

HW Series

Switches and Pilot Devices

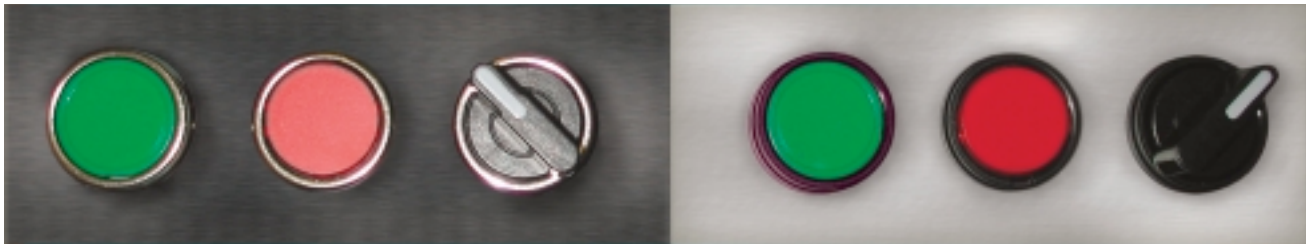


idec

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.



Specifications	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							
	Contact Ratings		Break Values				Make Values		
		AC		DC		AC		DC	
		Inductive	Resistive	Inductive	Resistive	Inductive	Resistive	Inductive	Resistive
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

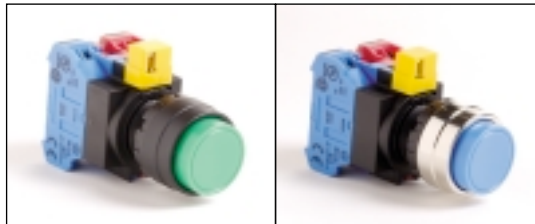
Registration No. R9551089 (E-stops)
Registration No. J9551458 (all other switches)
Registration No. J9650511 (Pilot Lights)

For more information, visit www.idec.com or call your local IDEC representative.

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
Green	G
Grey	N
Red	R
Blue	S
White	W
Yellow	Y

Grey not available in mushroom

Pilot Lights



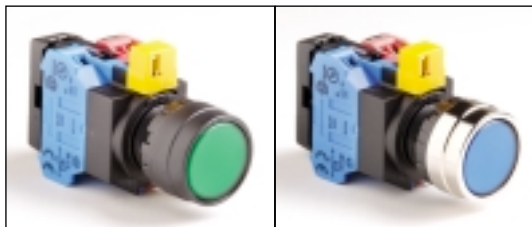
	Plastic Bezel	Metal Bezel
Flat Lens, LED, 24VAC/DC	HW1P-1FQD-②-24V	HW4P-1FQD-②-24V
Flat Lens, LED, 120VAC	HW1P-1FQD-②-120V	HW4P-1FQD-②-120V
Flat Lens, LED, 240VAC	HW1P-1FQD-②-240V	HW4P-1FQD-②-240V
Dome Lens, LED, 24VAC/DC	HW1P-2FQD-②-24V	HW4P-2FQD-②-24V
Dome Lens, LED, 120VAC	HW1P-2FQD-②-120V	HW4P-2FQD-②-120V
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	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

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

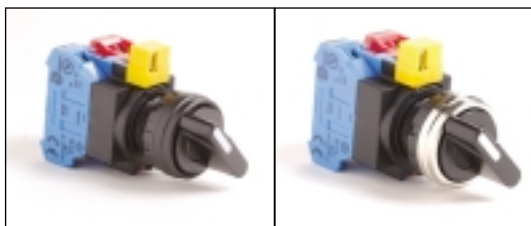
② Lens/LED Color Code

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

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.

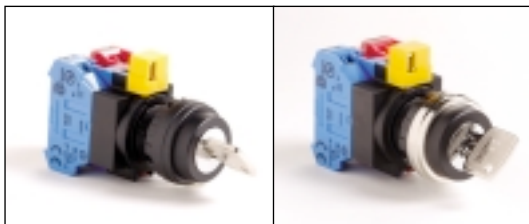
Selector Switches



	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



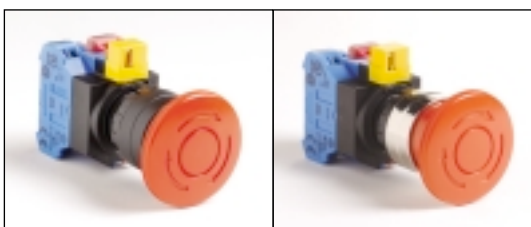
	Plastic Bezel	Metal Bezel
2 Position, Maintained, 1NO	HW1K-2AF10	HW4K-2AF10
2 Position, Maintained, 2NO	HW1K-2AF20	HW4K-2AF20
2 Position, Maintained, 1NO/1NC	HW1K-2AF11	HW4K-2AF11
2 Position, Spring from Right, 1NO	HW1K-21BF10	HW4K-21BF10
2 Position, Spring from Right, 2NO	HW1K-21BF20	HW4K-21BF20
2 Position, 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

HW Accessories

	Appearance	Description/Usage	Part Number	
Locking Ring Wrench		Metallic tool used to tighten the plastic locking ring when installing the HW series unit in a panel	MW9Z-T1	
Lamp/LED Removal Tool		Rubber tool makes lamp removal and replacement easier.	OR-55	
Metallic Mounting Hole Plug		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	
Replacement Contacts		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
Replacement Lamps		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
E-Stop Shroud		Plastic shroud intended for use with E-stop switches to prevent inadvertent activation.	HW9Z-KG1-TK2120	

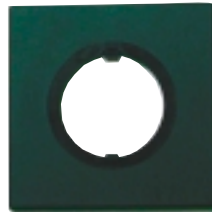
Nameplates



HWAM-0B



HWAQ-0B



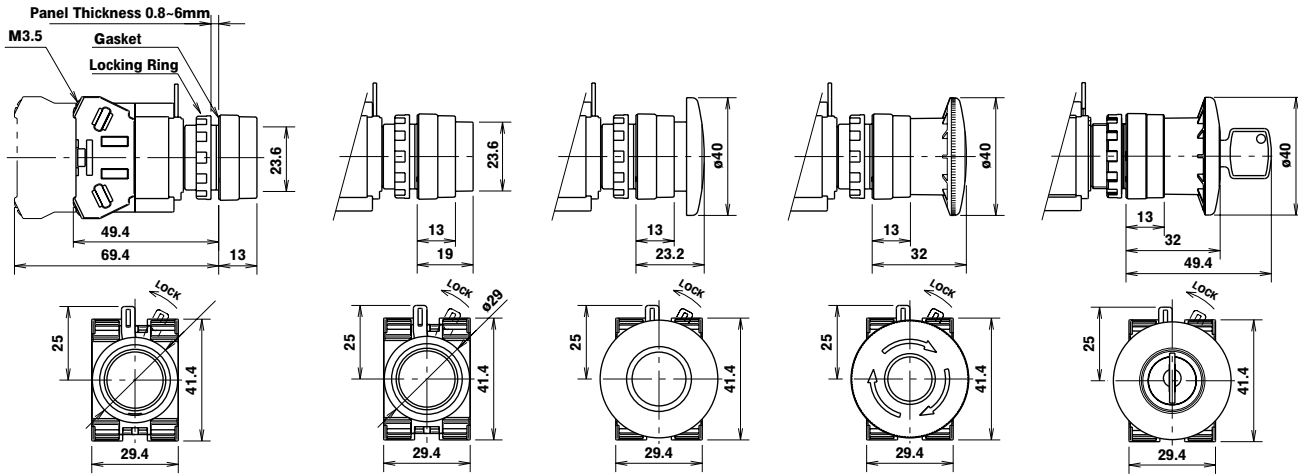
HWAS-0B



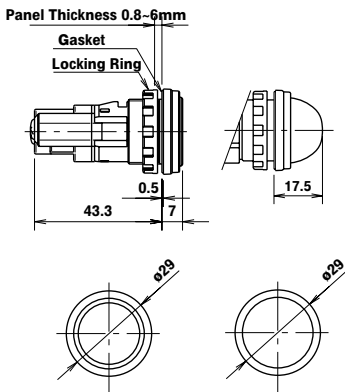
HWAV-27

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

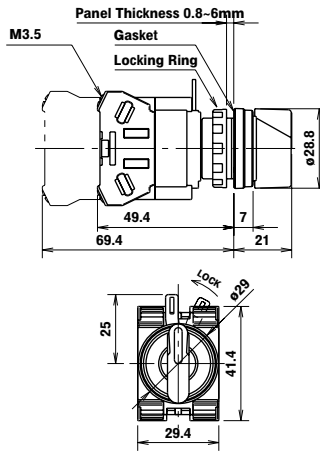
Pushbuttons/E-Stops



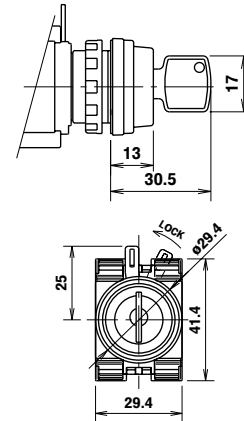
Pilot Lights



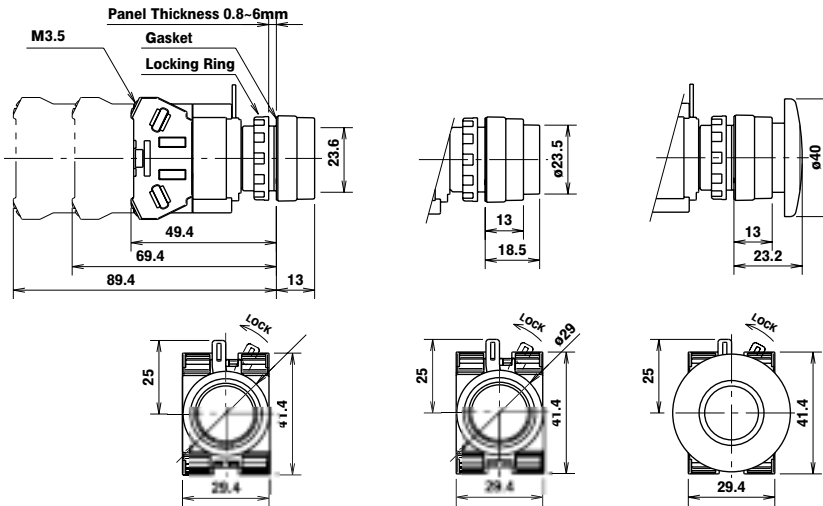
Selector Switches



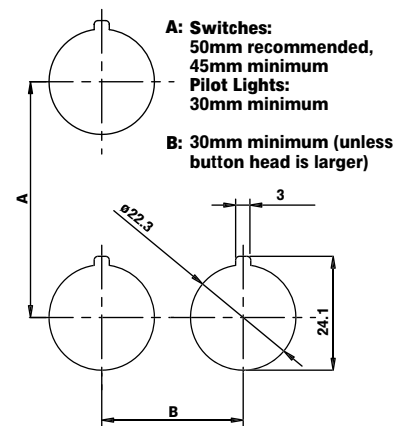
Key Switches



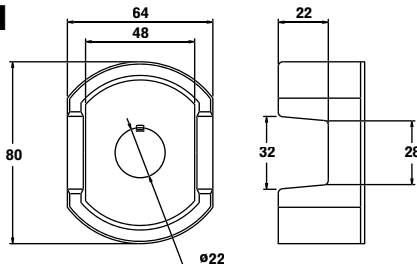
Illuminated Pushbuttons



Panel Cutout



E-Stop Shroud



All dimensions in mm.

For additional dimensions, see the Industrial Automation Catalog.

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