

Pushbuttons and Indicating Lights



E22/EM22 Pilot Devices

Product Description

Eaton’s Cutler-Hammer® 22.5 mm industrial heavy-duty pushbutton line offers a wide array of functional, smartly styled illuminated and non-illuminated pushbuttons, selector switches, push-pulls, alternate action and twist-to-release operators. The complete line also includes transformer, full voltage, resistor, LED or neon light units.

E22 operators are available with either a traditional chrome or matte black front-of-panel appearance. The space-saving design and modular construction of the E22 line makes on-the-job assembly fast and simplifies the stocking of both components and complete devices.

Eaton’s Cutler-Hammer EM22 metal series is a rugged line of metal construction 22.5 mm pushbutton devices. They are an extension of the industrially proven E22 heavy-duty double insulated 22.5 mm pushbutton family.

EM22 operators are heavy-duty zinc die-cast construction plated with a corrosion-resistant chromate finish. Operators are complete with a very durable chrome-plated metal bezel. Indicating light units in the EM22 series feature smartly styled round lenses that enhance their appearance and brightness.

All EM22 operators are compatible with existing E22 contact blocks, light units, accessories and enclosures.

EM22 metal operators and indicating lights are grounded when mounted to metal panels through the toothed mounting nut. They are not grounded when mounted to plastic panels.

Product History

E22 was first sold in 1983. The line has had one major change in the mid 1990s to increase the size of the button plates to be roughly equivalent to a 30mm pushbutton. Then in 2002, the EM22 extension of the line was introduced. Since then, only minor changes/additions have occurred. While the entire product breadth is not available anymore as aftermarket, most functionality is available in the products shown in this catalog.

Product History Time Line

Product	1980	1985	1990	1995	2000	2005	Present
E22							
EM22							

Key Operated Selector Switches

Key removal from maintained positions only—will accept a maximum of two contact blocks (four circuits) with supplied three-way mounting adapter. Optional five-way adapter will accept a maximum of five contact blocks (10 circuits).

Plastic Black Bezel**Plastic Chrome Bezel****Metal Chrome Bezel****Key Operated Selector Switches—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13****Operating Mode****M = Maintained****S = Momentary****E22 Series—Plastic Operators****EM22 Series—Metal Operators**

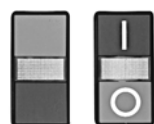
Left	Center	Right	Cam Code	45° Black Bezel Catalog Number ^①	45° Chrome Bezel Catalog Number ^①	60° Chrome Bezel Catalog Number ^①
Two-Position						
M	—	M	2	E22KB52	E22K52	—
M	—	M	2	E22KB53	E22K53	EM22K53
M	—	S	2	E22KB62	E22K62	EM22K62
—	M	M	2	E22KBF4	E22KF4	EM22KF4
Three-Position						
M	M	M	1	E22KBG7	E22KG7	—

Spare Key

Description	Reference Number Stamped on Key	Catalog Number
Standard lock	92239	E22KS2

Specialty Operators**Mechanical Push Rod****Flush Pushbutton Operators with Mechanical Push Rod—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13**

Description	Color	Plastic—Black Bezel Catalog Number	Plastic—Chrome Bezel Catalog Number
25 mm diameter flush pushbutton Operators supplied with mechanical push rod—suitable for external mechanical reset of overload relays. Push rod must be cut to desired length	Gray	E22PB7L	E22P7L

Double-Headed Pushbuttons**Double-Headed Pushbuttons****Illuminated and Non-Illuminated Double-Headed Pushbuttons—UL (NEMA) Type 1; IP40**

Description	Operator Colors	Marking	Plastic—Black Bezel Catalog Number
Non-illuminated double-headed pushbutton	Green—Red	I	E22DB1A21

Contact Blocks**Contact Blocks****Contact Blocks**

Description	Catalog Number
1NC	E22B1 ^②
1NO	E22B2
1NO-1NC	E22B11 ^②
2NO	E22B20
One self-monitoring 1NC	E22CB1M ^{②③}

Notes

^① Final digit of catalog number represents key removal position per the chart below.

Key Removal Position	Code Suffix	Key Removal Position	Code Suffix
Left only	2	Center only	4
Right and left	3	Right, left and center	7

^② Marked with direct opening action (DOA) symbol per IEC 60947-5-1 (Annex K) and NEMA ICS 5 (Part 6).

^③ For use with trigger action emergency stop (E22LTA2) operators.