












# 20 Nm

## Medium Duty Window Wiper

Ideal for low speed vessels with small windows

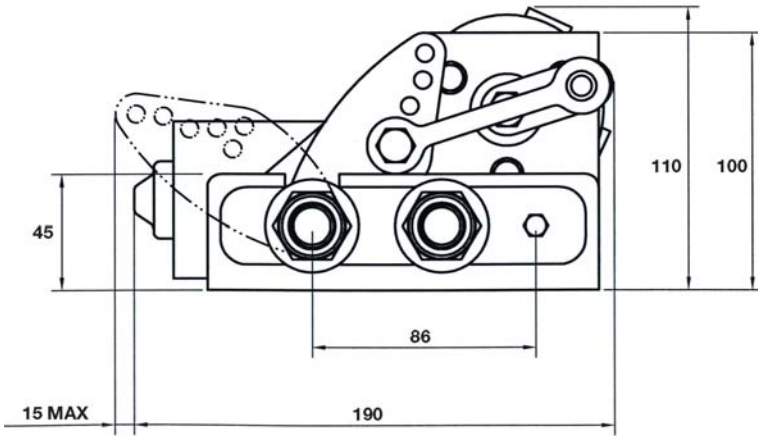
-  A compact unit
-  Pantograph and pendulum
-  Arms with blades up to 24ins. (610mm) are available
-  Fixed arc or variable arc models
-  12 and 24 volt DC
-  Two speeds
-  Self parking facility
-  Insulated earth return and EMC filter are standard
-  Operated by various controls including a rotary switch, toggle switch, rocker switch or a multi-speed / function control system





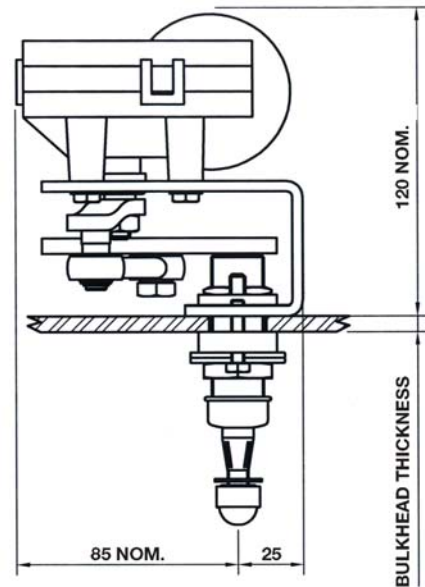
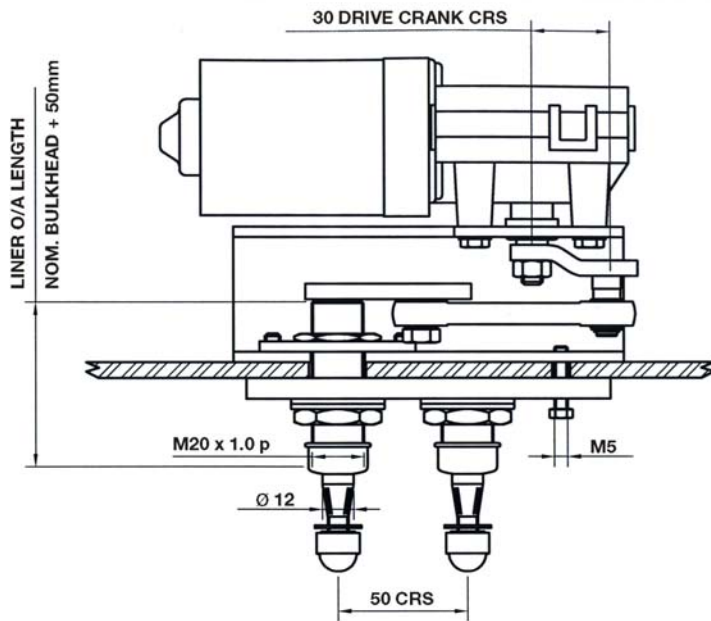
# 20 Nm Medium Duty Window Wiper

Ideal for low speed vessels with small windows



## Specifications

<b>Standard Details</b>	2 Speed; Self Parking; Insulated Earth Return; 12v and 24v
<b>Angles of Arc</b>	Variable - at stated angles
<b>Pantograph Units</b>	40°, 50°, 60°, 70°, 80°, 90°
<b>Pendulum Units</b>	40°, 50°, 60°, 70°, 80°, 90°
<b>Spindle Centres</b>	Between Drive Liner & Idler = 50mm
<b>Drive Liner</b>	M20 - Brass Liner/12mm SS Spindle
<b>Liner Overall Length</b>	Bulkhead Thickness + 65mm
<b>Idler Liner</b>	M20 - Brass Liner/12mm SS Spindle
<b>Bracket</b>	No notation used for Bracket
<b>Unit Weight</b>	Allowing for the maximum arm and blade lengths; 3.5Kgs (7.7 lbs)



## Wiper Arms and Blades

### ■ Pantograph Arms

P613	Medium Duty
<b>Lengths</b>	12" to 24" (310mm to 610mm) nom
<b>Drive Head</b>	12mm
<b>Blade Clip</b>	14mm

### ■ Pendulum Arms

F63	Medium Duty
<b>Lengths</b>	12" to 28" (310mm to 710mm) nom
<b>Drive Head</b>	12mm
<b>Blade Clip</b>	14mm

### ■ Blades

B140	Curved Blade
<b>Lengths</b>	12" to 24" (310mm to 610mm) nom
For use with arm types:	
Pendulum	F63
Pantograph	P614



## B. HEPWORTH AND COMPANY LIMITED

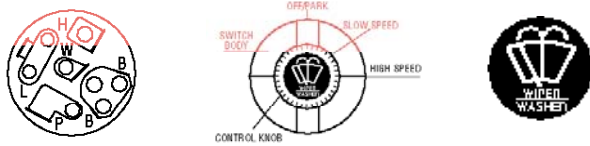
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# 20 / 30 / 50 / 80 / 110 Nm

## Electrical Details

### Non-intermittent Rotary Switch 12v : 24v 10094800

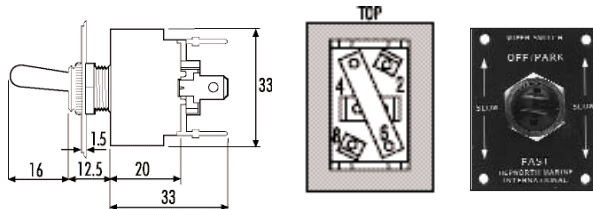


#### Wiring the Motor Unit to a Rotary Switch

Motor	Switch
31b (self park reversal feed)	position P
53 (low speed)	position L
53a (self park)	position B and positive DC ship's supply
53b (high speed)	position H
31 (earth connection)	the negative ship's supply
Washer Pump	position W

### Toggle Switch & Plate 12v : 24v 90041400

Dimensions: w20 h38



#### Wiring the Motor Unit to a Toggle Switch

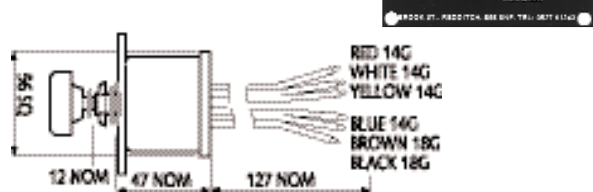
Motor	Switch
31b (self park reversal feed)	position 8
53 (low speed)	position 4
53a (self park)	position 6 and positive DC ship's supply
53b (high speed)	position 2
31 (earth connection)	the negative ship's supply

### Multi Speed Control Switch and Plate

12v - 90041000

24v - 90041100

Dimensions: w83 h66



#### Wiring the Motor Unit to a Multi Speed Control Switch

Motor	Switch
31b (self park reversal feed)	to the BLUE wire
53 (low speed)	to the YELLOW wire
53a (self park)	both RED wires and positive DC ship's supply
53b (high speed)	to the WHITE wire
31 (earth connection)	to the BLACK wire
Washer Pump	to BROWN wire

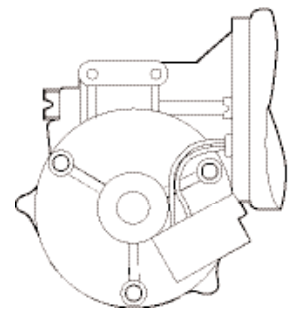
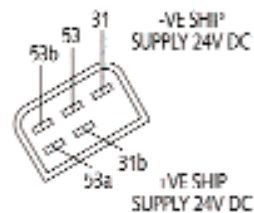
### Multi-Function Wiper Switch

A Standard Rocker Size Switch, the Multi-Function Wiper Switch has all the functions of our Standard Rotary Switch.

24 volt DC.



#### INSULATED EARTH RETURN



#### 20Nm Motor Unit

Voltage	Starting Current	Running Current
12v DC	5 amps	3 amp
24v DC	3 amps	2 amps

#### 30Nm Motor Unit

Voltage	Starting Current	Running Current
12v DC	5 amps	3 amp
24v DC	3 amps	2 amps

#### 50Nm Motor Unit

Voltage	Starting Current	Running Current
12v DC	5 amps	3 amp
24v DC	3 amps	2 amps

#### 80Nm Motor Unit

Voltage	Starting Current	Running Current
12v DC	9 amps	5 amp
24v DC	5 amps	2 amps

#### 110Nm Motor Unit

Voltage	Starting Current	Running Current
24v	5 amps	2 amps

Current readings are for guidance only.



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