1.0 How to order

This document walks you through how to order the above specified Shell design using the Rosemount 114C Thermowell. This document outlines only the physical dimensional aspect of the design. Any testing or certification requirements apart from thermowell calculations (according to the ASME PTC 19.3TW) are outside the scope of this document.

Adding the following options satisfy the Shell Van Stone design requirements.

- **R61** - Stepped instrument connection threads
- **R62** - Roughening of last 120 mm (4.7 in.) of the stem
- **E03** - Fillet radius of 3 mm
- **D01** - Bore diameter of 7 mm
- **F01** - 15 mm stub thickness for flange size (11/2 in.) DN40 up to ASME class 1500
- **F02** - 20 mm stub thickness for flange size (2 in.) DN50 up to ASME class 2500
- **R21** - The thermowell calculation option will trigger a disclaimer on the report stating calculations were done without stem roughening as this option is out of scope of the ASME PTC 19.3 TW.

Example: 114CM0255VAB25C060AR21R61R62E03F01D01

2.0 Sensor requirements

Due to the stepped instrument threads (option R61), the sensor length will be affected. The typical calculations for matching sensor length will not work. The overall sensor length must be reduced by 10 mm or 0.5 in. If this is done with a 214C sensor and Oracle is used, there is cross model validation that will take care of this issue. Look for the safety messages in the Toolkit that will warn and guide you.