

Q100 STEEL ROLLER SHUTTERS

DRIVE OPTIONS & INSTALLATION CLEARANCES

Manual Operation

Operated manually by hand - the maximum recommended size is 6m² to meet the specified amount of force to safely operate the load - 220N.

Chain Operation

Operated via hauling chain operated reduction gearbox - the maximum recommended size is 22m² (Grifco P/N #HDHWO) or 25m² (Grifco P/N #EHDHWO).

Electric Operation

- Operated electrically by heavy duty industrial worm & wheel reduction gearbox/electric motor unit through chain drive to shutter drum.
- Standard position of motor is below the drum.
- The drive has built-in limit switches and is operated by Up/Stop/Down push button controls. The Down button requires continuous pressure for the entire down cycle of shutter for safety reasons.
- Remote control activation, key switches, induction loops or other means of operation may be fitted as an optional extras.
Remote down must have PE Beam.

- 3-Phase openers are standard. Single phase openers are available as optional extra. All standard openers have Short Time Rated Duty Cycle (10 minutes operation every hour).
- High Cycle Rated openers are available in 3, or single phase versions. These are recommended for shutters exceeding 20 cycles per day, or for car parks securing more than 6 vehicles.
- Motor sizes:
 - 0.75kW (1HP) for shutters up to 36m²
 - 1.1kW (1.5 HP) for shutters up to 50.0m²
 - 1.5kW (2.0 HP) for shutters up to 80.0m²
 Typical operating speed - 6 meters per minute.

Note: Fitting windlock to doors decreases the square meter capacity of the motor by 10%.

- The openers are fitted with emergency hauling chain drive in the case of power failure.

Table 1 SERIES 100 SLAT THICKNESS AVAILABILITY

| Slat (mm) | Thickness Availability | |
|-----------|------------------------|-------|
| | 0.8mm | 1.0mm |
| 100mm | Yes | Yes |

Q100 Standard Headroom & Siderommm Clearances

| Type | Operation | Max. Size | Guide | "A" Inboard | "A" Outboard | "B" | "C" | "D" | "D1" | "E" | "F" |
|------|-----------|------------------|----------|-------------|--------------|-------|-------|-------|-------|-------|-------|
| Q100 | Manual | 6m ² | 60mm | 170mm | | 190mm | 650mm | 400mm | N/A | 400mm | N/A |
| Q100 | Manual | 6m ² | 100mm | 210mm | | 230mm | 650mm | 400mm | N/A | 400mm | N/A |
| Q100 | Manual | 6m ² | Windlock | 210mm | | 230mm | 650mm | 400mm | N/A | 400mm | N/A |
| Q100 | Chain | 25m ² | 60mm | 170mm | 410mm | 190mm | 700mm | 500mm | 550mm | 400mm | 790mm |
| Q100 | Chain | 25m ² | 100mm | 210mm | 450mm | 230mm | 700mm | 500mm | 550mm | 400mm | 790mm |
| Q100 | Chain | 25m ² | Windlock | 210mm | 450mm | 230mm | 700mm | 500mm | 550mm | 400mm | 790mm |
| Q100 | Electric | 36m ² | 60mm | 170mm | 410mm | 190mm | 700mm | 540mm | 700mm | 400mm | 790mm |
| Q100 | Electric | 36m ² | 100mm | 210mm | 450mm | 230mm | 700mm | 540mm | 700mm | 400mm | 790mm |
| Q100 | Electric | 36m ² | Windlock | 210mm | 450mm | 230mm | 700mm | 540mm | 700mm | 400mm | 790mm |
| Q100 | Electric | 8m H x 10m W | Windlock | 250mm | 450mm | 230mm | 800mm | 640mm | 840mm | 400mm | 950mm |

Codes - Refer Tech. Sheet 9B for drawing: A - Inboard / Outboard sideroom. B - Capstan end sideroom. C - Minimum Headroom from underside lintel to ceiling. D - Inside clearance of capstan side of curtain. D1 - Inside clearance of drive side. E - Underside of lintel to centreline of shaft. F - Headroom from underside of below mount motor to top of rolled curtain.

NOTES:

- Dimension 'A' is shown for RH operation. For LH operation swap dimensions 'A' & 'B'.
- All headroom dimensions allow for 250mm high guide feed-in extension above lintel height.
- * - If release arm set below motor this dimension increases to 1200mm.
- For restricted clearance applications, discuss options with Arco (Qld) engineer.
- The typical life span of roller shutter springing is defined as follows:
 - Low cycle (i.e. open 1-20 cycles per day) - Spring life of up to 10,000 cycles;
 - High cycle (i.e. open 20-40 cycles per day) - Spring life of up to 80,000 cycles;
 - Extreme high cycle (i.e. open more than 40 cycles per day) - Spring drums are not recommended. A springless drum and brake motor is recommended for these applications.