# Product Guide


Level and Flow Measurement

# Rotating Paddles

## 300 Series

pulsar®
PROCESS MEASUREMENT

# Rotating Paddles:

## 300 Series

## Features

- Robust and high reliability switching
- High, demand and low level switching
- Low cost polypropylene versions
- High strength stainless steel
- Cable and rigid extension options
- High temperature +600°C option
- ATEX11 1/2D, GOST-R, FM/CSA & IEC-Ex option

**The Pulsarpoint 300 series is a range of rotating paddle level switches, for level measurement and switching on bulk solids. The paddle's rotation is interrupted when material reaches the paddle, causing a clutch to disengage the motor. This in turn actuates a relay allowing an alarm signal to be switched. This may be used to signify a material level as being high, intermediate or low depending on configuration chosen.**

### Application

Effective management of material storage and flow prevents overflows, empty vessels, clogged or blocked chutes or conveyors. Costly or dangerous spillage, material waste or unnecessary maintenance may be avoided.

Typical applications may be found in the food, animal feed, pharmaceutical, chemical, plastics, quarrying, power generation, cement and other industries employing bulk solids material storage or conveying.

Suitable products for monitoring include plaster, cement, chalk, lime, granules, wood chips, cereals, cocoa, sugar, animal feeds, washing powders or plastic powders and pellets.

POINT 300

### Pulsarpoint 300

The 300 utilises a plastics PA6 housing, sealed to IP66. The process connection is of the same material, with a polypropylene double blade paddle as standard. This can easily be converted to a single blade (as shown).

Rope and solid extensions are available, along with an aluminium process connector (shown).

POINT 310

### Pulsarpoint 310

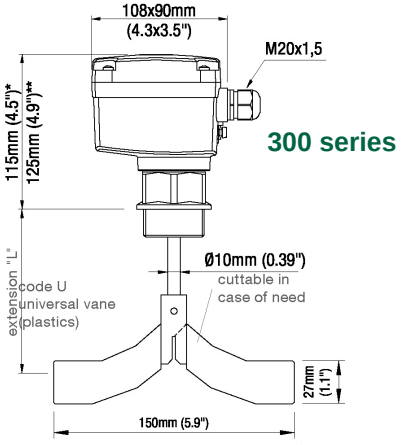
The 310 has a diecast aluminium housing sealed to IP66, with process connection in aluminium, or stainless steel. Various paddle materials, along with options on seals for aggressive media applications are available. The 310 switch is available for high application temperatures of up to 600°C. It is also available with ATEX dust approval for zone 20, 21 and 22.

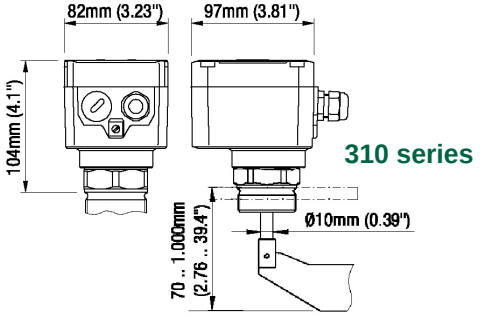
### Options

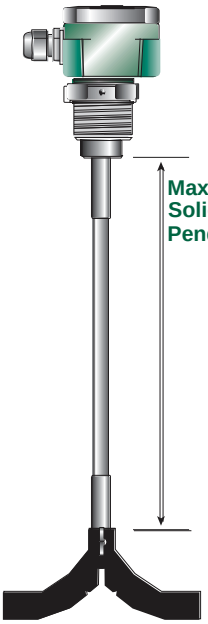
Switches are available with solid or cable extension, allowing a wide range of alarm points to be catered for with materials to suit the application, as well as high temperature versions for applications up to 600°C, such as is required in electrostatic precipitator hopper level measurement.

# Technical Specification: Pulsarpoint 300 series

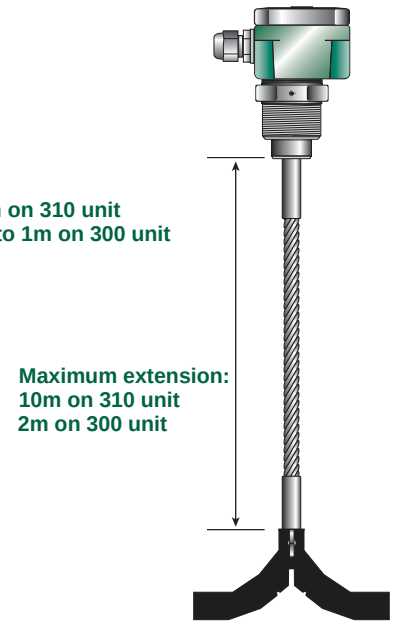
| TECHNICAL SPECIFICATION PULSARPOINT 300 and 310: | |
|---|---|
| **Voltage: (5 versions):** | 240, 110, 48, 24VAC 50/60HZ, 24V DC (Universal Voltage option) |
| **Installed load:** | 3VA |
| **Switched output:** | Max. load 250VAC, 2A, 500VA or 300VDC, 2A, 60W |
| **TECHNICAL SPECIFICATION PULSARPOINT 300:** | |
| **Housing:** | Plastics PA6 IP66 |
| **Cable entry:** | 1 entry with M20 x 1.5. 2nd entry optional |
| **Process connection:** | 1½ " DIN 228 (1½" BSP) |
| **Process connection material:** | Plastics PA6 |
| **Shaft material:** | Stainless steel |
| **Paddle material:** | 1.4301 (SS304)/ 1.4305 (SS303) |
| **Bearing and seal:** | Slide bearing, shaft seal to DIN 3760 |
| **Shaft speed:** | 1 rpm or 5 rpm with 1.3 second switching delay |
| **Minimum bulk density:** | Adjustable in 3 steps from 100g/litre |
| **Process temp and pressure:** | -20C (-4F) (-40C/-40F with optional heater) to +80°C (+176°F) and +0.8bar (5 & 10 bar options) |
| **TECHNICAL SPECIFICATION PULSARPOINT 310 and ATEX IEC-Ex OPTION:** | |
| **Housing:** | Aluminium die cast IP65 |
| **Cable entry:** | 1 entry with PG13.5 gland. 2nd entry optional |
| **Process connection:** | 1½ " DIN 228 (1½" BSP) or optional flange |
| **Process connection material:** | Stainless steel, aluminium, galvanised |
| **Shaft material:** | Stainless steel |
| **Paddle material:** | Stainless steel |
| **Bearing and seal:** | Ball bearing, shaft seal to DIN 3760 |
| **Shaft speed:** | 1 rpm or 5 rpm with 1.3 second switching delay |
| **Minimum bulk density:** | 15g/litre (0.94lbs/ft3) |
| **Process temp and pressure:** | -20C (-4F) (-40C/-40F optional heater) to +80°C (+176°F) and +0.8 bar (5 & 10 bar options) |
| **Flammable atmosphere version:** | Dust: ATEX 1/2D Ex ia D20 (Zone 20, 21 and 22) |
| **High temperature option:** | 600°C (1112°F) (not Ex version) |




**Solid extension (310 only)**
**Pendulum extension, spring loaded (300 only)**




**Rope extension**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