

Established in 1951 in Arlington, Texas, Martin has evolved into a global powerhouse with 30+ strategically located sites. Our unwavering commitment to excellence in power transmission and material handling positions us as a trusted partner globally. At Martin, we offer more than products; we provide precision, personalized service, combining global capability with local care. Experience the Martin difference, where our dedication to quality sets us apart.

## **Success in Business, Martin's Philosophy:**

Success at Martin requires a strategic mindset — knowing customers, taking ownership, building trust, and cultivating an owner's mentality. Effective leadership involves personal responsibility, positive work culture, visibility, and effective communication. Unlocking success demands creativity, innovation, and resisting the status quo. Aligning priorities with a greater purpose ensures contributions lead to organizational success. Martin emphasizes basics — quality, service, and low-cost production — for streamlined and maximized efforts.

## "Get Big, Stay Small" Strategy:

Martin advises strategic business expansion, discovering scalable avenues while preserving core qualities. Maintaining agility and adaptability in the dynamic market landscape is crucial. In a world full of choices, Martin's commitment to prioritizing personalized service and connections with customers sets us apart from the competition.

## **AVAILABLE IN STOCK**



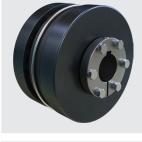
#### **JAW**

- 13 coupling sizes
- Torque capacity up to 4,716 in-lb
- Max. bore capacity 2 7/8"
- Max. angular misalignment 1°
- Non-lubricated



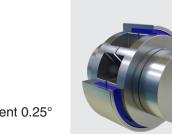
## **BLUE-FLEX®**

- 19 coupling sizes
- Torque capacity up to 1,650,000 in-lb
- Max. bore capacity 13"
- Max. angular misalignment 0.25°
- Lubricated



#### **QUADRA-FLEX®**

- 13 coupling sizes
- Torque capacity up to 47,250 in-lb
- Max. bore capacity 6"
- Max. angular misalignment 2°
- Non-lubricated



#### **GO-FLEX®**

- 12 coupling sizes
- Torque capacity up to 1,680,000 in-lb
- Max. bore capacity 11"
- Max. angular misalignment 2°
- Non-lubricated



#### **MARTIN-FLEX®**

- · 8 coupling sizes
- · Torque capacity up to 9,076 in-lb
- Max. bore capacity 3-1/2"
- Max. angular misalignment 4°
- Max. parallel misalignment 1/8"
- Axial misalignment 5/16"
- Non-lubricated



#### **CHAIN**

- 13 coupling sizes
- · Torque capacity up to 105,882 in-lb
- Max. bore capacity 6 1/8"
- Lubricated



## ONLINE SHEAVE DRIVE SELECTOR TOOL

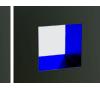
The Coupling Selector online tool simplifies the process of finding the right product for you. Simply input your drive specifications, and we'll guide you to the perfect selection. Visit martinsprocket.com or scan the QR code to explore this and other drive selector tools available.



## AVAILABLE CUSTOM BORE OPTIONS



Sleeved





Hex



D

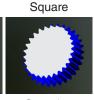








Involute











Taper

Double D



MST®

Assembly

Spline

Spline

Serration Spline

Keyway and Setscrew

QD

#### **MADE-TO-ORDER**

## **SPECIALITY**

- · Special bores
- Shear pin assembly
- · Custom spacer design
- · Split clam sytle hub
- Break disc
- And more...

# MATERIALS AND FINISHES

# HUBS AND FLANGES

- Cast Iron
- Carbon steel
- Stainless steelSintered metal
- Aluminum
- Nickel

Zinc

Cadmium

• Chrome

- INSERTSUrethane
- Buna-N
- Hytrel<sup>®</sup>
- Bronze
- Metal detectable
- FDA compliant

## **SHEAR PIN**

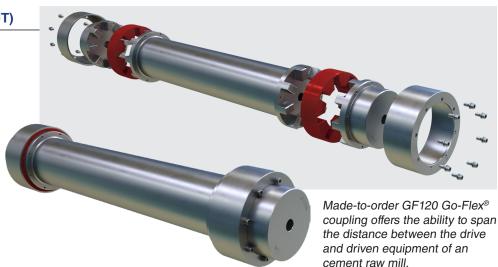
Shear pin is a mechanical fastener acting as a safety device that breaks or shears under specific loads or excessive torque to protect components from jammed or overloaded conditions. These are used in gearboxes, motors, or drivetrain assemblies such as conveyor systems, mixers, or crushers.



Made-to-order
1120T Blue-Flex® grid coupling
which offers shear pin
protection to the driving and
driven equipment.

## SPACER DESIGN (API DROPOUT)

Spacer designs (API dropout) connect the driver and driven shafts, spanning the gap between them in various applications including pumps. They allow for easy maintenance as the spacer can be removed for additional access to the pump.



## **ELASTOMERIC COUPLINGS**

Elastomeric couplings transfer torque between shafts using flexible insert made of elastomer materials that compensate for misalignment and dampen vibrations. Elastomeric couplings are versatile and reliable, making them suitable for various applications across different industries. They are commonly used in industrial machines like pumps, compressors, conveyors, mixers, as well as HVAC systems and renewable energy applications like wind turbines and solar systems.

- MISALIGNMENT COMPENSATION through adaptable accommodation for angular, parallel, and axial misalignments, leading to reduced strain on connected equipment.
- SHOCK ABSORPTION offers excellent protection to the connected machinery from sudden shocks and impacts.
- VIBRATION REDUCTION by dampening vibrations generated during operation, elastomeric couplings enhance system reliability, reduce wear and tear, and minimize maintenance requirements.
- ENERGY EFFICIENCY by reducing energy loses caused by misalignment or vibrations, improving overall efficiency.
- EASY INSTALLATION AND MAINTENANCE provided by design for simple and quick installation, and requires minimal maintenance.



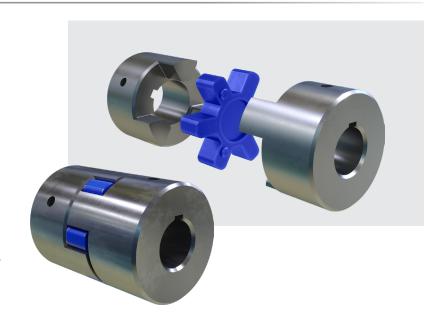
**GO-FLEX® COUPLINGS** with a wrap around insert are easy to replace, removing the retaining ring/fastener and sliding standard cover allows for complete access without moving other

- · Fast and easy insert replacement
- · Minimal downtime with urethane inserts available for various
- Simple replacement process ensures equipment back up in
- Versatile installation: vertical or
- No realignment needed, even in

## **JAW COUPLING**

JAW COUPLINGS are Martin's versatile coupling solutions, available in two styles: Martin Universal (ML) for higher horsepower applications and Martin Super (MS) for complete interchangeability.

- No lubrication required for easy installation and minimal maintenance
- No metal-to-metal contact, enhancing resistance to oil, dirt, sand, moisture, and grease for extended longevity
- Facilitated easy inspection of the load-carrying spider
- Flexibility to accommodate angular or parallel misalignment of shafts with the buna-n spider member ensures smooth power transmission



## **QUADRA-FLEX® COUPLING**

**QUADRA-FLEX COUPLINGS** are Martin's solution for non-lubricated, maintenance-free power transmission with easy and quick installation. These couplings are designed to handle all combinations of shock, vibration, and misalignment. They excel in various aspects:

- **Parallel:** Absorbing parallel misalignment without wear, minimizing energy loss, with handling capacities ranging from 0.015" to 0.062" depending on size.
- Angular: Easily accommodating angular misalignment up to 2 degrees without appreciable wear, thanks to flexing characteristics and tooth locking action.
- Torsional: Torsionally resilient sleeves absorb shocks and dampen vibrations effectively, preventing transmission between equipment.
- S/B (end float): With axial flexibility allowing limited end float acceptance, Quadra-Flex® couplings reduce thrust loads transferred to bearings.



## **MARTIN-FLEX® COUPLING**

MARTIN FLEX® FLEXIBLE COUPLINGS are engineered to seamlessly transmit power while accommodating shaft misalignment up to 4°, parallel misalignment up to 0.125", and end float up to 0.313". Two-piece flange design for swift and effortless installation, these couplings utilize an elastomeric element to absorb shock and torsional vibration across a broad temperature range.



## **METALLIC COUPLINGS**

Metallic couplings enable efficient torque transmission and compensate for misalignment. They are resilient to harsh environments and have high torque capacity and power transmission capability. With their compact design, durability, reduced maintenance needs, and misalignment compensation, metallic couplings are reliable for applications that require efficient power transmission in various industries like industrial machinery, mining, construction, as well as oil and gas.

- HIGH TORQUE CAPACITY for heavy-duty applications needing substantial power transmission.
- MATERIAL OPTIONS provide excellent resistance to heat, corrosion, and harsh environmental conditions for demanding applications.
- STIFFNESS ensures precise and efficient power transmission with minimal torsional deflection.
- MISALIGNMENT ACCOMMODATION for angular, parallel, and axial misalignments, leading to reduced strain on connected equipment.

- COMPACT DESIGN is ideal for limited space applications, minimizing size and weight.
- LUBRICATION requirements are generally low, reducing maintenance needs and increasing convenience.
- HIGH POWER TRANSMISSION CAPABILITY efficiently transmit large amounts of power, ensuring reliability in high-power applications.
- LONGEVITY AND DURABLE DESIGNS minimize downtime and maintenance costs in demanding industrial environments.

## **BLUE-FLEX® GRID COUPLING**

Martin Blue-Flex® grid couplings excel in applications requiring high torque and dampening. Unlike traditional metallic couplings, they effectively reduce vibration and absorb shock loads, safeguarding driven and driving components. Through progressive contact between the hub teeth's curved profile and the flexible grid, impact energy is dispersed, mitigating peak loads. Blue-Flex® grid couplings adhere to Martin's renowned standards for quality, availability, service, and response time, ensuring reliability that industries depend on.

## ROLLER CHAIN COUPLING

Roller chain couplings are commonly used in industrial machinery, particularly in applications where precise motion transmission is required, or where there may be misalignment between the shafts. They are known for their durability, reliability, and ability to handle high torque loads.



## **POWERING INDUSTRIES** SINCE 1951

Unlock the pinnacle of industrial excellence with Martin, your trusted partner in custom coupling engineering. For over seven decades, we've been at the forefront of innovation, crafting bespoke solutions that stand the test of time.

Elevate your industrial experience with Martin – where precision meets performance, and innovation meets reliability. Unleash the power of custom couplings designed to propel your industry forward. Choose Martin, choose excellence.



## **UNMATCHED INVENTORY**

With the largest power transmission stock in North America, find the perfect fit for your needs, always exceeding expectations.

## **TAILORED TO PERFECTION**

Crafting made-to-order couplings for unique industrial needs. Diverse materials, shaft options, and assemblies bring your vision to life.

## **QUALITY ASSURED**

Backed by a solid one-year warranty\*, Martin ensures top-tier reliability and durability in every product.

## RAPID RESPONSE, SWIFT SOLUTIONS

Quick alterations and manufacturing across locations guarantee the industry's fastest lead times for made-to-order products. Your deadlines, our priority.

## A PERSONAL TOUCH TO EVERY ORDER

Beyond products, Martin is your dedicated partner in success. Experience precision, performance, and reliability. Choose Martin, choose excellence.

<sup>\*</sup> Conditions apply, check our Limited Warranty at https://martinsg.info/terms

## **COUPLING SELECTION GUIDE**

SELECTION	COUPLING TYPE						
CRITERION	ML - JAW	CHAIN	QUADRA-FLEX	MARTIN-FLEX	GO-FLEX	BLUE-FLEX	
ind	ch 1/8" to 2-5/8"	7/16" to 6-1/8"	3/8" to 5-1/2"	3/8" to 3-1/2"	1/2" to 11"	1/2" to 13"	
Size Range m	m 4 to 65	12 to 160	9 to 140	9 to 90	12 to 280	12 to 330	
in-lbs <b>Torque</b>	3.5 to 6,228	1,921 to 151,622**	60 to 72,480	649 to 9,076	365 to 1,680,000	460 to 1,650,000	
<b>Range</b> N	m 0.4 to 704	218 to 17,135	6.78 to 8,190	73 to 1025	40 to 189,840	52 to 186,450	
Maximum Angular Misalignment	1/2° to 1°	2°	2°	4°	2°	.25°	
Temperature Range	-40° to 212° F	-30° to 225° F	-65° to 275° F	-45° to 180° F	-60° to 212° F	-40° to 250° F	
Standard Element	-40° to 100° C	-35° to 108° C	-53° to 135° C	-42° to 85° C	-50° to 100° C	-40° to 121° C	
Reactionary Loads due to Misalignment	Medium	Low	Low	Medium	Low	High	
Torque to Outside Diameter Capability	Good	Good	Fair	Fair	Fair	Good	
Speed Capability	Good	Good	Fair	Fair	Good	Good	
Torsional Stiffness	Low	Medium	Low	Low	Medium	Medium	
Ease of Installation/ Maintenance	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	
Chemical Resistance	Good	Good	Good	Fair	Good	Fair	
Adaptable to Several Designs	Excellent	Poor	Excellent	Good	Excellent	Excellent	
Damping Capacity	Good	Poor	Excellent	Excellent	Good	Good	
Industry Interchangeable	Yes	Yes	Yes	Yes	Yes	Yes	

<sup>\*\*</sup> MAX Allowable Torque below 50 RPM \*\*\* Half-Coupling ONLY

## **INSERT SELECTION GUIDE**

## **GO-FLEX® INSERT**

SELECTION CRITERION	<b>STANDARD</b> Red	MEDIUM TORQUE Dark Blue	EXTREME High Torque Black	METAL DETECTABLE Blue	<b>HI-TEMP</b> White
Temperature °F Range °C		-60°F to			Up to 300°F Up to 148°C
Material	Moderately soft urethane	Higher durometer urethane	Highest torque urethane	Urethane with FDA compliant additive for metal detectability	Hi-Temp urethane
Applications	Good vibration dampening, cushioning of shock loads, reversing or quick start and stop of high inertial loads	Moderate to high torque	High torque	Food and chemical Industries where plastic contamination compromises production	Moderate to high torque

## **JAW COUPLING SPIDER**

SELECTIO CRITERIO		<b>BUNA-N</b> Black	<b>URETHANE</b> Blue	<b>HYTREL</b> ® Tan	BRONZE
Temperature Range	°F °C	-40° to 212° F -40° to 100° C	-30° to 160° F -34° to 71° C	-60° to 250° F -51° to 121° C	-40° to 450° F -40° to 232° C
Missalighment	Angular Parallel	1° 0.		1/2° 15"	
Dampening		High	Lo	DW .	N/A
Resistances		Good resistance to oil	Good resistance to oil and chemicals	Excellent resistance to oil and chemicals	Not affected by extreme temperatures, water, oil, or dirt
Other Features		<ul> <li>Standard flexible elastomer</li> <li>Resembles natural rubber</li> </ul>	<ul> <li>Greater torque capability than NBR (1.5 times)</li> <li>Not recommended for cyclic or start/stop</li> </ul>	<ul> <li>Flexible elastomer designed for high torque and high temperature operations</li> <li>Not recommended for cyclic or start/stop</li> </ul>	<ul> <li>Rigid, porous oil- impregnated metal insert</li> <li>For slow speed (max. 250 RPM), requiring high torque capabilities</li> </ul>

## **QUADRA-FLEX® SLEEVE**

SELECTION Criterion		TPR	EPDM	NEOPRENE	HYTREL®
Sizes		3 - 12	13 - 16	11 - 16	6 - 14
Temperature	°F	-50° F to +275° F	-30° F to +275° F	0° F to +200° F	-65° F to +250° F
Range	°C	-46° C to +135° C	-34° C to +135° C	-18° C to +93° C	-54° C to +121° C
Torsional Flexibil	ity		15°		7°
Resistances		Good resistance to oil	Good resistance to oil and chemicals	Excellent resistance to oil and chemicals	Not affected by extreme temperatures, water, oil, or dirt
Other Features		Standard material for sizes 3-12. Combines the characteristics of both EPDM and Neoprene	Standard material for sizes 13-16	These sleeves offer a higher resistance than EPDM and are self-extinguishing	For high torque applications Four times higher power

## **NOMENCLATURE**



Quadra-Flex® **Couplings** 

**Bore** 



Jaw **Couplings** 



Martin-Flex® **Couplings** 



Chain **Couplings** 



Blue-Flex® Grid **Couplings** 

JAW



Go-Flex® Flexible Couplings

## QUADRA-FLEX®



Note: Bored-to-Size flanges are furnished with

**5J3/4 8JEM-MD** EM TPR - 2 Pc, Retaining Ring E EPDM - 2 Pc, Retaining Ring H Hytrel - 1 Pc Solid HS Hytrel - 2 Pc Split

**SLEEVE** Metal Detectable Sleeve Material JEM TPR - 1 Pc Solid, Thermoplastic JEMS TPR - 1 Pc Split, Thermoplastic N Neoprene - 2 Pc, Retaining Ring Sleeve Size 3 to 16 standard keyway and 2 setscrews unless specified otherwise

**MARTIN FLEX®** 

**GRID & HUB** 

Componen	t	— <b>F5JA</b> –	Bore
F Flange Size	E Element	— 1 JJA —	JA, SH, SDS, SK, SF, E (small to large)
5 to 12			



**ML090SS1** Type **ML** Universal MS Super Size 035 to 276 Material leave blank for steel SS Stainless Steel Bore

#### **SPIDER**

## SRL090-MD Add if **Metal** Detectable Size 035 to 276 Spider SRL Buna-N SUL Urethane

SHL Hytrel SBL Bronze

## **ROLLER CHAIN**

Chain Size 4016 7/8	Add <b>COV</b> for Cover
40 to 120 40 10 7/0	4012 to 6020 Plastic (No Suffix)
Tooth Count	Aluminium (Add <b>-AL</b> )
Bore Size or Bushing	6022 to 12022 Aluminium (No Suffix)
TBH, TBF Taper	Add <b>CHN</b> for Chain
JA, SH, SK, SF QD (small to large)	

## **BLUE-FLEX® GRID**



1040T-GRID 1050T-HUB1 7/8 **Hub Type HUB** Hub SH Shaft Hub Bore Size (Plain Bore if no Bore Size) 1020T to 1090T Clearance fit bore

standard keyway and 2 set screws 1100T to 1200T Interference fit bore standard keyway and 1 setscrew

# **PARTS & KITS** 1090T10-SUBASY

**Cover Style** 10 Horizontal 20 Vertical Parts & Kits

COV Cover, Fasterner Set & Seal Kit FAS Fastener Set SUBASY Cover Kit & Grid **SEAL** Seal Kit

#### **SPACER HUB**

1050T-CL3.5000

**CL** Spacer Hub **Spacer Length** 

## **GO-FLEX®**



#### **INSERT** Go-Flex® **GF20SD-INS** Size 10 to 120 **Insert Type** Standard Duty (Red) SD Medium Duty (Dark Blue) MD Extreme Duty (Black) HT Hi-Temp (White) FG Metal Detectable (Light Blue) Insert

#### **COVER** Go-Flex® **GF20XP-CVR** Size 10 to 120 **Cover Type** Standard Duty (Carbon Steel) Standard Duty (Stainless Steel) SS Horizontal Split (Aluminium) VS Vertical Split HS Horizontal/Vertical Split Cover







Phone: 817.258.3000

Fax: 817.258.3333

martinsprocket.com