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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## HW Series – 22mm IEC Style Global Pushbuttons

### Key features:

- Locking lever removable contact blocks
- Finger-safe IP20 contacts
- Tamperproof construction
- All E-stops meet EN60947-5-5, and are compliant with SEMI S2 standards
- Worldwide approvals
- Easy to assemble
- Choice of black plastic or metallic front bezels
- LED illumination
- Transformer or full voltage
- Slow make double break contacts



### HW: The Best Engineered Switch in the World

IDEC's HW switches are "The best engineered switch in the world" for a reason. Carrying the CE mark, UL, CSA, CCC (Chinese), and TUV approvals, these switches are designed for use in almost any part of the world.

include illuminated and non-illuminated pushbuttons, pilot lights, selector switches, and emergency stop switches.

Complete with finger-safe contact blocks offering IP20 protection, these 7/8" (22mm) switches

All switches also incorporate mechanically keyed safety locking levers, ensuring correct installation and maintaining safety in high-vibration applications.



File No. E68961



File No. LR21451



TUV Rheinland  
Certificate No.  
R50086203\_HW\_e-stop  
R50391189\_HW



Certificate No.  
2017010305987846

### Specifications

Electrical	Rated Operational Characteristics	AC-15: A600 or Ue = 250V, Ie = 3A (NO, NC, NO-EM, NC-LB) DC-13: P600 or Ue = 125V, Ie = 1.1A (NO, NC) DC-13: Q600 or Ue = 125V, Ie = 0.9A (NO-EM, NC-LB)					
	Rated Insulation Voltage	600V					
	Rated Switching Over-Voltage	Less than 4kV, conforming to IEC60947-1					
	Rated Impulse Withstanding Voltage	4kV for contact circuit, 2.5kV for lamp circuit					
	Rated Thermal Current	10 Amp					
	Minimum Switching Capacity	5 mA at 3V AC/DC					
	Electrical Reliability	MTBF < 1 fault for 10 million operation cycles (3V DC, 5mA)					
Lamp Ratings	LEDs: 6V/17mA max, 12V & 24V/11mA max, 120 & 240V/10mA max						
Mechanical	Contact Operation	Slow break NC or NO					
	Positive Action Operation (Emergency Stops with NC contacts)	5.5mm to 10mm travel to latch, 45N minimum force to latch 10mm maximum travel, 1,800 operations per hour maximum for a Pushlock Turn Reset 900 operations per hour maximum for a Push-Pull					
	Operating Force	Flush and extended pushbuttons—with 1NO or 1NC contact: 6.2±2N (momentary), 7.0±2N (maintained) Additional contacts—1NO or 1NC: +3.2N (momentary), + 3.3N (maintained)					
	Recommended Terminal Torque	Unit	Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw	
							Crimping Terminal
		HW-U Contact Block	Solid Wire	ø0.5 to 1.6 mm (AWG14 to 22) ø1.7 to 2.0 mm (AWG12)	2	1.0 to 1.3	
			Stranded Wire	0.3 to 2.0 mm <sup>2</sup> (AWG14 to 22) 2.1 to 3.5 mm <sup>2</sup> (AWG12)	1	1.2 to 1.3	
	Illuminated Unit (*1)	Unit	Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw	
							Crimping Terminal
	Applicable Wire Size	Pilot Light	Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw	
Crimping Terminal							2
		Solid Wire	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3 (M3.5)		
		Stranded Wire	ø0.3 to 2.0 mm (AWG14 to 22)				
1. * refers to the lamp terminals of the illuminated push buttons and selector switches.							
Applicable Wire Size	Minimum 1 x 22 AWG, max. 2 x 14 AWG or 1 x 12 AWG						
Contact Resistance	Initial contact resistance of 50mΩ or less						
Contact Gap	4mm (NO and NC), 2mm (NO-EM and NC-LB)						
Horsepower Rating	Reference Value: 1/4 HP @ 120V (1ø non-reversing), 1HP @ 240V (3ø non-reversing)						
Contact Material	Silver (gold plated contacts available - contact IDEC)						
Operating Temperature	Operation: -25 to +50°C (without freezing), Storage: -40 to +70°C (without freezing)						
Vibration Resistance	10 to 55Hz, 98m/sec <sup>2</sup> (10G) conforming to IEC6068-2-6						
Shock Resistance	980m/sec <sup>2</sup> (100G) conforming to IEC6068-2-7						
Mechanical Life	Momentary pushbuttons: 5,000,000 (900 operations per hour), All other switches: 500,000						

Switches & Pilot Devices

Signaling Lights






Relays & Sockets


Timers

Contactors

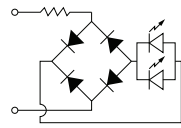
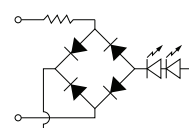
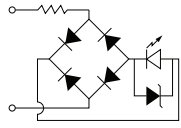



Terminal Blocks


Circuit Breakers

Conforming to Standards		EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 No.14															
 File No. E68961  File No. LR92374    Registration No. R9551089 (E-stops) Registration No. R50054316 (Dual Pushbuttons) Registration No. J9650511 (Pilot Lights) Registration No. J9551458 (all other switches)		CSA: pushbuttons and selector switches: A600 pilot lights and illuminated pushbuttons, direct supply pilot lights and illuminated pushbuttons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V) UL: pushbuttons and selector switches: A600 pilot lights and illuminated pushbuttons, direct supply pilot lights and illuminated pushbuttons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V) TÜV: pushbuttons and selector switches: A600-P600 (NO, NC)/Q600 (NO-EM, NC-LB) pilot lights and illuminated pushbuttons, direct supply pilot lights and illuminated pushbuttons with integral transformer (100/110, 115, 120, 200/220, 230, 240, 380, 400/440, 480V)															
Electric Shock Protection		Class 2 conforming to IEC60664-7															
Degree of Protection (conforming to IEC60529 and UL50)		UL Type 1, 4X, 12, 13 <sup>1</sup> IP65 (from front of the panel) IP20 (Type HW-U contact block)															
Pollution Degree (conforming to IEC60947-1)		3															
External Short-Circuit Protection		10A 250V fuse conforming to IEC60269-1															
Contact Ratings		Contact Block				Type HW-U											
Pushbuttons		Rated Insulation Voltage				600V											
Illuminated Pushbuttons		Rated Continuous Current				10A											
Selector Switches		Contact Ratings by Utilization Category				AC-15 (A600) DC-13 (P600)											
Illuminated Selector Switches		IEC 60947-5-1															
Pushbutton Selectors																	
Operational Voltage		24V		48V		50V		110V		220V		440V					
Operational Current		AC 50/60 Hz		AC-12 Control of resistive loads & solid state loads		10A		—		10A		10A		6A		2A	
				AC-15 Control of electromagnetic loads (> 72VA)		10A		—		7A		5A		3A		1A	
		DC		DC-12 Control of resistive loads & solid state loads		10A		5A		—		2.2A		1.1A		—	
				DC-13 Control of electromagnets		5A		2A		—		1.1A		0.6A		—	

 For dimensions, see page 660.  
Note 1. Except HW2B

**LED Lamp Ratings (LSTD Type)**

Model	LSTD-6Ⓞ	LSTD-1Ⓞ	LSTD-2Ⓞ	LSTD-H2Ⓞ	LSTD-M4Ⓞ
Lamp Base	BA9S/13				
Rated Voltage	6V AC/DC	12V AC/DC	24V AC/DC	120V AC	240V AC
Voltage Range	6V AC/DC ±10%	12V AC/DC ±10%	24V AC/DC ±10%	120V AC ±5%	240V AC ±5%
Current Draw	AC A, R, W: G, S:	17mA 8mA	11mA	11mA	10mA
	DC A, R, W: G, S:	14mA 5.5mA	10mA	10mA	—
Color Code	A (amber), G (green), R (red), S (blue), W (white)				
Lamp Base Color	Same as illumination color				
Voltage Marking	Die stamped on the base				
Life (reference value)	Approx. 50,000 hours (The luminance reduces to 50% the initial intensity when used on complete DC.)				
Internal Circuit	A, R, W		A, R, W		
					
	G, S				
			 LED Chip  Protection Diode  Zener Diode		

 In place of Ⓞ, specify the Lens/LED Color Code.

Non-Illuminated Round Pushbuttons (Assembled)



Function	Contacts	Round Flush		Round Extended	
		Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
Momentary	Operator Only	HW1B-M1-①	HW4B-M1-①	HW1B-M2-①	HW4B-M2-①
	1NO	HW1B-M1F10-①	HW4B-M1F10-①	HW1B-M2F10-①	HW4B-M2F10-①
	1NC	HW1B-M1F01-①	HW4B-M1F01-①	HW1B-M2F01-①	HW4B-M2F01-①
	1NO-1NC	HW1B-M1F11-①	HW4B-M1F11-①	HW1B-M2F11-①	HW4B-M2F11-①
	2NO	HW1B-M1F20-①	HW4B-M1F20-①	HW1B-M2F20-①	HW4B-M2F20-①
	2NC	HW1B-M1F02-①	HW4B-M1F02-①	HW1B-M2F02-①	HW4B-M2F02-①
	2NO-2NC	HW1B-M1F22-①	HW4B-M1F22-①	HW1B-M2F22-①	HW4B-M2F22-①
Maintained	Operator Only	HW1B-A1-①	HW4B-A1-①	HW1B-A2-①	HW4B-A2-①
	1NO	HW1B-A1F10-①	HW4B-A1F10-①	HW1B-A2F10-①	HW4B-A2F10-①
	1NC	HW1B-A1F01-①	HW4B-A1F01-①	HW1B-A2F01-①	HW4B-A2F01-①
	1NO-1NC	HW1B-A1F11-①	HW4B-A1F11-①	HW1B-A2F11-①	HW4B-A2F11-①
	2NO	HW1B-A1F20-①	HW4B-A1F20-①	HW1B-A2F20-①	HW4B-A2F20-①
	2NC	HW1B-A1F02-①	HW4B-A1F02-①	HW1B-A2F02-①	HW4B-A2F02-①
	2NO-2NC	HW1B-A1F22-①	HW4B-A1F22-①	HW1B-A2F22-①	HW4B-A2F22-①

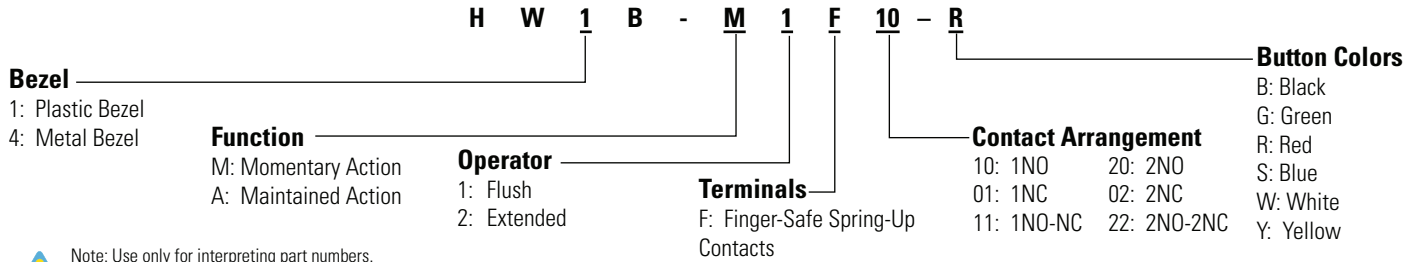
① Button Color Code

Color	Code
Black	B
Green	G
Red	R
Blue	S
White	W
Yellow	Y



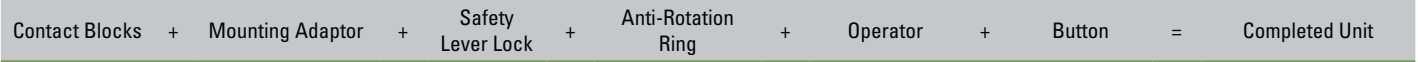
1. In place of ①, specify the Button Color Code from table below.
2. For nameplates and accessories, see page 655 and 658.
3. For dimensions, see page 660.
4. For contact assembly part numbers, see page 659.
5. All assembled part numbers in catalog include standard, Finger-Safe (HW-U...) contacts.
6. Operator only models include operator plus button.
7. Additional contact configurations available (up to 6 total contacts).

Part Number Structure



Note: Use only for interpreting part numbers. Do not use for developing part numbers.

Non-Illuminated Round Pushbuttons (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

Anti-Rotation Ring

Style	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Buttons

Style	Part Number
Round Flush 	HW1A-B1-①
Round Extended 	HW1A-B2-①

1. In place of ①, specify the Button Color Code from table.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

1. Used to mount contact blocks to operator.  
2. IDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Operators

Style		Plastic Bezel	Metal Bezel
Round Flush/ Extended 	Momentary	HW1B-M0	HW4B-M0
	Maintained 	HW1B-A0	HW4B-A0

Safety Lever Lock

Style	Part Number
	HW9Z-LS

① Button Color Code

Color	Code
Black	B
Green	G
Red	R
Blue	S
White	W
Yellow	Y

Non-Illuminated Mushroom Head Pushbuttons (Assembled)



Function	Contacts	ø29mm Mushroom Head		ø40mm Mushroom Head	
		Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
Momentary	<i>Operator Only</i>	HW1B-M3-⓪	HW4B-M3-⓪	HW1B-M4-⓪	HW4B-M4-⓪
	1NO	HW1B-M3F10-⓪	HW4B-M3F10-⓪	HW1B-M4F10-⓪	HW4B-M4F10-⓪
	1NC	HW1B-M3F01-⓪	HW4B-M3F01-⓪	HW1B-M4F01-⓪	HW4B-M4F01-⓪
	1NO-1NC	HW1B-M3F11-⓪	HW4B-M3F11-⓪	HW1B-M4F11-⓪	HW4B-M4F11-⓪
	2NO	HW1B-M3F20-⓪	HW4B-M3F20-⓪	HW1B-M4F20-⓪	HW4B-M4F20-⓪
	2NC	HW1B-M3F02-⓪	HW4B-M3F02-⓪	HW1B-M4F02-⓪	HW4B-M4F02-⓪
Maintained	<i>Operator Only</i>	HW1B-A3-⓪	HW4B-A3-⓪	HW1B-A4-⓪	HW4B-A4-⓪
	1NO	HW1B-A3F10-⓪	HW4B-A3F10-⓪	HW1B-A4F10-⓪	HW4B-A4F10-⓪
	1NC	HW1B-A3F01-⓪	HW4B-A3F01-⓪	HW1B-A4F01-⓪	HW4B-A4F01-⓪
	1NO-1NC	HW1B-A3F11-⓪	HW4B-A3F11-⓪	HW1B-A4F11-⓪	HW4B-A4F11-⓪
	2NO	HW1B-A3F20-⓪	HW4B-A3F20-⓪	HW1B-A4F20-⓪	HW4B-A4F20-⓪
	2NC	HW1B-A3F02-⓪	HW4B-A3F02-⓪	HW1B-A4F02-⓪	HW4B-A4F02-⓪
	2NO-2NC	HW1B-A3F22-⓪	HW4B-A3F22-⓪	HW1B-A4F22-⓪	HW4B-A4F22-⓪



Function	Contacts	ø60mm Mushroom Head
		Plastic Bezel
Momentary	<i>Operator Only</i>	HW1B-M5-⓪*
	1NO	HW1B-M5F10-⓪*
	1NC	HW1B-M5F01-⓪*
	1NO-1NC	HW1B-M5F11-⓪*
	2NO	HW1B-M5F20-⓪*
	2NC	HW1B-M5F02-⓪*
	2NO-2NC	HW1B-M5F22-⓪*

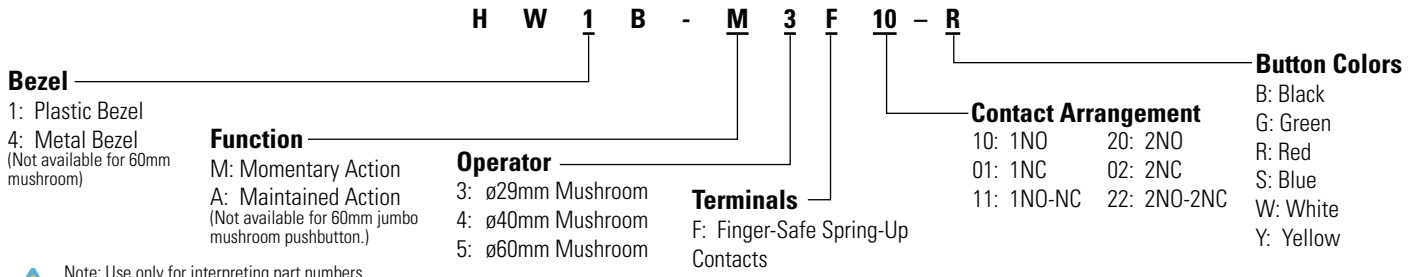
⓪ Button Color Code

Color	Code
Black	B
Green	G
Red	R
Blue	S
White	W
Yellow	Y



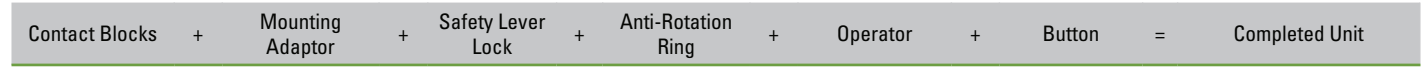
1. In place of ⓪, specify the Button Color Code from table.
2. \*60mm mushroom available only in red, green, black, and yellow.
3. For nameplates and accessories, see page 655 and 658.
4. For dimensions, see page 660.
5. For contact assembly part numbers, see page 659.
6. All assembled part numbers in catalog include standard spring-up Finger-Safe (HW-U...) contacts.
7. Operator only models include operator plus button.
8. Additional contact configurations available (up to 6 total contacts).

Part Number Structure



Note: Use only for interpreting part numbers. Do not use for developing part numbers.

Non-Illuminated Mushroom Head Pushbuttons (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

Buttons

Style	Part Number
ø29mm Mushroom Cap	HW1A-B3-Ⓢ
ø40mm Mushroom Cap	HW1A-B4-Ⓢ

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

- Used to mount contact blocks to operator.
- IDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Operators

Style		Plastic Bezel	Metal Bezel
ø29mm Mushroom ø40mm Mushroom	Momentary	HW1B-M0L	HW4B-M0L
	Maintained	HW1B-A0L	HW4B-A0L
ø60mm Jumbo Mushroom	Momentary	HW1B-M5-Ⓢ*	—

- \*60mm mushroom operator includes non-removable button (available in red, black, green and yellow only).
- For nameplates and accessories, see page 655 and 658.
- For dimensions, see page 660.

1. In place of Ⓢ, specify the Button Color Code from table.

Ⓢ Button Color Code

Color	Code	Color	Code
Black	B	Blue	S
Green	G	White	W
Red	R	Yellow	Y

HW1B-M5 available only in black, red, green and yellow.

Non-Illuminated Square Pushbuttons (Assembled)



Function	Contacts	Square Flush	Square Extended
		Plastic Bezel	Plastic Bezel
Momentary	<i>Operator Only</i>	HW2B-M1-①	HW2B-M2-①
	1NO	HW2B-M1F10-①	HW2B-M2F10-①
	1NC	HW2B-M1F01-①	HW2B-M2F01-①
	1NO-1NC	HW2B-M1F11-①	HW2B-M2F11-①
	2NO	HW2B-M1F20-①	HW2B-M2F20-①
	2NC	HW2B-M1F02-①	HW2B-M2F02-①
	2NO-2NC	HW2B-M1F22-①	HW2B-M2F22-①
Maintained	<i>Operator Only</i>	HW2B-A1-①	HW2B-A2-①
	1NO	HW2B-A1F10-①	HW2B-A2F10-①
	1NC	HW2B-A1F01-①	HW2B-A2F01-①
	1NO-1NC	HW2B-A1F11-①	HW2B-A2F11-①
	2NO	HW2B-A1F20-①	HW2B-A2F20-①
	2NC	HW2B-A1F02-①	HW2B-A2F02-①
	2NO-2NC	HW2B-A1F22-①	HW2B-A2F22-①

① Button Color Code

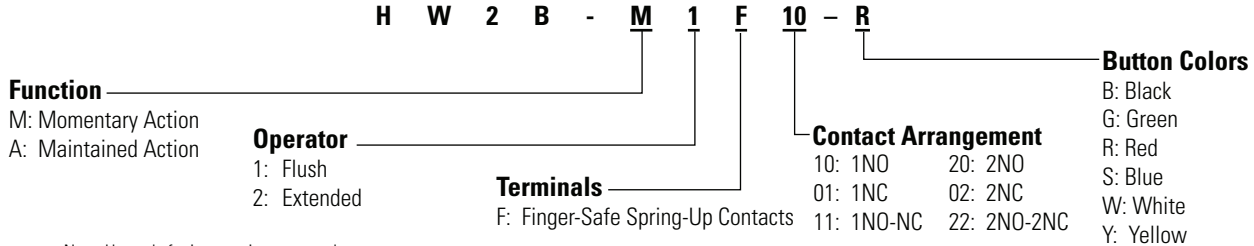
Color	Code
Black	B
Green	G
Red	R
Blue	S
White	W
Yellow	Y



1. In place of ①, specify the Button Color Code from table.
2. For nameplates and accessories, see page 655 and 658.
3. For dimensions, see page 660.
4. For contact assembly part numbers, see page 659.
5. Square pushbuttons available in plastic bezel only.
6. All assembled part numbers in catalog include finger-safe spring-up (HW-U...) contacts.
7. Operator only model includes operator and button.
8. Additional contact configurations available (up to 6 total contacts).



**Part Number Structure**



Note: Use only for interpreting part numbers. Do not use for developing part numbers.

**Non-Illuminated Square Pushbuttons (Replacement Parts)**

Contact Blocks + Mounting Adaptor + Safety Lever Lock + Anti-Rotation Ring + Operator + Button = Completed Unit



**Contact Blocks**

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

**Contact Block Mounting Adaptor**

Style	Part Number
	HW-CB2C

- 1. Used to mount contact blocks to operator.
- 2. IDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

**Safety Lever Lock**

Style	Part Number
	HW9Z-LS

**Anti-Rotation Ring**

Appearance	Part Number
	HW9Z-RL

- Use with notched panel cutout to prevent unit rotation.

**Operators**

Style	Plastic Bezel	
	Momentary Square Flush Extended	HW2B-M0
	Maintained	HW2B-A0

- 2. For nameplates and accessories, see pages 655 and 658.
- 3. For dimensions, see page 660.

**Buttons**

Style	Part Number
Square Flush 	HW2A-B1-Ⓢ
Square Extended 	HW2A-B2-Ⓢ

- 1. In place of Ⓢ, specify the Button Color Code from table.

**Ⓢ Button Color Code**

Color	Code	Color	Code
Black	B	Blue	S
Green	G	White	W
Red	R	Yellow	Y

Non-Illuminated E-Stop Pushbuttons (Assembled)



Contacts	Ø29mm Head Pushlock Turn Reset		Ø40mm Head Pushlock Turn Reset	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
<i>Operator Only</i>	HW1B-V3Ⓞ†	HW4B-V3Ⓞ†	HW1B-V4Ⓞ†	HW4B-V4Ⓞ†
1NO	HW1B-V3F10-Ⓞ†	HW4B-V3F10-Ⓞ†	HW1B-V4F10-Ⓞ†	HW4B-V4F10-Ⓞ†
1NC	HW1B-V3F01-Ⓞ†	HW4B-V3F01-Ⓞ†	HW1B-V4F01-Ⓞ†	HW4B-V4F01-Ⓞ†
1NO-1NC	HW1B-V3F11-Ⓞ†	HW4B-V3F11-Ⓞ†	HW1B-V4F11-Ⓞ†	HW4B-V4F11-Ⓞ†
2NO	HW1B-V3F20-Ⓞ†	HW4B-V3F20-Ⓞ†	HW1B-V4F20-Ⓞ†	HW4B-V4F20-Ⓞ†
2NC	HW1B-V3F02-Ⓞ†	HW4B-V3F02-Ⓞ†	HW1B-V4F02-Ⓞ†	HW4B-V4F02-Ⓞ†



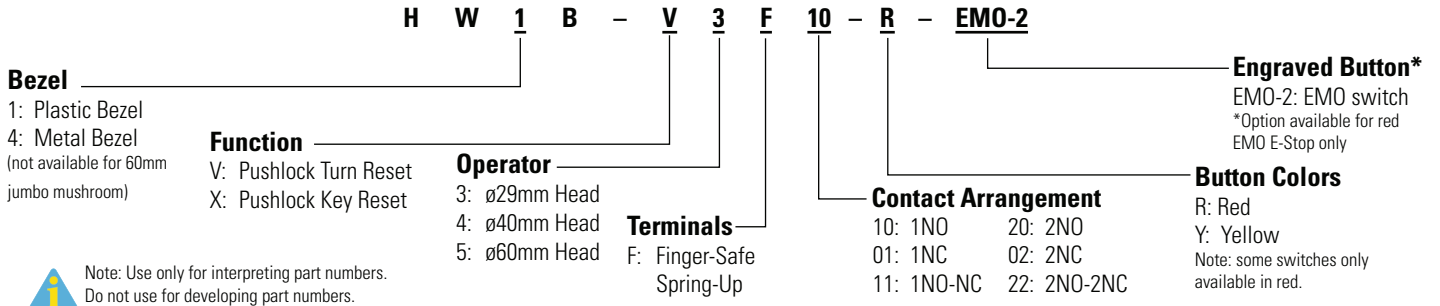
Contacts	Ø40mm Head EMO Pushlock Turn Reset		Ø40mm Head Pushlock Key Reset	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
<i>Operator Only</i>	HW1B-V4R-EMO-2*	HW4B-V4R-EMO-2*	HW1B-X4R*	HW4B-X4R*
1NO	HW1B-V4F10-R-EMO-2*	HW4B-V4F10-R-EMO-2*	HW1B-X4F10-R*	HW4B-X4F10-R*
1NC	HW1B-V4F01-R-EMO-2*	HW4B-V4F01-R-EMO-2*	HW1B-X4F01-R*	HW4B-X4F01-R*
1NO-1NC	HW1B-V4F11-R-EMO-2*	HW4B-V4F11-R-EMO-2*	HW1B-X4F11-R*	HW4B-X4F11-R*
2NO	HW1B-V4F20-R-EMO-2*	HW4B-V4F20-R-EMO-2*	HW1B-X4F20-R*	HW4B-X4F20-R*
2NC	HW1B-V4F02-R-EMO-2*	HW4B-V4F02-R-EMO-2*	HW1B-X4F02-R*	HW4B-X4F02-R*



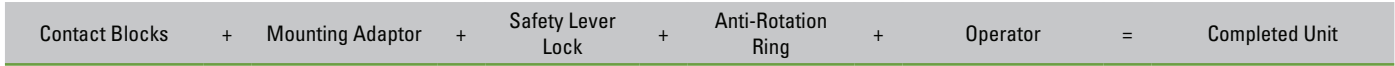
- \* Available in Red only.
- † Available in red or yellow. Insert color code in place of Ⓞ (R: Red, Y: Yellow).
- For accessories, see page 658.
- For dimensions, see page 660.
- For nameplates and shrouds, see page 659.
- For contact assembly part numbers, see page 659.
- All HW series E-stops comply with EN60947-5-5, the IEC "E-Stop Addendum to the Low Voltage Directive," this includes "tamper proof" operation whereby a change of contact state is not possible by "teasing" or "floating" the operator.
- All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.
- Operator only models include operator and button.
- Additional contact configurations available (up to 6 total contacts).

Contacts	ø60mm Head Pushlock Turn Reset
	Plastic Bezel
<i>Operator Only</i>	HW1B-V5R*
1NO	HW1B-V5F10-R*
1NC	HW1B-V5F01-R*
1NO-1NC	HW1B-V5F11-R*
2NO	HW1B-V5F20-R*
2NC	HW1B-V5F02-R*

Part Number Structure



Non-Illuminated E-Stop Pushbuttons (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

- Used to mount contact blocks to operator.
- IEDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Operators

Style	Plastic		Metal
ø29mm Head Pushlock Turn Reset 	red	HW1B-V3R	HW4B-V3R
	yellow	HW1B-V3Y	HW4B-V3Y
ø40mm Head Pushlock Turn Reset 	red	HW1B-V4R	HW4B-V4R
	yellow	HW1B-V4Y	HW4B-V4Y
ø40mm Head EMO Pushlock Turn Reset* 	HW1B-V4R-EMO-2		HW4B-V4R-EMO-2
ø40mm Head Pushlock Key Reset* 	HW1B-X4R		HW4B-X4R
ø60mm Head Pushlock Turn Reset* 	HW1B-V5R		-

- \* Available in red only.
- All E-Stop buttons are not removable from the operator.

Note: Determine mounting centers to ensure proper spacing.

Push Pull & Unibody E-Stop Pushbuttons (Assembled)



ø40mm Head Push-Pull

Contacts	Plastic Bezel	Metal Bezel
Operator Only (Red)	HW1B-Y2R	HW4B-Y2R
Operator Only (Yellow)	HW1B-Y2Y	HW4B-Y2Y
1NO	HW1B-Y2F10-Ⓣ†	HW4B-Y2F10-Ⓣ†
1NC	HW1B-Y2F01-Ⓣ†	HW4B-Y2F01-Ⓣ†
1NO-1NC	HW1B-Y2F11-Ⓣ†	HW4B-Y2F11-Ⓣ†
2NC	HW1B-Y2F02-Ⓣ†	HW4B-Y2F02-Ⓣ†
2NO	HW1B-Y2F20-Ⓣ†	HW4B-Y2F20-Ⓣ†

ø40mm Unibody Pushlock Turn Reset\*

Contacts	Plastic Bezel
1NO-1NC	HW1E-BV4F11-R
2NC	HW1E-BV4F02-R
1NO-2NC*	HW1E-BV412R-TK2093-1



\* NO contact is used as a monitoring contact

Unibody Illuminated E-Stops\*

Contacts	LED
1NO-1NC	HW1E-LV4F11QD-R-Ⓣ
2NC	HW1E-LV4F02QD-R-Ⓣ
2NC (with push-on illumination)	HW1E-TV4F02QD-R-Ⓣ
1NO-1NC (with push-on illumination)	HW1E-TV4F11QD-R-Ⓣ

③ Full Voltage LED Code

Voltage	Code
6VAC/DC	6V
12VAC/DC	12V
24VAC/DC	24V
120V AC	120V
240V AC	240V

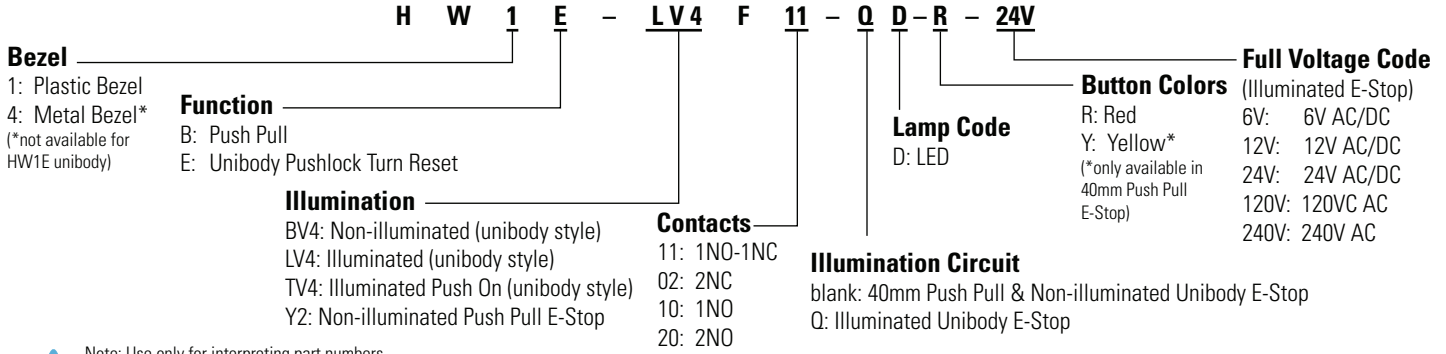
Terminal Numbering (Unibody only)

Models	Terminal Number
1NO-1NC	NO = 13/14, NC = 11/12
2NC	NC = 11/12, NC = 21/22
HW1E-L HW1E-T	LED + = X2, LED - = X1



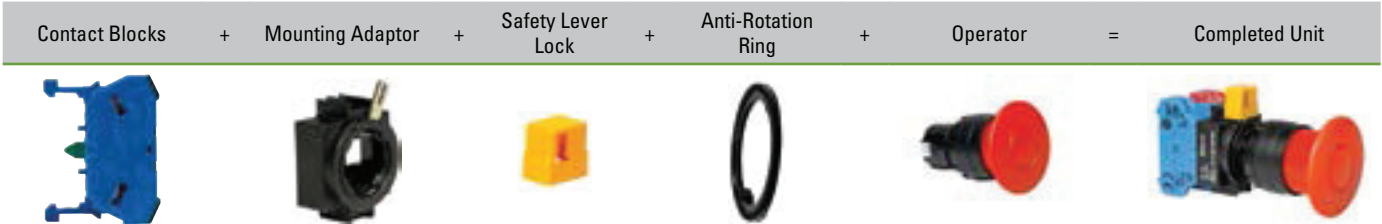
- \* Available in Red only.
- † Available in red or yellow. Insert color code in place of Ⓣ (R: Red, Y: Yellow).
- In place of Ⓣ, specify Full Voltage LED Code.
- With single unit construction, the positive action contacts are integrated in the body of the switch. This provides an extra degree of safety and reliability for critical emergency stop functions.
- In the illuminated version, the light is independent of the switch action (except push-on LED model).
- For accessories, see page 658.
- For dimensions, see page 660.
- For nameplates and shrouds, see page 658.
- For contact assembly part numbers, see page 658.
- All HW Series E-Stop operators include non-removable color caps.
- All HW series E-Stops comply with EN60947-5-5, the IEC "E-Stop Addendum to the Low Voltage Directive," this includes "tamper proof" operation whereby a change of contact state is not possible by "teasing" or "floating" the operator.
- All HW series E-Stop switches comply with SEMI S2 standards.
- All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.
- Additional contact configurations available (up to 6 total contacts).

Part Number Structure



Note: Use only for interpreting part numbers. Do not use for developing part numbers.

Illuminated & Non-Illuminated E-Stop Pushbuttons (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

1. There are no replacement parts for the HW1E unibody E-Stop.  
 2. For illuminated unibody E-Stop, see page 659 for replacement lens.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

1. Used to mount contact blocks to operator.  
 2. IDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Operators

Style	Part Number	
ø40mm Head Push-Pull	Plastic	HW1B-Y2R
	Metal	HW4B-Y2R
	Plastic	HW1B-Y2Y
	Metal	HW4B-Y2Y

All E-Stop Buttons are not removable from the operator.

E-Stop Stations



Contacts	29mm Pushlock Turn Reset		40mm Pushlock Turn Reset	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
1NO-1NC	FB1W-HW1B-V311R	FB1W-HW4B-V311R	FB1W-HW1B-V411R	FB1W-HW4B-V411R
2NC	FB1W-HW1B-V302R	FB1W-HW4B-V302R	FB1W-HW1B-V402R	FB1W-HW4B-V402R



Contacts	40mm Push-Pull Reset		40mm Pushlock Key Reset	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
1NO-1NC	FB1W-HW1B-Y211R	FB1W-HW4B-Y211R	FB1W-HW1B-X411R	FB1W-HW4B-X411R
2NC	FB1W-HW1B-Y202R	FB1W-HW4B-Y202R	FB1W-HW1B-X402R	FB1W-HW4B-X402R



Contacts	40mm EMO Pushlock Turn Reset	
	Plastic Bezel	Metal Bezel
1NO-1NC	FB1W-HW1B-V411R-EMO-2	FB1W-HW4B-V411R-EMO-2
2NC	FB1W-HW1B-V402R-EMO-2	FB1W-HW4B-V402R-EMO-2

- 1. Maximum of two contact blocks.
- 2. Box is supplied with yellow top and black bottom only.

Jumbo Dome Pilot Lights



Plastic Bezel

Actual Size



Jumbo Dome	LED	Operator Only	HW1P-500
		Full Voltage 24V AC/DC	HW1P-504-Ⓢ

- 1. In place of Ⓢ, specify the Lens/LED Color Code.
- 2. Spring-Up terminals with 24V LED.
- 3. For nameplates and accessories, see page 655 and 658.
- 4. For dimensions, see page 660.

Ⓢ Lens/LED Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

Jumbo Dome Replacement Parts

Item	Appearance	Description	Part Number
Lens		Polycarbonate Lens	HW1A-P5Ⓢ
LED Diffusing Lens			HW9Z-PP5C
LED Lamps		LED Lamp	LSTDB-2Ⓢ

- 1. In place of Ⓢ, specify the Lens/LED Color Code.
- 2. Use white LED for yellow lens.

Lamp Ratings

	Part Number	Operating Voltage	Rated Current	Power Consumption
LED	LSTDB-2	24V AC/DC ±10%	15mA	0.36W




Pilot Lights (Assembled)



		Round Flush		Dome	
		Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
Operator Only		HW1P-1FQ0-②	HW4P-1FQ0-②	HW1P-2FQ0-②	HW4P-2FQ0-②
Full Voltage		HW1P-1FQD-②-③	HW4P-1FQD-②-③	HW1P-2FQD-②-③	HW4P-2FQD-②-③
Transformer	120V AC	HW1P-1FH2D-②	HW4P-1FH2D-②	HW1P-2FH2D-②	HW4P-2FH2D-②
	240V AC	HW1P-1FM4D-②	HW4P-1FM4D-②	HW1P-2FM4D-②	HW4P-2FM4D-②
	480V AC	HW1P-1FT8D-②	HW4P-1FT8D-②	HW1P-2FT8D-②	HW4P-2FT8D-②
DC-DC Converter*	110V DC	HW1P-1D2D-②	-	HW1P-2D2D-②	-



		Square Flush
		Plastic Bezel
Operator Only		HW2P-1FQ0-②
Full Voltage		HW2P-1FQD-②-③
Transformer	120V AC	HW2P-1FH2D-②
	240V AC	HW2P-1FM4D-②
	480V AC	HW2P-1FT8D-②
DC-DC Converter*	110V DC	HW2P-1D2D-②

 \* DC-DC converter voltage input from 90-140V DC.

② Lens/LED Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

③ LED Full Voltage Code

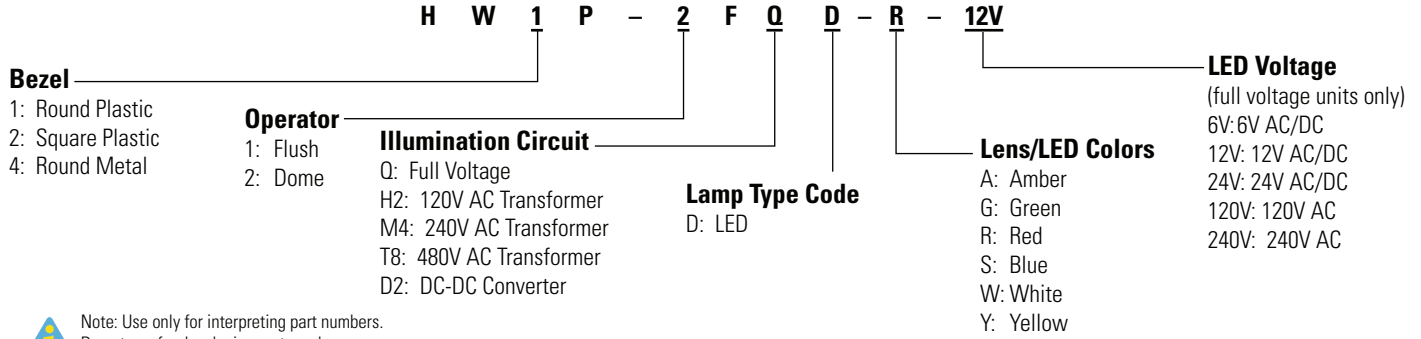
Voltage	Code
6VAC/DC	6V
12VAC/DC	12V
24VAC/DC	24V
120V AC	120V
240V AC	240V



1. In place of ②, specify the Lens/LED Color Code from table below.
2. In place of ③ specify the Full Voltage Code from table below.
3. For nameplates and accessories, see page 655 and 658.
4. For dimensions, see page 660.
5. **Pilot lights do not come with anti-rotation ring.**
6. Operator models come with operator and lens.
7. **Yellow pilot light comes with white LED.**



Part Number Structure



Pilot Lights (Replacement Parts)



(not applicable for full voltage units)

Transformer Units

Style	Voltage	Part Number
LED	120V AC	HW-FH20
	240V AC	HW-FM40
	480V AC	HW-FT80
(6V secondary voltage)	110V DC†	HW-RD0*

- 1. \*DC-DC convertor can only be used with HW1P-100 and HW2P-100 operators
- 2. † DC-DC converter voltage input from 90-140V DC.

LED Lamps

Style	Voltage	Part Number
LED	6V AC/DC	LSTD-6⊙
	12V AC/DC	LSTD-1⊙
	24V AC/DC	LSTD-2⊙
	120V AC	LSTD-H2⊙
	240V AC	LSTD-M4⊙

- 1. In place of ⊙, specify the LED Color Code.
- 2. The LED contains a current-limiting resistor and reverse polarity protection diodes.

② LED Color Code

Color	Code	Color	Code
Amber	A	Blue	S
Green	G	White	W
Red	R		

For yellow lens use white LED.

Operators

Style	Type	Plastic Bezel	Metal Bezel	
Round Flush	Full Voltage	HW1P-1FQ0	HW4P-1FQ0	
	Transformer	Finger-Safe	HW1P-10	HW4P-10
		Used for DC-DC convertor only	HW1P-100	-
Dome	Full Voltage	HW1P-2FQ0	HW4P-2FQ0	
	Transformer	Finger-Safe	HW1P-20	HW4P-20
		Used for DC-DC convertor only	HW2P-100	-
Square Flush	Full Voltage	HW2P-1FQ0	-	
	Transformer	Used for DC-DC convertor only	HW2P-100	-

- 1. Transformer type requires separate transformer & LED. Must select correct transformer bases. Use 6V LEDs.
- 2. Full voltage type only requires LED.

Lenses

Style	Part Number
Round/Flush	HW1A-P1-③
Dome	HW1A-P2-③
Square/Flush	HW2A-P1-③

In place of ③, specify the Lens Color Code.

③ Lens Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

For yellow lens use white LED.

### Illuminated Round Pushbuttons (Assembled)



#### Illuminated Full Voltage Pushbuttons



Contacts	Flush		Extended		Extended w/ Full Shroud	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
Momentary Operator Only 1NO 1NC 1NO-1NC 2NO	HW1L-M1-②	HW4L-M1-②	HW1L-M2-②	HW4L-M2-②	HW1L-MF2-②	HW4L-MF2-②
	HW1L-M1F10QD-②-③	HW4L-M1F10QD-②-③	HW1L-M2F10QD-②-③	HW4L-M2F10QD-②-③	HW1L-MF2F10QD-②-③	HW4L-MF2F10QD-②-③
	HW1L-M1F01QD-②-③	HW4L-M1F01QD-②-③	HW1L-M2F01QD-②-③	HW4L-M2F01QD-②-③	HW1L-MF2F01QD-②-③	HW4L-MF2F01QD-②-③
	HW1L-M1F11QD-②-③	HW4L-M1F11QD-②-③	HW1L-M2F11QD-②-③	HW4L-M2F11QD-②-③	HW1L-MF2F11QD-②-③	HW4L-MF2F11QD-②-③
	HW1L-M1F20QD-②-③	HW4L-M1F20QD-②-③	HW1L-M2F20QD-②-③	HW4L-M2F20QD-②-③	HW1L-MF2F20QD-②-③	HW4L-MF2F20QD-②-③
Maintained Operator Only 1NO 1NC 1NO-1NC 2NO	HW1L-A1-②	HW4L-A1-②	HW1L-A2-②	HW4L-A2-②	HW1L-AF2-②	HW4L-AF2-②
	HW1L-A1F10QD-②-③	HW4L-A1F10QD-②-③	HW1L-A2F10QD-②-③	HW4L-A2F10QD-②-③	HW1L-AF2F10QD-②-③	HW4L-AF2F10QD-②-③
	HW1L-A1F01QD-②-③	HW4L-A1F01QD-②-③	HW1L-A2F01QD-②-③	HW4L-A2F01QD-②-③	HW1L-AF2F01QD-②-③	HW4L-AF2F01QD-②-③
	HW1L-A1F11QD-②-③	HW4L-A1F11QD-②-③	HW1L-A2F11QD-②-③	HW4L-A2F11QD-②-③	HW1L-AF2F11QD-②-③	HW4L-AF2F11QD-②-③
	HW1L-A1F20QD-②-③	HW4L-A1F20QD-②-③	HW1L-A2F20QD-②-③	HW4L-A2F20QD-②-③	HW1L-AF2F20QD-②-③	HW4L-AF2F20QD-②-③

#### Illuminated Transformer Pushbuttons



Contacts	Flush		Extended		Extended w/ Full Shroud	
	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel	Plastic Bezel	Metal Bezel
Momentary Operator Only 1NO-1NC 2NO	HW1L-M1-②	HW4L-M1-②	HW1L-M2-②	HW4L-M2-②	HW1L-MF2-②	HW4L-MF2-②
	HW1L-M1F11-③D-②	HW4L-M1F11-③D-②	HW1L-M2F11-③D-②	HW4L-M2F11-③D-②	HW1L-MF2F11-③D-②	HW4L-MF2F11-③D-②
	HW1L-M1F20-③D-②	HW4L-M1F20-③D-②	HW1L-M2F20-③D-②	HW4L-M2F20-③D-②	HW1L-MF2F20-③D-②	HW4L-MF2F20-③D-②
Maintained Operator Only 1NO-1NC 2NO	HW1L-A1-②	HW4L-A1-②	HW1L-A2-②	HW4L-A2-②	HW1L-AF2-②	HW4L-AF2-②
	HW1L-A1F11-③D-②	HW4L-A1F11-③D-②	HW1L-A2F11-③D-②	HW4L-A2F11-③D-②	HW1L-AF2F11-③D-②	HW4L-AF2F11-③D-②
	HW1L-A1F20-③D-②	HW4L-A1F20-③D-②	HW1L-A2F20-③D-②	HW4L-A2F20-③D-②	HW1L-AF2F20-③D-②	HW4L-AF2F20-③D-②



- In place of ②, specify Lens/LED Color Code from table.
- In place of ③ specify Voltage Code from table.
- Light independent of switch position.
- For replacement part numbers, see page 626.
- For nameplates and accessories, see page 655 and 658.
- For dimensions, see page 660.
- For contact assembly part numbers, see page 659.
- Full voltage and transformer models use the same operator.
- Additional contact configurations available (up to 6 total contacts).
- 10. Yellow pushbutton comes with white LED.**

#### ② Lens/LED Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

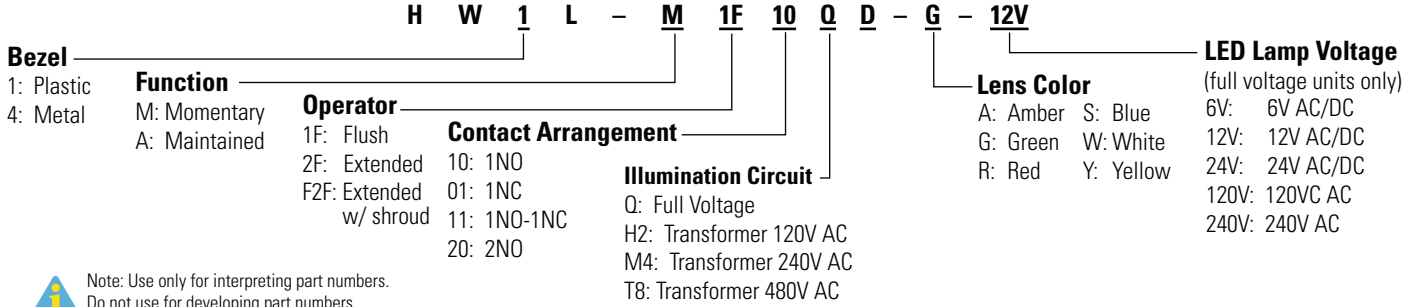


Yellow LED not available. Use white LED for yellow lens.

#### ③ Voltage Code

Full Voltage Models		Transformer Models	
Voltage	Code	Voltage	Code
6V AC/DC	6V	120V AC	H2
12V AC/DC	12V	240V AC	M4
24V AC/DC	24V	480V AC	T8
120V AC	120V		
240V AC	240V		

Part Number Structure



Illuminated Round Pushbuttons (Replacement Parts)



\*Transformer not needed with full voltage models.

Lamp Circuit Components

Style	Description	Terminals	Part Number
	For use with HW-CBL on all illuminated pushbutton units. One required for each deck (pair) of contacts.		HW-LH3
	For use with odd number of contacts.	Finger-Safe	HW-DA1FBN
	For use with even number of contacts.	Finger-Safe	TW-DA1FB
	120VAC 240VAC 480VAC	Finger-Safe	TW-F126B TW-F246B TW-F486B
	110VDC		HW-L16D

- \*With spring-up terminals - to use spring-up terminal type, must use transformer type operator designed for spring-up transformer.
- \*\* DC-DC converter voltage input from 90-140V DC.

Operators

Style		Plastic Bezel	Metal Bezel
Round Flush/Extended		HW1L-M0	HW4L-M0
		HW1L-A0	HW4L-A0
Extended with Full Shroud		HW1L-MF0	HW4L-MF0
		HW1L-AF0	HW4L-AF0

Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10 HW-U10R (early make)	HW-U01 HW-U01R (late break)

- All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CBL

- Used to mount contact blocks to operator (first pair only).
- IEDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Lenses

Style	Part Number
Round Flush	HW1A-L1-Ⓞ
Round Extended	HW1A-L2-Ⓞ

In place of Ⓞ, specify the Lens Color Code from previous page.

Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

LED Lamps

Style	Voltage	Part Number
	6V AC/DC	LSTD-6Ⓞ
	12V AC/DC	LSTD-1Ⓞ
	24V AC/DC	LSTD-2Ⓞ
	120V AC	LSTD-H2Ⓞ
	240V AC	LSTD-M4Ⓞ

- In place of Ⓞ, specify the LED Color Code.
- The LED contains a current-limiting resistor and reverse polarity protection diodes.
- Yellow LED not available, use white LED when using yellow lens.

Illuminated Mushroom & Square Pushbuttons (Assembled)



		40mm Mushroom Head		Square Flush	
		Contacts	Plastic Bezel	Metal Bezel	Plastic Bezel
Full Voltage	Momentary	<i>Operator Only</i> <sup>†</sup>	HW1L-M4-②	HW4L-M4-②	HW2L-M1-②
		1NO	HW1L-M4F10QD-②-③	HW4L-M4F10QD-②-③	HW2L-M1F10QD-②-③
		1NC	HW1L-M4F01QD-②-③	HW4L-M4F01QD-②-③	HW2L-M1F01QD-②-③
		1NO-1NC	HW1L-M4F11QD-②-③	HW4L-M4F11QD-②-③	HW2L-M1F11QD-②-③
		2NO	HW1L-M4F20QD-②-③	HW4L-M4F20QD-②-③	HW2L-M1F20QD-②-③
	Maintained	<i>Operator Only</i> <sup>†</sup>	HW1L-A4-②	HW4L-A4-②	HW2L-A1-②
		1NO	HW1L-A4F10QD-②-③	HW4L-A4F10QD-②-③	HW2L-A1F10QD-②-③
		1NC	HW1L-A4F01QD-②-③	HW4L-A4F01QD-②-③	HW2L-A1F01QD-②-③
		1NO-1NC	HW1L-A4F11QD-②-③	HW4L-A4F11QD-②-③	HW2L-A1F11QD-②-③
		2NO	HW1L-A4F20QD-②-③	HW4L-A4F20QD-②-③	HW2L-A1F20QD-②-③
Transformer	Momentary	1NO-1NC	HW1L-M4F11③D-②	HW4L-M4F11③D-②	HW2L-M1F11③D-②
		2NO	HW1L-M4F20③D-②	HW4L-M4F20③D-②	HW2L-M1F20③D-②
	Maintained	1NO-1NC	HW1L-A4F11③D-②	HW4L-A4F11③D-②	HW2L-A1F11③D-②
		2NO	HW1L-A4F20③D-②	HW4L-A4F20③D-②	HW2L-A1F20③D-②



- † Full voltage and transformer units use the same operator.
- In place of ②, specify the Lens/LED Color Code from table.
- In place of ③ specify the Voltage Code from table.
- Light independent of switch position
- For nameplates and accessories, see page 655 and 658.
- For dimensions, see page 660.
- For contact assembly part numbers, see page 659.
- Additional contact configurations available (up to 6 total contacts).
- Yellow pushbutton comes with white LED.**

② Lens/LED Color Code

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y*



- \*40mm mushroom lenses not available in yellow.
- Yellow LED not available. Use white LED for yellow lens.

③ Voltage Code

Full Voltage Models		Transformer Models	
Voltage	Code	Voltage	Code
6V AC/DC	6V	120V AC	H2
12V AC/DC	12V	240V AC	M4
24V AC/DC	24V	480V AC	T8
120V AC	120V		
240V AC	240V		

Switches & Pilot Devices

Signaling Lights

Relays & Sockets

Timers

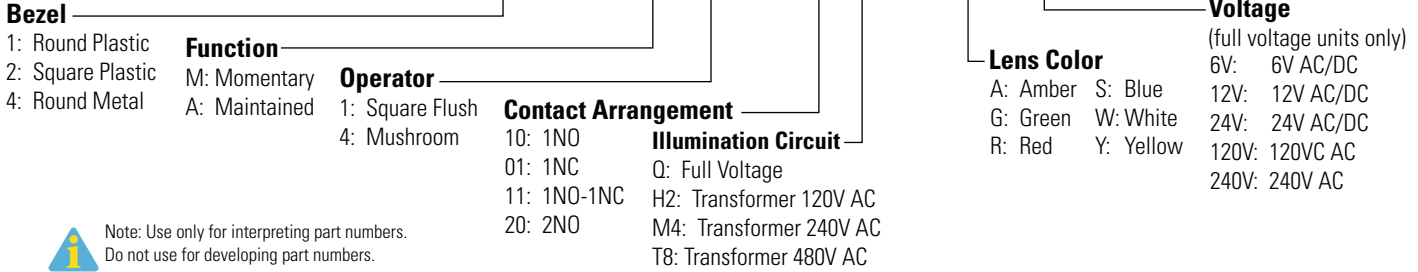
Contactors

Terminal Blocks

Circuit Breakers

Part Number Structure

H W 1 L - M 1 F 10 Q D - G - 12V



Illuminated Mushroom & Square Pushbuttons (Replacement Parts)



\*Transformer not needed with full voltage models.

Lamp Circuit Components

Style	Description	Terminals	Part Number
Lead Holder	For use with HW-CBL on all illuminated pushbutton units. One required for each deck (pair) of contacts.		HW-LH3
Dummy Block with Full Voltage Adaptor	For use with odd number of contacts.	Finger-Safe	HW-DA1FBN
Full Voltage Adaptor	For use with even number of contacts.	Finger-Safe	TW-DA1FB
Transformer Unit (6V secondary voltage)	120VAC 240VAC 480VAC	Finger-Safe	TW-F126B TW-F246B TW-F486B
DC-DC Converter	110VDC		HW-L16D

- \*With spring-up terminals - to use spring-up terminal type, must use transformer type operator designed for spring-up transformer.
- \*\* DC-DC converter voltage input from 90-140V DC.

Operators

Style			Plastic Bezel	Metal Bezel
ø40mm Mushroom		Momentary	HW1L-MOL	HW4L-MOL
		Maintained	HW1L-AOL	HW4L-AOL
Square		Momentary	HW2L-MO	-
		Maintained	HW2L-AO	-

Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10 HW-U10R (early make)	HW-U01 HW-U01R (late break)

- All assembled part numbers in catalog include standard finger-safe spring-up contacts (HW-U...).

Contact Block Mounting Adaptor

Style	Part Number
	HW-CBL

- Used to mount contact blocks to operator (first pair only).
- IDECC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

- Use with notched panel cutout to prevent unit rotation.

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Lenses

Style	Part Number
ø40mm Mushroom Lens	ALW4BLU-⊙*
Square Flush	HW2A-L1-⊙

- In place of ⊙, specify the Lens Color Code.
- \*Mushroom lens not available in yellow.

LED Lamps

Style	Voltage	Part Number
	6V AC/DC	LSTD-6⊙
	12V AC/DC	LSTD-1⊙
	24V AC/DC	LSTD-2⊙
	120V AC	LSTD-H2⊙
	240V AC	LSTD-M4⊙

- In place of ⊙, specify the LED Color Code.
- The LED contains a current-limiting resistor and reverse polarity protection diodes.
- Yellow LED not available, use white LED when using yellow lens.

Selector Switches 2-Position (Assembled)



2-Position Selector Switches

Contact	Mounting	Operator Position		Handle	Maintained	Spring Return from Right
		L	R			
<i>Operator Only</i>				<i>Knob Lever</i>	<i>HW</i> Ⓢ-2T <i>HW</i> Ⓢ-2L	<i>HW</i> Ⓢ-21T <i>HW</i> Ⓢ-21L
1NO	1	0	X	<b>Knob Lever</b>	HWⓈ-2TF10 HWⓈ-2LF10	HWⓈ-21TF10 HWⓈ-21LF10
1NO- 1NC	1 2	0 X	X 0	<b>Knob Lever</b>	HWⓈ-2TF11 HWⓈ-2LF11	HWⓈ-21TF11 HWⓈ-21LF11
2NO	1 2	0 0	X X	<b>Knob Lever</b>	HWⓈ-2TF20 HWⓈ-2LF20	HWⓈ-21TF20 HWⓈ-21LF20
2NO- 2NC	1 2 3 4	X 0 X 0	0 X 0 X	<b>Knob Lever</b>	HWⓈ-2TF22 HWⓈ-2LF22	HWⓈ-21TF22 HWⓈ-21LF22

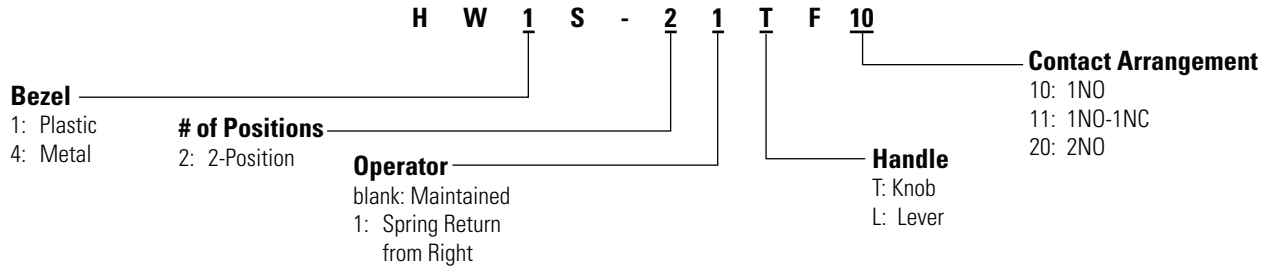


1. In place of Ⓢ enter 1 for plastic bezel or 4 for metal bezel.
2. For nameplates, see page 655.
3. All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.
4. Standard color for knob and lever is black.
5. Optional colors available for lever type. Must order in components. See next page for part numbers.
6. Additional contact configurations available (up to 6 total contacts).
7. For Truth Tables see page 668.

Ⓢ Bezel Type

Type	Code
Plastic	1
Metal	4

Part Number Structure



Note: Use only for interpreting part numbers. Do not use for developing part numbers.

Selector Switches 2-Position (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

Anti-Rotation Ring

Style	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

- Used to mount contact blocks to operator (first pair only).
- IEDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Operators

Style	Description	Handle	Plastic Bezel	Metal Bezel
	Maintained	Knob	HW1S-2T	HW4S-2T
		Lever	HW1S-2	HW4S-2
	Spring Return from Right	Knob	HW1S-21T	HW4S-21T
		Lever	HW1S-21	HW4S-21

- Knob operator comes with black handle.
- To order lever type, lever and inserts must be ordered separately, along with lever operator. See part numbers below.

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Levers & Inserts

Style	Part Number
	ASWHHL-⓪
	TW-HC1-⓪

Standard lever color is black. Standard insert color is white.

① Handle/Insert Color Code

Color	Code
Black*	B
Blue	S
Green	G
Red	R
Yellow	Y
White†	W

- \* Lever color inserts not available in black.
- †Lever not available in white.

Selector Switches 3-Position (Assembled)



3-Position Selector Switches

Contact	Mounting	Operator Position			Handle	Maintained	Spring Return from Right	Spring Return from Left	Spring Return Two-Way
		L	C	R					
<i>Operator Only</i>					<i>Knob Lever</i>	<i>HW⊙S-3T* HW⊙S-3L</i>	<i>HW⊙S-31T HW⊙S-31L</i>	<i>HW⊙S-32T HW⊙S-32L</i>	<i>HW⊙S-33T HW⊙S-33L</i>
1NO- 1NC	1 2	0 0	X 0	X X	<b>Knob Lever</b>	HW⊙S-3TF11 HW⊙S-3LF11	HW⊙S-31TF11 HW⊙S-31LF11	HW⊙S-32TF11 HW⊙S-32LF11	HW⊙S-33TF11 HW⊙S-33LF11
2NO 2NC	1 2	X 0	0 0	0 X	<b>Knob Lever</b>	HW⊙S-3TF20 HW⊙S-3LF20	HW⊙S-31TF20 HW⊙S-31LF20	HW⊙S-32TF20 HW⊙S-32LF20	HW⊙S-33TF20 HW⊙S-33LF20
2NC	1 2	0 X	X X	X 0	<b>Knob Lever</b>	HW⊙S-3TF02 HW⊙S-3LF02	HW⊙S-31TF02 HW⊙S-31LF02	HW⊙S-32TF02 HW⊙S-32LF02	HW⊙S-33TF02 HW⊙S-33LF02
2NO- 1NC	1 2 3	X 0 0	0 0 X	0 X 0	<b>Knob</b>	HW⊙S-3JTF21N1	—	—	—
2NO- 2NC	1 2 3 4	X 0 0 X	0 0 X X	0 X X 0	<b>Knob</b>	HW⊙S-3TF22	HW⊙S-31TF22	HW⊙S-32TF22	HW⊙S-33TF22
2NO- 2NC	1 2 3 4	0 X X 0	0 X X 0	X 0 0 X	<b>Knob</b>	HW⊙S-3STF22N9	—	—	—
4NO	1 2 3 4	X 0 X 0	0 0 0 0	0 X 0 X	<b>Knob</b>	HW⊙S-3TF40	HW⊙S-31TF40	HW⊙S-32TF40	HW⊙S-33TF40
4NO	1 2 3 4	X 0 X 0	0 X 0 0	0 X 0 X	<b>Knob</b>	HW⊙S-3STF40N2	—	—	—
4NC	1 2 3 4	0 X 0 X	X X X X	X 0 X 0	<b>Knob</b>	HW⊙S-3TF04	HW⊙S-31TF04	HW⊙S-32TF04	HW⊙S-33TF04

⊙ Bezel Type

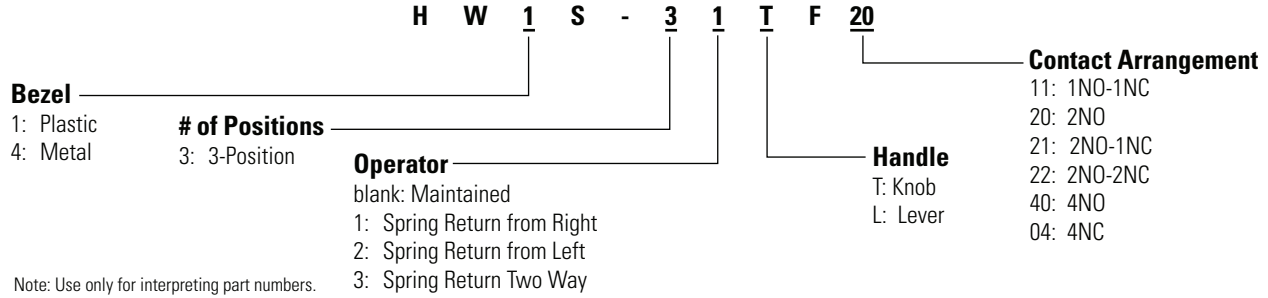
Type	Code
Plastic	1
Metal	4



- In place of ⊙ enter 1 for plastic bezel or 4 for metal bezel.
- Knob operator includes black knob/lever operator includes black lever.
- \* Three position operator is available with three different cams.  
HW⊙S-3T: Maintained (standard cam)  
HW⊙S-3ST: Maintained (S cam)  
HW⊙S-3JT: Maintained (J cam)
- Operator cams are color coded (white=standard cam, red=S cam, black=J cam).
- For nameplates, see page 655.
- For contact assembly part numbers, see page 659.
- All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.
- Standard color for knob and lever is black.
- Optional colors available for lever type. Must order in components. See next page for part numbers.
- Additional contact configurations available (up to 6 total contacts).
- For Truth Tables see page 668.



Part Number Structure



Selector Switches 3-Position (Replacement Parts)



Contact Blocks

Style	Contacts	1NO	1NC
	Finger-Safe Spring-Up Terminal	HW-U10	HW-U01
		HW-U10R (early make)	HW-U01R (late break)
	Dummy Block	HW-DB	

Anti-Rotation Ring

Style	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Operators

Style	Description	Handle	Plastic Bezel	Metal Bezel
	Maintained (standard cam)	Knob	HW1S-3T	HW4S-3T
		Lever	HW1S-3	HW4S-3
	Maintained (S cam)	Knob	HW1S-3ST	HW4S-3ST
		Knob	HW1S-3JT	HW4S-3JT
	Spring Return from Right (standard cam)	Knob	HW1S-31T	HW4S-31T
		Lever	HW1S-31	HW4S-31
	Spring Return from Left (standard cam)	Knob	HW1S-32T	HW4S-32T
		Lever	HW1S-32	HW4S-32
	2-Way Spring Return (standard cam)	Knob	HW1S-33T	HW4S-33T
		Lever	HW1S-33	HW4S-33

1. Knob operator comes with black handle.  
 2. Three position knob operator is available with three different cams.  
 3. Operator cams are color coded (white=standard cam, red=S cam, black=J cam).  
 4. To order lever type, lever and inserts must be ordered separately, along with lever operator. See part numbers below.

Contact Block Mounting Adaptor

Style	Part Number
	HW-CB2C

1. Used to mount contact blocks to operator (first pair only).  
 2. IDEC strongly recommends using the safety lever lock to prevent heavy vibration or maintenance personnel from inadvertently unlocking contacts.

Safety Lever Lock

Style	Part Number
	HW9Z-LS

Levers & Inserts

Style	Part Number
	ASWHHL-①
	TW-HC1-①

Standard lever color is black. Standard insert color is white.

① Handle/Insert Color Code

Color	Code
Black*	B
Blue	S
Green	G
Red	R
Yellow	Y
White†	W

1. \* Lever color inserts not available in black.  
 2. †Lever not available in white.

Selector Switches 4- & 5-Position (Assembled)



4-Position Selector Switches

Contact	Mounting	Operator Position				Handle	Maintained
		1	2	3	4		
		↙	↑	↗	↘		
<i>Operator Only</i>						<i>Knob Lever</i>	HWⓈS-4T HWⓈS-4L
1NO- 2NC	1	X	0	0	0	Knob Lever	HWⓈS-4TF12 HWⓈS-4LF12
	2	0	X	0	0		
	3	0	0	X	0		
	4	0	0	0	0		
1NO- 3NC	1	0	X	X	X	Knob Lever	HWⓈS-4TF13N6 HWⓈS-4LF13N6
	2	0	X	0	0		
	3	0	0	X	0		
	4	0	0	0	X		
2NO- 2NC	1	X	0	0	0	Knob Lever	HWⓈS-4TF22N3 HWⓈS-4LF22N3
	2	0	X	0	0		
	3	0	0	X	0		
	4	0	0	0	X		

5-Position Selector Switch

Contact	Mounting	Operator Position					Handle	Maintained
		1	2	3	4	5		
		↙	↘	↑	↗	↘		
<i>Operator Only</i>						<i>Knob Lever</i>	HWⓈS-5T HWⓈS-5L	
2NO- 2NC	1	X	0	0	0	0	Knob Lever	HWⓈS-5TF22N3 HWⓈS-5LF22N3
	2	0	X	0	0	0		
	3	0	0	0	X	0		
	4	0	0	0	0	X		



- In place of Ⓢ enter 1 for plastic bezel or 4 for metal bezel.
- Knob operator includes black knob/lever operator includes black lever.
- For nameplates, see page 655.
- For contact assembly part numbers, see page 659.
- Five position circuit cannot be made to make five independent contact closures.
- All assembled part numbers in catalog include standard finger-safe spring-up (HW-U...) contacts.
- Standard color for knob and lever is black.
- Optional colors available for lever type. Must order in components. See next page for part numbers.
- Additional contact configurations available (up to 6 total contacts).
- For Truth Tables see page 668.

Ⓢ Bezel Type

Type	Code
Plastic	1
Metal	4