

Motor Selection Guide

For Rolling Shutters

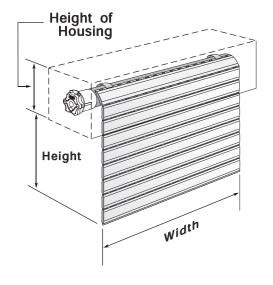
To select a motor in this guide you need to know the following:

- 1. Type of slat: Height and Thickness
- 2. Total weight of shutter
- 3. Diameter of the tube



Type of Slat:

It is important to consider the height and thickness of the slats before choosing an operator, since these variables affect the weight per square foot of a rolling shutter. In the next four pages you will find four types of slats. Choose the one that most closely corresponds to the slat that you intend to use.



Total Weight of Shutter

Total weight = $\underbrace{\text{Width x (Height + Height of Housing)}}_{\text{surface}} x \text{ Weight per sq. ft.}$

Important Note:

The choice of a motor also depends on the type of installation.

- If you use one motor for two or more shutters add 15% for each additional shutter to derive the total weight.
 - Examples: 2 shutters/one motor = + 15% to the total weight 3 shutters/one motor = + 30% to the total weight
- If the roller tube is too far from the tracks, add 15% to the total weight



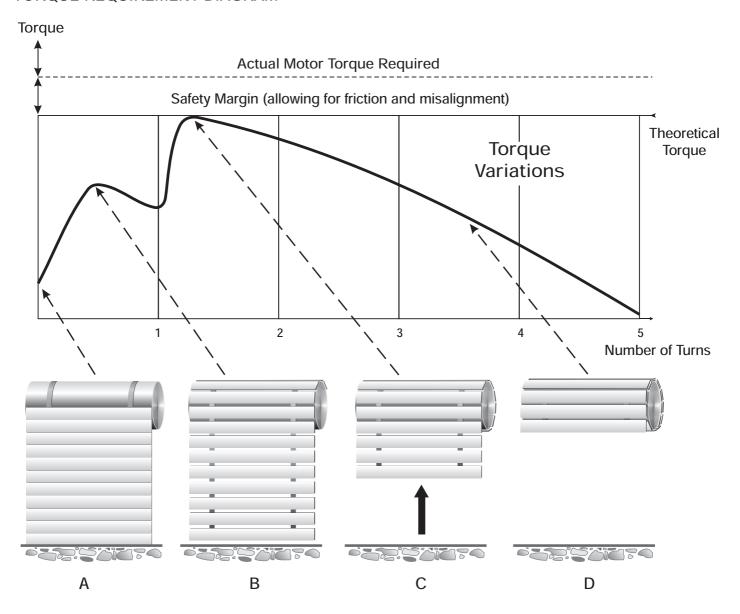
Diameter of Tube:

The lifting capacity of an operator decreases when the tube diameter increases. Therefore, it is necessary to choose the smallest tube while considering the load capacity of the tube and the optimum roll-up diameter of the slats.

After choosing the roller tube and the chart corresponding to your type of slat (see pages 17-20), select the operator according to the weight and the total height of the shutter (the safety factor is included in these charts).



TORQUE REQUIREMENT DIAGRAM



- A. The initial torque required to start lifting the slats is small. However, it increases rapidly. This results from the motor lifting the load of the slats away from the bottom of the application.
- B. All slats are hanging free. The torque may slightly decrease while the slats are rolling up, since the tube radius has not yet increased.
- C. The maximum torque required is arrived at when the slats are lifted up about one third of the way from the bottom of the application.
- D. The torque decreases progressively and reaches a minimum when the shutter is fully rolled up.



ROUND

3.5" (89)

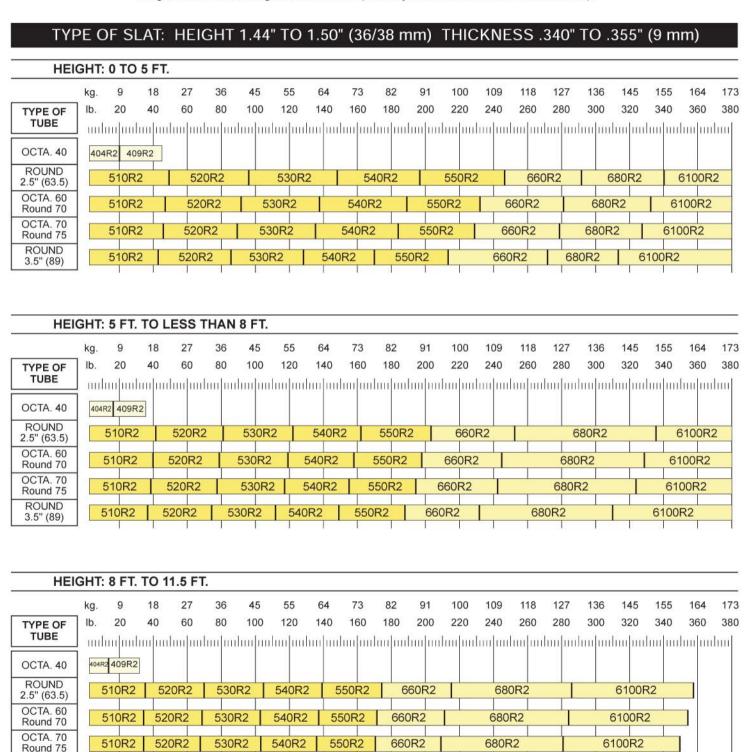
520R2

510R2

530R2

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After choosing the roller tube and the page corresponding to your type of slat, select the operator according to the weight and the total height of the shutter (A safety factor is included in these charts).



660R2

680R2

6100R2

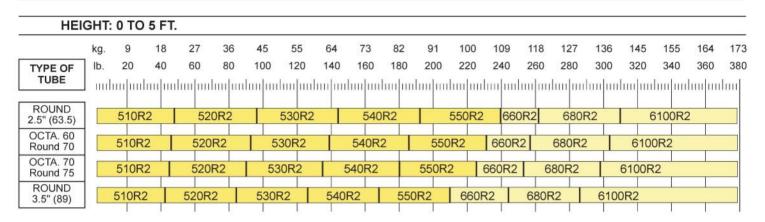
550R2

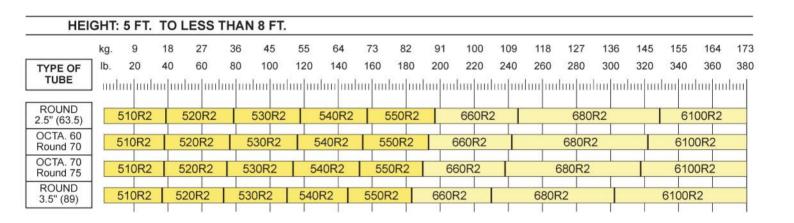
540R2

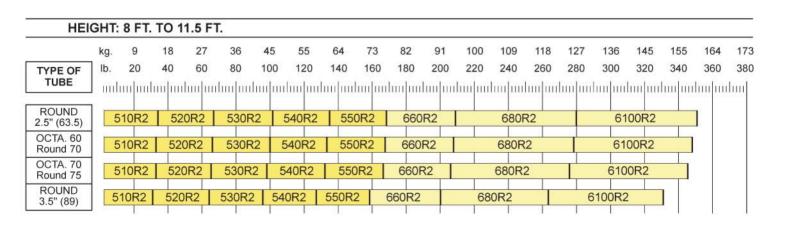


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TYPE OF SLAT: HEIGHT 1.58" TO 1.65" (40/42 mm) THICKNESS .340" TO .355" (9 mm)









510R2

520R2

530R2

540R2

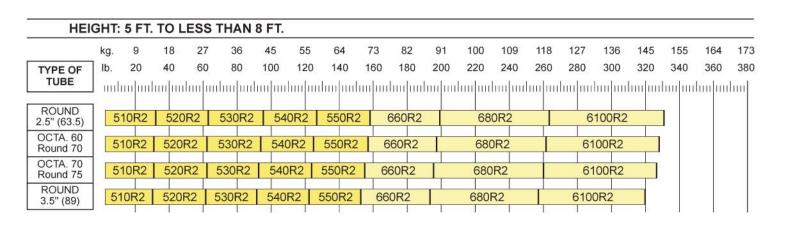
Round 75

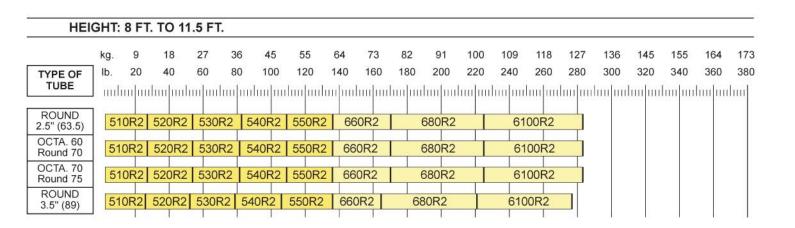
3.5" (89)

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TYPE OF SLAT: HEIGHT 1.986" TO 2.10" (50/53 mm) THICKNESS .55" (14 mm) HEIGHT: 0 TO 5 FT. 27 kg. 9 18 36 45 55 64 73 82 91 100 109 118 127 136 145 155 164 173 lb. 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 TYPE OF TUBE ROUND 510R2 520R2 530R2 540R2 550R2 2.5" (63.5) OCTA. 60 510R2 530R2 540R2 550R2 520R2 Round 70 OCTA. 70 510R2 520R2 530R2 540R2 550R2

550R2







510R2

520R2

530R2

ROUND

3.5" (89)

Motor Selection Guide For Rolling Shutters

TYPE OF SLAT: HEIGHT 2.125" TO 2.20" (54/56 mm) THICKNESS .55" (14 mm) HEIGHT: 0 to 5 FT. kg. 9 18 27 36 45 55 64 73 82 91 100 109 118 127 136 145 155 164 173 lb. 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 TYPE OF TUBE OCTA. 60 510R2 520R2 530R2 540R2 550R2 Round 70 OCTA. 70 510R2 520R2 530R2 540R2 550R2 Round 75

550R2

540R2

