












# Type 1780

## Extra Heavy Duty Window Wiper

Low voltage systems ideal for average to high speed vessels

-  Pantograph and pendulum
-  Arms with blades up to 59ins. (1500mm) available for average speed vessels
-  Arms with blades up to 39ins. (1000mm) available for high speed vessels
-  Fixed arc or variable arc models
-  12 and 24 volt DC
-  Two speeds
-  Self parking facility
-  Insulated earth return and EMC filter are standard
-  Operated by various controls including a rotary switch, rocker switch or a multi-speed / function control system



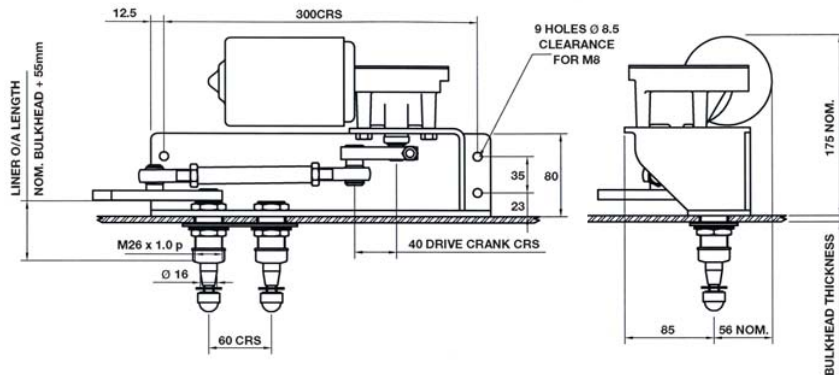
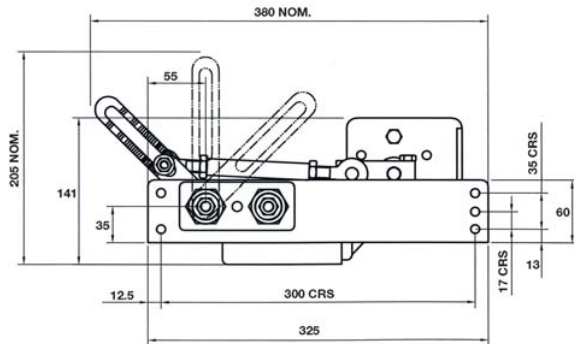


# Type 1780 Heavy Duty Window Wiper

Low voltage systems ideal for average to high speed vessels

## Specifications

Standard Details	2 Speed; Self Parking; Insulated Earth Return; 12v and 24v
Angles of Arc - Fixed	
Pantograph Units	25° to 90° (in 5° increments only)
Pendulum Units	25° to 115° (in 5° increments only)
Angles of Arc - Variable	
Pantograph Units	40° to 90° (in 5° increments only)
Pendulum Units	40° to 90° (in 5° increments only)
Spindle Centers	Between Drive Liner & Idler = 60mm Pantograph Units only
Drive Liner	M26 - Brass Liner / 16mm SS Spindle Pantograph & Pendulum Units
Liner Overall Length	Bulkhead Thickness + 55mm
Idler Liner	M20 - Brass Liner / 16mm SS Spindle Pantograph Units only
Bracket	C - Compact Bracket
Unit Weight	Allowing for the maximum arm and blade lengths; 8Kgs (17.6 lbs)



## Wiper Arms and Blades

### ■ Pantograph Arms

P84 Heavy Duty  
Lengths 24" to 60" (610mm to 1525mm) nom  
Drive Head 16mm  
Blade Clip 14mm & 20mm

### ■ Pendulum Arms

F80 Heavy Duty  
Lengths 24" to 60" (610mm to 1525mm) nom  
Drive Head 16mm  
Blade Clip 14mm  
  
F81 Heavy Duty  
Lengths 24" to 60" (610mm to 1525mm) nom  
Drive Head 16mm  
Blade Clip 20mm

### ■ Blades

B140 Curved Blade  
Lengths 12" to 28" (310mm to 710mm) nom  
For use with arm types:  
Pendulum F80  
Pantograph P84

B140 Curved Blade  
Lengths 32" (810mm), 36" (915mm) & 39" (1000mm)  
For use with arm types:  
Pendulum F81  
Pantograph P84



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