

OUTPUT SHAFT
REVOLUTIONS

1.5

1.0×10^8

9.0

8.0

7.0

6.0

5.0

4.0

3.0

2.5

2.0

1.5

1.0×10^7

9.0

8.0

7.0

6.0

5.0

4.0

3.0

2.5

2.0

1.5

1.0×10^6

9.0

8.0

7.0

6.0

5.0

4.0

3.0

2.5

Model 50

Planet Bearing B_{10} Life vs Input Torque
(Average $[B_{10}]$ life approximately 5 times value shown)

TO CALCULATE LIFE

$$\text{no. hrs} = \frac{\text{no. cycles (scale at left)}}{60 \times \text{output RPM}}$$

EXAMPLE:
for 50 RPM at 10,000 lb. in.
motor torque

$$\text{no. hrs} = \frac{5.0 \times 10^6}{60 \times 50} = 1667 \text{ hrs } B_{10} \text{ life}$$

MOTOR TORQUE, LB. IN.
(NEWTON METERS)

3750 5000 7500 10000 12500 15000 17500 20000 22500 23750
(424) (565) (847) (1130) (1412) (1695) (1977) (2260) (2542) (2683)