



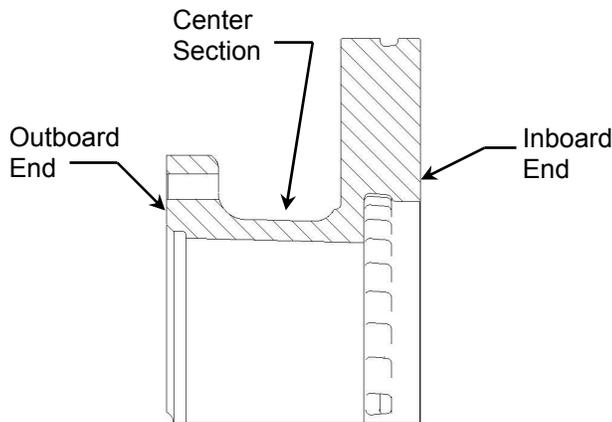
### 3. DEFINITIONS

A listing of basic nomenclature and definitions are shown in paragraph 3.1. Metric mounting systems are defined using millimeters (mm). Non-metric mounting systems are defined using inches.

The mounting systems defined in this document **do not** correspond to the mounting systems defined in SAE document J694.

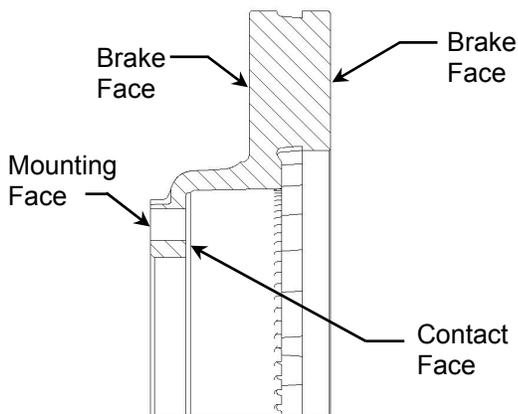
#### 3.1 FEATURE DEFINITIONS

- A Number of Studs or Bolts
- B Mounting Bolt Circle
- C Rotor Pilot Hole Diameter
- D Rotor Mounting Thru Hole Size or Thread
- E Rotor Minimum Chamfer
- F Rotor Chamfer Angle
- G Rotor Minimum Pilot Length
- H Rotor Maximum Pilot Radius
- J Hub Pilot Diameter
- K Hub Mounting Thru Hole Size or Thread
- L Hub Maximum Pilot Root Radius
- M Hub Pilot Length
- N Hub Mounting Counter Bore Diameter
- P Hub Mounting Counter Bore Depth
- Q Hub Mounting Pilot Chamfer Angle
- R Hub Mounting Pilot Chamfer Length



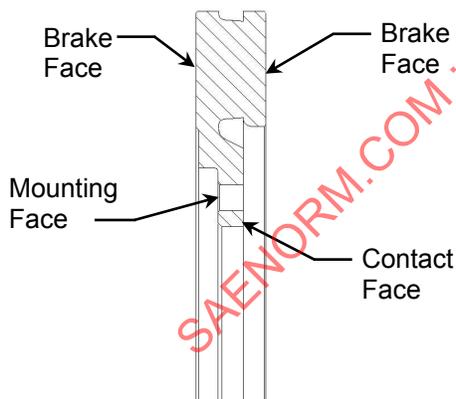
U section rotors are identified by their distinct cross section. Both the axial inboard and outboard end of the rotor have larger outer diameters than the center section.

U – Section Rotor



Hat section rotors are identified by the location of their attachment interface surfaces. One or both of the mounting faces and the face which comes in contact with the fastening mechanism are axially located outside the braking surfaces. The entire mounting flange has a maximum diameter which is smaller than the inside diameter of the braking surfaces.

Hat Rotor



Flat section rotors are identified by the location of their attachment interface surfaces. Both the mounting face and the face which comes in contact with the fastening mechanism are axially located between the braking surfaces. The entire mounting flange has a maximum diameter which is smaller than the inside diameter of the braking surfaces. At the time of publication, there were no high volume class 5-8 rotors in North America that conform to this description.

Flat Rotor

FIGURE 1 - ROTOR CONFIGURATIONS

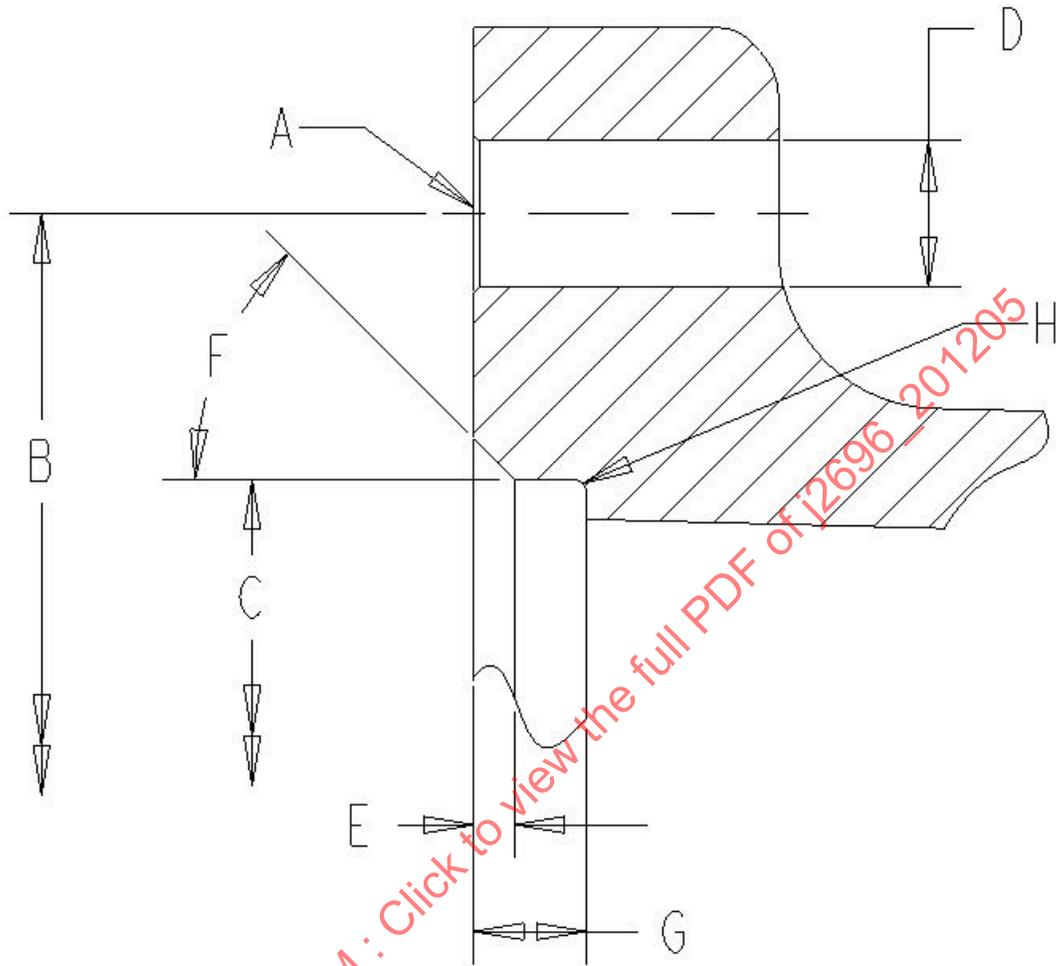


FIGURE 2 - ROTOR INTERFACE DIMENSIONS - U SECTION ROTORS

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TABLE 1 - U-SECTION BRAKE ROTOR DIMENSIONS

|                 | A                     | B  | C                              | D                                 | E               | F             | G                    | H                    |
|-----------------|-----------------------|--|--------------------------------|-----------------------------------|-----------------|---------------|----------------------|----------------------|
| Mounting System | No. of Studs or Bolts | Mounting Bolt Circle<br>$\oplus .38 \text{ } \emptyset$ ( $\oplus .015 \text{ } \emptyset$ ) | Pilot Hole Diameter            | Mounting Thru Hole Size or Thread | Minimum Chamfer | Chamfer Angle | Minimum Pilot Length | Maximum Pilot Radius |
| Ai              | 10                    | 266.70<br>(10.500)   | 216.00/215.90<br>(8.504/8.500) | 5/8-18                            | 3.56<br>(.140)  | 45°           | 10.41<br>(.410)      | 2.03<br>(.080)       |
| Aii             | 10                    | 249.50<br>(9.823)  | 194.08/194.01<br>(7.641/7.638) | M16 x 2                           | 22.49<br>(.885) | 35°           | 28.83<br>(1.135)     | 1.14<br>(.045)       |
| Aiii            | 10                    | 249.50<br>(9.823)  | 194.08/194.01<br>(7.641/7.638) | 5/8-18                            | 6.60<br>(.260)  | 45°           | 16.89<br>(.665)      | 2.29<br>(.090)       |
| Aiv             | 10                    | 249.50<br>(9.823)  | 219.99/219.91<br>(8.661/8.658) | 5/8-11                            | 2.50<br>(.098)  | 20°           | 9.90<br>(.390)       | 2.70<br>(.107)       |
| Av              | 10                    | 285.75<br>(11.250)   | 241.40/241.30<br>(9.504/9.500) | 26.92<br>(1.060)                  | 1.52<br>(.060)  | 45°           | 8.64<br>(.340)       | 2.03<br>(.080)       |
| Avi             | 8                     | 266.70<br>(10.500)   | 216.00/215.90<br>(8.504/8.500) | 5/8-18                            | 3.56<br>(.140)  | 45°           | 10.41<br>(.410)      | 2.03<br>(.080)       |

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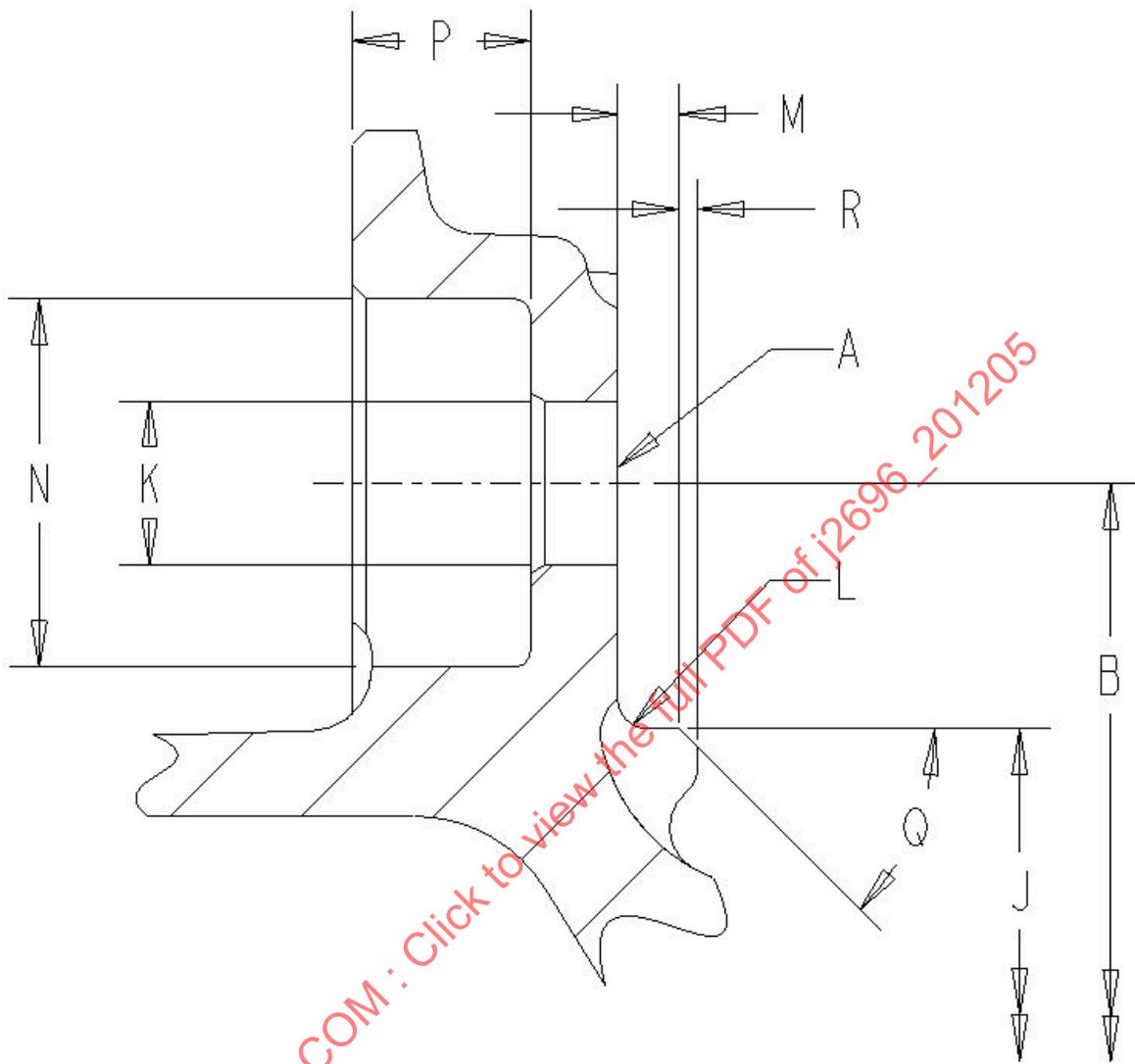


FIGURE 3 - HUB INTERFACE DIMENSIONS FOR USE WITH U-SECTION ROTORS

TABLE 2 - DISC BRAKE HUB DIMENSIONS FOR USE WITH U-SECTION ROTORS

|                 | A                     | B   | J                              | K   | L                                      | M                    | N                                      | P                                   | Q                            | R                                     |
|-----------------|-----------------------|---|--------------------------------|---|--|----------------------|--|-------------------------------------|------------------------------|---------------------------------------|
| Mounting System | No. of Studs or Bolts | Mounting Bolt Circle<br>$\oplus .38 \text{ } \emptyset$<br>( $\oplus .015 \text{ } \emptyset$ ) | Pilot Diameter                 | Nominal Mounting Thru Hole Size or Thread | Maximum Pilot Root Radius <sup>1</sup> | Maximum Pilot Length | Nominal Mounting Counter Bore Diameter | Minimum Mounting Counter Bore Depth | Mounting Pilot Chamfer Angle | Maximum Mounting Pilot Chamfer Length |
| Ai              | 10                    | 266.70<br>(10.500)  | 215.82/215.72<br>(8.497/8.493) | 16.66<br>(.656)                           | 3.43<br>(.135)                         | 6.73<br>(.265)       | 38.10<br>(1.500)                       | 14.63<br>(.576)                     | 45°                          | .97<br>(.038)                         |
| Aii             | 10                    | 249.50<br>(9.823)   | 193.93/193.85<br>(7.635/7.632) | 16.99<br>(.669)                           | 17.86<br>(.703)                        | 27.13<br>(1.068)     | N/A                                    | N/A                                 | 45°                          | 2.29<br>(.090)                        |
| Aiii            | 10                    | 249.50<br>(9.823)   | 194.00/193.93<br>(7.638/7.635) | 17.00<br>(.669)                           | 5.48<br>(.216)                         | 14.34<br>(.565)      | 25.50<br>(1.004)                       | 17.60<br>(.693)                     | 45°                          | N/A                                   |
| Aiv             | 10                    | 249.50<br>(9.823)   | 219.86/219.81<br>(8.656/8.654) | 16.66<br>(.656)                           | 0.00<br>(.000)                         | 6.35<br>(.250)       | 36.83<br>(1.450)                       | 17.02<br>(.670)                     | 20°                          | 2.8<br>(.110)                         |
| Av              | 10                    | 285.75<br>(11.250)  | 241.30/241.22<br>(9.500/9.497) | 25.40<br>(1.000)                          | 1.52<br>(.060)                         | 6.60<br>(.260)       | N/A                                    | N/A                                 | N/A                          | N/A                                   |
| Avi             | 8                     | 266.70<br>(10.500)  | 215.82/215.72<br>(8.497/8.493) | 16.66<br>(.656)                           | 3.43<br>(.135)                         | 6.73<br>(.265)       | 38.10<br>(1.500)                       | 14.63<br>(.576)                     | 45°                          | .97<br>(.038)                         |

<sup>1</sup> Pilot root radii identified as "0.00" may require an undercut.

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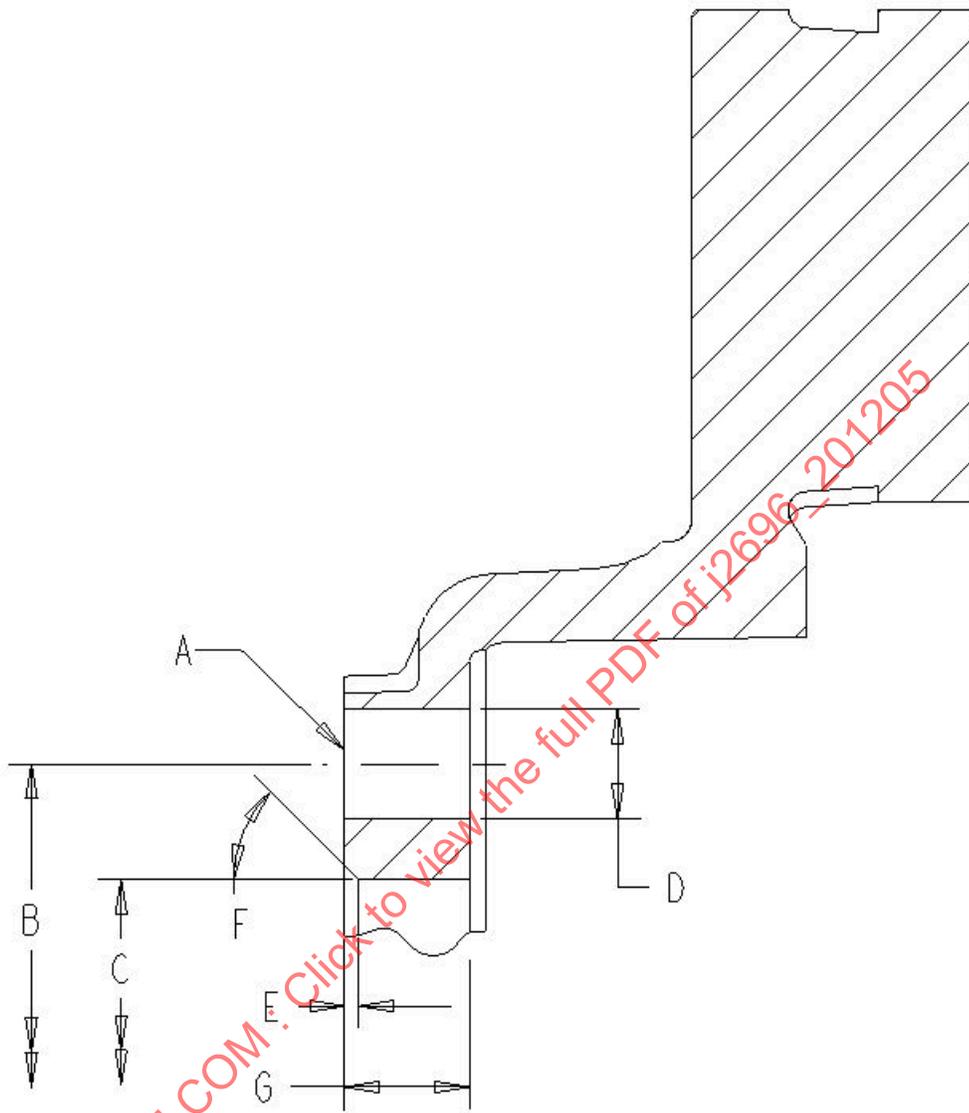


FIGURE 4 - ROTOR INTERFACE DIMENSIONS - HAT SECTION ROTORS