KEYED IGNITION SWITCHES
Model Series 6850/6900/6901

- Two, three and four positions
- Snap and Nut mount available
- Variations of standard circuity available
- Customizable graphics on snap mount switches
- RoHS, REACH and Conflict Mineral compliant

OPERATION

Delta's rotary ignition switches are used to start and stop small, internal combustion engines and electric vehicles and to switch accessories on and off by controlling the make and break of up to seven connections. Switch actuation is by a non-coded key, available from Delta.

ELECTRICAL SPECIFICATION

Property		
Continuous Current Rating	@ 12-14 VDC, A	20
	@ 56-60 VDC, A	5
Life, 5A @ 12-14 VDC	Inductive	10,000 cycles
	Resistive	50.000 cycles
Life, 400mA @ 48-50 VDC	Resistive	50.000 cycles
Key Insertion Force, lbs.	4	
Key Turning Torque, in-oz	40	
Maximum Key Torque @ Stop, in-lb	20	
Installation Temperature	55 °F to 100°F	
Operating Temperature	-10°F to 150°F	
Storage Temperature	-40°F to 180°F	

ENVIRONMENTAL RATINGS

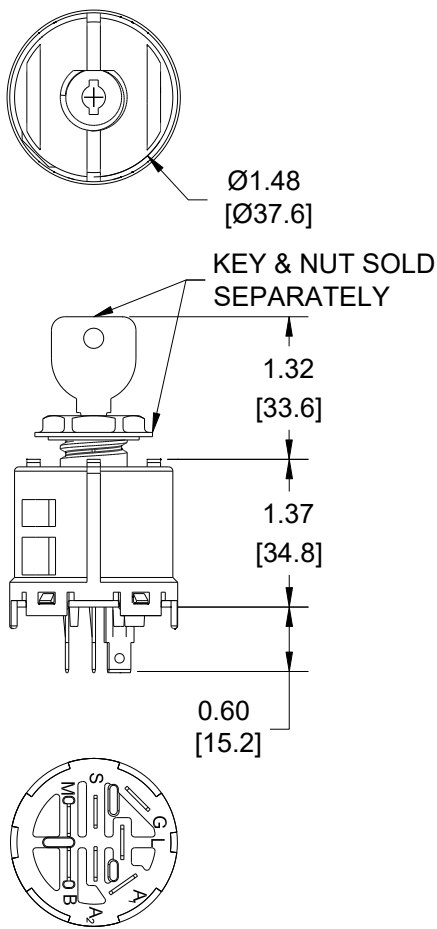| Exposure	Specification
Salt Fog	ASTM B117, 96 Hours
Dust / Water Ingress	IEC 60529, IP55 (front), IP53 (back **)**
Chemical Resistance	ASTM Ref C Fuel, Diesel Fuel, Oil, Antifreeze, Freon, Paint, Latex, Gasoline, Gas with 10% ethanol, WD-40, Battery Acid, Ammoniated Glass Cleaner, Kerosene, GOJO®, Fertilizer

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AVAILABLE CONFIGURATIONS

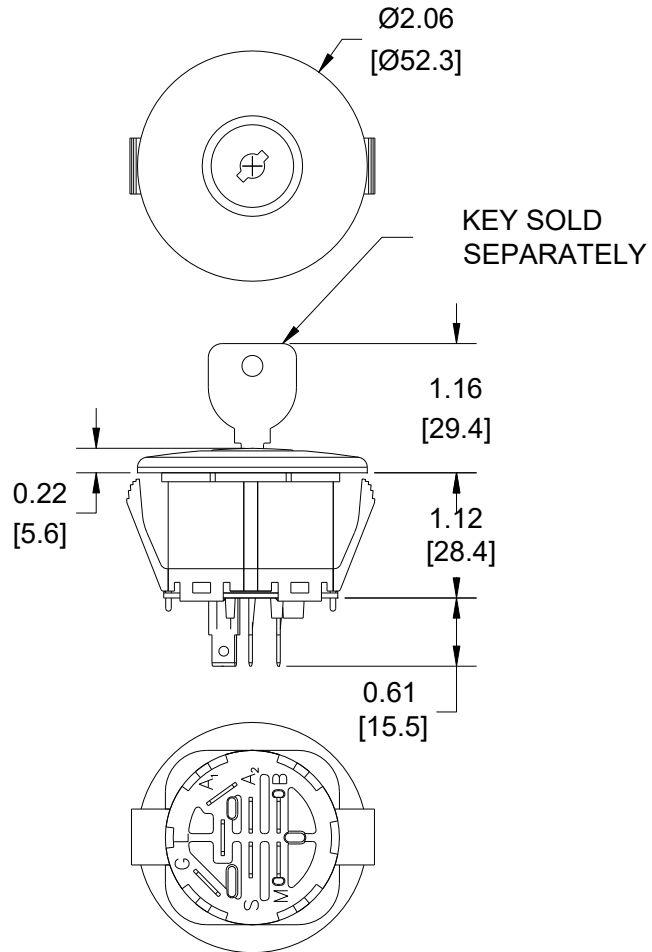| Part number | Mount | Keyway | Graphics | Positions | | | | | Connector |
				#	1	2	3	4	
6850-21	Nut	Plastic	None	2	M+G	Open			Delphi 2973872
6850-22	Nut	Plastic	None	2	Open	M+G			Delphi 2973872
6850-31	Nut	Plastic	None	3	M+G	L+B	S+B		Delphi 2973422
6850-36	Nut	Plastic	None	3	M+G	L+B+A	L+B+S		Delphi 2973422
6850-37	Nut	Plastic	None	3	M+G	L+B	L+B+S		Delphi 2973422
6850-47	Nut	Plastic	None	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6900-21	Snap	Plastic	None	2	M+G	Open			Delphi 2973872
6900-21P	Snap	Plastic	Printed	2	M+G	Open			Delphi 2973872
6900-22*	Snap	Plastic	None	2	Open	M+G			Delphi 2973872
6900-22P*	Snap	Plastic	Printed	2	Open	M+G			Delphi 2973872
6900-24	Snap	Plastic	None	2	Open, Open	B+A_1, L+A_2			Delta 972311
6900-24P1	Snap	Plastic	Printed	2	Open, Open	B+A_1, L+A_2			Delta 972311
6900-25	Snap	Plastic	Printed	2	M+G	L+G			Delta 972311
6900-31P	Snap	Plastic	Printed	3	M+G	L+B	S+B		Delphi 2973422
6900-36M	Snap	Plastic	Molded	3	M+G	L+B+A	L+B+S		Delphi 2973422
6900-37	Snap	Plastic	None	3	M+G	L+B	L+B+S		Delphi 2973422
6900-37M	Snap	Plastic	Molded	3	M+G	L+B	L+B+S		Delphi 2973422
6900-37P	Snap	Plastic	Printed	3	M+G	L+B	L+B+S		Delphi 2973422
6900-44P	Snap	Plastic	Printed	4	M+G	B+A+L	B+A	B+A.S_1+S_2	Delta 972311
6900-47	Snap	Plastic	None	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6900-47M	Snap	Plastic	Molded	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6900-47P	Snap	Plastic	Printed	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6900-47PG	Snap	Plastic	Printed	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6900-49P1	Snap	Plastic	Printed	4	M+G+A_1	B+A_1	B+A_1, L+A_2	B+S+A_1	Delta 972311
6900-49P2	Snap	Plastic	Printed	4	M+G+A_1	B+A_1	B+A_1, L+A_2	B+S+A_1	Delta 972311
6901-37	Snap	Metal	None	3	M+G	L+B	L+B+S		Delphi 2973422
6901-37P	Snap	Metal	Printed	3	M+G	L+B	L+B+S		Delphi 2973422
6901-37P2	Snap	Metal	Printed	3	M+G	L+B	L+B+S		Delphi 2973422
6901-47	Snap	Metal	None	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311
6901-47P	Snap	Metal	Printed	4	M+G+A_1	B+A_1, L+A_2	B+A_1	B+S+A_1	Delta 972311

* Listed to UL 1054 (E319443)

DIMENSIONS

Note: For specific Part information please refer to the Application print.

6850 Series

6900/6901 Series

Ø2.06
[Ø52.3]

Ø1.48
[Ø37.6]

KEY SOLD
SEPARATELY

KEY & NUT SOLD
SEPARATELY

1.32
[33.6]

1.16
[29.4]

1.37
[34.8]

0.22
[5.6]

1.12
[28.4]
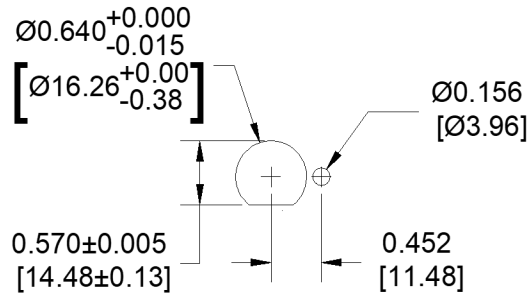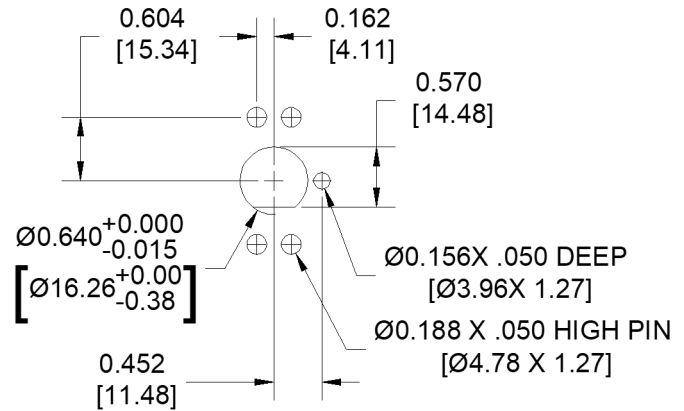
0.60
[15.2]

0.61
[15.5]

CONNECTION

Switches have integral 1/4" spade terminals. 2-terminal switches mate with Delphi P/N 02973872 and TE Connectivity P/N 521120-1 connectors. 5-terminal switches mate with Delphi P/N 02973422 connectors. 6- and 7-terminal switches mate with Delta P/N 972311 connectors (see Accessories section).
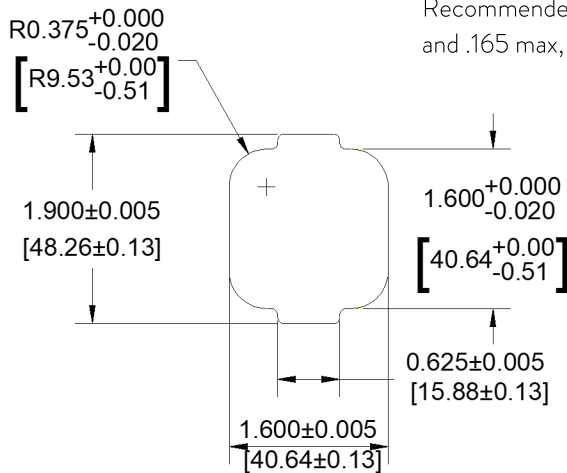
MOUNTING (6850 Series)

Metal Panel

Plastic Panel

Ø0.640$^{+0.000}_{-0.015}$
$\left[Ø16.26^{+0.00}_{-0.38}\right]$

Ø0.156
[Ø3.96]

0.570±0.005
[14.48±0.13]

0.452
[11.48]

0.604
[15.34]

0.162
[4.11]

0.570
[14.48]

Ø0.640$^{+0.000}_{-0.015}$
$\left[Ø16.26^{+0.00}_{-0.38}\right]$

Ø0.156X .050 DEEP
[Ø3.96X 1.27]

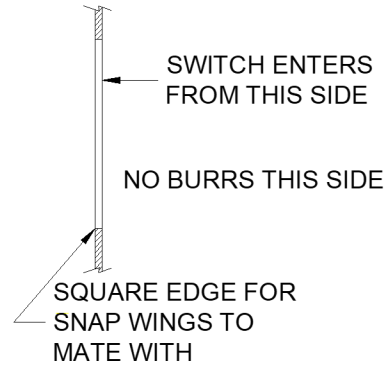Ø0.188 X .050 HIGH PIN
[Ø4.78 X 1.27]

0.452
[11.48]

Use pinned washer 9260 for rotation keying (see Accessories section)
Panel thickness is .07 to .19 with a 9256 nut and .05 to .17 with a 9752 nut (see Accessories section)

MOUNTING (6900/6901 Series)

Recommended panel thicknesses are .048 max, .060 max, .105 max, and .165 max, including paint, decals, etc.

R0.375$^{+0.000}_{-0.020}$
$\left[R9.53^{+0.00}_{-0.51}\right]$

1.900±0.005
[48.26±0.13]

1.600$^{+0.000}_{-0.020}$
$\left[40.64^{+0.00}_{-0.51}\right]$

0.625±0.005
[15.88±0.13]

1.600±0.005
[40.64±0.13]

SWITCH ENTERS
FROM THIS SIDE

NO BURRS THIS SIDE

SQUARE EDGE FOR
SNAP WINGS TO
MATE WITH

ACCESSORIES

Item #	Use With	Description
9252	6850 Series	Plastic Nut, .05-.17 Panel Thickness
9256	6850 Series	Plastic Nut, .07-.19 Panel Thickness
9260	6850 Series	Pinned Washer, .100 Max Panel Thickness
972311	6850/6900/6901 Series	Connector, 7-Position
688S-STD	6850/6900/6901 Series	Key, Standard
688S-001	6850/6900/6901 Series	Key, Standard with Ring
688P-STD	6850/6900/6901 Series	Key, Over molded
688P-UMB-001	6850 Series	Single Umbrella Key, With Cover and Ring
688P-UMB-002	6850 Series	Umbrella/Standard Key Combo, 688P-UMB-001 + 688S-STD
688P-UMB-003	6900/6901 Series	Single Umbrella Key, With Cover and Ring
688P-UMB-004	6900/6901 Series	Umbrella/Standard Key Combo, 688P-UMB-003 + 688S-STD

Note: Life expectancy and switch performance are largely dependent on application. It is the user's responsibility to determine suitability of this product for the application. This information is intended as a guide for proper application.