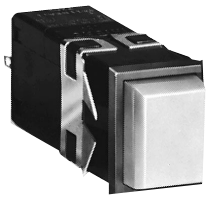
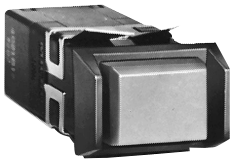
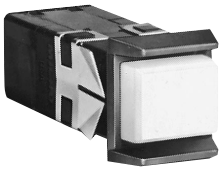


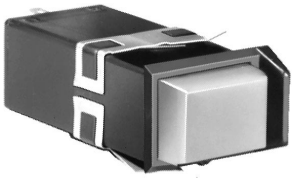
Bezel on all sides



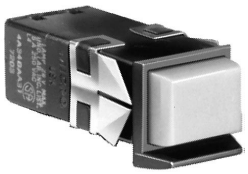
Barriers on short sides



Barriers on long sides



Barrier on one short side



Barriers on one long side

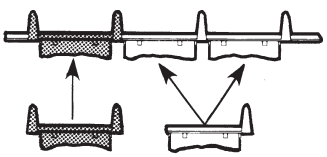
FEATURES
- Provides distinctive color display whether lighted or unlighted.
- Convenient front panel mounting and relamping, without tools.
- Matching indicators.
- Locked button option discourages tampering.
- Choice of transmitted color, projected color, or dead front display.
- UL recognized, CSA certified.

MOUNTING
Snap-in mounting. Switch or indicator is easily inserted into the cutout. Mounting clips grip the panel. No tools are needed.

Housings with a full bezel can be front panel or sub-panel mounted, individually or in strips.

Barrier type housings are normally mounted top-of-panel in strips, but can also be individually mounted. Barriers can be on either the short or long housing sides.

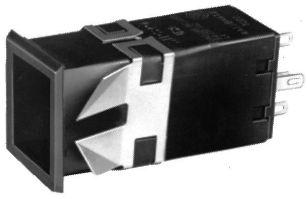
The drawing shows how housings with a barrier on one side are used in a strip of two or more units. The first has a barrier on two sides, while all other units have a barrier on one side, and butt against each other.



Barriers on both sides. Barriers on one side.

Button

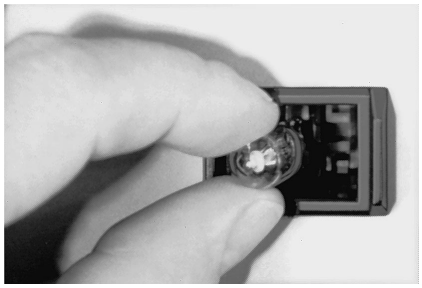
Incandescent Lamp



Housing

RELAMPING

1. Lamps and legends can be changed from panel front. When button is removed, lamp is extracted from its socket and retained in button.



2. Ease of lamp replacement. After the inoperative lamp is automatically removed with the button, the new lamp is inserted without the use of tools.

ELECTRICAL RATINGS

5-amp silver contacts —
5 amps res., 3 amps ind., 30 VDC.
UL code L-4: 5 amps, 250 VAC

10-amp silver contacts —
UL code L-285; 10 amps, ⅛ Hp, 125 or 250 VAC.

Gold contacts —
1 amp res., 0.5 amp, ind., 30 VDC
UL code L-22: 1 amp, 125 VAC

Gold alloy contacts —
0.1 amp, res., 30 VDC;
1 amp, 125 VAC.

LOCKED BUTTON OPTION

Series 4 can be furnished with a locked button option for use in areas accessible to the public, where tampering and vandalism are problems. The housing has a special mounting clip with built-in button retainer. This mounting clip must be removed from behind panel to allow button removal. Button movement during switch operation is unaffected by locked button feature. (These units cannot be relamped from front of panel.)

SWITCH HOUSING ORDER GUIDE

Order buttons separately from page 109.

4A11B

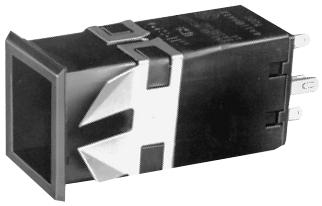
Switch Housing Style (Black)
4A11B Bezel: all sides Mtg. clips: long sides
4A34B Barrier: one long side Mtg. clips: short sides
4A21B Barriers: short sides Mtg. clips: long sides
4A23B Barrier: one short side Mtg. clips: long sides
With Housing Provision for Locked Button
4A13B Bezel: all sides Mtg. clips: long sides
4A25B Barriers: short sides Mtg. clips: long sides
4A26B Barrier: one short side Mtg. clips: long sides

AA

Switching Element		
		Terminals
Electrical Data	Action	.110 QC
1-Pole (SPDT), 5 a. silver contacts	Momentary	**AA**
	Alt. Action	**BA**
2-Pole (DPDT), 5 a. silver contacts	Momentary	**EA**
	Alt. Action	**FA**
2-Pole (DPDT), 10 a. silver contacts	Momentary	**NA**
	Alt. Action	**PA**

11

Incandescent Illumination
11 No lamp, has lamp socket for T-3¼ wedge base lamps.
21 #161 12-volt T-3¼ lamp.
31 #656 or 152 28-volt T-3¼ lamp
91 Unlighted, no lamp socket.



Example:
4A11BAA11
Black switch housing with a bezel on all sides, mounting clips on long sides, 1-pole momentary-action 5-amp silver contacts, 110″ quick-connect/solder terminals, and a T-3¼ lamp socket.

MOUNTING CLIP ORIENTATION

Mounting clips on the **long sides** of the housing are specified when individually mounted or when the long sides of strip mounting housings parallel the long sides of the panel cutout slot. The most secure mounting is achieved when the mounting clips are on the long sides.

Mounting clips on the **short sides** of the housing are specified when short sides of strip mounted housings parallel the long sides of the panel cutout slot.

BUTTON ORDER GUIDE

4B1 | **A** | **G** | **N**

Button With Metal Shell*
4B2
Both button and metal shell provided.

Button With Metal Shell, With Provision for Locked Button*
4B3
Both button and metal shell provided.

Button Without Metal Shell
4B1
Button only. (without metal shell). For replacement purposes only.

Button Type
A
Transmitted color. 5 sides lighted. 1-piece translucent button.

E
Transmitted color. 5 sides lighted. Transparent colorless button & translucent color insert. U or N type only.

Display Color
B Std. Blue
G Std. Green
R Std. Red
Y Std. Yellow
W Std. White

Legend (Legend Order Sheet must accompany all orders for legended buttons)
U
No legend, button (incl. insert) unassembled. (For customer who does own legending.) Use with any button except 4B1A—

N
No legend, button assembled. (For applications not requiring legends.) Use with any button.

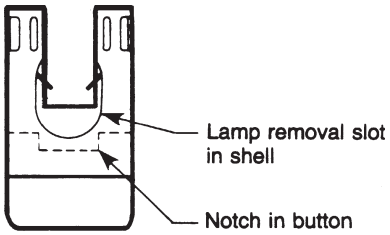
L
Legend on button only, button assembled. (For customer who prefers to have MICRO SWITCH provide legending.) Use with ''A'' button.

*To be ordered with switch.

Button

Button and metal shell

Example:
4B1AGN
Green (transmitted color) unlegended button. (If the button shell is also desired, substitute 4B2 for 4B1.)



Note: legended button should be assembled as shown above, with button notch keyed to lamp removal slot in shell. This will reduce possibility of lamp droppage when button is removed from the housing. Buttons are legended in this manner.

LEGENDING

Pad printed legends
Use Legend Order Sheet FO-63039 (see page 110) to specify pad printed legends. Reproduce it on your office copier. Legends are oversprayed for maximum durability.

Film legends
Film legends are not supplied by MICRO SWITCH. However, this service is readily available from commercial sources or may be provided through your in-house capabilities. The film should be polyester to withstand lamp heat and must be precision cut, per the dimensions shown on the next page, to insure proper alignment.

The film fits into a small undercut on the face of the button insert. The film is held securely when the outer button and insert are snapped together. (Note: It is difficult to disassemble for legend changes without damaging the parts.)

Button and insert should be snapped together prior to being assembled to the button shell.

LAMP ORDER GUIDE

Catalog Listing	Illum. Code	Incandescent Lamp Description
4Z231	31	#656 or #152 28-volt (T-3¼)

LAMP DATA

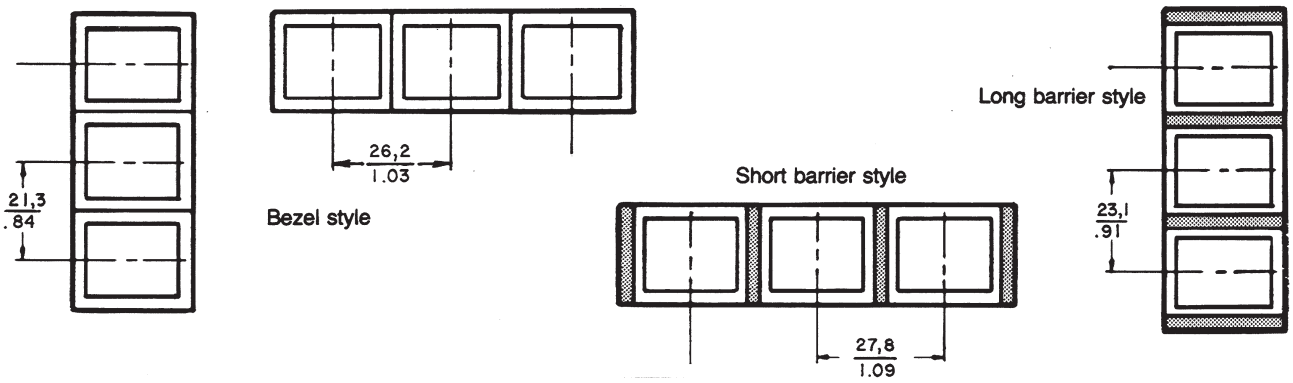
Following data was compiled from manufacturers' specifications and is provided for reference only.

Illum. Code	Industry Lamp No.	Design Volts	Incandescent Lamp Specifications			
31	656 or 152	28	Socket volts	28.0	27.0	26.0
			Amps	.06	.057	.054
			MSCP	.65	.52	.49
			Life (hrs. avg.)	5,000	7,500	10,000

METAL SHELL ORDER GUIDE

Catalog Listing	Description
4Z41	For type 4B1 buttons

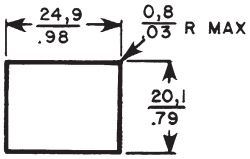
MOUNTING CENTERS FOR STRIP MOUNT



PANEL CUTOUT FOR STRIP MOUNT

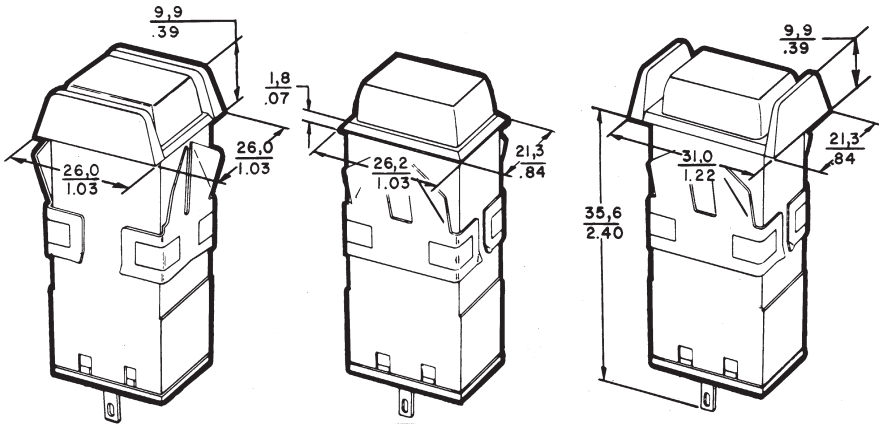
	Housing Style	+0,38 +.015 Dimensions −0,00 −.000 Width	Length
Short Sides Abutting	Full Bezel	79″ (20,1 mm)	[No. of units x 1.03″ (26,2 mm)] - .05″ (1,4 mm)
	Short Barrier	79″ (20,1 mm)	[No. of units x 1.09″ (27,8 mm)] - .12″ (3,0 mm)
Long Sides Abutting	Full Bezel	.98″ (24,8 mm)	[No. of units x .84″ (21,3 mm)] - .05″ (1,4 mm)
	Long Barrier	.98″ (24,8 mm)	[No. of units x .91″ (23,1 mm)] - .12″ (3,0 mm)

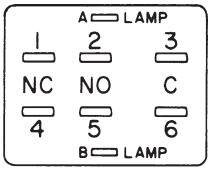
PANEL CUTOUT FOR INDIVIDUAL MOUNT (any housing style)



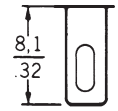
Manual Switches
Pushbutton Switches and Indicators

MOUNTING DIMENSIONS (For reference only)

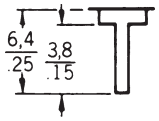




⚠ **Terminal View**



.110 QC terminal



Printed circuit terminal

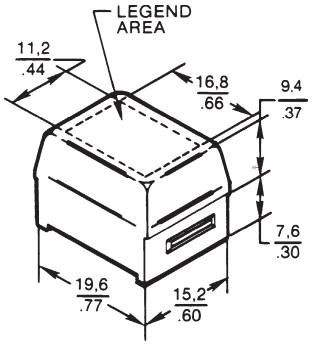
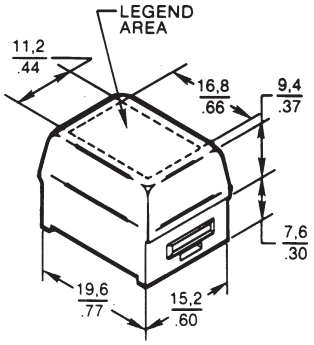
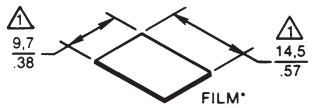
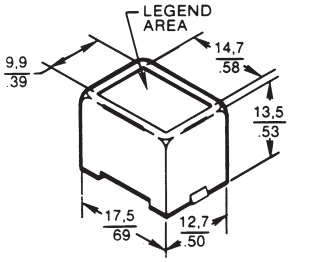
Panel thickness: .040-.200 in. (1,02-5,08 mm)

Key: 0,0 = mm / 0.00 = inches

⚠ For proper legend orientation, Series 4 switch when viewed from front of panel, should have terminals 1 and 3 up for Figures 1 & 3 and to the right for Figures 2 and 4. (Figures 1-4 on Legend Order Sheet next page.)

Quick-connect terminals are .110″ (2,8 mm) wide by .020″ (0,5 mm) thick. The slot is .130″ (3,3 mm) long by .048″ (1,2 mm). Printed circuit terminals are: Lamp — .025 (0,6 mm) by .020″ (0,5 mm): Switch — .025″ (0,6 mm) square.

All terminals are plated to permit soldering.

Type A Button (5 sides lighted)	Type E Button (5 sides lighted)
 Translucent Colored Button	 Transparent Button Colorless   Translucent Colored Insert ±.005/0,13 *Thickness: .004″ to .007″/0,1 to 0,18 (Film furnished by customer)

Pushbuttons

Honeywell

"Series 4" Legend Order Sheet

ACCOUNT NO. _____

1. Determine if legend is to be applied to outer button shell, or to button insert.
2. Select oppropriate Fig. No. from Chart "A" or "B", and enter on legend order chart.
3. Place√ in appropriate "TYPE SIZE" column *(refer to CHART "C" for examples).*
4. Place√ in BLACK or WHITE legend color column.
5. Indicate quantity desired.
6. Fill in legend description. *(DO NOT EXCEED MAXIMUM NUMBER OF LINES OR*

Catalog Listing **4**		
Customer P.O. No.	Customer Dwg. No.	
MICRO SWITCH Sales Order	Line Number	Schedule No.

Customer: _____

Address: _____

(state) (city)

A Button: Legend on Top Surface

Legend Area

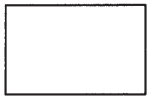


Fig. 1

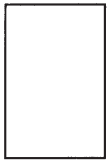


Fig. 2

Type Size	Fig. 1 Without An "M" or "W" Max. Char. /Line	Fig. 1 Without An "M" or "W" Max. Lines /Area	Fig. 1 With An "M" or "W" Max. Char. /Line	Fig. 1 With An "M" or "W" Max. Lines /Area	Fig. 2 Without An "M" or "W" Max. Char. /Line	Fig. 2 Without An "M" or "W" Max. Lines /Area	Fig. 2 With An "M" or "W" Max. Char. /Line	Fig. 2 With An "M" or "W" Max. Lines /Area
5/64	9	4	9	4	7	5	6	5
7/64	7	3	6	3	5	4	4	4
9/64	6	2	5	2	4	3	4	3
13/64	4	1	3	1	3	2	2	2
5/16	2	1	2	1	2	1	1	1

B Button Insert: Legend on Top Surface

Legend Area

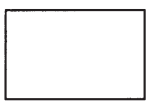


Fig. 3

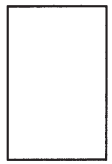


Fig. 4

Type Size	Fig. 1 Without An "M" or "W" Max. Char. /Line	Fig. 1 Without An "M" or "W" Max. Lines /Area	Fig. 1 With An "M" or "W" Max. Char. /Line	Fig. 1 With An "M" or "W" Max. Lines /Area	Fig. 4 Without An "M" or "W" Max. Char. /Line	Fig. 4 Without An "M" or "W" Max. Lines /Area	Fig. 4 With An "M" or "W" Max. Char. /Line	Fig. 4 With An "M" or "W" Max. Lines /Area
5/64	7	3	7	3	4	4	4	4
7/64	5	2	5	1	3	3	3	3
9/64	5	1	5	1	3	2	2	2
13/64	3	1	2	1	2	2	1	2
5/16	2	1	1	1	1	1	1	1

C

Modified Gothic lettering (A thru Z). numerals (0 thru 9) and Symbols below available in 5/64, 7/64, 9/64, 13/64 and 5/16.

A3
Modified Gothic

STANDARD SYMBOLS AVAILABLE

.	,	:	;	!	?	'	_	"	/	(	)	*	&
$	¢	#	%	°	+	-	±	÷	x	=	≠	>	<
→	↑	↓	←	C_R	1/4	1/2	3/4	1/3	2/3	@	∞		

D

SPECIAL LEGENDS

NOTE: Use this area to show special Legend Locations or Configurations NOT shown above. NON-STANDARD legends will involve additional charges and increased delivery time.

Fig. "A"

Fig. "B"

LEGEND ORDER CHART

Customer Part No	Fig No	Type Size REF. Chart A or B 5/64	7/64	9/64	13/64	5/16	Ink Color Black	White	Button Qty	Legend Description Do Not Exceed Maximum Number of Lines or Characters Sequence: Left-to-Right or Top-to-Bottom 1st Line	2nd Line	3rd Line	4th Line	5th Line

FO-63039-B

_____ (Signature) _____ (Date)