

# 5000 SERIES

STAINLESS STEEL  
GENERAL PURPOSE



## Operating Parameters

### MEDIA

Water, Steam, Hot Oil, Air

### PRESSURE\*

750 PSI (Water), 120 PSI (Steam)  
100 PSI (Hot Oil), 300 PSI (Air)

### TEMPERATURE\*

300° F (Water), 350° F (Steam), 395° F (Hot Oil)

### SPEED\*

1,000 RPM (NPT), 3,600 RPM (MT)

### THREADS

- 1/4" to 2" NPT
- BSP, BSPP & Metric Threads Available

### MATERIAL

300 Grade Stainless Steel

### CONFIGURATION OPTIONS

Mono Flow and Dual Flow Configurations Available

\* See Performance Charts For Details

## Features & Benefits

### Corrosion Resistant

300 Grade stainless steel construction for superior corrosion resistance.

### Long Service Life

Two precision bearings keep the 5000 Series seal faces perfectly aligned to extend the life of the 5000 Series Rotary Union.

### Dual Flow Option

With the addition of an elbow, the 5000 Series can become dual flow.

### Balanced Mechanical Seal Design

The balanced mechanical seal design of the 5000 series allows for optimal operation with a wide variety of media.

### Replaceable Cartridge

Integrated cartridge design makes repairs fast and easy reducing maintenance costs.

### Multiple Seal Design Options

All sizes are available with three seal options for better wear resistance.

#### ■ 5000 Series Standard

Carbon graphite against a ceramic coated steel seal design offers long life.

#### ■ 5000 T Series (Consult Factory)

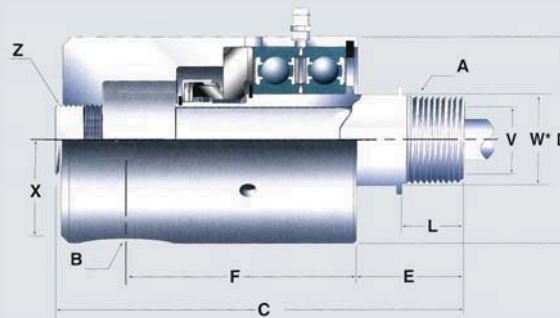
The carbon graphite seal ring against a tungsten carbide face ring design will offer longer wear life where dirty media is used.

#### ■ 5000 ASM Series (Consult Factory)

The tungsten carbide face ring against a siliconized graphite seal ring design is used for abrasive applications.

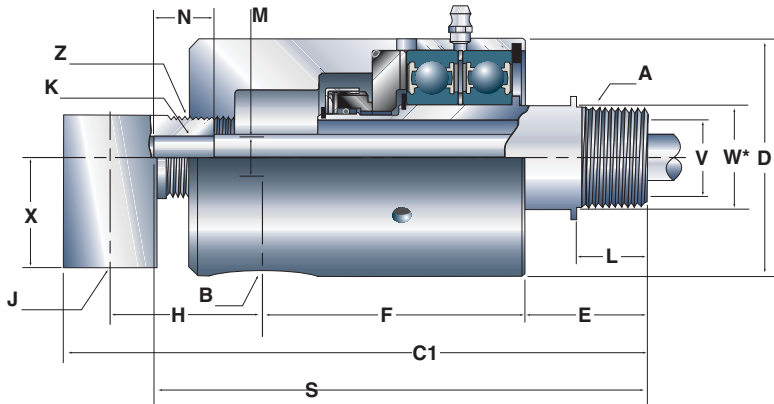
5000 SERIES ROTARY UNIONS • NPT, UNS, UN THREADS • MONO FLOW

| PART NUMBERS | Nominal Pipe Size | Shaft Thread (A) | 5000 Series Standard |             |                  |                |             |                  |
|--------------|-------------------|------------------|----------------------|-------------|------------------|----------------|-------------|------------------|
|              |                   |                  | Right Hand           |             |                  | Left Hand      |             |                  |
|              |                   |                  | Part Number          | Description | Repair Cartridge | Part Number    | Description | Repair Cartridge |
|              | 1/4               | 1/4 NPT          | <b>750625C</b>       | R5000P      | 451671C          | <b>750624C</b> | L5000P      | 451670C          |
|              | 3/8               | 3/8 NPT          | <b>750110C</b>       | R5100P      | 451251C          | <b>750109C</b> | L5100P      | 451250C          |
|              |                   | 5/8-18 UNF       | <b>750142C</b>       | R5124P      | 451253C          | <b>750141C</b> | L5124P      | 451252C          |
|              | 1/2               | 1/2 NPT          | <b>750112C</b>       | R5200P      | 451258C          | <b>750111C</b> | L5200P      | 451257C          |
|              |                   | 3/4-16 UNF       | <b>750147C</b>       | R5224P      | 451260C          | <b>750146C</b> | L5224P      | 451259C          |
|              |                   | Quick Release    | <b>750150C</b>       | Q5200P      | 451263C          | <b>750150C</b> | Q5200P      | 451263C          |
|              | 3/4               | 3/4 NPT          | <b>750089C</b>       | R5300P      | 451265C          | <b>750088C</b> | L5300P      | 451264C          |
|              |                   | 1-14 UNS         | <b>750152C</b>       | R5324P      | 451267C          | <b>750151C</b> | L5324P      | 451266C          |
|              |                   | Quick Release    | <b>750155C</b>       | Q5300P      | 451270C          | <b>750155C</b> | Q5300P      | 451270C          |
|              | 1                 | 1 NPT            | <b>750114C</b>       | R5400P      | 451272C          | <b>750113C</b> | L5400P      | 451271C          |
|              |                   | 1-1/2-12 UNF     | <b>750157C</b>       | R5424P      | 451274C          | <b>750156C</b> | L5424P      | 451273C          |
|              |                   | Quick Release    | <b>750160C</b>       | Q5400P      | 451277C          | <b>750160C</b> | Q5400P      | 451277C          |
|              | 1-1/4             | 1-1/4 NPT        | <b>750116C</b>       | R5500P      | 451279C          | <b>750115C</b> | L5500P      | 451278C          |
|              |                   | 1-3/4-12 UN      | <b>750162C</b>       | R5524P      | 451281C          | <b>750161C</b> | L5524P      | 451280C          |
|              |                   | Quick Release    | <b>750165C</b>       | Q5500P      | 451284C          | <b>750165C</b> | Q5500P      | 451284C          |
|              | 1-1/2             | 1-1/2 NPT        | <b>750118C</b>       | R5600P      | 451286C          | <b>750117C</b> | L5600P      | 451285C          |
|              |                   | 2-12 UN          | <b>750167C</b>       | R5624P      | 451288C          | <b>750166C</b> | L5624P      | 451287C          |
|              |                   | Quick Release    | <b>750170C</b>       | Q5600P      | 451291C          | <b>750170C</b> | Q5600P      | 451291C          |
|              | 2                 | 2 NPT            | <b>750120C</b>       | R5700P      | 451293C          | <b>750119C</b> | L5700P      | 451292C          |
|              |                   | 2-1/2-12 UN      | <b>750172C</b>       | R5724P      | 451295C          | <b>750171C</b> | L5724P      | 451294C          |
|              |                   | Quick Release    | <b>750175C</b>       | Q5700P      | 451298C          | <b>750175C</b> | Q5700P      | 451298C          |



5000 SERIES ROTARY UNIONS • NPT, UNS, UN THREADS • MONO FLOW (in.)

| DIMENSIONS | Nominal Pipe Size | Shaft Thread A (Right or Left) | B (NPT) | C       | C1     | D       | E       | F       | H   | J (NPT) | L     | V       | W (Flats) | X     | Z (NPT) |
|------------|-------------------|--------------------------------|---------|---------|--------|---------|---------|---------|-----|---------|-------|---------|-----------|-------|---------|
|            |                   |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 3/8        | 3/8 NPT           | 3/8                            | 4       | 5-1/4   | 1-9/16 | 1-1/4   | 2-9/32  | 1-3/8   | 3/8 | 5/8     | 3/8   | 5/8     | 1-1/16    | 3/8   |         |
|            | 5/8-18 UNF        |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 1/2        | 1/2 NPT           | 1/2                            | 4-3/4   | 5-15/16 | 2-1/16 | 1-9/32  | 2-23/32 | 1-7/16  | 3/8 | 3/4     | 1/2   | 7/8     | 1-1/16    | 3/8   |         |
|            | 3/4-16 UNF        |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 3/4        | 3/4 NPT           | 3/4                            | 5-1/4   | 6-1/2   | 2-5/16 | 1-13/32 | 3       | 1-9/16  | 1/2 | 3/4     | 11/16 | 1-1/4   | 1-1/16    | 1/2   |         |
|            | 1-14 UNS          |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 1          | 1 NPT             | 1                              | 6-3/16  | 7-1/2   | 3-1/8  | 1-5/8   | 3-7/16  | 1-13/16 | 1/2 | 15/16   | 1     | 1-3/8   | 1-15/32   | 3/4   |         |
|            | 1-1/2-12 UNF      |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 1-1/4      | 1-1/4 NPT         | 1-1/4                          | 7-1/2   | 9-1/16  | 3-1/2  | 2-9/64  | 4-1/32  | 2-5/32  | 3/4 | 1-1/16  | 1-1/4 | 1-5/8   | 1-1/32    | 1     |         |
|            | 1-3/4-12 UN MT    |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 1-1/2      | 1-1/2 NPT         | 1-1/2                          | 8-3/8   | 9-15/16 | 4      | 2-13/32 | 4-17/32 | 2-1/4   | 3/4 | 1-1/16  | 1-1/2 | 1-15/16 | 1-5/32    | 1-1/4 |         |
|            | 2-12 UN           |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
| 2          | 2 NPT             | 2                              | 9-1/2   | 11      | 4-3/8  | 2-21/32 | 5-1/16  | 2-1/2   | 3/4 | 1-1/8   | 1-7/8 | 2-1/2   | 1-5/32    | 1-1/4 |         |
|            | 2-1/2-12 UN       |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |
|            | Quick Release     |                                |         |         |        |         |         |         |     |         |       |         |           |       |         |



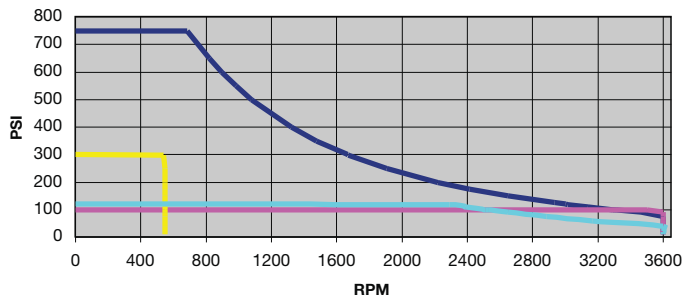
5000 SERIES ELBOWS FOR DUAL FLOW (in.)

| Nominal Pipe Size | Elbows for Stationary Siphon Systems |                        |             |             | Elbows for Rotating Siphon Systems |            |         |            |       |
|-------------------|--------------------------------------|------------------------|-------------|-------------|------------------------------------|------------|---------|------------|-------|
|                   | Part Number                          | Siphon K               | Siphon Pipe | Siphon Tube | Part Number                        | Siphon (K) | S       | M          | N     |
|                   |                                      | Pipe Thread<br>Tube OD |             |             |                                    |            |         |            |       |
| 3/8               | 465409C                              | 1/4                    | -           | 4-1/4       | -                                  | -          | -       | -          | -     |
| 1/2               | 465408C                              | 1/8 NPT                | 4-15/16     | -           | 451245C                            | 3/8        | 4-9/16  | .370-.371  | 1-1/4 |
|                   | 465410C                              | 3/8                    | -           | 4-15/16     | -                                  | -          | -       | -          | -     |
| BSP               | 465416C                              | 1/8-28 BSP             | 125 mm      | -           | -                                  | -          | -       | -          | -     |
|                   | 465401C                              | 1/8 NPT                | 5-3/8       | -           | -                                  | -          | -       | -          | -     |
| 3/4               | 465402C                              | 1/4 NPT                | 5-15/32     | -           | -                                  | -          | -       | -          | -     |
|                   | 465403C                              | 7/16                   | -           | 5-5/32      | -                                  | -          | -       | -          | -     |
|                   | 465404C                              | 1/2                    | -           | 5-5/32      | 451243C                            | 1/2        | 5-5/32  | .495-.496  | 1-1/4 |
| BSP               | 465417C                              | 1/8-28 BSP             | 136 mm      | -           | -                                  | -          | -       | -          | -     |
|                   | 465418C                              | 1/4-19 BSP             | 139 mm      | -           | -                                  | -          | -       | -          | -     |
| 1                 | 465411C                              | 1/4 NPT                | 6-5/16      | -           | -                                  | -          | -       | -          | -     |
|                   | 465412C                              | 3/8 NPT                | 6-3/16      | -           | 451246C                            | 5/8        | 6-1/8   | .619-.612  | 1-1/4 |
|                   | 465413C                              | 5/8                    | -           | 6-1/4       | -                                  | -          | -       | -          | -     |
| BSP               | 465419C                              | 3/8-19 BSP             | 157 mm      | -           | -                                  | -          | -       | -          | -     |
|                   | 465414C                              | 1/2 NPT                | 7-13/32     | -           | -                                  | -          | -       | -          | -     |
| 1-1/4             | 465415C                              | 3/4                    | -           | 7-9/16      | 451247C                            | 3/4        | 7-7/16  | .743-.745  | 1-1/2 |
|                   | 465420C                              | 1/2-14 BSP             | 188 mm      | -           | -                                  | -          | -       | -          | -     |
| 1-1/2             | 465405C                              | 1/2 NPT                | 8-9/32      | -           | -                                  | -          | -       | -          | -     |
|                   | 465406C                              | 3/4 NPT                | 8-1/4       | -           | 451244C                            | 1          | 8-9/16  | .998-1.000 | 1-3/4 |
|                   | 465407C                              | 1                      | -           | 8-1/2       | -                                  | -          | -       | -          | -     |
| BSP               | 465421C                              | 3/4-14 BSP             | 210 mm      | -           | -                                  | -          | -       | -          | -     |
| 2                 | 465405C                              | 1/2 NPT                | 9-11/32     | -           | -                                  | -          | -       | -          | -     |
|                   | 465406C                              | 3/4 NPT                | 9-9/32      | -           | 451244C                            | 1          | 9-19/32 | .998-1.000 | 1-3/4 |
|                   | 465407C                              | 1                      | -           | 9-17/32     | -                                  | -          | -       | -          | -     |
| BSP               | 465421C                              | 3/4-14 BSP             | 235 mm      | -           | -                                  | -          | -       | -          | -     |

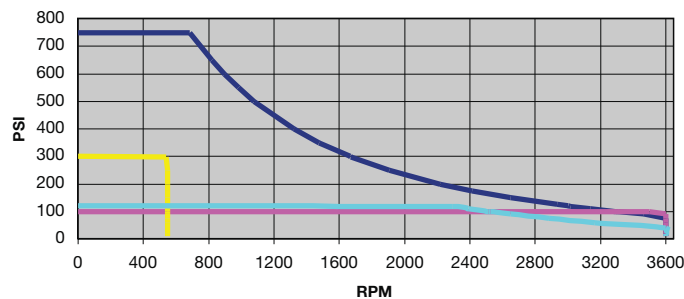
ELBOWS FOR DUAL FLOW

# Performance Charts

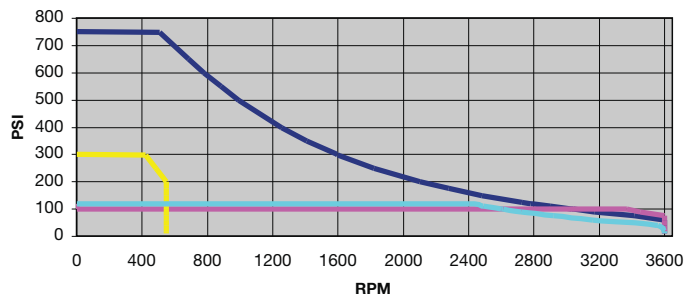
1/4"



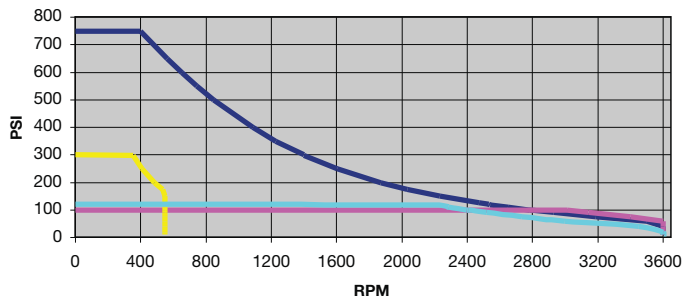
3/8"



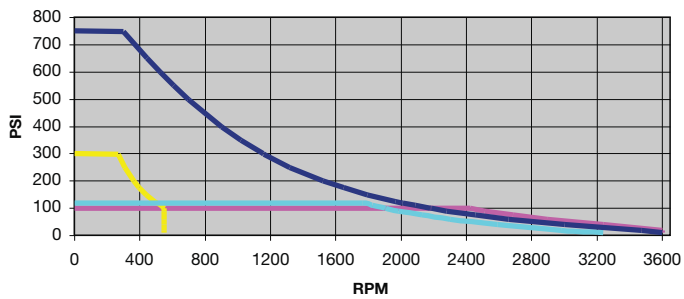
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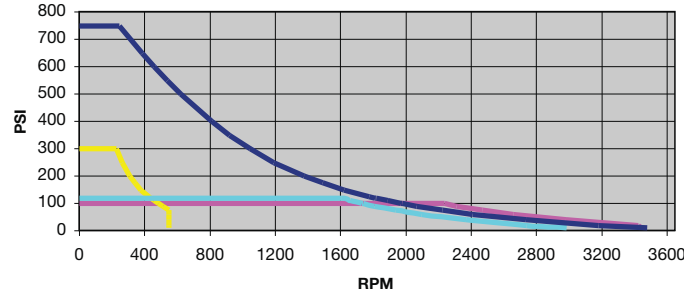
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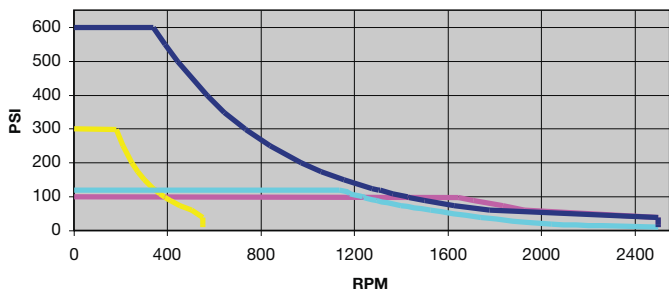
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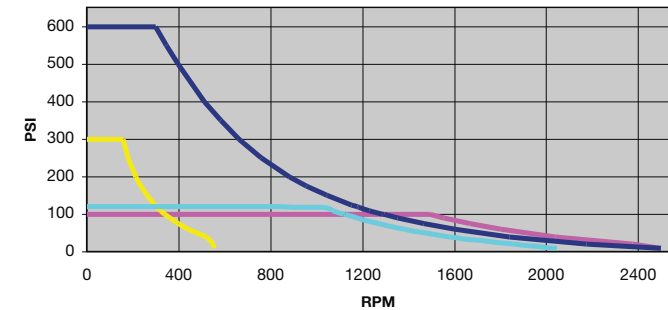
1 1/4"



1 1/2"



2"



Steam
  Water
  Hot Oil
  Air