

**Full 360° Smart Sensor (Hall Effect Technology)**



**FEATURES**

- Absolute ratiometric output over 360° range with no dead band
- Self-contained package not requiring external electronic interface
- Contactless technology
- Reverse polarity protection
- Non volatile positioning output



The model 601-HE represents a new generation of Smart Sensors in contactless technology based on the Hall effect principle. This unique electronic device is a self-contained package which provides an analog electrical output over a full 360° without the need of external electronics. The low power consumption and non-volatile output makes this universal sensor the real cost-effective alternative to encoders.

<b>STANDARD ELECTRICAL SPECIFICATIONS</b>	
PARAMETER	
Supply	4.5 to 5.5 V <sub>DC</sub>
Supply Current	16 mA max.
Over Voltage Protection	10 V
Independent Linearity	± 1 %
Electrical Track	360° continuous
Analog Voltage Output	5 % to 95 % of supply (ratiometric) CW or CCW see graphs on next page
Output Ramp Slope	Electrically switchable - see graphs
Temperature Coefficient	V <sub>out</sub> /ΔT 125 mV/°C typ.
Hysteresis Static	0.8° max.

<b>MECHANICAL SPECIFICATIONS</b>	
Rotation	360° continuous
Rotational Speed (Max.)	120 RPM
Operating Torque Max.	0.25 oz. - in (18 g - cm)
Weight	30 g

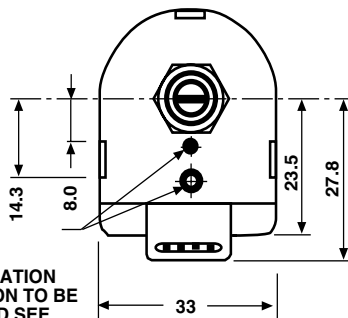
<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Operating Life	5 000 000 Cycles
Operating Temperature Range	- 45 °C + 85 °C
Storage Temperature Range	- 45 °C to + 85 °C
Sealing	IP54

<b>ORDERING INFORMATION/DESCRIPTION</b>																		
<b>601 HE</b>	<b>0000</b>	<b>B01</b>	<b>e4</b>															
MODEL	CONFIGURATION CODE	PACKAGING	LEAD FINISH															
	<table border="1"> <thead> <tr> <th>PRODUCT NUMBER</th> <th>Ø 1.57 PIN</th> <th>Ø 3.18 PIN</th> </tr> </thead> <tbody> <tr> <td>0000</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>0001</td> <td>Yes</td> <td>-</td> </tr> <tr> <td>0002</td> <td>-</td> <td>Yes</td> </tr> <tr> <td>0003</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	PRODUCT NUMBER	Ø 1.57 PIN	Ø 3.18 PIN	0000	Yes	Yes	0001	Yes	-	0002	-	Yes	0003	-	-	Box of 1 piece	
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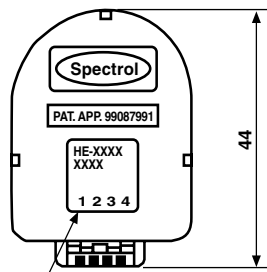
<b>SAP PART NUMBERING GUIDELINES</b>		
<b>601 HE</b>	<b>0001</b>	<b>B01</b>
MODEL	PIN CONFIGURATION	PACKAGING



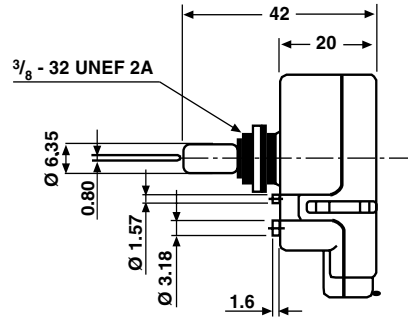
**DIMENSIONS** in millimeters



ANTI-ROTATION  
PIN OPTION TO BE  
SPECIFIED SEE  
ORDERING  
INFORMATION



PRODUCT NO. DATE  
CODE AND TERMINAL  
I.D. LABEL

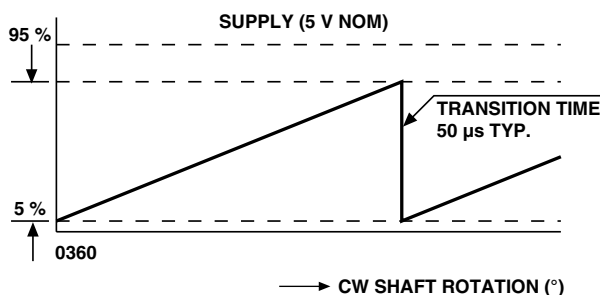


PIN CONNECTIONS		FUNCTION
1	+ 5 V	Supply
2	0 V	
3	Output	O/P voltage
4	Direction	Connected to 0 V: CCW Open circuit or connected to 5 V: CW

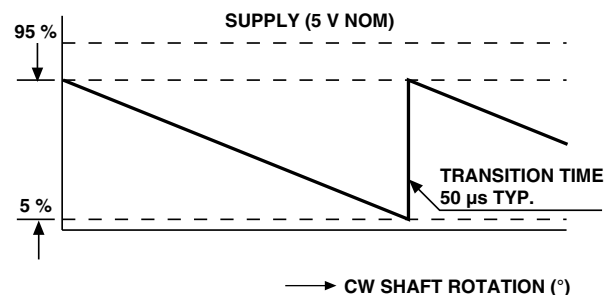
MATERIAL SPECIFICATIONS	
Housing	Plastic
Bushing	Brass, nickel plated
Shaft	Stainless steel
Pin terminal connector	Gold plated
Output connection	Pin header to suit IDC connectors. e.g. Panduit C100 - F22 and Molex 7880
Bushing Mount Hardware Lock Washer, Internal Tooth	Steel, nickel plated
Panel Nut	Brass, nickel plated



CABLE ASSEMBLY FOR CONNECTION	
Part Number	601-1056-0000
Description	Molex KK
	4-way crimp connector
	4 wire (250 mm)



MODEL: 601 HE when pin 4  
connected to 5 V or open circuit



MODEL: 601 HE when pin 4  
connected to 0 V



## Disclaimer

All product specifications and data are subject to change without notice.

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