



# 351 HE HALL EFFECT POSITION SENSOR



## 351 HE

Single-Turn, Bushing-Mount, Hall-Effect Sensor  
"Mount and Forget!"

### FEATURES

- Accurate linearity down to  $\pm 0.5\%$
- All electrical angles available up to  $360^\circ$
- Long life > 10 million cycles
- No-contact, Hall effect technology
- Designed for use in harsh environments
- Size 09 (22.2 mm)

### APPLICATIONS

- Foot-pedal position sensors
- Throttle position sensors
- Steering position sensors
- Rudder positioning
- Auto pilot feedback
- Drive-by-wire
- Lift-and-shuttle position sensors
- Tilt control and tilt positioning feedback
- Suspension-system position sensors

Datasheet is available on our web site at [www.vishay.com](http://www.vishay.com)  
for 351HE - <http://www.vishay.com/doc?57099>

# Single Turn Bushing Mount Hall Effect Sensor in Size 09 (22.2 mm)



### FEATURES

- Accurate linearity down to:  $\pm 0.5\%$
- All electrical angles available up to:  $360^\circ$  (no dead band)
- Long life: greater than 10M cycles
- Non contacting technology: Hall effect
- Model dedicated to all applications in harsh environments



RoHS  
COMPLIANT

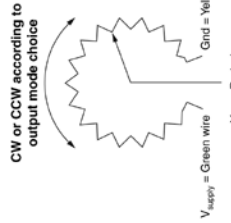
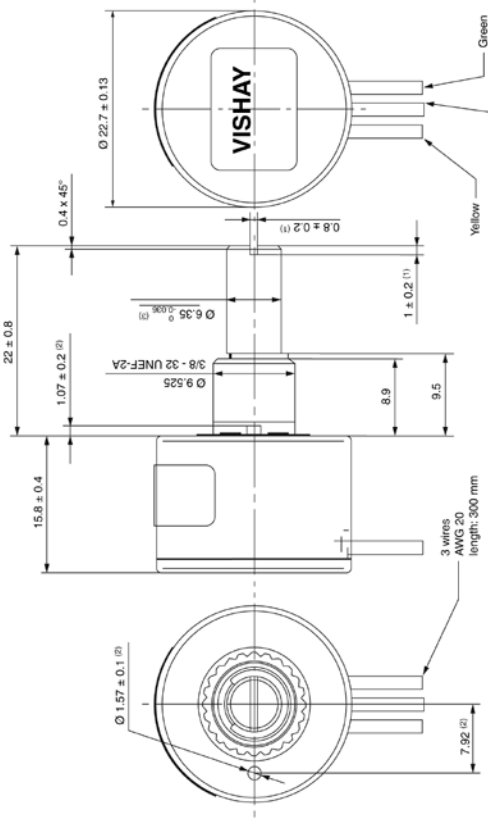
PARAMETER	STANDARD	SPECIAL
Electrical angle	$90^\circ, 180^\circ, 270^\circ, 360^\circ$	Any other angle upon request
Linearity	$\pm 1\%$	$\pm 0.5\%$
Supply voltage	5 V (DC) $\pm 10\%$	Other upon request
Supply current	10 mA typical	16 mA for PWM output
Output signal	Analog ratiometric 10% to 90% of $V_{supply}$ or PWM 10% to 90% duty cycle	Other upon request
Over-voltage protection	+20 V (DC)	
Reverse voltage protection	-10 V (DC)	
Load resistance recommended	Min. 4 k $\Omega$ for analog output and 1 k $\Omega$ min. for PWM output	
Hysteresis	$< 0.2\%$	

ORDERING INFORMATION/DESCRIPTION						
351HE	0	A	1	W	A	1S22 XXXX BO 10 e1
MODEL FEATURES	LINEARITY	ELECTRICAL ANGLE	OUTPUT TYPE	OUTPUT SIGNAL	SHAFT TYPE	SPECIAL REQUEST
0: continuous rotation and antirotation pin and no antirotation pin	A: $\pm 1\%$ B: $\pm 0.5\%$	1: $90^\circ$ 2: $180^\circ$ 3: $270^\circ$ 4: $360^\circ$ 9: other angles	W: wires Z: custom	A: analog CW B: analog CCW C: PWM CW D: PWM CCW Z: other output	0: 6 mm 1: 6.35 mm 2: 3.175 mm 9: special P: plain S: slotted Z: other type	Box of 10 pieces
2: stops at $340^\circ$ and antirotation pin						
3: stops at $340^\circ$ and no antirotation pin						

Shaft length from mounting face 22 mm to 72 mm max. per step of 5 mm

SAP PART NUMBERING GUIDELINES						
351HE	1	B	9	Z	C	0P27 XXXX
MODEL	MECHANICAL FEATURES	LINEARITY	ELECTRICAL ANGLE	OUTPUT TYPE	OUTPUT SIGNAL	SHAFT TYPE
						SPECIAL REQUEST

### DIMENSIONS in millimeters



Viewed from shaft

### Notes:

- (1) For version slotted shaft
- (2) For version non turn pin
- (3) For shaft type "1"

Revision 06-Sep-07

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