

Bulletin 1003

SS Rotary Joints For Hot Oil





EULER MISSION STATEMENT

The goal of the EULER Company is to supply our customers the highest quality rotary unions and joints that are competitively priced and offer the best delivery in the industry. EULER will work to partner with our customers to initiate new products and applications, along with internal programs for continuous product improvements and cost containment.







The **EULER SS Hot Oil Rotary Joint** are ideal for a wide range of applications using heat transfer oils. The SS Hot Oil Joint is a flexible design offered in monoflow, duoflow fixed siphon pipe models. This Joint offers superior performance for industries such as plastics, rubber, paper, roofing products, textile, to name just a few.



Design Features

- Antimony Impregnated Seals and Bushings provide 3X the life of standard seals and bearings.
- Hardened sleeve is QPQ treated for extreme wear and corrosion resistance.
- Convex seal is self-aligning and under compression for greater strength and shock resistance.
- Antimony Impregnated Carbon Bushings are under compression and widely spaced.
 Provides improved support of the joint and siphon pipe.
- A Seal Life Indicator allows preventive maintenance and easy repair with an inexpensive repair kit.
- Additional port allows installing instrumentation

Sizes 1/2" to 3"

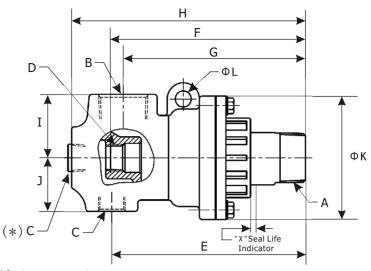
Operating Parameters

| Temperature: | +600°F/+ 315°C |
|------------------|-------------------|
| Pressure Rating: | |
| Sizes 1/2" to 3" | 100 PSI / 6.8 BAR |



DUO-FLOW Fixed Siphon





(*) Sealed plug can be removed for instrumentation

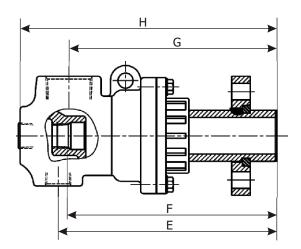
| | | | (*) Sealed | plug can be i | removed foi | r instrum | entation | | | | | | | |
|---------------|---------------------|--------------------|-----------------|---------------|--------------------|-----------|----------|--------|--------|-------|-------|-------|------|-------|
| Joint Size | Part Number | А | В | С | D Siphon Thread | E | F | G | H | 1 | J | ФК | ΦL | "X" |
| | EU-23008-00-00 | 1/2" NPT RH | 1/2" NPT | 1/4" NPT | 1/8" NPT | 5.43" | 5.12" | 4.6" | 5.93" | 1.62" | 1.16" | 3.29" | | .19" |
| 1/2" | EU-23008-01-00 | 1/2" NPT LH | 1/2 NP1 | 1/4 NP1 | 1/8 NP1 | 5.43 | 5.12 | 4.0 | 5.95 | 1.02 | 1.16 | 3.29 | I | .19 |
| 1/2 | EU-23008-04-03 | R 1/2" RH | D 1 /2" | D 1 /4" | D 1 /0" | 127.0 | 120.0 | 1100 | 150.6 | 41.15 | 29.46 | 83.6 | | 4.0 |
| | EU-23008-05-03 | R 1/2" LH | R 1/2" | R 1/4" | R 1/8" | 137.9 | 130.0 | 116.8 | 150.6 | 41.15 | 29.40 | 65.0 | I | 4.8 |
| | EU-23012-00-00 | 3/4" NPT RH | 3/4" NPT | 1/2" NPT | 1/4" NPT | 5.22" | 5.31" | 4.6" | 6.23" | 1.75" | 1.25" | 3.54" | | .19" |
| 3/4" | EU-23012-01-00 | 3/4" NPT LH | 3/4 NPT | 1/2 NP1 | 1/4 NP1 | 5.22 | 5.51 | 4.0 | 0.23 | 1.75 | 1.25 | 3.54 | I | .19 |
| 3/4 | EU-23012-04-03 | R 3/4" RH | R 3/4" | R 1/2" | R 1/4" | 132.6 | 134.9 | 116.8 | 158.2 | 44.45 | 31.75 | 89.9 | | 4.8 |
| | EU-23012-05-03 | R 3/4" LH | K 3/4 | K 1/2 | K 1/4 | 132.0 | 134.9 | 110.8 | 158.2 | 44.45 | 31./5 | 89.9 | I | 4.8 |
| | EU-23016-00-00 | 1" NPT RH | 1"NDT | 1 /2" NDT | 3/8" NPT | 6.02" | 6.1" | 5.27" | 7.07" | 2.06" | 1.25" | 3.88" | .50" | .25" |
| 1" | EU-23016-01-00 | 1" NPT LH | 1"NPT | 1/2" NPT | 3/8 NP1 | 6.02 | 0.1 | 5.27 | 7.07 | 2.06 | 1.25 | 3.88 | .50 | .25 |
| 1 | EU-23016-04-03 | R 1" RH | D 4 II | D 1 /2 II | D 2 /0!! | 152.0 | 154.0 | 122.0 | 170.6 | 52.22 | 24.75 | 00.55 | 12.7 | 6.4 |
| | EU-23016-05-03 | R 1" LH | R 1" | R 1/2" | R 3/8" | 152.9 | 154.9 | 133.9 | 179.6 | 52.32 | 31.75 | 98.55 | 12.7 | 6.4 |
| | EU-23020-00-00 | 1-1/4" NPT RH | 1 1 / 4 NIDT | 2 /4!! NIDT | 1 /2 NIDT | 7.051 | 7 24 !! | 6.741 | 0.661 | 2.10 | 1 70" | 4.761 | C211 | 25" |
| 4 4 / 4 !! | EU-23020-01-00 | 1-1/4" NPT LH | 1-1/4" NPT | 3/4" NPT | 1/2" NPT | 7.05" | 7.31" | 6.74" | 8.66" | 2.19" | 1.78" | 4.76" | .62" | .25" |
| 1-1/4" | EU-23020-04-03 | R 1-1/4" RH | D 1 1/4II | D 2 /4II | D 1 /2 | 170.1 | 105.7 | 171.2 | 220.0 | 55.63 | 45.24 | 120.0 | 15.7 | 6.4 |
| | EU-23020-05-03 | R 1-1/4" LH | R 1-1/4" | R 3/4" | R 1/2" | 179.1 | 185.7 | 171.2 | 220.0 | 55.62 | 45.21 | 120.9 | 15.7 | 6.4 |
| | EU-23024-00-00 | 1-1/2" NPT RH | 1 1 /2 NIDT | 2 /4!! NIDT | 2 /4" NDT | 7.541 | 7.50! | 7.1" | 0.00 | 2.44! | 2.06" | 4.05" | C211 | 25" |
| 1-1/2" | EU-23024-01-00 | 1-1/2" NPT LH | 1-1/2" NPT | 3/4" NPT | 3/4" NPT | 7.54" | 7.59" | 7.1 | 9.09" | 2.44" | 2.06" | 4.95" | .62" | .25" |
| 1-1/2 | EU-23024-04-03 | R 1-1/2" RH | D 1 1/2 | D 2 /4II | D 2 /4!! | 101.5 | 102.0 | 100.3 | 220.0 | 61.00 | F2 22 | 125.7 | 15.7 | 6.4 |
| | EU-23024-05-03 | R 1-1/2" LH | R 1-1/2" | R 3/4" | R 3/4" | 191.5 | 192.8 | 180.3 | 230.9 | 61.98 | 52.32 | 125.7 | 15.7 | 6.4 |
| | EU-23032-00-00 | 2" NPT RH | 2 II NIDT | 4.4./4!! NIDT | 2 /4 !! NIDT | 0.60" | 0.60 | 0.42" | 10.60 | 2.75" | 2.56" | 6.20" | 62" | 24" |
| 2" | EU-23032-01-00 | 2" NPT LH | 2"NPT | 1-1/4" NPT | 3/4" NPT | 8.68" | 8.68" | 8.12" | 10.69 | 2.75" | 2.56" | 6.28" | .62" | .31" |
| 2" | EU-23032-04-03 | R 2" RH | D 211 | D 4 4 /4 !! | D 2 /4II | 220.5 | 220.5 | 206.2 | 274.5 | 60.05 | CF 02 | 450.5 | 45.7 | 7.0 |
| | EU-23032-05-03 | R 2" LH | R 2" | R 1-1/4" | R 3/4" | 220.5 | 220.5 | 206.2 | 271.5 | 69.85 | 65.02 | 159.5 | 15.7 | 7.9 |
| | EU-23040-00-00 | 2-1/2" NPT RH | 2.4/2UNDT | 4.4./4!! NIDT | 4 II NIDT | 40.2" | 40.2" | 0.02" | 42.54" | 2.0" | 2.50" | 7.45" | 75" | 25" |
| 2.4./2.11 | EU-23040-01-00 | 2-1/2" NPT LH | 2-1/2" NPT | 1-1/4" NPT | 1" NPT | 10.2" | 10.3" | 9.82" | 12.51" | 3.0" | 2.50" | 7.15" | .75" | .25" |
| 2-1/2" | EU-23040-04-03 | R 2-1/2" RH | D 2 1 /2 | D 1 1 / 4 II | D 1 II | 250.1 | 261.6 | 240.4 | 247.0 | 76.20 | 62.50 | 101.6 | 10.1 | 6.4 |
| | EU-23040-05-03 | R 2-1/2" LH | R 2-1/2" | R 1-1/4" | R 1" | 259.1 | 261.6 | 249.4 | 317.8 | 76.20 | 63.50 | 181.6 | 19.1 | 6.4 |
| | EU-23048-00-00 | 3" NPT RH | 2 II NIDT | 1 1 /2 NET | 1 1/2 NDT | 10.02" | 11.00" | 10.72" | 12.1" | 2.62" | 2.00" | 0.00" | 0.4" | 25.11 |
| 2" | EU-23048-01-00 | 3" NPT LH | 3" NPT | 1-1/2" NPT | 1-1/2" NPT | 10.92" | 11.09" | 10.73" | 13.1" | 3.62" | 2.88" | 8.08" | .94" | .25" |
| 3" | EU-23048-04-03 | R 3" RH | D 0 " | D 4 4 /2 !! | D 4 4 /0" | 277. | 201 7 | 272.5 | 222 = | 04.05 | 72.45 | 205.2 | 22.0 | |
| | EU-23048-05-03 | R 3" LH | R 3" | R 1-1/2" | R 1-1/2" | 277.4 | 281.7 | 272.5 | 332.7 | 91.95 | 73.15 | 205.2 | 23.9 | 6.4 |
| Other clea | eve connections ava | ailable Contact Fi | ulor | | | | | | | | | | | |

Other sleeve connections available. Contact Eule

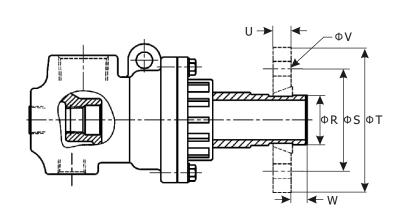


DUO-FLOW Fixed Siphon Flange & Quick Release Connection

Flange Connection



Quick Release Connection



* Please check "SS DUO-FLOW Fixed Siphon Rotary Joints" for other sizes

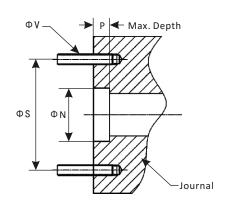
| Joint Size | Part Number | Connection | E | F | G | Н | 4 X Ф V | ФР | Фѕ | ФТ | U | w |
|---------------|----------------|------------|--------|--------|--------|--------|---------|----------------|--------|--------|------|--------|
| 1" | EU-23016-91-00 | Flange | 6.75" | 6.84" | 6.00" | 7.81" | Ф.56" | Ф1.399"-1.401" | Ф2.75" | Ф3.88" | .75" | 1.092" |
| 1" | EU-23016-90-00 | Q.R. | 6.76" | 6.85" | 6.01" | 7.82" | Ф.56" | Ф1.276"-1.278" | Ф3.12" | Ф5.00" | .56" | .438" |
| 1-1/4" | EU-23020-90-00 | Q.R. | 8.61" | 8.87" | 8.30" | 10.22" | Ф.56" | Ф1.620"-1.622" | Ф3.50" | Ф5.50" | .62" | .50" |
| 1.4./2.11 | EU-23024-91-00 | Flange | 8.95" | 9.00" | 8.51" | 10.51" | Ф.69" | Ф2.091"-2.093" | Ф3.62" | Ф4.88" | .75" | 1.092" |
| 1-1/2" | EU-23024-90-00 | Q.R. | 8.95" | 9.00" | 8.51" | 10.51" | Ф.56" | Ф1.870"-1.872" | Ф3.88" | Ф5.50" | .69" | .50" |
| 2" | EU-23032-91-00 | Flange | 10.15" | 10.14" | 9.59" | 12.16" | Ф.69" | Ф2.714"-2.716" | Ф4.25" | Ф5.50" | .75" | 1.092" |
| 2 | EU-23032-90-00 | Q.R. | 9.77" | 9.77" | 9.21" | 11.78" | Ф.56" | Ф2.318"-2.320" | Ф4.75" | Ф6.81" | .75" | .625" |
| 2.1/2" | EU-23040-91-00 | Flange | 10.15" | 10.62" | 9.59" | 12.16" | Ф.75" | Ф3.089"-3.091" | Ф4.62" | Ф5.88" | .75" | 1.092" |
| 2-1/2" | EU-23040-90-00 | Q.R. | 10.83" | 10.92" | 10.45" | 13.14" | Ф.56" | Ф2.838"-2.840" | Ф4.75" | Ф6.75" | .88" | .75" |
| 3" | EU-23048-91-00 | Flange | 11.41" | 11.59" | 11.22" | 13.59" | Ф.69" | Ф3.714"-3.716" | Ф5.25" | Ф6.50" | .75" | 1.092" |
| 3" | EU-23048-90-00 | Q.R. | 11.42" | 11.59" | 11.22" | 13.60" | Ф.69" | Ф3.730"-3.732" | Ф6.75" | Ф8.00" | .94" | .88" |

Note: Q.R.= Quick Release Connection

Quick Release Flanges split wedges are available. Contact Euler for more info.

Journal Flange Reference Information

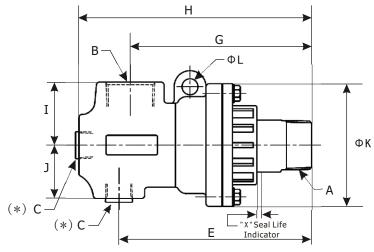
| Joint | Flange Conn | ection | Quick Release Connection | | | | |
|--------|----------------|--------|--------------------------|-------|--|--|--|
| Size | ФИ | Р | ФИ | Р | | | |
| 1" | Ф1.408"-1.406" | 1.052" | Ф1.283"-1.279" | .312" | | | |
| 1-1/4" | • | - | Ф1.624"-1.623" | .375" | | | |
| 1-1/2" | Ф2.099"-2.096" | 1.052" | Ф1.877"-1.873" | .375" | | | |
| 2" | Ф2.724"-2.721" | 1.052" | Ф2.325"-2.321" | .5" | | | |
| 2-1/2" | Ф3.099"-3.096" | 1.052" | Ф2.845"-2.841" | .625" | | | |
| 3" | Ф3.724"-3.721" | 1.052" | Ф3.439"-3.435" | .875" | | | |





MONO-FLOW





 $(\ensuremath{\ensuremath{\$}}\xspace)$ Sealed plug can be removed for instrumentation

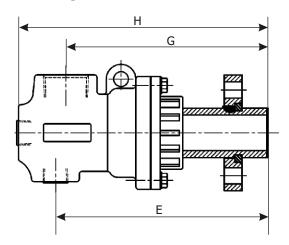
| | (**) Sealed plug can be removed for instrumentation | | | | | | | | | | | |
|---------------|---|---------------|-------------|-------------|--------|--------|--------|-------|-------|---------|------|------|
| Joint Size | Part Number | А | В | С | E | G | н | I | J | ФК | ФГ | "x" |
| | EU-25008-00-00 | 1/2" NPT RH | 4 /2 NDT | 4 /4" NDT | E 42" | 4.61 | F 02" | 4 62" | 1.16" | 2 20" | | .19" |
| 1 /2" | EU-25008-01-00 | 1/2" NPT LH | 1/2" NPT | 1/4" NPT | 5.43" | 4.6" | 5.93" | 1.62" | 1.16" | 3.29" | _ | .19" |
| 1/2" | EU-25008-04-03 | R 1/2" RH | D 1 /2" | D 1 /4" | 127.0 | 116.0 | 150 C | 41.15 | 20.46 | 02.6 | | 4.0 |
| | EU-25008-05-03 | R 1/2" LH | R 1/2" | R 1/4" | 137.9 | 116.8 | 150.6 | 41.15 | 29.46 | 83.6 | _ | 4.8 |
| | EU-25012-00-00 | 3/4" NPT RH | 2 /4" NDT | 1 /2" NDT | F 22" | 4.6" | C 22" | 1 75" | 1 25" | 2 5 4 " | | .19" |
| 2 /4" | EU-25012-01-00 | 3/4" NPT LH | 3/4" NPT | 1/2" NPT | 5.22" | 4.6" | 6.23" | 1.75" | 1.25" | 3.54" | _ | .19 |
| 3/4" | EU-25012-04-03 | R 3/4" RH | D 2 /4" | D 1 /2" | 122.6 | 116.0 | 150.2 | 44.45 | 21.75 | 90.0 | | 4.0 |
| | EU-25012-05-03 | R 3/4" LH | R 3/4" | R 1/2" | 132.6 | 116.8 | 158.2 | 44.45 | 31.75 | 89.9 | _ | 4.8 |
| | EU-25016-00-00 | 1" NPT RH | 1 " NDT | 1 /2" NDT | 6.02" | 5.27" | 7.07" | 2.06" | 1.25" | 3.88" | FO" | .25" |
| 1" | EU-25016-01-00 | 1" NPT LH | 1" NPT | 1/2" NPT | 6.02" | 5.27 | 7.07 | 2.06" | 1.25 | 3.88 | .50" | .25 |
| | EU-25016-04-03 | R 1" RH | D 1 " | D 1 /2" | 152.0 | 122.0 | 170 C | F2 22 | 21.75 | 00.6 | 12.7 | C 4 |
| | EU-25016-05-03 | R 1" LH | R 1" | R 1/2" | 152.9 | 133.9 | 179.6 | 52.32 | 31.75 | 98.6 | 12.7 | 6.4 |
| | EU-25020-00-00 | 1-1/4" NPT RH | 1 1 /4" NDT | 2 /4" NDT | 7.05" | C 74" | 0.00" | 2.10" | 1 70" | 4.76" | C2!! | .25" |
| 1-1/4" | EU-25020-01-00 | 1-1/4" NPT LH | 1-1/4" NPT | 3/4" NPT | 7.05" | 6.74" | 8.66" | 2.19" | 1.78" | 4.76" | .62" | .25" |
| | EU-25020-04-03 | R 1-1/4" RH | D 1 1/4" | D 2 /4" | 170 1 | 171.2 | 220.0 | FF 63 | 45 21 | 120.0 | 15.7 | C 4 |
| | EU-25020-05-03 | R 1-1/4" LH | R 1-1/4" | R 3/4" | 179.1 | 171.2 | 220.0 | 55.62 | 45.21 | 120.9 | 15.7 | 6.4 |
| | EU-25024-00-00 | 1-1/2" NPT RH | 1 1 /2" NDT | 2 /4" NDT | 7.54" | 7.1" | 0.00" | 2.44" | 2.06" | 4.95" | .62" | .25" |
| 1 1/2" | EU-25024-01-00 | 1-1/2" NPT LH | 1-1/2" NPT | 3/4" NPT | 7.54 | 7.1 | 9.09" | 2.44" | 2.06" | 4.95 | .62 | .25 |
| 1-1/2" | EU-25024-04-03 | R 1-1/2" RH | D 4 4 /2 II | D 2 /4 II | 101 5 | 100.2 | 220.0 | 64.00 | F2 22 | 125.7 | 15.7 | C 4 |
| | EU-25024-05-03 | R 1-1/2" LH | R 1-1/2" | R 3/4" | 191.5 | 180.3 | 230.9 | 61.98 | 52.32 | 125.7 | 15.7 | 6.4 |
| | EU-25032-00-00 | 2" NPT RH | 2" NDT | 1 1 /4" NDT | 8.68" | 0.12" | 10.00 | 2.75" | 2.56" | C 20" | C2!! | 24" |
| 2" | EU-25032-01-00 | 2" NPT LH | 2" NPT | 1-1/4" NPT | 8.08 | 8.12" | 10.69 | 2.75" | 2.56" | 6.28" | .62" | .31" |
| | EU-25032-04-03 | R 2" RH | n 2" | D 1 1 /4" | 220 5 | 206.2 | 271 5 | CO 05 | CE 03 | 150.5 | 15.7 | 7.0 |
| | EU-25032-05-03 | R 2" LH | R 2" | R 1-1/4" | 220.5 | 206.2 | 271.5 | 69.85 | 65.02 | 159.5 | 15.7 | 7.9 |
| | EU-25040-00-00 | 2-1/2" NPT RH | 2-1/2" NPT | 1 1 /4" NDT | 10.2" | 9.82" | 12.51" | 3.0" | 2.50" | 7.15" | .75" | .25" |
| 2-1/2" | EU-25040-01-00 | 2-1/2" NPT LH | 2-1/2 NP1 | 1-1/4" NPT | 10.2 | 9.62 | 12.51 | 5.0 | 2.50 | 7.15 | ./5 | .25 |
| 2-1/2 | EU-25040-04-03 | R 2-1/2" RH | R 2-1/2" | R 1-1/4" | 259.1 | 249.4 | 317.8 | 76.20 | 63.50 | 181.6 | 19.1 | 6.4 |
| | EU-25040-05-03 | R 2-1/2" LH | N Z-1/Z | N 1-1/4 | 239.1 | 249.4 | 317.8 | 70.20 | 03.30 | 101.0 | 13.1 | 0.4 |
| | EU-25048-00-00 | 3" NPT RH | 3" NPT | 1-1/2" NPT | 10.92" | 10.73" | 13.1" | 3.62" | 2.88" | 8.08" | .94" | .25" |
| 3" | EU-25048-01-00 | 3" NPT LH | 3 INF1 | 1-1/2 NPI | 10.92 | 10./3 | 15.1 | 3.02 | 2.00 | 0.00 | .94 | .25 |
| | EU-25048-04-03 | R 3" RH | R 3" | R 1-1/2" | 277 4 | 272.5 | 222 7 | 91.95 | 72 15 | 205.2 | 22.0 | 6.4 |
| | EU-25048-05-03 | R 3" LH | N 3 | K 1-1/2 | 277.4 | 272.5 | 332.7 | 91.95 | 73.15 | 205.2 | 23.9 | 0.4 |

Other sleeve connections available. Contact Euler.

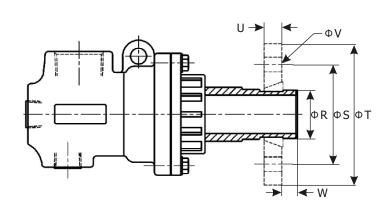


MONO-FLOW Flange & Quick Release Connection

Flange Connection



Quick Release Connection



* Please check "SS MONO-FLOW Rotary Joints" for other sizes

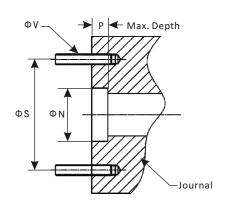
| Joint Size | Part Number | Connection | E | G | Н | 4 X Φ V | ФК | Фѕ | ФТ | U | w |
|---------------|----------------|------------|--------|--------|--------|---------|----------------|--------|--------|------|--------|
| 1" | EU-25016-91-00 | Flange | 6.75" | 6.00" | 7.81" | Ф.56" | Ф1.399"-1.401" | Ф2.75" | Ф3.88" | .75" | 1.092" |
| 1 | EU-25016-90-00 | Q.R. | 6.76" | 6.01" | 7.82" | Ф.56" | Ф1.276"-1.278" | Ф3.12" | Ф5.00" | .56" | .438" |
| 1-1/4" | EU-25020-90-00 | Q.R. | 8.61" | 8.30" | 10.22" | Ф.56" | Ф1.620"-1.622" | Ф3.50" | Ф5.50" | .62" | .50" |
| 1 1/2" | EU-25024-91-00 | Flange | 8.95" | 8.51" | 10.51" | Ф.69" | Ф2.091"-2.093" | Ф3.62" | Ф4.88" | .75" | 1.092" |
| 1-1/2" | EU-25024-90-00 | Q.R. | 8.95" | 8.51" | 10.51" | Ф.56" | Ф1.870"-1.872" | Ф3.88" | Ф5.50" | .69" | .50" |
| 2" | EU-25032-91-00 | Flange | 10.15" | 9.59" | 12.16" | Ф.69" | Ф2.714"-2.716" | Ф4.25" | Ф5.50" | .75" | 1.092" |
| 2 | EU-25032-90-00 | Q.R. | 9.77" | 9.21" | 11.78" | Ф.56" | Ф2.318"-2.320" | Ф4.75" | Ф6.81" | .75" | .625" |
| 2-1/2" | EU-25040-91-00 | Flange | 10.15" | 9.59" | 12.16" | Ф.75" | Ф3.089"-3.091" | Ф4.62" | Ф5.88" | .75" | 1.092" |
| 2-1/2 | EU-25040-90-00 | Q.R. | 10.83" | 10.45" | 13.14" | Ф.56" | Ф2.838"-2.840" | Ф4.75" | Ф6.75" | .88" | .75" |
| 3" | EU-25048-91-00 | Flange | 11.41" | 11.22" | 13.59" | Ф.69" | Ф3.714"-3.716" | Ф5.25" | Ф6.50" | .75" | 1.092" |
| 3 | EU-25048-90-00 | Q.R. | 11.42" | 11.22" | 13.60" | Ф.69" | Ф3.730"-3.732" | Ф6.75" | Ф8.00" | .94" | .88" |

Note: Q.R.= Quick Release Connection

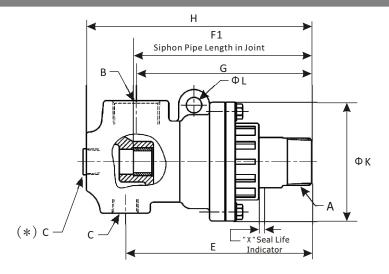
Quick Release Flanges split wedges are available. Contact Euler for more info.

Journal Flange Reference Information

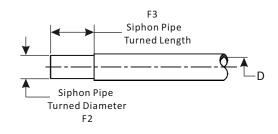
| Joint | Flange Conn | ection | Quick Release Connection | | | |
|--------|----------------|--------|--------------------------|-------|--|--|
| Size | ФИ | ΦNP | | P | | |
| 1" | Ф1.408"-1.406" | 1.052" | Ф1.283"-1.279" | .312" | | |
| 1-1/2" | Ф2.099"-2.096" | 1.052" | Ф1.877"-1.873" | .375" | | |
| 2" | Ф2.724"-2.721" | 1.052" | Ф2.325"-2.321" | .5" | | |
| 2-1/2" | Ф3.099"-3.096" | 1.052" | Ф2.845"-2.841" | .625" | | |
| 3" | Ф3.724"-3.721" | 1.052" | Ф3.439"-3.435" | .875" | | |







Duo-Flow & Rotating Siphon



 $(\ensuremath{\ensuremath{\ast}}) \mbox{ Sealed plug can be removed for instrumentation}$

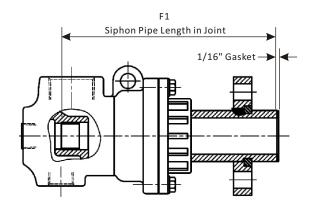
| Joint Size | Part Number | А | В | С | D Siphon pipe size | E | F1 length in joint | F2 Pipe Dia. | F3 Turned length | G | Н | ФК | ΦL | "X" |
|---------------|----------------|---------------|--------------|-------------|--------------------------|--------|--------------------------|-----------------|------------------------|--------|--------|-------|------|------|
| | EU-24012-00-00 | 3/4" NPT RH | 2 /4" NDT | 1/2" NPT | 1/8" | 5.22" | 5.13" | .496"497" | 1.125" | 4.6" | 6.23" | 3.54" | | .19" |
| 3/4" | EU-24012-01-00 | 3/4" NPT LH | 3/4" NPT | 1/2 NPT | 1/0 | 5.22 | 5.15 | .490497 | 1.125 | 4.0 | 0.23 | 3.54 | _ | .19 |
| 3/4 | EU-24012-04-03 | R 3/4" RH | R 3/4" | R 1/2" | 1/8" | 132.6 | 130.30 | 12.60-12.62 | 28.6 | 117 | 158.2 | 89.9 | | 4.8 |
| | EU-24012-05-03 | R 3/4" LH | N 3/4 | N 1/2 | 1/0 | 132.0 | 130.30 | 12.00-12.02 | 20.0 | 117 | 136.2 | 65.5 | | 4.0 |
| | EU-24016-00-00 | 1" NPT RH | 1" NPT | 1/2" NPT | 1/4" | 6.02" | 6.14" | .621"622" | 1.25" | 5.27" | 7.07" | 3.88" | .50" | .25" |
| 1" | EU-24016-01-00 | 1" NPT LH | 1 NPT | 1/2 NF1 | 1/4 | 0.02 | 0.14 | .021022 | 1.25 | 3.27 | 7.07 | 3.00 | .50 | .23 |
| 1 | EU-24016-04-03 | R 1" RH | R 1" | R 1/2" | 1/4" | 152.9 | 155.96 | 15.77-15.80 | 31.75 | 134 | 179.6 | 98.6 | 12.7 | 6.4 |
| | EU-24016-05-03 | R 1" LH | K I | K 1/2 | 1/4 | 152.9 | 155.90 | 15.77-15.80 | 31./5 | 154 | 179.6 | 96.0 | 12.7 | 0.4 |
| | EU-24020-00-00 | 1-1/4" NPT RH | 1 1 // " NDT | 2 /4" NIDT | 3/8" | 7.05" | 7.53" | .808"810" | 1.50" | 6.74" | 8.66" | 4.76" | .62" | .25" |
| 1 1 // " | EU-24020-01-00 | 1-1/4" NPT LH | 1-1/4" NPT | 3/4" NPT | 5/0 | 7.05 | 7.55 | .806810 | 1.50 | 6.74 | 0.00 | 4.76 | .02 | .25 |
| 1-1/4" | EU-24020-04-03 | R 1-1/4" RH | D 1 1/4" | D 2 /4" | 3/8" | 179.1 | 101 26 | 20.52-20.57 | 38.1 | 171 | 220.0 | 121 | 15.7 | 6.4 |
| | EU-24020-05-03 | R 1-1/4" LH | R 1-1/4" | R 3/4" | 5/0 | 1/9.1 | 191.26 | 20.52-20.57 | 50.1 | 1/1 | 220.0 | 121 | 15.7 | 0.4 |
| | EU-24024-00-00 | 1-1/2" NPT RH | 1-1/2" NPT | 2 /4" NDT | 1/2" | 7.54" | 7.53" | .995"997" | 1.50" | 7.1" | 9.09" | 4.95" | .62" | .25" |
| 1-1/2" | EU-24024-01-00 | 1-1/2" NPT LH | | 3/4" NPT | 1/2 | 7.54 | 7.55 | .995997 | 1.50 | 7.1 | 9.09 | 4.95 | .02 | .25 |
| 1-1/2 | EU-24024-04-03 | R 1-1/2" RH | R 1-1/2" | R 3/4" | 1/2" | 191.5 | 191.26 | 25.27-25.32 | 38.1 | 180 | 230.9 | 126 | 15.7 | 6.4 |
| | EU-24024-05-03 | R 1-1/2" LH | N 1-1/2 | N 3/4 | 1/2 | 191.5 | 191.20 | 23.27-23.32 | 30.1 | 160 | 230.9 | 120 | 15.7 | 0.4 |
| | EU-24032-00-00 | 2" NPT RH | 2" NPT | 1-1/4" NPT | 1/2" | 8.68" | 8.43" | 1.245"-1.247" | 2.00" | 8.12" | 10.69 | 6.28" | .62" | .31" |
| 2" | EU-24032-01-00 | 2" NPT LH | 2 INFT | 1-1/4 INF | 1/2 | 0.00 | 0.45 | 1.243 -1.247 | 2.00 | 0.12 | 10.03 | 0.20 | .02 | .51 |
| 2 | EU-24032-04-03 | R 2" RH | R 2" | R 1-1/4" | 1/2" | 220.5 | 214.12 | 31.62-31.67 | 50.8 | 206 | 271.5 | 160 | 15.7 | 7.9 |
| | EU-24032-05-03 | R 2" LH | N Z | N 1-1/4 | 1/2 | 220.5 | 214.12 | 31.02-31.07 | 30.6 | 200 | 2/1.5 | 100 | 15.7 | 7.9 |
| | EU-24040-00-00 | 2-1/2" NPT RH | 2 1/2" NDT | 1 1 /4" NDT | 3/4" | 10.2" | 10.08" | 1.495"-1.497" | 2.25" | 0 02" | 12.51" | 7 15" | .75" | .25" |
| 2-1/2" | EU-24040-01-00 | 2-1/2" NPT LH | Z-1/Z INFT | 1-1/4" NPT | 5/4 | 10.2 | 10.08 | 1.493 -1.497 | 2.23 | 9.02 | 12.51 | 7.13 | ./3 | .23 |
| 2-1/2 | EU-24040-04-03 | R 2-1/2" RH | D 2 1 /2" | D 1 1//" | 3/4" | 259.1 | 256.03 | 37.97-38.02 | 57.2 | 249 | 317.8 | 182 | 19.1 | 6.4 |
| | EU-24040-05-03 | R 2-1/2" LH | R 2-1/2" | R 1-1/4" | 5/4 | 239.1 | 230.03 | 37.37-36.02 | 37.2 | 249 | 317.6 | 102 | 19.1 | 0.4 |
| | EU-24048-00-00 | 3" NPT RH | 3" NPT | 1 1/2" NPT | 1" | 10.92" | 11.09 | 1.745"-1.747" | 2.25" | 10.73" | 13.1" | 8.08" | .94" | .25" |
| 3" | EU-24048-01-00 | 3" NPT LH | 5 INFI | II/Z INPI | 1 | 10.52 | 11.03 | 1./43 -1./4/ | 2.25 | 10.73 | 13.1 | 0.00 | .54 | .23 |
| 3 | EU-24048-04-03 | R 3" RH | R 3" | R 1-1/2" | 1" | 277.4 | 281.69 | 44.32-44.37 | 57.2 | 273 | 332.7 | 205 | 23.9 | 6.4 |
| | EU-24048-05-03 | R 3" LH | 1/ 3 | N 1-1/2 | 1 | 211.4 | 201.03 | 74.32-44.37 | 37.2 | 2/3 | 332.7 | 203 | 23.3 | 0.4 |

Other sleeve connections available. Contact Euler.

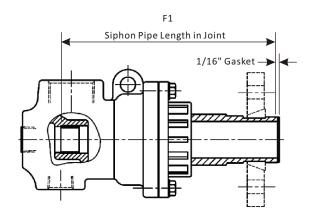


DUO-FLOW Rotating Siphon Flange & Quick Release Connection

Flange Connection



Quick Release Connection



^{*} Please check "SS DUO-FLOW Fixed Siphon Rotary Joints" for other sizes

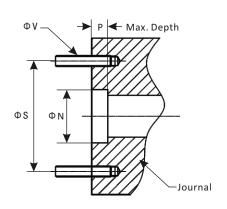
| Joint Size | Part Number | Connection | D Siphon pipe size | F1 length in Joint | F2 Pipe Dia. | F3 Turned length |
|---------------|----------------|------------|-----------------------|-----------------------|-----------------|---------------------|
| 1" | EU-24016-91-00 | Flange | 1/4" | 6.88" | Ф.621"622" | 1.250" |
| 1 | EU-24016-90-00 | Q.R. | 1/4" | 6.89" | Ф.621"622" | 1.250" |
| 1-1/4" | EU-24020-90-00 | Q.R. | 3/8" | 8.65" | Ф.808"810" | 1.500" |
| 1 1 /2 !! | EU-24024-91-00 | Flange | 1/2" | 8.94" | Ф.995"997" | 1.500" |
| 1-1/2" | EU-24024-90-00 | Q.R. | 1/2" | 8.95" | Ф.995"997" | 1.500" |
| 2" | EU-24032-91-00 | Flange | 1/2" | 9.89" | Ф1.245"-1.247" | 2.000" |
| 2 | EU-24032-90-00 | Q.R. | 1/2" | 9.52" | Ф1.245"-1.247" | 2.000" |
| 2-1/2" | EU-24040-91-00 | Flange | 3/4" | 10.70" | Ф1.495"-1.497" | 2.250" |
| 2-1/2 | EU-24040-90-00 | Q.R. | 3/4" | 10.70" | Ф1.495"-1.497" | 2.250" |
| 3" | EU-24048-91-00 | Flange | 1" | 11.60" | Ф1.745"-1.747" | 2.250" |
| 3 | EU-24048-90-00 | Q.R. | 1" | 11.60" | Ф1.745"-1.747" | 2.250" |

Note: Q.R.= Quick Release Connection

Quick Release Flanges split wedges are available. Contact Euler for more info.

Journal Flange Reference Information

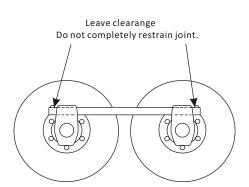
| Joint | Flange Conn | ection | Quick Release Connection | | | |
|--------|----------------|--------|--------------------------|-------|--|--|
| Size | ФИ | Р | ФИ | Р | | |
| 1" | Ф1.408"-1.406" | 1.052" | Ф1.283"-1.279" | .312" | | |
| 1-1/4" | - | - | Ф1.624"-1.623" | .375" | | |
| 1-1/2" | Ф2.099"-2.096" | 1.052" | Ф1.877"-1.873" | .375" | | |
| 2" | Ф2.724"-2.721" | 1.052" | Ф2.325"-2.321" | .5" | | |
| 2-1/2" | Ф3.099"-3.096" | 1.052" | Ф2.845"-2.841" | .625" | | |
| 3" | Ф3.724"-3.721" | 1.052" | Ф3.439"-3.435" | .875" | | |



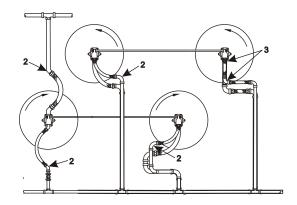


Installation Instructions

- 1. Always use a flexible hose rated for the media, pressure and temperature. Avoid side loading the union with the hose.
- 2. Do not install hose taut. Use 45' or 90' elbows to avoid kinking.
- In tight installations use vertical and horizontal hoses connected by a 90' elbow.



Anti-Rotation rods may be installed either horizontally or vertically.



- 4. If union has an anti-rotation lug use pipe or solid rod between unions or machine frame. Install anti-rotation rod loosely allowing free movement of the union.
- 5. Suggested Anti-Rotation Rod Size
 1" Union 3/8" dia. Max
 1 1/4" to 2" Union ½"dia. Max
 2 ½"Union 5/8" dia. Max
 3" Union 3/4" dia. Max

EULER Warranty

EULER warrants it's products for one year, except for three years on the WS Series unions, from date of shipment are free from defects in materials and workmanship. Euler's sole liability is for repair or replacement when returned transportation prepaid after obtaining a Return Goods Authorization after a reasonable time from the warranty period.

This warranty is void if in Euler's judgment the union has been dismantled, modified, damaged from improper maintenance, side loading, excessive temperature, abrasive or chemical action or other forms of abuse.

Euler makes no other warranties either express or implied on merchantability and fitness for a particular purpose. No representative, agent or employee of Euler has the authority to modify the terms of this warranty. Euler will not be responsible for any consequential or resulting damage claimed to be caused by the use of it's products.



Technical Data

Flow Factors (Cv)

| Joint Size | SS DUO-FLOW With Syphon Pipe Cv | SS MONO-FLOW With Syphon Pipe Cv |
|------------|---------------------------------------|--|
| 1/2" | 2.0 | 7.0 |
| 3/4" | 8.0 | 20.0 |
| 1" | 12.0 | 34.0 |
| 1-1/4" | 18.0 | 40.0 |
| 1-1/2" | 23.0 | 49.0 |
| 2" | 49.0 | 80.0 |
| 2-1/2" | 59.0 | 130.0 |
| 3" | 93.0 | 200.0 |

$$\triangle P = (\frac{Q}{Cv})$$

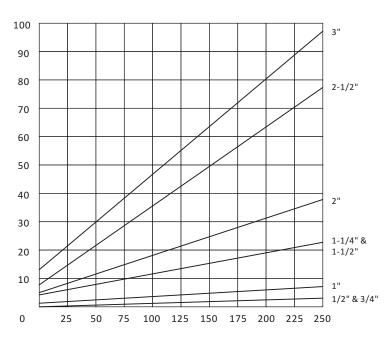
 $\triangle P = pressure drop (psi)$

Q = flow (gpm)

Cv = flow in gpm with one psi pressure

drop. (+60°F water)

Torque vs Pressure



ADDITIONAL EULER ENGINEERED PRODUCTS



Culer

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The EULER WS/WSX Rotary Unions have premium features not found in other unions such as low torque, seals for filtered and unfiltered media and is RoHS compliant.

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EULER INC.

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