

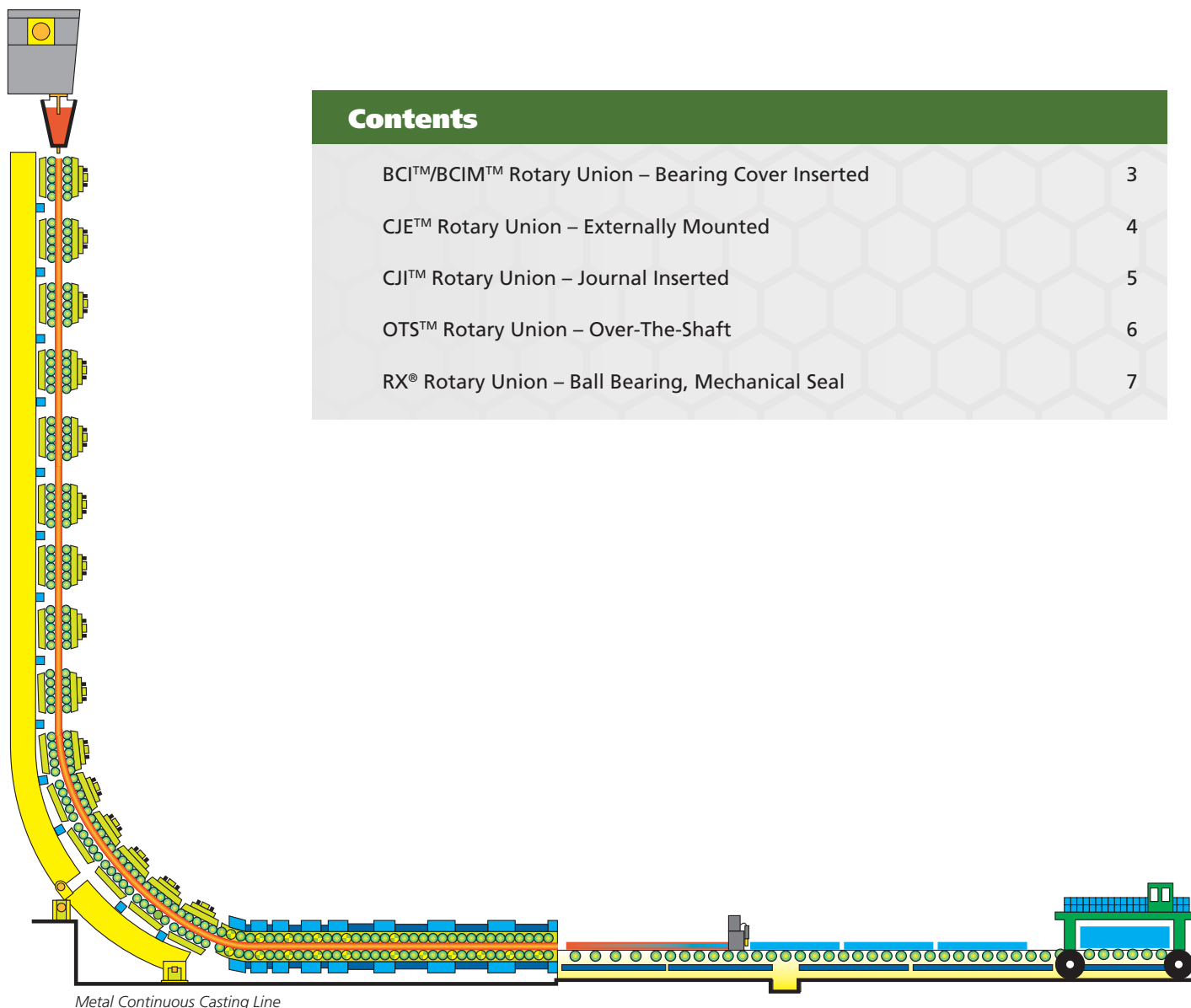
Metals Industry

Rotary Unions for Water Cooling



Engineered reliability and effective cooling increases productivity and decreases maintenance downtime.

Rotary Unions



Metal Continuous Casting Line

Contents

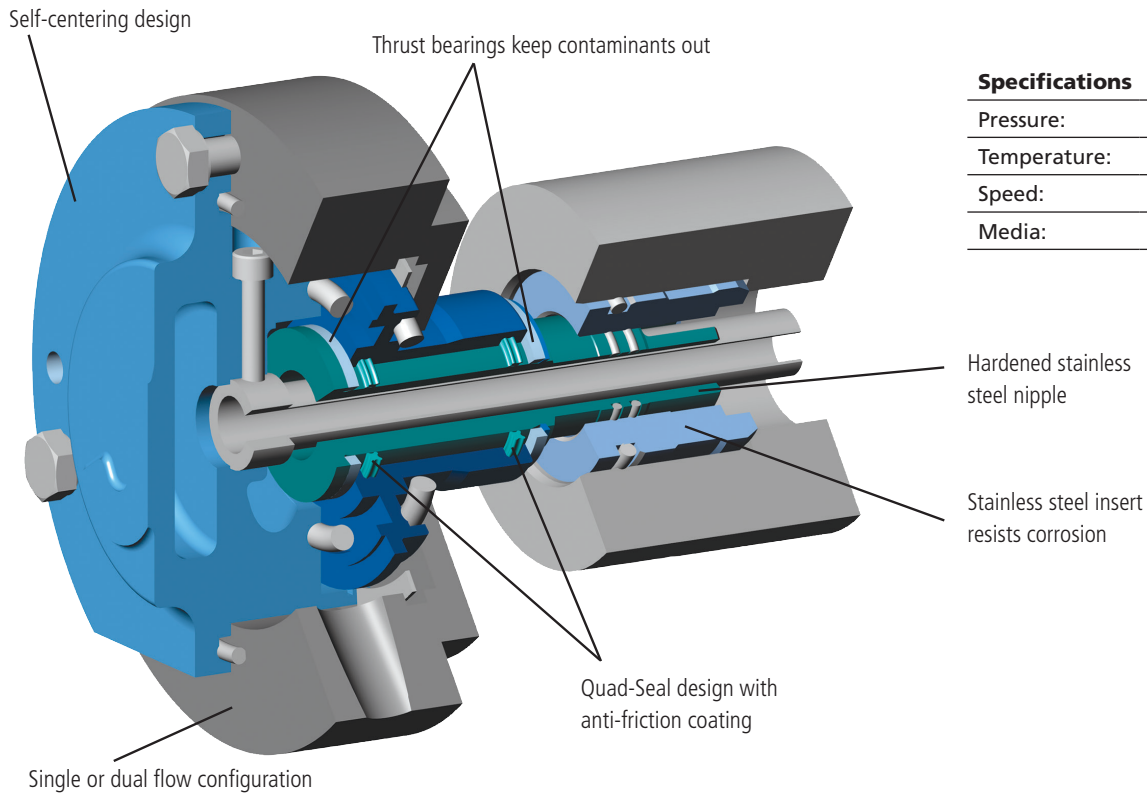
BCI™/BCIM™ Rotary Union – Bearing Cover Inserted	3
CJE™ Rotary Union – Externally Mounted	4
CJI™ Rotary Union – Journal Inserted	5
OTS™ Rotary Union – Over-The-Shaft	6
RX® Rotary Union – Ball Bearing, Mechanical Seal	7

About Kadant Johnson

Since 1930, Kadant Johnson has specialized in the design and manufacture of rotary joints and precision unions and in the integration of these products with systems and services. Rotary unions are sealing devices used on rotating components to convey steam, water, air, coolant, and oil. In addition to rotary unions, Kadant Johnson also supplies auxiliary products and services, such as vacuum breakers, flexible metal hose, sight flow indicators, pressure-powered pumps, and installation and repair services.



BCI/BCIM Rotary Union



Specifications

Pressure:	150 psig (10 bar)
Temperature:	250°F (121°C)
Speed:	25 RPM
Media:	Water

Features

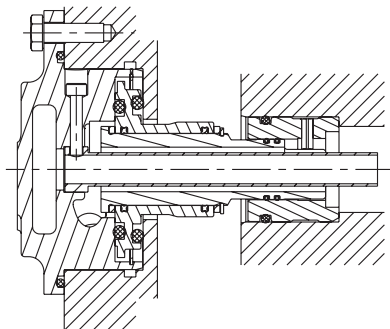


- Mounts inside bearing cover
- External flexible hose eliminated
- Custom-designed and manufactured
- Available with Quad-Seal or mechanical seal
- High Cv flow values
- Can be rebuilt without removing bearing cover
- Up to 10 mm axial movement

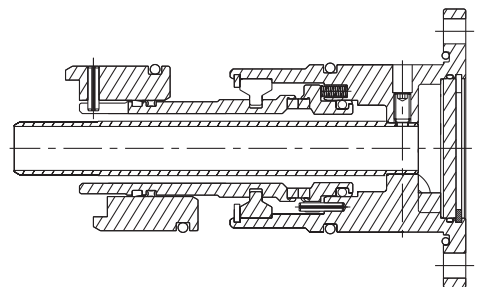
Benefits



- Rotary union protected from break-outs
- Side loading eliminated
- Application flexibility
- Multiple campaign performance
- Continuous cooling, large flow areas
- Easy installation and repair
- Accommodates thermal growth of roll

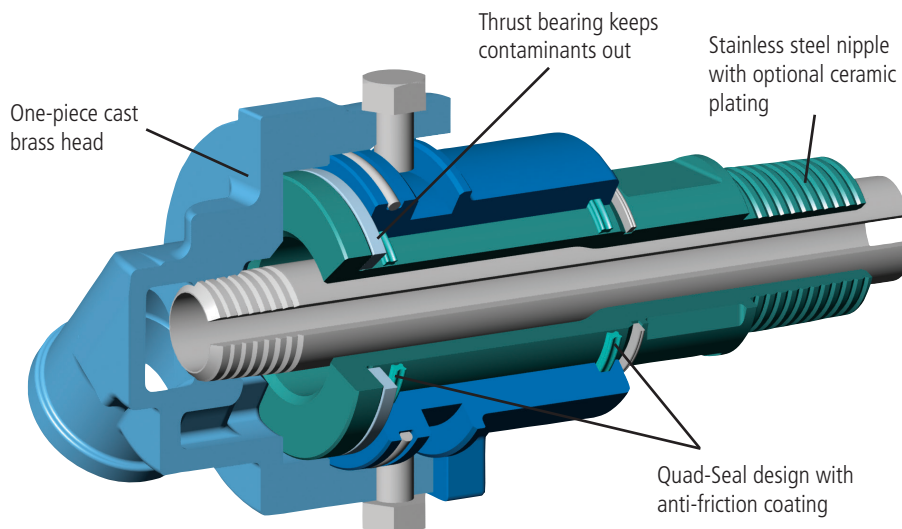


BCI with patented Quad-Seal



BCIM with mechanical seal

CJE Rotary Union



Specifications

Pressure:	150 psig (10 bar)
Temperature:	250°F (121°C)
Speed:	25 RPM
Media:	Water

Features

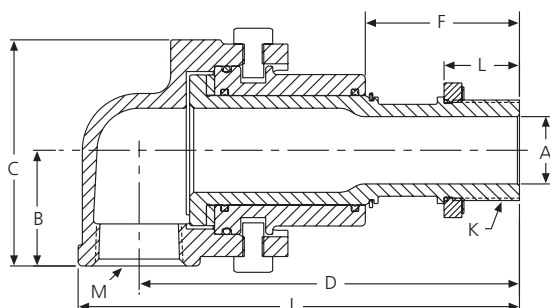


- Minimum number of moving parts
- Permanently lubricated
- Large bearing area

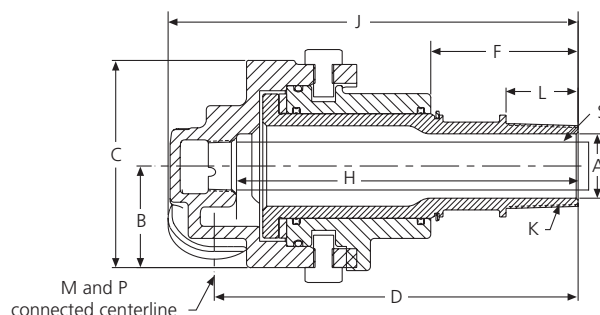
Benefits



- Simple design for easy operation
- Low maintenance requirements
- Provides shock and vibration resistance



CJE - Single Flow



CJED - Dual Flow

CJE - Single Flow

Size (K)	M	A	B	C	D	F	J	L	Units
3/4"	3/4"	0.75	1.44	2.75	4.12	1.69	4.88	0.88	inches
		19	37	69	105	43	124	22	mm
1"	3/4" - 1"	1.00	1.75	3.38	5.69	2.31	6.56	1.12	inches
		25	44	86	144	59	167	29	mm
1 1/2"	1 1/2"	1.50	2.06	4.00	7.50	2.69	8.69	1.50	inches
		38	56	102	191	68	221	38	mm

CJED - Dual Flow

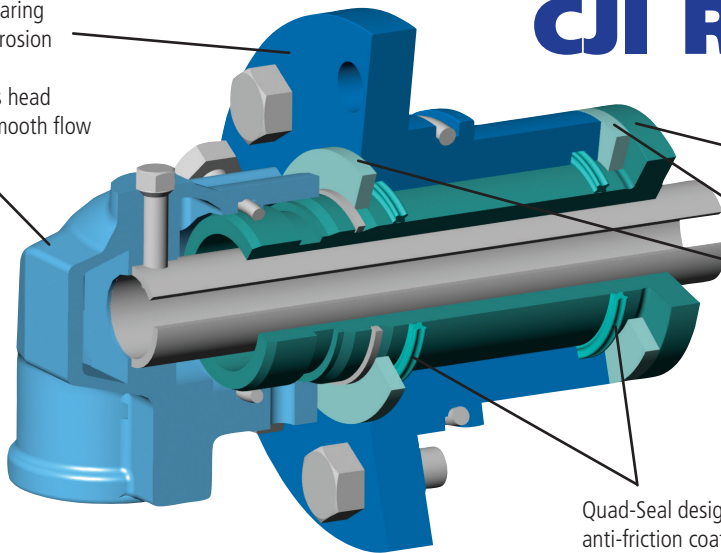
Size (K)	M	P	S	A	B	C	D	F	H	J	L	Units
3/4"	3/4"	3/4"	9/16"*	0.75	1.31	2.56	4.13	1.69	4.25	4.88	0.88	inches
				19	33	65	105	43	108	124	22	mm
1"	1/2" - 3/4"	1/2" - 3/4"	3/8" - 3/4"*	1.00	1.56	3.19	5.69	2.31	5.69	6.38	1.13	inches
				25	40	81	144	59	144	162	29	mm
1 1/2"	3/4" - 1"	3/4" - 1"	3/4" - 1 1/8"*	1.50	1.88	3.81	7.50	2.69	7.31	8.44	1.50	inches
				38	48	97	191	68	186	214	38	mm

* Indicates tube O.D.

CJI Rotary Union

Bronze bearing
resists corrosion

Cast brass head
permits smooth flow



Stainless steel nipple with
optional ceramic plating

Thrust bearings keep
contaminants out

Quad-Seal design with
anti-friction coating

Specifications

Pressure:	150 psig (10 bar)
Temperature:	250°F (121°C)
Speed:	100 RPM
Media:	Water

Features

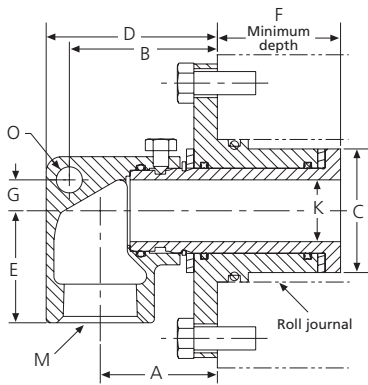


- Deep grease galley
- No mechanical seal
- Quad-Ring with anti-friction coating
- Optional ceramic plated nipple

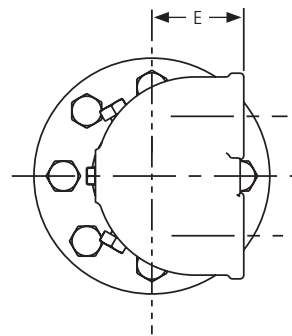
Benefits



- Optimal lubrication for multiple campaigns
- Fast and easy repair
- Extended operating life, less wear
- Minimal wear to nipple sealing area



CJA - Single Flow



CJD - Dual Flow

CJA - Single Flow

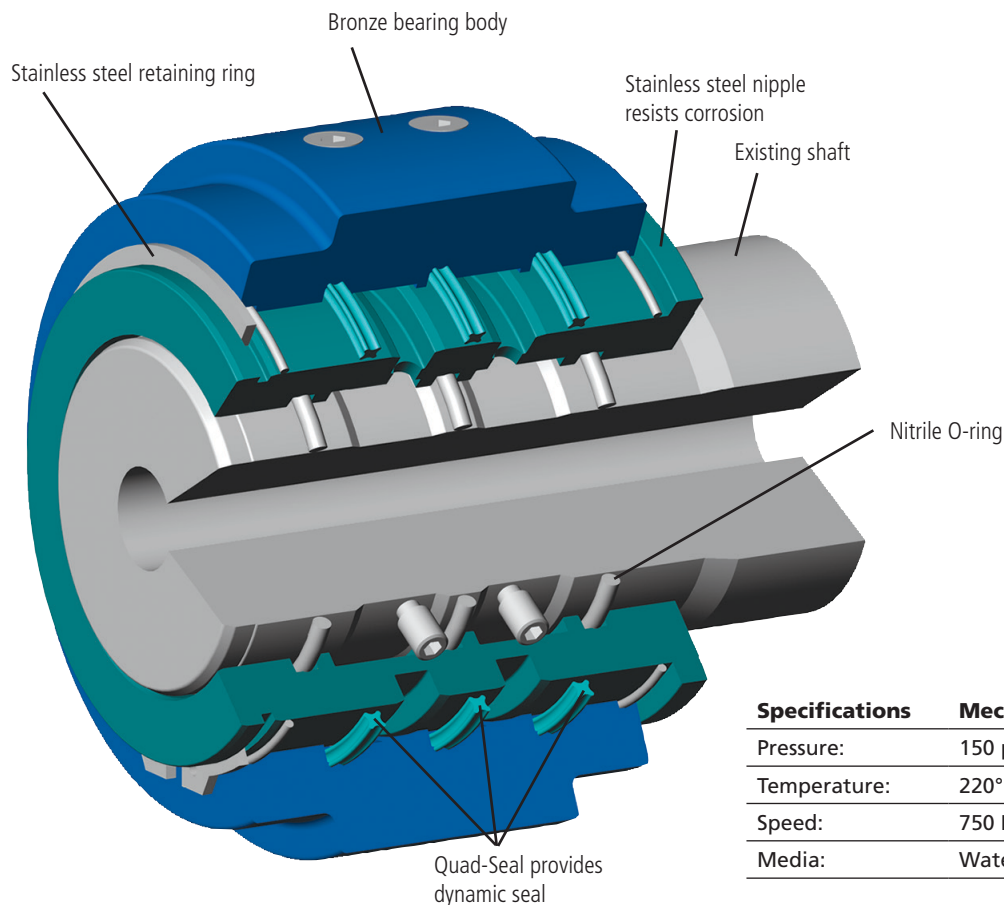
Size (K)	M	A	B	C	D	E	F	G	O	Units
3/8"	3/8"	0.72	-	1.04	-	1.19	1.05	-	-	inches
		19	-	26	-	30	26	-	-	mm
3/4"	1/2" - 1"	1.75	2.25	1.63	2.63	1.81	1.38	0.50	0.44	inches
		44	57	41	67	45	35	12	11	mm
1"	1/2" - 1"	1.88	2.38	2.00	2.75	1.81	2.00	0.50	0.44	inches
		48	60	51	70	45	51	12	11	mm
1"	1 1/4" - 1 1/2"	2.63	3.38	2.75	3.75	1.88	2.25	0.81	0.44	inches
		67	86	70	95	48	83	21	11	mm

CJD - Dual Flow

Size (K)	M	P	S	A	B	C	D	E	F	H	Units
3/4"	1/2" - 3/4"	1/2" - 3/4"	3/4" *	1.56	2.00	1.63	2.50	1.56	1.38	1.94	inches
				40	51	41	64	40	35	49	mm
1"	1/2" - 3/4"	1/2" - 3/4"	3/4" *	1.69	2.00	2.00	2.63	1.56	2.00	2.12	inches
				43	51	51	67	40	51	54	mm
1 1/2"	3/4" - 1"	3/4" - 1"	1 1/8" *	2.19	2.50	2.75	3.38	1.56	3.19	2.44	inches
				56	64	70	86	40	81	62	mm

* Indicates tube O.D.

OTS Rotary Union



Specifications	Mechanical Seal	Quad-Seal
Pressure:	150 psig (10 bar)	150 psig (10 bar)
Temperature:	220°F (105°C)	200°F (93°C)
Speed:	750 RPM	4 RPM
Media:	Water	Water

Features

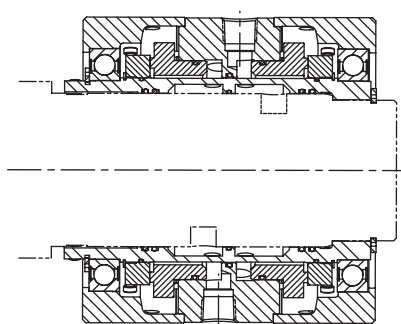
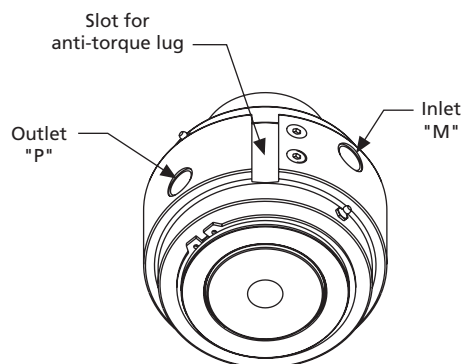


- All stainless steel, bronze, and aluminum material options
- Custom-designed and manufactured
- Quad-Seal with anti-friction coating
- Simple design, minimal components
- Soft-seal repair kit available
- Mechanical seal version available for high-speed

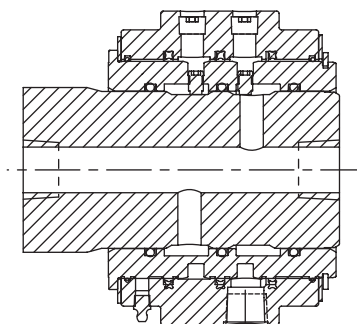
Benefits



- Highly resistant to corrosion
- Application flexibility
- Proven long-term performance
- Fast repair, long life
- Convenient ordering, simple maintenance
- Extended performance life

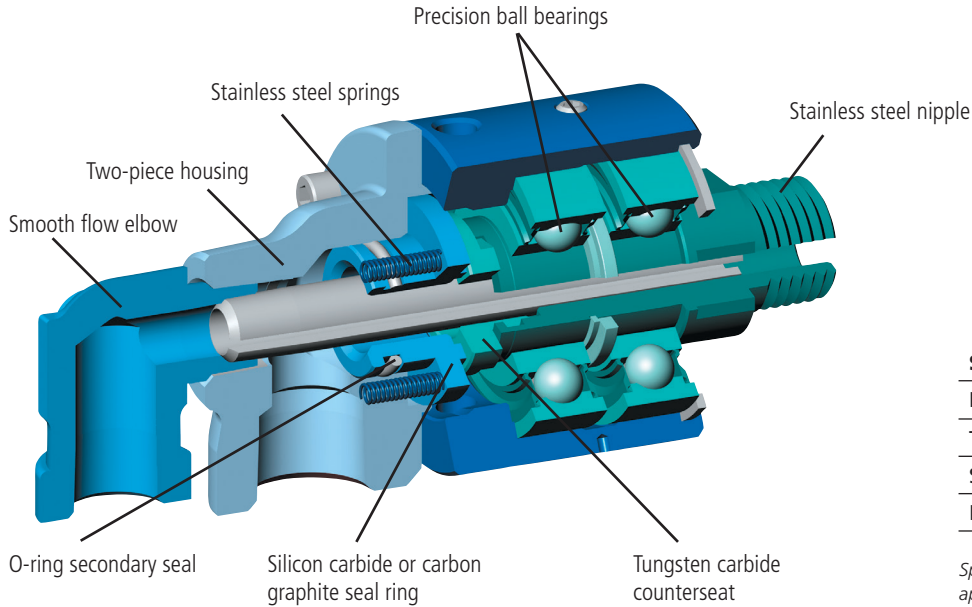


OTS with mechanical seal



OTS with Quad-Seal

RX Rotary Union



Specifications

Pressure:	200 psig (13 bar)
Temperature:	450°F (232°C)
Speed:	3,500 RPM
Media:	Water, Thermal Oil

Specifications vary by media, consult factory for application specific ratings

Features

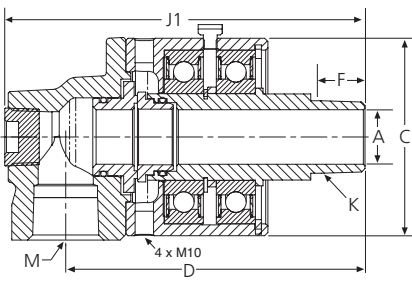


- Springs located outside the flow area
- Stainless steel rotor
- Two-piece housing, on-machine seal replacement
- O-rings fully captured in glands

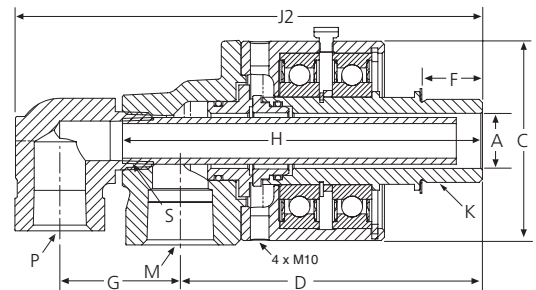
Benefits



- Improved reliability, increased flow area
- Corrosion resistant
- Reduced down-time and cost of maintenance
- Robust design, no risk of O-ring slipping



Single flow



Dual flow

Size (K)	M	P	S	A	C	D	F	G	H	J1	J2	Units
3/8"	3/8"	1/4"	1/4"	0.38	2.54	3.92	0.41	1.42	4.60	4.67	6.01	inches
				10	65	100	10	36	117	119	153	mm
1/2"	1/2"	3/8"	1/8"	0.50	2.54	4.03	0.53	1.42	4.60	4.79	6.01	inches
				13	65	102	13	36	117	122	153	mm
3/4"	3/4"	1/2"	1/4"	0.68	2.90	4.40	0.56	1.71	5.25	5.40	6.82	inches
				17	74	112	14	43	133	137	173	mm
1"	1"	1/2"	3/8"	1.00	3.58	5.43	0.66	2.17	6.47	6.54	8.40	inches
				25	91	138	17	55	164	166	213	mm
1 1/4"	1 1/4"	1"	1/2"	1.25	3.78	6.09	0.68	2.64	7.86	7.45	9.71	inches
				32	96	155	17	67	200	189	247	mm
1 1/2"	1 1/2"	3/4"	3/4"	1.50	4.57	6.86	0.68	2.7	8.11	8.36	10.54	inches
				38	116	174	17	68	206	212	268	mm

Sizes available up through 6". Dimensions shown for taper threaded rotor.

Global Support

Local Assistance on a Worldwide Basis

Many suppliers have made a commitment to the international marketplace. But few have taken that commitment as far as Kadant Johnson. To assure product availability wherever it's needed, Kadant Johnson rotary joints and unions, syphons, and related equipment are manufactured in Asia, Europe, North America, and South America. Because knowledgeable advice and prompt service are as important as the products, Kadant Johnson has factory-authorized representatives in nearly 150 countries. So no matter where you are, Kadant Johnson products, service, and assistance are nearby.



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