RX® Rotary Union

2" to 3" Dual Flow



The RX rotary union connects stationary piping to a rotating device. The fluid is sealed by precision, micro-lapped seals that provide a uniform, full-flow design. The union is supported by two widely-spaced anti-friction bearings and is available with a bearing isolation system for added bearing protection. The RX union is capable of intermittent dry running and features a 100% pure-molded carbon graphite or silicon carbide seal and tungsten carbide counterseat.

Standard RX Ratings

Pressure:	200 psig (13 bar)
Temperature:	220°F (105°C)
Speed, flanged rotor:	1,000 RPM
Speed, thread rotor:	750 RPM
Media:	Water, Thermal Oil
Speed, thread rotor:	750 RPM

Consult Kadant Johnson for RX-1, RX-2, and RX-3 unions for applications up to 450°F (232°C). High-pressure RX-4 and RX-5 water unions are available in 2" size up to 400°F (204°C) and 363 psig (25 bar).

Overview



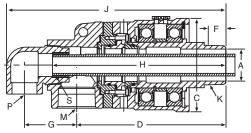
Features

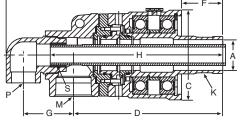
- Springs located outside the flow area
- Stainless steel rotor
- Two-piece housing, on-machine seal replacement
- · O-rings fully captured in glands
- Balanced seal assembly
- Full flow area
- Matched seal faces
- Bearing isolation system available
- Tungsten carbide counterseat



Benefits

- Improved reliability, increased flow area
- Corrosion resistant
- Reduced down-time and cost of maintenance
- Robust design, no risk of o-ring slipping
- Extended operating life
- Low pressure drop
- Materials selected for specific service
- Increased bearing protection
- Added toughness and shock resistance



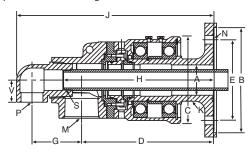


Taper thread nipple

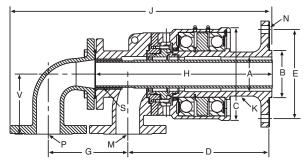
Q flange nipple

M NPT	K Nipple	Part ID										S		
		Fixed Pipe	Rotating Pipe	A	С	D	F	G	H		P NPT	NPT Fixed Pipe	Rotating Pipe OD	Approx. Weight
11/4"	2" NPT RH 2" NPT LH	12K41498 12K41499	12K42704 12K42705	1.90"	5.60"	9.00"	0.70"	3.15"	10.46"	13.20"	1″	1″	1.247" 1.244"	30 lb
	2" - BSP RH 2" - BSP LH	12K42600 12K42610	12K42810 12K42820	49	143	229	29*	79	269	336	1″	1"	31.67 31.59	14 Kg
	Q Flange	12K42250	12K42875	1.90″	5.60"	9.40"	2.60"	3.15"	10.80"	13.60"	1"	1″	1.247" 1.244"	30 lb
2½"	2 ¹ ⁄ ₂ " NPT RH 2 ¹ ⁄ ₂ " NPT LH	12K45900 12K45910	12K45978 12K45980	2.40"	6.90"	10.70"	0.93"	3.90"	12.10″	15.80"	11/2"	11/2"	1.877" 1.874"	45 lb
	2½" - BSP RH 2½" - BSP LH	12K45930 12K45940	12K46140 12K46145	61	174	271	38*	371	307	402	11/2"	11/2"	47.68 47.60	20 Kg
	Q Flange	12K45995	12K46205	2.40"	6.90"	10.66"	2.80"	3.93"	12.90"	15.80"	11/2"	11/2"	1.877" 1.874"	45 lb
2"	3" NPT RH 3" NPT LH	12K52090 12K52095	12K52918 12K52920	2.90"	7.90"	12.90"	1.02"	4.90"	14.70"	19.30"	2"	2"	2.247" 2.244"	71 lb
	3" - BSP RH 3" - BSP LH	12K52210 12K52220	12K52938 12K52936	74	200	327	45*	453	373	491	2"	2"	57.07 57.00	32 Kg
	Q Flange	12K52275	12K52950	2.90"	7.90″	12.50"	3.30"	4.90"	15.60″	19.00"	2"	2"	2.247" 2.244"	71 lb

^{*}Lock-up dimension for straight threads.



2" and $2\frac{1}{2}$ " integral flange



3" integral flange

									S		
В*	D	E	G	H		N	P	NPT Fixed Pipe	Rotating Pipe OD	V	Approx. Weight
8.32"	9.12"	6.38"	3.15"	10.33"	13.34″	4 x ¹ / ₂ "	1″	1″	1.247" 1.244"	2.60"	40 lb
8.32"	8.70"	6.38"	4.80"	10.75"	15.80″	4 x ¹ / ₂ "	1"	1″	1.247" 1.244"	4.00"	45 lb
8.32"	10.40"	6.38"	3.90"	12.40"	15.60″	4 x ¹ / ₂ "	11/2"	11/2"	1.877" 1.874"	3.00"	57 lb
8.32"	10.30"	6.38"	6.20"	12.40″	19.20″	4 x ¹ / ₂ "	11/2"	11/2"	1.877" 1.874"	4.60"	69 lb
4.00"	12.50″	7.56"	4.90"	15.60"	19.00"	6 x ¹ / ₂ "	2"	2"	2.247" 2.244"	3.50"	79 lb
4.00"	12.00"	7.56"	6.80"	14.71″	22.20"	6 x ¹ / ₂ "	2"	2″	2.247" 2.244"	5.10"	94 lb
l	8.32" 8.32" 8.32" 4.00"	8.32" 9.12" 8.32" 8.70" 8.32" 10.40" 8.32" 10.30" 4.00" 12.50"	8.32" 9.12" 6.38" 8.32" 8.70" 6.38" 8.32" 10.40" 6.38" 8.32" 10.30" 6.38" 4.00" 12.50" 7.56"	8.32" 9.12" 6.38" 3.15" 8.32" 8.70" 6.38" 4.80" 8.32" 10.40" 6.38" 3.90" 8.32" 10.30" 6.38" 6.20" 4.00" 12.50" 7.56" 4.90"	8.32" 9.12" 6.38" 3.15" 10.33" 8.32" 8.70" 6.38" 4.80" 10.75" 8.32" 10.40" 6.38" 3.90" 12.40" 8.32" 10.30" 6.38" 6.20" 12.40" 4.00" 12.50" 7.56" 4.90" 15.60"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 4 x ½" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 4 x ½" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 4 x ½" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4 x ½" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00" 6 x ½"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 4 x ½" 1" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 4 x ½" 1" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 4 x ½" 1½" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4 x ½" 1½" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00" 6 x ½" 2"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 4 x ½" 1" 1" 1" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 4 x ½" 1" 1" 1" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 4 x ½" 1½" 1½" 1½" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4 x ½" 1½" 1½" 1½" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00" 6 x ½" 2" 2"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 4 x ½" 1" 1" 1.247" 1.244" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 4 x ½" 1" 1" 1".244" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 4 x ½" 1½" 1½" 1½" 1.877" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4 x ½" 1½" 1½" 1½" 1.877" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00" 6 x ½" 2" 2" 2.247" 4.00" 12.50" 7.56" 6.90" 14.74" 23.20" 6 x ½" 2" 2.247"	8.32" 9.12" 6.38" 3.15" 10.33" 13.34" 4 x ½" 1" 1" 1" 1.247" 1.244" 2.60" 8.32" 8.70" 6.38" 4.80" 10.75" 15.80" 4 x ½" 1" 1" 1" 1.247" 1.244" 4.00" 8.32" 10.40" 6.38" 3.90" 12.40" 15.60" 4 x ½" 1½" 1½" 1½" 1½" 1½" 1.877" 1.874" 3.00" 8.32" 10.30" 6.38" 6.20" 12.40" 19.20" 4 x ½" 1½" 1½" 1½" 1½" 1½" 1.877" 4.60" 4.00" 12.50" 7.56" 4.90" 15.60" 19.00" 6 x ½" 2" 2" 2" 2.247" 3.50" 2.244" 3.50"

^{*} For 2" and $2^{1/2}$ " sizes, the 'B' dimension is the ID of the counterbore. Counterbore depth is 0.25" (6.4 mm). For 3" size, the 'B' dimension is the OD of the pilot. Pilot length 0.30" (7.6 mm).

Dimensions are for reference only and subject to change.

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