

# 9000G SERIES

WATER, STEAM & HOT OIL

HIGH TEMPERATURE



**MODELS  
ADDED**

## Operating Parameters

### MEDIA

Steam, Hot Oil, Water

### PRESSURE\*

250 psi (Water), 175 psi (Steam),  
100 psi (Hot Oil)

### TEMPERATURE\*

600° F (Hot Oil), 378° F (Steam)

### SPEED\*

700 RPM

### THREADS

- 1/4" to 3" NPT
- BSP Threads Available
- Flanged

### MATERIAL

- Cast Iron Housing with Stainless Steel or Plated Sleeve
- Steel Shaft

### CONFIGURATION OPTIONS

Mono Flow & Dual Flow Configurations Available

*\* See Performance Charts  
For Details*

## Features & Benefits

### Superior Sealing Performance

Bellows Sealing System provides superior sealing performance throughout the wear life of the Rotary Union.

### Designed For Dirty Media Applications

Debris in contaminated media will not be captured in the Bellows Sealing System, which reduces clogging.

### Maintenance Free

The 9000G is maintenance free because there is no rolling element bearing, therefore no lubrication is required.

### High Temperature Applications

Offers the same design as the standard 9000 Series, but utilizes carbon graphite bearings for high temperature applications.

### Ideal For High Temperatures

The thrust collar allows for thermal expansion, making this an ideal union for high temperature, general purpose applications.

### Flanged Mounted Units Available

Consult Factory.

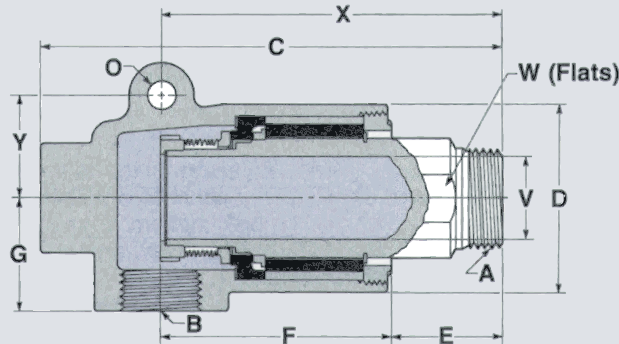
## 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • MONO FLOW

| PART NUMBERS | Nominal Pipe Size | Shaft Thread (A) | Right Hand Thread |             |                  | Left Hand Thread |             |                  |
|--------------|-------------------|------------------|-------------------|-------------|------------------|------------------|-------------|------------------|
|              |                   |                  | Part Number       | Description | Repair Cartridge | Part Number      | Description | Repair Cartridge |
|              | 1/4               | 1/4              | <b>480630C</b>    | R050P       | 481323C          | <b>480629C</b>   | L050P       | 481322C          |
|              | 3/8               | 3/8              | <b>480632C</b>    | R150P       | 481325C          | <b>480631C</b>   | L150P       | 481324C          |
|              | 1/2               | 1/2              | <b>480198C</b>    | R250P       | 481204C          | <b>480197C</b>   | L250P       | 481203C          |
|              | 3/4               | 3/4              | <b>480247C</b>    | R350P       | 481208C          | <b>480246C</b>   | L350P       | 481207C          |
|              | 1                 | 1                | <b>430111C</b>    | R450P-8     | 471882C          | <b>430110C</b>   | L450P-8     | 471881C          |
|              | 1-1/4             | 1-1/4            | <b>440581C</b>    | R9550P      | 471665C          | <b>440580C</b>   | L9550P      | 471664C          |
|              | 1-1/2             | 1-1/2            | <b>440165C</b>    | R9650P      | 471575C          | <b>440164C</b>   | L9650P      | 471576C          |
|              | 2                 | 2                | <b>440469C</b>    | R9750P      | 471716C          | <b>440468C</b>   | L9750P      | 471715C          |
|              | 2-1/2             | 2-1/2            | <b>440577C</b>    | R9850P      | 471718C          | <b>440576C</b>   | L9850P      | 471717C          |
|              | 3                 | 3                | <b>440505C</b>    | R9950P      | 471720C          | <b>440504C</b>   | L9950P      | 471719C          |

## 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • DUAL FLOW

| PART NUMBERS | Nominal Pipe Size | Shaft Thread (A) | Right Hand Thread |             |                  | Left Hand Thread |             |                  |
|--------------|-------------------|------------------|-------------------|-------------|------------------|------------------|-------------|------------------|
|              |                   |                  | Part Number       | Description | Repair Cartridge | Part Number      | Description | Repair Cartridge |
|              | 1/2               | 1/2              | <b>480204C</b>    | R250S       | 481204C          | <b>480203C</b>   | L250S       | 481203C          |
|              | 3/4               | 3/4              | <b>480253C</b>    | R350S       | 481208C          | <b>480252C</b>   | L350S       | 481207C          |
|              | 1                 | 1                | <b>430113C</b>    | R450S-8     | 471882C          | <b>430112C</b>   | L450S-8     | 471881C          |
|              | 1-1/4             | 1-1/4            | <b>440583C</b>    | R9550S      | 471665C          | <b>440582C</b>   | L9550S      | 471664C          |
|              | 1-1/2             | 1-1/2            | <b>440167C</b>    | R9650S      | 471575C          | <b>440166C</b>   | L9650S      | 471576C          |
|              | 2                 | 2                | <b>440471C</b>    | R9750S      | 471716C          | <b>440470C</b>   | L9750S      | 471715C          |
|              | 2-1/2             | 2-1/2            | <b>440579C</b>    | R9850S      | 471718C          | <b>440578C</b>   | L9850S      | 471717C          |
|              | 3                 | 3                | <b>440507C</b>    | R9950S      | 471720C          | <b>440506C</b>   | L9950S      | 471719C          |

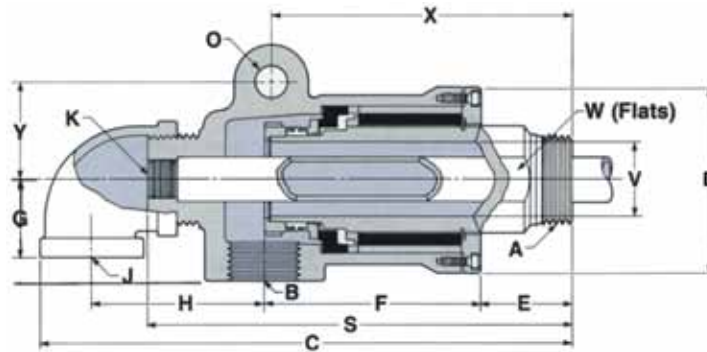
## Mono Flow



## 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • MONO FLOW (in.)

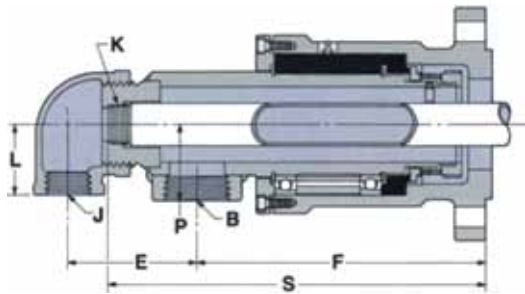
| DIMENSIONS | Nominal Pipe Size | Shaft Thread (A) | Right Hand Thread |             |                  | Left Hand Thread |             |                  | Inlet Thread (B) | C       | D     | E      | F       | G      | O   | V     | W       | X      | Y     |
|------------|-------------------|------------------|-------------------|-------------|------------------|------------------|-------------|------------------|------------------|---------|-------|--------|---------|--------|-----|-------|---------|--------|-------|
|            |                   |                  | Part Number       | Description | Repair Cartridge | Part Number      | Description | Repair Cartridge |                  |         |       |        |         |        |     |       |         |        |       |
|            | 1/4               | 1/4              | <b>480630C</b>    | R050P       | 481323C          | <b>480629C</b>   | L050P       | 481322C          | 1/4              | 4-3/8   | 1-3/4 | 1-1/8  | 2-9/16  | 1-1/16 | —   | 1/4   | 5/8     | —      | —     |
|            | 3/8               | 3/8              | <b>480632C</b>    | R150P       | 481325C          | <b>480631C</b>   | L150P       | 481324C          | 3/8              | 4-3/8   | 1-3/4 | 1-1/8  | 2-9/16  | 1-1/16 | —   | 3/8   | 11/16   | —      | —     |
|            | 1/2               | 1/2              | <b>480198C</b>    | R250P       | 481204C          | <b>480197C</b>   | L250P       | 481203C          | 1/2              | 5       | 2-3/8 | 1-1/2  | 2-3/4   | 1-1/4  | —   | 1/2   | 15/16   | —      | —     |
|            | 3/4               | 3/4              | <b>480247C</b>    | R350P       | 481208C          | <b>480246C</b>   | L350P       | 481207C          | 3/4              | 5-1/2   | 2-1/2 | 1-5/8  | 3       | 1-7/16 | —   | 3/4   | 1-3/32  | —      | —     |
|            | 1                 | 1                | <b>430111C</b>    | R450P-8     | 471882C          | <b>430110C</b>   | L450P-8     | 471881C          | 1                | 6-1/8   | 3     | 1-3/4  | 3-3/8   | 1-3/4  | —   | 1     | 1-11/32 | —      | —     |
|            | 1-1/4             | 1-1/4            | <b>440581C</b>    | R9550P      | 471665C          | <b>440580C</b>   | L9550P      | 471664C          | 1-1/4            | 9-1/16  | 3-3/4 | 2-1/16 | 4-13/16 | 2-3/16 | 5/8 | 1-1/4 | 1-11/16 | 6-7/8  | 2     |
|            | 1-1/2             | 1-1/2            | <b>440165C</b>    | R9650P      | 471575C          | <b>440164C</b>   | L9650P      | 471576C          | 1-1/2            | 9-11/16 | 4-1/8 | 2-3/16 | 5-1/4   | 2-3/16 | 5/8 | 1-1/2 | 1-15/16 | 7-3/8  | 2-1/4 |
|            | 2                 | 2                | <b>440469C</b>    | R9750P      | 471716C          | <b>440468C</b>   | L9750P      | 471715C          | 2                | 11-3/4  | 5-7/8 | 2-7/16 | 6-7/16  | 2-5/8  | 5/8 | 2     | 2-9/16  | 8-9/16 | 2-3/4 |
|            | 2-1/2             | 2-1/2            | <b>440577C</b>    | R9850P      | 471718C          | <b>440576C</b>   | L9850P      | 471717C          | 2-1/2            | 15-3/8  | 7-1/8 | 3-1/2  | 7-3/16  | 3-3/8  | —   | 2-1/2 | 3       | —      | —     |
|            | 3                 | 3                | <b>440505C</b>    | R9950P      | 471720C          | <b>440504C</b>   | L9950P      | 471719C          | 3                | 15-3/4  | 7-1/8 | 3-7/8  | 8-5/16  | 3-7/8  | —   | 3     | 3-5/8   | —      | —     |

## Dual Flow

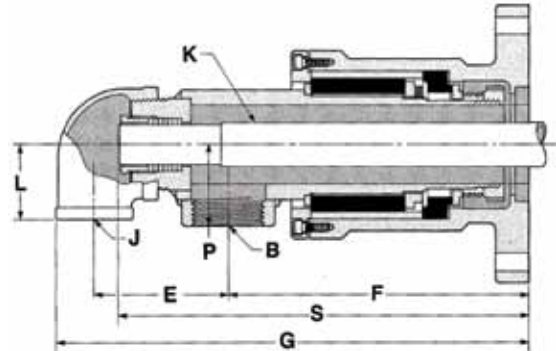


| DIMENSIONS | 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • DUAL FLOW (in.) |                     |              |               |                    |        |       |        |         |        |        |     |        |       |         |        |       |
|------------|---------------------------------------------------------------|---------------------|--------------|---------------|--------------------|--------|-------|--------|---------|--------|--------|-----|--------|-------|---------|--------|-------|
|            | Nominal<br>Pipe Size                                          | Shaft Thread<br>(A) | Inlet<br>(B) | Outlet<br>(J) | Siphon K<br>(NPSM) | C      | D     | E      | F       | G      | H      | O   | S      | V     | W       | X      | Y     |
|            | 1/2                                                           | 1/2                 | 1/2          | 1/2           | 1/8                | 7-1/4  | 2-3/8 | 1-1/2  | 2-3/4   | 1-1/4  | 2-1/8  | —   | 6      | 1/2   | 15/16   | —      | —     |
|            | 3/4                                                           | 3/4                 | 3/4          | 1/2           | 1/4                | 7-3/4  | 2-1/2 | 1-5/8  | 3       | 1-7/16 | 2-3/8  | —   | 6-3/8  | 3/4   | 1-3/32  | —      | —     |
|            | 1                                                             | 1                   | 1            | 1/2           | 3/8                | 8-1/2  | 3     | 1-3/4  | 3-3/8   | 1-3/4  | 2-5/8  | —   | 7-1/8  | 1     | 1-11/32 | —      | —     |
|            | 1-1/4                                                         | 1-1/4               | 1-1/4        | 1/2           | 1/2                | 10-5/8 | 3-3/4 | 2-1/8  | 4-13/16 | 2      | 3      | 5/8 | 8-7/8  | 1-1/4 | 1-11/16 | 6-7/8  | 2     |
|            | 1-1/2                                                         | 1-1/2               | 1-1/2        | 3/4           | 3/4                | 11-3/8 | 4-1/8 | 2-3/16 | 5-1/4   | 2-3/16 | 3-1/4  | 5/8 | 9-9/16 | 1-1/2 | 1-15/16 | 7-3/8  | 2-1/4 |
|            | 2                                                             | 2                   | 2            | 1             | 3/4                | 13-7/8 | 5     | 2-7/16 | 6-1/2   | 2-5/8  | 4-1/16 | 5/8 | 11-1/2 | 2     | 2-9/16  | 8-9/16 | 2-3/4 |
|            | 2-1/2                                                         | 2-1/2               | 2            | 1-1/4         | 1                  | 16-7/8 | 6-1/2 | 3-1/2  | 7-1/4   | 3-3/8  | 5      | —   | 14     | 2-1/2 | 3       | —      | —     |
|            | 3                                                             | 3                   | 2-1/2        | 1-1/4         | 1-1/4              | 18-3/4 | 7-1/8 | 3-1/2  | 8-5/16  | 3-7/8  | 5-1/2  | —   | 15-5/8 | 3     | 3-5/8   | —      | —     |

## Dual Flow Flange



## RSP Flange



| 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • DUAL FLOW (in.) • FLANGE |              |                 |             |                  |              |                 |                 |                     |         |         |         |         |        |
|------------------------------------------------------------------------|--------------|-----------------|-------------|------------------|--------------|-----------------|-----------------|---------------------|---------|---------|---------|---------|--------|
| DIMENSIONS                                                             | Shaft ID (A) | Part Number     | Description | Repair Cartridge | Shaft ID (A) | Inlet B (NPT)   | Outlet J (NPT)  | Syphon Tap K (NPSM) | E       | F       | S       | L       | P      |
|                                                                        | 1-1/4        | Consult Factory | 580S-2-U    | Consult Factory  | 1-1/4        | 1               | 1/2             | 1/2                 | 2-3/4   | 7-1/16  | 8-7/8   | 1-5/8   | 1-5/8  |
|                                                                        | 1-1/2        |                 | 680S-2-U    |                  | 1-1/2        | 1-1/4           | 3/4             | 3/4                 | 3-3/8   | 7-11/16 | 9-15/16 | 1-13/16 | 1-7/8  |
|                                                                        | 2            |                 | 780S-2-U    |                  | 2            | 1-1/2           | 1               | 3/4                 | 3-13/16 | 9-1/16  | 11-1/2  | 2-1/16  | 2-5/16 |
|                                                                        | 2-1/2        |                 | 880S-2-U    |                  | 2-1/2        | 2               | 1-1/4           | 1                   | 4-3/4   | 10-5/16 | 13-9/16 | 2-5/8   | 2-5/8  |
|                                                                        | 3            |                 | 980S-2-U    |                  | 3            | 2-1/2           | 1-1/4           | 1-1/4               | 5-1/4   | 11-7/8  | 15-1/2  | 2-7/8   | 3-1/16 |
|                                                                        | 4            | Consult Factory | 1080S-1-U   | Consult Factory  | 4            | Consult Factory | Consult Factory | Consult Factory     | --      | --      | --      | --      | --     |
|                                                                        | 5            |                 | 1180S-1-U   |                  | 5            |                 |                 |                     | --      | --      | --      | --      | --     |

Models Added

| DIMENSIONS | 9000G SERIES HIGH TEMPERATURE ROTARY UNIONS • ROTATING SIPHON PIPE (in.) • FLANGE |                 |                 |                  |                 |                 |                |                      |                     |                 |         |          |         |        |        |    |    |
|------------|-----------------------------------------------------------------------------------|-----------------|-----------------|------------------|-----------------|-----------------|----------------|----------------------|---------------------|-----------------|---------|----------|---------|--------|--------|----|----|
|            | Shaft ID                                                                          | Part Number     | Description     | Repair Cartridge | Shaft ID        | Inlet B (NPT)   | Outlet J (NPT) | Siphon Size K (NPSM) | Maximum Siphon Size | E               | F       | G        | L       | P      | S      |    |    |
|            | 1-1/4                                                                             | Consult Factory | 588-20-U        | Consult Factory  | 1-1/4           | 1               | 1/2            | 1/2                  | 1/2                 | 2-3/4           | 7-1/16  | 10-7/16  | 1-5/8   | 1-5/8  | 9-1/2  |    |    |
|            | 1-1/2                                                                             |                 | 688-30-U        |                  | 1-1/2           | 1-1/4           | 3/4            | 3/4                  | 3/4                 | 3-3/8           | 7-11/16 | 11-13/16 | 1-13/16 | 1-7/8  | 10-3/4 |    |    |
|            | 2                                                                                 |                 | 788-30-U        |                  | 2               | 1-1/2           | 1              | 3/4                  | 1                   | 3-13/16         | 9-1/16  | 13-3/4   | 2-1/16  | 2-5/16 | 12-1/4 |    |    |
|            | 2-1/2                                                                             |                 | 888-40-U        |                  | 2-1/2           | 2               | 1-1/4          | 1                    | 1-1/2               | 4-3/4           | 10-5/16 | 16-1/2   | 2-5/8   | 2-5/8  | 14-1/4 |    |    |
|            | 3                                                                                 |                 | 988-50-U        |                  | 3               | 2-1/2           | 1-1/4          | 1-1/4                | 2                   | 5-1/4           | 11-7/8  | 18-3/16  | 2-7/8   | 3-1/16 | 16-1/4 |    |    |
|            | 4                                                                                 |                 | Consult Factory |                  | Consult Factory | Consult Factory | 4              | Consult Factory      | Consult Factory     | Consult Factory | 2-1/2   | --       | --      | --     | --     | -- | -- |
|            | 5                                                                                 |                 |                 |                  |                 |                 | 5              |                      |                     |                 | 3       | --       | --      | --     | --     | -- | -- |

Models Added

Performance Charts

