bulgin
a brand of Elektron Technology

Piezo Switch Series Datasheets

Introduction

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

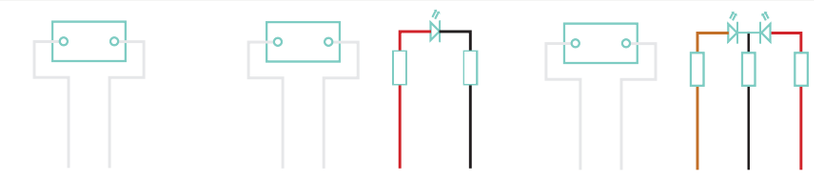
MPZ	/	016	/	X	/	XX	/	X	/	X

Series	Body Diameter	Profile	Color	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 D1 = Red and green	24v	L = Latching Toggle (No Suffix= Momentary)

Examples:

MPZ022/F = Non Illuminated Piezo, 22mm, Flathead
MPZI/022/F/RD/24 = Illuminated Piezo, 22mm, Flathead, Red Illumination, 24 volt
MPZI/022/G/BL/24/L = Illuminated Piezo, 22mm, Guided Profile, Blue Illumination, 24 volt, Latching Toggle

Circuit Specifications

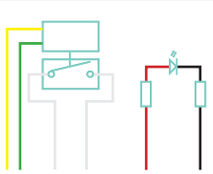


Non Illuminated | One color Illuminated | Two color Illuminated

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

+

Color* Illuminated 24V AC/DC
Power Supply 24V AC/DC



One color Illuminated (Latching Toggle)

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

Other switches are available upon request*

bulgin
a brand of Elektron Technology

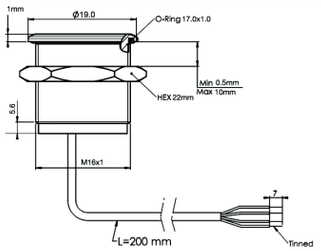
16MM Stainless Steel Non Illuminated

MPZ016

Non Illuminated

8 Inch lead

Flathead or Guided profile



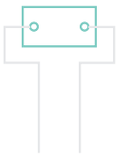
Specification	MPZ016
Type	Momentary
Material	Stainless Steel (Aluminum upon request)
Maximum Voltage	24V AC/DC
Switch resistance “ON“	<1Ω
Switch resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental 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



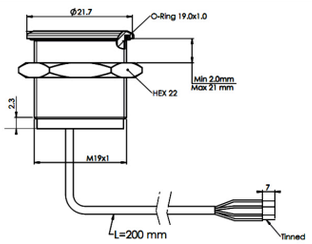
Switch Voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

bulgin
a brand of Elektron Technology

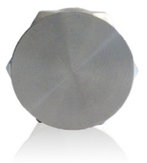
19MM Stainless Steel Illuminated

MPZI019

Blue Illumination
8 Inch lead
Flathead

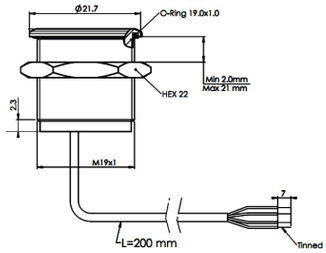


19MM Stainless Steel Non Illuminated



MPZ019

Non Illuminated
8 Inch lead
Flathead



Specification — MPZ019, MPZI019

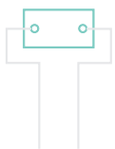
Type	Momentary
Material	Stainless Steel (Aluminum upon request)
Maximum Voltage	24V AC/DC
Switch resistance “ON“	<1Ω
Switch resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically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

Environmental specs

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

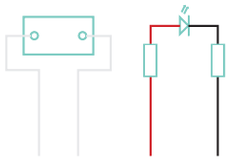
Circuit Specification

19MM Stainless Steel Non Illuminated



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

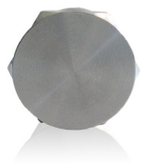
19MM Stainless Steel Illuminated



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

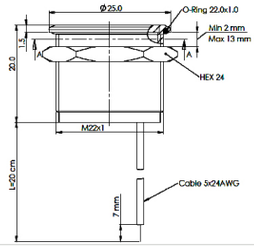
bulgin
a brand of Elektron Technology

22MM Stainless Steel Non Illuminated



MPZ022

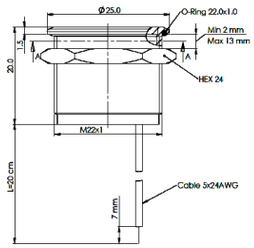
Non Illuminated
8 Inch lead
Flathead



22MM Stainless Steel Illuminated

MPZI022

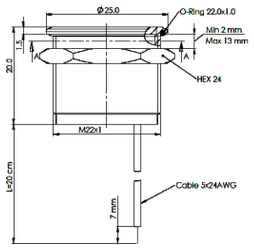
Red or Green Illumination
1 color
8 Inch lead
Flathead



22MM Stainless Steel Illuminated

MPZI022

Red and Green Illumination
(2 color)
8 Inch lead
Flathead



Specification — MPZ022, MPZI022

Type	Momentary
Material	Stainless Steel (Aluminum upon request)
Maximum Voltage	24V AC/DC
Switch resistant “ON“	<1Ω
Switch resistant “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
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 specs

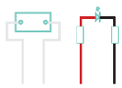
Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration resistance	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS compliance	Compliant

Circuit Specification

22MM Stainless Steel Non Illuminated

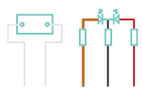
Switch Voltage	24 AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

22MM Stainless Steel Illuminated 1 color



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

22MM Stainless Steel Illuminated 2 color



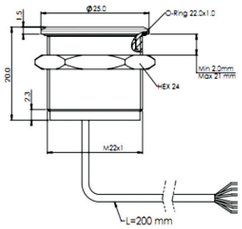
Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

bulgin
a brand of Elektron Technology

22MM Stainless Steel Illuminated

MPZI022/L

Blue Illumination
1 color
8 Inch lead
Flathead



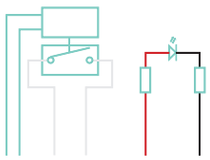
Specification	MPZI022/L
Type	Latching Toggle
Material	Stainless Steel (Aluminum upon request)
Power Supply	24V AC/DC
Switching Voltage	48V AC peak/DC
Switch resistant “ON“	<0.7Ω
Switch resistant “OFF“	>1000MΩ
Capacitance	<90pF
Switching current	1A Max
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental specs

Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration resistance	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
Color* Illuminated	24V AC/DC

bulgin

a brand of Elektron Technology

The Americas

Elektron Technology
5856 Corporate Suite 220
Cypress
CA 906030

Tel: +1 760 343 3650
Email: americas@elektron-technology.com

Europe

Elektron Technology,
Broers Building,
JJ Thomson Avenue, Cambridge,
CB3 0FA,

Tel: +44 (0)1223 371 000
Email: europe@elektron-technology.com

China and Asia

Elektron Technology,
Room 902, 568 Hengfeng,
Henhui Int Building,
Shanghai 200070,

Tel: +86 (21)604 00060
Email: asia@elektron-technology.com