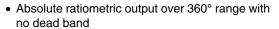
## Vishay Spectrol



# Full 360° Smart Sensor (Hall Effect Technology)



#### **FEATURES**





- Self-contained package not requiring external electronic interface
- · Contactless technology
- Reverse polarity protection
- Non volatile positioning output
- Compliant to RoHS directive 2002/95/EC

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.

STANDARD ELECTRICAL SPECIFICATIONS		
PARAMETER		
Supply	4.5 V <sub>DC</sub> 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 μV/°C typ.	
Hysteresis Static	0.8° max.	

MECHANICAL SPECIFICATIONS	
Rotation	360° continuous
Rotational Speed (Max.)	120 RPM
Operating Torque Max.	0.25 ozin (18 g-cm)
Weight	30 g

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

ORDERING INFORMATION/DESCRIPTION					
601 HE	0000		BO1	e4	
MODEL	CONFIGURATION CODE		PACKAGING	LEAD FINISH	
	PRODUCT NUMBER	Ø 1.57 PIN	Ø 3.18 PIN	Box of 1 piece	
	0000	Yes	Yes		
	0001	Yes	-		
	0002	-	Yes		
	0003	-	-	]	

SAP PART NUMBERING GU	DELINES	
601 HE	0001	B01
MODEL	PIN CONFIGURATION	PACKAGING

For technical questions, contact: sfer@vishay.com

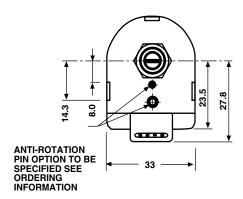
Document Number: 57094

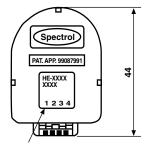
Revision: 30-Jul-10



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

#### **DIMENSIONS** in millimeters



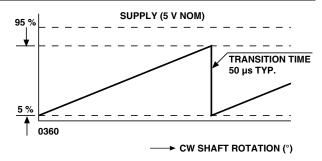


PRODUCT NO. DATE CODE AND TERMINAL I.D. LABEL

<b>-</b>	42 →
<sup>3</sup> / <sub>8</sub> - 32 UNEF 2A	
6, 6, 3, 6, 6, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	
0.8	
Ø 3.18	1.6

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

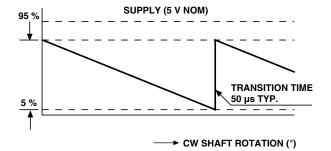
MATERIAL SPECIFICATIONS	
Housing	Plastic
Bushing	Brass, nickel plated
Shaft	Stainless steel
Pin terminal connector	Gold plated
Output connection	Pin header to suit IDC connectors. e.g. Panduit C100 - F22 and Molex 7880
Bushing Mount Hardware Lock Washer, Internal Tooth	Steel, nickel plated
Panel Nut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



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



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 0 V

Document Number: 57094 Revision: 30-Jul-10



## **Legal Disclaimer Notice**

Vishay

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Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.