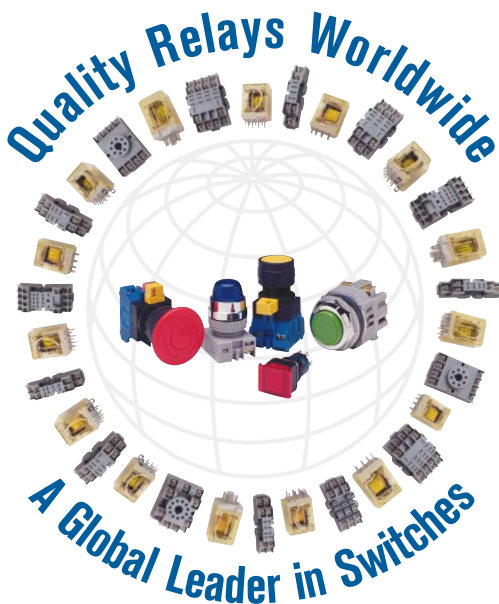


# Quick Selection Guide

*Switches, Pushbuttons and Pilot Devices*



The logo for idec, featuring a stylized orange and red symbol above the lowercase text "idec" in a bold, blue, sans-serif font.

## NON-ILLUMINATED PUSHBUTTONS

A Series Ø 5/8" (16mm) - Oiltight Type

Operator Description	Assembled Part No.	
	Momentary	Maintained
Round	AB6M - M ① P - ②	AB6M - A ① P - ②
Square	AB6Q - M ① P - ②	AB6Q - A ① P - ②
Rectangular	AB6H - M ① P - ②	AB6H - A ① P - ②
Large Round	AB6M - M ① P - M ②	AB6M - A ① P - M ②
Large Square	AB6Q - M ① P - Q ②	AB6Q - A ① P - Q ②
Large Rectangular	AB6Q - M ① P - H ②	AB6Q - A ① P - H ②

① Contact Code

1: SPDT

2: DPDT

② Button Color Code

S: Blue G: Green W: White

B: Black R: Red Y: Yellow



A Series Round



A Series Large Round



A Series Large Rectangular

## NON-ILLUMINATED PUSHBUTTONS

HW Series Ø 7/8" (22mm), TW Series Ø 7/8" (22mm), TWTW Series Ø 1-13/64" (30mm)  
NEMA 4, 4X, 13

Operator Description	Assembled Part No.		
	HW Series	TW Series	TWTW Series
Flush	HW1B-M1F ① - ②	ABW1 ① - ②	ABD1 ① N- ②
Square Flush	HW2B-M1F ① - ②	ABQW1 ① - ②	-
Extended	HW1B-M2F ① - ②	ABW2 ① - ②	ABD2 ① N- ②
Square Extended	HW2B-M2F ① - ②	ABQW2 ① - ②	-
Extended w/Full Shroud	-	ABFW2 ① - ②	ABFD2 ① N- ②
Mushroom	HW1B-M4F ① - ②	ABW4 ① - ②	ABD3 ① N- ②
Mushroom w/Full Shroud	-	ABGW4 ① - ②	ABGD3 ① N- ②
Jumbo Mushroom	HW1B-M5F ① - ②	-	ABD4 ① N- ②

Operator Description	Assembled Part No.		
	HW Series	TW Series	TWTW Series
Flush	HW1B-A1F ① - ②	AOW1 ① - ②	AOD1 ① N- ②
Square Flush	HW2B-A1F ① - ②	AQOW1 ① - ②	-
Extended	HW1B-A2F ① - ②	AOW2 ① - ②	AOD2 ① N- ②
Square Extended	HW2B-A2F ① - ②	AQOW2 ① - ②	-
Extended w/Full Shroud	-	AOFW2 ① - ②	AOFD2 ① N- ②
Mushroom	HW1B-A4F ① - ②	AOW4 ① - ②	AOD3 ① N- ②
Mushroom w/Full Shroud	-	-	AOGD3 ① N- ②
Jumbo Mushroom	-	-	AOD4 ① N- ②

① Contact Code

01: 1NC 10: 1NO 20: 2NO  
02: 2NC 11: 1NO-1NC 22: 2NO-2NC

② Button Color Code

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

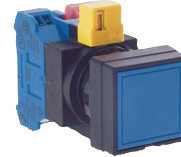
## NON-ILLUMINATED PUSHBUTTONS



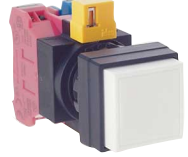
HW Series Flush



HW Series Extended



HW Series Square Flush



HW Series Square Extended



TW Series Flush



TW Series Extended w/Full Shroud



TWTW Series Extended



TWTW Series Mushroom w/Full Shroud



HW Series Jumbo Mushroom



TWTW Series Jumbo Mushroom

## ILLUMINATED PUSHBUTTONS (LED)

A Series Ø 5/8" (16mm) - Oilight Type

Operator Description	Assembled Part No.		
	Momentary	Maintained	
Round	AL6M - M ① ② P - ③	AL6M - A ① ② P - ③	
Square	AL6Q - M ① ② P - ③	AL6Q - A ① ② P - ③	
Rectangular	AL6H - M ① ② P - ③	AL6H - A ① ② P - ③	
Large Round	AL6M - M ① ② P - M ③	AL6M - A ① ② P - M ③	
Large Square	AL6Q - M ① ② P - Q ③	AL6Q - A ① ② P - Q ③	
Large Rectangular	AL6Q - M ① ② P - H ③	AL6Q - A ① ② P - H ③	

① Contact Code	② LED Voltage	③ Lens Color Code		
1: SPDT	2: 6V DC	A: Amber	G: Green	W: White
2: DPDT	3: 12V DC	S: Blue (24V only)	R: Red	Y: Yellow
	4: 24V DC			



A Series  
Large Illuminated Round



A Series  
Illuminated Rectangular



A Series  
Large Illuminated Square

## EMERGENCY STOP NON-ILLUMINATED PUSHBUTTONS

HW Series Ø 7/8" (22mm), TW Series Ø 7/8" (22mm), TWTD Series Ø 1-13/64" (30mm)

NEMA 4, 4X, 13

Operator Description	Assembled Part No.		
	HW Series	TW Series	TWTD Series
Push Turn Reset (29mm)	HW1B-V3F ① - R*	AVW3 ① - R*	-
Push Turn Reset (40mm)	HW1B-V4F ① - R*	AVW4 ① - R*	AVD3 ① N - R*
Push-Pull	HW1B-Y2F ① - ②	AYW4 ① - ②	AYD3 ① N - ②
Jumbo Push Turn Reset	HW1B-V5F ① - R*	-	-
Push Key Reset	HW1B-X4F ① - R*	AXW4 ① - R*	-

① Contact Code	② Button Color Code				
01: 1NC	10: 1NO	20: 2NO	S: Blue	G: Green	W: White
02: 2NC	11: 1NO-1NC	22: 2NO-2NC	B: Black	R: Red	Y: Yellow

Note: \*Button color in Red only.

## ILLUMINATED PUSHBUTTONS - (LED & INCANDESCENT)

HW Series Ø 7/8" (22mm), TW Series Ø 7/8" (22mm), TWTD Series Ø 1-13/64" (30mm) - NEMA 4, 4X, 13

Operator Description	Assembled Part No.		
	Momentary	HW Series	TW Series
Extended Lens (w/Transformer)	HW1L-M2F ① ⑤ ② - ③	ALW2 ⑥ 6 ① ② - ③	ALD2 ⑥ 6 ① ② N - ③
Extended Lens (Full Voltage)	HW1L-M2F ① Q ② - ③ - ④	ALW299 ① ② - ③ - ④	ALD299 ① ② N - ③ - ④
Extended Lens w/Full Shroud (Transformer)	HW1L-MF2F ① ⑤ ② - ③	ALFW2 ⑥ 6 ① ② - ③	ALFD2 ⑥ 6 ① ② N - ③
Extended Lens w/Full Shroud (Full Voltage)	HW1L-MF2F ① Q ② - ③ - ④	ALFW299 ① ② - ③ - ④	ALFD299 ① ② N - ③ - ④
Square Flush Lens (Transformer)	HW2L-M1F ① ⑤ ② - ③	-	-
Square Flush Lens (Full Voltage)	HW2L-M1F ① Q ② - ③ - ④	-	-
Mushroom (Transformer)	HW1L-M4F ① ⑤ ② - ③	ALW4 ⑥ 6 ① ② - ③	ALD3 ⑥ 6 ① ② N - ③
Mushroom (Full Voltage)	HW1L-M4F ① Q ② - ③ - ④	ALW499 ① ② - ③ - ④	ALD399 ① ② N - ③ - ④

Operator Description	Assembled Part No.		
	Maintained	HW Series	TW Series
Extended Lens (Transformer)	HW1L-A2F ① ⑤ ② - ③	AOLW2 ⑥ 6 ① ② - ③	AOLD2 ⑥ 6 ① ② N - ③
Extended Lens (Full Voltage)	HW1L-A2F ① Q ② - ③ - ④	AOLW299 ① ② - ③ - ④	AOLD299 ① ② N - ③ - ④
Extended Lens w/Full Shroud (Transformer)	HW1L-AF2F ① ⑤ ② - ③	AOLFW2 ⑥ 6 ① ② - ③	AOLFD2 ⑥ 6 ① ② N - ③
Extended Lens w/Full Shroud (Full Voltage)	HW1L-AF2F ① Q ② - ③ - ④	AOLFW299 ① ② - ③ - ④	AOLFD299 ① ② N - ③ - ④
Square Flush Lens (Transformer)	HW2L-A1F ① ⑤ ② - ③	-	-
Square Flush Lens (Full Voltage)	HW2L-A1F ① Q ② - ③ - ④	-	-
Mushroom (Transformer)	HW1L-A4F ① ⑤ ② - ③	AOLW4 ⑥ 6 ① ② - ③	AOLD3 ⑥ 6 ① ② N - ③
Mushroom (Full Voltage)	HW1L-A4F ① Q ② - ③ - ④	AOLW499 ① ② - ③ - ④	AOLD399 ① ② N - ③ - ④

① Contact Code	② Lamp Type	③ Lens Color Code		④ Lamp Voltage	⑤ Transformer Voltage Code	⑥ Transformer Voltage Code
01: 1NC	Blank: Incandescent	A: Amber	R: Red	(Full Voltage Only)	(HW)	(TW & TWTD)
02: 2NC	20: 2NO	S: *Blue	W: White	6: 6V AC/DC	H2: 120V AC	12: 120V AC
10: 1NO	D: LED	G: Green	Y: Yellow (LED only)	12: 12V AC/DC	M4: 240V AC	24: 240V AC
22: 2NO-2NC				120: **120V AC	T8: 480V AC	48: 480V AC

\* Blue LED are available only in 24V.

\*\* 120V AC lamps available only in LED or TWTD Series.

## EMERGENCY STOP NON-ILLUMINATED PUSHBUTTONS



HW Series  
Push Turn Reset



HW Series  
Push Pull Mushroom



HW Series  
Push Key Reset



HW Series  
Jumbo Push Turn Reset



TW Series  
Push Turn Reset



TW Series  
Push Key Reset



TWT Series  
Push Turn Reset



TWT Series  
Push-Pull

## ILLUMINATED PUSHBUTTONS



HW Series  
Illuminated Flush Lens



HW Series  
Illuminated Extended Lens



HW Series  
Illuminated Mushroom



TWT Series  
Illuminated Extended Lens



TW Series  
Illuminated Extended Lens



TW Series  
Illuminated Extended Lens w/Full Shroud



TW Series  
Illuminated Mushroom



TWT Series  
Illuminated Extended Lens w/Full Shroud

## SELECTOR SWITCHES - KNOB & KEY SELECTOR

A Series Ø 5/8" (16mm) - Oiltight Type

Position	Contact	Assembled Part No. Knob Type	*Key Type
2-Position Maintained	DPDT	AS6 ① -2Y2P	AS6 ① -2K2PA
3-Position Maintained	DPDT	AS6 ① -3Y2P	AS6 ① -3K2PA

① Bezel Shape

M: Round Q: Square H: Rectangular

Note: \*Key removable in all positions.



A Series  
Round Key Switch



A Series  
Square Selector



A Series  
Rectangular Key Switch

## SELECTOR SWITCHES - KNOB & KEY SELECTOR

HW Series Ø 7/8" (22mm), TW Series Ø 7/8" (22mm)

TWTD Series Ø 1-13/64" (30mm)

Contact Arrangement	Operator Position	Assembled Part No.	HW Series	TW Series	TWTD Series
2-Position 1NO-1NC	X - 0 0 - X	HW1S-2TF11 Key: HW1K-2AF11	ASW2 ① 11	ASD2 ① 11N	
2-Position 2NO-2NC	0 - X 0 - X X - 0	HW1S-2TF22 Key: HW1K-2AF22	ASW2 ① 22	ASD2 ① 22N	
3-Position 2NO	X 0 0 0 0 X	HW1S-3TF20 Key: HW1K-2AF20	ASW3 ① 20	ASD3 ① 20N	
3-Position 2NO-2NC	X 0 0 0 0 X 0 - X - X X - X 0	HW1S-3TF22 Key: HW1K-3AF22	ASW3 ① 22	ASD3 ① 22N	

① Operator Style

Blank: Knob

L: Lever

K: Key

Note:

X: Closed

O: Open

\*X\*: Overlapping Contacts

## PILOT LIGHTS (LED)

A Series Ø 5/8" (16mm) - Oiltight Type

Operator Description	Assembled Part No.
Round	AL6M - P ② P - ③
Square	AL6Q - P ② P - ③
Rectangular	AL6H - P ② P - ③

② LED Voltage	③ Lens Color Code
2: 6V DC	A: Amber R: Red
3: 12V DC	S: Blue (24V only) W: White
4: 24V DC	G: Green Y: Yellow

## PILOT LIGHTS



A Series  
Illuminated Round



A Series  
Illuminated Square

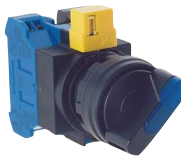


A Series  
Illuminated Rectangle

## SELECTOR SWITCHES



HW Series Selector Switch



HW Series Illuminated Selector Switch



HW Series Key Switch



TW Series Key Switch



TWTD Series Illuminated Selector Switch

## PILOT LIGHTS (LED & INCANDESCENT)

HW Series Ø 7/8" (22mm), TW Series Ø 7/8" (22mm), TWTD Series Ø 1-13/64" (30mm) NEMA 4, 4X, 13

Operator Description	Assembled Part No.		
	HW Series	TW Series	TWTD Series
Dome Lens (Transformer)	HW1P-2F ⑤ ② - ③	APW2 ⑥ 6 ② - ③	APD1 ⑥ 6 ② N - ③
Dome Lens (Full Voltage)	HW1P-2FQ ② - ③ - ④	APW299 ② - ③ - ④	APD199 ② N - ③ - ④
Round Flush Lens (Transformer)	HW1P-1F ⑤ ② - ③	APW1 ⑥ 6 ② - ③	-
Round Flush Lens (Full Voltage)	HW1P-1FQ ② - ③ - ④	APW199 ② - ③ - ④	-
Square Lens (Transformer)	HW2P-1F ⑤ ② - ③	-	-
Square Lens (Full Voltage)	HW2P-1FQ ② - ③ - ④	-	-

② Lamp Type

Blank: Incandescent

D: LED

③ Lens Color Code

A: Amber R: Red

S: \*Blue W: White

G: Green Y: Yellow(LED only)

④ Lamp Voltage

(Full Voltage Only)

6: 6V AC/DC 24: 24V AC/DC

12: 12V AC/DC 120: \*120V AC

⑤ Transformer Voltage Code (HW): H2: 120V AC, M4: 240V AC, T8: 480V AC

⑥ Transformer Voltage Code (TW & TWTD): 12: 120V AC, 24: 240V AC, 48: 480V AC

\*Blue LED is available only in 24V.

\*\* 120V AC lamps available only in LED or TWTD Series.

## PILOT LIGHTS ➤



HW Series  
Square Pilot Light



TW Series  
Flush Pilot Light



TWTD Series  
Dome Pilot Light



HW Series  
Dome Pilot Light (Transformer)



TW Series  
Dome Pilot Light (Transformer)

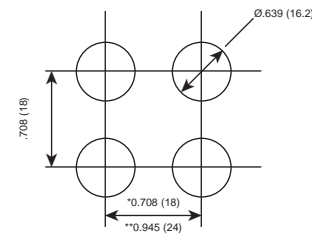


TWTD Series  
Dome Pilot Light (Transformer)

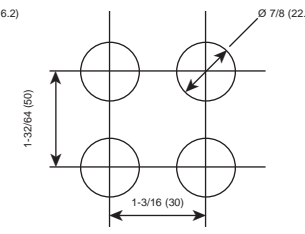
## PANEL CUT-OUT DIMENSIONS

Dimensions in inches (mm)

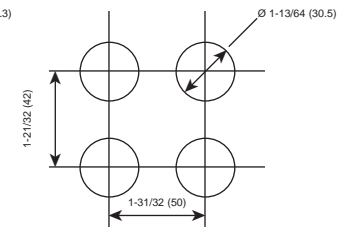
A Series



HW Series & TW Series



TWTD Series



\*\*Rectangular bezels

\* Round and square bezels

## A Series Specifications & Ratings



### General Specifications

Contact Configuration: SPDT, DPDT, snap action  
Contact Material: Gold-clad silver  
Contact Resistance: 50 mΩ maximum (initial value)  
Insulation Resistance: 100 MΩ minimum (500V DC megger)  
Dielectric Strength: 2,000V AC, 1 minute  
Mechanical Life: 1,000,000 operations minimum  
Electrical Life: 100,000 operations minimum  
(@ 1,200 operations/hr)

### Contact Ratings

Rated Thermal Current: 3A  
Rated Insulation Voltage: 250V AC/DC  
Rated Operational Current: (Resistive Loads)

12VDC/1A	120V AC/1A
24V DC/1A	240V AC/0.5A

Termination: Solder Tab Terminals  
Approvals: UL recognized and CSA certified

## HW Series Specifications & Ratings



### General Specifications

Contact Configuration: STSP (NO OR NC), double break  
Contact Resistance: 50 mΩ maximum (initial value)  
Insulation Resistance: 100 MΩ minimum (between live/dead parts)  
Dielectric Strength: 2,500V AC, 1 minute (between live/dead parts)  
Mechanical Life: Momentary Pushbuttons: 5,000,000 operations minimum  
All Others: 500,000 operations minimum  
Electrical Life: 500,000 operations minimum  
(full load, 30 operations/minute, 40% Duty Cycle)

Termination: M3.5 screw terminal w/sems plate  
Approvals: UL listed, CSA certified, TÜV approved, CE marked

### Contact Ratings

Rated Operational Current: (Resistive Loads)

12V DC/4A	120V AC/10A
24V DC/4A	240V AC/6A

Rated Thermal Current: 10A  
Minimum Switching Capacity: 5mA @ 3V AC/DC  
Rated Insulation Voltage: 600V AC/DC  
UL Rating: A600 (Heavy Pilot Duty)  
P600

### NEMA Ratings

Pushbuttons, Pilot Lights, Selector Switches: 1, 2, 3, 3R, 4, 4X, 5, 12, 13  
Key Switches: 1, 2, 3R, 5, 13

## TW & TWTD Series Specifications & Ratings



### General Specifications

Contact Configuration: STSP (NO OR NC), double break  
Contact Resistance: 50 mΩ maximum (initial value)  
Insulation Resistance: 100 MΩ minimum (between live/dead parts)  
Dielectric Strength: 2,500V AC, 1 minute (between live/dead parts)  
Mechanical Life: Momentary Pushbuttons: 5,000,000 operations minimum  
All Others: 500,000 operations minimum  
Electrical Life: 500,000 operations minimum  
(full load, 30 operations/minute, 40% Duty Cycle)  
Approvals: UL listed, CSA certified, DEMKO approved, CE marked

### Contact Ratings

Rated Operational Current: (Resistive Loads)

12V DC/4A	120V AC/10A
24V DC/4A	240V AC/6A

Rated Thermal Current: 10A  
Minimum Switching Capacity: 5mA @ 3V AC/DC  
Rated Insulation Voltage: 600V AC/DC  
UL Rating: A600 (Heavy Pilot Duty)

### NEMA Ratings

Pushbuttons, Pilot Lights, Selector Switches: 1, 2, 3, 3R, 4, 4X, 5, 12, 13  
Key Switches: 1, 2, 3R, 5, 13

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Selection Guide #: QSG 1/99 1M

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