

GENERAL CATALOG



# **Rotary Unions**

for

• Water • Hot Oil • Steam • Air • Hydraulic • Vacuum • Coolant • Custom Applications

# " Excellence built into every Rotary Unions "

**FLUIDEN** offer wide range of Rotary Unions/ Rotary Joints for new Installations and as well as easily equivalent and retrofit for other brands of rotary unions with best quality range at a very competitive prices & excellence after sales services in India. We are manufacturing a wide range of Rotary Unions / Rotary Joints for different applications include water, steam, thermal oil, hydraulic oil, air, and coolant and for custom applications too. From receiving inquiry to delivery and for best service after sales a gentle cooperation with our customers will always in line with customers satisfaction and product performance. We adhere to our customers through accurate information, effective analysis, accurate conclusions, short response times, and comprehensive optimization for best solution.

#### The reason for our success

The true strength of our passion is we do not see quality as a standard but rather as a lifelong commitment to our valued customer for performance and superior after sales support.....

#### We are always there for you...

Our experience and expertise philosophy have always a quality time for our customers, we are identifying problem and then implementing in the form of an optimized solution.....



# our aim

" To be the first choice for Rotary Unions / Rotary Joints customers. As one of the experienced manufacturers of rotary unions in existence, our aim is to maximize the quality and value of our products & services. This is accomplished by many years of experience and constant deals with our customers they can always rely on

our rotary union's high quality, reliability, and safety with customer needs "

# performance -eak-proof solutions for excellent



# We are working on customer oriented service with **excellent quality of product**

We at **FLUIDEN** is one of Best Rotary Union/ Rotary Joints manufacturer in India. **FLUIDEN** offers wide Range of Rotary Unions for New Installations and as well as easily equivalent for other brands of rotary unions with best quality range of rotating unions at a very competitive prices & excellence after sales services in India. **FLUIDEN** is manufacturing a wide range of Rotary Unions for different

applications. A rotary joint, also designated to as a Rotary Union or Rotating Union, permits the flow of various media from a stationary supply pipe and into and/or out of rotating equipment. Heat transfer and hydraulic media typically used with rotary joints and rotating unions include steam, water, thermal oil, hydraulic oil, air, and coolant.

FLUIDEN rotating unions must be capable to with stand high pressure with high rotating speed.

**FLUIDEN** rotary joints, premier in the industry, are designed for cold and hot water, steam up to 250°c/482°f, 40 bar, hot oil up to 390°c/ 734°f, hydraulic oil, air up to 40 bar, chemical media, coolant up to 150 bar, vacuum, high running speeds.

# **Rotary Unions for Comprehensive Industries....**



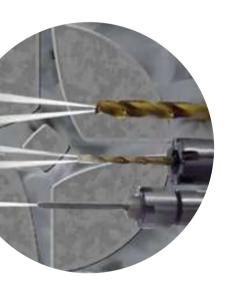
### Iron & Steel

**FLUIDEN** Rotary Unions are used into casting, hot and cold rolling, extrusion, and galvanizing applications in the metals industry. Resistant to external temperatures, rotary unions are used into continuous casting cooling rolls and into hydraulic coiler & de coiler as a media of water & hydraulic...

#### 

**FLUIDEN** Rotary Unions are used in textile machinery industry. It is used into Weaving, dyeing and finishing process machinery. Rotary unions are used for drying and cooling processes use heated or cooled rolls or dryer with use of media of water, steam and hot oil...





#### **Machine Tools**

**FLUIDEN** Rotary Unions for coolant, air, and oil service are high-performance, high-precision rotary unions which are generally applied to spindles on CNC machines, gun drilling, milling, and other machinery by media using water and coolant...

### Corrugating

**FLUIDEN** Rotary Unions are used in the wet end of corrugating operations including on preheater rolls, single facers, preheat stack dryers, glue stations, and double backers, flexo printing, calendaring, and cooling applications machinery by media using Steam and hot oil with advantage of siphon pipe system...



# **Rotary Unions for Comprehensive Industries....**



#### Paper ·····

**FLUIDEN** Rotary Unions are used into paper mills & paper converters machines by use of steam joint and siphon systems and water unions for heating and cooling. Rotary unions are using into Paper dryers heating rolls by media using steam, hot water and oil with advantage of siphon system.

### Plastic

**FLUIDEN** Rotary Unions are used into plastic machinery including cast film, blown film, foam, flexible and rigid sheet extrusion, single and multi-layer coextrusion, blow molding, thermoforming, printing machine cooling cylinder, flexo printing machine cooling cylinder for water, thermal oil, air and hydraulic applications...





#### **Rubber & Tire**

**FLUIDEN** Rotary Unions are used into Rubber and tire manufacturing industries including mixing and extrusion of the rubber combined with other ingredients by using of media Water and steam.

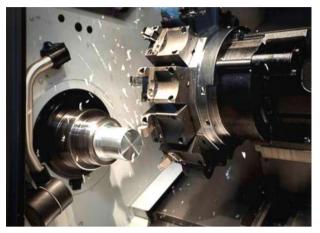
& many more **custom rotary unions** for your application with variety of media including **water, air, coolant, hot oil, steam...** 

#### Developing a wide vertical range of rotary unions with

# optimized manufacturing processes High quality for demanding applications....

Most of the products and spare parts are stocked at the factory and can be delivered in a very short time. When in need of a special product, customer receives quotation with technical information and drawings. After confirmation of the order, finished product is supplied in a very short time. From the receipt of the raw materials to the shipment of the final product, our total production process is subject to the strictest quality controls. *FLUIDEN* assured for perfect seal combination for various types of media likes clean water, air, vacuum, hot oil, poor filtering water, hydraulic oil, coolant, etc. *FLUIDEN* keep designing perfect balanced seal combinations with micro-lapped for the specific pressure, on the seal faces, constant regardless of the fluid pressure.

### Manufacturing



### Quality



Quality is the priority principle of *FLUIDEN*. In order to secure such principle quality, control starts with the raw material entrance and continues through all production processes and ends up with the quality control of all the products one by one. Quality control continues by the information exchange with the customers and the data collected is widely used in products development. The quality of *FLUIDEN* is warranted by the testing of every single rotary union before delivery to customers. Only high quality materials are used in making **FLUIDEN** rotary unions. The careful control of the manufacturing process involved in producing the necessary parts warranties that all the unions are manufactured within the technical specification. The control of the manufacturing process warranties that the entire products are manufactured within the technical specification. Every delivered product was tested on modern benches under customer's application parameters.

## Service & Reliability

Our customers can always rely on our quality of products. We offers full support to our customers through out lifetime of product.

#### Quality is more important for us than making a good product

# **Our Product Solutions** at a Glance....



#### **3000 Series**

#### Water, Saturated Steam & Hot Oil Services

- Max. Water Pressure
- Max. Saturated Steam Pressure
  - Max. Hot Oil Pressure
- Max. Temperature
- Max. Rotor Speed
- Rotor Thread Sizes
- 10 bar ( 150 psi ) 1 bar ( 15 psi ) 7 bar ( 100 psi ) 126°C ( 260° F ) 3500 rpm 1/4" to 2" BSP, NPT, UNF, Metric

#### **4000 Series**

#### Water, Saturated Steam & Hot Oil Services

- Max. Water Pressure
- Max. Saturated Steam Pressure
- Max. Temperature
- Max. Rotor Speed
- Rotor Thread Sizes

14 bar ( 200 psi ) 1 bar ( 14 psi ) 120°C ( 248° F )

- 750 rpm
- 2-1/2" BSP, NPT, UNF, Metric





#### 8000 series

#### **Steam & Hot Oil Services**

- Max. Saturated Steam Pressure
- Max. Hot Oil Pressure
- Max. Temperature
- Max. Rotor Speed
- Rotor Thread Sizes
- 0.8 to 30 bar
- 0.8 to 10 bar
- 30°C to 320°C
- 450 rpm
- 1" to 2-1/2" BSP, NPT, UNF, Metric

#### 5700 Series

#### **Continues Casting Machines (CCM)**

- Max. Water Pressure
- Max. Temperature
- Max. Rotor Speed
- Inlet Thread Sizes

10 bar ( 150 psi ) 85°C ( 185° F ) 250 rpm 3/4" to 1" BSP, NPT, UNF, Metric



#### **Multi-Media Rotary Unions**

- Max. Air Pressure
- Max. Hydraulic Pressure for High Speed Operation Low Speed Operation
- Max. Temperature
- Max. Rotor Speed
- Inlet Thread Sizes

10 bar ( 145 psi )

60 bar ( 860 psi ) 245 bar ( 3500 psi ) 80°C ( 175° F ) 250 rpm 3/8" to 1/2" BSP, NPT, UNF, Metric

#### 2000 Series

#### **Air-Hydraulic, Vacuum Services**

- Max. Air Pressure
- Max. Vacuum Pressure
- Max. Hydraulic Pressure
- Max. Temperature
- Max. Rotor Speed
- Rotor Thread Sizes

10 bar ( 145 psi ) 2" Hg ( 6.7 kPa ) 70 bar ( 1,000 PSI ) 70°C ( 160° F ) 3,500 rpm 1/8" to 1-1/2" BSP, NPT, UNF, Metric





#### **1000 Series**

#### **Coolant for Machine Tools**

- Max. Coolant Pressure
- Max. Coolant Temperature
- Max. Rotor Speed
- Rotor Thread Sizes

1,500 PSI ( 105 BAR ) 70°C ( 160° F ) 20,000 rpm Available as per Machine Spindle end size

& many more custom rotary unions for new installations as well as easily interchangeable with other brands of rotary unions
 & best suitable for your application with variety of media including water, air, coolant, hot oil, steam...



Rotary Unions for General Purpose
Water, Saturated steam & Hot Oil Service





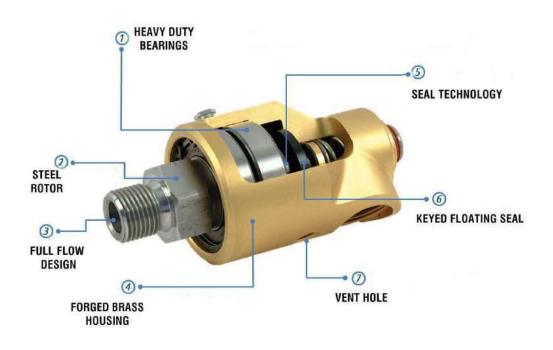
- Self-supported rotary union
- Forged brass housing up to 2" size
- Corrosion resist stainless steel rotor
- Highly precise and lubricated heavy duty ball bearings for long life and stable rotation
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Seal face combination: Silicon Carbide to Carbon Graphite
- Designed for both mono-flow and duo-flow
- Available in both US and metric standards
- Easy installation
- Customized models are available

Technical Da	ita
Max. Water Pressure	10 bar ( 150 psi )
Max. Saturated Steam Pressure	1 bar ( 15 psi )
Max. Hot Oil Pressure	7 bar ( 100 psi )
Max. Temperature	126°C(260° F)
Max. Rotor Speed for	
• Sizes 3/8", 1/2", 3/4"	3500 rpm
• Size 1"	3000 rpm
• Size 1-1/4", 1-1/2"	2500 rpm
• Size 2"	750 rpm
Max. Flow of Media	24 L / min

Mono-flow & Duo-flow Design

Size DN 8 (1/4") to DN 50 (2")

#### **Construction of 3000 Series Rotary Union**



www.fluidenrotaryunions.com

G 1" BSP

G 1" BSP

117

117

40

40

65

65

181

181

78

78 Subject to technical & dimensional changes without prior notice.

47.6 257 300

47.6 257 300

3/4″

3/4"

DN 15	3000-115-12R	3000-215-12R	1/2″	1/2" NPT-RH	3/8″	G 1/8" BSP	57	22	35	90	38	12.7	121	148	3/8″
	3000-115-12L	3000-215-12L	1/2″	1/2" NPT-LH	3/8″	G 1/8″ BSP	57	22	35	90	38	12.7	121	148	3/8″
1/2″	3000-115-14R	3000-215-14R	1/2″	3/4"-16 UNF-RH	3/8″	G 1/8" BSP	57	20	35	80	38	12.7	120	146	3/8″
1/2	3000-115-14L	3000-215-14L	1/2″	3/4"-16 UNF-LH	3/8″	G 1/8" BSP	57	20	35	80	38	12.7	120	146	3/8″
	3000-115-13R	3000-215-13R	1/2″	M 22 X 1.5 RH	3/8″	G 1/8" BSP	57	20	37	80	38	12.7	120	146	3/8"
	3000-115-13L	3000-215-13L	1/2″	M 22 X 1.5 LH	3/8″	G 1/8" BSP	57	20	37	80	38	12.7	120	146	3/8″
	3000-120-11R	3000-220-11R	3/4″	G 3/4" BSP-RH	1/2″	G 1/4" BSP	73	20	34	96	45	17.5	138	168	1/2″
	3000-120-11L	3000-220-11L	3/4″	G 3/4" BSP-LH	1/2″	G 1/4" BSP	73	20	34	96	45	17.5	138	168	1/2″
DN 20	3000-120-12R	3000-220-12R	3/4″	3/4" NPT-RH	1/2″	G 1/4" BSP	73	22	34	96	45	17.5	171	171	1/2″
DN 20	3000-120-12L	3000-220-12L	3/4″	3/4" NPT-LH	1/2″	G 1/4" BSP	73	22	34	96	45	17.5	171	171	1/2″
3/4"	3000-120-15R	3000-220-15R	3/4″	1"-14 UNS-RH	1/2″	G 1/4" BSP	73	20	34	104	45	17.5	138	198	1/2″
5/4	3000-120-15L	3000-220-15L	3/4″	1"-14 UNS-LH	1/2″	G 1/4" BSP	73	20	34	104	45	17.5	138	168	1/2″
	3000-120-13R	3000-220-13R	3/4″	M 27 X 1.5 RH	1/2″	G 1/4" BSP	73	20	35	96	45	17.5	138	168	1/2″
	3000-120-13L	3000-220-13L	3/4″	M 27 X 1.5 LH	1/2″	G 1/4" BSP	73	20	35	96	45	17.5	138	168	1/2″
	3000-125-11R	3000-225-11R	1″	G 1" BSP-RH	1/2″	G 3/8″ BSP	83	22	42	109	59	25	165	203	3/4″
	3000-125-11L	3000-225-11L	1″	G 1" BSP-LH	1/2″	G 3/8" BSP	83	22	42	109	59	25	165	203	3/4"
DN 25	3000-125-12R	3000-225-12R	1″	1" NPT-RH	1/2″	G 3/8″ BSP	83	30	42	121	59	25	173	211	3/4"
DN 25	3000-125-12L	3000-225-12L	1″	1" NPT-LH	1/2″	G 3/8″ BSP	83	30	42	121	59	25	173	211	3/4″
1″	3000-125-14R	3000-225-14R	1″	1-1/2"-12 UNF-RH	1/2″	G 3/8″ BSP	83	30	42	121	59	25	173	211	3/4"
	3000-125-14L	3000-225-14L	1″	1-1/2"-12 UNF-LH	1/2″	G 3/8″ BSP	83	30	42	121	59	25	173	211	3/4″
	3000-125-13R	3000-225-13R	1″	M 35 X 1.5 RH	1/2″	G 3/8″ BSP	83	30	36	121	59	25	173	211	3/4"
	3000-125-13L	3000-225-13L	1″	M 35 X 1.5 LH	1/2″	G 3/8″ BSP	83	30	36	121	59	25	173	211	3/4″
	3000-132-11R	3000-232-11R	1-1/4″	G 1-1/4" BSP-RH	3/4″	G 1/2" BSP	91	28	54	121	71	31.8	191	234	1″
DN 32	3000-132-11L	3000-232-11L	1-1/4″	G 1-1/4" BSP-LH	3/4″	G 1/2" BSP	91	28	54	121	71	31.8	191	234	1″
DN 52	3000-132-12R	3000-232-12R	1-1/4″	1-1/4" NPT-RH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	238	1″
1-1/4"		3000-232-12L	1-1/4″	1-1/4" NPT-LH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	238	1″
1-1/4	3000-132-16R	3000-232-16R	1-1/4″	1-3/4"-12 UN-RH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	237	1″
	3000-132-16L	3000-232-16L	1-1/4″	1-3/4"-12 UN-LH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	237	1″
	3000-140-11R	3000-240-11R	1-1/2″	G 1-1/2" BSP-RH	3/4″	G 3/4" BSP	108	30	72	149	78	38	225	268	1-1/4″
	3000-140-11L	3000-240-11L	1-1/2″	G 1-1/2" BSP-LH	3/4″	G 3/4" BSP	108	30	72	149	78	38	225	268	1-1/4″
DN 40	3000-140-12R	3000-240-12R	1-1/2″	1-1/2" NPT-RH	3/4″	G 3/4" BSP	108	30	72	152	78	38	215	261	1-1/4″
DN 40	3000-140-12L	3000-240-12L	1-1/2″	1-1/2" NPT-LH	3/4″	G 3/4" BSP	108	30	72	152	78	38	215	261	1-1/4″
1-1/2'	3000-140-16R	3000-240-16R	1-1/2″	2"-12 UN-RH	3/4″	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4″
1-1/2	3000-140-16L	3000-240-16L	1-1/2″	2"-12 UN-LH	3/4″	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4″
	3000-140-13R	3000-240-13R	1-1/2″	M 50 X 1.5 RH	3/4″	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4″
	3000-140-13L	3000-240-13L	1-1/2″	M 50 X 1.5 LH	3/4″	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4″
DN 50	3000-150-11R	3000-250-11R	2″	G 2" BSP	3/4″	G 1" BSP	117	30	65	166	78	47.6	246	289	1-1/4″
50	3000-150-11L	3000-250-11L	2″	G 2" BSP	3/4″	G 1" BSP	117	30	65	166	78	47.6	246	289	1-1/4″

'O'

Outlet

Thread

----

----

1/4″

1/4"

1/4″

1/4"

1/4″

1/4″

3/8"

3/8″

'R'

**Rotor Thread** 

G 1/4" BSP-RH

G 1/4" BSP-LH

G 3/8" BSP-RH

G 3/8" BSP-LH

3/8" NPT-RH

3/8" NPT-LH

5/8"-18 UNF-RH

5/8"-18 UNF-LH

G 1/2" BSP-RH

G 1/2" BSP-LH

'S'

Siphon

Thread

----

----

M 6 X 1

M 6 X 1

M 6 X 1

M 6 X 1

----

G 1/8" BSP

G 1/8" BSP

ØD

43.5

43.5

45

45

45

45

45

45

57

57

E 1

16

16

16.5

16.5

16.5

16 5

16.5

16.5

20

20

E 2

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26

26

26

26

26

26

35

35

Mono-flow Design L1 E 2 E 1 Rotor Thread Plug Thread <u>-</u> øD 0н Port 'B' A / F (IN-LET) G 1 Lock-up length ( Approx. )

'B'

Port Size

1/4″

1/4″

3/8″

3/8″

3/8″

3/8"

3/8″

3/8"

1/2"

1/2″

Model No.

3000-108-11R 3000-208-11R

3000-110-11R 3000-210-11R

3000-110-11L 3000-210-11L

3000-110-12R 3000-210-12R

3000-110-12L 3000-210-12L

3000-110-14R 3000-210-14R

3000-115-11R 3000-215-11R

3000-115-11L 3000-215-11L

3000-150-12R 3000-250-12R

3000-150-12L 3000-250-12L

2"

2″

2″

2" NPT

2" NPT

**Duo-flow** 

3000-208-11L

3000-210-14L

Mono-flow

3000-108-11L

3000-110-14L

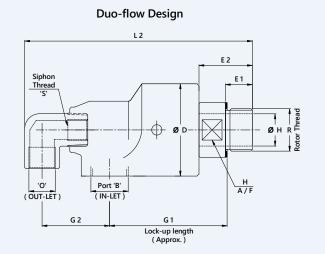
Size

**DN 8** 

1/4"

DN 10

3/8"



G 1

Lockup

Approx

69.3

69.3

64.5

64.5

69.3

693

64.5

64.5

80

80

G 2

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35

35

35

35

35

35

38

38

ØН L1

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9.5

9.5

9.5

95

9.5

9.5

12.7

12.7

ΎΡ

Plug

Thread

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---

1/4″

1/4"

1/4″

1/4"

1/4″

1/4″

3/8″

3/8″

L 2

---

97.5

97.5 ---

101.5 122.5

101.5 122.5

99.5 122.5

99.5 122.5

99.5 122.5

99.5 122.5

120 148

120 148

11

1-1/4"

1-1/4″



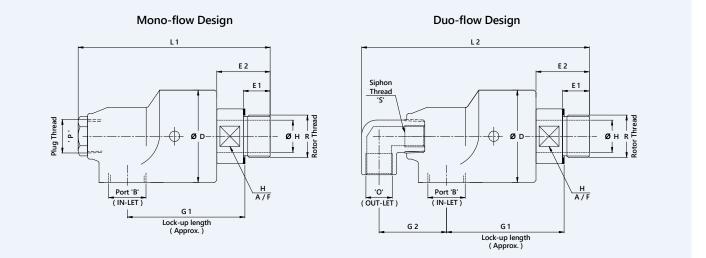


- Self-supported rotary union
- Forged brass housing up to 2" size
- Corrosion resist stainless steel rotor
- Highly precise and lubricated heavy duty ball bearings for long life and stable rotation
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Seal face combination: Carbon Graphite to Ceramic
- Designed for both mono-flow and duo-flow
- Available in both US and metric standards
- Easy installation
- Custom models are available

1			
	Technical Da	ata	
	Max. Water Pressure	10 bar ( 150 psi )	
	Max. Saturated Steam Pressure	1 bar ( 15 psi )	
	Max. Hot Oil Pressure	7 bar ( 100 psi )	
	Max. Temperature	126°C(260° F)	
	Max. Rotor Speed for		
	• Sizes 3/8", 1/2", 3/4"	3500 rpm	
	• Size 1"	3000 rpm	
	• Size 1-1/4", 1-1/2"	2500 rpm	
	• Size 2"	750 rpm	
	Max. Flow of Media	24 L / min	

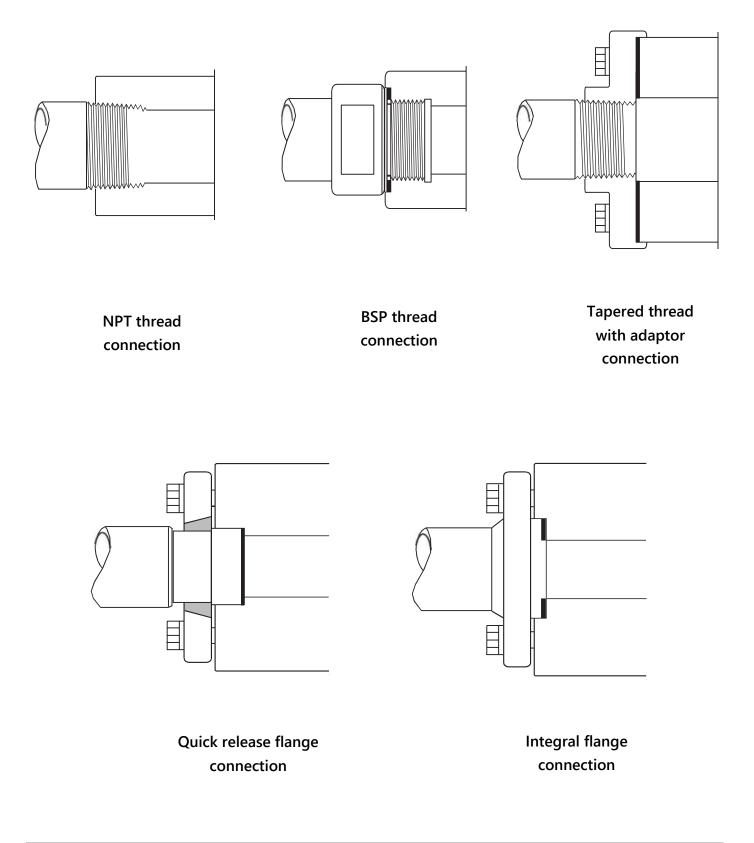
Mono-flow & Duo-flow Design

Size DN 8 (1/4") to DN 50 (2")



	Mod	lel No.	'B'		'O'	'S'				G 1					'P'
Size	Mono-flow	Due flow	Port	'R' Rotor Thread	Outlet	Siphon	ØD	E 1	E 2	Lockup	G 2	ØН	L1	L 2	Plug
		Duo-flow	Size		Thread	Thread				Approx.					Thread
DN 8	3100-108-21R	3100-208-21R	1/4″	G 1/4" BSP-RH			43.5	16		69.3			97.5		
1/4″	3100-108-21L	3100-208-21L	1/4″	G 1/4" BSP-LH			43.5	16		69.3			97.5		
	3100-110-21R	3100-210-21R	3/8″	G 3/8" BSP-RH	1/4″	M 6 X 1	45	16.5	26	64.5	35	9.5	101.5	122.5	1/4″
DN 10	3100-110-21L	3100-210-21L	3/8″	G 3/8" BSP-LH	1/4″	M 6 X 1	45	16.5	26	64.5	35	9.5	101.5	122.5	1/4″
	3100-110-22R	3100-210-22R	3/8″	3/8" NPT-RH	1/4″	M 6 X 1	45	16.5	26	69.3	35	9.5	99.5	122.5	1/4″
3/8″	3100-110-22L	3100-210-22L	3/8″	3/8" NPT-LH	1/4″	M 6 X 1	45	16.5	26	69.3	35	9.5	99.5	122.5	1/4″
-,	3100-110-24R	3100-210-24R	3/8″	5/8"-18 UNF-RH	1/4″		45	16.5	26	64.5	35	9.5	99.5	122.5	1/4″
	3100-110-24L	3100-210-24L	3/8"	5/8"-18 UNF-LH	1/4"		45	16.5	26	64.5	35	9.5	99.5	122.5	1/4"
	3100-115-21R	3100-215-21R	1/2"	G 1/2" BSP-RH	3/8"	G 1/8" BSP	57	20	35	80	38	12.7	120	148	3/8"
	3100-115-21L	3100-215-21L	1/2"	G 1/2" BSP-LH	3/8"	G 1/8" BSP	57	20	35	80	38	12.7	120	148	3/8"
DN 15	3100-115-22R	3100-215-22R	1/2"	1/2" NPT-RH	3/8"	G 1/8" BSP	57	22	35	90	38	12.7	121	148	3/8"
	3100-115-22L	3100-215-22L	1/2"	1/2" NPT-LH	3/8"	G 1/8" BSP	57	22	35	90	38	12.7	121	148	3/8"
1/2″	3100-115-24R 3100-115-24L	3100-215-24R	1/2″ 1/2″	3/4"-16 UNF-RH 3/4"-16 UNF-LH	3/8″ 3/8″	G 1/8" BSP	57 57	20 20	35 35	80 80	38 38	12.7 12.7	120 120	146 146	3/8"
	3100-115-24L 3100-115-23R	3100-215-24L 3100-215-23R	1/2	M 22 X 1.5 RH	3/8	G 1/8" BSP G 1/8" BSP	57	20	35 37	80	38	12.7	120	146	3/8″ 3/8″
	3100-115-23K 3100-115-23L	3100-215-23R	1/2	M 22 X 1.5 KH	3/8"	G 1/8 BSP	57	20	37	80	38	12.7	120	146	3/8"
	3100-1120-21R	3100-213-23L	3/4"	G 3/4" BSP-RH	1/2"	G 1/8 B3P	73	20	34	96	45	17.5	138	140	1/2"
	3100-120-21L	3100-220-21L	3/4"	G 3/4" BSP-LH	1/2"	G 1/4" BSP	73	20	34	96	45	17.5	138	168	1/2"
	3100-120-22R	300-220-22R	3/4"	3/4" NPT-RH	1/2"	G 1/4" BSP	73	22	34	96	45	17.5	171	171	1/2"
DN 20	3100-120-22L	3100-220-22L	3/4"	3/4" NPT-LH	1/2"	G 1/4" BSP	73	22	34	96	45	17.5	171	171	1/2"
	3100-120-25R	3100-220-25R	3/4"	1"-14 UNS-RH	1/2"	G 1/4" BSP	73	20	34	104	45	17.5	138	198	1/2"
3/4″	3100-120-25L	3100-220-25L	3/4"	1"-14 UNS-LH	1/2"	G 1/4" BSP	73	20	34	104	45	17.5	138	168	1/2"
	3100-120-23R	3100-220-23R	3/4"	M 27 X 1.5 RH	1/2"	G 1/4" BSP	73	20	35	96	45	17.5	138	168	1/2"
	3100-120-23L	3100-220-23L	3/4″	M 27 X 1.5 LH	1/2″	G 1/4" BSP	73	20	35	96	45	17.5	138	168	1/2″
	3100-125-21R	3100-225-21R	1″	G 1" BSP-RH	1/2″	G 3/8" BSP	83	22	42	109	59	25	165	203	3/4″
	3100-125-21L	3100-225-21L	1″	G 1" BSP-LH	1/2″	G 3/8″ BSP	83	22	42	109	59	25	165	203	3/4″
DUOT	3100-125-22R	3100-225-22R	1″	1" NPT-RH	1/2″	G 3/8″ BSP	83	30	42	121	59	25	173	211	3/4″
DN 25	3100-125-22L	3100-225-22L	1″	1" NPT-LH	1/2″	G 3/8" BSP	83	30	42	121	59	25	173	211	3/4″
411	3100-125-24R	3100-225-24R	1″	1-1/2"-12 UNF-RH	1/2″	G 3/8" BSP	83	30	42	121	59	25	173	211	3/4″
1″	3100-125-24L	3100-225-24L	1″	1-1/2"-12 UNF-LH	1/2″	G 3/8" BSP	83	30	42	121	59	25	173	211	3/4″
	3100-125-23R	3100-225-23R	1″	M 35 X 1.5 RH	1/2″	G 3/8" BSP	83	30	36	121	59	25	173	211	3/4″
	3100-125-23L	3100-225-23L	1″	M 35 X 1.5 LH	1/2″	G 3/8" BSP	83	30	36	121	59	25	173	211	3/4″
	3100-132-21R	3100-232-21R	1-1/4″	G 1-1/4" BSP-RH	3/4″	G 1/2" BSP	91	28	54	121	71	31.8	191	234	1″
DN 32	3100-132-21L	3100-232-21L	1-1/4″	G 1-1/4" BSP-LH	3/4″	G 1/2" BSP	91	28	54	121	71	31.8	191	234	1″
DN 52	3100-132-22R	3100-232-22R	1-1/4″	1-1/4" NPT-RH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	238	1″
1-1/4″	3100-132-22L	3100-232-22L	1-1/4″	1-1/4" NPT-LH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	238	1″
1 1/ 4	3100-132-26R	3100-232-26R	1-1/4″	1-3/4"-12 UN-RH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	237	1″
	3100-132-26L	3100-232-26L	1-1/4″	1-3/4"-12 UN-LH	3/4″	G 1/2" BSP	91	30	54	191	71	31.8	191	237	1″
	3100-140-21R	3100-240-21R	1-1/2"	G 1-1/2" BSP-RH	3/4"	G 3/4" BSP	108	30	72	149	78	38	225	268	1-1/4"
	3100-140-21L	3100-240-21L	1-1/2"	G 1-1/2" BSP-LH	3/4"	G 3/4" BSP	108	30	72	149	78	38	225	268	1-1/4"
DN 40	3100-140-22R	3100-240-22R	1-1/2"	1-1/2" NPT-RH	3/4"	G 3/4" BSP	108	30	72	152	78	38	215	261	1-1/4"
	3100-140-22L	3100-240-22L	1-1/2"	1-1/2" NPT-LH	3/4"	G 3/4" BSP	108	30	72	152	78	38	215	261	1-1/4"
1-1/2″		3100-240-26R		2"-12 UN-RH	3/4"	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4"
	3100-140-26L	3100-240-26L	1-1/2"	2"-12 UN-LH	3/4"	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4"
	3100-140-23R		1-1/2"	M 50 X 1.5 RH	3/4"	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4"
	3100-140-23L	3100-240-23L		M 50 X 1.5 LH	3/4"	G 3/4" BSP	108	30	72	152	78	38	225	272	1-1/4"
DN 50	3100-150-21R	3100-250-21R	2"	G 2" BSP	3/4"	G 1" BSP	117	30	65 65	166	78	47.6	246	289	1-1/4"
	3100-150-21L	3100-250-21L	2″ 2″	G 2" BSP	3/4"	G 1" BSP	117	30	65 65	166 181	78 79	47.6	246	289	1-1/4"
2″	3100-150-22R 3100-150-22L	3100-250-22R 3100-250-22L	2"	2" NPT 2" NPT	3/4" 3/4"	G 1" BSP G 1" BSP	117 117	40 40	65	181	78 78	47.6 47.6	257 257	300 300	1-1/4" 1-1/4"
	5100-150-22L	5100-250-22L	2	2 111 1	5/4	GT D3P	117			technical					
								SU	uject l	lo technical	oc unne		nanges w	nitiout p	nor notice.

FLUIDEN rotary unions are attached to roll journals using threaded, flanged, or Quick-release flange



**FLUIDEN** Assurance for Excellence





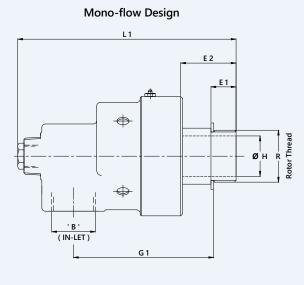
# **Rotary Unions for General Purpose** Water & Saturated Steam Service

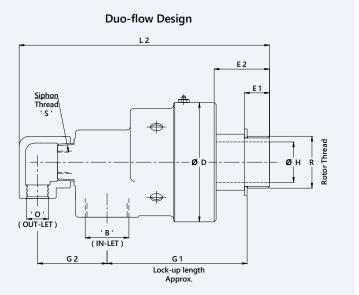




Technical D	ata
Max. Water Pressure	14 bar ( 200 psi )
Max. Saturated Steam Pressure	1 bar ( 14 psi )
Max. Temperature	120°C ( 248° F )
Max. Rotor Speed	750 rpm
Max. Flow of Media	80 L / min

- Self-supported rotary union
- Cast Iron housing
- Corrosion resist stainless steel rotor
- Highly precise and lubricated heavy duty ball bearings for long life and stable rotation
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Available in two seal face combinations
  - \* Carbon Graphite to Ceramic
- \* Tungsten Carbide to Ceramic ( suitable for poor media quality )
- Designed for both mono-flow and duo-flow
- Available in both US and metric standards
- Easy installation & maintenance





	Mode	el No.	'B'	'R'	ʻOʻ	ʻSʻ				G 1					'P'
Size	Mono-flow	Duo-flow	Port Size	Rotor Thread	Outlet Thread	Siphon Thread	ØD	E 1	E 2	Lockup Approx.	G 2	ØН	L1	L2	Plug Thread
	4000-165-11R	4000-265-11R	2-1/2″	G 2-1/2" BSP-RH	1-1/4″	1" NPT	177.5	38	82	208	109	60.3	312	382	1" NPT
	4000-165-11L	4000-265-11L	2-1/2″	G 2-1/2" BSP-LH	1-1/4″	1" NPT	177.5	38	82	208	109	60.3	312	382	1" NPT
DN 65	4000-165-12R	4000-265-12R	2-1/2"	G 2-1/2" NPT-RH	1-1/4″	1" NPT	177.5	48	82	208	109	60.3	312	382	1" NPT
	4000-165-12L	4000-265-12L	2-1/2″	G 2-1/2" NPT-LH	1-1/4″	1" NPT	177.5	48	82	208	109	60.3	312	382	1" NPT
2-1/2″	4000-165-100	4000-265-100	2-1/2″	Quick Release Nipple Connection	1-1/2″	1-1/2″ NPT	177.5		82	208	112	60.3	312	382	1-1/2″ NPT

Subject to technical & dimensional changes without prior notice. Customized models are available on request.





# Rotary Unions for Saturated Steam & Hot Oil Service





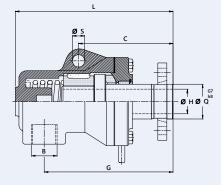
- Self-supported rotary union
- Heavy duty ductile iron housing up to 2<sup>1</sup>/<sub>2</sub>" size
- Heat treated carbon steel rotor
- Rotation of housing is prevented by fork on housing cover
- Highly wear resistant imported Carbon Graphite bush bearings
- Bush bearings are especially suitable for thermal oil in conditions of high pressure, temperature at moderate speed
- Mono flow design
- Available in both US and metric standards
- Easy installation & repairable
- Custom models are available

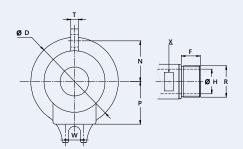
#### Technical Dat

- Max. Water Pressure
- Max. Saturated Steam Pressure
- Max. Hot Oil Pressure
- Max. Temperature
- Max. Rotor Speed for
- Max. Flow of Media

ta	
	0.8 to 30 bar
	0.8 to 30 bar
	0.8 to 10 bar
	- 10°C to 320°C
	450 rpm
	24 L/min

#### **Mono-flow Design**





Size	Model No.	'B' Port Size	'R' Rotor Thread	ØD	S	F	G	ØН	L	Ν	Р	с	Ø Q G7 / h8	х	W
DN 25	8100-125-31R	1″	G 1" BSP-RH	98	14	29	143	25	173	55	50	105		30	14
UN 25 1"	8100-125-31L	1″	G 1" BSP-LH	98	14	29	143	25	173	55	50	105		30	14
	8100-125-300	1″		98	14	29	143	25	173	55	50	105	35		14
DN 32	8100-132-31R	1-1/4″	G 3/8" BSP-RH	115	16	34	168	32	201	64	56	119		41	16
1-1/4"	8100-132-31L	1-1/4″	G 3/8" BSP-LH	115	16	34	168	32	201	64	56	119		41	16
1-1/4	8100-132-300	1-1/4″	3/8" NPT-RH	115	16	34	168	32	201	64	56	119	45		16
DN 40	8100-140-31R	1-1/2″	G 1-1/2" BSP-RH	125	16	37	184	38	224	67	67	125		46	16
1-1/2"	8100-140-31L	1-1/2″	G 1-1/2" BSP-LH	125	16	37	184	38	224	67	67	125		46	16
1-1/2	8100-140-300	1-1/2″		125	16	37	184	38	224	67	67	125	50		16
DN 50	8100-150-31R	2″	G 2" BSP-RH	145	18	44	226	50	273	84	81	147		60	18
2"	8100-150-31L	2″	G 2" BSP-LH	145	18	44	226	50	273	84	81	147		60	18
2	8100-150-300	2″		145	18	44	226	50	273	84	81	147	66		18
DN 65	8100-165-31R	2-1/2″	G 2-1/2" BSP-RH	183	20	50	266	66	326	95	90	167		75	20
2-1/2"	8100-165-31L	2-1/2"	G 2-1/2" BSP-LH	183	20	50	266	66	326	95	90	167		75	20
2-1/2	8100-165-300	2-1/2"		183	20	50	266	66	326	95	90	167	85		20
			** Rotor Connec	tions: R	– RH Th	nread, l	– LH Threa	id, 0 – Fla	inge Conr	nection, C	ther thre	ads connec	tions are av	/ailable up	on request

tor Connections: R – RH Thread, L – LH Thread, U – Hange Connection, Other threads connections are available upon request Subject to technical & dimensional changes without prior notice.





- Self-supported rotary union
- Heavy duty ductile iron housing up to 2<sup>1</sup>/<sub>2</sub>" size
- Heat treated carbon steel rotor
- Rotation of housing is prevented by fork on housing cover
- Highly wear resistant imported Carbon Graphite bush bearings
- Bush bearings are especially suitable for thermal oil in conditions of high pressure, temperature at moderate speed
- Duo flow design
- Available in fixed inner siphon & rotating inner siphon design
- Available in both US and metric standards
- Easy installation & repairable
- Custom models are available

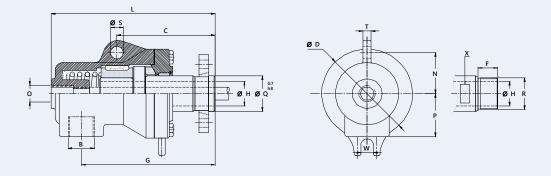
#### **Technical Data**

- Max. Water Pressure
- Max. Saturated Steam Pressure
- Max. Hot Oil Pressure
- Max. Temperature
- Max. Rotor Speed for
- Max. Flow of Media
- 0.8 to 30 bar 0.8 to 30 bar 0.8 to 10 bar - 10°C to 320°C 450 rpm <u>24 L / min</u>

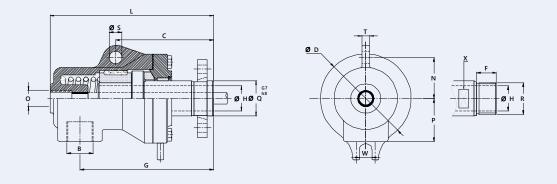
#### **Construction of 8000 Series Rotary Unions**



### Duo-flow rotary union for non-rotating siphon pipe



#### Duo-flow rotary union for rotating siphon pipe



	Mode	l No.	'B'	'R'	'O'										ØQ		
Size	Stationary Siphon	Rotating Siphon	ь Port Size	Rotor Thread	Outlet	ØD	S	F	G	ØН	L	Ν	Р	С	G7 / h8	Х	W
DN 25	8201-225-31R	8202-225-31R	3/4"	G 1" BSP-RH	G 3/8" BSP	98	14	29	143	25	173	55	50	105		30	14
1"	8201-225-31L	8202-225-31L	3/4"	G 1" BSP-LH	G 3/8" BSP	98	14	29	143	25	173	55	50	105		30	14
	8201-225-300	8202-225-300	3/4"		G 3/8" BSP	98	14	29	143	25	173	55	50	105	35		14
DN 32	8201-232-31R	8202-232-31R	1″	G 1-1/4" BSP-RH	G1/2" BSP	115	16	34	168	32	201	64	56	119		41	16
1-1/4"	8201-232-31L	8202-232-31L	1″	G 1-1/4" BSP-RH	G1/2" BSP	115	16	34	168	32	201	64	56	119		41	16
1-1/4	8201-232-300	8202-232-300	1″		G1/2" BSP	115	16	34	168	32	201	64	56	119	45		16
DN 40	8201-240-31R	8202-240-31R	1-1/4″	G 1-1/2" BSP-RH	G3/4" BSP	125	16	37	184	38	224	67	67	125		46	16
1-1/2"	8201-240-31L	8202-240-31L	1-1/4″	G 1-1/2" BSP-LH	G3/4" BSP	125	16	37	184	38	224	67	67	125		46	16
1-1/2	8201-240-300	8202-240-300	1-1/4″		G3/4" BSP	125	16	37	184	38	224	67	67	125	50		16
DN 50	8201-250-31R	8202-250-31R	1-1/2″	G 2" BSP-RH	G1" BSP	145	18	44	226	50	273	84	81	147		60	18
2"	8201-250-31L	8202-250-31L	1-1/2″	G 2" BSP-LH	G1" BSP	145	18	44	226	50	273	84	81	147		60	18
2	8201-250-300	8202-250-300	1-1/2″		G1" BSP	145	18	44	226	50	273	84	81	147	66		18
DN 65	8201-265-31R	8202-265-31R	2″	G 2-1/2" BSP-RH	G 1-1/2" BSP	183	20	50	266	66	326	95	90	167		75	20
	8201-265-31L	8202-265-31L	2″	G 2-1/2" BSP-LH	G 1-1/2" BSP	183	20	50	266	66	326	95	90	167		75	20
2-1/2"	8201-265-300	8202-265-300	2″		G 1-1/2" BSP	183	20	50	266	66	326	95	90	167	85		20
		** Ro	otor Connec	tions: R – RH Threa	d, L – LH Thre	ad, 0 –	Flang	e Conr	nection	, Othe	r threa	ds cor	nnectio	ons are	available	upon r	equest.

Subject to technical & dimensional changes without prior notice.





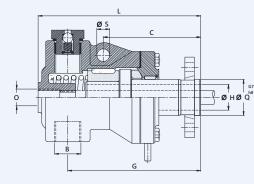
- Self-supported rotary union
- Heavy duty ductile iron housing up to 21/2" size
- Heat treated carbon steel rotor
- Rotation of housing is prevented by fork on housing cover
- Highly wear resistant imported Carbon Graphite bush bearings
- Bush bearings are especially suitable for thermal oil in conditions of high pressure, temperature at moderate speed
- Duo flow design
- Stationary siphon connections with Vacuum Valves
- Available in both US and metric standards
- Easy installation & repairable
- Custom models are available

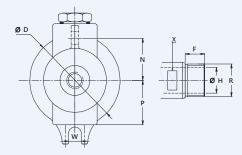
#### **Technical Data**

- Max. Water Pressure
- Max. Saturated Steam Pressure
- Max. Hot Oil Pressure
- Max. Temperature
- Max. Rotor Speed for
  Max. Flow of Media
- Max. Flow of Media

0.8 to 30 bar 0.8 to 30 bar 0.8 to 10 bar - 10°C to 320°C 450 rpm 24 L/min

#### Duo-flow rotary union for non-rotating siphon pipe, with vacuum breaker





Size	Model No.	'B' Port Size	'R' Rotor Thread	'O' Outlet	ØD	S	F	G	ØН	L	Ν	Р	с	Ø Q G7 / h8	x	w
DNI OF	8300-225-31R	3/4"	G 1" BSP-RH	G 3/8" BSP	98	14	29	143	25	173	55	50	105		30	14
DN 25	8303-225-31L	3/4"	G 1" BSP-LH	G 3/8" BSP	98	14	29	143	25	173	55	50	105		30	14
· •	8303-225-300	3/4"		G 3/8" BSP	98	14	29	143	25	173	55	50	105	35		14
DNI 22	8303-232-31R	1″	G 1-1/4" BSP-RH	G1/2" BSP	115	16	34	168	32	201	64	56	119		41	16
DN 32 1-1/4"	8303-232-31L	1″	G 1-1/4" BSP-RH	G1/2" BSP	115	16	34	168	32	201	64	56	119		41	16
1-1/4	8303-232-300	1″		G1/2" BSP	115	16	34	168	32	201	64	56	119	45		16
DNI 40	8303-240-31R	1-1/4″	G 1-1/2" BSP-RH	G3/4" BSP	125	16	37	184	38	224	67	67	125		46	16
DN 40 1-1/2"	8303-240-31L	1-1/4″	G 1-1/2" BSP-LH	G3/4" BSP	125	16	37	184	38	224	67	67	125		46	16
1-1/2	8303-240-300	1-1/4″		G3/4" BSP	125	16	37	184	38	224	67	67	125	50		16
	* Rotor Connections: R – RH Thread, L – LH Thread, 0 – Flange Connection, Other threads connections are available upon request.															

Subject to technical & dimensional changes without prior notice.

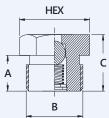




- Brass material
- Available in ½" & 1 "size
- Provide protection against damages of steam heated rolls due to occurs low pressure
- Available also separately

#### **Technical Data**

- Differiatial Pressure
- 0.3 bar 160° C ( 320° F )
- Max. Temperature



'B' Port Size	А	С	Х
1/2" BSP	22	30	30
1" BSP	19	30	41

Subject to technical & dimensional changes without prior notice.





# **Rotary Unions for** Water Service for Continuous Casting Machine

#### **5700** Series Rotary Unions

#### for Continues Casting Machines (CCM)

*FLUIDEN 5700* Series special designed for steel making industries and rolling mill (Continuous Casting Production Lines) machines. This series rotary unions are mainly used in water service in CCM machines. The specially designed seals are withstanding with various operating conditions, such as high temperature at low rotation speed with low friction and wear.



#### **Special Design Features**

- Self-supported rotary union
- Available in both Mono flow & Duo flow design
- Brass housing and elbow
- Corrosion resist stainless steel rotor
- In the shaft mounted design
- Widely spaced composite bearings
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life

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- Available in both US and metric standards
- Easy installation & repairable

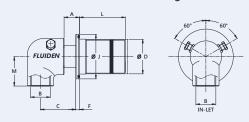
#### **Technical Data**

10 bar ( 150 psi ) 85°C ( 185° F )

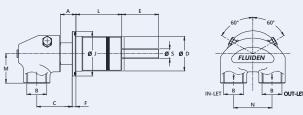
250 rpm

- Max. Water Pressure
- Max. Temperature
- Max. Rotor Speed

Mono-flow Design



**Duo-flow Design** 



Model No.	'B' l	Port size	Α	С	Ø D	E	F	ØJ	L	М	Ν	ØS
5700-120-011		G 3/4" BSP	19	55	46.35/46.10		5	59	61	47		
5700-120-012	Mono	3/4" NPT	19	55	46.35/46.10		5	59	61	47		
5700-125-011	flow	G 1″ BSP	19	55	59.00/58.75		5	72.90	79	47		
5700-125-012		1″ NPT	19	55	59.00/58.75		5	72.90	79	47		
5700-220-011		G 3/4" BSP	19	51	46.35/46.10	49	5	59	61	40	51	13.00/12.96
5700-220-021		G 3/4" BSP	19	51	59.00/58.75	63.5	5	72.90	79	40	51	19.00/18.95
5700-220-012	Duo	3/4" NPT	19	51	46.35/46.10	49	5	59	61	40	51	13.00/12.96
5700-220-022	flow	3/4" NPT	19	51	59.00/58.75	63.5	5	72.90	79	40	51	19.00/18.95
5700-225-011		G 1″ BSP	19	69	71.25/71.00	48	5	86	88	49	63.5	28.70/28.58
5700-225-012		1″ NPT	19	69	71.25/71.00	48	5	86	88	49	63.5	28.70/28.58
							Subject t	o technica	al & dime	nsional d	handes wi	thout prior notice

Subject to technical & dimensional changes without prior notice.

Please do not operate at max. pressure combined with max. speed.

#### 5702 Series Rotary Unions

#### for Continues Casting Machines (CCM)

*FLUIDEN 5702* Series special designed for steel making industries and rolling mill (Continuous Casting Production Lines) machines. This series rotary unions are mainly used in water service in CCM machines. The specially designed seals are withstanding with various operating conditions, such as high temperature at low rotation speed with low friction and wear.



#### **Special Design Features**

- Self-supported rotary union
- Available in both Mono flow & Duo flow design
- Brass housing and elbow
- Corrosion resist stainless steel rotor
- In the shaft mounted design
- Widely spaced composite bearings
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life

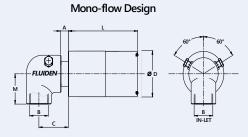
LUIDEN

urance for Excellence

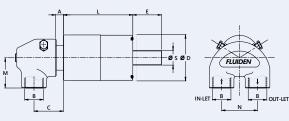
- Available in both US and metric standards
- Easy installation & repairable

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- Max. Water PressureMax. Temperature
- e 10 bar ( 150 psi ) 85°C ( 185° F )
- Max. Rotor Speed
- 85°C (185° F ) 250 rpm



#### Duo-flow Design



Model No.	'B' Port size		А	С	Ø D	E	F	L	М	N	ØS
5702-125-021		G1″ BSP	17	45	46.35/46.10		38	80.92	47		
5702-125-021	Mono	G1" BSP	17	45	46.35/46.10		38	80.92	47		
5702-125-012	flow	1" NPT	17	45	59.00/58.75		32	56.23	47		
5702-125-022		1" NPT	17	45	59.00/58.75		38	80.92	47		
5702-220-011		G3/4" BSP	17	43	46.35/46.10	57	32	56.23	40	51	13.00/12.96
5702-220-021		G3/4" BSP	17	43	59.00/58.75	57	38	80.92	40	51	19.00/18.95
5702-220-012	Duo	3/4" NPT	17	43	46.35/46.10	57	32	56.23	40	51	13.00/12.96
5702-220-022	flow	3/4" NPT	17	43	59.00/58.75	57	38	80.92	40	51	19.00/18.95
5702-225-011		G 1″ BSP	23	67	71.25/71.00	55	54	82.72	47	63.5	28.70/28.58
5702-225-021		1" NPT	23	67	71.25/71.00	55	54	82.72	47	63.5	28.70/28.58
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Please do not operate at max. pressure combined with max. speed. Customized Models are available on request.





# Rotary Unions for Air- Hydraulic & Vacuum Service





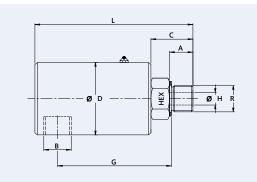
Self-supported rotary union

- Aluminium housing
- Stainless steel threaded rotor
- Highly precise and lubricated bearings for long life
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application Available in both US and metric thread standards
- Easy installation

Technical D	ata
Max. Air Pressure	10 bar ( 145 psi )
Max. Vacumm Pressure	2" Hg ( 6.7 kPa )
<ul> <li>Max. Hydraulic Pressure for :-</li> </ul>	
• Size- 1/8", 1/4", 3/8"	70 bar ( 1,000 PSI )
• Size- 1/2"	50 bar ( 750 PSI )
• Size- 1/2"	70 bar ( 1,000 PSI )
Max. Temprature	70°C(160°F)
Max. Rotor Speed ( NPT Threads )	3,500 rpm

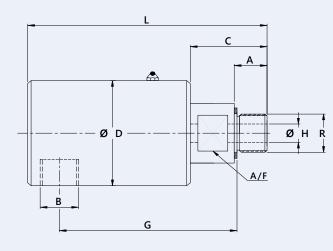
• Max. Rotor Speed ( Parallel Threads )

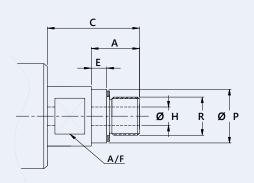




Size	Model No.	'B' Port Size	'R' Rotor Thread	А	С	ØD	G	ØН	L	HEX
	2100-106-011R		1/4" BSP - RH	13	22	28.5	52	3.2	71.5	16
	2100-106-012L		1/8" NPT - LH	11	22	28.5	52	3.2	71.5	16
DN 6	2100-106-014R	1/8″	3/8"-24 UNF - RH	13	22	28.5	52	3.2	71.5	16
	2100-106-014L		3/8"-24 UNF - LH	13	22	28.5	52	3.2	71.5	16
	2100-106-013R		M 10 X 1 - RH	11	22	28.5	54	3.2	71.5	16
	2100-108-011R		1/4" BSP - RH	13	29	41.5	60	6.4	81	22.2
	2100-108-011L		1/4" BSP - LH	13	29	41.5	60	6.4	81	22.2
DN 8	2100-108-012R	1/4"	1/4" NPT - RH	16	28.6	41.5	62.5	6.4	81	22.2
DIN 8	2100-108-012L	1/4	1/4" NPT - LH	16	28.6	41.5	62.5	6.4	81	22.2
	2100-108-014R		5/8" – 18 UNF - RH	16	28.6	41.5	57	6.4	81	22.2
	2100-108-014L		5/8" – 18 UNF - LH	16	28.6	41.5	57	6.4	81	22.2
	2100-110-011R		3/8" BSP - RH	16.5	27	43.5	71.5	8.7	100	24
	2100-110-012R	3/8″	1/4" NPT- RH	16	27	43.5	79.5	9.5	100	24
DN 10	2100-110-112R		3/8" NPT- RH	16	27	43.5	79.5	9.5	100	24
DN IU	2100-110-014R		5/8" – 18 UNF - RH	16	27	43.5	72.2	9.5	100	24
	2100-110-014L		5/8" – 18 UNF - LH	16	27	43.5	72.2	9.5	100	24
	2100-110-013R		M 16 X 2 - RH	16.5	27	43.5	72.2	8.7	100	24
	2100-115-011R		1/2" BSP- RH	19	33.3	57	77.5	12.7	113	28.5
	2100-115-011L		1/2" BSP- LH	19	33.3	57	77.5	12.7	113	28.5
	2100-115-111R		3/4" BSP – RH	19	32.5	57	77	15.8	112	35
	2100-115-111L		3/4" BSP – LH	19	32.5	57	77	15.8	112	35
	2100-115-012R		1/2" NPT - RH	22.2	36.5	57	89	12.7	116	28.5
	2100-115-012L		1/2" NPT - LH	22.2	36.5	57	89	12.7	116	28.5
DN 15	2100-115-112R	1/2"	3/4" NPT – RH	22.2	36.5	57	88	15.8	116	28.5
DIN IS	2100-115-112L	1/2	3/4" NPT – LH	22.2	36.5	57	88	15.8	116	28.5
	2100-115-014R		3/4" – 16 UNF - RH	19	33.3	57	77.5	12.7	112.5	28.5
	2100-115-014L		3/4" – 16 UNF - LH	19	33.3	57	77.5	12.7	112.5	28.5
	2100-115-013R		M 35 X 1.5- RH	15	38	73	96	17.5	125.5	41
	2100-115-013L		M 35 X 1.5- RH	15	38	73	96	17.5	125.5	41
	2100-115-015R		1"- 14 UNS -RH	19	32.5	51	77	15.8	112	35
	2100-115-015L		1″ -14 UNS - LH	19	32.5	51	77	15.8	112	35
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Please do not operate at max. pressure combined with max. speed.





Size	Model No.	'B' Port Size	'R' Rotor Thread	А	С	ØD	E	G	ØН	L	Ø P Pilot Dia.	A/F
	2100-120-011R		G 3/4" BSP-RH	19	34	72.5		94	17.5	128		32
	2100-120-011L		G 3/4" BSP-LH	19	34	72.5		94	17.5	128		32
	2100-120-012R		3/4" NPT-RH	22	36.5	72.5		103	19.5	130		32
	2100-120-012L		3/4" NPT-LH	22	36.5	72.5		103	19.5	130		32
	2100-010-013R-P		M 22 X 1.5-RH-PLT	14	28	72.5	3	87.5	14.3	87.5	26.992/26.979	32
	2100-010-013L-P		M 22 X 1.5-LH-PLT	14	28	72.5	3	87.5	14.3	87.5	26.992/26.979	32
DN 20	2100-010-113R-P	3/4″	M 27 X 1.5-RH-PLT	15	35	72.5	6	91	17.5	129	27.993/27.980	36
DIN 20	2100-010-113L-P	5/4	M 27 X 1.5-LH-PLT	15	35	72.5	6	91	17.5	129	27.993/27.980	36
	2100-120-113R		M 35 X 1.5-RH	15	38	72.5		101	17.5	131		41
	2100-120-113L		M 35 X 1.5-LH	15	38	72.5		101	17.5	131		41
	2100-120-015R		1"- 14 UNS-RH	19	33	72.5		93.6	16.7	127		32
	2100-120-015L		1" -14 UNS-LH	19	33	72.5		93.6	16.7	127		32
	2100-120-115R-P		1"- 14 UNS-RH-PLT	19	54	72.5	12.7	101.5	16	147.5	31.699/31.694	41
	2100-120-115L-P		1"- 14 UNS-LH-PLT	19	54	72.5	12.7	101.5	16	147.5	31.699/31.694	41
	2100-125-011R		G 1" BSP-RH	21	42	82.6		108	22.2	150		38
	2100-125-011L		G 1" BSP-LH	21	42	82.6		108	22.2	150		38
	2100-125-012R		1" NPT-RH	28.5	49	82.6		122	25.4	157		38
	2100-125-012L		1" NPT-LH	28.5	49	82.6		122	25.4	157		38
	2100-125-013R		M 35 X 1.5-RH	15	35	83		108	25	144		36
	2100-125-013L		M 35 X 1.5-LH	15	35	83		108	25	144		36
DN 25	2100-125-113R-P	1″	M 35 X 1.5-RH-PLT	29	59	83	12	103	25	167	39.991/39.975	36
	2100-125-113L-P		M 35 X 1.5-LH-PLT	29	59	83	12	103	25	167	39.991/39.975	36
	2100-125-014R		1-1/2"- 12 UNF-RH	28.5	49	82.6		108	25.4	157		38
	2100-125-014L		1-1/2"- 12 UNF-LH	28.5	49	82.6		108	25.4	157		38
	2100-125-114-P		1-1/2"- 12 UNF-RH-PLT	25.5	58.7	82.6	12.7	106.5	25.4	166.5	39.649/39.636	38
	2100-125-114-P		1-1/2" -12 UNF-LH-PLT	25.5	58.7	82.6	12.7	106.5	25.4	166.5	39.649/39.636	38
	2100-140-011R		G 1-1/2" BSP-RH	29	72	108		143	35	205		54
	2100-140-011L		G 1-1/2" BSP-LH	29	72	108		143	35	205		54
	2100-140-012R		1-1/2" NPT-RH	30	62	108		147.5	38	195		54
	2100-140-012L		1-1/2" NPT-LH	30	62	108		147.5	38	195		54
DN 40	2100-140-013R	1-1/2″	M 50 X 1.5-RH	23	66	108		147	38	200		54
DIN 40	2100-140-013L	1-1/2	M 50 X 1.5-LH	23	66	108		147	38	200		54
	2100-140-016R		1-3/4"- 12 UN-RH	22	81	108		159	32	214		54
	2100-140-016L		1-3/4"- 12 UN-LH	29	72	108		143	35	205		54
	2100-140-116R		2"- 12 UN-RH	28.5	71.5	108		143	38	205		54
	2100-140-116L		2"- 12 UN-LH	28.5	71.5	108		143	38	205		54
											l changes without pri	
							Please o	lo not ope	erate at m	ax. pressu	ure combined with ma	ax. speed





#### **Technical Data**

- Max. Pressure
- Max. Vacumm Pressure
- Max. Hydraulic Pressure
- Max. Temperature
- 210 bar ( 3,050 psi ) 120°C ( 250° F )

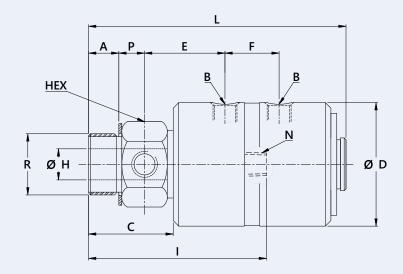
10 bar ( 150 psi ) 2" Hg ( 6.7 kPa )

230 rpm

Max. Rotor Speed

#### **Special Design Features**

- Self-supported rotary union
- Aluminium housing
- Stainless steel threaded rotor
- Bearing made from special material
- Duo flow design
- Specially designed mechanical seals
- Available in both US and metric thread standards
- Easy installation



Size	Model No.	'B' Port Size	'R' Rotor Thread	А	С	ØD	E	F	G	ØН	1	L	М	Ν	Р	HEX
	2200-208-11R	2 X 1/4″	1" BSP	28	55.5	66.5	42.9	29.5	67.8	7.9		150	1/4" NPT	1/4" NPT	19	44.4
2	2200-208-11**	2 X 1/4″	1" BSP	28	55.5	66.5	42.9	29.5	67.8	17.4	96	150	1/4" NPT	1/4" NPT	19	44.4
2 x DN 8	2200-208-12R	2 X 1/4″	1" NPT	28	55.5	66.5	42.9	29.5	66.7	7.9		150	1/4" NPT	1/4" NPT	15	44.4
	2200-208-12**	2 X 1/4″	1″ NPT	28	55.5	66.5	42.9	29.5	66.7	17.4	96	150	1/4" NPT	1/4" NPT	15	44.4
	2200-215-11R	2 X 1/2″	1-1/4" BSP	28	63	76	66.9	42	84.2	16		208	1/2" NPT	1/2" NPT	17.5	55
2 - DNI 45	2200-215-11**	2 X 1/2″	1-1/4" BSP	28	63	76	66.9	42	84.2	27	129	208	1/2" NPT	1/2" NPT	17.5	55
2 x DN 15	2200-215-12R	2 X 1/2″	1-1/4" NPT	28	63	76	66.9	42	95.25	16		208	1/2" NPT	1/2" NPT	17.5	50.8
	2200-215-12**	2 X 1/2″	1-1/4" NPT	28	63	76	66.9	42	95.25	27	129	208	1/2" NPT	1/2" NPT	17.5	50.8
	2200-220-11R	2 X 3/4"	1-1/2" BSP	30	66.5	89	69.9	48.5	91.2	20.6		225.5	3/4" NPT	3/4" NPT	19.5	63.5
2	2200-220-11**	2 X 3/4"	1-1/2" BSP	30	66.5	89	69.9	48.5	91.2	34.9	147.5	225.5	3/4" NPT	3/4" NPT	19.5	63.5
2 x DN 20	2200-220-12R	2 X 3/4"	1-1/2" NPT	30	66.5	89	69.9	48.5	104	20.6		225.5	3/4" NPT	3/4" NPT	19.5	63.5
	2200-220-12**	2 X 3/4"	1-1/2" NPT	30	66.5	89	69.9	48.5	104	34.9	147.5	225.5	3/4" NPT	3/4" NPT	19.5	63.5
										(**)	Indicate	d mode	ls are suppl	ying withou	ıt inner	rotors

Subject to technical & dimensional changes without prior notice.

Please do not operate at max. pressure combined with max. speed.





**Technical Data** 

395 bar ( 5,700 psi )

395 bar ( 5,700 psi )

90°C (195° F)

1,500 rpm

Max. Hydraulic Oil Pressure

Max. Water Pressure

• Max. Temperature

• Max. Rotor Speed

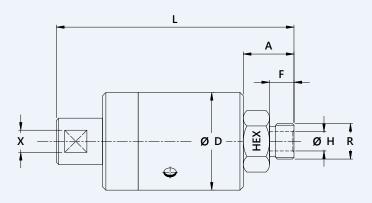
#### Special Design Features

- Self-supported rotary union
- Mono flow design
- Stainless steel housing to resist corrosion from media
- Stainless steel back cover and threaded rotor
- All components are made of steel and corrosion resist
- Highly precise and lubricated dual row ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure with high speed changes with minimum friction and wear for prolong service life
- Available in both US and metric thread standards
- Easy installation

#### Seal Face Combinations for High Performance

- Silicon Carbide to Silicon carbide
- Tungsten Carbide to Tungsten Carbide

#### DN 8 -25 Monoflow High Pressure and Speed Rotary Unions



Size	Model No.	'B' Port Size	'R' Rotor Thread	А	F	L	ØD	ØН	HEX	Х
DN 8	2300-108-111	1/4"	1/4" BSP - RH	26	15	118	50	7	27	10
DIN O	2300-108-112	1/4	1/4" BSP - LH	26	15	118	50	7	27	10
DN 10	2300-110-111	3/8″	3/8″ BSP - RH	26	15	118	50	10	27	10
	2300-110-112	5/0	3/8" BSP - LH	26	15	118	50	10	27	10
DN15	2300-115-111	1/2"	1/2" BSP- RH	30	20	122	50	12	30	10
	2300-115-112	1/2	1/2" BSP- LH	30	20	122	50	12	30	10
DN 20	2300-120-111	3/4"	3/4" BSP – RH	44	24	161	96	18	48	10
DIN 20	2300-120-112	5/4	3/4" BSP – LH	44	24	161	96	18	48	10
DN 25	2300-125-111	1″	1" BSP – RH	44	24	161	96	24	48	10
DIN 25	2300-125-112	'	1" BSP – LH	44	24	161	96	24	48	10
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Please do not operate at max. pressure combined with max. speed.





# Multi Passages Rotary Unions for Multi Media Water, Air, Hydraulic Oil

#### 5500 Series Multi-Passage, Multi-Purpose,

#### **Multi-Media Rotary Unions**



Multi-passage rotary unions are using for more than one operating media are used simultaneously. It is a self-supported rotary union. The multi-passage rotary union provides multiple, independent passages, each with a different rotating inlet ports, but lays same axis.

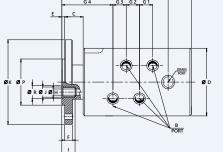
The multiple independent passages permit the flow of the same or different kind of operating media from rotating equipment. A multi-passage rotary union are including various media likes hydraulic fluids, air, coolant etc. The sealing technology selected is dependent on the media and operating conditions, such as temperature, pressure, speed, and passage size. The very special designed seals and the hardened steel rotor permits to operate at high fluid pressure and low rotation speed with low friction and wear.

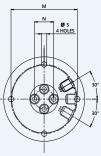


#### **Special Design Features**

- Multi Passage design for multi-media application
- Self-supported rotary union
- Brass housing for water service
- Aluminium housing for air service
- Carbon steel housing for hydraulic oil service
- Corrosion resist stainless steel flanged rotor
- Widely spaced highly precise and lubricated heavy duty ball bearings for long life and stable rotation
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Dynamic carbon Teflon sealing design
- Available in both US and metric standards
- Easy installation
- Custom connections types are available

#### **Technical Data** • Max. Air Pressure 10 bar ( 145 psi ) Max. Vacuum Pressure 2" Hg ( 6.7 kPa ) Max. Hydraulic Pressure for • High Speed Operation...... 60 bar ( 860 psi ) Low Speed Operation..... 245 bar ( 3500 psi ) • Max. Temperature 80°C (175° F) Max. Rotor Speed 250 rpm \_G 1 Ø S HOLE E

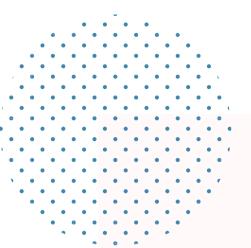




#### 5500 Series

Size	Model No.	"B" Port Size	с	ØD	E	F	G	G 1	G 2	G 3	G 4	øн	T	۵٦	øк	L	М	N	Ø P Pilot Dia.	ØR	ø s
4 X DN 10	5500-410-01	4X3/8" BSP	24.5	88.7	4	10.7	142	18	26	18	72	12.05 12.00	12	9	110	175.8	90	24.6	60.00 59.98	16.7	7.5
4 X DN 10	5500-410-02	4X3/8" NPT	24.5	88.7	4	10.7	142	18	26	18	72	12.05 12.00	12	9	110	175.8	90	24.6	60.00 59.98	16.7	7.5
	5500-415-01	4X1/2" BSP	24.5	107.5	4	13.7	169	23	32	23	81	15.05 15.00	15	13	130	202.5	110	29	75.00 74.98	19.7	9
4 X DN 15	5500-415-02	4X1/2" NPT	24.5	107.5	4	13.7	169	23	32	23	81	15.05 15.00	15	13	130	202.5	110	29	75.00 74.98	19.7	9

Subject to technical & dimensional changes without prior notice. Please do not operate at max. pressure combined with max. speed.

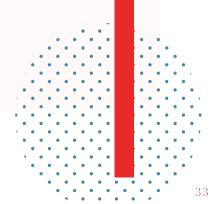


# CUSTOM DESIGN PHILOSOPHY

#### STANDARD & CUSTOMIZED SOLUTIONS FOR Special working conditions and dimensions

Whatever your application needs are, we offer a wide range of standard models of Rotary Unions and customized models of Rotary Unions to fit your media type, pressure, speed and temperature requirements...

......Fill the form below, we are fully appreciate your requirements and passionate to fulfill within



COMPANY NAME :
ADRESS :
TEL : FAX :
CONTACT :
SIZE : or FLOW RATE :
CONNECTION TYPE : THREADED SHAFT SHAFT FLANGE SHAFT
IF THREADED SHAFT; SIZE :
DIRECTION I RIGHT HAND LEFT HAND
PRESSURE : BAR or PSI
TEMPERATURE: °C or °F
Does presure or temperature change during operation? If yes, please give max. and min. and describe:
SPEED : CYLINDER DIAMETER :
DOES DIRECTION CHANGE ?
MEDIUM : 🗌 WATER 🔄 STEAM 🔄 HOT OIL 🔄 HYDRAULIC 📄 PNEUMATIC or OTHER
If medium is corrosive, flammable, explosive or toxic, please explain :
Flow Type:   Single Flow   Dual Flow   Multiport
If Dual Flow: Syphon Size :
If Stationary : Threaded Tube If Threaded; Thread Type : NPT BSP
If Multiport; Number of ports : Port Size :
For rod supported joints; Rod spacing (N) Rod Diameter (O) :
If Compensator? Yes No
How many are being used now?Potential Usage?
If other brands are used now;
Brand name :
Model :
Problems? Any information about the application? Send drawing if possible.
· · · · · · · · · · · · · · · · · · ·
If you have any questions or need asistance please call us

#### FLUIDEN CO. (INDIA)

(AN ISO 9001:2015 COMPANY)



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www.fluidenrotaryunions.com www.throughspindlecoolantunions.com



MACHINE



# **Rotary Unions**

for

For CNC Machine Tools, VMC & HMC Machines , Gun Drill Machines, Rotary Index Tables

### FLUIDEN 1000 SERIES

### FOR HIGH SPEED MACHINE TOOLS COOLANT APPLICATIONS

The FLUIDEN 1000 series coolant rotary unions models are precisely designed for transferring coolant through the very high speed rotating spindle.

In Machine tools systems the supply of coolant through the high speed rotating spindle, which has following advantages over conventional cooling system where tool tips have been cooled by supplying coolant from an external source. In some processes this method of cooling does not provide optimum performance and decreases the service life of the cutting tools tips in the case of combined high speed rotation and pressure. At the end of results, the temperature will be increased at the cutting tool tip and the service life of the cutting tool is decreasing over the time. This **FLUIDEN 1000** series coolant rotary union models are specially designed for cooling the tool tips of cutting tool.

FLUIDEN 1000 series coolant rotary union models are utilized in the machine tool industries for,

- Machine Tools
- CNC Machines
- Vertical & Horizontal Machining Center
- Drilling Machines

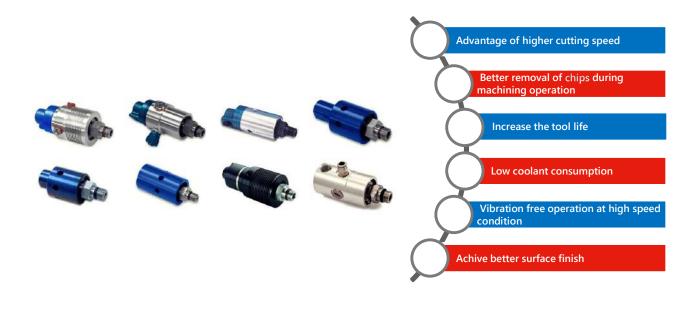
- Gun Drills
- Spindles
- Grinding Machines
- Rotary Index Table & Transfer Lines

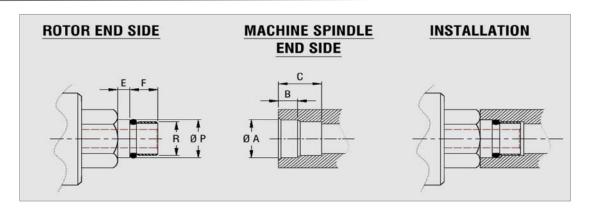
The seals are designed well balanced and micro lapped which is always remains closed without remain any problems when with wet run or dry run operating conditions. Balanced seals are also allowing a low friction torque and a very long life to withstand for poor quality filtration of coolant. This very special designed rotary coolant union allows minimizing the space required for their installation. In additions to this special design features these unions are must increase the tool life even operating at high speed rotating speed, high pressure & high temperature.

The FLUIDEN 1000 series coolant rotary unions models are capable to withstand typical operating conditions are as following:

Models	Operating Pressure	Operating Temperature	Machine Spindle Speed
1009	1,500 PSI ( 105 BAR )	160°F ( 70°C )	20,000 RPM
1902	1,000 PSI ( 70 BAR )	160°F ( 70°C )	12,000 RPM
1090	1,500 PSI ( 105 BAR )	160°F ( 70°C )	15,000 RPM
1080	1,500 PSI ( 105 BAR )	160°F ( 70°C )	15,000 RPM
1008	1,500 PSI ( 105 BAR )	160°F ( 70°C )	20,000 RPM
1001	1,500 PSI ( 105 BAR )	160°F ( 70°C )	15,000 RPM
1016	1,000 PSI ( 70 BAR )	160°F ( 70°C )	12,000 RPM

In additions of above parameters followings are the advantages of FLUIDEN 1000 series ....





### Mounting Examples of Coolant Rotary Unions in Machine Tools

Rot	tor End Sid	de Sizes		Machine Spindle End Side Sizes					
R	Ø P	E	F	ØA	В	С			
	17.993	5	11	18.000	8.5	17			
M 16 X 1.5	17.988			17.995					
	16.025	5	11	16.037	7	17			
	16.020			16.027					
	16.649	4.7	14	16.662	7	20.6			
5/8"-18 UNF	16.644	4.7	14	16.652	1	20.0			
5/0 -10 UNF	15.872	2.4 14 1!		15.885	15.885				
	15.864	2.4	14	15.875	4.7	14.3			

\*\* Other rotor end & thread sizes are available as per machine spindle end sizes

#### Following are some important parameters required for better selection of coolant rotary unions...

- ✓ Space availability for mounting the rotary union properly (Maximum length & diameter...)
- ✓ Media type of using coolant (Water based Coolant, Cutting Oil, Hydraulic Oil, Dry air...)
- ✓ Position of machine tool spindle (Horizontal, Vertical...)
- ✓ Maximum operating pressure...
- ✓ Maximum operating temperature...
- ✓ Maximum rotor speed...
- ✓ Request to provide sample drawing for any equivalent make...

#### " In addition to above parameters, FLUIDEN make rotary unions are ideal for new installations

as well as directly interchangeable with any other brands of coolant rotary unions "





• Max. Pressure

• Max. Temperature

Max. Rotor Speed

• Max. Flow of Media

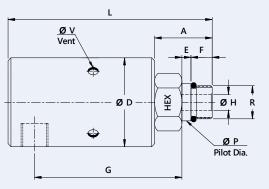
#### **Special Design Features**

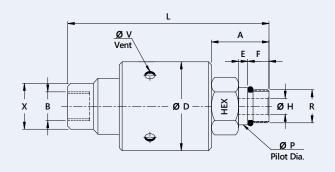
- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated deep groove ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



**FLUIDEN 1001** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

#### Radial Model (90°)





Axial Model (180°)

105 bar ( 1,520 psi )

70°C (160° F)

15,000 rpm

20 L / min

Model No.	'B' P	ort Size	'R' Rotor Thread	А	F	E	G	L	ØD	ØН	Ø P Pilot Dia.	V	HEX	Х
1001-108-302		G 3/8″ BSP	M 16 X1.5 LH	30	11	5		97	43	6	17.994 / 17.976	9	24	22.2
1001-208-302		3/8″ NPT	M 16 X1.5 LH	30	11	5		97	43	6	17.994 / 17.976	9	24	22.2
1001-208-002	Axial	3/8″ NPT	M 10 X 1 LH	27	11	3		94	43	3.2	17.994 / 17.976	9	24	22.2
1001-208-401		3/8″ NPT	5/8"-18 UNF RH	33.3	14	4.7		100	43	6	16.650 / 16.645	9	24	22.2
1001-208-402		3/8″ NPT	5/8"-18 UNF LH	33.3	14	4.7		100	43	6	16.650 / 16.645	9	24	22.2
1001-108-392	Radial	G 3/8″ BSP	M 16 X1.5 LH	30	11	5	68	97	43	6	17.993 / 17.976	9	24	
1001-208-392	Raulai	3/8″ NPT	M 16 X1.5 LH	33.3	11	5	68	97	43	6	17.994 / 17.976	9	24	
								<b>C</b> 1 1			aller an aller all also and			

Subject to technical & dimensional changes without prior notice.

Please do not operate at max. pressure combined with max. speed.

Customized models are available on request.





#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated deep groove ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



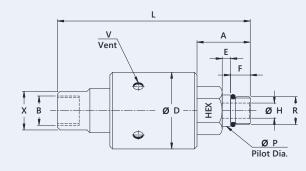
**FLUIDEN 1016** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

#### **Technical Data**

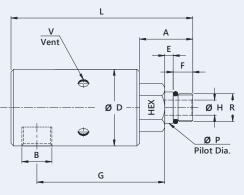
- Max. Pressure
- Max. Temperature
- Max. Rotor Speed
- Max. Flow of Media
- 70°C ( 160° F ) 12,000 rpm 80 L / min

70 bar ( 1,015 psi )

#### Radial Model (90°)



Axial Model (180°)



Model No.	'E	3' Port Size	'R' Rotor Thread	А	F	E	L	G	ØD	ØН	Ø P Pilot Dia.	V	HEX	Х
1016-110-302		G 3/8″ BSP	M 16X1.5 LH	30	11	5	114		44	9	17.993/17.975	9	24	22
1016-210-302		3/8″ NPT	M 16X1.5 LH	30	11	5	114		44	9	17.993/17.975	9	24	22
1016-210-401		3/8″ NPT	5/8"-18 UNF RH	33.3	14	4.7	115		44	9	16.650/16.644	9	24	22
1016-210-402	Axial	3/8″ NPT	5/8"-18 UNF LH	33	14	4.7	115		44	9	16.650/16.644	9	24	22
1016-108-302	Ax	G 1/4" BSP	M 16X1.5 LH	30	11	5	114		44	9	17.993/17.975	9	24	22
1016-208-302		1/4" NPT	M 16X1.5 LH	30	11	5	114		44	9	17.993/17.975	9	24	22
1016-208-401		G 1/4" NPT	5/8"-18 UNF RH	33.3	14	4.7	115		44	9	16.650/16.644	9	24	22
1016-208-402		1/4" NPT	5/8"-18 UNF LH	33.3	14	4.7	115		44	9	16.650/16.644	9	24	
1016-110-392		G 3/8" BSP	M 16X1.5 LH	30	11	5	114	71.3	44	9	17.993/17.975	9	24	
1016-210-392	Radial	3/8″ NPT	M 16X1.5 LH	30	11	5	114	71.3	44	9	17.993/17.975	9	24	
1016-210-491	Rac	3/8″ NPT	5/8"-18 UNF RH	33.3	14	4.7	115	71.3	44	9	16.650/16.644	9	24	
1016-210-492		3/8″ NPT	5/8"-18 UNF LH	33.3	14	4.7	115	71.3	44	9	16.650/16.644	9	24	
								Subject	to techr	ical & d	imensional changes v	withou	it prior no	otice.

Please do not operate at max. pressure combined with max. speed.

Customized models are available on request.





Max. Pressure

Max. Temperature

Max. Rotor Speed

Max. Flow of Media

#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated angular contact ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



**FLUIDEN 1008** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

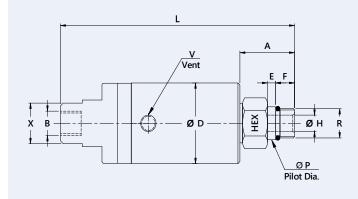
#### Axial Model (180°)

105 bar ( 1,520 psi )

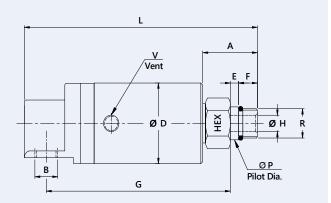
70°C (160° F)

20,000 rpm

80 L / min



#### Radial Model (90°)



Model No.	'B'	Port size	'R' Rotor Thread	А	E	F	G	L	ØD	ØН	Ø P Pilot Dia.	V	HEX	Х
1008-108-302		1/4" BSP	M 16X1.5 LH	30	5	11	130		53	9	17.993/17.975	G 1/4" BSP	24	22
1008-208-302		1/4" NPT	M 16X1.5 LH	30	5	11	130		44	9	17.993/17.975	Ø 9	24	22
1008-208-402	Axial	1/4" NPT	5/8"-18 UNF LH	33.3	4.7	14	133		44	9	16.650/16.644	Ø 9	24	22
1008-110-402	Axi	3/8″ BSP	5/8"-18 UNF LH	33.3	4.7	14	130		44	9	16.650/16.644	Ø 9	24	22
1008-210-302		3/8″ NPT	M 16X1.5 LH	30	5	11	133		44	9	17.993/17.975	Ø 9	24	22
1008-210-402		3/8″ NPT	5/8"-18 UNF LH	33.3	5	14	133		44	9	17.993/17.975	Ø 9	24	22
1008-108-392		1/4" BSP	M 16X1.5 LH	30	5	11	135	105	53	9	17.993/17.975	G 1/4" BSP	24	
1008-110-392	Radial	3/8″ BSP	M 16X1.5 LH	30	5	11	135	105	44	9	17.993/17.975	Ø 9	24	
1008-210-392	Rac	3/8″ NPT	M 16X1.5 LH	30	4.7	11	135	105	44	9	16.650/16.644	Ø 9	24	
1008-210-492		3/8″ NPT	5/8"-18 UNF LH	33.3	4.7	14	138	105	44	9	16.650/16.644	Ø 9	24	
								S	ubject to	o technic	al & dimensional o	changes withou	ut prior n	otice.
								Plea	ase do n	ot opera	te at max. pressure	e combined wi	th max. s	peed.

Customized models are available on request.





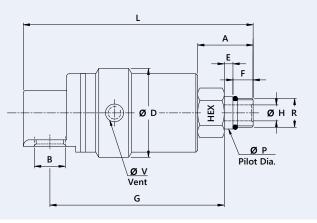
#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated deep groove ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



**FLUIDEN 1902** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

#### Radial Model (90°)



#### **Technical Data**

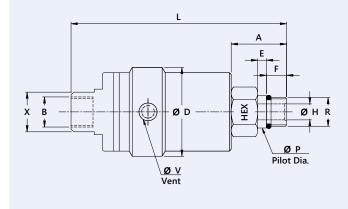
- Max. Pressure
- Max. Temperature
- Max. Rotor Speed
- Max. Flow of Media
  - Axial Model (180°)

70 bar ( 1,015 psi )

70°C (160° F)

12,000 rpm

24 L / min



Model No.	'B'	Port Size	'R' Rotor Thread	А	F	E	G	L	ØD	ØН	Ø P Pilot Dia.	V	HEX	Х
1902-110-302		G 3/8″ BSP	M 16X1.5-LH	32	11	5		130	49.5	9	17.993/17.988	1/4" BSP	24	22
1902-210-402	Axial	3/8″ NPT	5/8"-18 UNF-LH	35.7	14.3	5		134	49.5	9	16.650/16.644	1/4" NPT	24	22
1902-310-302		3/8″ PT	M 16X1.5-LH	32	11	5		130	49.5	9	17.993/17.988	1/4" PT	24	22
1902-110-392		G 3/8″ BSP	M 16X1.5-LH	32	11	5	106	136	49.5	9	17.993/17.988	1/4" BSP	24	
1902-210-492	Radial	3/8″ NPT	5/8"-18 UNF-LH	35.7	14.3	5	106	140	49.5	9	16.650/16.644	1/4" NPT	24	
1902-310-392		3/8″ PT	M 16X1.5-LH	32	11	5	106	136	49.5	9	17.993/17.988	1/4" PT	24	
								S	ubject to	technical	& dimensional cha	anges withou	t prior	notice.

Please do not operate at max. pressure combined with max. speed.

Customized Models are available on request.





Max. Pressure

• Max. Temperature

Max. Rotor Speed

Max. Flow of Media

#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated angular contact ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



**FLUIDEN 1009** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

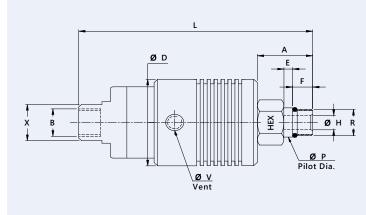
#### Axial Model (180°)

105 bar (1,520 psi)

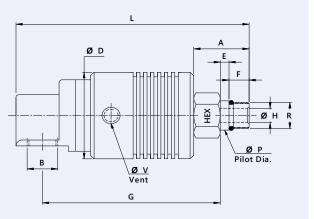
70°C (160° F)

20,000 rpm

24 L / min



#### Radial Model (90°)



Model No.	'B	' Port size	'R' Rotor Thread	А	F	E	G	L	ØD	ØН	Ø P Pilot Dia.	V	HEX	Х
1009-108-302		G 1/4" BSP	M 16X1.5 LH	31	11	5		130	53	5	17.993/17.988	G1/4" BSP	24	22
1009-208-402		1/4" NPT	5/8"-18 UNF LH	34	14.3	5		134	53	5	16.650/16.644	1/4" NPT	24	22
1009-308-302	ial	1/4" PT	M 16X1.5 LH	31	11	5		129	53	9	17.993/17.988	1/4" PT	24	22
1009-110-302	Axi	G 3/8″ BSP	M 16X1.5 LH	31	11	5		130	53	9	17.993/17.988	G1/4" BSP	24	22
1009-210-402		3/8″ NPT	5/8"-18 UNF LH	34	14.3	5		134	53	9	16.650/16.644	1/4" NPT	24	22
1009-310-302		3/8″ PT	M 16X1.5 LH	31	11	5		129	53	9	17.993/17.988	1/4" PT	24	22
1009-108-392		G 1/4" BSP	M 16X1.5 LH	31	11	5	105	136	53	5	17.993/17.988	G1/4" BSP	24	
1009-208-492		1/4" NPT	5/8"-18 UNF LH	34	14.3	5	105	140	53	5	16.650/16.644	G1/4" NPT	24	
1009-308-392	dial	1/4" PT	M 16X1.5 LH	31	11	5	105	136	53	9	17.993/17.988	1/4" PT	24	
1009-110-392	Rac	G 3/8″ BSP	M 16X1.5 LH	31	11	5	105	136	53	9	17.993/17.988	G1/4" BSP	24	
1009-210-492		3/8″ NPT	5/8"-18 UNF LH	34	14.3	5	105	140	53	9	16.650/16.644	1/4" NPT	24	
1009-110-390		3/8″ PT	M 16X1.5 LH	31	11	5	105	136	53	9	17.993/17.988	1/4" PT	24	
									Subjec	t to tech	nical & dimensiona	I changes with	out prior	notice.

Please do not operate at max. pressure combined with max. speed. Customized models are available on request.





#### **Special Design Features**

- Self-supported rotary union with two independent passages
- Aluminium anodized housing to resist corrosion from media
- Stainless steel flanged rotor
- lubricated deep groove ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Labyrinth system to protect ball bearings
- Easy installation

- Media
- Max. Air Pressure
- Max. Coolant Pressure
- Max. Hydraulic Pressure
- Max. Temperature
- Max. Rotor Speed
- Max. Flow of Media
- Filtration

Hydraulic Oil, Coolant, Air 6 bar ( 85 psi ) 70 bar ( 1000 psi ) 65 bar ( 950 psi ) 70°C ( 160° F ) 7,000 rpm 70 L / min ISO 4406 Class 17/15/12,

**FLUIDEN 2220** series high speed two-passage rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

Model No.	'B' Port Size	'R' Connection
2220-208-108F-SPL	(2) X 1/4 NPT	Ø 108 MM FLANGED ROTOR





#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated angular contact ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation

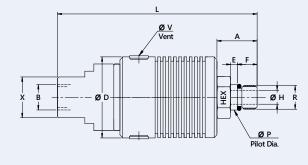


**FLUIDEN 1080** series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

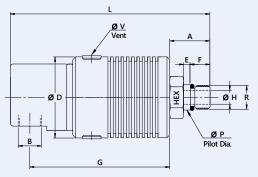
#### Technical Data 105 bar ( 1500 psi )

- Max. Pressure
- Max. Temperature
- Max. Rotor SpeedMax. Flow of Media
- l 15,000 rpm lia 80 L / min
  - Axial Model (180°)

85°C (185° F)



Radial Model (90°)



Model No.	'B	' Port Size	'R' Rotor Thread	Α	F	E	L	G	ØD	ØН	Ø P Pilot Dia.	V	HEX
1080-108-301		G 1/4" BSP	M 16X1.5 - RH	25.9	10.9	5	144	65	53	8.9	17.993/17.988	G 1/8" BSP	24
1080-208-302	Axial	G 1/4" NPT	5/8"-18 UNF LH	28.9	13.9	5	141	65	53	8.9	16.650/16.644	G 1/8" BSP	24
1080-110-301	Ax	G 3/8" BSP	M 16X1.5 - RH	25.9	10.9	5	144	65	53	8.9	17.993/17.988	G 1/8" BSP	24
1080-210-302		G 3/8" NPT	5/8"-18 UNF LH	28.9	13.9	5	141	65	53	8.9	16.650/16.644	G 1/8" BSP	24
1080-108-391		G 1/4" BSP	M 16X1.5 - RH	25.9	10.9	5	144	65	53	8.9	17.993/17.988	G 1/8" BSP	24
1080-208-392	Radial	G 1/4" NPT	5/8"-18 UNF LH	28.9	13.9	5	141	65	53	8.9	16.650/16.644	G 1/8" BSP	24
1080-110-391	Rac	G 3/8" BSP	M 16X1.5 - RH	25.9	10.9	5	144	65	53	8.9	17.993/17.988	G 1/8" BSP	24
1080-210-392		G 3/8" NPT	5/8"-18 UNF LH	28.9	13.9	5	141	65	53	8.9	16.650/16.644	G 1/8" BSP	24
								Subje	ct to teo	chnical 8	& dimensional char	nges without prior	notice.

Subject to technical & dimensional changes without prior notice. Please do not operate at max. pressure combined with max. speed. Customized models are available on request.





105 bar ( 1500 psi )

85°C (185° F)

15,000 rpm

80 L / min

Axial Model (180°)

• Max. Pressure

• Max. Temperature

Max. Rotor Speed

• Max. Flow of Media

#### **Special Design Features**

- Self-supported rotary union
- Aluminium anodized housing to resist corrosion from media
- Stainless steel threaded rotor
- Highly precise and lubricated deep groove ball bearings for long life and stable rotation at very high speed
- Specially designed mechanical seals to sustain high pressure changes with minimum friction and wear for prolong service life
- Designed for both axial and radial application
- Available in both US and metric thread standards
- Easy installation



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R

FLUIDEN 1090 series coolant rotary unions are ideal for new installations as well as directly interchangeable with any other brands of coolant rotary unions

ø

ØΡ

Pilot Dia.

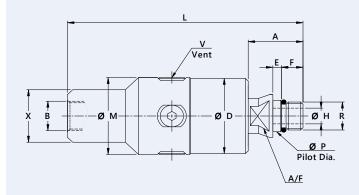
A/F

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#### Radial Model (90°)

V Vent

ø D

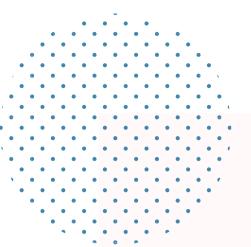


Model No.	'B	' Port Size	'R' Rotor Thread	Α	F	E	L	G	ØМ	ØD	ØН	Ø P Pilot Dia.	V	HEX	X
1090-108-301		G 1/4" BSP	M16X1.5 - RH	29	11.5	4.5	108	92	34.4	34	5	17.993/17.988	G 1/4″ BSP		30
1090-208-302	Axial	G 1/4" NPT	M16X1.5 - LH	29	11.5	4.5	108	92	34.4	34	5	17.993/17.988	G 1/4″ BSP		30
1090-110-301	Ax	G 3/8″ BSP	M16X1.5 - RH	29	11.5	4.5	125	109	44	43	9	17.993/17.988	G 1/4" BSP		24
1090-210-302		G 3/8" NPT	M16X1.5 - LH	29	11.5	4.5	125	109	44	43	9	17.993/17.988	G 1/4" BSP		24
1090-108-391		G 1/4" BSP	M16X1.5 - RH	29	11.5	4.5	91	66	34.4	34	5	17.993/17.988	G 1/4" BSP	17	
1090-208-392	Radial	G 1/4" NPT	M16X1.5 - LH	29	11.5	4.5	91	66	34.4	34	5	17.993/17.988	G 1/4" BSP	17	
1090-110-391	Rac	G 3/8″ BSP	M16X1.5 - RH	29	11.5	4.5	108	82	44	34	5	17.993/17.988	G 1/4" BSP	17	
1090-210-392		G 3/8" NPT	M16X1.5 - LH	29	11.5	4.5	110	82	44	43	9	17.993/17.988	G 1/4" BSP	17	
									S	ubject 1	o techr	ical & dimensional	changes withou	it prior i	notice.

Please do not operate at max. pressure combined with max. speed.

Customized models are available on request.

www.fluidenrotaryunions.com

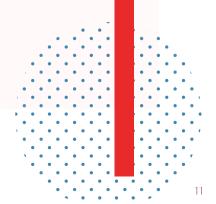


# CUSTOM DESIGN PHILOSOPHY

#### STANDARD & CUSTOMIZED SOLUTIONS FOR Special working conditions and dimensions

Whatever your application needs are, we offer a wide range of standard models of Rotary Unions and customized models of Rotary Unions to fit your media type, pressure, speed and temperature requirements...

......Fill the form below, we are fully appreciate your requirements and passionate to fulfill within



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Machine Type	<ul> <li>CNC Machining Center</li> <li>Gun Drilling</li> <li>Transfer Line or Flex Line</li> <li>Turning Machine</li> <li>Grinding</li> <li>Multiple Spindle Head</li> <li>Other</li> </ul>
Orientation	□ Horizontal □ Vertical □ Multi-axis: Vertical + ° and – °
Union Location	□ Spindle □ Motor Spindle □ Indexing Table or Pallet □ Other:
Available Space	Maximum overall length =mm Maximum diameter =mm (Please attach drawings or photographs of the area where the union will be installed.)
Mounting	Bearing-supported:          □ Rotor-mounted           □ Bore-mounted          Bearingless:          □ Outboard mounting           □ Inboard mounting             □ Around the shaft (shaft diameter =mm)           □ Other:
Rotor Style	<ul> <li>Threaded (pitch and diameter =)</li> <li>Flanged (diameter =)</li> <li>Other:</li> </ul>
Media	Water-based coolant       Cutting oil       Hydraulic oil         Air-oil mist       Lubricated air       Dry air         Other:
Operating Conditions	<ul> <li>Maximum pressure bar (when rotating) bar (when stopped)</li> <li>Maximum speed rpm</li> <li>Maximum flow liters per minute</li> <li>Maximum temperature °C</li> </ul>

### FLUIDEN CO. (INDIA)

(AN ISO 9001:2015 COMPANY)



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