

A3

Switches & Pilot Devices



HW: The Best Engineered Switch in the World

Key features include:

- *Locking lever removable contact blocks*
- *Finger-safe IP20 contacts as standard, other terminal styles available*
- *Tamperproof construction*
- *All E-stops meet EN418 and are compliant with SEMI S2 standards*
- *Worldwide approvals*
- *Easy to assemble*
- *Available assembled or as sub-components*
- *Choice of black plastic or metallic front bezels*
- *Incandescent or LED illumination*
- *Transformer or full voltage*
- *Slow make double break self cleaning contacts*

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.

Complete with finger-safe contact blocks offering IP20 protection, these 7/8" (22mm) switches include illuminated and non-illuminated pushbuttons, pilot lights, selector switches, and emergency stop 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. LR92374



TÜV Rheinland

Registration No. R9551089 (E-stops)
 Registration No. R50054316 (Dual Pushbuttons)
 Registration No. J9650511 (Pilot Lights)
 Registration No. J9551458 (all other switches)



Certificate No.
 2005010305145656

Conforming to Standards		EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 No.14							
Approvals		<p>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)</p> <p>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)</p> <p>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)</p>							
   <p>File No. E68961 File No. LR92374 Certificate No. 2005010305145656</p>   <p>TÜV Rheinland Registration No. R9551089 (E-stops) Registration No. J9551458 (all other switches) Registration No. J9650511 (Pilot Lights)</p>									
Operating Temperature		Operation: -25 to +50°C (without freezing), Storage: -40 to +70°C (without freezing)							
Vibration Resistance		10 to 55Hz, 98m/sec ² (10G) conforming to IEC6068-2-6							
Shock Resistance		980m/sec ² (100G) conforming to IEC6068-2-7							
Electric Shock Protection		Class 0 conforming to IEC60536							
Degree of Protection (conforming to IEC60529) (conforming to NEMA ICS6-110)		IP65 (from front of the panel) IP20 (Type HW-F contact block) NEMA 1, 2, 3, 3R, 3S, 4, 4X, 5, 12, 13 (from front of panel)							
Mechanical Life		Momentary pushbuttons: 5,000,000 (900 operations per hour), All other switches: 500,000							
Pollution Degree (conforming to IEC60947-1)		3 for switches not using a transformer, 2 for switches using a transformer							
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							
Contact Operation		Slow break NC or NO, self-cleaning							
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)							
Terminal Referencing		Conforming to CENELEC EN50005							
Recommended Terminal Torque		0.8 N m (7.1 in lb.)							
External Short-Circuit Protection		10A 250V fuse conforming to IEC60269-1							
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)							
Electrical Reliability		MTBF < 1 fault for 10 million operation cycles (3V DC, 5mA)							
Lamp Ratings		Incandescent: 1 W LEDs: 6V/17mA max, 12V & 24V/11mA max, 120 & 240V/10mA max							
Maximum Inrush Current		40 A (40 ms)							
Contact Material		Silver (gold plated contacts available - contact IDEC)							
Contact Ratings	Pushbuttons		Contact Block		Type HW-C/HW-F /HW-G				
	Illuminated Pushbuttons		Rated Insulation Voltage		600V				
	Selector Switches		Rated Continuous Current		10A				
	Illuminated Selector Switches Pushbutton Selectors		Contact Ratings by Utilization Category IEC 60947-5-1		AC-15 (A600) DC-13 (P600)				
Characteristics	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
	Operational Current	DC	DC-12 Control of resistive loads & solid state loads	8A	5A	—	2.2A	1.1A	—
DC-13 Control of electromagnets			5A	2A	—	1.1A	0.6A	—	



1. For dimensions, see page A3-100.
2. For life expectancy derating curves, see page A3-105.

Non-Illuminated Pushbuttons (Assembled)

Part Numbers: Non-Illuminated Pushbuttons

Style	Contact	Plastic Bezel		Metal Bezel	
		Momentary	Maintained	Momentary	Maintained
Round Flush 	1NO	HW1B-M1F10-①	HW1B-A1F10-①	HW4B-M1F10-①	HW4B-A1F10-①
	1NC	HW1B-M1F01-①	HW1B-A1F01-①	HW4B-M1F01-①	HW4B-A1F01-①
	1NO-1NC	HW1B-M1F11-①	HW1B-A1F11-①	HW4B-M1F11-①	HW4B-A1F11-①
	2NO	HW1B-M1F20-①	HW1B-A1F20-①	HW4B-M1F20-①	HW4B-A1F20-①
	2NC	HW1B-M1F02-①	HW1B-A1F02-①	HW4B-M1F02-①	HW4B-A1F02-①
	2NO-2NC	HW1B-M1F22-①	HW1B-A1F22-①	HW4B-M1F22-①	HW4B-A1F22-①
Round Extended 	1NO	HW1B-M2F10-①	HW1B-A2F10-①	HW4B-M2F10-①	HW4B-A2F10-①
	1NC	HW1B-M2F01-①	HW1B-A2F01-①	HW4B-M2F01-①	HW4B-A2F01-①
	1NO-1NC	HW1B-M2F11-①	HW1B-A2F11-①	HW4B-M2F11-①	HW4B-A2F11-①
	2NO	HW1B-M2F20-①	HW1B-A2F20-①	HW4B-M2F20-①	HW4B-A2F20-①
	2NC	HW1B-M2F02-①	HW1B-A2F02-①	HW4B-M2F02-①	HW4B-A2F02-①
	2NO-2NC	HW1B-M2F22-①	HW1B-A2F22-①	HW4B-M2F22-①	HW4B-A2F22-①
29mm Mushroom Head 	1NO	HW1B-M3F10-①	HW1B-A3F10-①	HW4B-M3F10-①	HW4B-A3F10-①
	1NC	HW1B-M3F01-①	HW1B-A3F01-①	HW4B-M3F01-①	HW4B-A3F01-①
	1NO-1NC	HW1B-M3F11-①	HW1B-A3F11-①	HW4B-M3F11-①	HW4B-A3F11-①
	2NO	HW1B-M3F20-①	HW1B-A3F20-①	HW4B-M3F20-①	HW4B-A3F20-①
	2NC	HW1B-M3F02-①	HW1B-A3F02-①	HW4B-M3F02-①	HW4B-A3F02-①
	2NO-2NC	HW1B-M3F22-①	HW1B-A3F22-①	HW4B-M3F22-①	HW4B-A3F22-①
40mm Mushroom Head 	1NO	HW1B-M4F10-①	HW1B-A4F10-①	HW4B-M4F10-①	HW4B-A4F10-①
	1NC	HW1B-M4F01-①	HW1B-A4F01-①	HW4B-M4F01-①	HW4B-A4F01-①
	1NO-1NC	HW1B-M4F11-①	HW1B-A4F11-①	HW4B-M4F11-①	HW4B-A4F11-①
	2NO	HW1B-M4F20-①	HW1B-A4F20-①	HW4B-M4F20-①	HW4B-A4F20-①
	2NC	HW1B-M4F02-①	HW1B-A4F02-①	HW4B-M4F02-①	HW4B-A4F02-①
	2NO-2NC	HW1B-M4F22-①	HW1B-A4F22-①	HW4B-M4F22-①	HW4B-A4F22-①
60mm Jumbo Mushroom Head 	1NO	HW1B-M5F10-①*	—	—	—
	1NC	HW1B-M5F01-①*	—	—	—
	1NO-1NC	HW1B-M5F11-①*	—	—	—
	2NO	HW1B-M5F20-①*	—	—	—
	2NC	HW1B-M5F02-①*	—	—	—
	2NO-2NC	HW1B-M5F22-①*	—	—	—
Square Flush 	1NO	HW2B-M1F10-①	HW2B-A1F10-①	—	—
	1NC	HW2B-M1F01-①	HW2B-A1F01-①	—	—
	1NO-1NC	HW2B-M1F11-①	HW2B-A1F11-①	—	—
	2NO	HW2B-M1F20-①	HW2B-A1F20-①	—	—
	2NC	HW2B-M1F02-①	HW2B-A1F02-①	—	—
	2NO-2NC	HW2B-M1F22-①	HW2B-A1F22-①	—	—
Square Extended 	1NO	HW2B-M2F10-①	HW2B-A2F10-①	—	—
	1NC	HW2B-M2F01-①	HW2B-A2F01-①	—	—
	1NO-1NC	HW2B-M2F11-①	HW2B-A2F11-①	—	—
	2NO	HW2B-M2F20-①	HW2B-A2F20-①	—	—
	2NC	HW2B-M2F02-①	HW2B-A2F02-①	—	—
	2NO-2NC	HW2B-M2F22-①	HW2B-A2F22-①	—	—

① Button Color Code

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

* Grey is available for Round Flush models only.



1. In place of ①, specify the Button Color Code.
2. * Jumbo mushroom available only in red, green, black, and yellow.
3. For nameplates and accessories, see page A3-96 and A3-98.
4. For dimensions, see page A3-100.
5. For sub-assembly part numbers, see page A3-56.

Non-Illuminated Pushbuttons (Partial-Assemblies)

Contact Assembly + Operator Assembly + Complete Switch



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Switches & Pilot Devices

Part Numbers: Operator Assemblies

Style		Plastic Bezel	Metal Bezel
Round Flush		HW1B-M1-①	HW4B-M1-①
		HW1B-A1-①	HW4B-A1-①
Round Extended		HW1B-M2-①	HW4B-M2-①
		HW1B-A2-①	HW4B-A2-①
29mm Mushroom Head		HW1B-M3-①	HW4B-M3-①
		HW1B-A3-①	HW4B-A3-①
40mm Mushroom Head		HW1B-M4-①	HW4B-M4-①
		HW1B-A4-①	HW4B-A4-①
60mm Mushroom Head		HW1B-M5-①*	—

Style		Plastic Bezel	Metal Bezel
Square Flush		HW2B-M1-①	—
		HW2B-A1-①	—
Square Extended		HW2B-M2-①	—
		HW2B-A2-①	—



1. In place of ①, specify the Button Color Code from table below.
2. For complete sub-assemblies, see page A3-56.

Part Numbers: Contact Assemblies

Style	Contacts	Part Number
Standard Fingersafe Contacts	1NO	HW-CBF10
	1NC	HW-CBF01
	1NO/1NC	HW-CBF11
	2NO	HW-CBF20
	2NC	HW-CBF02
Spring Up Terminal Contacts	1NO	HW-CB10
	1NC	HW-CB01
	1NO/1NC	HW-CB11
	2NO	HW-CB20
	2NC	HW-CB02
	2NO/2NC	HW-CB22

① Button Color Code

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

*Grey is available for round flush only.



*60mm mushroom available in red, green, black and yellow only.

Non-Illuminated Pushbuttons (Sub-Assembled)

Contact Blocks + Adaptor & Safety Lever Lock + Anti-Rotation Ring + Operator + Button = Complete Part



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Switches & Pilot Devices

Part Numbers: Operators

Style		Plastic Bezel	Metal Bezel
Round Flush/Extended	Momentary	HW1B-M0	HW4B-M0
	Maintained	HW1B-A0	HW4B-A0
Ø 29mm Mushroom Ø 40mm Mushroom	Momentary	HW1B-M0L	HW4B-M0L
	Maintained	HW1B-A0L	HW4B-A0L
Ø 60mm Jumbo Mushroom	Momentary	HW1B-M5-①*	-
Square Flush Extended	Momentary	HW2B-M0	-
	Maintained	HW2B-A0	-

- In place of ①, specify the Button Color Code from table below.
- *60mm mushroom operator includes non-removable button (available in red, black, green and yellow only).
- For nameplates and accessories, see page A3-96.
- For dimensions, see page A3-100.

① Button Color Code

Color	Code	Color	Code
Black	B	White	W
Green	G	Yellow	Y
Red	R	Grey	N [†]
Blue	S		

- HW1B-M5 available only in black, red green and yellow.
- [†] Grey available for round flush only.

Part Numbers: Contact Blocks

Style	1NO	1NC
Standard Fingersafe Contacts (IP20)	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
Spring-Up Terminal Contacts	HW-G10 HW-G10R (early make)	HW-G01 HW-G01R (late break)
Exposed Screw Terminal Contacts	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
Dummy Block	TW-DB	



- All assembled part numbers in catalog include standard (HW-F...) contacts.
- Assembled units with spring-up terminals (HW-G...) can be ordered by removing an "F" from the part number (Ex. HW1B-M1F11-R becomes HW1B-M111-R).
- Units with exposed screw terminals (HW-C...) must be ordered as sub-components.
- All contacts (including non-fingersafe versions) are UL, CSA, and IEC compliant and carry the CE mark.

Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL



Use with notched panel cutout to prevent unit rotation.

Part Numbers: Buttons

Style	Part Number
Round Flush	HW1A-B1-①
Round Extended	HW1A-B2-①
Ø 29mm Mushroom Cap	HW1A-B3-①
Ø 40mm Mushroom Cap	HW1A-B4-①
Square Flush	HW2A-B1-①
Square Extended	HW2A-B2-①

Part Number: Contact Block Mounting Adaptor (safety lever lock included)

Style	Part Number
	HW-CB2C




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

Emergency Stop Pushbuttons (Assembled)

Part Numbers: Non-Illuminated Emergency Stop Pushbuttons

Style	Contact	Plastic Bezel	Metal Bezel
ø 40mm Head Push-Pull 	1NO 1NC 1NO-1NC 2NC 2NO	HW1B-Y2F10-①† HW1B-Y2F01-①† HW1B-Y2F11-①† HW1B-Y2F02-①† HW1B-Y2F20-①†	HW4B-Y2F10-①† HW4B-Y2F01-①† HW4B-Y2F11-①† HW4B-Y2F02-①† HW4B-Y2F20-①†
ø 29mm Head Pushlock Turn Reset 	1NO 1NC 1NO-1NC 2NO 2NC	HW1B-V3F10-R* HW1B-V3F01-R* HW1B-V3F11-R* HW1B-V3F20-R* HW1B-V3F02-R*	HW4B-V3F10-R* HW4B-V3F01-R* HW4B-V3F11-R* HW4B-V3F20-R* HW4B-V3F02-R*
ø 40mm Head Pushlock Turn Reset 	1NO 1NC 1NO-1NC 2NO 2NC	HW1B-V4F10-①† HW1B-V4F01-①† HW1B-V4F11-①† HW1B-V4F20-①† HW1B-V4F02-①†	HW4B-V4F10-①† HW4B-V4F01-①† HW4B-V4F11-①† HW4B-V4F20-①† HW4B-V4F02-①†
ø 40mm Head EMO Pushlock Turn Reset 	1NO 1NC 1NO-1NC 2NO 2NC	HW1B-V4F10-R-EMO-2 HW1B-V4F01-R-EMO-2 HW1B-V4F11-R-EMO-2 HW1B-V4F20-R-EMO-2 HW1B-V4F02-R-EMO-2	HW4B-V4F10-R-EMO-2 HW4B-V4F01-R-EMO-2 HW4B-V4F11-R-EMO-2 HW4B-V4F20-R-EMO-2 HW4B-V4F02-R-EMO-2
ø 40mm Head Pushlock Key Reset 	1NO 1NC 1NO-1NC 2NO 2NC	HW1B-X4F10-R* HW1B-X4F01-R* HW1B-X4F11-R* HW1B-X4F20-R* HW1B-X4F02-R*	HW4B-X4F10-R* HW4B-X4F01-R* HW4B-X4F11-R* HW4B-X4F20-R* HW4B-X4F02-R*
ø 60mm Head Pushlock Turn Reset 	1NO 1NC 1NO-1NC 2NO 2NC	HW1B-V5F10-R* HW1B-V5F01-R* HW1B-V5F11-R* HW1B-V5F20-R* HW1B-V5F02-R*	-
ø 40mm Head Unibody Pushlock Turn Reset 	1NO-1NC 2NC 1NO-2NC	HW1E-BV4F11-R* HW1E-BV4F02-R* HW1E-BV412R-TK2093-1**	-

Part Numbers: Illuminated Emergency Stop Pushbuttons

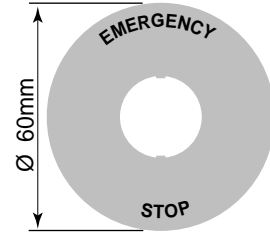
Style	Illumination Type	Contact	Part Number
	LED	1NO-1NC 2NC 2NC (with active lamp circuit) 1NO-1NC (with active lamp circuit)	HW1E-LV4F11QD-R*-③ HW1E-LV4F02QD-R*-③ HW1E-TV4F02QD-R*-③ HW1E-TV4F11QD-R*-③
	Incandescent	1NO-1NC 2NC 1NO-1NC (with active lamp circuit) 2NC (with active lamp circuit)	HW1E-LV4F11Q-R*-③ HW1E-LV4F02Q-R*-③ HW1E-TV4F11Q-R*-③ HW1E-TV4F02Q-R*-③



- * Available in Red only.
- † Available in red or yellow (insert color code in place of ①)
- In place of ③, specify Full Voltage 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 active lamp circuit model).
- For nameplates and accessories, see page A3-96.
- For dimensions, see page A3-100.
- For sub-assembly part numbers, see next page.
- All HW series E-stops comply with EN418, 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.
- "Active Lamp Circuit" consists of a built-in Normally Open contact in series with the lamp. This allows the lamp to illuminate only when the button is pressed and eliminates the need for external jumpering.
- Replacement Lens is HWLV-LENSR.

Part Numbers: Nameplates

HWAV-Yellow Plastic



Style	Part Number
60mm Diameter "Emergency Stop"	HWAV-27†
60mm Diameter Blank	HWAV-0
80mm Diameter "Emergency Stop" (for jumbo mushroom use)	HWAV5-27



† HWAV-27 comes marked "Emergency Stop" as shown in drawing.

Part Numbers: E-Stop Shrouds

Style	Part Number
	HW9Z-KG1-TK2120
	HW9Z-KG2-TK2120



Not applicable for 60mm mushroom.

Terminal Numbering (Unibody only)

Models	Terminal Number
1NO-1NC	NO = .3/.4, NC = .1/.2
2NC	NC = 11/12, NC = 21/22
HW1E-L HW1E-T	Lamp + = X2, Lamp - = X1

③ Full Voltage Code

Voltage	Code
6VAC/DC	6V
12VAC/DC	12V
24VAC/DC	24V

Emergency Stop Pushbuttons (Partial-Assemblies)

Contact Assembly + Anti-Rotation Ring + Operator Assembly + Complete Switch



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Switches & Pilot Devices

Part Numbers: Operators

Style		Plastic Bezel	Metal Bezel
		HW1B-V3R*	HW4B-V3R*
	red	HW1B-V4R	HW4B-V4R
	yellow	HW1B-V4Y	HW4B-V4Y
		HW1B-V4R-EMO-2*	HW4B-V4R-EMO-2*
	red	HW1B-Y2R	HW4B-Y2R
	yellow	HW1B-Y2Y	HW4B-Y2Y
		HW1B-X4R*	HW4B-X4R*
		HW1B-V5R*	-

Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL



Use with notched panel cutout to prevent unit rotation.



- *Available in red only.
- All HW Series Emergency Stop operators include non-removable color caps.
- All HW Series Emergency Stop operators comply with EN418 "E-Stop Addendum to the Low Voltage Directive" (when used as part of a complete HW series Emergency Stop Pushbutton).
- All HW series Emergency Stop switches comply with SEMI S2 standards.

Part Numbers: Contact Assemblies

Style	Contacts	Part Number
	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CBF10 HW-CBF01 HW-CBF11 HW-CBF20 HW-CBF02 HW-CBF22
	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CB10 HW-CB01 HW-CB11 HW-CB20 HW-CB02 HW-CB22



Gold contact option is available for spring-up terminals. Add suffix "MAU" to end of part number. For example, HW-CB20 becomes HW-CB20-MAU.

Emergency Stop Pushbuttons (Sub-Assembled)

Contact Blocks + Adaptor & Safety Lever Lock + Anti-Rotation Ring + Operator = Complete Part





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Part Numbers: Emergency Stop Operators

Style	Plastic	Metal
 ø 29mm Head Pushlock Turn Reset	HW1B-V3R*	HW4B-V3R*
 ø 40mm Head Pushlock Turn Reset	red HW1B-V4R	HW4B-V4R
	yellow HW1B-V4Y	HW4B-V4Y
 ø 40mm Head EMO Pushlock Turn Reset	HW1B-V4R-EMO-2*	HW4B-V4R-EMO-2*
 ø 40mm Head Push-Pull	red HW1B-Y2R	HW4B-Y2R
	yellow HW1B-Y2Y	HW4B-Y2Y
 ø 40mm Head Pushlock Key Reset	HW1B-X4R*	HW4B-X4R*
 ø 60mm Head Pushlock Turn Reset	HW1B-V5R*	-





-  1. *Available in red only.
-  2. All Emergency Stop Buttons are non-removable from the operator.





Part Number: Contact Block Mounting Adaptor (safety lever lock included)

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 (included) to prevent heavy vibration or maintenance personnel from unlocking contacts.

Part Numbers: Contact Blocks

Description	Part Number	
	1NO	1NC
 Standard Fingersafe (IP20)	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
 Spring-Up Terminal Contacts	HW-G10 HW-G10R (early make) HW-G10-MAU (gold contacts)	HW-G01 HW-G01R (late break) HW-G01-MAU (gold contacts)
 Exposed Screw Terminal Contacts	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
 Dummy Block	TW-DB	

-  1. All assembled part numbers in catalog include standard (HW-F..) contacts. (except unibody)
-  2. Assembled units with spring-up terminals (HW-G...) can be ordered by removing an "F" from the part number (Ex. HW1B-M1F11-R becomes HW1B-M111-R).
-  3. Units with exposed screw terminals (HW-C...) must be ordered as sub-components.
-  4. All contacts (including exposed screw) are UL, CSA, and IEC compliant and carry the CE mark.

Part Numbers: Anti-Rotation Ring


Appearance	Part Number
	HW9Z-RL

-  Use with notched panel cutout to prevent unit rotation.

Emergency Stop Stations

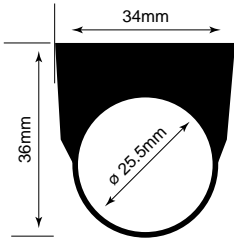
Part Numbers: Emergency Stop Stations


Description	Contacts	Plastic Bezel	Metal Bezel
Ø 40mm Pushlock Turn Reset	1NO-1NC	HW1X-BV411-R*	HW4X-BV411-R*
	2NC	HW1X-BV402-R*	HW4X-BV402-R*
Ø 29mm Pushlock Turn Reset	1NO-1NC	HW1X-BV311-R*	HW4X-BV311-R*
	2NC	HW1X-BV302-R*	HW4X-BV302-R*
Ø 40mm Push-Pull Reset	1NO-1NC	HW1X-BY411-R*	HW4X-BY411-R*
	2NC	HW1X-BY402-R*	HW4X-BY402-R*
Ø 40mm Pushlock Key Reset	1NO-1NC	HW1X-BX411-R*	HW4X-BX411-R*
	2NC	HW1X-BX402-R*	HW4X-BX402-R*

-  1. * Available in Red only.
 2. Maximum of two contact blocks.
 3. Available as completed unit only.
 4. Box is supplied with yellow top and black bottom only.



Part Numbers: Nameplates for Emergency Stop Stations

NSA-Aluminum	Color	Part Number	
		Blank	Engraved
	Black	NSA-0	NSA-*
	Red	NSA-0R	NSA-*R

-  1. In place of * please insert the word, letters, or numbers you would like engraved. For standard engravings, see page A3-96.
 2. For specifications on engravings, please consult factory.

Part Numbers: Base Mount Contact Blocks

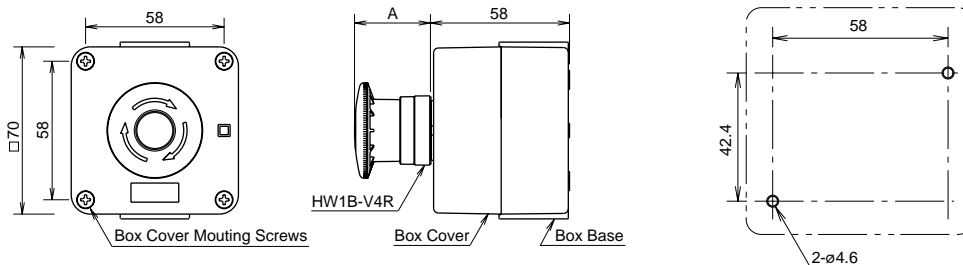
Configuration	Part Number
1NO	HW-S10
1NC	HW-S01



Part Numbers: Plug Adaptors





Type	Part Number
G1/2	HW9Z-G
PG16	HW9Z-PG

Panel Mount Dimensions



Pilot Lights (Assembled)

Part Numbers: Pilot Lights

Style			Plastic Bezel	Metal Bezel
Round Flush  (Full Voltage type shown)	Full Voltage		HW1P-1FQ ^④ - ^② - ^③	HW4P-1FQ ^④ - ^② - ^③
	Transformer	120V AC 240V AC 480V AC	HW1P-1FH2 ^④ - ^② HW1P-1FM4 ^④ - ^② HW1P-1FT8 ^④ - ^②	HW4P-1FH2 ^④ - ^② HW4P-1FM4 ^④ - ^② HW4P-1FT8 ^④ - ^②
	DC-DC Converter*	110V DC	HW1P-1D2 ^④ - ^②	-
Dome  (Full Voltage type shown)	Full Voltage		HW1P-2FQ ^④ - ^② - ^③	HW4P-2FQ ^④ - ^② - ^③
	Transformer	120V AC 240V AC 480V AC	HW1P-2FH2 ^④ - ^② HW1P-2FM4 ^④ - ^② HW1P-2FT8 ^④ - ^②	HW4P-2FH2 ^④ - ^② HW4P-2FM4 ^④ - ^② HW4P-2FT8 ^④ - ^②
	DC-DC Converter*	110V DC	HW1P-2D2 ^④ - ^②	-
Square Flush  (Transformer type shown)	Full Voltage		HW2P-1FQ ^④ - ^② - ^③	-
	Transformer	120V AC 240V AC 480V AC	HW2P-1FH2 ^④ - ^② HW2P-1FM4 ^④ - ^② HW2P-1FT8 ^④ - ^②	-
	DC-DC Converter*	110V DC	HW2P-1D2 ^④ - ^②	-
Jumbo Dome 	Full Voltage** 24V AC/DC	LED	HW1P-5Q4- ^②	-
		Incandescent	HW1P-5Q7- ^②	



- In place of ^②, specify the Lens/LED Color Code.
- In place of ^③ specify the Full Voltage Code from table below.
- In place of ^④ specify Lamp Type Code.
- *DC-DC convertor voltage input from 90-140V DC, comes with spring up terminals only.
- **Available with spring up terminals and 24V only.
- For nameplates and accessories, see page A3-96.
- For dimensions, see page A3-100.

② Lens/LED Color Code

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

③ Full Voltage Code

Voltage	Code
6V AC/DC	6
12V AC/DC	12
24V AC/DC	24
120V AC (LED only)	120
240VAC (LED only)	240

④ Lamp Type Code

Lamp	Code
Incandescent	Blank
LED	D

Pilot Lights (Partial-Assemblies)

Full Voltage Models

A3

Switches & Pilot Devices

Operator/Lens + Lamp = Complete Pilot Light



Part Numbers: Operator/Lens

Style	Plastic Bezel	Metal Bezel
Round Flush 	HW1P-1FQ0-②	HW4P-1FQ0-②
Dome 	HW1P-2FQ0-②	HW4P-2FQ0-②
Square Flush 	HW2P-1FQ0-②	-

Part Numbers: Lamps

Type	Voltage	Part Number
LED 	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
	240V AC	LSTD-M4②
Incandescent 	6.3V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24
	30V AC/DC	IS-30



- In place of ②, specify the LED Color Code from table on previous page.
- The LED contains a current-limiting resistor and reverse polarity protection diodes.



- In place of ②, specify the Lens Color Code from table on previous page.
- Operator/Lens assembly for use with standard transformers only, not spring up terminal type.

Transformer Models

Transformer/Lamp + Operator/Lens = Complete



Part Numbers: Operator/Lens

Style	Plastic Bezel	Metal Bezel
Round Flush 	HW1P-1F0-②	HW4P-1F0-②
Dome 	HW1P-2F0-②	HW4P-2F0-②
Square Flush 	HW2P-1F0-②	-

Part Numbers: Transformer/Lamp

Item	Voltage	Part Number
	120V AC with LED	HW-FH2-②
	240V AC with LED	HW-FM4-②
	480V AC with LED	HW-FT8-②
	120V AC with Incandescent	HW-FH2
	240V AC with Incandescent	HW-FM4
	480V AC with Incandescent	HW-FT8



- In place of ②, specify the LED Color Code from table on previous page.
- All transformers have a 6V AC secondary voltage.
- LED/Lamp supplied with transformer partial assembly.



In place of ②, specify the Lens Color Code from table on previous page.

Pilot Lights (Sub-Assembled)

Transformer* + Lamp + Anti-Rotation Ring + Operator + Lens = Complete Part




* Not applicable to full voltage units.

Part Numbers: Operators

Style	Type	Plastic Bezel	Metal Bezel
 Round Flush (HW1P-10 shown)	Full Voltage	Standard	HW1P-1FQ0
		Spring Up Terminals	HW1P-1Q0
	Transformer	Standard	HW1P-10
		Spring Up Terminals	HW1P-100
 Dome (HW1P-20 shown)	Full Voltage	Standard	HW1P-2FQ0
		Spring Up Terminals	HW1P-2Q0
	Transformer	Standard	HW1P-20
		Spring Up Terminals	HW1P-200
 Square Flush (HW2P-10 shown)	Full Voltage	Standard	HW2P-1FQ0
		Spring Up Terminals	HW2P-1Q0
	Transformer	Standard	HW2P-10
		Spring Up Terminals	HW2P-100



- Transformer type requires separate transformer & lamp. Must select correct transformer bases on standard or spring up terminal type. Use 6V lamps or LEDs.
- Full voltage type only requires lamp.

Part Numbers: Transformer Units

Style	Voltage	Part Number
 LED/Incandescent (6V secondary voltage)	120V AC	HW-FH20 HW-MH20 (with spring up terminals)*
	240V AC	HW-FM40 HW-MM40 (with spring up terminals)*
	480V AC	HW-FT80 HW-RT80 (with spring up terminals)*
	110V DC**	HW-RD0 (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.

Part Numbers: Lamps

Type	Voltage	Part Number	② Lens/LED Color Code	
			Color	Code
 LED	6V AC/DC	LSTD-6②	Amber	A
	12V AC/DC	LSTD-1②	Green	G
	24V AC/DC	LSTD-2②	Red	R
	120V AC	LSTD-H2②	Blue	S
	240V AC	LSTD-M4②	White	W
 Incandescent	6.3V AC/DC	IS-6	Yellow	Y
	12V AC/DC	IS-12		
	24V AC/DC	IS-24		




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

Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

Use with notched panel cutout to prevent unit rotation.

Part Numbers: Lenses

Style	Part Number
 Round/Flush	HW1A-P1-②
 Dome	HW1A-P2-②
 Square/Flush	HW2A-P1-②

In place of ②, specify the Lens Color Code.

Jumbo Dome Pilot Light Replacement Parts

Description	Item	Part Number
Replacement Jumbo Dome Operator	LED Type	HW1P-5Q0
	Incandescent Type*	HW1P-5Q7
Replacement Jumbo Dome Lens	Polycarbonate Lens	HW1A-P5① ① = (A, G, R, S, W, Y)
Replacement LED Diffusing Lens		HW9Z-PP5C
Replacement LED Lamps for HW Jumbo Dome	LED Lamp	LSTDDB-2① ① = (A, G, R, S, W, Y)

*Operator comes with incandescent bulb.

Illuminated Pushbuttons (Assembled)

Part Numbers: Illuminated Pushbuttons

A3

Switches & Pilot Devices

Style	Description	Contacts	Plastic Bezel		Metal Bezel	
			Momentary	Maintained	Momentary	Maintained
Flush 	Full Voltage	1NO 1NC 1NO-1NC 2NO	HW1L-M1F10Q④-②-③ HW1L-M1F01Q④-②-③ HW1L-M1F11Q④-②-③ HW1L-M1F20Q④-②-③	HW1L-A1F10Q④-②-③ HW1L-A1F01Q④-②-③ HW1L-A1F11Q④-②-③ HW1L-A1F20Q④-②-③	HW4L-M1F10Q④-②-③ HW4L-M1F01Q④-②-③ HW4L-M1F11Q④-②-③ HW4L-M1F20Q④-②-③	HW4L-A1F10Q④-②-③ HW4L-A1F01Q④-②-③ HW4L-A1F11Q④-②-③ HW4L-A1F20Q④-②-③
	Transformer 120V AC 240V AC 240V AC	1NO-1NC 2NO 1NO-1NC 2NO	HW1L-M1F11H2④-② HW1L-M1F20H2④-② HW1L-M1F11M4④-② HW1L-M1F20M4④-②	HW1L-A1F11H2④-② HW1L-A1F20H2④-② HW1L-A1F11M4④-② HW1L-A1F20M4④-②	HW4L-M1F11H2④-② HW4L-M1F20H2④-② HW4L-M1F11M4④-② HW4L-M1F20M4④-②	HW4L-A1F11H2④-② HW4L-A1F20H2④-② HW4L-A1F11M4④-② HW4L-A1F20M4④-②
Extended 	Full Voltage	1NO 1NC 1NO-1NC 2NO	HW1L-M2F10Q④-②-③ HW1L-M2F01Q④-②-③ HW1L-M2F11Q④-②-③ HW1L-M2F20Q④-②-③	HW1L-A2F10Q④-②-③ HW1L-A2F01Q④-②-③ HW1L-A2F11Q④-②-③ HW1L-A2F20Q④-②-③	HW4L-M2F10Q④-②-③ HW4L-M2F01Q④-②-③ HW4L-M2F11Q④-②-③ HW4L-M2F20Q④-②-③	HW4L-A2F10Q④-②-③ HW4L-A2F01Q④-②-③ HW4L-A2F11Q④-②-③ HW4L-A2F20Q④-②-③
	Transformer 120V AC 240V AC 240V AC	1NO-1NC 2NO 1NO-1NC 2NO	HW1L-M2F11H2④-② HW1L-M2F20H2④-② HW1L-M2F11M4④-② HW1L-M2F20M4④-②	HW1L-A2F11H2④-② HW1L-A2F20H2④-② HW1L-A2F11M4④-② HW1L-A2F20M4④-②	HW4L-M2F11H2④-② HW4L-M2F20H2④-② HW4L-M2F11M4④-② HW4L-M2F20M4④-②	HW4L-A2F11H2④-② HW4L-A2F20H2④-② HW4L-A2F11M4④-② HW4L-A2F20M4④-②
Extended with Full Shroud 	Full Voltage	1NO 1NC 1NO-1NC 2NO	HW1L-MF2F10Q④-②-③ HW1L-MF2F01Q④-②-③ HW1L-MF2F11Q④-②-③ HW1L-MF2F20Q④-②-③	HW1L-AF2F10Q④-①-③ HW1L-AF2F01Q④-①-③ HW1L-AF2F11Q④-①-③ HW1L-AF2F20Q④-①-③	HW4L-MF2F10Q④-②-③ HW4L-MF2F01Q④-②-③ HW4L-MF2F11Q④-②-③ HW4L-MF2F20Q④-②-③	HW4L-AF2F10Q④-①-③ HW4L-AF2F01Q④-①-③ HW4L-AF2F11Q④-①-③ HW4L-AF2F20Q④-①-③
	Transformer 120V AC 240V AC 240V AC	1NO-1NC 2NO 1NO-1NC 2NO	HW1L-MF2F11H2④-② HW1L-MF2F20H2④-② HW1L-MF2F11M4④-② HW1L-MF2F20M4④-②	HW1L-AF2F11H2④-② HW1L-AF2F20H2④-② HW1L-AF2F11M4④-② HW1L-AF2F20M4④-②	HW4L-MF2F11H2④-② HW4L-MF2F20H2④-② HW4L-MF2F11M4④-② HW4L-MF2F20M4④-②	HW4L-AF2F11H2④-② HW4L-AF2F20H2④-② HW4L-AF2F11M4④-② HW4L-AF2F20M4④-②
40mm Mushroom Head 	Full Voltage	1NO 1NC 1NO-1NC 2NO	HW1L-M4F10Q④-②-③ HW1L-M4F01Q④-②-③ HW1L-M4F11Q④-②-③ HW1L-M4F20Q④-②-③	HW1L-A4F10Q④-②-③ HW1L-A4F01Q④-②-③ HW1L-A4F11Q④-②-③ HW1L-A4F20Q④-②-③	HW4L-M4F10Q④-②-③ HW4L-M4F01Q④-②-③ HW4L-M4F11Q④-②-③ HW4L-M4F20Q④-②-③	HW4L-A4F10Q④-②-③ HW4L-A4F01Q④-②-③ HW4L-A4F11Q④-②-③ HW4L-A4F20Q④-②-③
	Transformer 120V AC 240V AC 240V AC	1NO-1NC 2NO 1NO-1NC 2NO	HW1L-M4F11H2④-② HW1L-M4F20H2④-② HW1L-M4F11M4④-② HW1L-M4F20M4④-②	HW1L-A4F11H2④-② HW1L-A4F20H2④-② HW1L-A4F11M4④-② HW1L-A4F20M4④-②	HW4L-M4F11H2④-② HW4L-M4F20H2④-② HW4L-M4F11M4④-② HW4L-M4F20M4④-②	HW4L-A4F11H2④-② HW4L-A4F20H2④-② HW4L-A4F11M4④-② HW4L-A4F20M4④-②
Square Flush 	Full Voltage	1NO 1NC 1NO-1NC 2NO	HW2L-M1F10Q④-②-③ HW2L-M1F01Q④-②-③ HW2L-M1F11Q④-②-③ HW2L-M1F20Q④-②-③	HW2L-A1F10Q④-②-③ HW2L-A1F01Q④-②-③ HW2L-A1F11Q④-②-③ HW2L-A1F20Q④-②-③	-	-
	Transformer 120V AC 240V AC 240V AC	1NO-1NC 2NO 1NO-1NC 2NO	HW2L-M1F11H2④-② HW2L-M1F20H2④-② HW2L-M1F11M4④-② HW2L-M1F20M4④-②	HW2L-A1F11H2④-② HW2L-A1F20H2④-② HW2L-A1F11M4④-② HW2L-A1F20M4④-②	-	-

1. In place of ② specify the Lens Color Code, in place of ③ specify the Full Voltage Code and in place of ④ specify Lamp Type Code.
2. For partial and sub-assembly part numbers, see pages A3-65 and A3-66.
3. For nameplates and accessories, see page A3-96.
4. For dimensions, see page A3-100.

④ Lamp Type Code

Lamp	Code
Incandescent	Blank
LED	D

② Lens Color Code

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

③ Full Voltage Codes

Voltage	Code
6V AC/DC	6V
12V AC/DC	12V
24V AC/DC	24V
120V AC (LED only)	120V
240VAC (LED only)	240V

*40mm mushroom lenses not available in yellow

Illuminated Pushbuttons (Partial-Assemblies)

Contact Assembly + Lamp* + Operator/Lens = Complete Switch



*Lamp is included in contact assembly for transformer models only.


Part Numbers: Operators/Lens

Type		Plastic Bezel	Metal Bezel
 Flush	Momentary	HW1L-M1-②	HW4L-M1-②
	Maintained	HW1L-A1-②	HW4L-A1-②
 Extended	Momentary	HW1L-M2-②	HW4L-M2-②
	Maintained	HW1L-A2-②	HW4L-A2-②
 Extended/Full shroud	Momentary	HW1L-MF2-②	HW4L-MF2-②
	Maintained	HW1L-AF2-②	HW4L-AF2-②
 Mushroom*	Momentary	HW1L-M4-②*	HW4L-M4-②*
	Maintained	HW1L-A4-②*	HW4L-A4-②*
 Square	Momentary	HW2L-M1-②	-
	Maintained	HW2L-A1-②	



1. In place of ②, specify the Lens Color Code.
2. *Mushroom Lens not available in yellow.


Part Numbers: Full Voltage Contact Assemblies (order lamp separately)

Style	Contacts	Part Number
	1NO	HW-FL10Q0
	2NO	HW-FL20Q0
	1NO/1NC	HW-FL11Q0
	1NC	HW-FL01Q0
	2NC	HW-FL02Q0





Order lamp separately.

Part Numbers: Transformer Contact Assemblies (lamp included)

Style	Contacts	Part Number
 120V AC with LED	1NO	HW-FL10H2-②
	2NO	HW-FL20H2-②
	1NC	HW-FL01H2-②
	1NO/1NC	HW-FL11H2-②
240V AC with LED	1NO	HW-FL10M4-②
	2NO	HW-FL20M4-②
	1NC	HW-FL01M4-②
	1NO/1NC	HW-FL11M4-②
480V AC with LED	1NO	HW-FL10T8-②
	2NO	HW-FL20T8-②
	1NC	HW-FL01T8-②
	1NO/1NC	HW-FL11T8-②
120V AC with Incandescent	1NO	HW-FL10H2
	2NO	HW-FL20H2
	1NC	HW-FL01H2
	1NO/1NC	HW-FL11H2
240V AC with Incandescent	1NO	HW-FL10M4
	2NO	HW-FL20M4
	1NC	HW-FL01M4
	1NO/1NC	HW-FL11M4

Part Numbers: Lamps

Type	Voltage	Part Number
 LED	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
	240V AC	LSTD-M4②
 Incandescent	6.3V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24
	30V AC/DC	IS-30



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

② Lens/LED Color Code

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

Illuminated Pushbuttons (Sub-Assembled)

Part Numbers: LED and Incandescent Illuminated Pushbuttons

Transformer* + Contact Blocks + Lead Holder + Adaptor† + Lamp + Anti-Rotation Ring + Operator + Lens = Complete Part

A3

Switches & Pilot Devices



- 1. *Transformer not needed with full voltage types.
- 2. † Adaptor includes safety lever lock.

Part Numbers: Lenses

Style	Part Number
Round Flush 	HW1A-L1-②
Round Extended 	HW1A-L2-②
Ø 40mm Mushroom Cap 	ALW4BLU-②*
Square Flush 	HW2A-L1-②

- 1. In place of ②, specify the Lens Color Code.
- 2. *not available in yellow.

Part Numbers: Operators

Style		Part Number	
		Plastic Bezel	Metal Bezel
Round Flush/Extended 	Momentary	HW1L-M0	HW4L-M0
	Maintained	HW1L-A0	HW4L-A0
Extended with Full Shroud 	Momentary	HW1L-MF0	HW4L-MF0
	Maintained	HW1L-AF0	HW4L-AF0
Ø 40mm Mushroom Head 	Momentary	HW1L-M0L	HW4L-M0L
	Maintained	HW1L-A0L	HW4L-A0L
Square Flush 	Momentary	HW2L-M0	-
	Maintained	HW2L-A0	

② Lens/LED Color Code

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

- *ALW4BLU not available in yellow.

Illuminated Pushbuttons (Sub-Assembled) con't



Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL



Use with notched panel cutout to prevent unit rotation

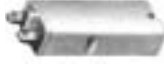



Part Numbers: Lamps

Type	Voltage	Part Number
LED 	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
Incandescent 	240V AC	LSTD-M4②
	6.3V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24
	30V AC/DC	IS-30



- In place of ②, specify the LED Color Code from table on previous page.
- The LED contains a current-limiting resistor and reverse polarity protection diodes.





Part Numbers: 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.	Fingersafe	HW-DA1FB
		Exposed	HW-DA1B
		Spring Up	HW-GA1
Full Voltage Adaptor 	For use with even number of contacts.	Fingersafe	TW-DA1FB
		Exposed	TW-DA1B
Transformer Unit 	120VAC 240VAC 480VAC	Fingersafe	TW-F126B TW-F246B TW-F486B
	120V 240V 480V	Spring Up	HW-T126 HW-T246 HW-L486
	(6V secondary voltage)	Exposed	TW-T126B TW-T246B TW-T486B
DC-DC Converter	110VDC		HW-L16D



HW-GA1 "Dummy Block with full voltage adaptor" does not require the use of HW-LH3.


Part Numbers: Contact Blocks

Description	Part Number	
	1NO	1NC
Standard Fingersafe (IP20) 	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
Spring-Up Terminal Contacts 	HW-G10 HW-G10R (early make)	HW-G01 HW-G01R (late break)
Exposed Screw Terminal Contacts 	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
Dummy Block 	TW-DB	



- All assembled part numbers in catalog include standard (HW-F...) contacts.
- Assembled units with spring-up terminals (HW-G...) can be ordered by removing an "F" from the part number (Ex. HW1B-M1F11-R becomes HW1B-M111-R).
- Units with exposed screw terminals (HW-C...) must be ordered as sub-components.

Part Numbers: Contact Block Mounting Adaptor (safety lever lock included)

Style	Part Number
	HW-CBL



- Used to mount contact blocks to operator (first pair only). Lamp holder is built-in.
- IDEC strongly recommends using the safety lever lock (included) to prevent heavy vibration or maintenance personnel from unlocking contacts.

A3

Switches & Pilot Devices

Selector Switches (Assembled)

Part Numbers: 2-Position Selector Switches

		Operator Position		Handle	Maintained	Spring Return from Right
Contact	Mounting	L	R			
					Part Number	Part Number
1NO	1	0	X	Knob Lever	HW [Ⓢ] S-2TF10 HW [Ⓢ] S-2LF10	HW [Ⓢ] S-21TF10 HW [Ⓢ] S-21LF10
1NO-1NC	1 2	0 X	X 0	Knob Lever	HW [Ⓢ] S-2TF11 HW [Ⓢ] S-2LF11	HW [Ⓢ] S-21TF11 HW [Ⓢ] S-21LF11
2NO	1 2	0 0	X X	Knob Lever	HW [Ⓢ] S-2TF20 HW [Ⓢ] S-2LF20	HW [Ⓢ] S-21TF20 HW [Ⓢ] S-21LF20



Part Numbers: 3-Position Selector Switches

		Operator Position			Handle	Maintained	Spring Return from Right	Spring Return from Left	Spring Return Two-Way
Contact	Mounting	L	C	R					
						Part Number	Part Number	Part Number	Part Number
1NO-1NC	1 2	0 0	X 0	X X	Knob Lever	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	1 2	X 0	0 0	0 X	Knob Lever	HW [Ⓢ] S-3TF20 HW [Ⓢ] S-3LF20	HW [Ⓢ] S-31TF20 HW [Ⓢ] S-31LF20	HW [Ⓢ] S-32TF20 HW [Ⓢ] S-32LF20	HW [Ⓢ] S-33TF20 HW [Ⓢ] S-33LF20
2NO-1NC	1 2 3	X 0 0	0 0 X	0 X 0	Knob	HW [Ⓢ] S-3JTF21N1	—	—	—
2NO-2NC	1 2 3 4	X 0 0 X	0 0 X X	0 X X 0	Knob	HW [Ⓢ] S-3TF22	HW [Ⓢ] S-31TF22	HW [Ⓢ] S-32TF22	HW [Ⓢ] S-33TF22

Ⓢ Bezel Type

Type	Code
Plastic	1
Metal	4

Part Numbers: 4-Position Selector Switch

		Operator Position				Handle	Maintained Part Number
Contact	Mounting	1	2	3	4		
1NO 3NC	1 2 3 4	0 0 0 0	X X 0 0	X 0 X 0	X 0 0 X	Knob Lever	HW [Ⓢ] S-4TF13N6 HW [Ⓢ] S-4LF13N6
2NO-2NC	1 2 3 4	X 0 0 0	0 X 0 0	0 0 X 0	0 0 0 X	Knob Lever	HW [Ⓢ] S-4TF22N3 HW [Ⓢ] S-4LF22N3

Part Numbers: 5-Position Selector Switch

		Operator Position					Handle	Maintained Part Number
Contact	Mounting	1	2	3	4	5		
2NO-2NC	1 2 3 4	X 0 0 0	0 X 0 0	0 0 0 0	0 0 X 0	0 0 0 X	Knob Lever	HW [Ⓢ] S-5TF22N3 HW [Ⓢ] S-5LF22N3



1. In place of Ⓢ enter 1 for plastic bezel or 4 for metal bezel.
2. Mounting refers to contact location on operator. See page A3-82.
3. For nameplates, see page A3-96.
4. Custom contact arrangements available. Contact IDEC for details.
5. Five position circuit cannot be made to make five independent contact closures.

Selector Switches (Partial-Assemblies)

Contact Assembly + Operator = Complete Part



A3

Switches & Pilot Devices

Part Numbers: Operators

	No. of Positions	Description	Handle	Plastic Bezel	Metal Bezel	
<p>Knob Operator (plastic bezel) Knob Operator (metal bezel)</p> <p>Lever Operator (plastic bezel)</p>	2	Maintained	Knob	HW1S-2T	HW4S-2T	
			Lever	HW1S-2L	HW4S-2L	
			Spring Return from Right	Knob	HW1S-21T	HW4S-21T
				Lever	HW1S-21L	HW4S-21L
	3	Maintained (standard cam)	Knob	HW1S-3T*	HW4S-3T*	
			Lever	HW1S-3L	HW4S-3L	
		Maintained (S cam)	Knob	HW1S-3ST*	HW4S-3ST*	
			Knob	HW1S-3JT*	HW4S-3JT*	
		Spring Return from Right	Knob	HW1S-31T	HW4S-31T	
			Lever	HW1S-31L	HW4S-31L	
Spring Return from Left	Knob	HW1S-32T	HW4S-32T			
	Lever	HW1S-32L	HW4S-32L			
4	Maintained	Knob	HW1S-4T	HW4S-4T		
		Lever	HW1S-4L	HW4S-4L		
5	Maintained	Lever	HW1S-5T	HW4S-5T		
		Lever	HW1S-5L	HW4S-5L		



1. Knob operator includes knob.
2. * Three position operator is available with three different cams.
3. Operator cams are color coded (white=standard cam, red=S cam, black =J cam).
4. For details of determining which cam to use, see page A3-79.

Part Numbers: Contact Assemblies

Style	Contacts	Part Number
Standard Fingersafe Contacts 	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CBF10 HW-CBF01 HW-CBF11 HW-CBF20 HW-CBF02 HW-CBF22
Spring Up Terminal Contacts 	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CB10 HW-CB01 HW-CB11 HW-CB20 HW-CB02 HW-CB22

Selector Switches (Sub-Assembled)

Contact Blocks + Adaptor and Safety Lever Lock + Anti-Rotation Ring + Operator = Complete Part

A3

Switches & Pilot Devices



Part Numbers: Operators

Style	# of Positions	Description	Handle	Plastic Bezel	Metal Bezel
Knob Operator 	2	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	
Lever Operator 	3	Maintained (standard cam)	Knob	HW1S-3T*	HW4S-3T*
			Lever	HW1S-3*	HW4S-3*
		Maintained (S cam)	Knob	HW1S-3ST*	HW4S-3ST*
		Maintained (J cam)	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	
4	Maintained	Knob	HW1S-4T	HW4S-4T	
		Lever	HW1S-4	HW4S-4	
5	Maintained	Knob	HW1S-5T	HW4S-5T	
		Lever	HW1S-5	HW4S-5	

- 1. Knob operator comes with handle.
- 2. * Three position operator is available with three different cams.
- 3. Operator cams are color coded (white=standard cam, red=S cam, black =J cam).
- 4. For details of determining which cam to use, see page A3-79.
- 5. To order colored handle type, knob/lever and inserts must be ordered separately, along with lever operator. See part numbers below.

Part Numbers: Levers and Inserts

Style	Part Number
Knob 	ASWHHY-①
Lever 	ASWHHL-①
Lever Color Insert 	TW-HC1-①

① Handle/Insert Color Code

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

* Lever color inserts not available in black.
† Knob and lever not available in white.

Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL

- 1. Use with notched panel cutout to prevent unit rotation.
- 2. Not required when using HW series nameplates. See page A3-96.

Part Numbers: Contact Block Mounting Adaptor (safety lever lock included)

Appearance	Part Number
	HW-CB2C

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

Part Numbers: Contact Blocks

Description	Part Number	
	1NO	1NC
Standard Fingersafe (IP20)	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
Spring-Up Terminal Contacts	HW-G10 HW-G10R (early make)	HW-G01 HW-G01R (late break)
Exposed Screw Terminal Contacts	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
Dummy Block	TW-DB	

- 1. All assembled part numbers in catalog include standard (HW-F...) contacts.
- 2. Assembled units with spring-up terminals (HW-G...) can be ordered by removing an "F" from the part number (Ex. HW1B-M1F11-R becomes HW1B-M111-R).
- 3. Units with exposed screw terminals (HW-C...) must be ordered as sub-components.

Key Switches (Assembled)



A3

Switches & Pilot Devices

Part Numbers: 2-Position Key Switches

Contact	Mounting	Operator Position		Part Number	
		L	R	Maintained	Spring Return from Right
1NO	1	0	X		
	2	X	0		
1NO-1NC	1	0	X		
	2	X	0		
2NO	1	0	X		
	2	0	X		

Key Removable Option Codes

Code	Description
A	Key retained in NO position (removable in all positions)
B	Key retained in right position only
C	Key retained in left position only
D	Key retained in left and right (3 position only)
E	Key retained in center only (3 position only)
G	Key retained right and center (3 position only)
H	Key retained left and center (3 position only)



For more information on these options, contact your IDEC representative.

Part Numbers: 3-Position Key Switches

Contact	Mounting	Operator Position			Part Number			
		L	C	R	Maintained	Spring Return from Right	Spring Return from Left	Spring Return from Left & Right
1NO-1NC	1	0	X	X				
	2	0	0	X				
2NO	1	X	0	0				
	2	0	0	X				
2NO-2NC	1	X	0	0				
	2	0	0	X				
	3	0	X	X				
	4	X	X	0				

Ⓢ Bezel Type

Type	Code
Plastic	1
Metal	4



- In place of Ⓢ enter 1 for plastic bezel or 4 for metal bezel (see table at right).
- Key is removable in all maintained positions. Other key removable options available.
- Two keys are supplied with all switches.
- All standard operators are keyed alike (contact IDEC for special keys).
- For nameplates, see page A3-96.
- Custom contact arrangements available, contact IDEC for details.
- Mounting refers to contact location on operator. See page A3-82.

Key Switches (Partial-Assemblies)

Contact Assembly + **Operator** = **Complete Part**



A3

Switches & Pilot Devices

Part Numbers: Operators

	# of Positions	Description	Plastic Bezel	Metal Bezel
	2	Maintained	HW1K-2A	HW4K-2A
		Maintained, key remove left only	HW1K-2B	HW4K-2B
		Spring from Right	HW1K-21B	HW4K-21B
	3	Maintained, Standard Cam	HW1K-3A	HW4K-3A
		Maintained, Cam S	HW1K-3SA	HW4K-3SA
		Maintained, Cam J	HW1K-3JA	HW4K-3JA
		Spring Return from Right	HW1K-31B	HW4K-31B
		Spring Return from Left	HW1K-32C	HW4K-32C
		Two-Way Spring Return	HW1K-33D	HW4K-33D



- Operator includes two keys.
- All standard operators are keyed alike (contact IDEC for special keys).
- Other key removable options available. See "Other Key Removable Option Codes" on next page.

Part Numbers: Contact Assemblies

Style	Contacts	Part Number
Standard Fingersafe Contacts 	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CBF10 HW-CBF01 HW-CBF11 HW-CBF20 HW-CBF02 HW-CBF22
Spring Up Terminal Contacts 	1NO 1NC 1NO/1NC 2NO 2NC 2NO/2NC	HW-CB10 HW-CB01 HW-CB11 HW-CB20 HW-CB02 HW-CB22

Key Removable Option Codes

Code	Description
A	Key retained in NO position (removable in all positions)
B	Key retained in right position only
C	Key retained in left position only
D	Key retained in left and right (3 position only)
E	Key retained in center only (3 position only)
G	Key retained right and center (3 position only)
H	Key retained left and center (3 position only)



- For more information on these options, contact your IDEC representative.
- Key retained in all spring-return positions.

Key Switches (Sub-Assembled)

Contact Blocks + Adaptor & Safety Lever Lock + Anti-Rotation Ring + Operator = Complete Part



A3

Switches & Pilot Devices


Part Numbers: Operators

# of Positions	Description	Plastic Bezel	Metal Bezel
2	Maintained	HW1K-2A	HW4K-2A
	Maintained, key remove left only	HW1K-2B	HW4K-2B
	Spring from Right	HW1K-21B	HW4K-21B
3	Maintained, Standard Cam	HW1K-3A	HW4K-3A
	Maintained, Cam S	HW1K-3SA	HW4K-3SA
	Maintained, Cam J	HW1K-3JA	HW4K-3JA
	Spring Return from Right	HW1K-31B	HW4K-31B
	Spring Return from Left	HW1K-32C	HW4K-32C
	Two-Way Spring Return	HW1K-33D	HW4K-33D



- Operator includes two keys.
- All standard operators are keyed alike (contact IDEC for special keys).
- Other key removable options available. See table below.

Part Numbers: Contact Block Mounting Adaptor (safety lever lock included)

Style	Part Number
	HW-CB2C



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





Key Removable Option Codes

Code	Description
A	Key retained in NO position (removable in all positions)
B	Key retained in right position only
C	Key retained in left position only
D	Key retained in left and right (3 position only)
E	Key retained in center only (3 position only)
G	Key retained right and center (3 position only)
H	Key retained left and center (3 position only)



For more information on these options, contact your IDEC representative.

Part Numbers: Contact Blocks

Description	Part Number	
	1NO	1NC
Standard Fingersafe (IP20) 	HW-F10 HW-F10R (early make)	HW-F01 HW-F01R (late break)
Spring-Up Terminal Contacts 	HW-G10 HW-G10R (early make)	HW-G01 HW-G01R (late break)
Exposed Screw Terminal Contacts 	HW-C10 HW-C10R (early make)	HW-C01 HW-C01R (late break)
Dummy Block 	TW-DB	



- All assembled part numbers in catalog include standard (HW-F...) contacts.
- Assembled units with spring-up terminals (HW-G...) can be ordered by removing an "F" from the part number (Ex. HW1B-M1F11-R becomes HW1B-M111-R).
- Units with exposed screw terminals (HW-C...) must be ordered as sub-components.

Part Numbers: Anti-Rotation Ring

Appearance	Part Number
	HW9Z-RL



- Use with notched panel cutout to prevent unit rotation (not included with assembled units).
- Not required when using HW series nameplates. See page A3-96.


Illuminated Selector Switches (Assembled)

A3

Switches & Pilot Devices



Part Numbers: 2-Position LED/Incandescent Selector Switches

Plastic Bezel	Operator Position				Type	Part Number	
	Contact	Mounting	L	R		Maintained	Spring Return From Right
	1NO-1NC	1 2	0	X	Full Voltage	HW ^⑤ F-2F11Q ^④ - ^② - ^③	HW ^⑤ F-21F11Q ^④ - ^② - ^③
			X	0	Transformer	120V HW ^⑤ F-2F11H2 ^④ - ^② 240V HW ^⑤ F-2F11M4 ^④ - ^② 480V HW ^⑤ F-2F11T8 ^④ - ^②	HW ^⑤ F-21F11H2 ^④ - ^② HW ^⑤ F-21F11M4 ^④ - ^② HW ^⑤ F-21F11T8 ^④ - ^②
	2NO	1 2	0	X	Full Voltage	HW ^⑤ F-2F20Q ^④ - ^② - ^③	HW ^⑤ F-21F20Q ^④ - ^② - ^③
			0	X	Transformer	120V HW ^⑤ F-2F20H2 ^④ - ^② 240V HW ^⑤ F-2F20M4 ^④ - ^② 480V HW ^⑤ F-2F20T8 ^④ - ^②	HW ^⑤ F-21F20H2 ^④ - ^② HW ^⑤ F-21F20M4 ^④ - ^② HW ^⑤ F-21F20T8 ^④ - ^②
	2NO-2NC	1 2 3 4	0	X	Full Voltage	HW ^⑤ F-2F22Q ^④ - ^② - ^③	HW ^⑤ F-21F22Q ^④ - ^② - ^③
			X	0	Transformer	120V HW ^⑤ F-2F22H2 ^④ - ^② 240V HW ^⑤ F-2F22M4 ^④ - ^② 480V HW ^⑤ F-2F22T8 ^④ - ^②	HW ^⑤ F-21F22H2 ^④ - ^② HW ^⑤ F-21F22M4 ^④ - ^② HW ^⑤ F-21F22T8 ^④ - ^②



- In place of ^② specify the Lens/LED color code.
- In place of ^③ specify the Full Voltage code.
- In place of ^④ specify Lamp Type code.
- In place of ^⑤ enter 1 for plastic bezel or 4 for metal bezel (see table below).
- For nameplates, see page A3-96.
- For partial and sub-assembly part numbers, see pages A3-76 and A3-77.
- Mounting refers to contact location on operator. See page A3-82.

^② Lens/LED Color Code

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

^③ Full Voltage Code

Voltage	Code
6V AC/DC	6V
12V AC/DC	12V
24V AC/DC	24V
120V AC (LED only)	120 V
240V AC (LED only)	240 V

^④ Lamp Type Code

Lamp	Code
Incandescent	Blank
LED	D

^⑤ Bezel Type

Type	Code
Plastic	1
Metal	4

Illuminated Selector Switches (Assembled) con't

Part Numbers: 3-Position LED/Incandescent Selector Switches

Contact	Mounting	Operator Position			Type	Part Number	Part Number	Part Number	Part Number						
		L	C	R											
1NO-1NC	1	0	X	X	Full Voltage	HW5F-3F11Q4-2-3	HW5F-31F11Q4-2-3	HW5F-32F11Q4-2-3	HW5F-33F11Q4-2-3						
	2	0	0	X						Transformer	120V 240V 480V	HW5F-3F11H24-2 HW5F-3F11M44-2 HW5F-3F11T84-2	HW5F-31F11H24-2 HW5F-31F11M44-2 HW5F-31F11T84-2	HW5F-32F11H24-2 HW5F-32F11M44-2 HW5F-32F11T84-2	HW5F-33F11H24-2 HW5F-33F11M44-2 HW5F-33F11T84-2
2NO	1	X	0	0	Full Voltage	HW5F-3F20Q4-2-3	HW5F-31F20Q4-2-3	HW5F-32F20Q4-2-3	HW5F-33F20Q4-2-3						
	2	0	0	X						Transformer	120V 240V 480V	HW5F-3F20H24-2 HW5F-3F20M44-2 HW5F-3F20T84-2	HW5F-31F20H24-2 HW5F-31F20M44-2 HW5F-31F20T84-2	HW5F-32F20H24-2 HW5F-32F20M44-2 HW5F-32F20T84-2	HW5F-33F20H24-2 HW5F-33F20M44-2 HW5F-33F20T84-2
2NC	1	0	X	X	Full Voltage	HW5F-3F02Q4-2-3	HW5F-31F02Q4-2-3	HW5F-32F02Q4-2-3	HW5F-33F02Q4-2-3						
	2	X	X	0						Transformer	120V 240V 480V	HW5F-3F02H24-2 HW5F-3F02M44-2 HW5F-3F02T84-2	HW5F-31F02H24-2 HW5F-31F02M44-2 HW5F-31F02T84-2	HW5F-32F02H24-2 HW5F-32F02M44-2 HW5F-32F02T84-2	HW5F-33F02H24-2 HW5F-33F02M44-2 HW5F-33F02T84-2
2NO-2NC	1	X	0	0	Full Voltage	HW5F-3F22Q4-2-3	HW5F-31F22Q4-2-3	HW5F-32F22Q4-2-3	HW5F-33F22Q4-2-3						
	2	0	0	X						Transformer	120V 240V 480V	HW5F-3F22H24-2 HW5F-3F22M44-2 HW5F-3F22T84-2	HW5F-31F22H24-2 HW5F-31F22M44-2 HW5F-31F22T84-2	HW5F-32F22H24-2 HW5F-32F22M44-2 HW5F-32F22T84-2	HW5F-33F22H24-2 HW5F-33F22M44-2 HW5F-33F22T84-2
	3	0	X	X								4	X	X	0
4NO	1	X	0	0	Full Voltage	HW5F-3F40Q4-2-3	HW5F-31F40Q4-2-3	HW5F-32F40Q4-2-3	HW5F-33F40Q4-2-3						
	2	0	0	X						Transformer	120V 240V 480V	HW5F-3F40H24-2 HW5F-3F40M44-2 HW5F-3F40T84-2	HW5F-31F40H24-2 HW5F-31F40M44-2 HW5F-31F40T84-2	HW5F-32F40H24-2 HW5F-32F40M44-2 HW5F-32F40T84-2	HW5F-33F40H24-2 HW5F-33F40M44-2 HW5F-33F40T84-2
	3	X	0	0								4	X	0	X
4NC	1	0	X	X	Full Voltage	HW5F-3F04Q4-2-3	HW5F-31F04Q4-2-3	HW5F-32F04Q4-2-3	HW5F-33F04Q4-2-3						
	2	X	X	0						Transformer	120V 240V 480V	HW5F-3F04H24-2 HW5F-3F04M44-2 HW5F-3F04T84-2	HW5F-31F04H24-2 HW5F-31F04M44-2 HW5F-31F04T84-2	HW5F-32F04H24-2 HW5F-32F04M44-2 HW5F-32F04T84-2	HW5F-33F04H24-2 HW5F-33F04M44-2 HW5F-33F04T84-2
	3	0	X	X								4	X	0	X

A3

Switches & Pilot Devices



- In place of ② specify the Lens/LED color code.
- In place of ③ specify the Full Voltage code.
- In place of ④ specify Lamp Type code.
- In place of ⑤ enter 1 for plastic bezel or 4 for metal bezel (see table below).
- For nameplates, see page A3-96.
- For partial and sub-assembly part numbers, see pages A3-76 and A3-77.
- Mounting refers to contact location on operator. See page A3-82.

② Lens/LED Color Code

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

③ Full Voltage Code

Voltage	Code
6V AC/DC	6V
12V AC/DC	12V
24V AC/DC	24V
120V AC (LED only)	120 V
240V AC (LED only)	240 V

④ Lamp Type Code

Lamp	Code
Incandescent	Blank
LED	D

⑤ Bezel Type

Type	Code
Plastic	1
Metal	4

Illuminated Selector Switches (Partial-Assemblies)

Contact Assembly + Lamp + Operator/Lens = Complete Part



A3

Switches & Pilot Devices

Full Voltage Models

Part Numbers: Operators/Lens

		Type	Plastic	Metal
	2 pos.	Maintained	HW1F-2②	HW4F-2②
		Spring from Right	HW1F-21②	HW4F-21②
	3 pos.	Maintained	HW1F-3②	HW4F-3②
		Spring from Right	HW1F-31②	HW4F-31②
		Spring from Left	HW1F-32②	HW4F-32②
		Spring from Both	HW1F-33②	HW4F-33②



In place of ②, specify the Lens Color Code from table below.

Part Numbers: Lamps

Type	Voltage	Part Number
	6V AC/DC	LSTD-6②
	12V AC/DC	LSTD-1②
	24V AC/DC	LSTD-2②
	120V AC	LSTD-H2②
	240V AC	LSTD-M4②
	6.3V AC/DC	IS-6
	12V AC/DC	IS-12
	24V AC/DC	IS-24



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

Part Numbers: Contact Assemblies (order lamp separately)

Style	Contacts	Part Number
	1NO	HW-FL10Q0
	2NO	HW-FL20Q0
	1NO/1NC	HW-FL11Q0
	1NC	HW-FL01Q0
	2NC	HW-FL02Q0



Order lamp separately from table on right.

Transformer Models

Part Numbers: Contact Assemblies (lamp included)

Style	Contacts	Part Number
	1NO	HW-FL10H2-②
	2NO	HW-FL20H2-②
	1NC	HW-FL01H2-②
	1NO/1NC	HW-FL11H2-②
	1NO	HW-FL10M4-②
	2NO	HW-FL20M4-②
	1NC	HW-FL01M4-②
	1NO/1NC	HW-FL11M4-②
	1NO	HW-FL10T8-②
	2NO	HW-FL20T8-②
	1NC	HW-FL01T8-②
	1NO/1NC	HW-FL11T8-②
	1NO	HW-FL10H2
	2NO	HW-FL20H2
	1NC	HW-FL01H2
	1NO/1NC	HW-FL11H2
	1NO	HW-FL10M4
	2NO	HW-FL20M4
	1NC	HW-FL01M4
	1NO/1NC	HW-FL11M4



6V LED/Lamp included with transformer sub-assembly.

Part Numbers: Operators/Lens

		Type	Plastic	Metal
	2 pos.	Maintained	HW1F-2②	HW4F-2②
		Spring from Right	HW1F-21②	HW4F-21②
	3 pos.	Maintained	HW1F-3②	HW4F-3②
		Spring from Right	HW1F-31②	HW4F-31②
		Spring from Left	HW1F-32②	HW4F-32②
		Spring from Both	HW1F-33②	HW4F-33②



In place of ②, specify the Lens Color Code from table below.

② Lens/LED Color Code

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