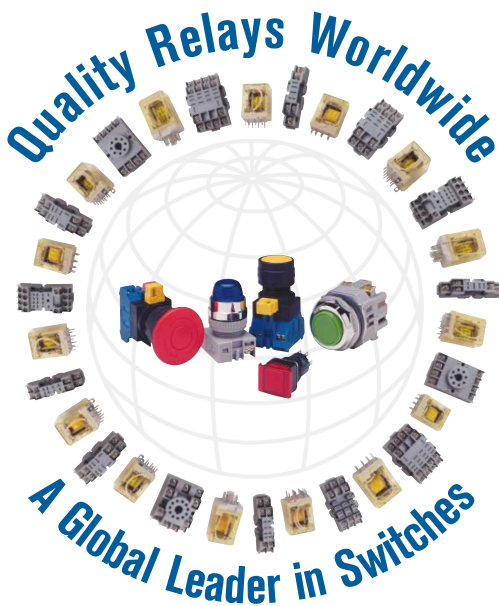


Quick Selection Guide

Switches, Pushbuttons and Pilot Devices



The logo for idec, featuring a stylized orange and red symbol above the word '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	AQW1 ① - ②	-
Extended	HW1B-A2F ① - ②	AOW2 ① - ②	AOD2 ① N- ②
Square Extended	HW2B-A2F ① - ②	AQW2 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

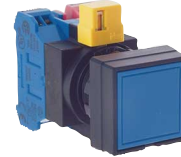
NON-ILLUMINATED PUSHBUTTONS



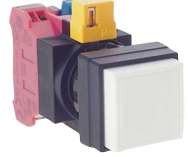
HW Series Flush



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
02: 2NC	11: 1NO-1NC	22: 2NO-2NC	G: Green
			W: White
			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	TWTD 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	TWTD 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



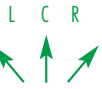
A Series
Rectangular Key Switch

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.
	L C R	HW Series TW Series TWTD Series
2-Position 1NO-1NC	X - 0 0 - X	HW1S-2TF11 ASW2 ① 11 ASD2 ① 11N Key: HW1K-2AF11
2-Position 2NO-2NC	0 - X 0 - X X - 0	HW1S-2TF22 ASW2 ① 22 ASD2 ① 22N Key: HW1K-2AF22
3-Position 2NO	X 0 0 0 0 X	HW1S-3TF20 ASW3 ① 20 ASD3 ① 20N Key: HW1K-2AF20
3-Position 2NO-2NC	X 0 0 0 0 X 0 - X - X X - X 0	HW1S-3TF22 ASW3 ① 22 ASD3 ① 22N Key: HW1K-3AF22



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

3: 12V DC

4: 24V DC

A: Amber

S: Blue (24V only)

G: Green

R: Red

W: White

Y: Yellow

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



A Series
Illuminated Round



A Series
Illuminated Square



A Series
Illuminated Rectangle

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)

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

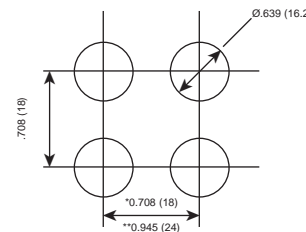
*Blue LED is available only in 24V.

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

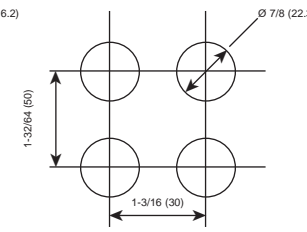
PANEL CUT-OUT DIMENSIONS

Dimensions in inches (mm)

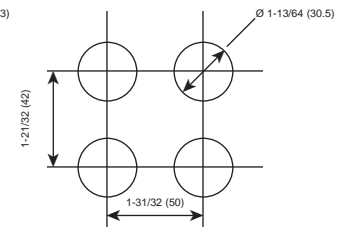
A Series



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

©1998 IDEC Corporation

Selection Guide #: QSG 1/99 1M

**For complete details,
see IDEC's Industrial Automation Catalog.**

IDEC CORPORATION
Sunnyvale, CA 94089-2209
(800) 262-IDEC
In Canada: (888) 578-9988
In Australia: (800) 68-4332

<http://www.idec.com>