

# RPM - Resistive Chain Level Measurement



## Flexible by Design

The RPM level sensor is designed for use in the chemical, oil, shipping, food processing, waste treatment, and many other industries. Each RPM is manufactured to the users specifications making it fit to work precisely according to the application requirements.

### Features

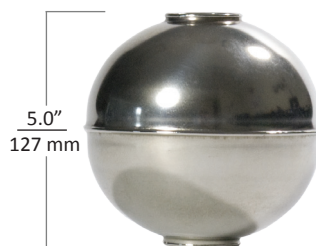
- Continuous level indication
- Rugged and highly reliable
- Anti-stick float design
- Resistive chain or loop powered 4-20 mA output
- Hazardous location approvals - Explosion proof / Intrinsically safe

**W. H. Cooke & Co., Inc.** Manufacturer of thermocouples & RTD's Made in the USA  
Supplier of industrial controls, heaters, and sensors since 1963

[sales@whcooke.com](mailto:sales@whcooke.com)

717-630-2222

# RPM Specifications



## Performance

- Resolution:
  - Standard: 13 mm (0.5 in.)
  - High: 7 mm (0.25 in.)
- Maximum Pressure: 72.5 psi (5 bar)

## Environmental

- IP65

## Certification

- CSA Explosion Proof:
  - 0-24 VDC output
    - Class 1, Division 1; Groups C & D  
-40°C ≤ Tamb ≤ +40°C
    - Class 1, Division 2; Groups C & D  
-40°C ≤ Tamb ≤ +85°C
  - 4-20 mA output
    - Class 1, Division 1; Groups C & D  
-40°C ≤ Tamb ≤ +40°C
    - Class 1, Division 2; Groups C & D  
-40°C ≤ Tamb ≤ +85°C
- CSA Intrinsically Safe:
  - Exia Class I, Division 1; Groups C & D IIB T4  
Class 1 Zone 1; Ex d IIB T3  
(4-20 mA output)  
-40°C ≤ Tamb ≤ +85°C
- ATEX Intrinsically Safe:
  - EX II 1 G EEx ia IIB T3  
-40°C ≤ Tamb ≤ +85°C  
AEx d IIB T3

## Connectivity

- Output:
  - 4-20 mA or Voltage (See Options)

## Electrical

- Supply Voltage:
  - Voltage Output: 0-24 VDC
  - 4-20 mA Output: 12-24 VDC

## Physical

- Housing: Cast aluminum
- Stem: 316L SS
- Stem Length: 122 to 610 cm (48 to 240 in.)
- Float Material:
  - Polyurethane, 8 in. OD (0.44 SG)
  - 316L SS, 5 in. OD (0.5 SG)
- Cable Entry: 3/4 in. NPT

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# Options

Part Number: RPM -      -      -      -      -      -      -     

A      B      C      D      E      F      G

## A. Probe Length

\_\_\_\_\_ Specify in inches

## B. Logo Designation

- A** APG (Default)
- B** Custom (minimum quantities apply)

## C. Float

- N** No Float
- F** Polyurethane float with designated logo (0.44 SG, 8" OD)
- S** 316 SS float (0.5 SG, 5" OD)
- C** Custom float (minimum quantities apply)

## D. Output Signal/Hazard Rating

- EX1** 0-24 VDC (resistive) with EX approval (Class 1, Div. 1)
- IS** 4-20 mA with IS and EX approval (Class 1, Div. 1)
- ISr** 20-4 mA with IS and EX approval (Class 1, Div. 1)
- AIS** 4-20 mA with ATEX approval (Ex. II.1G EX ia IIB T3 and Class 1, Div. 1 ia) CSA, IS, Class 1 Division 1

## E. Custom Wiring

- 000** None
- 001** T&B 2531 strain relief
- 2xx** Custom cable

## F. Resolution/Deadband S1, S2

- 02** 1/2" resolution, top deadband (S1) = 8 inches, bottom deadband (S2) = 5 inches
- 03** 1/2" resolution, top deadband (S1) = 8 inches, bottom deadband (S2) = 4 inches
- 04** 1/2" resolution, top deadband (S1) = 1/2 float H, bottom deadband (S2) = 1/2 float H
- 12** 1/4" resolution, top deadband (S1) = 8 inches, bottom deadband (S2) = 5 inches
- 13** 1/4" resolution, top deadband (S1) = 8 inches, bottom deadband (S2) = 4 inches
- 14** 1/4" resolution, top deadband (S1) = 1/2 float H, bottom deadband (S2) = 1/2 float H

## G. Mounting (Optional)

- 00** None
- 0Ax** Flat faced ANSI flange 316L SS (Specify size in ordering code: x=2", 3", 4", 5", or 6")
- 1Ax** Raised face ANSI flange 316L SS (Specify size in ordering code: x=2", 3", 4", 5", or 6")
- 4Tx** NPT plug mounted outside of tank 316L SS (Specify size in ordering code: x=2" or 3")

# RPM Accessories

Please order separately by part number.

Part Number	Description		
135414	Float stop	110367	5 in. 316 SS float, 0.25 in. resolution, 0.5 SG
135396	Bottom bracket	125312	8 in. polyurethane float, 0.5 in. resolution, 0.44 SG
125603	Right angle bracket pipe clamp	125620	8 in. polyurethane float, 0.25 in. resolution, 0.44 SG
110368	5 in. 316 SS float, 0.5 in. resolution, 0.5 SG		