NSN 5990-01-122-7130

Receiver-transmitter Synchro - Page 1 of 3



View Online at https://aerobasegroup.com/nsn/5990-01-122-7130

Body Material:

Steel, corrosion resisting

Body Style:

Standard round double flange a

Shoulder Diameter:

Between 3.3290 inches and 3.3340 inches

Pilot Diameter:

Between 1.6200 inches and 1.6300 inches

Second Shoulder Diameter:

Between 3.3740 inches and 3.3750 inches

Second Shoulder Length:

0.3650 mils and 0.3850 centimeters

Overall Length:

5.9650 inches

Flange Diameter:

Between 3.6240 inches and 3.6250 inches

Flange Thickness:

Between 0.2450 inches and 0.2550 inches

Body Diameter:

3.6230 mils and 3.6250 centimeters

Shaft Diameter:

0.2403 inches single shaft and 0.2405 inches single shaft

Shaft Length:

0.6900 inches single shaft and 0.7100 inches single shaft

End Application:

Used as torque receiver transmitter on rudder repeatback on 270 ft coast guard vessels

Distance Between Flanges:

Between 1.8070 inches and 1.8170 inches

Maximum Tempurature Rise:

35.0 degrees celsius

Body Size:

37

Rotor Input Voltage Rating In Volts:

115.0

Frequency In Hertz:

60.0

Rotor Input Current Rating:

830.0 milliamperes

Rotor Input Electrical Power Rating:

9.3 watts microwatts

Zss Impedance Magnitude In Ohms:

Between 8.00 and 10.00

NSN 5990-01-122-7130

Receiver-transmitter Synchro - Page 2 of 3



Zss Impedance Angle In Deg: Between 31.00 and 35.00 Phase Shift Angle In Deg: 3.000 input to output

Maximum Fundamental Null Voltage In Millivolts Per Volt:

35.00 output

Maximum Total Null Voltage Output In Millivolts Per Volt:

200.00

Electrical Error Angular Range In Minutes:

-10.0/+10.0

Spline Tooth Quantity:

22 single shaft

Receiver Error Angular Range In Minutes:

-36.0/+36.0

Torque Gradient Per Angular Deg:

0.900 inch-ounces

Shaft Radial Play Test Point:

0.125 inches

Shaft Maximum Radial Play:

0.0008 inches

Shaft End Play:

Between 0.0010 inches and 0.0050 inches

Pilot Length:

0.0250 mils and 0.0350 centimeters

Shoulder Length:

0.6500 mils and 0.6600 centimeters

Err Default:

Err default and err default

Mounting Surface To Terminal End Distance:

4.0300 inches

Spline Tooth Diametral Pitch:

96 single shaft

Shaft Thread Series Designator:

Unf single shaft

Shaft Thread Direction:

Right-hand single shaft

Shaft Thread Class:

2a single shaft

Terminal Location:

Rear

Shaft Thread Length:

0.3100 inches single shaft

Shaft Type:

Spline w/threads single shaft

NSN 5990-01-122-7130

Receiver-transmitter Synchro - Page 3 of 3



| Transformation Ratio: |
|--|
| 0.783 rotor to stator |
| Shaft Thread Size: |
| 0.250 inches single shaft |
| Shaft Radial Play Determining Weight: |
| 8.0 ounces |
| Shaft End Play Determining Weight: |
| 16.0 ounces |
| Terminal Type And Quantity: |
| 5 screw |
| Shelf Life: |
| N/a |
| Unit Of Measure: |
| |
| Demilitarization: |
| Yes - demil/mli |

Fiig: A07800