

500 SERIES INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS



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SIZE	MODEL
2"	520
2 1/2"	525
3"	530
4"	540









WARNING

Unless specified; ROTOFLUID rotary joints must not be used with Hydrocarbons or Flammable Mediums. Leaking may result explosion or fire.

Medium: Water

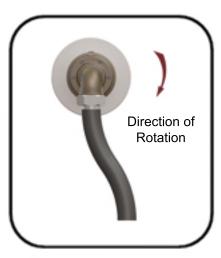
Max. Pressure: 10 bar (150 psi)
Max. Temperature: 120°C (250°F)

Max. Speed: 750 RPM

- Do not work with max. pressure at max. speed.
- All ROTOFLUID products are leakage tested before shipment. Disassemling or dismantling the joint invalidates the warranty.
- Operator should not make any modification or attachments and retroffiting of the rotary joint without manufacturers' consent is prohibited.
- It is important to use correct hand of rotary connection thread to ensure the Rotary Joint will not unscrew. If shaft rotates forward & reverse; flanged connection is recommended.
- ROTOFLUID Rotary Joints may only be installed by personel who have experience and knowledge about rotary joints and plumbing systems.
- For safe operation only use genuine ROTOFLUID parts.
- For safe operation only use hoses which are appropriate for the media.
- Follow engineering specifications of the machine builder.
- 500 Series Rotary Joints are designed to work with the interpassing medium. Do not run dry very long time. If application needs dry running, please consult factory.
- No need to remove hose connections or disassembling the joint from the machine.
 Just remove hex bolts from the end cap and change the worn out seal.

INSTALLATION

- Do not connect Rotary Joint directly to piping. Rotary Joints are designed to float with the flexible hoses.
- Install hose with curve in direction of rotation.
- 500 Series Rotary Joints are shipped with different end caps according to application styles; single flow, dual flow s type or dual flow rsp type.
- Always flood the Rotary Joint and purge any entrapped air in the system before operating the machine to improve joint performance and longer joint life.





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- 1. First hold the housing of the joint with a bench wise. Do not clamp too tightly, it will damage housing or bearings.
- 2. If the joint is used for single flow, apply adhesive or teflon tape to the threads of the inlet hose and assemble it to the housing.
- 3. If the joint is used for s type;
- 3.a) apply sealant or teflon tape to the threads of the siphon pipe and assemble it to the siphon thread inside the end cap. Becareful not to touch internal parts with the siphon pipe.
- 3.b) Apply sealant to the threads of the inlet and outlet hoses and assemble them to the housing and dual flow elbow.
- 4. If the joint is used for rsp type;
 - 4.a) apply grease to the o-rings in the siphon bearing in the end cap
- 4.b) push siphon pipe inside the bronze bearing, becareful not to damage o-rings and internal parts
- 4.c) Apply sealant to the threads of the inlet and outlet hoses and assemble them to the housing and dual flow elbow.
- 5. If housing connections are with flanges, place a new gasket onto the flange and fix flanges of the hoses with appropriate bolts.
- 6. Clean machine bore surface before assembling.
- 7. Apply adhesive or teflon tape to the threads of the shaft and install the joint to the machine. When installing, pay attention not to install eccentrically.
- 8. If the joint shaft is flanged,
 - 8.a) Clean rotating joint flange surface
 - 8.b) Place a new flange sealing o-ring into the flange groove
 - 8 c) Align rotating joint flange and machine bore flange.
- 8 d) Fix flange to the bore of the roll with appropriate bolts. Make sure the sealing o-ring on the shaft flange is in position.
- 9. If the joint shaft is quick release; put a new copper washer into the bore of the roll, assemble qr flange onto the shaft, place split rings onto the socket on the shaft correspondingly, place qr flange onto the split wedges and fix the flange to the bore of the roll with appropriate bolts.
- 10. Connect hoses to the supply and return lines. Use flexible hoses and never install joint directly to the pipes.
- 11. After assembly; control rotation of joint. If any wobble, vibration, knocking or noise show up or if any eccentricity seems; disassemble the joint from the machine and assemble it again.



- Do not apply too much grease on ball bearings. Over greasing will result damage of the bearings.
- All 400 Series Rotary Joints are equipped with grease relief valve to protect ball bearings from overgreasing.
- Always use fresh grease to the ball bearings.

Size	Std Temp	High Temp.
Size	(Volume gr)	(Volume gr)
2"	17.5	49
2 1/2"	45	75
3"	70	100
4"	95	125

















Light duty operating conditions:

- Up to 60 C
- Few vibrations
- Clean environment

Medium-Heavy duty operating conditions:

- 60 120 C
- Vibrations
- Polluted environment

Heavy duty operating conditions:

- 121°C 200°C
- Vibrations
- Polluted environment



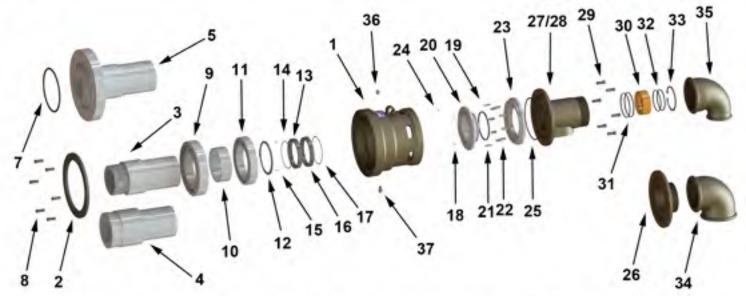
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NO	PART NAME	QTY
1	HOUSING	1
2	FRONT HOUSING FLANGE	1
3	SHAFT - THREADED	1
4	SHAFT - QR	- 1
5	SHAFT - FLANGE - TYPE 1	- 1
6	SHAFT - FLANGE - TYPE 2	1
7	FLANGE O-RING	1
8	BOLTS	6
9	FRONT BALL BEARING	1
10	WASHER	1
11	BOTTOM BALL BEARING	1
12	EXT. RETAINING RING	1
13	ROTARY SEAL RING	1
14	SEAL O-RING	1
15	PIM	2
16	FLOATING SEAL RING	1
17	SEAL O-RING	1
18	PIM	2

NO	PART NAME	QTY
19	FLOATING SEAL O-RING	1
20	FLOATING SEAL HOLDER	1
21	FLOATING SEAL PIM	2
22	SPRING	8
23	HOUSING FLANGE	1
24	HOUSING FLANGE PIM	2
25	END CAP O-RING	1
26	END CAP - SINGLE FLOW	1
27	END CAP - S TYPE	1
28	END CAP - RSP TYPE	1
29	BOLTS	6
30	BRONZE BEARING	1
31	BEARING O-RING	2
32	PIPE O-RING	2
33	INT. RETAINING RING	1
34	SINGLE FLOW ELBOW	1
35	DUAL FLOW ELBOW	1
36	GREASE RING	1
37	GREASE RELIEF FITTING	- 1

No6 is not shown in the picture

Spare Parts Kit

- (7) Flange O-ring (Only flanged models)
- (13) Seal Ring
- (14) Seal Ring O-ring
- (16) Floating Seal Ring
- (17) Seal Ring O-ring
- (19) Floating Seal O-ring
- (22) Spring
- (25) End Cap O-ring
- (31) Bearing O-ring (Only RSP models)
- (32) Pipe O-ring (Only RSP models)

Repair kits are available for 500 Series and can be supplied by ROTOFLUID.

If you don't want to repair your rotary joints, ROTOFLUID will disassemble the joints, clean and replace worn out parts and all sealing test will be made and joints will be shipped as good as a new joint.