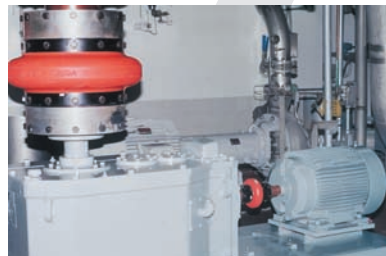


Couplings | Omega® Elastomer Couplings
(English-Inch)



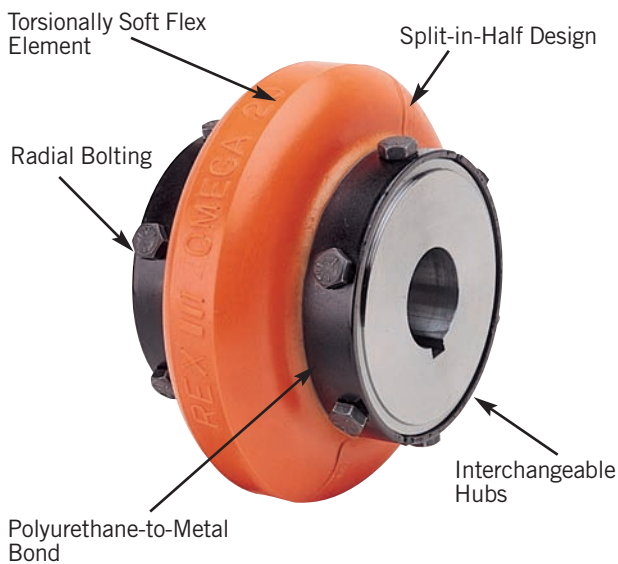
Omega® Elastomeric Couplings

OEM Performance and Coverage

The unique split-in-half flex element and reversible hubs significantly reduce total costs by reducing inventory and assembly time.

Rexnord Omega couplings are non-lubricated, material-flexing couplings utilizing a specially formulated polyurethane material engineered for maximum durability, strength and fatigue resistance.

Features and Benefits



The Rex Omega HSU coupling (green) is specifically designed for hot and humid conditions.

Rexnord is the leading coupling provider in the industry with a full-line of available solutions supported by trained customer service and application engineering professionals focused only on our coupling product line. For more information, contact your local Rexnord account executive.

- Split-in-half flex element design for simplified assembly and disassembly
- Interchangeable hubs allow for reduced inventory
- High misalignment capacity accommodates unavoidable misalignment with low reactionary forces
- Torsionally soft flex element cushions shock loads and vibration extending equipment life
- Polyurethane flex element does not require lubrication
- Polyurethane-to-metal bond eliminates assembly and slippage problems associated with mechanically clamped designs
- Our selection software makes choosing the right coupling a snap
- Rexnord field specialists are locally based experts available to support key end-users
- The Rexnord Omega HSU coupling (green) is specifically designed for hot and humid environments.

In addition, the HSU material performs well in caustic and acidic environments. Consult Rexnord engineering for your application.

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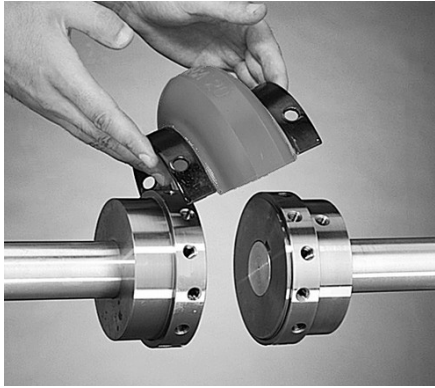


Rexnord Omega couplings operate in either horizontal or vertical applications without any additional components.

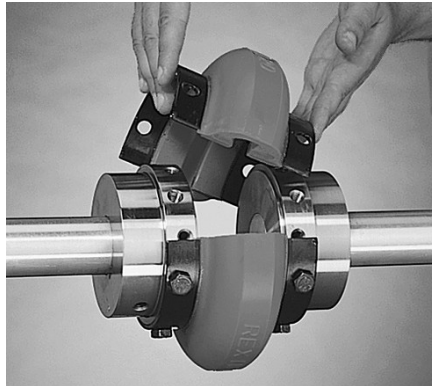
Ease of installation, ease of maintenance, and visual inspection make these couplings a must for many applications such as this mash cooker in a brewery. Never operate coupling without an OSHA approved guard.

Omega® Elastomeric Couplings

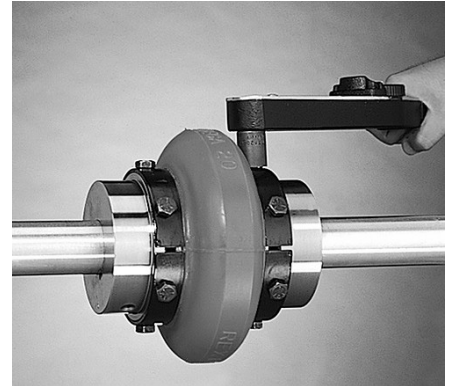
INSTALLATION



Mount one hub to shaft, leave other hub loose for adjustment of spacing.

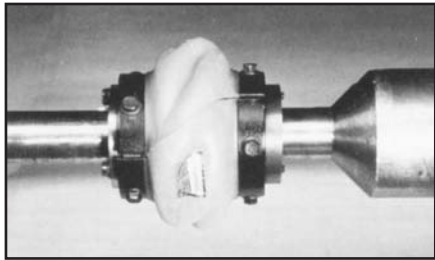


Place half of the Rexnord® Omega® element around hubs and secure with self-locking cap screws. Omega element will space the other hub. Now secure the other hub.



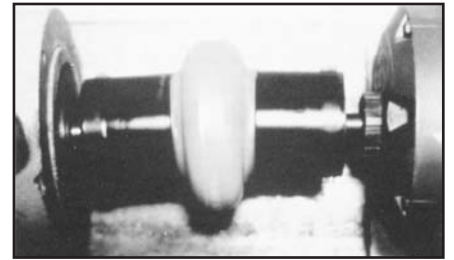
Mount other half of the Omega element. Tighten all cap screws to recommended torques below and you're done! Refer to the installation instruction for further details.

TESTED TOUGH



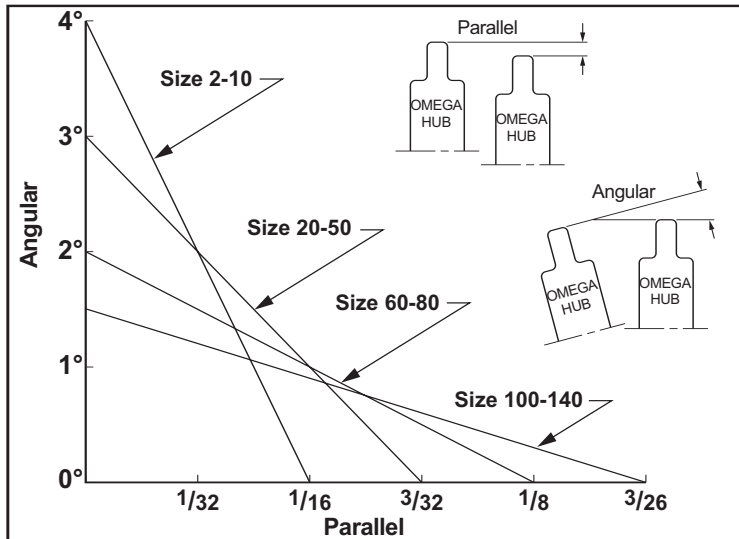
Severe static testing (5 x rating) shows element flexibility, rugged design and positive adhesive bond to the metal shoes.

Rigorous testing demonstrates that the Rexnord Omega coupling protects connected equipment from the damaging effects of misalignment, vibration and gross overload. Where other coupling designs might allow equipment damage, the super flexible element of Rexnord Omega couplings minimizes the reactionary forces on equipment bearings under severe misalignment conditions and reduces the effects of excessive shock overloads.



Demonstrates coupling's ability to accept severe misalignment.

Omega® Coupling Allowable Misalignment



Note:

Any combination of parallel and angular misalignment which falls under the triangle will not cause a premature fatigue failure of the flexible element in normal use.

— IMPORTANT — RECOMMENDED CAPSCREW TORQUE FOR PROPER INSTALLATION

| Coupling Size | Torque – Dry | |
|---------------|--------------|----------|
| | In. Lbs. | Ft. Lbs. |
| 2 | 204 | 17 |
| 3 | | |
| 4 | | |
| 5 | | |
| 10 | 360 | 30 |
| 20 | | |
| 30 | | |
| 40 | | |
| 50 | 816 | 68 |
| 60 | | |
| 70 | | |
| 80 | | |
| 100 | 3240 | 270 |
| 120 | | |
| 140 | | |
| 140 | 7080 | 590 |

NOTE: Capscrews have self locking patches which should not be reused more than twice. Capscrews can be further used if a thread locking adhesive is applied.

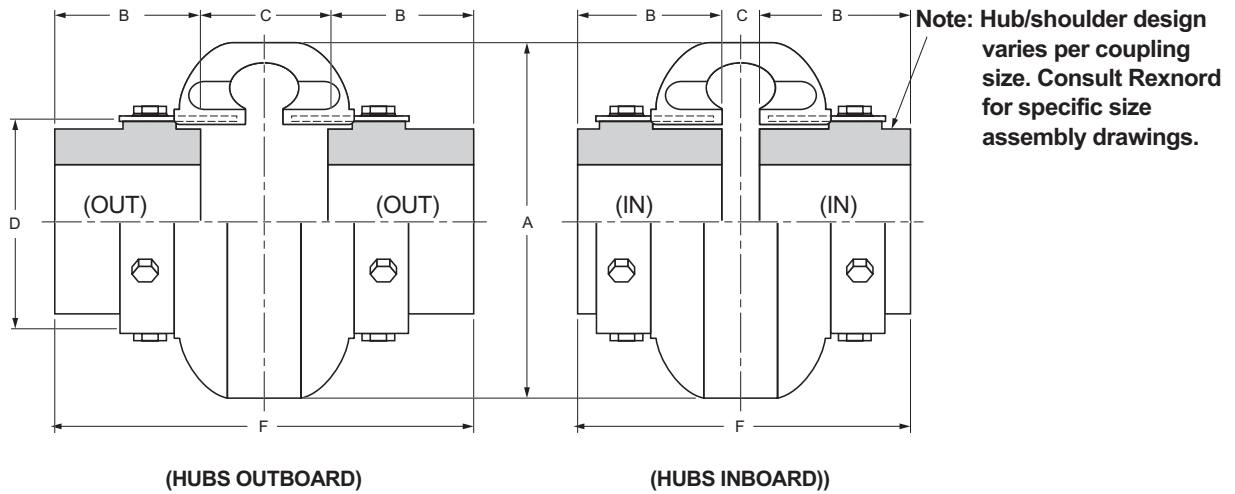
Do NOT Lubricate Capscrew Threads

Important Note:

Coupling alignment is directly related to smooth, efficient equipment operation. Care should be taken for best possible alignment.

REXNORD® OMEGA® STANDARD COUPLINGS

WITH STRAIGHT BORE HUBS



Specification Data With Straight Bore Hubs

| Omega Coupling Size | Recom. Max. Bore (In.) | ① Continuous HP/100 RPM | ① Continuous Torque (In. Lbs.) | Max. RPM | Dimensions In Inches | | | | | | | ② Weight (Lb.) |
|---------------------|------------------------|-------------------------|--------------------------------|----------|----------------------|------|-------|-------|-------|-------|-------|----------------|
| | | | | | A | B | C | | D | F | | |
| | | | | | | | (In.) | (Out) | | (In.) | (Out) | |
| E2 | 1.13 | .30 | 190 | 7500 | 3.50 | .94 | 1.34 | 1.90 | 1.85 | 3.22 | 3.78 | 1.2 |
| E3 | 1.38 | .58 | 365 | 7500 | 4.00 | 1.50 | .81 | 1.31 | 2.32 | 3.81 | 4.31 | 2.4 |
| E4 | 1.63 | .88 | 550 | 7500 | 4.56 | 1.69 | .44 | 1.31 | 2.60 | 3.81 | 4.69 | 3.0 |
| E5 | 1.88 | 1.48 | 925 | 7500 | 5.38 | 1.75 | .81 | 1.81 | 3.13 | 4.31 | 5.31 | 5.4 |
| E10 | 2.13 | 2.30 | 1450 | 7500 | 6.38 | 1.88 | .56 | 1.81 | 3.65 | 4.31 | 5.56 | 8.2 |
| E20 | 2.38 | 3.65 | 2300 | 6600 | 7.25 | 2.06 | .50 | 2.38 | 4.48 | 4.62 | 6.50 | 13.0 |
| E30 | 2.88 | 5.79 | 3650 | 5800 | 8.25 | 2.31 | .56 | 2.44 | 5.42 | 5.19 | 7.06 | 21.2 |
| E40 | 3.38 | 8.85 | 5500 | 5000 | 9.50 | 2.50 | .56 | 2.68 | 6.63 | 5.56 | 7.68 | 35 |
| E50 | 3.63 | 12.14 | 7650 | 4200 | 11.00 | 2.75 | .63 | 3.38 | 8.13 | 6.13 | 8.88 | 54 |
| E60 | 4.00 | 19.84 | 12,500 | 3800 | 12.50 | 3.25 | .69 | 3.44 | 8.75 | 7.19 | 9.94 | 72 |
| E70 | 4.50 | 35.12 | 22,125 | 3600 | 14.00 | 3.62 | .75 | 3.75 | 9.25 | 8.00 | 11.00 | 86 |
| E80 | 6.00 | 62.70 | 39,500 | 2000 | 16.00 | 4.87 | .75 | 5.00 | 11.25 | 10.50 | 14.75 | 170 |
| E100 | 6.75 | 135 | 85,050 | 1900 | 21.00 | 5.50 | 1.75 | 3.75 | 14.13 | 12.75 | 14.75 | 244 |
| E120 | 7.50 | 270 | 170,100 | 1800 | 25.00 | 6.00 | 2.25 | 4.88 | 17.63 | 14.24 | 16.88 | 425 |
| E140 | 11.00 | 540 | 340,200 | 1500 | 30.00 | 7.00 | 3.00 | 5.00 | 20.88 | 17.00 | 19.00 | 746 |

① Service factor = 1.0

② With maximum bore hubs.

- **SPLIT-IN-HALF FLEX ELEMENT**

Allows disassembly and replacement without disturbing hubs or connected equipment.

- **REVERSIBLE HUBS**

Accommodates different shaft spacing requirements, and allows compression bushings to be installed from either side of the hub.



Straight Bore Hubs



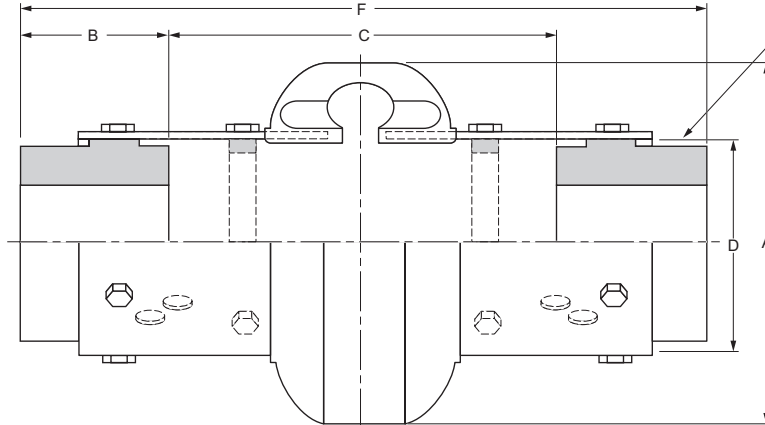
QD Hubs and Bushings



TAPER-LOCK® Hubs and Bushings

REXNORD® OMEGA® SPACER COUPLINGS

WITH STRAIGHT BORE HUBS



Note: Hub/shoulder design varies per coupling size. Consult Rexnord for specific size assembly drawings.

Specification Data With Straight Bore Hubs

| ① Omega Coupling Size | Recom. Max. Bore (In.) | ② Continuous HP/100 RPM | ② Continuous Torque (In. Lbs.) | ③ Max. RPM | ④ Dimensions In Inches | | | | | | | ⑥ Weight (Lb.) |
|--------------------------------|------------------------------|----------------------------------|---|------------------|---------------------------|------|--------------------|-------|-------|--------------------|-------|----------------------|
| | | | | | A | B | C | | D | F | | |
| | | | | | | | (In.) ^④ | (Out) | | (In.) ^⑤ | (Out) | |
| ES2-R | 1.13 | .30 | 190 | 7500 | 3.50 | .94 | 3.50 | 4.00 | 1.85 | 5.75 | 5.92 | 2.3 |
| ES3-R | 1.38 | .58 | 365 | 7500 | 4.00 | 1.50 | 3.50 | 5.00 | 2.32 | 7.25 | 8.00 | 4.0 |
| ES4-R | 1.63 | .88 | 550 | 7500 | 4.56 | 1.69 | 3.50 | 5.00 | 2.60 | 7.25 | 8.38 | 5.1 |
| ES5-R | 1.88 | 1.48 | 925 | 7500 | 5.38 | 1.75 | 3.50 | 5.00 | 3.13 | 7.25 | 8.50 | 7.5 |
| ES10-R | 2.13 | 2.30 | 1450 | 7500 | 6.38 | 1.88 | 3.50 | 5.00 | 3.65 | 7.25 | 8.75 | 10.3 |
| ES20 | 2.38 | 3.65 | 2300 | 4800 | 7.25 | 2.06 | 2.55 | 7.00 | 4.48 | 9.38 | 11.12 | 15.6 |
| ES30 | 2.88 | 5.79 | 3650 | 4200 | 8.25 | 2.31 | 2.05 | 7.00 | 5.42 | 9.38 | 11.62 | 25.1 |
| ES40 | 3.38 | 8.85 | 5500 | 3600 | 9.50 | 2.50 | 1.67 | 7.00 | 6.63 | 9.38 | 12.00 | 40 |
| ES50 | 3.63 | 12.14 | 7650 | 3100 | 11.00 | 2.75 | 1.17 | 7.00 | 8.13 | 9.38 | 12.50 | 60 |
| ES60 | 4.00 | 19.84 | 12,500 | 2800 | 12.50 | 3.25 | 2.67 | 9.75 | 8.75 | 12.50 | 16.25 | 84 |
| ES70 | 4.50 | 35.12 | 22,125 | 2600 | 14.00 | 3.62 | 1.99 | 9.75 | 9.25 | 12.50 | 17.00 | 102 |
| ES80 | 6.00 | 62.70 | 39,500 | 1800 | 16.00 | 4.87 | 2.18 | 9.75 | 11.25 | 12.50 | 19.50 | 180 |

① Suffix "R" designates high speed ring design. Rings are furnished standard for sizes ES2-R to ES10-R, optional for sizes ES20 to ES80.

② Service factor = 1.0.

③ Spacer coupling furnished with optional high speed rings (sizes ES20 to ES80) can be operated up to maximum allowable speeds for standard series couplings. See RPM Ratings on page 4.

④ Minimum shaft spacing is 0.25 inch. See page 8 for additional information.

⑤ Overall length of element.

⑥ With max bore hubs.

• ADJUSTABLE SPACER DESIGN

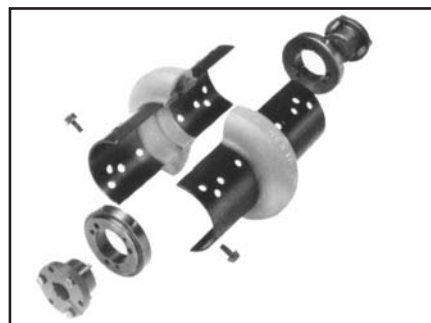
Optional hole mounting positions and reversible hub features allow adjustment to accommodate most shaft spacing requirements (see page 8)

• UNIVERSAL HUBS

Straight bore and compression bushed hub designs are identical and interchangeable for both the spacer and standard couplings. This means maximum utilization of off the shelf inventory.



Straight Bore Hubs



QD Hubs and Bushings



TAPER-LOCK® Hubs and Bushings