



ZERO-MAX°

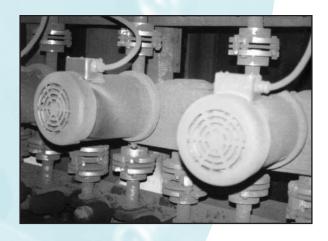
INDUSTRIAL INCIDENCE MEX (55) 53 63 23 31 MTY (81) 83 54 10 18 QRO (442) 1 95 72 60 ventas@industrialmagza.com

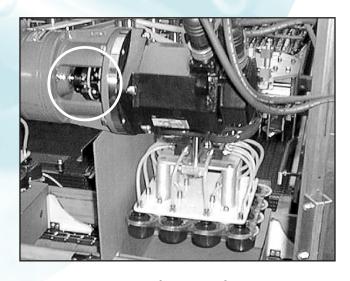
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INDUSTRIAL MACZAL

GD[®]Flexible Shaft Couplings







Key Is The Patented Disc Design.



The unique disc design, made of rugged composite material, reacts to coupling forces with high torsional stiffness, ability to lessen reaction loads and to absorb and dampen shock and vibration.

The Coupling For Today's Most Difficult Applications.

The CD Coupling is a unique hybrid coupling, combining the best features found in both steel disc and elastomeric couplings. Through its new open arm disc design and use of rugged composite materials, the coupling offers the high misalignment capacity found in many elastomeric couplings, but with higher torsional stiffness.

Compared to steel disc couplings, these couplings offer superior damping and isolation of shock and vibrating loads, including elimination of fretting corrosion and a dramatic reduction of stress fractures at the bolt hole locations. The CD Coupling also provides excellent chemical and moisture resistance in hostile environments which prove difficult or impossible for elastomeric or steel disc couplings.

Finite Element Analysis Tailors Disc To Application.

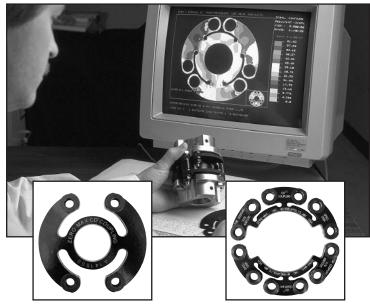


Using finite element analysis (FEA), the disc design can be easily modified along with changes in the composite material. Custom disc designs (manufactured on state-of-theart laser cutting machines) can add to or lessen coupling

flexibility or increase strength and stiffness as required for the particular application. There are over 40 standard models and sizes of CD couplings for most applications. For applications outside this range, CD Couplings can be designed and produced cost effectively within your delivery requirements.

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Standard Or Custom CD Couplings For Every Application

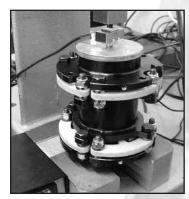


Longer Arm Design Yields **Greater Coupling Flexibility**

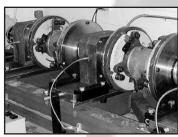
Shorter Arm Design Yields Greater Coupling Rigidity

Need higher misalignment and greater torque capacity in your coupling? Need more flexibility and torsional stiffness too? Need a really large bore diameter coupling or a very long spacer coupling? Chances are, a standard CD coupling will satisfy your requirements. If it doesn't, we'll quickly design a solution using our finite element analysis (FEA). With experience at thousands of different applications, our extensive FEA database brings instant answers to your questions.

Design and Analysis, Test Programs, and Production Capabilities are geared toward supplying the correct coupling at the lowest cost and in the shortest leadtime.



Coupling Axial Stiffness Test

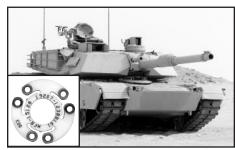


Full scale test of two wind generator couplings under extreme misalignment conditions.

Standard and Custom CD Coupling designs are verified in our modern test lab. Zero-Max test capabilities include all types of static and dynamic testing to insure that the design specifications are met.

Production of CD Couplings is executed with modern CNC machinery, which provides components with the accuracy required for demanding applications. Quality Control of all manufacturing processes, guarantees that CD Couplings will meet strict performance requirements.

Solutions Without Limits



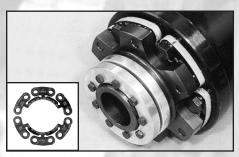
Challenge: Improve coupling dynamic torque carrying characteristics without increasing coupling size due to constrained operating envelope inside of air purifying system in M1A2 Battle tank.

Solution: Use a standard CD Coupling 6 bolt configuration with thicker disc pack. The added disc thickness greatly improves coupling stiffness and strength, still providing the needed compliance.



Challenge: Achieve high strength and durability while accommodating up to 2° misalignment in the largest wind turbine generators in North America. Withstand constantly changing torque and misalignment imposed on the drive train by the wind.

Solution: Design a customized, larger CD coupling with two 8-bolt disc packs in a spacer coupling configuration. By using a "slim" arm, more flexibility was added to the coupling to absorb the oscillating loads.



Challenge: Provide a floating shaft coupling to connect a series of high quality print stations. The coupling must provide minimal torsional deflection under maximum operating load to maintain precision registration.

Solution: Utilize a CD coupling with a 12-bolt disc pack and a special high rigidity spacer. Custom composite disc pack material is employed to transmit the required torque with extreme torsional stiffness.



CD Couplings Combine The Best Features of Steel Disc and Elastomeric Couplings.

Zero Backlash: The CD coupling design provides zero backlash, important in servo motor and other applications where position control in both the forward and reverse modes is critical to overall system accuracy.

High Misalignments: Unlike traditional steel disc couplings, (which allow no parallel misalignment), the Zero-Max CD open arm single flex coupling allows up to 0.013" (0.33mm) parallel misalignment employing a single disc pack, with up to 1.5° angular misalignment. In many cases, this capability eliminates the need to specify larger, double flex couplings, saving installation time, space and money.

Torsional Stiffness: CD couplings provide high torsional stiffness, important for applications such as servo motors, printing presses, packaging machines, line shafts and other equipment requiring registration of machine components. Helps avoid resonance in high speed machinery.

Maintenance Free: Install and forget. No periodic cleaning, replacing of seals, re-lubricating or grease guards are needed.

Unitized Design: The coupling disc packs consist of discs held together with precision bushings for ease of assembly.

Longer Life: The composite flex disc material and open arm disc design provide excellent fatigue properties, will not corrode under most operating conditions, reduces disc movement practically eliminating fretting corrosion between discs, a potential problem with steel disc couplings.

Environmentally Tough: The composite flex disc material is inert to water corrosion. Discs lose less than 10% strength when exposed to 30% sulfuric acid bath. Disc handle temperature extremes from -70° to +250°F (-57° to +121°C). The hubs, intermediate members and spacers are precision machined from high grade steel and coated for corrosion protection.

Vibration and Shock Control: Handles changing loads by damping shock and vibration, resulting in less wear and tear on machine components.

Drop-Out Design: Hubs are designed for easy bolt and disc pack removal without disturbing hubs or connected equipment.

Easy Installation: Coupling surfaces are precision machined and may be used as installation reference points for alignment and for subsequent alignment inspection.

Modification Without Limits

The CD coupling has a unique "open arm" design platform. Combined with the composite material used for the discs, it creates virtually unlimited possibilities and ease with which disc packs can be modified using the Zero-Max proprietary finite element analysis database. No one but Zero-Max can offer this service.

Over 10 Years **Experience**

Zero-Max has the answers. Our extensive application experience is yours with solutions for a wide variety of industry applications including packaging, paper converting, military, medical, iron ore processing, wind turbine applications, etc.

Quick Turnaround From Design To Delivery

Zero-Max is set up to meet your coupling delivery requirements, including specials. Modified discs designed quickly with our FEA and CAD processes. Discs then are produced very efficiently using laser cutting processes to deliver couplings when you need them at competitive prices. This laser process is quick economical, flexible and does not require expensive, permanent dies.

Three Hub Styles

A style hubs accommodate most standard bores. B style hubs allow bores to be up to 150% larger than most other coupling designs. Clamp style hubs are ideal for servo application and are available with or without keyways.



A Style Hubs



Clamp Style Hubs





Single Flex Coupling Pages 6-9 Standard models 1.85" to 12" diameter, up to 60,000 inch pounds. Misalianment up to 1.5° angular, 0.013" parallel and 0.220" axial. Available in either steel or aluminum hubs, with inch or metric bores.



Stainless Steel Coupling Pages 10-11 Standard models 3.0" to 5.25" diameter, up to 3,560 inch pounds. Misalignment up to 1.5° angular, 0.005" parallel and 0.110" axial. All material is 300 series stainless steel.



Double Flex Coupling Pages 12-15 Standard models 1.85" to 12" diameter, up to 47,200 inch pounds. Misalignment up to 3° angular, 0.137" parallel and 0.50" axial. Available in either steel or aluminum hubs, with inch or metric bores.



Floating Shaft Coupling Pages 16-19 Standard models 2.25" to 6.75" diameter, up to 12,500 inch pounds, with inch or metric hub bores.



Special Couplings Custom designed for any application. Pages 20-21

How to Order

Pages 22

Selection Guide and Technical Information

Pages 22-23

GD Couplings Single Flex - Steel



The single flex coupling is an excellent choice for zero backlash applications and where a small amount of parallel misalignment is needed and where precise alignment is difficult to achieve.

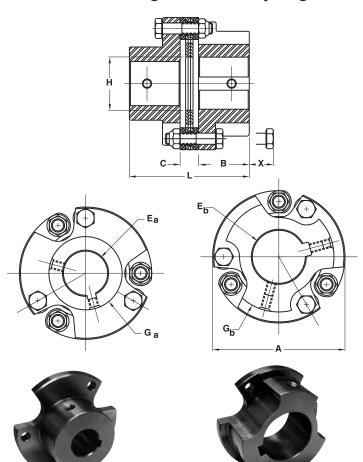
Single Flex -Performance Information

				Maximu	n Speed	*1	Misalignmen	ts	A I	Hub	В	lub		Clamp	ed Hub	
	Max. HP/100	Continuous Rated	Torsional Stiffness	A & B Hub	Clamp Style Hub	Angular	Parallel	Axial	Unit Weight at Max	Unit Inertia at Max	Unit Weight at Max	Unit Inertia at Max	Unit V at Max	Veight at 1/2	Unit I at Max	nertia at 1/2
	RPM	Torque	Sumess	nub	Style Hub				Bore	Bore	Bore	Bore	Bore	Max Bore	Bore	Max Bore
		in-lbs (Nm)	in-lbs/Deg. (Nm./Rad)	(RPM)	(RPM)	Degrees	Inch (mm)	Inch (mm)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	Lb. (kg.)	lb-in ² (Kg-cm ²)	lb-in ² (Kg-cm ²)
6A18	0.29	200 (23)	1,800 (11,650)	14000	12000	1.25	0.002 (0.05)	0.030 (0.8)	0.43 (0.2)	0.16 (0.47)			0.91 (0.41)	0.76 (.034)	0.44 (1.29)	0.26 (0.76)
6A22	0.43	400 (45)	2,680 (17,352)	12000	11000	1.25	0.002 (0.05)	0.030 (0.8)	0.88 (0.4)	0.49 (1.45)	0.96 (0.44)	0.66 (1.92)	1.23 (0.56)	1.06 (0.48)	0.73 (2.13)	0.54 (1.59)
6A26	0.75	575 (65)	3,100 (20,100)	10500	9500	1.25	0.003 (0.08)	0.040 (1.0)	1.37 (0.62)	0.93 (2.72)	1.37 (0.62)	1.21 (3.54)	1.81 (0.82)	1.54 (0.70)	1.47 (4.29)	0.98 (2.86)
6A30	1.27	1,100 (124)	6,638 (42,976)	9000	8000	1.25	0.003 (0.08)	0.050 (1.3)	2.0 (0.9)	1.9 (5.5)	2.5 (1.1)	2.8 (8.3)	2.88 (1.31)	2.03 (0.92)	3.11 (9.11)	1.69 (4.95)
6A37	2.54	2,100 (237)	10,374 (67,167)	7400	6700	1.5	0.004 (0.10)	0.070 (1.8)	3.6 (1.6)	5.6 (16.3)	4.2 (1.9)	7.9 (23.0)	6.04 (2.74)	4.36 (1.98)	9.62 (28.13)	6.20 (18.14)
6A45	3.97	3,300 (373)	19,138 (123,909)	6100	5600	1.5	0.004 (0.10)	0.090 (2.3)	6.4 (2.9)	14.6 (42.7)	7.2 (3.3)	20.0 (58.5)	7.65 (3.47)	7.31 (3.31)	18.0 (52.6)	14.4 (42.2)
6A52	5.65	4,500 (508)	26,049 (168,656)	5200	4800	1.5	0.005 (0.13)	0.110 (2.8)	10.5 (4.8)	32.4 (94.8)	11.4 (5.2)	43.2 (126)	11.93 (5.41)	9.89 (4.49)	38.9 (113.8)	27.3 (79.7)
6A60	10.08	8,000 (904)	41,485 (268,595)	4600	4400	1.5	0.006 (0.15)	0.130 (3.3)	15.3 (7.0)	61.3 (179)	18.4 (8.4)	90.6 (265)	18.0 (8.2)	14.9 (6.7)	75.6 (221.0)	53.0 (155.0)
6A67	16.34	12,500 (1,412)	61,948 (401,084)	4300	4100	1.5	0.007 (0.18)	0.150 (3.8)	22.0 (10.0)	111 (325)	26.5 (12.0)	163 (477)	26.6 (12.1)	18.7 (8.5)	143.69 (420.24)	85.1 (249.0)
6A77	24.75	19,000 (2,147)	94,107 (609,303)	3900		1.5	0.008 (0.20)	0.160 (4.1)	31.3 (14.2)	209 (612)	38.5 (17.5)	318 (931)				
6A90	39.67	30,000 (3,390)	160,653 (1,040,162)	3600		1.5	0.009 (0.23)	0.170 (4.3)	49.9 (22.7)	461 (1349)	62.6 (28.5)	722 (2113)				
6A105	55.37	44,000 (4,972)	244,204 (1,581,120)	3300		1.5	0.010 (0.25)	0.190 (4.8)	81.5 (37.0)	1046 (3061)	98.3 (44.7)	1572 (4600)				
6A120	74.89	60,000 (6,780)	328,095 (2,124,275)	3000		1.5	0.013 (0.33)	0.220 (5.6)	124.0 (56.4)	2054 (6011)	141.0 (64.1)	3100 (9070)				

- Peak torque is 1.5 times the continuous torque rating.
- The CD Couplings shown in the table above are capable of operating at higher degrees of shaft misalignment, depending upon application details and desired lifetime. Consult factory.
- Consult factory for speeds higher than those listed and balancing requirements, if necessary.
- Consult factory for higher torque and higher torsional stiffness couplings.
- * See Page 22 regarding selection of coupling and misalignment capability.

Single Flex Coupling With Set Screw Style Hub

Steel



-Dimensional Information

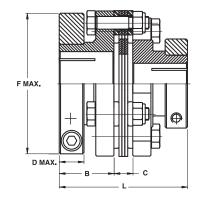
				Max	Bore					
				Ea		Ga	Gb			Х
				A Hub	B Hub	A Hub	B Hub			
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6A18	1.85 (47.0)	0.625 (15.9)	0.276 (7.0)	0.625 (16)		1.13 (28.6)		0.79 (20.1)	1.53 (38.8)	0.0 (0)
6A22	2.25	0.94	0.31	0.625	1.000	1.22	1.88	0.91	2.18	0.51
	(57.2)	(23.8)	(7.8)	(16)	(26)	(31)	(47.6)	(23.1)	(55.4)	(13)
6A26	2.59	1.06	0.31	0.750	1.250	1.50	2.16	1.00	2.43	0.39
	(66)	(27.0)	(7.8)	(19)	(32)	(38.2)	(54.8)	(25.4)	(61.7)	(9.9)
6A30	3.00	1.25	0.46	1.000	1.375	1.71	2.50	1.21	2.96	0.39
	(76.2)	(31.8)	(11.7)	(25)	(35)	(43)	(64)	(31)	(75)	(9.9)
6A37	3.75	1.44	0.52	1.250	1.813	2.19	3.13	1.51	3.40	0.68
	(95.3)	(36.5)	(13.3)	(32)	(46)	(56)	(79)	(38)	(86)	(17.3)
6A45	4.50	1.69	0.58	1.625	2.250	2.69	3.75	1.81	3.96	0.91
	(114)	(42.9)	(14.8)	(42)	(60)	(68)	(95)	(46)	(101)	(23.1)
6A52	5.25	1.94	0.65	1.875	2.625	3.31	4.38	2.10	4.52	0.73
	(133)	(49.2)	(16.4)	(48)	(66)	(84)	(111)	(54)	(115)	(18.5)
6A60	6.00	2.44	0.77	2.250	3.000	3.67	5.00	2.42	5.64	0.69
	(152)	(61.9)	(19.5)	(60)	(76)	(93)	(127)	(61)	(143)	(17.5)
6A67	6.75	2.75	0.86	2.625	3.375	4.29	5.63	2.72	6.36	0.41
	(172)	(69.9)	(21.8)	(66)	(85)	(109)	(143)	(69)	(162)	(10.4)
6A77	7.75	3.13	1.01	2.875	3.875	4.61	6.46	3.13	7.26	0.89
	(197)	(79.4)	(25.7)	(75)	(100)	(117)	(164)	(79)	(185)	(22.6)
6A90	9.00	3.75	1.13	3.000	4.500	5.38	7.50	3.62	8.63	1.39
	(229)	(95.3)	(28.8)	(76)	(115)	(137)	(191)	(92)	(219)	(35.3)
6A105	10.50	4.25	1.45	3.750	5.125	6.11	8.75	4.23	9.95	1.92
	(267)	(108)	(36.8)	(95)	(130)	(155)	(222)	(107)	(253)	(48.8)
6A120	12.00	4.75	1.54	4.250	6.000	7.34	10.00	4.83	11.04	1.48
	(305)	(121)	(39.0)	(110)	(152)	(186)	(254)	(123)	(280)	(37.6)

 "X" dimension is the minimum bolt travel required beyond the hub to disassemble the disc pack from the hubs.

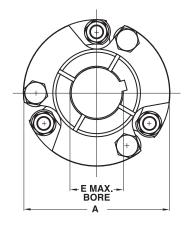
Single Flex Coupling With Clamp Style Hub



Clamp style is available with or without keyway.





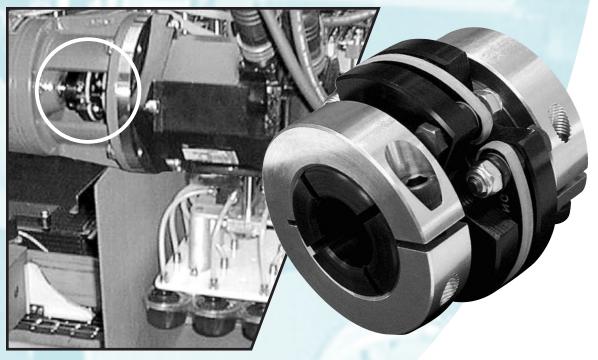


-Dimensional Information

					Max	Bore		
						E	F	
	Inch	Inch	Inch	Inch	w kwy Inch	w/o kwy	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6A18C	1.85	0.81	0.28	0.472	0.63	0.813	1.88	1.88
	(47.0)	(20.6)	(7.1)	(12)	(16)	(21)	(47.8)	(47.8)
6A22C	2.25	1.00	0.31	0.551	0.75	0.938	2.22	2.31
	(57.2)	(25.4)	(7.9)	(14)	(20)	(25)	(56.4)	(58.7)
6A26C	2.60	1.06	0.31	0.551	0.93	1.188	2.41	2.43
	(66.0)	(26.9)	(7.9)	(14)	(24)	(30)	(61.2)	(61.7)
6A30C	3.00	1.25	0.46	0.709	1.12	1.37	2.96	2.96
	(76.2)	(31.8)	(11.7)	(18)	(28)	(35)	(75.2)	(75.2)
6A37C	3.75	1.44	0.52	0.748	1.50	1.87	3.79	3.40
	(95.3)	(36.6)	(13.2)	(19)	(38)	(48)	(96.4)	(86.4)
6A45C	4.50	1.69	0.58	0.866	1.75	2.125	4.40	3.96
	(114.3)	(42.9)	(14.7)	(22)	(45)	(54)	(113)	(100.6)
6A52C	5.25	1.94	0.65	0.984	2.12	2.62	5.11	4.52
	(133.4)	(49.3)	(16.5)	(25)	(55)	(65)	(129.8)	(114.8)
6A60C	6.00	2.44	0.77	1.339	2.50	3.00	6.00	5.64
	(152.4)	(62.0)	(19.6)	(34)	(65)	(75)	(152.4)	(143.3)
6A67C	6.75	2.75	0.86	1.339	2.875	3.50	6.65	6.36
	(171.5)	(69.9)	(21.8)	(34)	(75)	(90)	(169)	(161.5)

Performance Note: The torque capacity of keyless clamped hubs is governed by many factors, including shaft hub bore diameter, clamp size, and other installation variables. Keyless coupling hubs with bore sizes less than approximately one-half the maximum bore listed may not transmit the torque rating of the disc pack. Consult factory if your application is of high torque/small shaft variety.

GD Couplings Single Flex - Aluminum



The single flex coupling with aluminum hubs has low weight and inertia, making it an excellent choice for servo-motor applications. This coupling possesses zero-backlash and high torsional stiffness with moderate misalignment capacity.

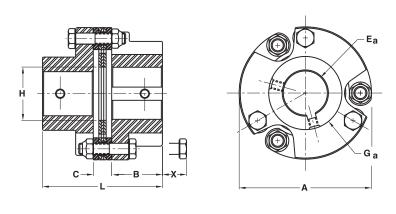
Single Flex -Performance Information

				Maximu	m Speed	*N	Misalignmen	ts	A I	łub		Clampe	ed Hub	
	Max. HP/100 RPM	Continuous Rated Torque	Torsional Stiffness	A Hub	Clamp Style Hub	Angular	Parallel	Axial	Unit Weight at Max Bore	Unit Inertia at Max Bore	Unit V at Max Bore	Weight at 1/2 Max Bore		nertia at 1/2 Max Bore
		in-lbs (Nm)	in-lbs/Deg. (Nm./Rad)	(RPM)	(RPM)	Degrees	Inch (mm)	Inch (mm)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	Lb. (kg.)	lb-in ² (Kg-cm ²)	lb-in ² (Kg-cm ²)
6A18A	0.29	200 (23)	1,800 (11,650)	17000	15000	1.25	0.002 (0.05)	0.030 (0.8)	0.17 (0.08)	0.08 (0.23)	0.34 (0.15)	0.30 (0.13)	0.17 (0.50)	0.10 (0.30)
6A22A	0.43	400 (45)	2,680 (17,352)	15000	13500	1.25	0.002 (0.05)	0.030 (0.8)	0.39 (0.18)	0.26 (0.76)	0.52 (0.24)	0.46 (0.21)	0.35 (1.02)	0.29 (0.84)
6A26A	0.75	575 (65)	3,100 (20,100)	13000	11500	1.25	0.003 (0.08)	0.040 (1.0)	0.56 (0.25)	0.42 (1.24)	0.72 (0.33)	0.63 (0.28)	0.62 (1.80)	0.45 (1.30)
6A30A	1.27	1,100 (124)	6,638 (42,976)	11000	9500	1.25	0.003 (0.08)	0.050 (1.3)	0.85 (0.38)	0.89 (2.59)	1.18 (0.54)	0.89 (0.40)	1.36 (3.97)	0.87 (2.54)
6A37A	2.54	2,100 (237)	10,374 (67,167)	9000	8000	1.5	0.004 (0.10)	0.070 (1.8)	1.72 (0.78)	2.91 (8.52)	2.44 (1.11)	1.86 (0.84)	4.15 (12.13)	2.97 (8.68)
6A45A	3.97	3,300 (373)	19,138 (123,909)	7500	6700	1.5	0.004 (0.10)	0.090 (2.3)	2.88 (1.31)	7.10 (20.8)	3.28 (1.49)	3.16 (1.43)	8.31 (24.29)	7.07 (20.68)
6A52A	5.65	4,500 (508)	26,049 (168,656)	6400	5800	1.5	0.005 (0.13)	0.110 (2.8)	4.37 (1.98)	14.3 (41.8)	4.91 (2.23)	4.20 (1.91)	17.1 (50.1)	13.1 (38.3)
6A60A	10.08	8,000 (904)	41,485 (268,595)	5600	5200	1.5	0.006 (0.15)	0.130 (3.3)	6.57 (2.98)	28.3 (82.8)	7.45 (3.38)	6.36 (2.89)	33.6 (98.3)	25.8 (75.6)

- Peak torque is 1.5 times the continuous torque rating.
- The CD Couplings shown in the table above are capable of operating at higher degrees of shaft misalignment, depending upon application details and desired lifetime. Consult factory.
- Consult factory for speeds higher than those listed and balancing requirements, if necessary.
- Consult factory for higher torque and higher torsional stiffness couplings.
- * See Page 22 regarding selection of coupling and misalignment capability.

Single Flex Coupling With Set Screw Style Hub

Aluminum





-Dimensional Information

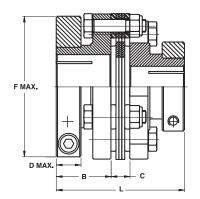
				Max Bore				
				Ea	Ga			Х
				A Hub	A Hub			
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6A18A	1.85 (47.0)	0.625 (15.9)	0.276 (7.0)	0.625 (16)	1.13 (28.6)	0.79 (20.1)	1.53 (38.8)	0.0 (0)
6A22A	2.25	0.94	0.31	0.625	1.22	0.91	2.18	0.51
	(57.2)	(23.8)	(7.8)	(16)	(31)	(23.1)	(55.4)	(13)
6A26A	2.59	1.06	0.31	0.750	1.50	1.00	2.43	0.39
	(66)	(27.0)	(7.8)	(19)	(38.2)	(25.4)	(61.7)	(9.9)
6A30A	3.00	1.25	0.46	1.000	1.71	1.21	2.96	0.39
	(76.2)	(31.8)	(11.7)	(25)	(43)	(31)	(75)	(9.9)
6A37A	3.75	1.44	0.52	1.250	2.19	1.51	3.40	0.68
	(95.3)	(36.5)	(13.3)	(32)	(56)	(38)	(86)	(17.3)
6A45A	4.50	1.69	0.58	1.625	2.69	1.81	3.96	0.91
	(114)	(42.9)	(14.8)	(42)	(68)	(46)	(101)	(23.1)
6A52A	5.25	1.94	0.65	1.875	3.31	2.10	4.52	0.73
	(133)	(49.2)	(16.4)	(48)	(84)	(54)	(115)	(18.5)
6A60A	6.00	2.44	0.77	2.250	3.67	2.42	5.64	0.69
	(152)	(61.9)	(19.5)	(60)	(93)	(61)	(143)	(17.5)

• "X" dimension is the minimum bolt travel required beyond the hub to disassemble the disc pack from the hubs.

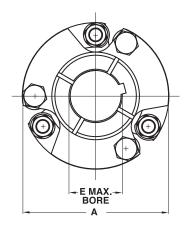
Single Flex Coupling With Clamp Style Hub



Clamp style is available with or without keyway.





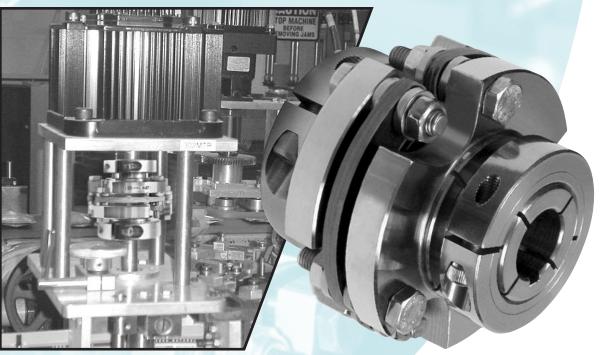


-Dimensional Information

					Max Bore E			
					1	E		L
					w kwy	w/o kwy		
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6A18-AC	1.85	0.81	0.28	0.472	0.63	0.813	1.88	1.88
	(47.0)	(20.6)	(7.1)	(12)	(16)	(21)	(47.8)	(47.8)
6A22-AC	2.25	1.00	0.31	0.551	0.75	0.938	2.22	2.31
	(57.2)	(25.4)	(7.9)	(14)	(20)	(25)	(56.4)	(58.7)
6A26-AC	2.60	1.06	0.31	0.551	0.93	1.188	2.41	2.43
	(66.0)	(26.9)	(7.9)	(14)	(24)	(30)	(61.2)	(61.7)
6A30-AC	3.00	1.25	0.46	0.709	1.12	1.37	2.96	2.96
	(76.2)	(31.8)	(11.7)	(18)	(28)	(35)	(75.2)	(75.2)
6A37-AC	3.75	1.44	0.52	0.748	1.50	1.87	3.79	3.40
	(95.3)	(36.6)	(13.2)	(19)	(38)	(48)	(96.4)	(86.4)
6A45-AC	4.50	1.69	0.58	0.866	1.75	2.125	4.40	3.96
	(114.3)	(42.9)	(14.7)	(22)	(45)	(54)	(113)	(100.6)
6A52-AC	5.25	1.94	0.65	0.984	2.12	2.62	5.11	4.52
	(133.4)	(49.3)	(16.5)	(25)	(55)	(65)	(129.8)	(114.8)
6A60-AC	6.00	2.44	0.77	1.339	2.50	3.00	6.00	5.64
	(152.4)	(62.0)	(19.6)	(34)	(65)	(75)	(152.4)	(143.3)

Performance Note: The torque capacity of keyless clamped hubs is governed by many factors, including shaft hub bore diameter, clamp size, and other installation variables. Keyless coupling hubs with bore sizes less than approximately one-half the maximum bore listed may not transmit the torque rating of the disc pack. Consult factory if your application is of high torque/small shaft variety.

GD Couplings Single Flex - Stainless Steel



The single flex stainless steel coupling is an excellent choice for zero backlash applications where washdown or clean room conditions are required. All material is of 300 Series stainless steel. The composite disc material is not subjected to chemical breakdown in washdown applications.

Single Flex -Performance Information

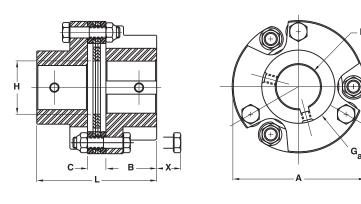
				Maximu	Maximum Speed *Misalignments			ts	A F	lub	ВН	lub	Clamped Hub			
	Max.	Continuous	Torsional	A & B	Clamp	Angular	Parallel	Axial	Unit Weight	Unit Inertia	Unit Weight	Unit Inertia	Unit V	Veight	Unit I	nertia
	HP/100 RPM	Rated Torque	Stiffness	Hub	Style Hub				at Max Bore	at Max Bore	at Max Bore	at Max Bore	at Max Bore	at 1/2 Max Bore	at Max Bore	at 1/2 Max Bore
		in-lbs (Nm)	in-lbs/Deg. (Nm./Rad)	(RPM)	(RPM)	Degrees	Inch (mm)	Inch (mm)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	Lb. (kg.)	lb-in ² (Kg-cm ²)	lb-in ² (Kg-cm ²)
6A30-SS	1.27	800 (90)	6,638 (42,976)	9000	8000	1.25	0.003 (0.08)	0.050 (1.3)	2.0 (0.9)	1.9 (5.5)	2.5 (1.1)	2.8 (8.3)	2.88 (1.31)	2.03 (0.92)	3.11 (9.11)	1.69 (4.95)
6A37-SS	2.54	1,600 (181)	10,374 (67,167)	7400	6700	1.5	0.004 (0.10)	0.070 (1.8)	3.6 (1.6)	5.6 (16.3)	4.2 (1.9)	7.9 (23.0)	6.04 (2.74)	4.36 (1.98)	9.62 (28.13)	6.20 (18.14)
6A45-SS	3.97	2,500 (282)	19,138 (123,909)	6100	5600	1.5	0.004 (0.10)	0.090 (2.3)	6.4 (2.9)	14.6 (42.7)	7.2 (3.3)	20.0 (58.5)	7.65 (3.47)	7.31 (3.31)	18.0 (52.6)	14.4 (42.2)
6A52-SS	5.65	3,560 (402)	26,049 (168,656)	5200	4800	1.5	0.005 (0.13)	0.110 (2.8)	10.5 (4.8)	32.4 (94.8)	11.4 (5.2)	43.2 (126)	11.93 (5.41)	9.89 (4.49)	38.9 (113.8)	27.3 (79.7)

- Peak torque is 1.5 times the continuous torque rating.
- Consult factory for speeds higher than those listed and balancing requirements, if necessary.
- Consult factory for higher torque and higher torsional stiffness couplings.
- * See Page 22 regarding selection of coupling and misalignment capability.

For other size stainless steel couplings not shown, please use the application and dimensional data for the Single Flex CD® Coupling (shown on pages 6 and 7). Then consult Zero-Max.

Single Flex Coupling With Set Screw Style Hub

Stainless Steel





-Dimensional Information

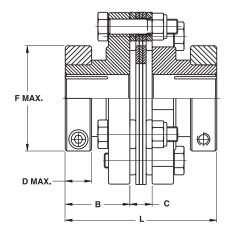
	A Inch (mm)	B Inch (mm)	C Inch (mm)	Max Bore Ea A Hub Inch (mm)	Ga A Hub Inch (mm)	H Inch (mm)	L Inch (mm)	X Inch (mm)
6A30-SS	3.00	1.25	0.46	1.000	1.71	1.21	2.96	0.39
	(76.2)	(31.8)	(11.7)	(25)	(43)	(31)	(75)	(9.9)
6A37-SS	3.75	1.44	0.52	1.250	2.19	1.51	3.40	0.68
	(95.3)	(36.5)	(13.3)	(32)	(56)	(38)	(86)	(17.3)
6A45-SS	4.50	1.69	0.58	1.625	2.69	1.81	3.96	0.91
	(114)	(42.9)	(14.8)	(42)	(68)	(46)	(101)	(23.1)
6A52-SS	5.25	1.94	0.65	1.875	3.31	2.10	4.52	0.73
	(133)	(49.2)	(16.4)	(48)	(84)	(54)	(115)	(18.5)

• "X" dimension is the minimum bolt travel required beyond the hub to disassemble the disc pack from the hubs.

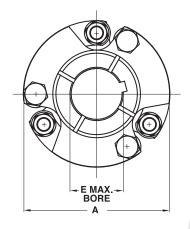
Single Flex Coupling With Clamp Style Hub



Clamp style is available with or without keyway.







-Dimensional Information

					Max	Bore		
					ا	E		
					w kwy	w/o kwy		
	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)
6A30C-SS	3.00 (76.2)	1.25 (31.8)	0.46 (11.7)	0.69 (17.5)	1.12 (28)	1.37 (35)	2.63 (66.8)	2.96 (75.2)
6A37C-SS	3.75 (95.3)	1.44 (36.6)	0.52 (13.2)	0.75 (19.1)	1.50 (38)	1.87 (48)	3.25 (82.6)	3.40 (86.4)
6A45C-SS	4.50 (114.3)	1.69 (42.9)	0.58 (14.7)	0.75 (19.1)	1.62 (42)	2.00 (50)	3.50 (88.9)	3.96 (100.6)
6A52C-SS	5.25 (133.4)	1.94 (49.3)	0.65 (16.5)	0.88 (22.4)	2.12 (55)	2.62 (65)	4.25 (108.0)	4.52 (114.8)

Performance Note: The torque capacity of keyless clamped hubs is governed by many factors, including shaft hub bore diameter, clamp size, and other installation variables. Keyless coupling hubs with bore sizes less than approximately one-half the maximum bore listed may not transmit the torque rating of the disc pack. Consult factory if your application is of high torque/small shaft variety.

GD Couplings Double Flex - Steel



The double flex coupling is ideal for applications where shafts are double-bearing supported or where additional parallel misalignment is present in the system. The coupling's large misalignment capability makes installation simple and lends itself to a wide variety of applications.

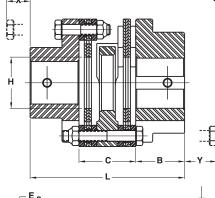
Double Flex -Performance Information

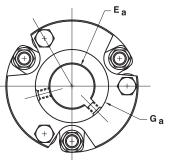
				Maxim	um Speed	*N	lisalignmer	nts	A F	lub	B F	lub		Clamp	ed Hub	
	Max. HP/100 RPM	Continuous Rated Torque	Torsional Stiffness	A & B Hub	Clamp Style Hub	Angular	Parallel	Axial	Unit Weight at Max Bore	Unit Inertia at Max Bore	Unit Weight at Max Bore	Unit Inertia at Max Bore	Unit at Max Bore	Weight at 1/2 Max Bore	Unit I at Max Bore	Inertia at 1/2 Max Bore
		in-lbs (Nm)	in-lbs/Deg. (Nm./Rad)	(RPM)	(RPM)	Degrees	Inch (mm)	Inch (mm)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	Lb. (kg.)	lb-in ² (Kg-cm ²)	lb-in ² (Kg-cm ²)
6P18	0.29	180 (20)	850 (5,500)	14000	12000	3	0.022 (0.56)	0.060 (1.5)	0.47 (0.21)	0.19 (0.56)			1.02 (0.46)	0.86 (0.39)	0.49 (1.43)	0.31 (0.90)
6P22	0.43	270 (30)	1,310 (8,482)	12000	11000	3	0.026 (0.66)	0.072 (1.8)	1.10 (0.50)	0.66 (1.94)	1.18 (0.54)	0.82 (2.41)	1.45 (0.66)	1.66 (0.75)	0.90 (2.62)	0.71 (2.07)
6P26	0.75	475 (53)	1,500 (9,712)	10500	9500	3	0.030 (0.76)	0.086 (2.2)	1.66 (0.75)	1.19 (3.47)	1.66 (0.75)	1.46 (4.28)	2.10 (0.95)	1.83 (0.83)	1.72 (5.03)	1.23 (3.59)
6P30	1.27	800 (90)	3,231 (20,923)	9000	8000	3	0.039 (1.0)	0.100 (2.5)	2.5 (1.1)	2.5 (7.3)	3.0 (1.3)	3.5 (10.2)	3.37 (1.53)	2.52 (1.14)	3.74 (10.95)	2.32 (6.79)
6P37	2.54	1,600 (181)	5,051 (32,700)	7400	6700	3	0.049 (1.2)	0.140 (3.6)	4.5 (2.1)	7.5 (21.8)	5.1 (2.3)	9.8 (28.6)	6.29 (2.85)	5.30 (2.41)	11.52 (33.68)	8.10 (23.69)
6P45	3.97	2,500 (282)	9,317 (60,324)	6100	5600	3	0.052 (1.3)	0.180 (4.6)	7.9 (3.6)	19.1 (55.9)	8.7 (4.0)	24.5 (71.7)	9.15 (4.15)	8.8 (4.0)	22.5 (65.7)	18.9 (55.3)
6P52	5.65	3,560 (402)	12,682 (82,109)	5100	4800	3	0.062 (1.6)	0.220 (5.6)	12.8 (5.8)	41.6 (122)	13.7 (6.2)	52.5 (154)	14.1 (6.4)	12.1 (5.5)	48.2 (140.9)	36.5 (106.8)
6P60	10.08	6,350 (718)	20,196 (130,763)	4600	4400	3	0.069 (1.8)	0.260 (6.6)	18.4 (8.4)	79.3 (232)	21.5 (9.8)	109 (319)	21.1 (9.6)	17.9 (8.1)	93.5 (273.6)	71.0 (207.5)
6P67	16.34	10,300 (1,164)	30,159 (195,265)	4300	4100	3	0.076 (1.9)	0.300 (7.6)	26.2 (11.9)	141 (413)	30.7 (14.0)	193 (565)	30.8 (14.0)	22.9 (10.4)	174 (508)	115 (336)
6P77	24.75	15,600 (1,763)	45,815 (296,634)	3300		3	0.089 (2.3)	0.320 (8.1)	38.5 (17.5)	273 (799)	45.8 (20.8)	381 (1115)				
6P90	39.67	25,000 (2,825)	78,213 (506,395)	2800		3	0.101 (2.6)	0.360 (9.1)	61.4 (27.9)	596 (1744)	74.1 (33.7)	857 (2508)				
6P105	55.37	34,900 (3,944)	118,889 (769,756)	2500		3	0.126 (3.2)	0.420 (10.7)	101 (45.9)	1362 (3986)	118 (53.6)	1888 (5525)				
6P120	74.89	47,200 (5,333)	159,730 (1,034,187)	2100		3	0.137 (3.5)	0.500 (12.7)	150 (68.2)	2600 (7609)	167 (76.0)	3646 (10,670)				

- Peak torque is 2.0 times the continuous torque rating.
- Consult factory for speeds higher than those listed and balancing requirements, if necessary.
- Consult factory for higher torque and higher torsional stiffness couplings.
- * See Page 22 regarding selection of coupling and misalignment capability.

Double Flex Coupling Set Screw Style Hub

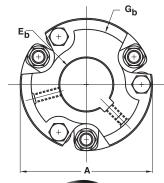
Steel





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-Dimensional Information

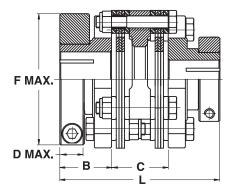
				Max	Bore						
						Ga	Gb				
				A Hub	B Hub	A Hub	B Hub				
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6P18	1.85 (47.0)	0.625 (15.9)	0.803 (20.4)	0.625 (16)		1.125 (28.6)		0.790 (20.1)	2.05 (52.1)		0.48 (12.2)
6P22	2.25	0.938	0.956	0.625	1.000	1.219	1.88	0.907	2.83	0.51	0.64
	(57.2)	(23.8)	(24.3)	(16)	(26)	(31)	(47.6)	(23.8)	(71.9)	(13)	(16.3)
6P26	2.59	1.06	1.03	0.750	1.250	1.502	2.16	1.00	3.16	0.39	0.47
	(65.9)	(27)	(26.3)	(19)	(32)	(38.2)	(54.8)	(25.4)	(80.2)	(9.9)	(12)
6P30	3.00	1.25	1.42	1.000	1.375	1.71	2.50	1.21	3.92	0.39	0.68
	(76.2)	(31.8)	(36.1)	(25)	(35)	(43)	(64)	(31)	(100)	(9.9)	(17.3)
6P37	3.75	1.44	1.67	1.250	1.813	2.19	3.13	1.51	4.55	0.68	0.95
	(95.3)	(36.5)	(42.4)	(32)	(46)	(56)	(79)	(38)	(115)	(17.3)	(24.1)
6P45	4.50	1.69	1.85	1.625	2.250	2.69	3.75	1.81	5.23	0.91	1.35
	(114)	(42.9)	(47.0)	(42)	(60)	(68)	(95)	(46)	(133)	(23.1)	(34.3)
6P52	5.25	1.94	2.11	1.875	2.625	3.31	4.38	2.10	5.98	0.73	1.10
	(133)	(49.2)	(53.5)	(48)	(66)	(84)	(111)	(54)	(152)	(18.5)	(27.9)
6P60	6.00	2.44	2.41	2.250	3.000	3.67	5.00	2.42	7.29	0.69	1.42
	(152)	(61.9)	(61.2)	(60)	(76)	(93)	(127)	(61)	(185)	(17.5)	(36.1)
6P67	6.75	2.75	2.70	2.625	3.375	4.29	5.63	2.72	8.20	0.41	1.11
	(171)	(69.9)	(68.7)	(66)	(85)	(108)	(143)	(69)	(208)	(10.4)	(28.2)
6P77	7.75	3.13	3.15	2.875	3.875	4.61	6.46	3.13	9.40	0.89	1.40
	(197)	(79.4)	(80.1)	(75)	(100)	(117)	(164)	(79)	(239)	(22.6)	(35.6)
6P90	9.00	3.75	3.58	3.000	4.500	5.38	7.50	3.62	11.08	1.39	1.47
	(229)	(95.3)	(91.0)	(76)	(115)	(137)	(190)	(92)	(281)	(35.3)	(37.3)
6P105	10.50	4.25	4.42	3.750	5.125	6.11	8.75	4.23	12.92	1.92	2.64
	(267)	(108)	(112)	(95)	(130)	(155)	(222)	(107)	(328)	(48.8)	(67.1)
6P120	12.00	4.75	4.82	4.250	6.000	7.34	10.00	4.83	14.32	1.48	2.14
	(305)	(121)	(123)	(110)	(152)	(186)	(254)	(123)	(364)	(37.6)	(54.4)

• "X" dimension is the minimum bolt travel required beyond the hub to disassemble the disc pack and intermediate member from the hubs.

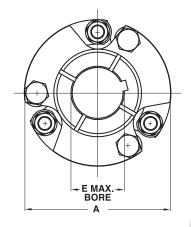
Double Flex Coupling With Clamp Style Hub



(Double flex coupling shown with clamp style hub. It is available with or without keyway.)







-Dimensional Information

I						Max Bore E			
1							E	F	
1						w kwy	w/o kwy		
١		Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)
	6P18C	1.85 (47.0)	0.81 (20.6)	0.80 (20.3)	0.472 (12)	0.63 (16)	0.813 (21)	1.88 (47.8)	2.42 (61.5)
	6P22C	2.25 (57.2)	1.00 (25.4)	0.96 (24.4)	0.551 (14)	0.75 (20)	0.938 (25)	2.22 (56.4)	2.96 (75.2)
	6P26C	2.60 (66.0)	1.06 (26.9)	1.04 (26.4)	0.551 (14)	0.93 (24)	1.188 (30)	2.41 (61.2)	3.16 (80.3)
	6P30C	3.00 (76.2)	1.25 (31.8)	1.42 (36.1)	0.709 (18)	1.12 (28)	1.37 (35)	2.96 (75.2)	3.92 (99.6)
	6P37C	3.75 (95.3)	1.44 (36.6)	1.67 (42.4)	0.748 (19)	1.50 (38)	1.87 (48)	3.79 (96.4)	4.55 (115.6)
	6P45C	4.50 (114.3)	1.69 (42.9)	1.85 (47.0)	0.866 (22)	1.75 (45)	2.125 (54)	4.40 (113)	5.23 (132.8)
	6P52C	5.25 (133.4)	1.94 (49.3)	2.11 (53.6)	0.984 (25)	2.12 (55)	2.62 (65)	5.11 (129.8)	5.98 (151.9)
	6P60C	6.00 (152.4)	2.44 (62.0)	2.41 (61.2)	1.339 (34)	2.50 (65)	3.00 (75)	6.00 (152.4)	7.29 (185.2)
	6P67C	6.75 (171.5)	2.75 (69.9)	2.70 (68.6)	1.339 (34)	2.875 (75)	3.50 (90)	6.65 (169)	8.20 (208.3)

Performance Note: The torque capacity of keyless clamped hubs is governed by many factors, including shaft hub bore diameter, clamp size, and other installation variables. Keyless coupling hubs with bore sizes less than approximately one-half the maximum bore listed may not transmit the torque rating of the disc pack. Consult factory if your application is of high torque/small shaft variety.

CD[®]**Couplings** Double Flex - Aluminum



The double flex coupling is ideal for applications where shafts are double-bearing supported or where additional parallel misalignment is present in the system. The coupling's large misalignment capability makes installation simple and lends itself to a wide variety of applications.

Double Flex -Performance Information

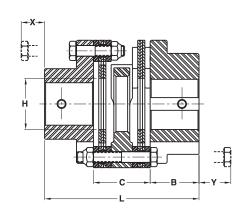
				Maxim	um Speed	*N	lisalignmer	nts	A F	lub	Clamped Hub			
	Max. HP/100 RPM	Continuous Rated Torque	Torsional Stiffness	A Hub	Clamp Style Hub	Angular	Parallel	Axial	Unit Weight at Max Bore	Unit Inertia at Max Bore	Unit ' at Max Bore	Weight at 1/2 Max Bore	Unit at Max Bore	Inertia at 1/2 Max Bore
		in-lbs (Nm)	in-lbs/Deg. (Nm./Rad)	(RPM)	(RPM)	Degrees	Inch (mm)	Inch (mm)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Lb. (kg.)	Lb. (kg.)	lb-in ² (Kg-cm ²)	Ib-in ² (Kg-cm ²)
6P18A	0.29	180 (20)	850 (5,500)	17000	15000	3	0.022 (0.56)	0.060 (1.5)	0.28 (0.13)	0.13 (0.38)	0.45 (0.20)	0.40 (0.18)	0.22 (0.64)	0.15 (0.45)
6P22A	0.43	270 (30)	1,310 (8,482)	15000	11000	3	0.026 (0.66)	0.072 (1.8)	0.62 (0.28)	0.43 (1.25)	0.74 (0.34)	0.68 (0.31)	0.52 (1.51)	0.45 (1.32)
6P26A	0.75	475 (53)	1,500 (9,712)	10500	9500	3	0.030 (0.76)	0.086 (2.2)	0.85 (0.39)	0.68 (1.99)	1.01 (0.46)	0.92 (0.42)	0.87 (2.54)	0.70 (2.04)
6P30A	1.27	800 (90)	3,231 (20,923)	11000	8000	3	0.039 (1.0)	0.100 (2.5)	1.34 (0.61)	1.52 (4.43)	1.68 (0.76)	1.39 (0.63)	1.99 (5.81)	1.50 (4.38)
6P37A	2.54	1,600 (181)	5,051 (32,700)	7400	6700	3	0.049 (1.2)	0.140 (3.6)	2.66 (1.21)	4.81 (14.07)	3.38 (1.53)	2.80 (1.27)	6.05 (17.68)	4.87 (14.24)
6P45A	3.97	2,500 (282)	9,317 (60,324)	7200	5600	3	0.052 (1.3)	0.180 (4.6)	4.38 (1.99)	11.6 (33.8)	4.78 (2.17)	4.66 (2.12)	12.8 (37.4)	11.5 (33.8)
6P52A	5.65	3,560 (402)	12,682 (82,109)	5100	4800	3	0.062 (1.6)	0.220 (5.6)	6.58 (2.98)	23.6 (68.9)	7.12 (3.23)	6.41 (2.91)	26.4 (77.2)	22.4 (65.4)
6P60A	10.08	6,350 (718)	20,196 (130,763)	4600	4400	3	0.069 (1.8)	0.260 (6.6)	9.67 (4.38)	46.3 (135)	10.5 (4.8)	9.5 (4.3)	51.6 (150.9)	43.8 (128.1)

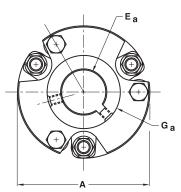
- Peak torque is 2.0 times the continuous torque rating.
- Consult factory for speeds higher than those listed and balancing requirements, if necessary.
- Consult factory for higher torque and higher torsional stiffness couplings.
- * See Page 22 regarding selection of coupling and misalignment capability.

Aluminum

3 63 23 31 MTY (81) 83 54 10 18 1 95 72 60 ventas@industrialmagza.com

ISTRIAL **MACZAL** MEX (55) 53 63 23 31







-Dimensional Information

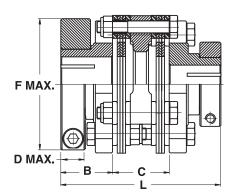
				Max Bore					
				Ea	Ga				Υ
				A Hub	A Hub				
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6P18A	1.85 (47.0)	0.625 (15.9)	0.803 (20.4)	0.625 (16)	1.125 (28.6)	0.790 (20.1)	2.05 (52.1)		0.48 (12.2)
6P22A	2.25	0.938	0.956	0.625	1.219	0.907	2.83	0.51	0.64
	(57.2)	(23.8)	(24.3)	(16)	(31)	(23.8)	(71.9)	(13)	(16.3)
6P26A	2.59	1.06	1.03	0.750	1.502	1.00	3.16	0.39	0.47
	(65.9)	(27)	(26.3)	(19)	(38.2)	(25.4)	(80.2)	(9.9)	(12)
6P30A	3.00	1.25	1.42	1.000	1.71	1.21	3.92	0.39	0.68
	(76.2)	(31.8)	(36.1)	(25)	(43)	(31)	(100)	(9.9)	(17.3)
6P37A	3.75	1.44	1.67	1.250	2.19	1.51	4.55	0.68	0.95
	(95.3)	(36.5)	(42.4)	(32)	(56)	(38)	(115)	(17.3)	(24.1)
6P45A	4.50	1.69	1.85	1.625	2.69	1.81	5.23	0.91	1.35
	(114)	(42.9)	(47.0)	(42)	(68)	(46)	(133)	(23.1)	(34.3)
6P52A	5.25	1.94	2.11	1.875	3.31	2.10	5.98	0.73	1.10
	(133)	(49.2)	(53.5)	(48)	(84)	(54)	(152)	(18.5)	(27.9)
6P60A	6.00	2.44	2.41	2.250	3.67	2.42	7.29	0.69	1.42
	(152)	(61.9)	(61.2)	(60)	(93)	(61)	(185)	(17.5)	(36.1)

• "X" dimension is the minimum bolt travel required beyond the hub to disassemble the disc pack and intermediate member from the hubs.

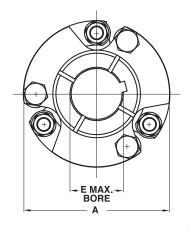
Double Flex Coupling With Clamp Style Hub



(Double flex coupling shown with clamp style hub. It is available with or without keyway.)





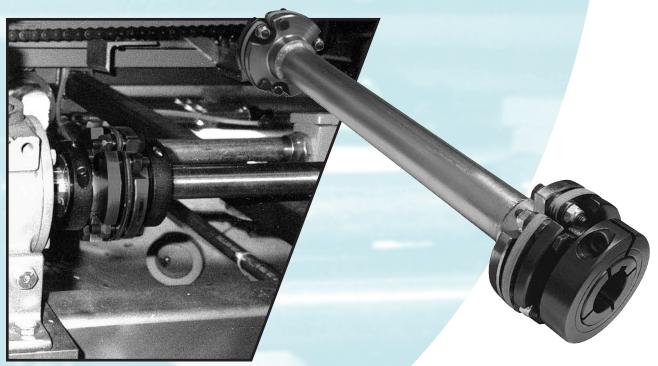


-Dimensional Information

					Max Bore			
						E		L
					w kwy	w/o kwy		
	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
6P18-AC	1.85	0.81	0.80	0.472	0.63	0.813	1.88	2.42
	(47.0)	(20.6)	(20.3)	(12)	(16)	(21)	(47.8)	(61.5)
6P22-AC	2.25	1.00	0.96	0.551	0.75	0.938	2.22	2.96
	(57.2)	(25.4)	(24.4)	(14)	(20)	(25)	(56.4)	(75.2)
6P26-AC	2.60	1.06	1.04	0.551	0.93	1.188	2.41	3.16
	(66.0)	(26.9)	(26.4)	(14)	(24)	(30)	(61.2)	(80.3)
6P30-AC	3.00	1.25	1.42	0.709	1.12	1.37	2.96	3.92
	(76.2)	(31.8)	(36.1)	(18)	(28)	(35)	(75.2)	(99.6)
6P37-AC	3.75	1.44	1.67	0.748	1.50	1.87	3.79	4.55
	(95.3)	(36.6)	(42.4)	(19)	(38)	(48)	(96.4)	(115.6)
6P45-AC	4.50	1.69	1.85	0.866	1.75	2.125	4.40	5.23
	(114.3)	(42.9)	(47.0)	(22)	(45)	(50)	(113)	(132.8)
6P52-AC	5.25	1.94	2.11	0.984	2.12	2.62	5.11	5.98
	(133.4)	(49.3)	(53.6)	(25)	(55)	(65)	(129.8)	(151.9)
6P60-AC	6.00	2.44	2.41	1.339	2.50	3.00	6.00	7.29
	(152.4)	(62.0)	(61.2)	(34)	(65)	(75)	(152.4)	(185.2)

Performance Note: The torque capacity of keyless clamped hubs is governed by many factors, including shaft hub bore diameter, clamp size, and other installation variables. Keyless coupling hubs with bore sizes less than approximately one-half the maximum bore listed may not transmit the torque rating of the disc pack. Consult factory if your application is of high torque/small shaft variety.

CD[®]Couplings Floating Shaft



The composite Disc Floating Shaft Coupling is zero backlash and torsionally stiff, yet provides superior dampening and misalignment capacity. Additionally, the patented Composite Disc provides excellent support for the floating shaft component without imposing excessive radial loads on the connected equipment and bearings. Precision coupling hardware and machining provide good dynamic balance.

Floating Shaft -Performance Information

				Torsional Stiffness				Maxim	um Misalign	ments	A I	lub			B Hub		Clamped Hub	
	Max. HP / 100 RPM	Continuous Rated Torque	Base (Note 1) at 12"" DBSE (at 300mm DBSE)"	Factor Z	Factor Y	Factor Z1	Factor Y1	Angular (Note 2)	Parallel	Axial	Base Unit Wt. at 12" DBSE (Note 3) at 300mm DBSE)	Base Unit Inertia at 12" DBSE (Note 3) at 300mm DBSE)	Weight adder per inch of DBSE (per meter of DBSE)	Inertia adder inch of DBSE (per meter of DBSE)	Additional Weight for (each)	Additional Inertia for (each)	Additional Weight for (each) maximum	Additional Inertia for (each) maximum
		inIbs. (Nm)	in. lbs./ deg. (Nm/ Radian)	inlbs./deg.	inIbs./deg.	(Nm/ Radian)	(Nm/ Radian)	Degrees	Inch/inch of DBSE (mm/Meter of DBSE)	Inch (mm)	Lb. (kg.)	Lb-in ² (Kg Cm ² / meter)	Lb./inch (kg./ meter)	LbIn ² (Kg-Cm ²)	Lb. (kg.)	LbIn ² (Kg-Cm ²)	Lb. (kg.)	LbIn ² (Kg-Cm ²)
6F22	0.43	400 (45)	516 (3,379)	0.052	0.842	(0.338)	(138)	2.5	0.022 (22)	0.060 (1.5)	2.00 (0.9)	0.86 (2.5)	0.054 (0.97)	0.012 (1.37)	0.04 (0.0)	0.09 (0.2)	0.25 (0.1)	0.15 (0.4)
6F26	0.75	575 (65)	857 (5,589)	0.086	2.09	(0.559)	(344)	2.5	0.022 (22)	0.080 (2.0)	3.29 (1.5)	1.90 (5.6)	0.086 (1.54)	0.029 (3.40)	0.00 (0.0)	0.14 (0.4)	0.37 (0.2)	0.33 (1.0)
6F30	1.27	1,100 (124)	1,246 (8,157)	0.125	2.09	(0.816)	(344)	2.5	0.022 (22)	0.100 (2.5)	4.19 (1.9)	3.44 (10.1)	0.086 (1.54)	0.029 (3.40)	0.25 (0.1)	0.48 (1.4)	0.65 (0.3)	0.77 (2.3)
6F37	2.54	2,100 (237)	3,754 (24,439)	0.375	13.05	(2.444)	(2,146)	3	0.026 (26)	0.14 (3.6)	8.30 (3.8)	11.8 (34.5)	0.208 (3.73)	0.184 (21.2)	0.30 (0.1)	1.2 (3.4)	1.01 (0.5)	1.90 (5.6)
6F45	3.97	3,300 (373)	7,215 (46,963)	0.722	25.57	(4.696)	(4,205)	3	0.026 (26)	0.18 (4.6)	13.2 (6.0)	28.2 (82.4)	0.254 (4.54)	0.360 (41.6)	0.42 (0.2)	2.7 (7.9)	1.01 (0.5)	4.33 (12.7)
6F52	5.65	4,500 (508)	9,921 (64,571)	0.992	35.72	(6.457)	(5,874)	3	0.026 (26)	0.22 (5.6)	20.9 (9.5)	61.1 (179)	0.292 (5.22)	0.504 (58.2)	0.45 (0.2)	5.4 (15.8)	1.88 (0.9)	7.26 (21.2)
6F60	10.08	8,000 (904)	15,749 (102,533)	1.575	53.30	(10.253)	(8,765)	3	0.026 (26)	0.26 (6.6)	28.2 (12.8)	109 (320)	0.333 (5.97)	0.751 (86.8)	1.5 (0.07)	14.6 (42.8)	2.01 (0.9)	8.73 (25.5)
6F67	16.34	12,500 (1,412)	24,219 (157,561)	2.422	93.98	(15.756)	(15,454)	3	0.026 (26)	0.30 (7.6)	39.7 (18.0)	201 (587)	0.403 (7.21)	1.325 (153.0)	2.3 (1.0)	25.8 (75.5)	2.25 (1.0)	12.25 (35.8)

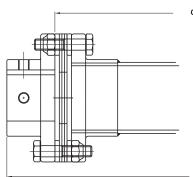
Note: 1) For torsional stiffness (K, in.-lb./deg.) of units longer than 12", use the following formula, where L=(DBSE-12): $K = ((ZxY) / ((LxZ) + Y)) \times 10^4$. For torsional stiffness (K, Nm/Radian) of units longer than 300mm, use the following formula, where L=(DBSE-300): $K = ((Z1 \times Y1) / ((L \times Z1) + Y1)) \times 10^4$.

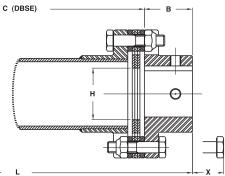
Note: 2) See page 22 regarding selection of coupling and misalignment capability.

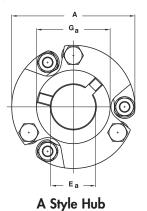
Note: 3) For weight and inertia of units longer than 12", subtract 12" from the DBSE (dimension C) and multiply by weight/inertia adders listed above.

• Peak torque is two times the continuous torque rating.

See the following page for maximum C Length and RPM data







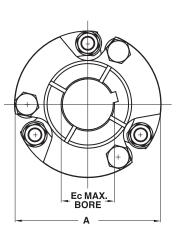
A G b

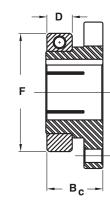
B Style Hub











Clamp Style Hub



Floating Shaft -Dimensional Information

							Max	Bore						
		B A & B Hub	Bc C Hub	D Max. C Hub	F Max. C Hub	Ea A Hub	Eb B Hub	Ec C Hub w kwy	Ec C Hub w/o kwy	Ga A Hub	Gb B Hub			C min. (DBSE)
		Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)	Inch (mm)
6F22	2.25	0.94	1.00	0.551	2.22	0.625	1.000	0.75	0.938	1.22	1.88	0.91	0.51	3.00
	(57.2)	(23.8)	(25.4)	(14)	(56.4)	(16)	(26)	(20)	(25)	(31.0)	(47.6)	(23.1)	(13.0)	(76.2)
6F26	2.59	1.06	1.06	0.551	2.41	0.750	1.250	0.938	1.188	1.50	2.16	1.00	0.39	3.00
	(65.8)	(27.0)	(27.0)	(14)	(61.2)	(19)	(32)	(24)	(30)	(38.1)	(54.8)	(25.4)	(9.9)	(76.2)
6F30	3.00	1.25	1.25	0.709	2.96	1.000	1.375	1.125	1.375	1.71	2.50	1.21	0.39	3.68
	(76.2)	(31.8)	(31.8)	(18)	(75.2)	(25)	(35)	(28)	(35)	(43.4)	(63.5)	(30.7)	(9.9)	(93.7)
6F37	3.75	1.44	1.44	0.748	3.79	1.250	1.813	1.500	1.875	2.19	3.13	1.51	0.68	4.5
	(95.3)	(36.5)	(36.5)	(19)	(96.4)	(32)	(46)	(38)	(48)	(55.6)	(79.4)	(38.4)	(17.3)	(114.3)
6F45	4.50	1.69	1.69	0.866	4.40	1.625	2.250	1.75	2.125	2.69	3.75	1.81	0.91	5.50
	(114.3)	(42.9)	(42.9)	(22)	(113)	(42)	(60)	(45)	(54)	(68.3)	(95.3)	(46.0)	(23.1)	(139.7)
6F52	5.25	1.94	1.94	0.984	5.11	1.875	2.625	2.125	2.625	3.31	4.38	2.10	0.73	6.5
	(133.4)	(49.2)	(49.2)	(25)	(129.8)	(48)	(66)	(55)	(65)	(84.1)	(111.1)	(53.3)	(18.5)	(165.1)
6F60	6.00	2.44	2.44	1.339	6.00	2.250	3.000	2.50	3.000	3.67	5.00	2.42	0.69	7.00
	(152.4)	(61.9)	(61.9)	(34)	(152.4)	(60)	(76)	(65)	(75)	(93.2)	(127.0)	(61.5)	(17.5)	(178)
6F67	6.75	2.75	2.75	1.339	6.65	2.625	3.375	2.875	3.50	4.29	5.63	2.72	0.41	8.00
	(171.5)	(69.9)	(69.9)	(34)	(169)	(66)	(85)	(75)	(90)	(109.0)	(142.9)	(69.1)	(10.4)	(203)

- Dimension L is equal to (2x B) + C (C is the DBSE or span)
- Dimension C is always manufactured to application requirements
- "X" dimension is minimum bolt travel required beyond the hub to disassemble disc packs from the hubs.

CD[®] Couplings Floating Shaft

Table below shows lengths and speeds at which standard floating shaft couplings can operate thereby avoiding natural frequencies. Couplings at or near table values may require dynamic balancing. See below for balancing information. Should your application fall outside these parameters, consult factory. Special construction of the disc pack or floating shaft can increase speeds and/or maximum lengths. Refer to coupling misalignment information below.

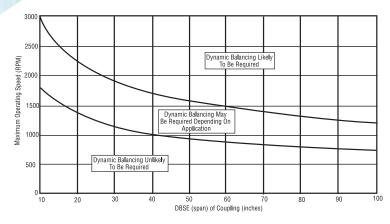
Floating Shaft -Maximum Span C

						_			_	_
	2250	2000	1750	1500	1250	1000	900	750	650	500
	RPM									
	Inch									
	(mm)									
6F22	46.9	49.8	53.2	57.5	63.0	70.4	74.2	81.3	87.4	99.6
	(1193)	(1265)	(1352)	(1461)	(1600)	(1789)	(1886)	(2066)	(2219)	(2530)
6F26	52.5	55.6	59.5	64.2	70.4	78.7	82.9	90.9	97.6	111.3
	(1332)	(1413)	(1511)	(1632)	(1787)	(1998)	(2107)	(2308)	(2479)	(2826)
6F30	52.5	55.6	59.5	64.2	70.4	78.7	82.9	90.9	97.6	111.3
	(1332)	(1413)	(1511)	(1632)	(1787)	(1998)	(2107)	(2308)	(2479)	(2826)
6F37	51.0	67.3	75.4	81.4	89.2	99.7	105.1	115.2	123.7	141.0
	(1295)	(1709)	(1915)	(2068)	(2266)	(2533)	(2670)	(2925)	(3142)	(3582)
6F45	59.5	79.2	84.9	91.7	100.5	112.4	118.4	129.7	139.4	158.9
	(1511)	(2012)	(2157)	(2330)	(2553)	(2854)	(3008)	(3295)	(3540)	(4036)
6F52	25.8	38.7	57.6	86.7	105.5	118.0	124.4	136.3	146.4	166.9
	(655)	(983)	(1463)	(2202)	(2681)	(2997)	(3159)	(3461)	(3718)	(4239)
6F60	33.2	49.0	71.8	103.0	112.8	126.1	133.0	145.7	156.5	178.4
	(843)	(1245)	(1824)	(2616)	(2866)	(3204)	(3377)	(3700)	(3974)	(4531)
6F67	32.5	49.3	73.9	111.8	124.0	138.7	146.2	160.1	172.0	196.1
	(826)	(1252)	(1877)	(2840)	(3150)	(3522)	(3713)	(4067)	(4369)	(4981)



Dynamic Balancing Guidelines for CD Floating Shaft Couplings

The close tolerances used to manufacture CD Couplings in conjunction with the composite disc pack, make CD Floating Shaft Couplings especially well suited to high speed and long span applications. Occasionally, the application may require dynamic balancing of the floating shaft coupling. See graph for general application guidelines.



Coupling Misalignment

In general, the misalignment capacity of CD Floating Shaft Couplings is related to the speed at which they operate and the mass of the floating shaft, which is governed by its diameter and length. The table to the right shows recommended maximum allowable angular misalignment:

By reducing the allowable misalignment (and therefore stresses in the discs) at higher operating speeds and longer DBSEs, the disc pack can better support and stabilize the floating shaft, which will result in longer coupling life, smoother operation, and less vibration to the connected equipment. Call us for application assistance.

DBSE (Distance "C")

	Up to 30"	30" - 60"	OVER 60"
To 500 RPM	3°	2.5°	2°
500-1000 RPM	2.5°	2°	1.5°
1000-1500 RPM	2°	1.5°	1°
Above 1500 RPM	1°	0.75°	0.50°

GD[®]**Couplings** Spacer and Floating Shaft Specials

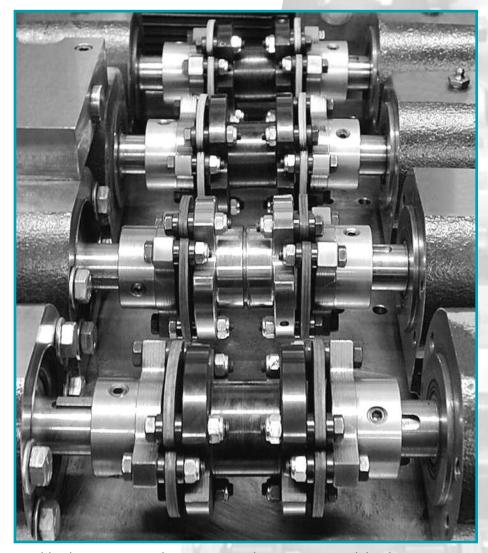
For long spans between motion components, special CD spacer or floating shaft couplings are the answer.

Any of the hub options (A, B and Clamp style) shown in this catalog are available.

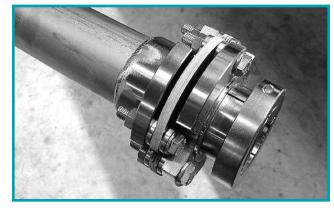
Special spacer materials are available including aluminum, steel, and stainless steel.

Special finishes to shaft and hub components are available including nickel plating, and others.

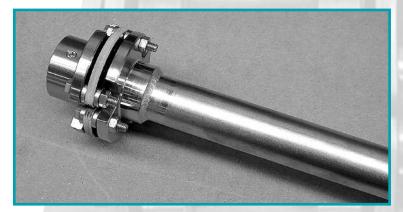
Call Zero-Max for recommendations.



Double Flex spacer couplings on test in the Zero-Max test lab. This system is designed to run continuously at high misalignment, subjecting the composite unitized disc packs to billions of flexural fatigue cycles.



Clamp style hub on CD spacer coupling provides backlash free shaft engagement.



Nickel plated CD floating shaft coupling provide corrosion protection in food and dairy applications where frequent washdowns are required.

GD[®]Couplings Specials



Custom designs for any application

No application is too large, too small, or too difficult for a CD coupling. Zero-Max has the ability to provide imaginative solutions for virtually every coupling need.

Design Engineering Assistance

Starting with Zero-Max engineering, your coupling needs receive careful analysis.
Recommendations are based on many years of coupling experience. Zero-Max creative engineering and complete CAD facilities provides you with the best coupling recommendation.



High Speed Couplings

This coupling uses low inertia design and hubs for exceptionally high speed servo applications.



Before and After Assembly

Blind Fit Couplings

Coupling is designed so assembly of two fixed shafts is possible without disassembly of the components.





QD Bushing Couplings*

Single flex coupling has machined hub to accept standard QD bushing.

^{*}See page 23 for separate catalog.



Stainless Steel CouplingsFor use in corrosive environments such as food, dairy or in clean room applications.



Nickel Plated CouplingsFor applications requiring frequent washdowns.



Twelve Bolt Couplings
Provides high torsional stiffness
and improved registry.



Phase Adjuster CouplingsSpecial double flex coupling has built-in phase adjuster for use in printing presses.



Torque Transducer Coupling
Special spacer coupling has
built-in torque transducer for
use on a test fixture. Device
is used for testing all-terrain
vehicle transmissions.



Splined Clamp Style Hubs

For high positive engagement. Eliminates the need for keyways, and reduces backlash on splined shaft applications.

Modified Discs For Increased Performance



Longer Arm Design Yields Greater Coupling Flexibility



Shorter Arm Design Yields Greater Coupling Rigidity

...and Everything in Between For Solutions Without Limits.

Whatever it takes, Zero-Max will get you there. Every CD custom coupling must first exceed our performance expectations before production and delivery to you, our customer. Zero-Max is committed to excellence and complete customer satisfaction.

Call today
to discuss
your custom
CD coupling needs
800-533-1731.

ventas@industrialmagza.com

Selecting The Right CD Coupling

Information Required

- Service factor.
- Continuous and peak torque requirements, and/or motor HP.
- · Coupling RPM.
- Distance between shaft ends. (DBSE).
- Misalignment requirements.
- Physical space limitations.
- Hub bores, with or without keyways.
- Other environmental considerations.

Selection Procedure

- 1. Select a coupling type (Single Flex, Double Flex, Spacer or Floating Shaft) based on misalignment and/or DBSE (Distance between shaft ends).
- 2. Determine the required service factor, please refer to the chart on the next page.

3. If continuous torque is known, then multiply it by the required service factor to get the design torque: Design Torque (in-lbs) = Continuous Torque (in-lbs) x Service Factor If continuous torque is not known, but Horsepower and RPM are, calculate the design torque by using this formula:

Design Torque (in-lbs) = $\frac{HP \times 63,000 \times Service\ Factor}{}$ Coupling RPM

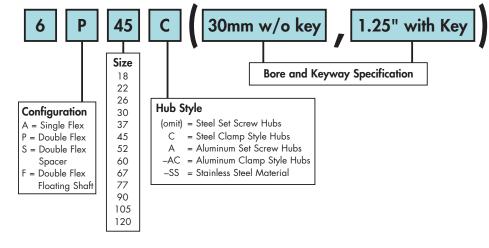
- 4. Select a coupling size that has a continuous torque rating greater than the Design Torque calculated in step 3. Make sure that the peak torque of the application does not exceed the peak torque rating of the coupling.
- 5. Check Coupling RPM to be sure it is within the rated maximum speed.
- 6. Make sure that the misalignment capability is sufficient. As with all couplings, there is a trade-off between the parallel, axial and angular misalignment capabilities. Be certain that the combined percentages of each do not exceed 100%. If you have a guestion on combined misalignments, consult the factory. It is always best to select a coupling with misalignment capabilities exceeding the initial operating conditions to allow for changing conditions over the operating life of the machine.
- 7. Check to be sure that the coupling fits the required dimensions such as available space envelope and bore sizes.
- 8. If the coupling size and type meet the torque, misalignment, space envelope criteria, the selection is complete.

Note: If the standard couplings listed in the catalog do not meet your requirements, please consult the factory. We will work with you to meet your needs.

How To Order

- Determine the complete model code and the bore sizes, see example.
- On the clamp style indicate if a keyway is needed. Note: If no callout is made the hub will have a keyway.
- Identify any options such as dynamic balancing, spacer or floating shaft length, special DBSE (distance between shaft ends), special materials such as stainless steel or nickel plating, special bore tolerances, nonstandard key sizes, etc.
- Please reference the charts on the next page regarding standard key sizes, bore tolerances, and application service factors.

Example 6P45C (30mm w/o key, 1.25" with key)



Service Factor Guide

	Driving Equipment								
Load	Motor or Turbine	Reciprocating Engine							
Uniform	1.0	1.5							
Light Shock	1.5	2.0							
Medium Stock	2.0	2.5							
Heavy Stock	2.5	3.0							

The service factors listed are intended only as a general guide. For typical service factors used in various applications, refer to "AGMA Standard-Lc classification and Service Factors For Flexible Couplings" (AGMA 514.02).

Standard Keyways

Inch Bore Hubs

Bore	Size	Kovavov	Bore	Keyway	
Over		Keyway	Over		neyway
0.437	0.562	0.125 x 0.062	2.250	2.750	0.625 x 0.312
0.562	0.875	0.187 x 0.094	2.750	3.250	0.750 x 0.375
0.875	1.250	0.250 x 0.125	3.250	3.750	0.875 x 0.437
1.250	1.375	0.312 x 0.156	3.750	4.500	1.000 x 0.500
1.375	1.750	0.375 x 0.187	4.500	5.500	1.250 x 0.625
1.750	2.250	0.500 x 0.250	5.500	6.500	1.500 x 0.750

Note: Inch bore hubs will be supplied with inch size setscrews.

Standard Keyways

Metric Bore Hubs

Bore	Size	Keyway	Bore	Size	Keyway
Over		Neyway	Over		Neyway
10	12	4 x 1.8	58	65	18 x 4.4
12	17	5 x 2.3	65	75	20 x 4.9
17	22	6 x 2.8	75	85	22 x 5.4
22	30	8 x 3.3	85	95	25 x 5.4
30	38	10 x 3.3	95	110	28 x 6.4
38	44	12 x 3.3	110	130	32 x 7.4
44	50	14 x 3.8	130	150	36 x 8.4
50	58	16 x 4.3	150	170	40 x 9.4

Note: Metric bore hubs will be supplied with metric size setscrews

Bore Tolerances

Non	ninal	Bore Tolerance						
Shaft D	iameter	Clas	ss 1	Interference				
Over	Over To		nce Fit					
0.437	1.500	-0.000	+0.001	-0.001	-0.0005			
1.500	2.000	-0.000	+0.001	-0.002	-0.001			
2.000	3.000	-0.000	+0.0015	-0.001	-0.001			
3.000	4.000	-0.000	+0.0015	-0.003	-0.0015			
4.000	5.000	-0.000	+0.002	-0.0035	-0.002			
5.000	6.000	-0.000	+0.002	-0.004	-0.0025			

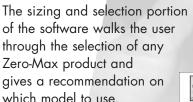
Based on nominal shaft diameter (AGMA Standard 511.02) Clearance Fit Standard. Metric hub bores will be supplied with H7 clearance fit as standard. S7 interference fit available.

Visit the Zero-Max website for additional technical information at www.zero-max.com

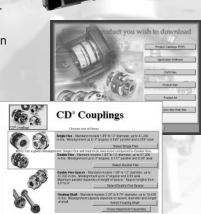


Sizing software for CD Couplings

Zero-Max provides free software on a CD ROM to help select and size the correct CD Coupling. This CD ROM contains all Zero-Max product catalogs in a PDF format, a comprehensive sizing and selection program and CAD drawings for most of the Zero-Max products.



The software is very user friendly and can be used on any Windows or Macintosh based computer.



For More Information on CD Couplings with QD Bushings



Call For This New Brochure. 1-800-533-1731



ServoClass® Couplings www.zero-max.com/servo



ETP® Bushings www.zero-max.com/etp



CD® Couplings www.zero-max.com/cd



Roh'lix® Linear Actuators www.zero-max.com/rohlix



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Zero-Max® Adjustable Speed Drives www.zero-max.com/drives



Torq-Tender® www.zero-max.com/torqtender



Crown Right Angle
Gear Drives
www.zero-max.com/crown



Control-Flex® Couplings www.zero-max.com/controlflex



 OHLA® Overhung Load Adapters www.zero-max.com/ohla

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