



Technical Specifications for Compact Industrial Anemometer Models
C5C-1263-2-SP (Switch Pulse Output) and C5CD-1263-2-SP (Dual Switch Pulse Output)

Anemometer Output – (Single or Dual Switch Pulse)

Pulse output from reed switch contact closure (4 pulses per revolution)

Anemometer Performance and Transfer Functions

Maximum speed (230+ mph or 102.82 + m/s)
Reed switch pulse/sec output signal range (0 to 322)
Distance constant @ 63% recovery (33.20 ft or 10.12 m)
Measuring range (0 mph to 230 mph, 0 m/s to 102.82 m/s)
Characteristic transfer function (V [m/s] = .32187 x f [Hz] + .67873)
Characteristic transfer function (V [mph] = .7200 x f [Hz] + 1.5183)
Starting threshold all positions averaged (2.70 mph or 1.21 m/s)
Starting threshold @ optimum flow position (1.54 mph or 0.69 m/s)
Accuracy test range (8.97 mph to 100.60 mph or 4.01 m/s to 44.97 m/s)
Accuracy within range with characteristic transfer function (.2 mph or .1 m/s)

Electrical Technical Data

Reed switch (Voltage 5 VDC max, current 1.0 mA max)
Magnet (4-Pole)

Materials of Construction

Shaft Tower (316 Stainless Steel)
Shaft (316 Stainless Steel)
Anemometer housing and shaft tower (316 Stainless Steel)
Cups, arms, and rotor assembly (316 Stainless Steel and Titanium)
Bearings (C-BRN0203OF Coated, double shielded, Stainless Steel, Marine Lube)

Physical Dimensions

Height (4.06 inches or 103.14 mm)
Weight (.942 pounds or 427.28 grams)
Body diameter (1.50 inches or 38.10 mm)
Swept diameter of rotor (7.75 inches or 196.85 mm)
Rotor cup conical cross-section (2.10 inches or 53.34 mm)

Sensor External Electrical Connections and Cable Specifications

Cable Connection and termination (M8 round pin connector, 2" Bare Leads)
Cable (108" Long, 2 conductors, 24 gauge, shielded with drain, PE jacket)
Cable color coding (Blue single (+), Black single (-), and single bare drain)

Required Tools for Mounting, Installation, and Maintenance

Mounting (0.5 inch or 12.7 mm diameter mast with two set screws)
Tools (3/16, 3/32, inch Allen Wrench, Phillips Screwdriver and .25" torque pin)

Environmental Specifications

Operating humidity range (0 to 100% RH)
Bearing operating temperature (-65°F to 300°F or -54°C to 148°C)
Reed switch operating temperature (-40°F to 257°F or -40°C to 125°C)

Anemometer Protection

Optional finish (Modified orange or black anti-ice coating on shaft tower)
Climatic protection (Protection against water, high humidity, salt spray, and dust)
Electrical protection (Over voltage and surge protection incorporated in electrical components)

C5C-1263-2-SP and C5CD-1263-2-SP Anemometer Calibration Test Standards

ASTM D 5096-02 (Standard Test Method for Determining the Performance of a Cup or Propeller Anemometer)
ISO 17713-1 (Meteorology Wind Measurements Part 1: Wind Tunnel Test Methods for Rotation Anemometer Performance)
Procedure: MEASNET, IEC 61400-12-1:2017 Annex F Modified for 4-26m/s

