



**THE SERIES IS3600 SWITCH OFFERS MAXIMUM AND OPTIMUM VISIBILITY AT SUNLIGHT WITH MINIMUM POWER LEVELS. AND AT NIGHT, THERE IS ZERO LIGHT LEAKAGE THROUGH THE LENGTH OF THE SWITCH.**

## The Innovative Switch Company

Cole Instrument Corp. is proud to offer a rotary switch with illumination at the shaft front. This can be used to light up any part of the rotary switch's knob. An LED (Light Emitting Diode) or an incandescent lamp is on the back end of the switch body, and a light pipe or fiber optics brings the concentrated light through the switch to the shaft front.

The light can meet most chromaticity or intensity requirements. The light can be an LED or a T1 incandescent lamp.

The switch features good heat sinking capabilities, and delivers up to twice the light intensity of units at equivalent power levels.

On light failure, relamping can be done by the customer. Cole can provide the replacement assembly.

This switch can be used in airborne, shipboard, and submarine panel control displays, and meets the brightness requirements of high altitude aircraft, as well as the MIL-DTL-901 C shock requirement for submarines and ships.



## IS3600 SERIES

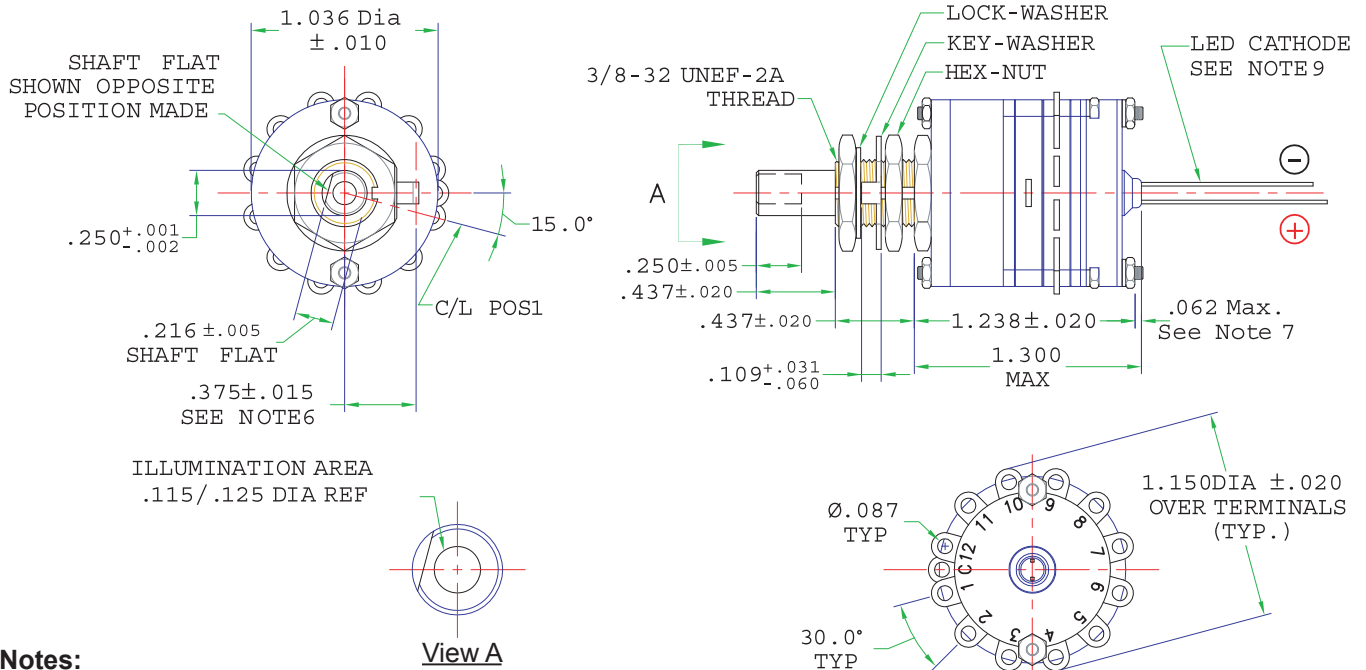
**Illuminated Shaft, One Inch Diameter Body**

### IS3600 FEATURES

- Ball Bearing Smooth Detent Indexing
- Constant Low Contact Resistance
- Rugged, Medium Impact Construction
- Flux Contamination Free
- MIL-DTL-3786 Tested
- 6 Amp Power Switching
- 100,000 Plus Operations Life Cycle

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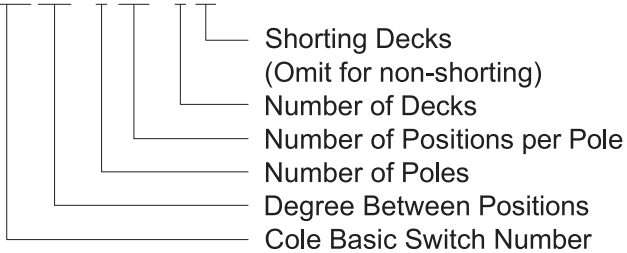
## Notes:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerances are plus or minus .005 and plus or minus 3 degrees on angles.
3. Shaft's flat is opposite position being made.
4. Switch can have up to six (6) decks.
5. Add .312 to the length for each additional deck.
6. Non-turn washer for .432 hole spacing, also available.
7. For switches with 6 decks, the stud projection is  $.312 \pm .060$
8. Switches are provided with full circle of terminals, regardless of the number of active positions.
9. Switch shown is with an LED for illumination. For incandescent lamp application, contact factory.

## ORDERING INFORMATION

Sample Code:

I36 30 - 1 12 - 1 S



Part Number for a I3630-112-1S, Illuminated Shaft, 3600 (1" body dia.), 30° indexing, 1 pole per deck, 12 positions per pole, 1 deck, shortng.

## OPTIONS

The following options can be added to the standard switch. When ordering, simply add the letters after the basic part number.

F = Fixed stop between the first and last position on a full-turn switch.

G = RFI-EMI shielding.

L = Low Level.

P = Panel and shaft seals.

S = Shorting (Available in all Configurations).

Y = Optional .432 Non-Turn Washer.

Screw Terminals Available. (Contact Factory for Special Part Number).



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# IS3600 SERIES

## Illuminated Shaft, One Inch Diameter Body

### Series IS3600 Technical Data

Specification	Unit	Value	Note:
Military Specifications		MIL-DTL-3786 style SR04	
Continuous (Non-Switching) Current Carrying Capacity	Amps	10	
Switching Current Capacity at 28 VDC resistive	Amps	6	at Atmospheric pressure with 85°C and at reduced Barometric pressure with 25°C
Switching Current Capacity at 115 VAC resistive	Amps	6	
Switching Current Capacity at 28 VDC inductive (2.8 H.)	Amps	3	
Low Level max. capacity	mA	10	at 30 millivolts DC max.
Dielectric Strength, min.	VRMS	1000	
Contact resistance, max. (initial)	milliohms (mΩ)	5	
Contact resistance, max. (after life)	milliohms (mΩ)	20	
Insulation resistance, min. (initial)	megaohms (MΩ)		at 100 VDC
Insulation resistance, min. (after life)	megaohms (MΩ)	60,000	at 100 VDC
Switching Life	cycles	25,000	switching 5 amps at 120 VAC.
Mechanical Life	cycles	100,000	
Rotational Torque, min.	inch ounces	16	
Rotational Torque, max.	inch ounces	80	
Mounting Ferrule Strength	inch pounds	15	
Weight	grams	48	
Molded Parts		thermoplastic	
Contact Surfaces		Silver	Gold plate option
Altitude	feet	80000	typical pressure at 80,000 feet: 0.4 psi
Temperature, min.	degrees Celsius	-65	
Temperature, max.	degrees Celsius	125	
Vibration Tested		Per MIL-DTL-3786	Mil-Std-202, Method 204, test condition B, vibration grade 3
Impact Shock, Medium		Meets	MIL-STD 202; Method 213
Impact Shock, High		Meets	at 100g, MIL-STD 202, Method 207
Moisture Resistant		Meets	MIL-STD 202; Method 106
Salt Spray Resistant		Meets	MIL-STD 202, Method 101, Condition "B"
Explosion Proof		Meets	MIL-STD 202, Method 109
Immersion		Meets	3 feet water, MIL-STD-202, method 104, test condition "C"
EMI/RFI		Meets	MIL-DTL-3786, 2 ohms shaft to ground max.
<b>LED Specifications</b>			
Hewlett Packard P/N			HLMA-KH00
Current	Amps	0.02	
Voltage	VDC	2.4	
Brightness	MCD	200	35 min
Wavelength	mm	615	