

55085 With Integral Actuator Magnet





Agency Approvals

Agency	Agency File Number
c Ru us	E61760 (<mark>TBD</mark>)

Dimensions

Dimensions in mm (inch)



Block Diagram



Notes:

1. Add caoacitor Cn as shown, close to the sensor, for transient suppression if required.

2. Add resistor Rpu as shown for sinking output.

Description

The 55085 is a miniature hall effect sensor with integral actuator magnet. Actuation occurs when a suitable vane passes through the slot between the magnet and hall element. It is capable of switching up to 28Vdc and 20mA and ideally suited to position and limit sensing, security, linear actuator, industrial process control, and shaft rotation applications.

Features

- · Sensor and magnet contained in a single housing
- Sensor operates when ferrous vane passes through slot

Benefits

- High switching speed up to 10kHz
- Long life up to 20 billion operations
- Unaffected by harsh environments

Applications

- Position and limit sensing
- · Shaft rotation sensing
- · Security systems

Activation

Dimensions in mm (inch)

- Three-pin leadout integral to sensor
- Reverse/Over voltage protection
- Built in temperature compensation
- Operates in static or dynamic magnetic field
- Small package size
- Simple installation
- Linear actuators
- Angle sensing
- Magnetic encoders



Note

1. Activate Distance is approximate using a 2.54mm (.100) thick ferrous vane as illustrated.

Additional Information









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Electrical Ratings

Hall Type			Digital Switch 3-Wire (Voltage Output)	
Supply Voltage ¹	Absolute Range Recommended Overvoltage Protection	Vdc Vdc Vdc - max.	-15 to +28 +3.8 to +24 32	
Output High Voltage		Vdc - min.	VDD - 2 (sinking output with internal pull-up resistor)	
Output Low Voltage		Vdc - max.	0.4 @20mA	
Output Current (continuously on)		mA - max.	20	
Current Consumption		mA - min. mA - max.	1 10.5	
Switching Speed		KHz-max.	10	
Temperature	Operating Storage	°C ℃	-40 to +100 -65 to +105	

Note:

1. As long as Tj (Junction Temperature) is not exceeded.

Miniature Vane > 55085



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Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A