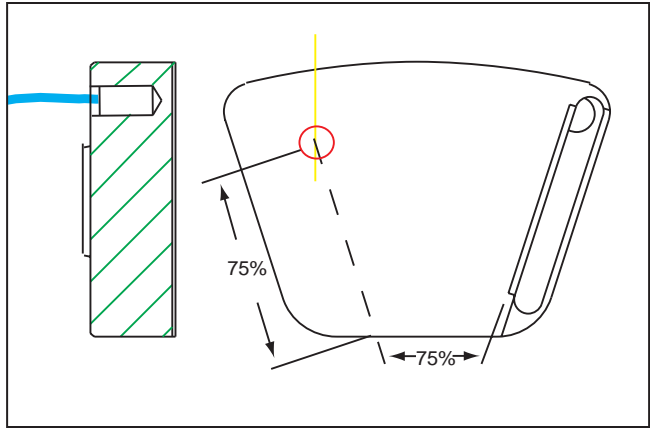


## INSTRUMENTATION

SlimLine bearings can be instrumented by arranging lead wires through the back of the carrier ring (see illustration).

### Temperature measurement

Changes in load, shaft speed, oil flow, oil inlet temperature, or bearing surface finish can affect bearing surface temperatures. At excessively high temperatures, the pad babbitt is subject to wiping which causes bearing failure. Consequently, for critical applications, we recommend using pads with built-in temperature sensors so you can see actual metal temperatures under all operating conditions. Either thermocouples or resistance temperature detectors (RTDs) can be installed in contact with the babbitt or in the pad body near the pad body/babbitt interface. See drawing for recommended sensor location.



**Recommended Sensor Location**

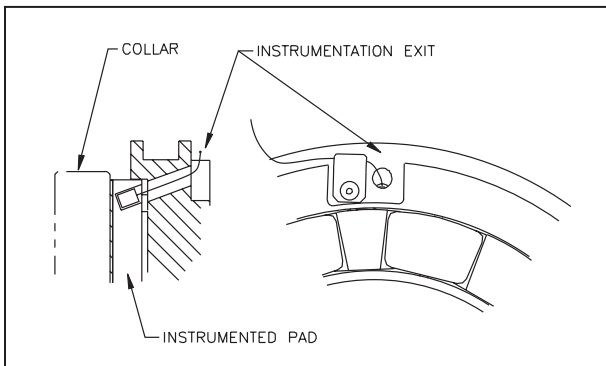
## BABBITT TEMPERATURE

With the correct LEG thrust bearing selected, you may wish to estimate the babbitt temperature at operating conditions, particularly if:

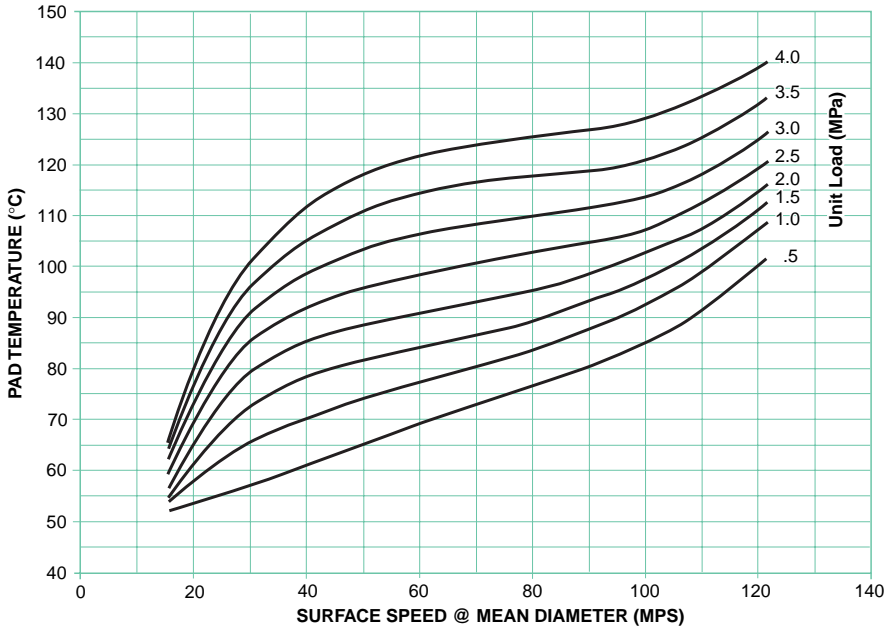
- Bearing load exceeds 2.8 MPa
- Collar surface speed exceeds 76.2 m/s

- Inlet oil temperature exceeds 50° C
- User specifications limit maximum allowable temperature

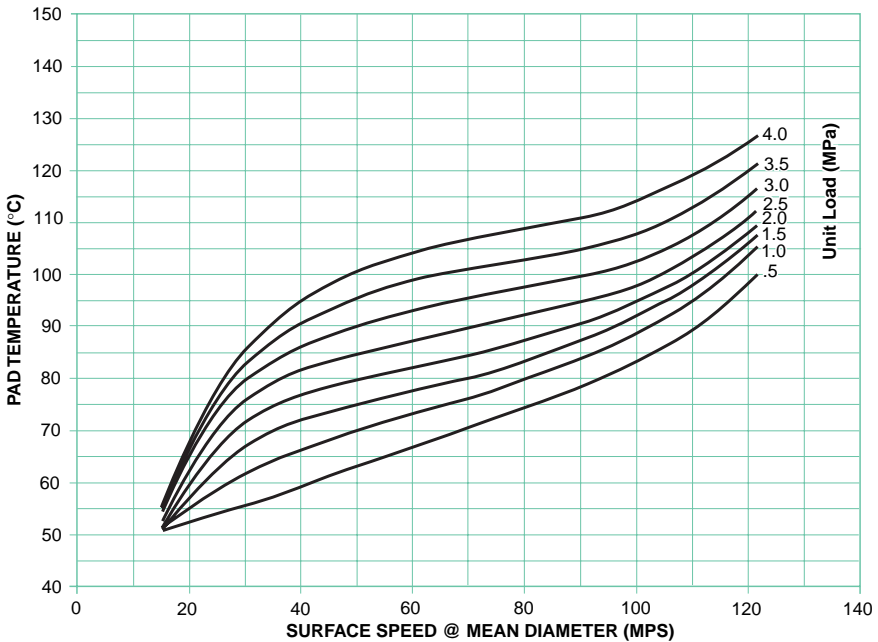
Please refer to the graphs on the next page to estimate the babbitt temperature at the recommended 75/75 position. If babbitt temperature exceeds bearing limitations of 130° C or user specifications (whichever is lower), you may be able to reduce it to a more acceptable level by substituting chrome-copper-backed shoes. Please contact our Engineering Department for additional suggestions.



### 75/75 PAD TEMPERATURE (STEEL)



### 75/75 PAD TEMPERATURE (CHROME-COPPER)



Temperatures are based on recommended oil, flow, and supply temperatures.  
Unit load is load divided by bearing area.