

INTRODUCTION

The solid brake arms and base plate minimize deflection, reducing release stroke losses. Optimized lever geometry ensures a maximum ratio for large braking forces. The brake shoes are made of cast iron with steel bushes and asbestos-free linings, either reverted or bonded. Additionally, brake shoe clamping springs are included, and all critical pivot points are equipped with bushes.

Application:

A flexible brake for a wide range of industrial applications, including steel processing, material handling cranes, and conveyor systems.

Brake Selection Procedure

Brake Torque Calculation:

For most applications the brake torque must be equal to or greater than motor full load torque as referred to the drum / wheel shaft.

$$\text{Thus, torque in Kg m} = \frac{974 \times \text{KW}}{\text{rpm}}$$

Where

KW = Motor Output
rpm = Revolution per minute

When torque requirements known and the type and the duty cycle established, the brake is selected accordingly from the selection table. For certain special application e.g. crane hoist and their overhauling loads, the brake should be capable of providing atleast 150% of motor torque.

TECHNICAL DATA:

Model	: EL 500-46
Thruster	: EL-46
Drum Dia	: 500 mm
Braking Torque	: 320 Kg-m
Thrust	: 46 Kg
Stroke	: 51 mm
Recommended Oil	: Transformer Oil - Grade BS:148
Oil Capacity	: 2.4 Ltrs.
Operating Voltage	: 415V±10%, 3Phase AC, 50Hz
Power Consumption	: 0.53 Amps
Input Watts	: 220 Watts
Insulation of Thruster	: F Class
Insulation Voltage	: 600V
Protection	: IP 54
Shoe Liner	: Asbestos Free
Shoe Width	: 200 mm

Optional:

- Manual release mechanism with lever
- Limit Switch

