1

Potentiometers

Product Description

Eaton's M22 potentiometers allow for a ready to use operator in a conveniently sized package. M22 potentiometers include the resistive element, instead of just a knob, and a built in legend surrounding the knob. The slim design, with integrated contacts and the range of resistances available, allows for a quick install.

Features

- Scale markings on the knob allows the operator to be used without an additional legend plate
- Oversized knob option available
- Slim design allows for space saving and simple wiring and installation

Protection Type

- IP66
- NEMA 4X, 13

Product Selection

Potentiometers

M22-R10K



M22M-R10K



Complete Devices

Bezel	Resistance Rk	Catalog Number
Silver	1	**M22-R1K**
	4.7	**M22-R4K7**
	10	**M22-R10K**
	47	**M22-R47K**
	100	**M22-R100K**
	470	**M22-R470K**
Black	1	**M22S-R1K**
	4.7	**M22S-R4K7**
	10	**M22S-R10K**
	47	**M22S-R47K**
	100	**M22S-R100K**
	470	**M22S-R470K**
Metal	1	**M22M-R1K**
	4.7	**M22M-R4K7**
	10	**M22M-R10K**
	47	**M22M-R47K**
	100	**M22M-R100K**
	470	**M22M-R470K**
Oversized Knob		
Silver	1	**M22-R1K-RH**
	4.7	**M22-R4K7-RH**
	10	**M22-R10K-RH**
	47	**M22-R47K-RH**
	100	**M22-R100K-RH**
	470	**M22-R470K-RH**
Black	1	**M22S-R1K-RH**
	4.7	**M22S-R4K7-RH**
	10	**M22S-R10K-RH**
	47	**M22S-R47K-RH**
	100	**M22S-R100K-RH**
	470	**M22S-R470K-RH**
Metal	1	**M22M-R1K-RH**
	4.7	**M22M-R4K7-RH**
	10	**M22M-R10K-RH**
	47	**M22M-R47K-RH**
	100	**M22M-R100K-RH**
	470	**M22M-R470K-RH**

Acoustic Devices

Product Description

Eaton's M22 acoustic devices are a simple and aesthetic way to add a buzzer or indicator to any application. Fitting in the same 22 mm hole, these devices can be ordered in continuous or pulsed tone and with or without the IP40 enclosure.

Features

- Continuous or pulsed tone available
- 83dB/10 cm decibel rating
- Slim design allows for space saving and simple wiring and installation

Protection Type

- IP40
- NEMA 12

Product Selection

Acoustic Devices

M22-AMC-XAM



Complete Devices

Description	Decibel Rating	Catalog Number
Indicator with buzzer, black continuous tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-AMC-XAM**
Indicator with buzzer, black pulsed tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-AMC-XAMP**

M22-XAM



Buzzers

Description	Decibel Rating	Catalog Number
Indicator without buzzer, black	83 dB/ 10 cm	**M22-AMC**
Buzzer only, continuous tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-XAM**
Buzzer only, pulsed tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-XAMP**

Technical Data and Specifications

Pushbuttons, Indicating Lights, Selector Switches and Emergency-Stop Operators

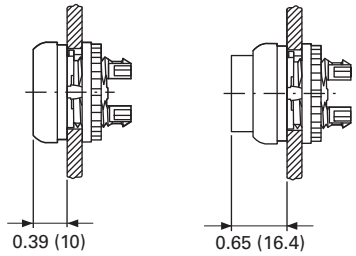
Description			Momentary Pushbuttons	Maintained Pushbuttons	Indicating Lights, Buzzers and Potentiometers	Emergency-Stop Operators	Selector Switches	Key-Operated Operators	Double Pushbuttons
General									
Standards			IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #340491	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184
Lifespan, mechanical	Operations	x 10^6	>5	>1	—	>0.1	>0.1	>0.1	>0.2
Operating frequency	Operations/h		≥3600	≥1800	—	≥600	≥2000	≥100	≥3600
Actuating force		n	≥5	≥5	—	≥50	–	—	≥5
Operating torque (screw terminals)		Nm	—	—	—	—	≥0.3	≥0.5	—
Protection Type									
IP			IP67, IP69K	IP67, IP69K	Indicating lights: IP67, 69K Buzzers: IP40 Potentiometers: IP66	IP67, IP69K	IP66	IP66	IP66
UL type			4X, 13	4X, 13	Indicating lights: 4X/13 Buzzers: 12 Potentiometers: 4X/13	4X, 13	4X, 13	4X, 13	4X, 13
Climatic proofing			Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclical to IEC 60068-2-30						
Ambient temperature, operating		°F (°C)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)
Mounting position			As required	As required	As required	As required	As required	As required	As required
Mechanical shock resistance to IEC 60068-2-27 shock duration 11 ms, half-sinusoidal		g	>30	>30	>30	>50	>30	>30	>30
Terminal Capacities									
Solid		AWG	—	—	20-16	—	—	—	—
		mm^2		—	0.5–1.5	—		—	
Stranded		AWG	—	—	20-16	—	—	—	—
		mm^2		—	0.5–1.5	—		—	
Contacts									
Rated impulse withstand voltage	U_{imp}	Vac	—	—	4000	—	—	—	—
Rated insulation voltage	U_i	V	—	—	2500	—	—	—	—
Overvoltage category/ pollution degree			—	—	III/3	—	—	—	—

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Approximate Dimensions in Inches (mm)

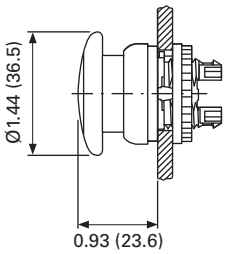
Illuminated Pushbuttons

M22…-DL-_ **M22…-DLH_**



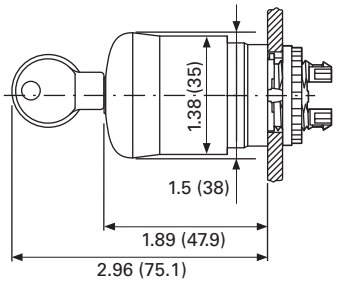
Mushroom Head Pushbutton

M22…-DP-_



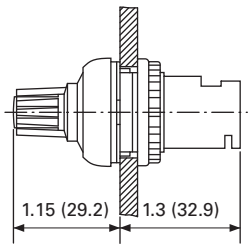
Emergency-Stop Operators

M22-PV_
M22S-PV_
M22-PVL_
M22-PVS_



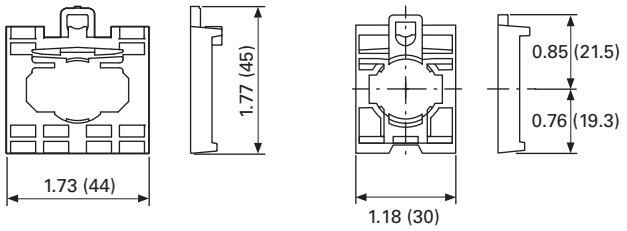
Potentiometer

M22(S)-R_



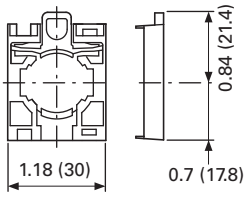
Contact Block Mounting Adapter

M22-A_ **M22S-A…**

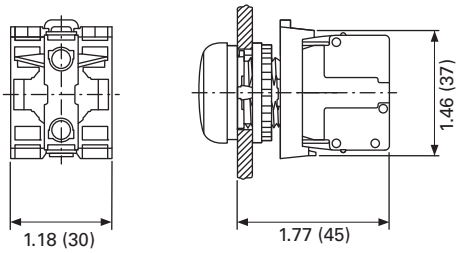


Front Mounted Centering Adapter

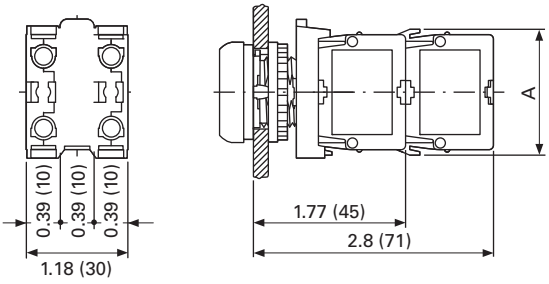
M22-ZA



Front Mounted Indicating Light



Pushbutton, Complete Devices



	1 x M22-K_	2 x M22-K_	1 x M22-CK_	2 x M22-CK_
A	1.46 (37.2)	1.46 (37.2)	1.54 (39.0)	1.54 (39.0)