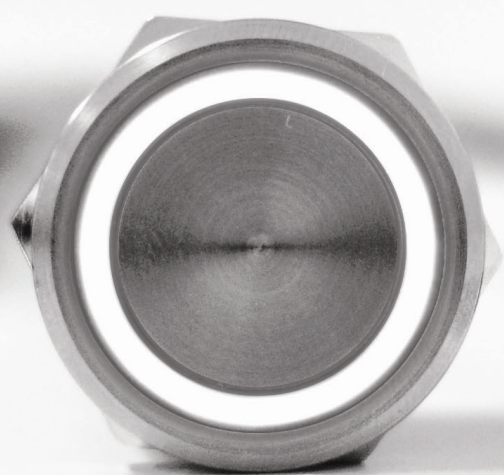bulgin
a brand of Elektron Technology

**Piezo Switch Series
Datasheets**

> " Piezo switches from Bulgin, designed to withstand the harshest of environments.
>
> Unlike traditional switches, Piezo switches have no moving mechanical parts making them extremely durable, withstanding millions of actuations and requiring little to no maintenance. "

Part No System

MPZ	/	016	/	X	/	XX	/	X	/	X

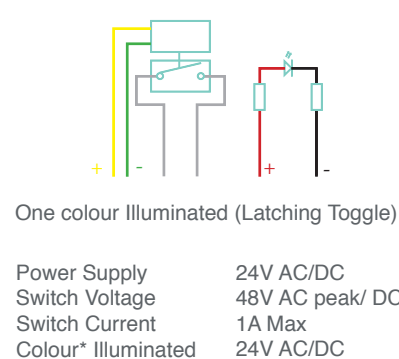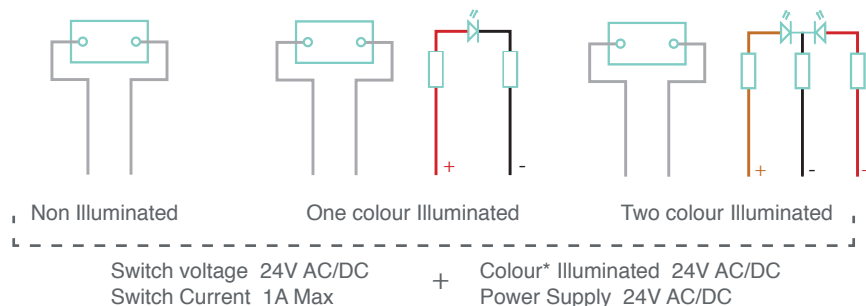| Series	Body Diameter	Profile	Colour	Led Voltage	Type
MPZ - Non Illuminated MPZI- Illuminated	016 = 16mm 019 = 19mm 022 = 22mm	F = Flat Head G = Guided Profile	BL = Blue RD = Red GN = Green DI = Red and green	24v	L = Latching Toggle (No Suffix= Momentary)

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

Non Illuminated   One colour Illuminated   Two colour Illuminated   One colour Illuminated (Latching Toggle)

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

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

Other switches are available upon request*

16mm Stainless Steel

bulgin
a brand of Elektron Technology

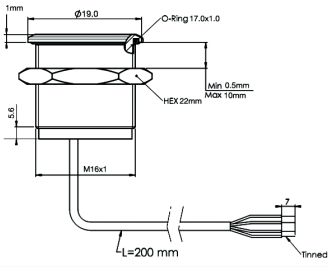**16MM Stainless Steel** Non Illuminated

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
Switching pulse time (prolonged)	up to 6 sec
Actuating force, typically	3-5 N
Life cycle	10 Million

Environmental specs

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

Circuit Specification

16MM Stainless Steel Non Illuminated
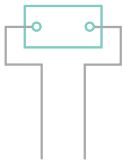
Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

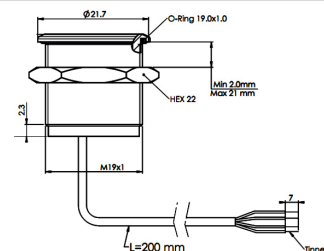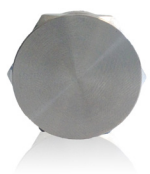19MM Stainless Steel Illuminated

Blue Illumination

20 cm lead

Flathead

MPZI019

19MM Stainless Steel Non Illuminated

Non Illumination

20 cm lead

Flathead
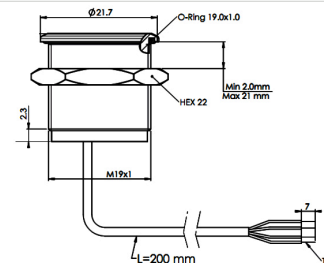
MPZ019

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
Switching pulse time (prolonged)	up to 6 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	10 Million

Environmental specs

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

Circuit Specification

19MM Stainless Steel Non Illuminated
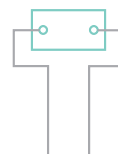
Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

19MM Stainless Steel Illuminated

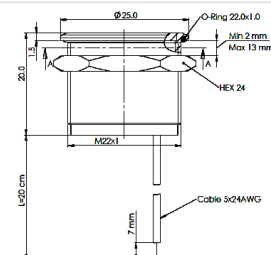|	
Switch voltage	24 V AC/DC
Switch Current	1A Max
Colour* Illuminated	24V AC/DC
Power Supply	24V AC/DC
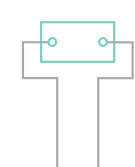
22MM Stainless Steel Non Illuminated
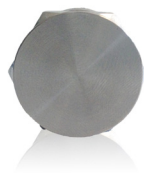
MPZ022

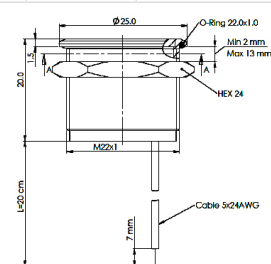Non Illumination

20 cm lead

Flathead

22MM Stainless Steel Illuminated

MPZI022

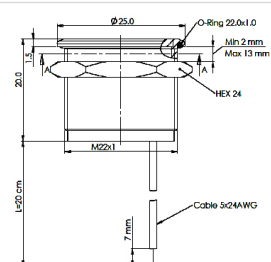Red or Green Illumination

1 colour

20 cm lead

Flathead

22MM Stainless Steel Illuminated

MPZI022

Red and Green Illumination

(2 colour)

20 cm lead

Flathead
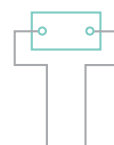
Specification   MPZ022, MPZI022

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
Switching pulse time (prolonged)	up to 6 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	10 Million

Environmental specs

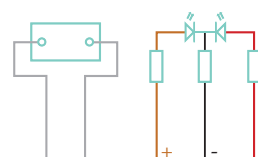|	
Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS compliance	Compliant

Circuit Specification

22MM Stainless Steel Non Illuminated

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

22MM Stainless Steel Illuminated

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

22mm Stainless Steel Flathead
Illuminated

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22MM Stainless Steel Illuminated

Blue Illumination

1 colour

20 cm lead

MPZI022/L

## 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 specs

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

Circuit Specification

22MM Stainless Steel Latching Toggle Illuminated
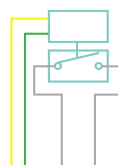
Power Supply	24V AC/DC
Switch Voltage	48V AC peak/ DC
Switch Current Max	1A Max
Colour* Illuminated	24V AC/DC

bulgin

a brand of Elektron Technology

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