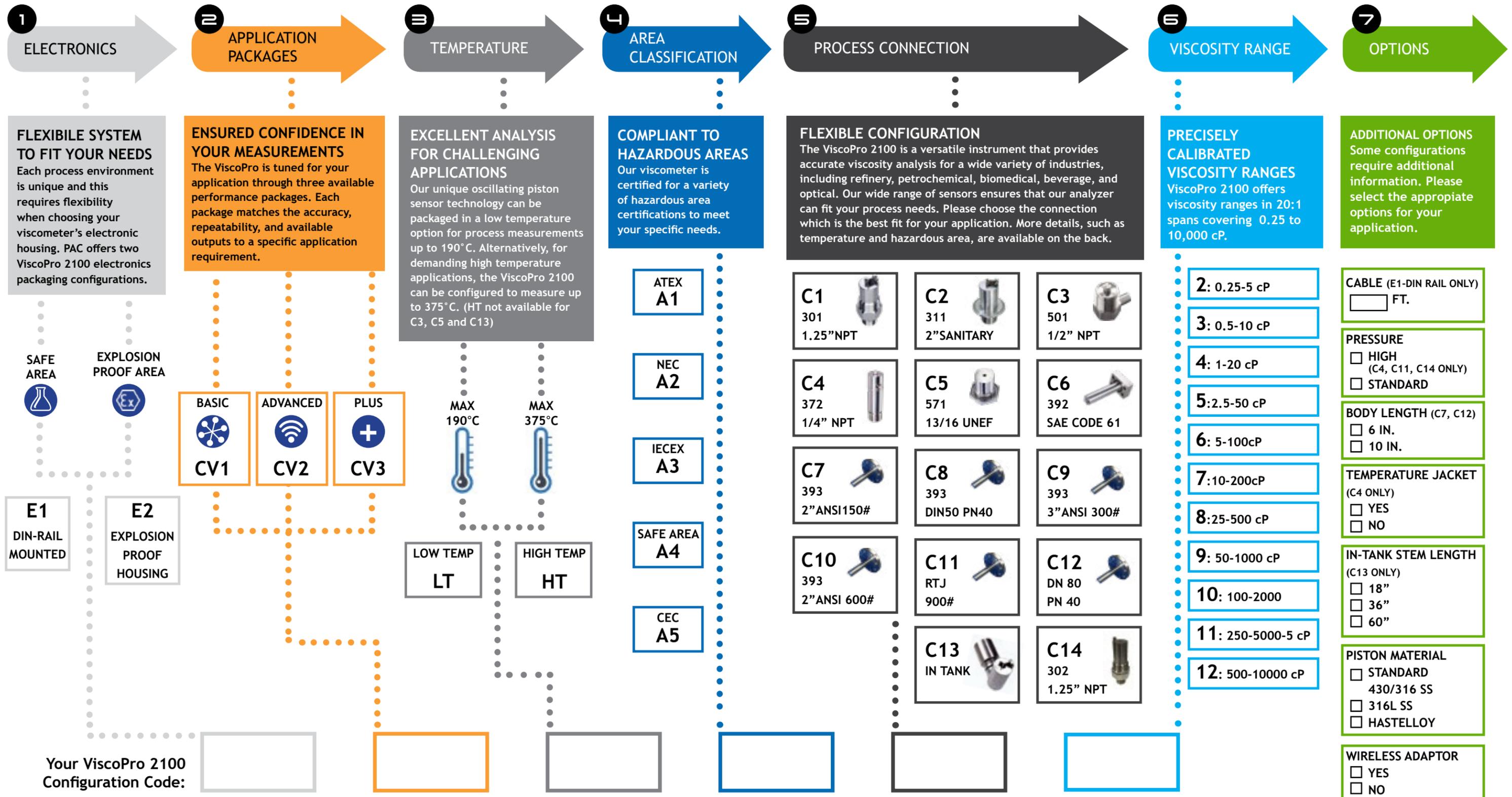# ViscoPro 2100 Configuration Guide

Select the choice that best fits your needs by filling in the proper code in the highlighted box at the bottom.
Page 2 has detailed descriptions of each option.
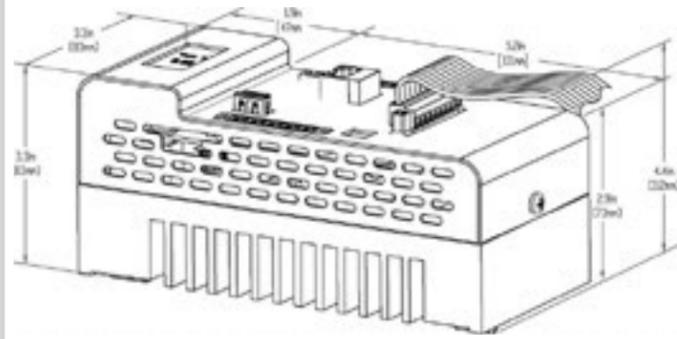Email your completed configuration code to sales@cambridgeviscosity.com

1 ELECTRONICS

2 APPLICATION PACKAGES
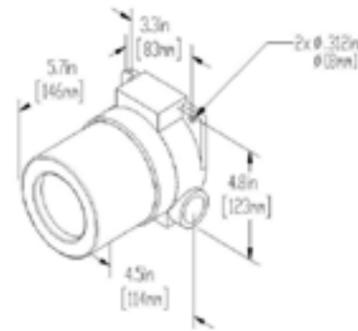
3 TEMPERATURE

4 AREA CLASSIFICATION

5 PROCESS CONNECTION

6 VISCOSITY RANGE

7 OPTIONS

FLEXIBILE SYSTEM TO FIT YOUR NEEDS
Each process environment is unique and this requires flexibility when choosing your viscometer's electronic housing. PAC offers two ViscoPro 2100 electronics packaging configurations.

ENSURED CONFIDENCE IN YOUR MEASUREMENTS
The ViscoPro is tuned for your application through three available performance packages. Each package matches the accuracy, repeatability, and available outputs to a specific application requirement.

EXCELLENT ANALYSIS FOR CHALLENGING APPLICATIONS
Our unique oscillating piston sensor technology can be packaged in a low temperature option for process measurements up to 190°C. Alternatively, for demanding high temperature applications, the ViscoPro 2100 can be configured to measure up to 375°C. (HT not available for C3, C5 and C13)

COMPLIANT TO HAZARDOUS AREAS
Our viscometer is certified for a variety of hazardous area certifications to meet your specific needs.

FLEXIBLE CONFIGURATION
The ViscoPro 2100 is a versatile instrument that provides accurate viscosity analysis for a wide variety of industries, including refinery, petrochemical, biomedical, beverage, and optical. Our wide range of sensors ensures that our analyzer can fit your process needs. Please choose the connection which is the best fit for your application. More details, such as temperature and hazardous area, are available on the back.

PRECISELY CALIBRATED VISCOSITY RANGES
ViscoPro 2100 offers viscosity ranges in 20:1 spans covering 0.25 to 10,000 cP.

ADDITIONAL OPTIONS
Some configurations require additional information. Please select the appropriate options for your application.

1 — ELECTRONICS
- SAFE AREA
- EXPLOSION PROOF AREA
- **E1** DIN-RAIL MOUNTED
- **E2** EXPLOSION PROOF HOUSING

2 — APPLICATION PACKAGES
- BASIC **CV1**
- ADVANCED **CV2**
- PLUS **CV3**

3 — TEMPERATURE
- MAX 190°C
- MAX 375°C
- LOW TEMP **LT**
- HIGH TEMP **HT**

4 — AREA CLASSIFICATION
- ATEX **A1**
- NEC **A2**
- IECEX **A3**
- SAFE AREA **A4**
- CEC **A5**

5 — PROCESS CONNECTION

C1 301 1.25"NPT	**C2** 311 2"SANITARY	**C3** 501 1/2" NPT
C4 372 1/4" NPT	**C5** 571 13/16 UNEF	**C6** 392 SAE CODE 61
C7 393 2"ANSI150#	**C8** 393 DIN50 PN40	**C9** 393 3"ANSI 300#
C10 393 2"ANSI 600#	**C11** RTJ 900#	**C12** DN 80 PN 40
C13 IN TANK	**C14** 302 1.25" NPT	

6 — VISCOSITY RANGE
- **2**: 0.25-5 cP
- **3**: 0.5-10 cP
- **4**: 1-20 cP
- **5**: 2.5-50 cP
- **6**: 5-100cP
- **7**: 10-200cP
- **8**: 25-500 cP
- **9**: 50-1000 cP
- **10**: 100-2000
- **11**: 250-5000-5 cP
- **12**: 500-10000 cP

7 — OPTIONS
- **CABLE** (E1-DIN RAIL ONLY) ____ FT.
- **PRESSURE**
  - ☐ HIGH (C4, C11, C14 ONLY)
  - ☐ STANDARD
- **BODY LENGTH** (C7, C12)
  - ☐ 6 IN.
  - ☐ 10 IN.
- **TEMPERATURE JACKET** (C4 ONLY)
  - ☐ YES
  - ☐ NO
- **IN-TANK STEM LENGTH** (C13 ONLY)
  - ☐ 18"
  - ☐ 36"
  - ☐ 60"
- **PISTON MATERIAL**
  - ☐ STANDARD 430/316 SS
  - ☐ 316L SS
  - ☐ HASTELLOY
- **WIRELESS ADAPTOR**
  - ☐ YES
  - ☐ NO

Your ViscoPro 2100 Configuration Code:

VISCOPRO 2100 CONFIGURATION GUIDE

1 ELECTRONICS

E1 DIN RAIL MOUNTED

E2 EXPLOSION PROOF

2 APPLICATION PACKAGES

FEATURES/PACKAGE	CV1 CORE	CV2 ADVANCED	CV3 PLUS
4-20mA outputs (viscosity, temperature, temperature compensated viscosity)	2	4	4
Factory calibration for repeatability	1.5%	0.5% (outdoor)	0.5% (indoor)
Quality Indicator	●	●	●
Field configurable through a commissioning interface: • 4-20 mA scaling • Averaging • Viscosity, temperature units • Temperature compensated viscosity • Bias adjustment		●	●
RTU Modbus		●	●

5 PROCESS CONNECTION

C1
MODEL 301: 1.25" NPT PIPE MOUNT
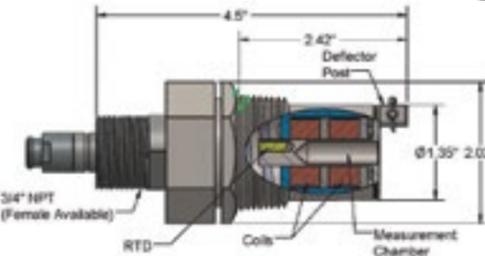
C2
MODEL 311: 2" QUICK DISCONNECT FLANGE
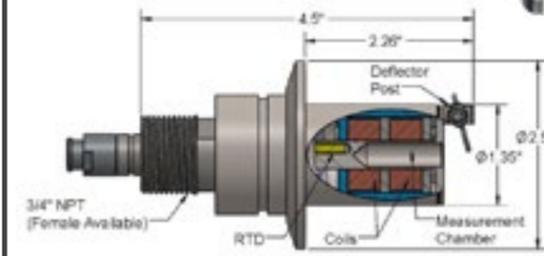
C3
MODEL 501: MINIATURE WITH 1/2" NPT SEAL
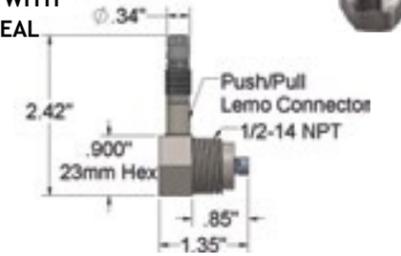
C4
MODEL 372: 1/4" NPT FLOW THROUGH
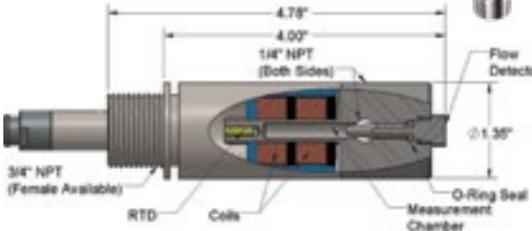
C5
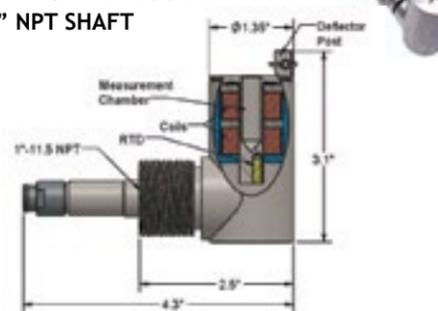MODEL 571: MINIATURE WITH O-RING SEAL
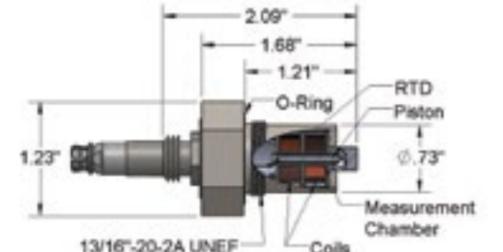
C6
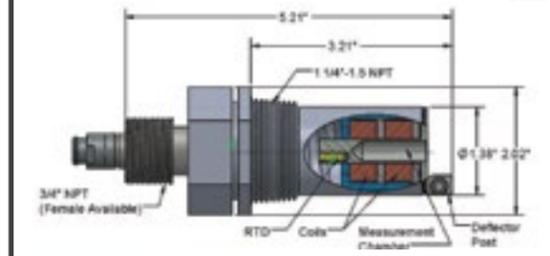MODEL 392: WIDE DIAMETER PIPE MOUNT WITH COMPACT SAE FLANGE
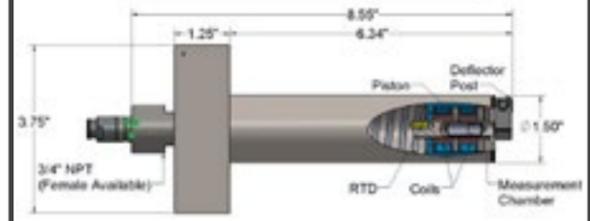
C7-C12
MODEL 393: WIDE DIAMETER PIPE MOUNT WITH ANSI/DIN ROUND FLANGE
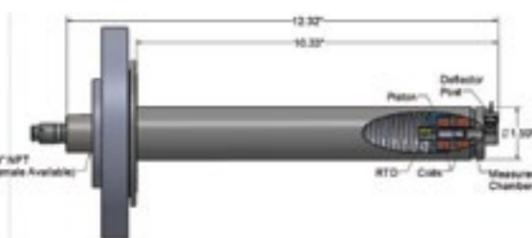
C13
MODEL 321: TANK MOUNT FOR 1" NPT SHAFT

C14
MODEL 302: 1.25" NPT WIDE DIAMETER PIPE MOUNT

NOTES:

- Almost all process connections are available in both temperature options (low or high), all area classifications, and viscosity ranges (from 0.2 to 10,000 cP). However, the 501 and 571 sensors are only available in the following options: low temperature, safe area, and up to 200 cP.
- E1 electronics are separated by cable from the sensor. The standard cable length is 15' (4.5m), but may be optionally ordered up to 100' (30.5m). E2 electronics are rigidly mounted to the sensor.
- Custom configurations available. Please consult factory.