Vishay Spectrol



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



### FEATURES

 Absolute ratiometric output over 360° range with no dead band



- Self-contained package not requiring external COMPLIANT 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 $V_{DC}$ to 5.5 $V_{DC}$
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	со	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	IDELINES	
601 HE	0001	B01
MODEL	PIN CONFIGURATION	PACKAGING

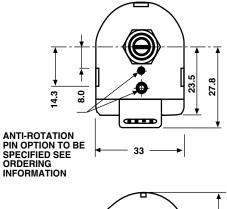


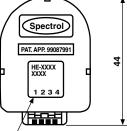
# Model 601 HE

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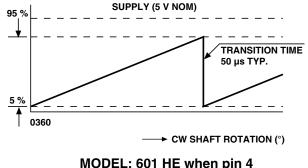
### **DIMENSIONS** in millimeters



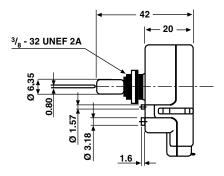


PRODUCT NO. DATE CODE AND TERMINAL I.D. LABEL

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



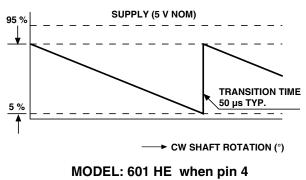
MODEL: 601 HE when pin 4 connected to 5 V or open circuit



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



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



AODEL: 601 HE when pin 4 connected to 0 V



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