Belt Drive Blower
Double Inlet Forward Curve Centrifugal Blowers
Single Belt Drive
Regal Beloit Corporation is a leading manufacturer of electric motors, mechanical and electrical motion controls and power generation products serving markets throughout the world. Regal Beloit is headquartered in Beloit, Wisconsin, and has manufacturing, sales and service facilities throughout the United States, Canada, Mexico, Europe and Asia.

Regal Air Systems brings together the strength and experience of three of Australia's leading manufacturers of air moving products for the HVAC industry. FASCO, Australian Fan & Motor Co (AFMC) and Torin are now in a position to offer industry an unparalleled range of products under the Regal Air Systems banner.

Our products are efficient and innovative; they conform to Australian design, performance and engineering standards. Regal Australia sources products from Regal manufacturing facilities and represents some of the world's leading industrial manufactures.

Regal Australia embraces the company core values of Integrity, High Energy and Performance and has adopted the initiatives of customer care, globalization, innovation, sustainability and simplification.

Our company business statement is that “We convert power into motion to help the world run more efficiently” has direct lineage to our core values and initiatives.

**Integrity**
We are a company that is honest, trustworthy, candid, transparent and fair.

**High Energy**
Our culture promotes a strong work ethic with high energy teams fostering a culture of inclusion and respect for all.

**Performance**
Everyone is expected to perform and our stakeholders count on us to execute, meet commitments and continuously improve.

**Customer Care**
Our future depends on the success of our customers. We will establish closer relationships with our customers, actively listen to their feedback and respond with a sense of urgency.

**Globalization**
We want to be global for three reasons. First, we want to participate in high growth markets around the world. Second, many of our customers are global and we want to serve customers where they do business. Finally, we want to utilize our global capabilities to seek out the best talent and to remain globally competitive.

**Innovation**
We will build the future of the Company on products that are new and needed. While we accept that with an innovation mindset comes a certain degree of risk, we are committed to investing in new products, technologies and processes that deliver real value to our customers.

**Sustainability**
The long term sustainability of our Company requires not only continuous growth and profitability, but also that we take personal responsibility for the impact we have on our planet, and for the fair and just treatment of the people we employ.

**Simplification**
Complexity is a serious disadvantage in business. We aim to simplify every aspect of our operations to eliminate complexities in order to increase our speed, improve our flexibility and reduce our costs.
# Belt Drive Blower Double Inlet Forward Curve

## Centrifugal Blowers

### Single Belt Drive

<table>
<thead>
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<tr>
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<td>15” x 15”</td>
<td>18 - 19</td>
</tr>
<tr>
<td>18” x 19”</td>
<td>20 - 21</td>
</tr>
</tbody>
</table>

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The Regal Air Systems banner.

The Regal Air Systems Corporation is an emerging leader in the HVAC industry. FASCO, Australian Fan & Motor Co., and Bi-Tron are now in a position to offer the HVAC industry a complete line of air moving products for the world. Regal Air Systems brings together the strength of three of Australia’s leading manufacturers of electric motors, mechanical and electrical motion controls and power generation products through their experience in the United States, Canada, Mexico, Europe and Asia.

Regal Beloit Corporation is a leading manufacturer of electric motors, mechanical and electrical motion controls and power generation products. Regal Beloit Corporation is headquartered in Beloit, Wisconsin, and has manufacturing, sales and service facilities serving markets throughout the world. Regal Australia embraces the company’s core values and initiatives.

“People, Planet and Profit” is our company’s business statement. It expresses our commitment to our employees, our customers, our communities and the world. Regal Beloit Corporation is committed to excellence and providing the highest quality products and services to our customers. We are committed to our core values of Integrity, High Energy and Performance and have adopted the initiatives of globalization, customer care, innovation, and sustainability and simplification.

“Globalization Customer Care Innovation Sustainability Simplification” is our business purpose.

We convert power into motion to help the world run more efficiently.” has direct lineage to the Regal Beloit Corporation’s company business statement.

Customer Care

Our future depends on the success of our customers. We will establish closer relationships with our customers, actively listen to their feedback and respond with a sense of urgency.

We will build the future of the Company on products that are new and needed. While we accept that with an innovation headset comes a certain degree of risk, we are committed to investing in new products, technologies and processes that deliver real value to our customers.

Innovation

We want to be global for three reasons. First, we want to participate in high growth markets around the world. Second, many of our customers are global and we want to serve customers where they do business. Finally, we want to utilize our global capabilities to seek growth in new products, technologies and processes that deliver real value to our customers.

Sustainability

The long term sustainability of our Company requires not only continuous growth and profitability, but also that we take personal responsibility for the impact we have on our planet, and for the fair treatment of the people we employ.

Simplification

Complexity is a serious disadvantage in business. We aim to simplify every aspect of our operations to eliminate complexities in order to increase our speed, improve our flexibility and reduce our costs.

Business Purpose

We convert power into motion to help the world run more efficiently.

Sections:

- **Introduction**: Overview of Regal Air Systems
- **Product Description, Applications**: Specifications and applications of belt drive blowers
- **How to Select**: Instructions on selecting the appropriate blower size
- **Single Belt Drive**
- **Centrifugal Blowers**
- **Belt Drive Blower Double Inlet Forward Curve**
- **Company Overview**
DESCRIPTION
The BC range of forward curved Double Width Double Inlet single blowers from FASCO are manufactured with wheel diameters from 241mm (9 inch) to 457mm (18 inch) and can deliver air volumes of up to 8000L/S.

Housings and wheels are manufactured from galvanised steel, wheels are forward curve design with inserted blades, hubs are available with 1 inch or 25mm bores.

Accessories – housing support brackets or mounting feet are available separately for each blower size.

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.
BC - HOW TO SELECT

When placing an order the part number should be specified. The product description is composed in accordance with the following example:

**BASIC OUTLINE OF CODE**

<table>
<thead>
<tr>
<th>STYLE OF UNIT</th>
<th>DIAMETER OF WHEEL</th>
<th>WIDTH OF WHEEL</th>
<th>FINAL CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**DETAILS OF CODE:**

1. **TYPE OF DRIVE**
   - B = Belt

2. **WHEEL TYPE**
   - C = Inserted Blade (CR) Type

3. **WHEEL DIAMETER**
   - In Millimetres

4. **WHEEL WIDTH**
   - In Millimetres

5. **DASH**

6. **DASH**

7. **DASH**

8. **FINAL CODE**
   - Refer Chart Below For Shaft Configuration

**EXAMPLE OF CODE**

BC381-381-75

16 Ø1” Standard
75 Ø25mm Standard
SINGLE BELT DRIVE
9”x7” STANDARD DUTY
BC241-181-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WEIGHT
7.0 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

SHAFT DETAIL

<table>
<thead>
<tr>
<th>Part No.</th>
<th>B (in)</th>
<th>C (in)</th>
<th>D (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC241-181-16</td>
<td>Ø25.40</td>
<td>6.35</td>
<td>3.75</td>
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<td>Ø25.35</td>
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<tr>
<td>BC241-181-75</td>
<td>Ø25.00</td>
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<td></td>
<td>Ø24.96</td>
<td>7.96</td>
<td>4.00</td>
</tr>
</tbody>
</table>

NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS

BC241-181-16
199
124
179
119
300

BC241-181-75

Mounting holes 11 x 16 slots

75
258
282
SINGLE BELT DRIVE
9”x7” STANDARD DUTY

DUCTED DISCHARGE

MAX 1750 RPM
SINGLE BELT DRIVE
9”x9” STANDARD DUTY
BC241-241-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WHEEL
Galvanised steel

WEIGHT
8.0 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

<table>
<thead>
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<th>D (in)</th>
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<td>BC241-241-75</td>
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<tr>
<td></td>
<td>Ø24.96</td>
<td>7.96</td>
<td>4.00</td>
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</tbody>
</table>

NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS

Mounting holes 11 x 16 slots
DUCTED DISCHARGE

MAX 1750 RPM

STATIC PRESSURE [Pa]

SHAFT POWER [W]

0 500 1000 1500 2000 2500

AIRFLOW [l/s]

9"x9" STANDARD DUTY
SINGLE BELT DRIVE
10"x8" STANDARD DUTY
BC270-203-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WHEEL
Galvanised steel

WEIGHT
9.0 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

SHAFT DETAIL

<table>
<thead>
<tr>
<th>Part No.</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>[in] BC270-203-16</td>
<td>202</td>
<td>246</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>BC270-203-75</td>
<td>227</td>
<td>246</td>
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</tbody>
</table>

NOTE:
1. Imperial Shaft - 1.0" uses ¼" x ¼" Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS

Mounting holes 11 x 16 slots
SINGLE BELT DRIVE
10"x10" STANDARD DUTY
BC270-270-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WHEEL
Galvanised steel

WEIGHT
10.5 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

<table>
<thead>
<tr>
<th>Part No.</th>
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<th>C</th>
<th>D</th>
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NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS
DUCTED DISCHARGE

MAX 1550 RPM

STATIC PRESSURE [Pa]

10"x10" STANDARD DUTY

AIRFLOW [l/s]

SHAFTPOWER [W]
SINGLE BELT DRIVE
12”x9” STANDARD DUTY
BC321-241-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WHEEL
Galvanised steel

WEIGHT
12.5 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

SHAFT DETAIL

<table>
<thead>
<tr>
<th>Part No.</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
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<td>224</td>
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<td>[mm] BC321-241-75</td>
<td>593</td>
<td>580</td>
<td>626</td>
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NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS
SINGLE BELT DRIVE
12”x9” STANDARD DUTY

DUCTED DISCHARGE

Graph showing performance characteristics for a 12”x9” standard duty single belt drive with ducted discharge at a maximum RPM of 1550. The graph illustrates static pressure vs. airflow rate. The vertical axis represents static pressure in Pascals, ranging from 0 to 1400, and the horizontal axis represents airflow in cubic meters per second, ranging from 0 to 4000. The graph includes performance curves at different RPMs and other operating conditions.
SINGLE BELT DRIVE
12”x12” STANDARD DUTY
BC321-321-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WEIGHT
13.0 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

SHAF T DETAIL

<table>
<thead>
<tr>
<th>Part No.</th>
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<th>D</th>
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<tbody>
<tr>
<td></td>
<td>Ø25.35</td>
<td>6.33</td>
<td>3.60</td>
</tr>
<tr>
<td>[mm] BC321-321-75</td>
<td>Ø25.00</td>
<td>8.00</td>
<td>4.20</td>
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<tr>
<td></td>
<td>Ø24.96</td>
<td>7.96</td>
<td>4.00</td>
</tr>
</tbody>
</table>

NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS

Mounting holes 11 x 16 slots
SINGLE BELT DRIVE
12”x12” STANDARD DUTY

DUCTED DISCHARGE

MAX 1300 RPM

STATIC PRESSURE [Pa] vs. AIRFLOW [l/s]

800

700

600

500

400

300

200

100

0

0

500

1000

1500

2000

2500

3000

3500

4000

4500

SHAFT POWER [W]
**SINGLE BELT DRIVE**

15”x11” STANDARD DUTY
BC381-286-XXX

**APPLICATIONS**
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

**HOUSING**
Galvanised steel

**WHEEL**
Galvanised steel

**WEIGHT**
17.5 Kg

**SHAFT**
Bright mild steel

**ACCESSORIES**
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

### DIMENSIONS

**SHAFT DETAIL**

<table>
<thead>
<tr>
<th>Part No.</th>
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<tr>
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<td>6.33</td>
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<td>[mm]</td>
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<td>8.00</td>
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<td>Ø24.96</td>
<td>7.96</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**NOTE:**
1. Imperial Shaft - 1.0” uses ¼” x ½” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

**DISCHARGE POSITIONS**

...
DUCTED DISCHARGE

MAX 1400 RPM

SINGLE BELT DRIVE
15”x11” STANDARD DUTY

SHAFT POWER [W]

STATIC PRESSURE [Pa]

AIRFLOW [l/s]
SINGLE BELT DRIVE
15”x15” STANDARD DUTY
BC381-381-XXX

APPLICATIONS
Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

HOUSING
Galvanised steel

WHEEL
Galvanised steel

WEIGHT
20.0 Kg

SHAFT
Bright mild steel

ACCESSORIES
Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

DIMENSIONS

SHAFT DETAIL

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<td>[in] BC381-381-16</td>
<td>25.40</td>
<td>6.35</td>
<td>3.75</td>
</tr>
<tr>
<td>[mm] BC381-381-75</td>
<td>25.00</td>
<td>8.00</td>
<td>4.20</td>
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</table>

NOTE:
1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

DISCHARGE POSITIONS

<table>
<thead>
<tr>
<th>BC381-381-16</th>
<th>15”x15” STANDARD DUTY</th>
<th>20.0 Kg</th>
<th>BC381-381-16</th>
<th>15”x15” STANDARD DUTY</th>
<th>20.0 Kg</th>
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<tr>
<td>309</td>
<td>211</td>
<td>495</td>
<td>497</td>
<td>521</td>
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<td>258</td>
<td>197</td>
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</table>
SINGLE BELT DRIVE
15"x15" STANDARD DUTY

DUCTED DISCHARGE
**SINGLE BELT DRIVE**

**18”x19” STANDARD DUTY**

**BC457-483-XXX**

### APPLICATIONS

Air handling units, fan coil units, evaporative condensers, cooling towers, air conditioning units, general ventilation.

### HOUSING

Galvanised steel

### WHEEL

Galvanised steel

### WEIGHT

29.5 Kg

### SHAFT

Bright mild steel

### ACCESSORIES

Purchased separately as required. Housing Support Bracket kit with grommets and screws P/No. KH054-241

### DIMENSIONS

![Dimensions Diagram](image)

### SHAFT DETAIL

<table>
<thead>
<tr>
<th>Part No.</th>
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<th>C</th>
<th>D</th>
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<td>Ø25.00</td>
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<td></td>
<td>Ø24.96</td>
<td>7.96</td>
<td>4.00</td>
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</table>

**NOTE:**

1. Imperial Shaft - 1.0” uses ¼” x ¼” Keyway
2. Metric Shaft - Ø25.0mm uses 8mm x 7mm Keyway

### DISCHARGE POSITIONS

![Discharge Positions Diagram](image)
SINGLE BELT DRIVE
18”x19” STANDARD DUTY

DUCTED DISCHARGE

MAX 1000 RPM

STATIC PRESSURE [Pa]

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

AIRFLOW [lit/s]

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

SHAFT POWER [W]

0 2000 4000 6000 8000 10000 12000 14000 16000 18000 20000

18”x19” STANDARD DUTY
All FASCO products are regularly redesigned and improved and FASCO reserves the right to change the design, technical specification and dimensions without prior notice.