



# DEUBLIN

## 1101 Series "Closed Seal" Rotating Unions for Continuous Coolant Service

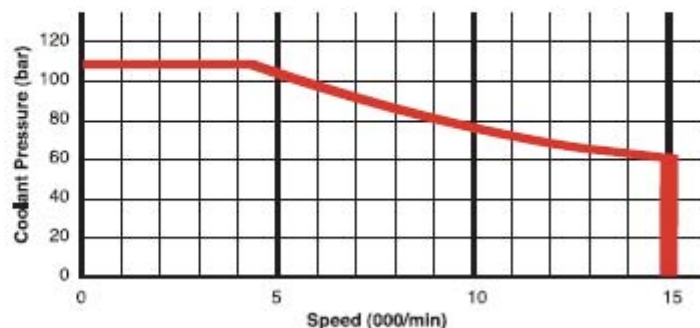
- Single passage for coolant or MQL
- Closed seals for transfer line and similar applications
- Full-flow design has no obstructions to trap chips or debris
- Bearing-supported with threaded rotor for easy installation
- Deep groove radial ball bearings for smooth operation
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodized aluminum housing resists corrosion

### Operating Data

Media	Water-based Coolant	
	MQL (oil mist) up to 10 bar (145 psi)	
Filtration	ISO 4406 Class 17/15/12, max. 60 micron	
Maximum Speed	15,000 min <sup>-1</sup>	15,000 rpm
Maximum Pressure	105 bar	1,520 psi
Maximum Flow	20 l/min	5.3 gpm
Maximum Temperature	160°F	71°C



**DO NOT RUN DRY**






# DEUBLIN

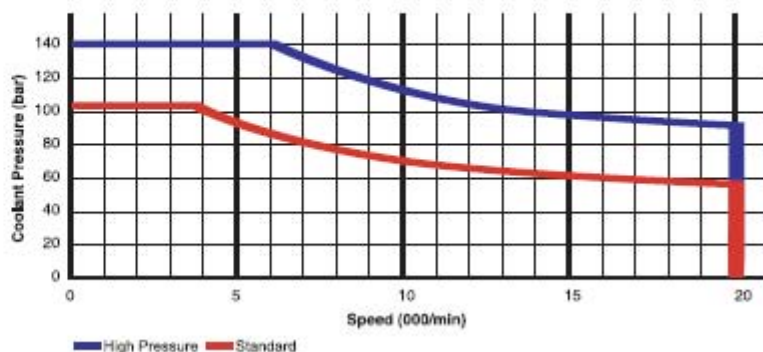
## 1109 Series Pop-Off™

### Rotor-Mounted Rotating Unions for Coolant Service with Dry Running

- Single passage for coolant or MQL
- Patented Pop-Off™ technology allows unlimited dry running without media pressure
- Full-flow design has no obstructions to trap chips or debris
- Bearing-supported with threaded rotor for easy installation
- Dual ABEC 7 (ISO class P4) angular contact ball bearings
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodized aluminum housing resists corrosion

## Operating Data

Media	Water-based Coolant		 <p><b>NO AIR PRESSURE WITH ROTATION</b></p>
Filtration	MQL (oil mist) up to 10 bar (145 psi)		
	ISO 4406 Class 17/15/12, max. 60 micron		
Maximum Speed	20,000 min <sup>-1</sup>	20,000 rpm	
Maximum Pressure	See chart		
Maximum Flow	82 l/min	21.6 gpm	Standard
	24.3 l/min	6.4 gpm	High Pressure (HP)
Maximum Temperature	160°F		71°C





# DEUBLIN

## 1116 Series "Closed Seal" Rotating Unions for Continuous Coolant Service

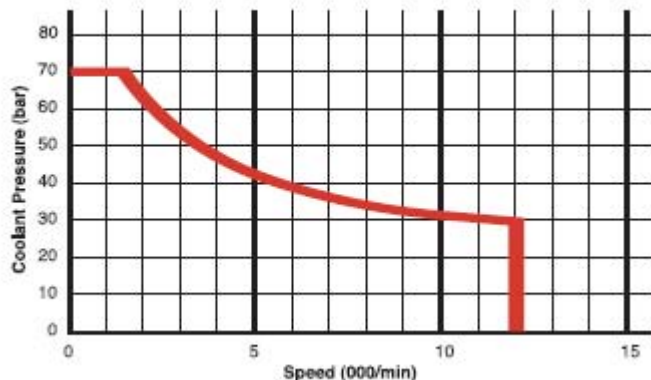
- Single passage for coolant or MQL
- Closed seals for transfer line and similar applications
- Full-flow design has no obstructions to trap chips or debris
- Bearing-supported with threaded rotor for easy installation
- Deep groove radial ball bearings for smooth operation
- Labyrinth system and large vents to protect ball bearings
- Balanced mechanical seals made from silicon carbide for long life even under difficult operating conditions
- Anodized aluminum housing resists corrosion

### Operating Data

Media	Water-based Coolant	
	MQL (oil mist) up to 10 bar (145 psi)	
Filtration	ISO 4406 Class 17/15/12, max. 60 micron	
Maximum Speed	12,000 min <sup>-1</sup>	12,000 rpm
Maximum Pressure	70 bar	1,015 psi
Maximum Flow	82 l/min	21.6 gpm
Maximum Temperature	160°F	71°C



**DO NOT RUN DRY**



# DEUBLIN

## 2400 Series Rotating Union



- Monoflow and duoflow design
- In-the-shaft mounted
- Self-supported rotating union
- Flanged housing or mounted with retaining plate
- Balanced mechanical seal
- Seal combination:  
Silicon Carbide/Silicon Carbide
- Brass housing and elbow
- Stainless steel rotor and supply pipe
- Engineered sleeve bearing
- Full-media flow
- Easily field repairable

### Operating Data

Maximum Water Pressure

150 PSI

10 bar

Maximum Speed

100 RPM

100/min

Maximum Temperature

250°F

>250°F consult **DEUBLIN**

# DEUBLIN

## General Purpose 55 Series Unions



- Monoflow and duoflow design
- Self-supported rotating union
- Radial housing connection
- Balanced mechanical seal
- 3 vent holes
- Forged brass housing
- Stainless steel rotor
- Special options:  
threaded vent holes,  
low torque design
- Lubrication Guide page 55

### Operating Data

Maximum Water Pressure	Model 55-555	750 PSI	50 bar
Maximum Water Pressure	Model 655	600 PSI	41 bar
Maximum Saturated Steam Pressure (Intermittent)		15 PSI	1 bar
Maximum Hot Oil Pressure		100 PSI	6.6 bar
Maximum Speed NPT Threads	Model 55-555	1,500 RPM	1,500/min
	Model 655	750 RPM	750/min
Maximum Speed Straight Threads			
	Model 55-255	3,500 RPM	3,500/min
	Model 355	3,000 RPM	3,000/min
	Model 525-555	2,500 RPM	2,500/min
	Model 655	750 RPM	750/min

Maximum Temperature

250°F

>250°F consult **DEUBLIN**



# DEUBLIN

## 2", 2½", 3" & 4" Cartridge Water Unions

- Monoflow and duoflow design
- Self-supported rotating union
- Radial housing connection
- Balanced mechanical seal
- Seal combinations:  
Carbon Graphite/Tungsten Carbide - standard  
Silicon Carbide/Tungsten Carbide - E.L.S.
- Steel-banded floating seal
- Easy and quick replacement of sealing components
- Full-media flow
- Vent slots
- Cast iron housing
- Steel rotor flanged/threaded
- Lubrication Guide page 55

### Operating Data

Maximum Water Pressure		150 PSI	10 bar
Maximum Speed		750 RPM	750/min
Torque for	Model 6200	4 ft.lbs	5.4 Nm
	Model 6250	7 ft.lbs	9.5 Nm
	Model 6300	8 ft.lbs	10.9 Nm
	Model 6400	10 ft.lbs	13.6 Nm

Maximum Temperature

250°F

>250°F consult **DEUBLIN**



# DEUBLIN

## 9000 Series Steam and Hot Oil Unions

- Monoflow and duoflow design
- Self-supported rotating union
- Spherical Carbon Graphite seal
- Seal wear indicator allows preventive maintenance
- 2 torque lugs on the housing
- Nickel-plated cast iron housing
- Steel rotor, nickel-plated for steam service

### Operating Data

Maximum Saturated Steam Pressure <sup>(1)</sup>	150 PSI	10 bar
Maximum Saturated Steam Temperature	365°F	185°C
Maximum Hot Oil Pressure <sup>(1)</sup>	100 PSI	7 bar
Maximum Speed <sup>(1)</sup>	400 RPM	400/min

Maximum Hot Oil Temperature

450°F

>450°F consult **DEUBLIN**



# DEUBLIN

## 3/4" to 1 1/2" Air-Hydraulic Unions

- Monoflow design
- Self-supported rotating union
- Radial housing connection
- Balanced mechanical seal
- Seal combinations:  
Carbon Graphite/Hardened Tool Steel or  
Carbon Graphite/Ceramic
- Felt oiler in seal cavity for air service
- Oiler for relubrication (3 - 5 drops/month)
- Low torque
- Aluminum housing
- Stainless steel or steel rotor (respective of model)
- Lubrication Guide page 55

### Operating Data

Maximum Air Pressure	150 PSI	10 bar
Maximum Vacuum	28" Hg	6.7 kPa
Maximum Hydraulic Pressure		
Model 250-094	1,000 PSI	70 bar
Model 355-021	1,000 PSI	70 bar
Model 452-000	750 PSI	50 bar
Maximum Speed NPT Threads	1,500 RPM	1,500/min
Maximum Speed Straight Threads		
Model 250-094	3,500 RPM	3,500/min
Model 355-021	3,000 RPM	3,000/min
Model 452-000	2,500 RPM	2,500/min
Maximum Temperature	250°F	120°C



# DEUBLIN

## 1/8" to 1/2" Air-Hydraulic Unions



- Monoflow design
- Self-supported rotating union
- Radial housing connection
- Balanced mechanical seal
- Seal combinations:
  - Carbon Graphite/Hardened Tool Steel or
  - Carbon Graphite/Silicon Carbide
- Felt oiler in seal cavity for air service
- Oiler for relubrication (3 - 5 drops/month)
- Low torque
- Weight-optimized design
- Aluminum housing
- Bearings lubricated for life

### Operating Data

Maximum Air Pressure	150 PSI	10 bar
Maximum Vacuum	28" Hg	6.7 kPa
Maximum Hydraulic Pressure		
Model 1005	1,000 PSI	70 bar
Model 1102	1,000 PSI	70 bar
Model 1115	500 PSI	34 bar
Model 1205	750 PSI	50 bar
Model 2200 <sup>①</sup>	1,000 PSI	70 bar
Maximum Speed NPT Threads	1,500 RPM	1,500/min
Maximum Speed Straight Threads	3,500 RPM	3,500/min
Maximum Temperature	250°F	120°C



# DEUBLIN

## Deu-Plex Low Speed Air-Hydraulic Unions

- Duoflow design
- Self-supported rotating union
- Composite bearing
- Vent holes between passages
- Special seals
- Hardened sealing surface
- Aluminum housing
- Steel rotor

### Optional:

- Tandem model as triple-passage design

## Operating Data

Maximum Air Pressure	150 PSI	10 bar
Maximum Vacuum Pressure	28" Hg	6.7 kPa
Maximum Hydraulic Pressure <sup>①</sup>	3,000 PSI	204 bar
Maximum Speed <sup>①</sup>	250 RPM	250/min
Torque for		
Model 1690	7 ft.lbs	9.5 Nm
Model 1790	18 ft.lbs	24 Nm
Model 1890	22 ft.lbs	29.8 Nm
Maximum Temperature	250°F	120°C



# DEUBLIN

## H Series Steam and Hot Oil Unions

- Monoflow and duoflow design
- Self-supported rotating union
- Convex seal ring better suited to handle mechanical and thermal shock
- Two widely-spaced graphite bearings
- H57 - H127 optional with sight glasses in the end cap for visual inspection of condensate removal
- Seal wear indicator allows preventive maintenance
- Flanged or threaded rotor available
- Cast iron housing
- Stainless steel rotor
- For steam and hot oil applications in paper, plastic and textile industries and open gear paper machines

### Operating Data 3/4" – 2"

Maximum Saturated Steam Pressure	150 PSI	10 bar
Maximum Speed Saturated Steam Service	400 RPM	400/min
Maximum Saturated Steam Temperature	365°F	185°C
Maximum Hot Oil Pressure	100 PSI	7 bar
Maximum Speed Hot Oil Service	400 RPM	400/min
Maximum Hot Oil Temperature	450°F	>450°F consult <b>DEUBLIN</b>

### Operating Data 2 1/2" – 5"

Maximum Saturated Steam Pressure	150 PSI	10 bar
Maximum Speed Saturated Steam Service	180 RPM	180/min
Maximum Saturated Steam Temperature	365°F	185°C
Maximum Hot Oil Pressure	100 PSI	7 bar
Maximum Speed Hot Oil Service	350 RPM	350/min
Maximum Hot Oil Temperature	450°F	>450°F consult <b>DEUBLIN</b>

# DEUBLIN

## HPS Series for High Pressure Steam Service in Corrugators

- Monoflow and duoflow design
- Self-supported rotating union
- Seals and bearings made of special Carbon Graphite
- Convex seal ring better suited to handle mechanical and thermal shock
- External mechanism to adjust siphon pipe through end cap
- Nickel-plated front and rear end cap
- Nickel-plated ductile iron housing
- Stainless steel spring
- Heavy duty steel rotor design
- Dual bearings for extended service life

### Operating Data

Maximum Saturated Steam Pressure	250 PSI	17 bar
Maximum Speed	400 RPM	400/min
Maximum Temperature	400°F	200°C

