

## **Durability for the Long Haul**

When your equipment operates in harsh environments, you need coupling products you can count on. Timken Quick-Flex® elastomeric couplings are designed to withstand harsh conditions, yet need minimal maintenance. They're easy-to-install and require no lubrication. With a lifespan that can match that of your equipment, Timken couplings can keep your overall cost of ownership competitively low.

### **Efficiency**

Timken Quick-Flex couplings directly replace most coupling configurations, thanks to our design's versatility. Plus, you won't need large inventories of spare parts for couplings – the only part you'll need is a urethane insert that can be replaced in just a few minutes without removing the hubs.

### **Durability**

There's no metal-to-metal contact with Timken Quick-Flex couplings, so you'll save money by avoiding damage to hubs or other metal components. For harsh environments, including wash-downs for food processing, we offer a stainless-steel version of each coupling.

### **More Uptime**

Your hubs and metal components can remain intact when you use Timken Quick-Flex couplings. Our design helps eliminate interference between coupling hubs that can damage your equipment. As needed, you can replace the urethane insert quickly and easily without removing the hubs.

### **Innovative Design**

Our couplings withstand up to 2 degrees of misalignment, and they dampen vibration and shock loads in your equipment.

### **Reduced Inventory**

The versatility of the Timken Quick-Flex design promotes standardization across your plant, reducing the need to stock multiple coupling styles and configurations.



# Choose Quick-Flex Couplings



**Standard Couplings** Shown with high-speed cover



**Single-Ended Spacer Couplings** Shown with low-speed split cover



**Double-Ended Spacer Couplings** Shown with high-speed split cover



**Splined Hub Couplings** Shown with high-performance split cover

### **Applications**

- Motor to gearbox (low torque/high speed)
- Gearbox to driven equipment (high torque/low speed)
- Motors to pumps
- Any drive shaft to a driven shaft

### Save Time and Money with Quick-Flex Couplings

- Solid and split covers are designed to accommodate higher speeds and increased torque.
- Inherently balanced from precision machining for high-speed applications.
- Design dampens torsional vibration and shock to help extend life of the coupling and surrounding components.
- Timken inserts help reduce downtime and replacement costs because inserts can be replaced without moving or disassembling the driving or driven equipment.

### **Solutions for Your Needs**

Whatever your application demands, you'll find a wide range of Timken couplings designed to suit your needs. Choose from multiple insert and cover configurations that withstand some of the most extreme environments.

- Twelve families ranging from bore sizes of 9.4 mm to 285 mm, 0.37 in. to 11.25 in.
- Designed for continuous torque levels from 0.043 kNm to 188.8 kNm, 377 in.-lbs. to 1,670,826 in.-lbs.
- Designed for peak torque levels from 0.085 kNm to 377.5 kNm, 754 in.-lbs. to 3,341,562 in.-lbs.
- Couplings accept shaft misalignment, up to 2 degrees.
- Split cover options help resist axial separating force under high torque.
- Standard and double-ended spacer couplings available for shaft separations of 25.4 mm to 3,048 mm, 1 in. to 120 in., for increased application acceptance.
- Four bore options available to meet customers' needs; 1) Bored, keyed and set screws style clearance and interference fit; 2) Bushing style; 3) Splined style; and 4) Mill motor style.
- Four insert choices for varying torque needs and temperature ranges up to 177° C, 350° F.

Quick-Flex Comparison	Quick-Flex	Jaw Coupling	Grid Coupling	Gear Coupling	Chain Coupling	Tire Coupling
Easy to Replace Without Moving Hubs	•		•		•	•
High and Low Torque Ratings	•			•		
High-Speed Capability	•			•		
Low Lifetime Cost	•					
Hubs Not Damaged When Urethane Inserts Need to be Replaced	•					•
No Lubrication Needed	•	•				•
No Hub Teeth Wear	•					
Cushioned Shock	•	•	•			•
Compact Design	•			•	•	

### **Powerful Connections**

Timken Quick-Flex Couplings transmit higher levels of torque in most cases, compared with the competitive averaged gear coupling ratings. Plus, the elastomeric coupling never needs lubrication because there's no metal-to-metal contact.

Quick-Flex Series	Quick-Flex Couplings Maximum Torque <sup>(1)</sup>	Quick-Flex Couplings Maximum Speed <sup>(1)</sup>	Gear Coupling Size	Gear Coupling Maximum Torque <sup>(2)</sup>	Torque Improvement
	<b>kNm</b> inlbs.	r/min		<b>kNm</b> inlbs.	
QF25	<b>1.4</b> 12,449	7000	1	<b>1.1</b> 9,360	33%
QF50	<b>3.0</b> 26,479	6000	1.5	<b>2.1</b> 18,748	41%
QF100	<b>6.1</b> 53,642	4800	2	<b>3.7</b> 33,094	62%
QF175	<b>10.0</b> 88,257	4200	2.5	<b>6.7</b> 59,270	49%
QF250	<b>13.4</b> 118,930	3800	3	<b>11.1</b> 98,152	21%
QF500	<b>24.8</b> 219,429	3400	3.5	<b>17.3</b> 153,316	43%
QF500	<b>24.8</b> 219,429	3400	4	<b>27.9</b> 246,537	0%
QF1000	<b>35.0</b> 310,466	3000	4.5	<b>38.2</b> 337,794	0%
QF1890	<b>62.5</b> 553,982	2800	5	<b>52.9</b> 468,322	18%
QF1890	<b>62.5</b> 553,982	2800	5.5	<b>69.3</b> 613,125	0%
QF3150	<b>98.3</b> 871,139	2000	6	<b>87.1</b> 770,471	13%
QF10260	<b>188.6</b> 1,670,826	1200	7	<b>133.8</b> 1,183,950	41%
QF10260	<b>188.6</b> 1,670,826	1200	8	<b>172.6</b> 1,527,375	9%
QF10260	<b>188.6</b> 1,670,826	1200	9	<b>302.8</b> 2,680,000	0%

<sup>(1)</sup> Based on Timken Quick-Flex coupling with split cover and black elastomeric insert

<sup>(2)</sup> Average maximum torque rating from competitive gear couplings

Industrial Sectors:		Find out more
<ul><li>Steel and Metal Mills</li><li>Aggregate</li><li>Mining</li></ul>	<ul><li>Sawmills</li><li>Industrial Processing</li><li>Pulp and Paper</li></ul>	about our commitment to product quality by visiting www.timken.com, keyword "Product quality."

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, chain, gears and related mechanical power transmission products and services.

### **Quick-Flex Inserts**

#### **Standard Red Insert**

Relatively soft urethane excels in vibrational dampening and cushioning of shock loads.

Use in reversing applications or applications with quick starting and stopping of highinertial loads.

### **High Torque** Blue Insert

Relatively stiff urethane provides moderate flexibility and vibrational dampening.

Use in applications with moderate to high torque, such as gear, grid or chain-style couplings.

#### **High Temperature White Insert**

Withstands application Stiffest urethane. temperatures up to 177° C, 350° F. Provides torque capabilities similar to the Quick-Flex blue insert.

#### **Highest Torque Black Insert**

Use in applications with very high torque, such as gear-style couplings.

