

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

FLEXIBLE 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.

SAFE AREA

EXPLOSION PROOF AREA

E1

DIN-RAIL MOUNTED

E2

EXPLOSION PROOF HOUSING

2

APPLICATION PACKAGES

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.

BASIC

CV1

ADVANCED

CV2

PLUS

CV3

3

TEMPERATURE

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)

MAX 190°C

MAX 375°C

LOW TEMP

LT

HIGH TEMP

HT

4

AREA CLASSIFICATION

COMPLIANT TO HAZARDOUS AREAS

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

ATEX

A1

NEC

A2

IECEX

A3

SAFE AREA

A4

CEC

A5

5

PROCESS CONNECTION

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.

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" ANSI 150#

C8

393

DIN 50 PN 40

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

PRECISELY CALIBRATED VISCOSITY RANGES

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

2: 0.25-5 cP

3: 0.5-10 cP

4: 1-20 cP

5: 2.5-50 cP

6: 5-100 cP

7: 10-200 cP

8: 25-500 cP

9: 50-1000 cP

10: 100-2000

11: 250-5000-5 cP

12: 500-10000 cP

7

OPTIONS

ADDITIONAL OPTIONS

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

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:

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1 ELECTRONICS

E1 DIN RAIL MOUNTED



E2 EXPLOSION PROOF

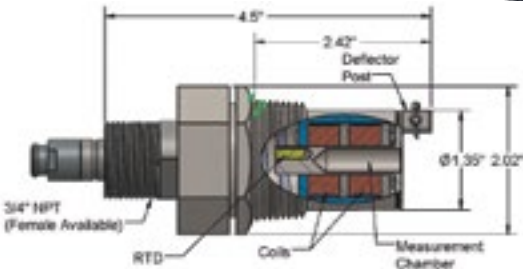


2 APPLICATION PACKAGES

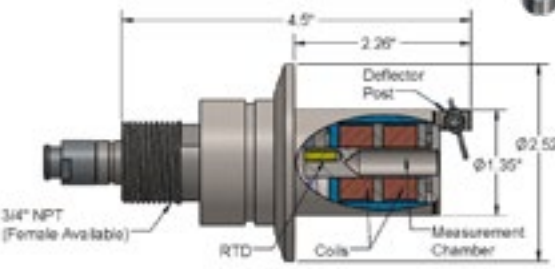
FEATURES/PACKAGE	CV1 CORE	CV2 ADVANCED	CV3 PLUS
4-20mA outputs (viscosity, temperature, temperature compensated viscosity)	2	4	4
Factory calibration for repeatability	1.5%	0.5% (outdoor)	0.5% (indoor)
Quality Indicator	●	●	●
Field configurable through a commissioning interface: • 4-20 mA scaling • Averaging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

5 PROCESS CONNECTION

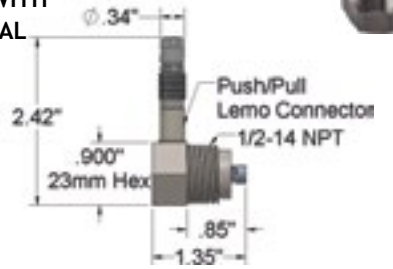
C1
MODEL 301:1.25" NPT PIPE MOUNT



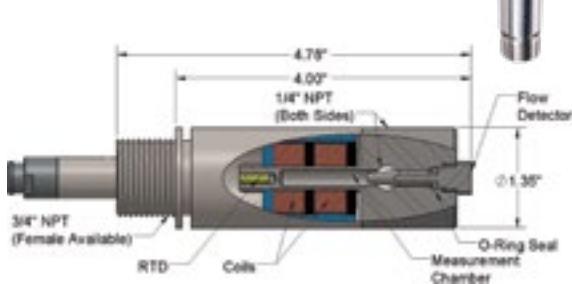
C2
MODEL 311:2" QUICK DISCONNECT FLANGE



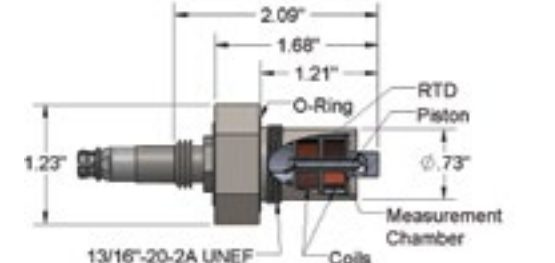
C3
MODEL 501:
MINIATURE WITH
1/2" NPT SEAL



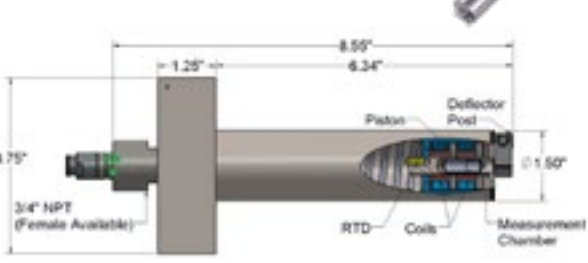
C4
MODEL 372: 1/4" NPT FLOW THROUGH



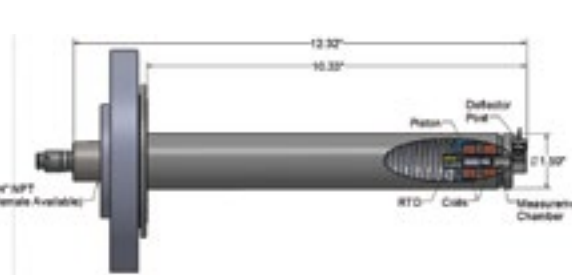
C5
MODEL 571: MINIATURE WITH
O-RING SEAL



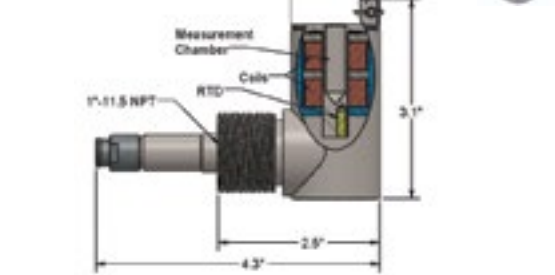
C6
MODEL 392: WIDE DIAMETER PIPE MOUNT
WITH COMPACT SAE FLANGE



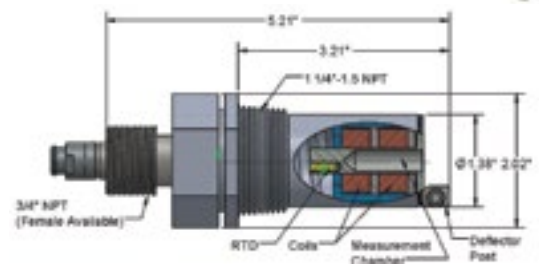
C7-C12
MODEL 393: WIDE DIAMETER PIPE
MOUNT WITH ANSI/DIN ROUND FLANGE



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.