MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

3300 SYSTEM

3300/70-XX-00

DUAL VALVE POSITION INDICATOR MODULE

Used with the applicable 3300 System configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Bently Nevada 3300/70-XX-00 manufacturer documentation

3300/70 Dual Valve Position Indicator

Bently Nevada™ Asset Condition Monitoring

Description

The 3300/70 Dual Valve Position Indicator provides continuous indication of one or two control valve openings and is designed for use with Turbine Supervisory Instrumentation (TSI) systems. The 3300/70 is an indicator only; it does not provide alarm capability.

The valve position is measured by observing the amount of rotation of the cam shaft. This measurement is obtained with a Bently Nevada Linear Variable Differential Transformer (LVDT) or potentiometer transducer, and is then displayed on the Dual Valve Position Indicator as a percentage of the valve opening.

imagination at work

Specifications

Inputs

Signal:

Accepts one or two LVDT or potentiometer transducer inputs. The same type of transducer must be used on both channels.

Power:

Nominal consumption of 2.0 watts.

Signal Conditioning

Accuracy:

Within ±0.33% of full-scale typical, ±1% maximum. Accuracy rated from signal input to proportional output which drives display, computer interface, and recorder output circuitry.

Specified at ambient temperature of +25°C (+77°F).

Outputs

Recorder:

User-programmable for +4 to +20 mA, 0 to -10 Vdc, or +1 to +5 Vdc. Each channel has an individual recorder output to indicate valve position 0 to 100% of full-scale. Indicator operation is unaffected by short-circuits on recorder outputs.

Recorder accuracy (in addition to signal conditioning accuracy):

All specified at +25°C (+77° F).

+4 to +20 mA: ±0.7% of signal, ±0.09 mA offset.

+1 to +5 Vdc: ±1.1% of signal, ±10 mV offset.

0 to -10 Vdc: ±1% of signal, ±15 mV offset.

Output Impedance (voltage outputs):

100 Ω. Minimum load resistance is 10 k Ω.

Voltage Compliance (current outputs):

0 to +12 Vdc range across load. Load resistance is 0 to 600 Ω when using +4 to +20 mA option.

Display

Meter:

Nonmultiplexing vertical bargraph-type Liquid Crystal Display (LCD), indicating valve position as percent opened (0 to 100%). Individual 63-segment LCDs are present for each signal.

Size:

83 mm (3.25 in), vertical dimension.

Resolution:

Within ±1.6% of monitor full-scale.

LED Indicators:

One constant ON green LED per channel indicates transducer OK status.

Environmental Limits

Operating Temperature:

0°C to +65°C (+32°F to +150°F).

Storage Temperature:

-40°C to +85°C (-40°F to +185°F).

Relative Humidity:

To 95%, noncondensing.