# OMEGA PILOTED
# FLOATING SHAFT COUPLINGS

**Super Flexible Polyurethane Elements:**
Protects equipment from the damaging effects of misalignment and shock loads. Elements are split longitudinally for easy assembly/disassembly.

**Specially Designed Capture Feature:**
Minimizes chances for catastrophic failures resulting from fatigue or excessive misalignment.

**Optional Center Members:**
Steel, stainless steel or composite materials are available depending on application and environmental requirements.

**No Lubrication:**
Pilot bushing and polyurethane element do not require lubrication.

**Corrosion Resistance:**
Zinc plated steel, stainless steel, composite material, or acid and alkali protective coatings are available.

**Long Span Capability:**
Optional composite tubes allow significantly longer span capabilities than conventional steel tubes.

Rex Omega Piloted floating shaft couplings are utilized to connect equipment which is relatively far apart. Such arrangements are particularly suited to transmit torque into areas where moisture, dust or corrosive conditions would be detrimental to driving machinery.

Typical applications include cooling tower drives, steel mill roll drives and paper machine drives[1].

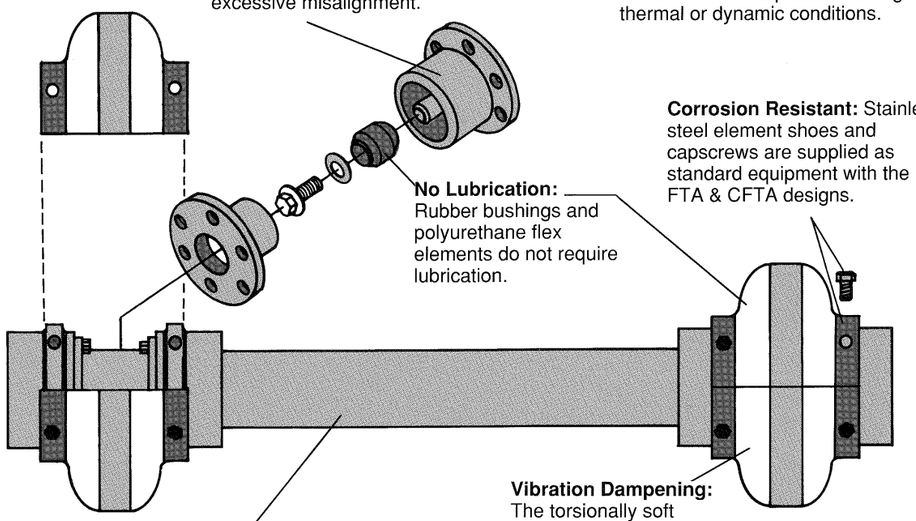
The Omega coupling's floating center member may be either solid or tubular, depending upon the system requirements. The assembly is piloted at each end by a resilient rubber bushing assembly which eliminates the need for intermediate support bearings.

Besides reliability, safety was engineered into the design by incorporation of the captured center member feature, which minimizes the possibility of a catastrophic failure due to fatigue or severe misalignment.

Omega Piloted floating shaft couplings are designed to alleviate situations where excessive misalignment in cooling tower applications are trouble-some.

**Captured Center Member Feature:** Minimizes chances for catastrophic failure resulting from fatigue or excessive misalignment.

**Self aligning:** Omega Piloted Floating Shaft couplings allow up to 1.50° angular misalignment.[2] The Piloted Rubber Bushings are press fit into the bushing housing to allow for axial movement due to possible changes in thermal or dynamic conditions.




**Optional:** Backstop rotation device - eliminates windmilling effect. Consult Rexnord.

[1] Consult Rexnord for torsional stiffness rate and application requirements.
[2] Equivalent to .023 mm per mm of shaft spacing (L dimension). ***Note:** Coupling alignment is directly related to equipment and coupling life. Care should be taken for best possible alignment.



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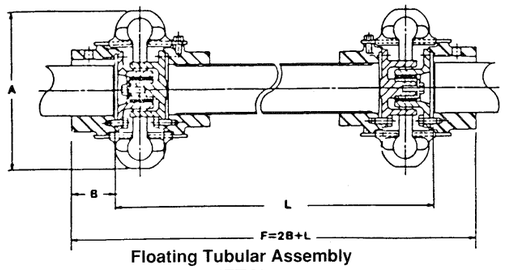
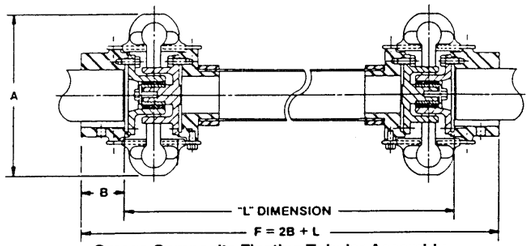
## (COOLING TOWER DRIVE COUPLINGS)



Floating Tubular Assembly (FTA)



Omega Composite Floating Tubular Assembly (CFTA)

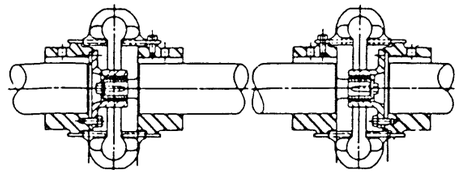
**SPECIFICATION DATA**

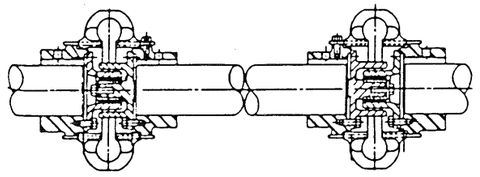
| Omega Size No. | Power[1] Rating KW/RPM | Torque[1] Capacity (Nm) | Max RPM | Max[2] Bore (mm) | Dimensions (mm) A | Dimensions (mm) B | Minimum Span (L) mm | Maximum Span (L) in mm @ Max RPM[3] Steel FTA | Maximum Span (L) in mm @ Max RPM[3] Composite (CFTA) |
|---|---|---|---|---|---|---|---|---|---|
| E10-M | 0.017 | 164 | 1800 | 55 | 162 | 43 | 213 | 1905 | 2642 |
| E20-M | 0.027 | 260 | 1800 | 60 | 184 | 48 | 251 | 2159 | 2642 |
| E30-M | 0.043 | 412 | 1800 | 75 | 210 | 54 | 267 | 2286 | 3277 |
| E40-M | 0.066 | 622 | 1800 | 85 | 241 | 59 | 292 | 2540 | 3277 |
| E50-M | 0.090 | 864 | 1800 | 90 | 279 | 65 | 337 | 2540 | 3277 |
| E60-M | 0.148 | 1412 | 1800 | 105 | 318 | 78 | 365 | 2718 | 3988 |
| E70-M | 0.262 | 2486 | 1800 | 120 | 356 | 87 | 400 | 2870 | 3988 |
| E80-M | 0.467 | 4463 | 1800 | 155 | 406 | 119 | 527 | 3124 | 4623 |
| E100-M | 1.000 | 9605 | 1500 | 171 | 533 | 135 | 495 | 3581 | *** |
| E120-M | 2.000 | 19,221 | 1200 | 190 | 635 | 148 | 543 | 3734 | *** |
| E140-M | 4.000 | 38,442 | 1200 | 229 | 762 | 178 | *** | *** | *** |

[1] Service Factor - 1.0 (2.0 Service Factor recommended for cooling tower applications).
[2] With straight bore hubs.
[3] Longer spans are possible at slower speeds or with special "EL" (extra long/oversize) tubes. Adjustable length center tube design is also available.
*** Consult factory.

| FTA and CFTA Material Classification (hubs and piloted bushing support hardware) | |
|---|---|
| Class D | Type 303-304 Stainless Steel Tube, Nickel Plated Hubs & Bushing Assemblies with Stainless Steel Elements & Hardware |
| Class E | Type 303-304 Stainless Steel Tube, Hubs & Bushing Assemblies with Stainless Steel Elements & Hardware. |
| Class DC | Composite Tube, Nickel Plated Hubs & Bushing Assemblies with Stainless Steel Elements & Hardware. |
| Class EC | Composite Tube, Type 303-304 Stainless Steel Hubs & Bushing Assemblies with Stainless Steel Elements & Hardware. |

**Also available in two solid shaft arrangements**
Consult Rexnord for specifications and application assistance.


**Piloted Shaft Assembly (PSA)**


**Floating Shaft Assembly (FSA)**