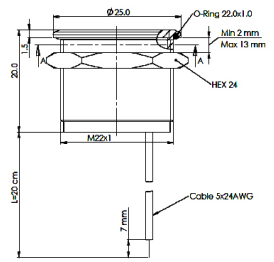


22MM Stainless Steel Illuminated



MPZI022

- Red or Green Illumination
- 1 colour
- 20 cm lead
- Flathead

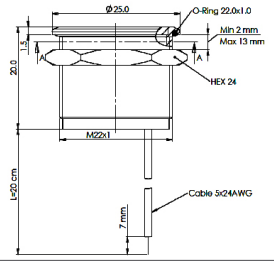


22MM Stainless Steel Illuminated



MPZI022

- Red and Green Illumination
- (2 colour)
- 20 cm lead
- Flathead



Specification

MPZ022, MPZI022

Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance "ON"	<1Ω
Switch Resistance "OFF"	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

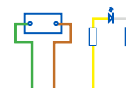
Circuit Specification

22MM Stainless Steel Non Illuminated



Switch Voltage	24 AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

22MM Stainless Steel Illuminated 1 colour



Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

22MM Stainless Steel Illuminated 2 colour



Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

Piezo Switches
22mm Stainless Steel Flathead

Illuminated

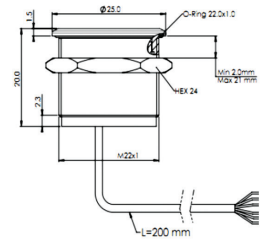


22MM Stainless Steel Illuminated



MPZI022/L

- Blue Illumination
- 1 colour
- 20 cm lead



Specification

MPZI022/L

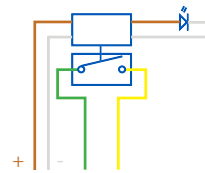
Type	Latching Toggle
Material	Stainless Steel (Aluminium upon request)
Power Supply	24V AC/DC
Switching voltage	48V AC peak/DC
Switch Resistance "ON"	<0.7Ω
Switch Resistance "OFF"	>1000MΩ
Capacitance	<90pF
Switching current	1A Max
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85°C°
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

Circuit Specification

22MM Stainless Steel Latching Toggle Illuminated



Power Supply	24V AC/DC
Switch Voltage	48V AC peak/ DC
Switch Current Max	1A Max
Colour* Illuminated	24V AC/DC

Part No System

MPZ	/	016	/	X	/	XX	/	X	/	X
Series MPZ - Non Illuminated MPZI- Illuminated		Body Diameter 016 = 16mm 019 = 19mm 022 = 22mm		Profile F = Flat Head G = Guided Profile		Colour BL = Blue RD = Red GN = Green D1 = Red and green		Led Voltage 24v		Type L = Latching Toggle (No Suffix= Momentary)

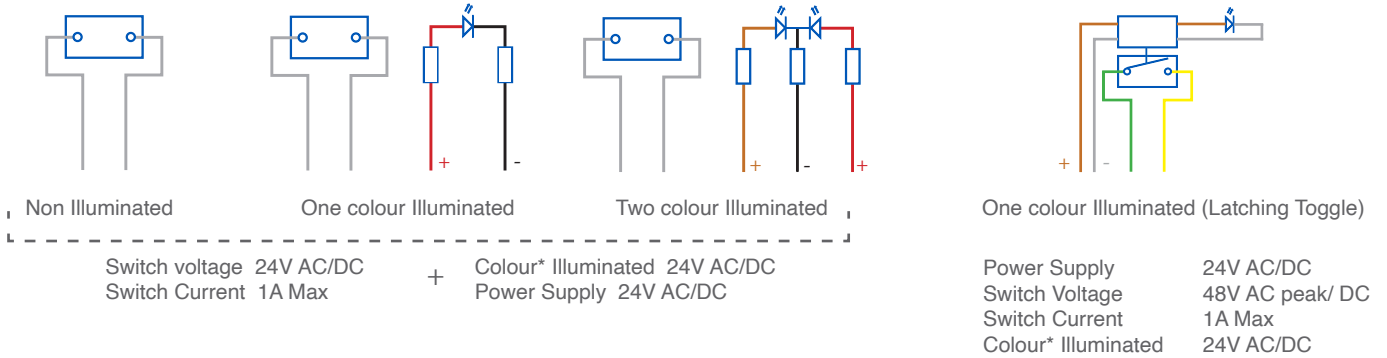
Examples:

MPZ022/F = Non Illuminated Piezo, 22mm, Flathead

MPZI022/F/RD/24 = Illuminated Piezo, 22mm, Flathead, Red Illumination, 24 volt

MPZI022/G/BL/24/L = Illuminated Piezo, 22mm, Guided Profile, Blue Illumination, 24 volt, Latching Toggle

Circuit Specifications



Other switches are available upon request*