



DISC & MICRO Coupling

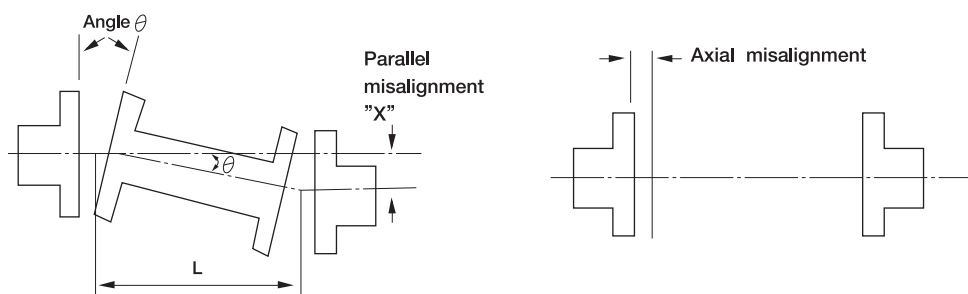
Distinctive Feature

1. Lubricating oil is unnecessary because the Jac Disk coupling has no sliding, frictional, or moving parts. Therefore, there is no friction or noise, and energy loss is low, with no dirty oil to cope with.
2. For the equipment such as machine tools with numerical controllers, indexing systems, and printing machines requiring accurate shaft rotation and phase control, Jac Disk couplings are best suited because of their high torsional stiffness.
3. When properly installed and if initial conditions remain unchanged, Jac Disk Coupling has an unlimited service life. Required maintenance consists of a visual inspection of the condition of the element (flexible plate) and of the bolts and nuts when operation is stopped.
In case of element damage due to overload or accident, a fail-safe mechanism transmitting rotation via washers becomes operational.

DISC Coupling

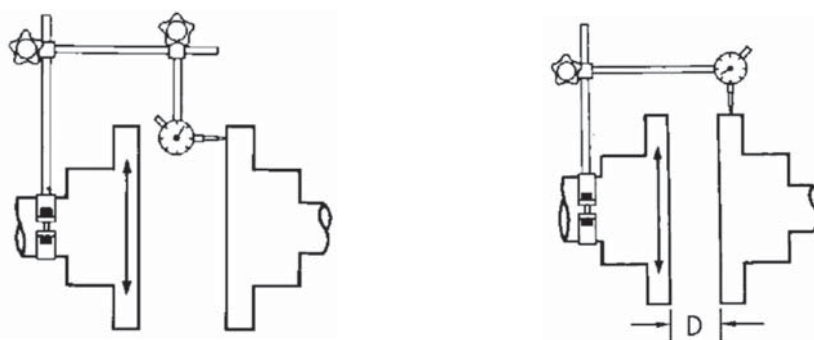
● Misalignment

1. Allowances for axial and parallel displacement of coupling depend on the number of bolts in the flexible element and operating speed. Axial and parallel displacement are in inverse proportion in other words, when one increases, the other decreases. Therefore, the two should be taken into consideration concurrently. The parallel displacement between the driving and driven shafts is absorbed by the angel ($\Delta\theta$) of the flexible elements, as shown in the following.
2. The Jac Disk coupling permits angular misalignment of up to 1o per flexible element. (in the case of a four-Bolt coupling)



● Instruction for installation

1. Distance between shaft ends
To have coupling in the correct position, see both flange faces (G dimensions) within $\pm 0.25\text{mm}$, except in special cases.
2. Angular misalignment
 - (a) Fix a dial gauge on one side of hub, rotate hub, find minimum reading on dial gauge at zero.
 - (b) Rotate coupling side with dial gauge 360~and readjust dial gauge so it smallest deflection reading. Peripheral face deflection for an angular misalignment of 0.1° is shown in the table below.
 - (c) Peripheral section of dial gauge may show abnormal deflection at through-hole area of hub. This is due to flaring of flange during working. Avoid this area.



Dial gauge reading

SIZE NO.		00	01	02	03	04	05	10	15	20	25	30	35	40	45	50	55	60	65
Dial gauge Reading (TIR mm)	Type-A(4-bolt)	-	-	-	-	-	0.12	0.15	0.16	0.20	0.22	0.25	0.29	0.34	0.37	0.43	0.48	-	-
	Type-E(6-bolt)	0.21	0.24	0.28	0.32	0.37	0.48	0.48	0.53	0.60	0.65	0.71	0.77	0.81	0.88	0.96	1.02	1.09	1.13
	Type-G(8-bolt)	-	0.37	-	0.43	-	0.48	0.48	0.53	0.60	0.65	0.71	0.77	0.81	0.88	0.96	1.02	1.09	1.13

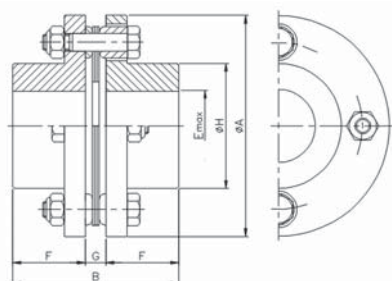
Bolt tightening torque

SIZE NO.		00	01	02	03	04	05	10	15	20	25	30	35	40	45	50	55	60	65
Bolt tightening torque (kgf-m)	Type-A(4-bolt)	-	-	-	-	-	0.9	0.9	2.2	2.2	4.2	7.3	11.5	15.9	15.9	22.1	33.5	-	-
	Type-E(6-bolt)	2.2	4.2	7.3	15.9	22.1	22.1	22.1	45	58	110	150	170	170	170	310	360	380	410
	Type-G(8-bolt)	-	7.3	-	15.9	-	22.1	22.1	45	58	110	150	170	170	170	310	360	380	410

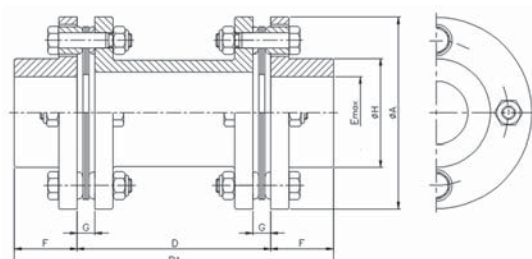
Dimensions



A3 Type (4-bolt single type)



AX, A4 Type (4-bolt Double type)



A3 Type (4-bolt single type)

Size No.	Basic Torque (kgf-m)	Maximum speed (rpm)	Standard (N-hub)						K-hub			Weight (kg)	GD ² (kgf-cm ²)
			A	B	E-max	F	G	H	p-hub	z-hub			
									F	H	E-max		
05	3.4	47,000	67.4	56.9	22	25.4	6.1	33.1	40	47	32	0.6	8
10	9.2	39,000	81.1	57.4	32	25.4	6.6	45.8	40	58	40	1.1	24
15	18	34,000	92.8	65.8	35	28.7	8.4	50.8	45	66	42	1.7	48
20	25	30,000	103.7	78.2	42	33.5	11.2	61	50	77	48	2.4	80
25	43	25,000	125.8	93.9	50	41.1	11.7	71.2	60	92	60	4.3	224
30	79	22,000	143	107.3	58	47.8	11.7	83.9	70	104	70	6.9	440
35	130	19,000	168	131.2	72	57.2	16.8	105.5	85	129	85	11.5	1080
40	210	16,000	194.1	144	82	63.5	17	118.2	100	147	95	16.4	2080
45	340	15,000	214.2	174	95	76.2	21.6	137.2	115	166	110	28	3520
50	500	13,000	246.2	201.7	108	88.9	23.9	156.3	135	191	120	37	7200
55	650	11,000	275.6	230.4	118	101.6	27.2	169	150	209	130	51	12800

Note) Coupling weight and GD2, without Bore machining

AX, A4 Type (4-bolt Double type)

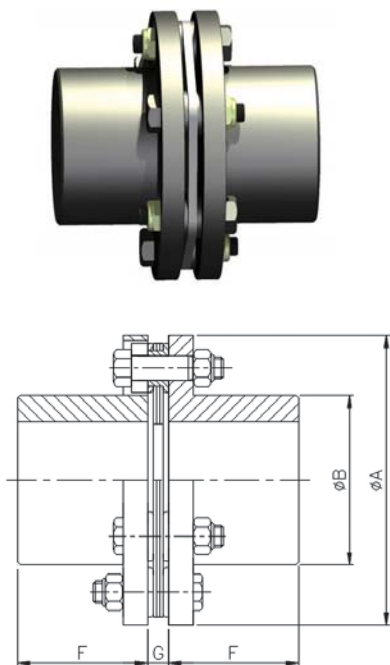
Size No.	Basic Torque (kgf-m)	Maximum speed (rpm)	A	A4(STANDARD)			AX(Short)			AB(Custom)	
				D	Weight (kg)	GD ² (kgf-cm ²)	D	Weight (kg)	GD ² (kgf-cm ²)	B	D
05	3.4	47,000	67.4	88.9	1.2	18	36	1.1	17.8	2F+D	Desired distance between shaft ends
10	9.2	39,000	81.1	88.9	1.9	44	39	1.7	41		
15	18	34,000	92.8	101.6	2.9	84	47	2.7	79		
20	25	30,000	103.7	127	4.1	148	53	3.7	136		
25	43	25,000	125.8	127	7.1	396	62	6.6	337		
30	79	22,000	143	127	10.8	800	69	10.3	775		
35	130	19,000	168	127	16.3	1680	78	15.6	1628		
40	210	16,000	194.1	139.7	24.7	3400	89	24	3317		
45	340	15,000	214.2	152.4	32.5	5600	97	31.5	5428		
50	500	13,000	246.2	177.8	50	11200	109	48.4	10865		
55	650	11,000	275.6	177.8	75	20400	134	73.9	20127		

Note) Coupling weight and GD2, without Bore machining

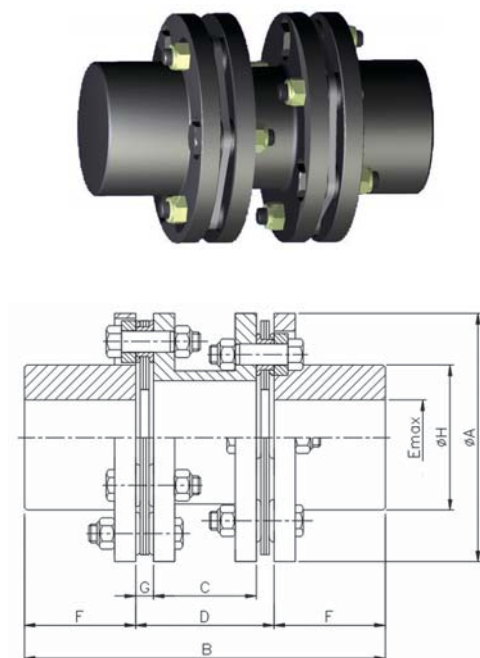
DISC Coupling

Dimensions

E3 Type (6-Bolt Single Type)



E4 Type (6-Bolt Double Type)



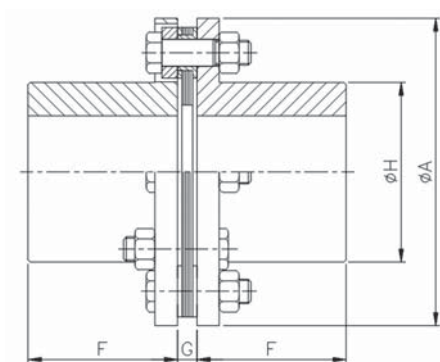
E4 Type (6-Bolt)

Size No.	Basic Torque (kgf-m)	Max. Speed (rpm)	N-hub								Weight (kg)	GD ² (kgf-m ²)	Allowable End Float (± mm)
			A	B	C	D	E-max	F	G	H			
00	58	26,000	119	168	39.4	60	51	54	10.3	74	6	0.03	3
01	94	23,000	137	198	50	72	55	63	11	81	9.1	0.06	3.4
02	174	19,000	161	238	67.2	90	67	74	11.4	97	16.9	0.14	3.6
03	341	17,000	180	269	82.4	109	72	80	13.3	104	21.6	0.26	4.2
04	633	15,000	212	308	87.6	118	85	95	15.2	124	35.1	0.59	4.5
05	620	11,000	276	377	118	153	111	112	17.5	161	65.1	1.8	3.9
10	840	11,600	276	377	115	153	111	112	19	161	66.1	1.9	3.9
15	1090	10,300	308	440	134	172	133	134	19	192	107.8	3.7	4.2
20	1820	9,200	346	497	148	191	152	153	21.5	218	156.1	6.7	4.9
25	2690	8,500	375	553	175	223	165	165	24	240	211.8	10.6	5.2
30	3410	7,800	410	610	195	254	178	178	29.5	258	274.5	16.5	5.4
35	4070	7,200	445	646	211	270	187	188	29.5	272	333.3	23.9	5.6
40	4720	6,800	470	686	212	274	205	206	31	297	399.2	30.7	6.3
45	6100	6,200	511	749	223	287	231	231	32	334	525.3	48	6.7
50	7620	5,700	556	800	227	292	254	254	32.5	364	676.3	72.9	7.3
55	9440	5,400	587	839	243	311	263	264	34	382	803.4	100.6	7.8
60	10890	5,000	629	895	274	343	275	276	34.5	399	954.1	137.7	8.7
65	13070	4,800	654	934	285	356	289	289	35.5	419	1095.3	176.9	8.9

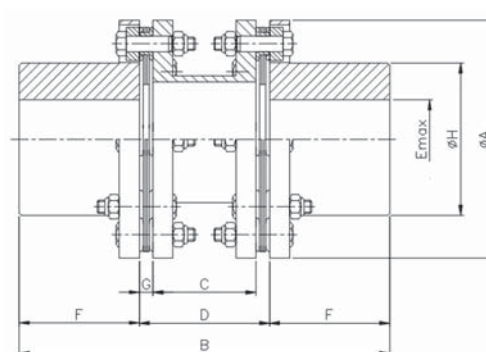
Note) Coupling weight and GD², without Bore machining

Dimensions

G3 Type (8-bolt Single type)



G4 Type (8-bolt Double type)



G4 Type (8-bolt)

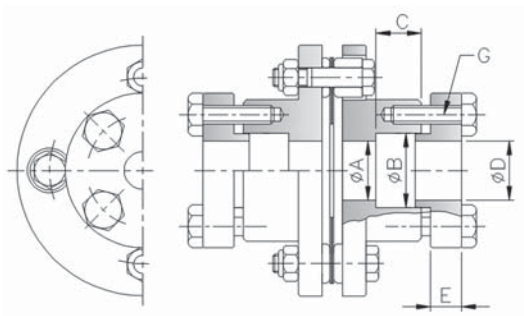
Size No.	Basic Torque (kgf-m)	Maximum speed (rpm)	Standard (N-hub)								Weight (kg)	GD ² (kgf-m ²)	Allowable End Float (± mm)
			A	B	C	D	E-max	F	G	H			
01	392	15,000	214	333	92.6	117	95	108	12.2	137	38	0.65	2.1
03	726	13,000	246	369	99.6	127	108	121	13.7	156	55.5	1.24	2.1
05	915	11,600	276	421	118	153	111	134	17.5	161	72.2	1.8	2.1
10	1,200	11,600	276	421	115	153	111	134	19	161	73.2	1.8	2.1
15	1,570	10,300	308	492	134	172	133	160	19	192	119.7	3.7	2.4
20	2,610	9,200	346	557	148	191	152	183	21.5	218	174.3	6.8	2.9
25	3,850	8,500	375	619	175	223	165	198	24	240	233.8	10.8	3.1
30	4,870	7,800	410	682	195	254	178	214	29.5	258	305.2	16.7	3.3
35	5,820	7,200	445	720	211	270	187	225	29.5	272	367.4	25	3.6
40	6,570	6,800	470	768	212	274	205	247	31	297	447.5	31.1	4
45	8,530	6,200	511	843	223	287	231	278	32	334	591.6	48	4.5
50	10,530	5,700	556	902	227	292	254	305	32.5	364	761.4	74.7	5
55	13,070	5,400	587	945	243	311	263	317	34	382	901.9	101.6	5.2
60	15,240	5,000	629	1005	274	343	275	321	34.5	399	1067.6	138.6	5.6
65	18,150	4,800	654	1050	285	356	289	347	35.5	419	1230.7	178.4	5.7

Note) Coupling weight and GD₂, without Bore machining

DISC Coupling

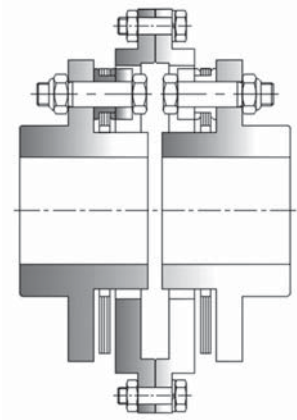
Dimensions

A3 type (Power lock tightening type)

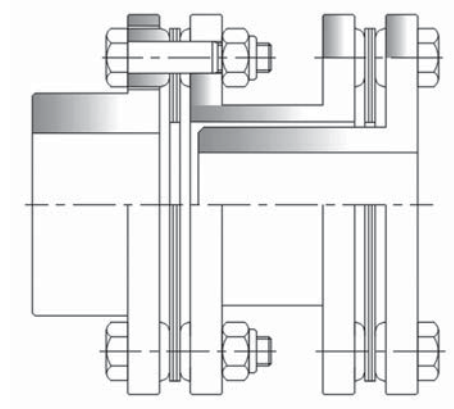


A Shaft dimensions	B (Power lock out diameter)	Power -lock Size	C Power lock depth		D	E	Minimum Applicable Coupling Size	G (Bolt used)
			1EA	2EA				
15	19	15 × 19	8	14.6	15	10	A3-05Z A3-10N	4-M6x20L
16	20	16 × 20			16			
17	21	17 × 21			17			
18	22	18 × 22			18			
19	24	19 × 24			19			
20	25	20 × 25			20		A3-05Z A3-10N A3-15N	4-M6x25L
22	26	22 × 26			22	12	A3-10N A3-15N	4-M6x20L 4-M6x25L
24	28	14 × 28			24		A3-10Z A3-15N A3-20N	4-M6x20L
25	30	25 × 30			25			4-M6x25L
28	32	28 × 32			28			6-M6x25L
30	35	30 × 35			30			
32	36	32 × 36			32		A3-15N A3-20N	
35	40	35 × 40	9	15	35		A3-15Z A3-20N A3-25N	4-M8x30L 6-M8x30L
36	42	36 × 42			36		A3-20N A3-25N	
38	44	38 × 44			38	15	A3-20Z A3-25N	4-M8x30L 6-M8x30L
40	45	40 × 45	10	16.5	40		A3-20Z A3-25N A3-30N	4-M8x30L
42	48	42 × 48			42			6-M8x30L
45	52	45 × 52	13	21.5	45		A3-25Z A3-30N A3-35N	4-M8x30L
48	55	48 × 55			48			6-M8x30L
50	57	50 × 57			50		A3-30Z A3-35N	4-M8x30L
55	62	55 × 62			55			6-M8x30L

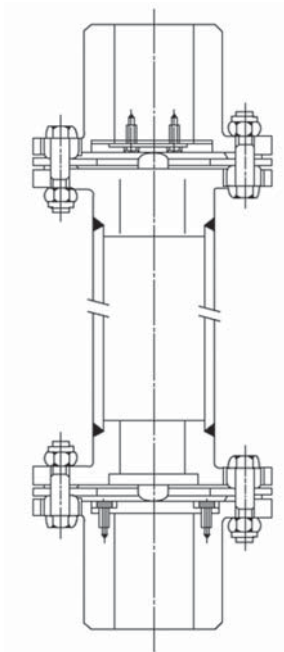
Special Applications



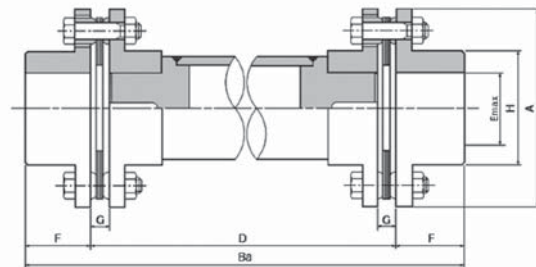
DOUBLE END PLUG-IN TYPE



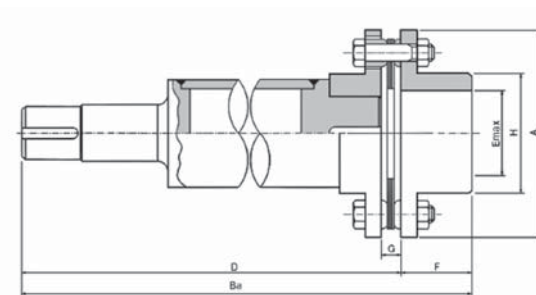
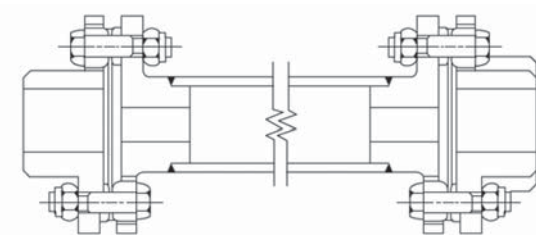
SINGLE END PLUG-IN TYPE



VERTICAL FLOATING SHAFT TYPE



FLOATING SHAFT TYPE



SEMI FLOATING SHAFT TYPE