

# HW Series

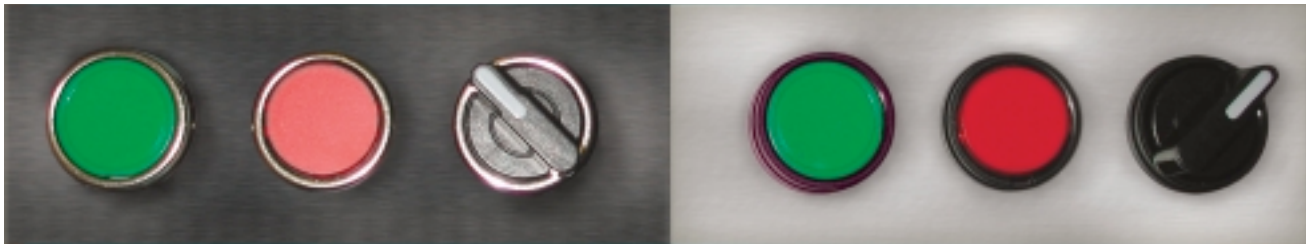
Switches and Pilot Devices



# HW Series Pushbuttons

In **basic black or stylish metal**, the HW series of 22mm switches from IDEC are available in several styles to dress up any panel. HW pushbuttons, switches and pilot devices are internationally-rated, designed for use almost anywhere in the world, and have removable contact blocks, fingersafe contacts and tamperproof construction. Choose simple black plastic bezels for clean uniformity, or new chrome-plated metallic bezels for a rugged industrial look.

This catalog is not comprehensive for the HW series; complete product information, including additional available part numbers, can be found in the Industrial Automation Catalog. For more information, contact IDEC Technical Support or Customer Service.



<b>Specifications</b>	Operating Temperature	Operation: -25 to +50°C (without freezing) Storage: -40 to +70°C (without freezing)							
	Degree of Protection (conforming to IEC60529) (conforming to NEMA ICS6-110)	IP65 (from front of the panel) IP20 (contact terminals) 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							
	Contact Material	Silver							
	Rated Insulation Voltage	600V							
	Rated Thermal Current	10 Amp							
	Minimum Load Capacity	5mA/3V AC/DC							
	Contact Operation	Slow make/slow break NO / NC self-cleaning							
	Contact Gap	4mm (NO and NC)							
	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: 20mA / 12, 24, 120, 240V: 10mA							
	Recommended Locking Ring Torque	7.1 in lb							
	<b>Contact Ratings</b>		<b>Break Values</b>				<b>Make Values</b>		
		<b>AC</b>		<b>DC</b>		<b>AC</b>		<b>DC</b>	
		<b>Inductive</b>	<b>Resistive</b>	<b>Inductive</b>	<b>Resistive</b>	<b>Inductive</b>	<b>Resistive</b>	<b>Inductive</b>	<b>Resistive</b>
Rated Operating Current		120V: 6A 240V: 3A 480V: 1.5A 600V: 1.2 A	120V: 10A 240V: 6A 480V: 2A	120V: 1.1A 240V: 0.6A 12V: 4A 24V: 4A	120V: 2A 240V: 1.1A 480V: 0.4A 12V: 4A 24V: 4A	120V: 60A 240V: 30A 480V: 15A 600V: 12 A	120V: 100A 240V: 60A 480V: 20A	120V: 11A 240V: 6A 12V: 40A 24V: 40A	120V: 20A 240V: 11A 480V: 4A 12V: 40A 24V: 40A



File No. E68961



File No. LR92374



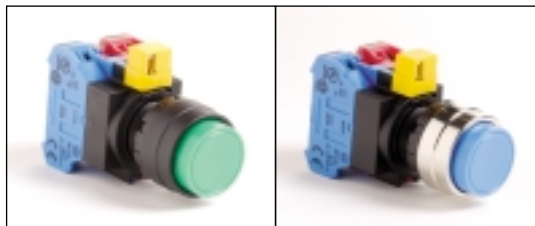
TÜV Rheinland

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

# Ordering Information



## Momentary Pushbuttons



	Plastic Bezel	Metal Bezel
Flush Button, 1NO	HW1B-M1F10-①	HW4B-M1F10-①
Flush Button, 2NO	HW1B-M1F20-①	HW4B-M1F20-①
Flush Button, 1NO/1NC	HW1B-M1F11-①	HW4B-M1F11-①
Extended Button, 1NO	HW1B-M2F10-①	HW4B-M2F10-①
Extended Button, 2NO	HW1B-M2F20-①	HW4B-M2F20-①
Extended Button, 1NO/1NC	HW1B-M2F11-①	HW4B-M2F11-①
Mushroom Button, 1NO	HW1B-M4F10-①	HW4B-M4F10-①
Mushroom Button, 2NO	HW1B-M4F20-①	HW4B-M4F20-①
Mushroom Button, 1NO/1NC	HW1B-M4F11-①	HW4B-M4F11-①

Momentary models listed; maintained (push-on/push-off) models also available.  
Extended button shown.

### ① Button Color Code

Color	Code
Black	<b>B</b>
Green	<b>G</b>
Grey	<b>N</b>
Red	<b>R</b>
Blue	<b>S</b>
White	<b>W</b>
Yellow	<b>Y</b>

Grey not available in mushroom

## Pilot Lights



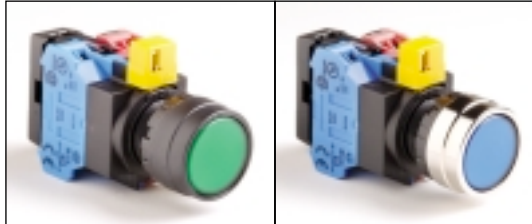
	Plastic Bezel	Metal Bezel
Flat Lens, LED, 24VAC/DC	HW1P-1FQD-②-24V	HW4P-1FQD-②-24V
Flat Lens, LED, 120VAC	HW1P-1FQD-②-120V	HW4P-1FQD-②-120V
Flat Lens, LED, 240VAC	HW1P-1FQD-②-240V	HW4P-1FQD-②-240V
Dome Lens, LED, 24VAC/DC	HW1P-2FQD-②-24V	HW4P-2FQD-②-24V
Dome Lens, LED, 120VAC	HW1P-2FQD-②-120V	HW4P-2FQD-②-120V
Dome Lens, LED, 240VAC	HW1P-2FQD-②-240V	HW4P-2FQD-②-240V

Direct voltage models listed; transformer models also available.  
Dome lens shown.

### ② Lens/LED Color Code

Color	Code
Amber	<b>A</b>
Green	<b>G</b>
Red	<b>R</b>
Blue	<b>S</b>
White	<b>W</b>
Yellow	<b>Y</b>

## Illuminated Momentary Pushbuttons



	Plastic Bezel	Metal Bezel
Flush Lens, LED, 24VAC/DC, 1NO	HW1L-M1F10QD-②-24V	HW4L-M1F10QD-②-24V
Flush Lens, LED, 24VAC/DC, 2NO	HW1L-M1F20QD-②-24V	HW4L-M1F20QD-②-24V
Flush Lens, LED, 24VAC/DC, 1NO/1NC	HW1L-M1F11QD-②-24V	HW4L-M1F11QD-②-24V
Flush Lens, LED, 120VAC, 1NO	HW1L-M1F10QD-②-120V	HW4L-M1F10QD-②-120V
Flush Lens, LED, 120VAC, 2NO	HW1L-M1F20QD-②-120V	HW4L-M1F20QD-②-120V
Flush Lens, LED, 120VAC, 1NO/1NC	HW1L-M1F11QD-②-120V	HW4L-M1F11QD-②-120V
Extended Lens, LED, 24VAC/DC, 1NO	HW1L-M2F10QD-②-24V	HW4L-M2F10QD-②-24V
Extended Lens, LED, 24VAC/DC, 2NO	HW1L-M2F20QD-②-24V	HW4L-M2F20QD-②-24V
Extended Lens, LED, 24VAC/DC, 1NO/1NC	HW1L-M2F11QD-②-24V	HW4L-M2F11QD-②-24V
Extended Lens, LED, 120VAC, 1NO	HW1L-M2F10QD-②-120V	HW4L-M2F10QD-②-120V
Extended Lens, LED, 120VAC, 2NO	HW1L-M2F20QD-②-120V	HW4L-M2F20QD-②-120V
Extended Lens, LED, 120VAC, 1NO/1NC	HW1L-M2F11QD-②-120V	HW4L-M2F11QD-②-120V
Mushroom Lens, LED, 24VAC/DC, 1NO	HW1L-M4F10QD-②-24V	HW4L-M4F10QD-②-24V
Mushroom Lens, LED, 24VAC/DC, 2NO	HW1L-M4F20QD-②-24V	HW4L-M4F20QD-②-24V
Mushroom Lens, LED, 24VAC/DC, 1NO/1NC	HW1L-M4F11QD-②-24V	HW4L-M4F11QD-②-24V
Mushroom Lens, LED, 120VAC, 1NO	HW1L-M4F10QD-②-120V	HW4L-M4F10QD-②-120V
Mushroom Lens, LED, 120VAC, 2NO	HW1L-M4F20QD-②-120V	HW4L-M4F20QD-②-120V
Mushroom Lens, LED, 120VAC, 1NO/1NC	HW1L-M4F11QD-②-120V	HW4L-M4F11QD-②-120V

### ② Lens/LED Color Code

Color	Code
Amber	<b>A</b>
Green	<b>G</b>
Red	<b>R</b>
Blue	<b>S</b>
White	<b>W</b>
Yellow	<b>Y</b>

Yellow not available in mushroom

Direct voltage model listed; transformer models also available.  
Momentary models listed; maintained (push-on/push-off) models also available.  
Flush lens shown.

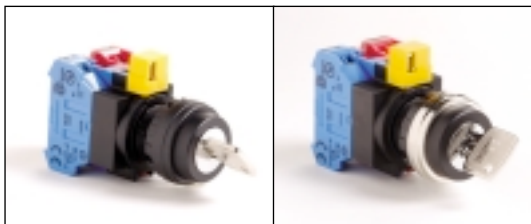
## Selector Switches



	Plastic Bezel	Metal Bezel
2 Position, Maintained, 1NO	HW1S-2TF10	HW4S-2TF10
2 Position, Maintained, 2NO	HW1S-2TF20	HW4S-2TF20
2 Position, Maintained, 1NO/1NC	HW1S-2TF11	HW4S-2TF11
2 Position, Spring from Right, 1NO	HW1S-21TF10	HW4S-21TF10
2 Position, Spring from Right, 2NO	HW1S-21TF20	HW4S-21TF20
2 Position, Spring from Right, 1NO/1NC	HW1S-21TF11	HW4S-21TF11
3 Position, Maintained, 2NO	HW1S-3TF20	HW4S-3TF20
3 Position, Maintained, 2NO/2NC	HW1S-3TF22	HW4S-3TF22
3 Position, Spring From Both, 2NO	HW1S-33TF20	HW4S-33TF20
3 Position, Spring From Both, 2NO/2NC	HW1S-33TF22	HW4S-33TF22

3-position with 2NO functions as "Hand-Off-Auto."  
4 and 5-position models also available.

## Key Switches



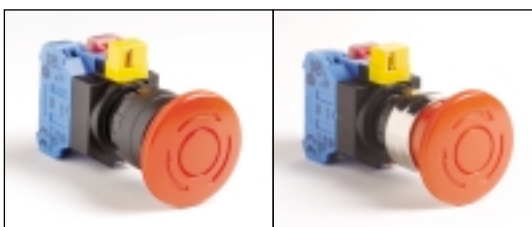
	Plastic Bezel	Metal Bezel
2 Position, Maintained, 1NO	HW1K-2AF10	HW4K-2AF10
2 Position, Maintained, 2NO	HW1K-2AF20	HW4K-2AF20
2 Position, Maintained, 1NO/1NC	HW1K-2AF11	HW4K-2AF11
2 Position, Spring from Right, 1NO	HW1K-21BF10	HW4K-21BF10
2 Position, Spring from Right, 2NO	HW1K-21BF20	HW4K-21BF20
2 Position, Spring from Right, 1NO/1NC	HW1K-21BF11	HW4K-21BF11
3 Position, Maintained, 2NO	HW1K-3AF20	HW4K-3AF20
3 Position, Maintained, 2NO/2NC	HW1K-3AF22	HW4K-3AF22
3 Position, Spring From Both, 2NO	HW1K-33DF20	HW4K-33DF20
3 Position, Spring From Both, 2NO/2NC	HW1K-33DF22	HW4K-33DF22

*3-position with 2NO functions as "Hand-Off-Auto."*

*Keys are removable in all maintained positions for models listed, other key removable options available.*

*Two keys supplied with each switch.*

## E-Stops



	Plastic Bezel	Metal Bezel
Push/Pull, 1NC	HW1B-Y2F01-R	HW4B-Y2F01-R
Push/Pull, 2NC	HW1B-Y2F02-R	HW4B-Y2F02-R
Push/Pull, 1NO/1NC	HW1B-Y2F11-R	HW4B-Y2F11-R
Push/Twist, 1NC	HW1B-V4F01-R	HW4B-V4F01-R
Push/Twist, 2NC	HW1B-V4F02-R	HW4B-V4F02-R
Push/Twist, 1NO/1NC	HW1B-V4F11-R	HW4B-V4F11-R
Push/Key, 1NC	HW1B-X4F01-R	HW4B-X4F01-R
Push/Key, 2NC	HW1B-X4F02-R	HW4B-X4F02-R
Push/Key, 1NO/1NC	HW1B-X4F11-R	HW4B-X4F11-R







### Only common models have been listed.

Many more options in both plastic and metal bezel switches are available.

For details, please refer to Section A in the Industrial Automation Catalog.

Contact IDEC to order a catalog, or download it from [www.idec.com](http://www.idec.com)

# HW Accessories

	Appearance	Description/Usage	Part Number	
<b>Locking Ring Wrench</b>		Metallic tool used to tighten the plastic locking ring when installing the HW series unit in a panel.	MW9Z-T1	
<b>Lamp/LED Removal Tool</b>		Rubber tool makes lamp removal and replacement easier.	OR-55	
<b>Metallic Mounting Hole Plug</b>		For plugging unused mounting holes in the panel. Tighten the attached locking ring to a torque of 12 kfg-cm maximum.  Degree of protection: IP66	LW9Z-BM	
<b>Replacement Contacts</b>		Stackable contacts, two per level. Maximum 6 contacts per switch. Odd numbers of contacts should be accompanied by TW-DB or HW-DA1FB dummy block.  Degree of protection: IP20	Normally open	HW-F10
			Normally closed	HW-F01
<b>Replacement Lamps</b>		Incandescent or LED lamps with BA9S/13 bayonet bases.  Color (*) must be specified for LEDs; other voltages available.	LED: 24V AC/DC	LSTD-2*
			LED: 120V AC	LSTD-H2*
			LED: 240V AC	LSTD-M4*
			* A = amber, G = green, R = red, S = blue, W = white, Y = yellow	
			Incandescent 24V AC/DC	IS-24
<b>E-Stop Shroud</b>		Plastic shroud intended for use with E-stop switches to prevent inadvertent activation.	HW9Z-KG1-TK2120	

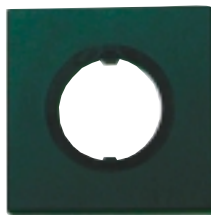
## Nameplates



**HWAM-0B**



**HWAQ-0B**



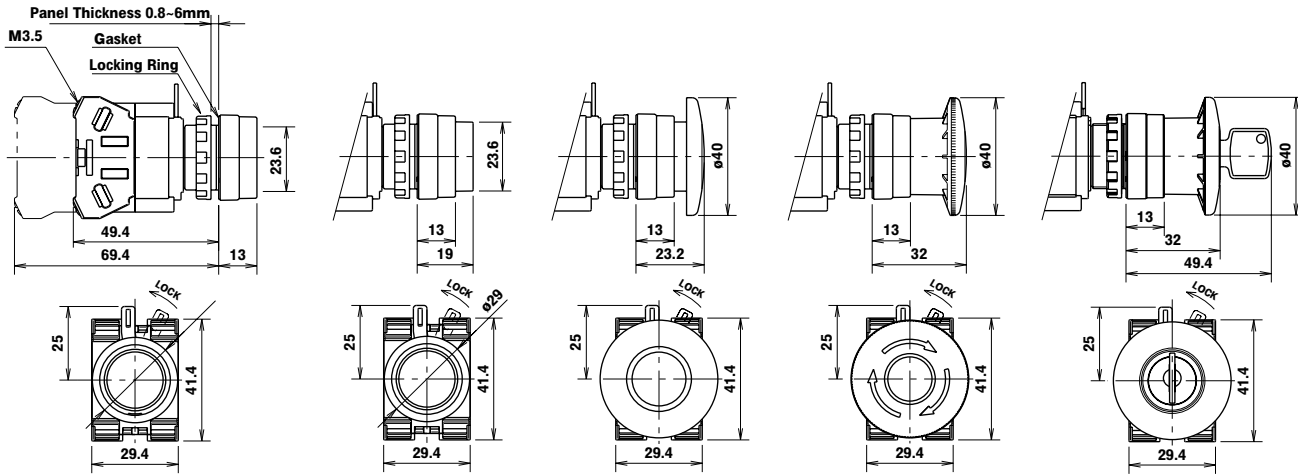
**HWAS-0B**



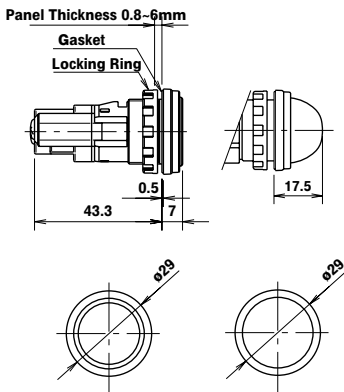
**HWAV-27**

*HWAM and HWAQ use snap-in engraving insert (HWNP-0).  
All nameplates available blank or engraved.*

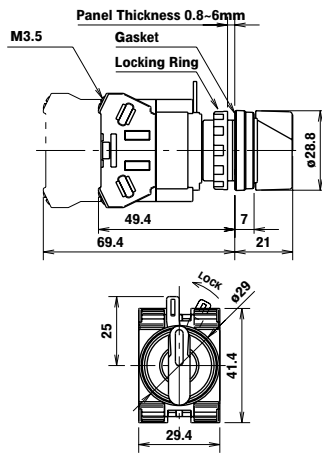
## Pushbuttons/E-Stops



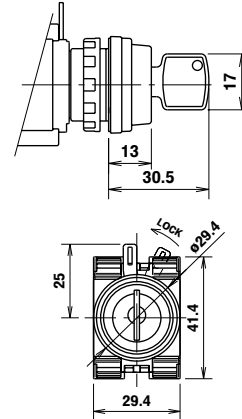
## Pilot Lights



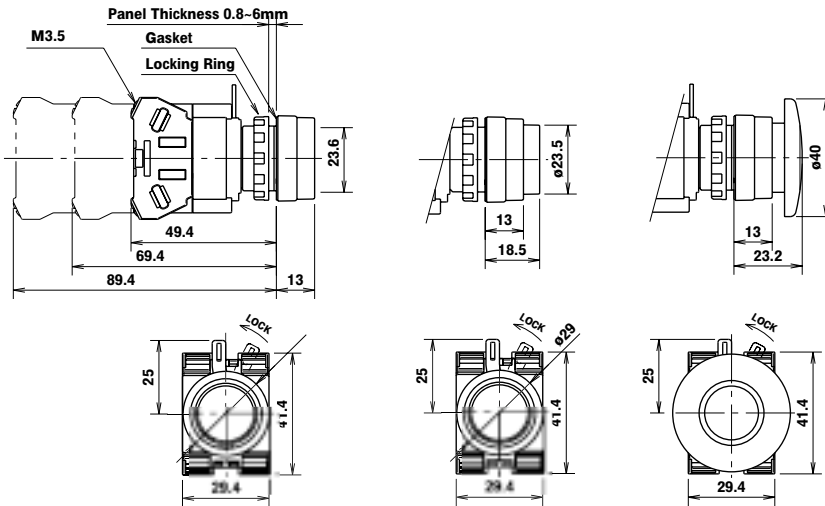
## Selector Switches



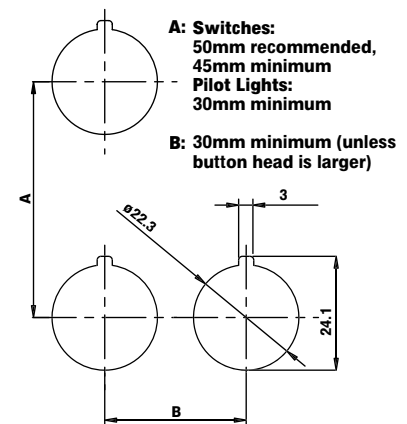
## Key Switches



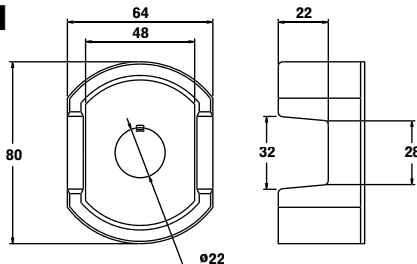
## Illuminated Pushbuttons



## Panel Cutout



## E-Stop Shroud



All dimensions in mm.

For additional dimensions, see the Industrial Automation Catalog.

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