FLEXIBLE DISC

COUPLING

For Enquiries, please contact:

Protrac Progressive (M) Sdn Bhd (854597-M)
No: 61-1, Pusat Perdagangan One Puchong, Jalan OP1/2, Off Jalan Puchong, 47160 Puchong, Selangor, W. Malaysia
Tel: (603) 8075 9800, (603) 8075 1800 & (603) 8075 6700 * Fax: (603) 8075 2823 * Website: http://www.protrac.com.my
Email: protrac1@gmail.com * sales@protrac.com.my

FLEXIBLE DISK COUPLING

특성 / Distinctive Features

1. 눈부신 산업분야의 발전과 더불어 산업분야의 기계장치에 없어서는 안될 동력 전달 부품의 coupling도 우수한 품질과 높은 신뢰성이 요구되고 있습니다.
   이와 같은 수요에 따라 중앙카프링 ***Jac***이 자신있게 권해 드리는 것이 디스크카플링 입니다.
2. 서로 닿거나 마찰 진동부분이 없으므로 윤활유가 필요없습니다. 따라서 소음, 진동, 마모가 없고 에너지 손실도 낮으며 청결하여 기름이 묻지 않습니다.

3. 중앙 ***Jac*** 디스크 카플링은 특수카프링의 필수조건인 hightorque이며 backlash가 없고 비틀림 강성이 크서 고속용이므로, NC장치가 부착된 공작기계, indexing장치, 인쇄기등에 적합 합니다.

4. 중앙 ***Jac*** 디스크 카플링 구조의 핵심은 element에 있습니다. 형상은 4각형이며 SUS-304 스프링판을 적층(積層)한 것입니다. 4본 bolt용 element는 4각형으로서 가장 허용편각이 크고 1° 까지 허용됩니다.
5. 중앙 ***Jac*** 디스크 카플링은 정확한 setting으로 초기 환경이 변하지 않으면 수명은 반영구적 입니다.
   정비는 운전 정지중에 element 또는 bolt, nut상태를 육안 검사만으로 끝냅니다. 돌발사고 등으로 큰 부하가 걸려 만일 element가 파손된다고 해도 볼트가 Washer에 끼워져서 회전이 전달 되므로 안전 합니다.

1. In all areas of industry, the demand for machinery and equipment of ever higher precision and efficiency is increasing daily, couplings, serving as important power transmission parts, are also expected to exhibit higher quality and reliability.
2. 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.
3. Higher torsional and no backlash.
   For the equipment such as machine tools with numerical controllers, indexing systems, and printing machines requiring accruate shaft rotation and phase control, ***Jac*** DISK COUPLINGS are best suited because of their high torsional stiffness.
4. The key point of the ***Jac*** DISK COUPLING design is the laminated straight sided flex pack, an assembly of thin stainless steel elements.
   Please refer to the figure above.
5. 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.
   Should the element be damaged due to overload or accident, a fail-safe mechanism transmitting rotation via washers becomes operational.

6. misalignment의 허용범위가 넓으므로 여러가지 system에 유연하게 적응합니다. 또한 특수설계에 의한 커다란 misalignment에도 대응할 수가 있습니다. misalignment가 흡수될 경우 shaft에 반력이 발생하지만 중앙 ***Jac*** 디스크 카플링을 사용하면 다른 coupling에 비해 반력을 보다 적게 억제시킬 수 있습니다.
7. 중앙 ***Jac*** 디스크 카플링의 부하능력은 특수한 경우를 제외하고는 극히 낮은 level에서 보존됩니다. 따라서 허용 misalignment내에 있으면 수명은 반영구적입니다.
   부품수가 적고 소형이므로 빠르고 확실하게 설치, 분해가 가능합니다. 또한 조립 재현성(再現性)이 좋으므로 고속회전기계에 매우 적합합니다.

6. Flexible couplings prevent problems by absorbing shaft misalignment while transmitting torque; this puts an opposing load on the shaft.
   With ***Jac*** DISK COUPLING however, this load is much lower than that with other types of couplings.

7. Load stress on ***Jac*** DISK COUPLING is maintained at very low level, except in special cases. Therefore the service life of these couplings is practically unlimited when operated within the acceptable range of allowable misalignment. Couplings can be mounted and unmounted quickly and easily due to their compactness and small number of parts. Excellent reassembly characteristics provide superior speed.

Type of Flexible Elements

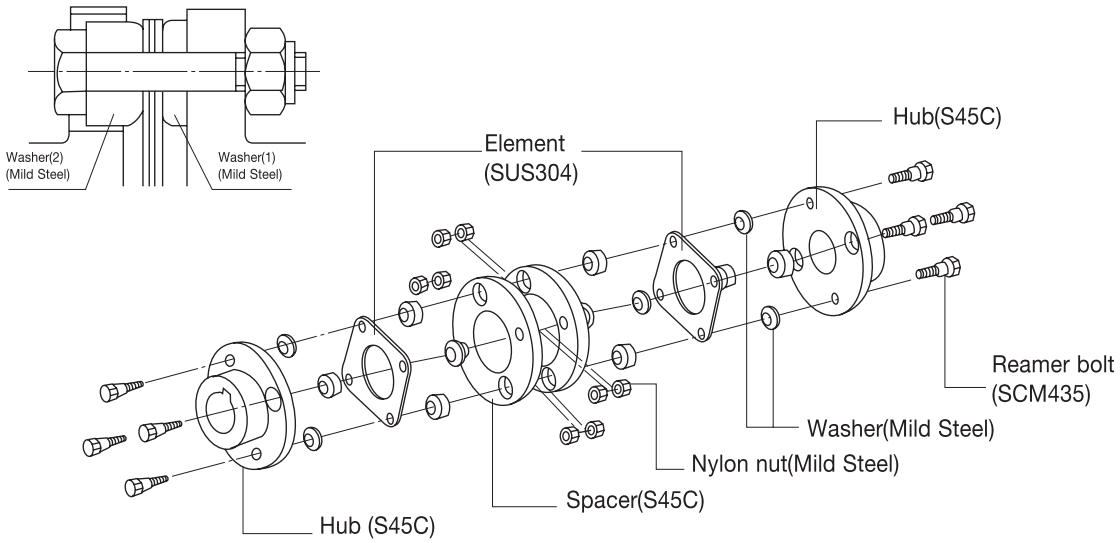
Usage \ Type of disc-plate		A Max.angular misalignment:1° Allowable torque: 3.4-650㎏ · m	E Max.angular misalignment:0.7° Allowable torque: 58-13.070㎏ · m	G Max.angular misalignment:0.5° Allowable torque: 392-18,150㎏ · m	S Max.angular misalignment:0.35° Allowable torque: 1,379-26,130㎏ · m	U Max.angular misalignment:0.25° Allowable torque: 1,669-31,936㎏ · m	W Number of bolts:10-20.Number is determined based on service conditions.Consult us for further information.. Max.torque:200×10³㎏ · m
single		A3	E3	-	-	-	-
double disc-flex	short space	AX	-	-	-	-	-
	standard space	A4	E4	G4	S4	U4	W4
	custom space	AB	EB	GB	SB	UB	WB
floating disc-flex	horizontal	A5	E5	G5	S5	U5	W5
	vertical	A7	E7	G7	S7	U7	W7

호칭방법 / Designation

Jac - □□□ - □ / □ - □

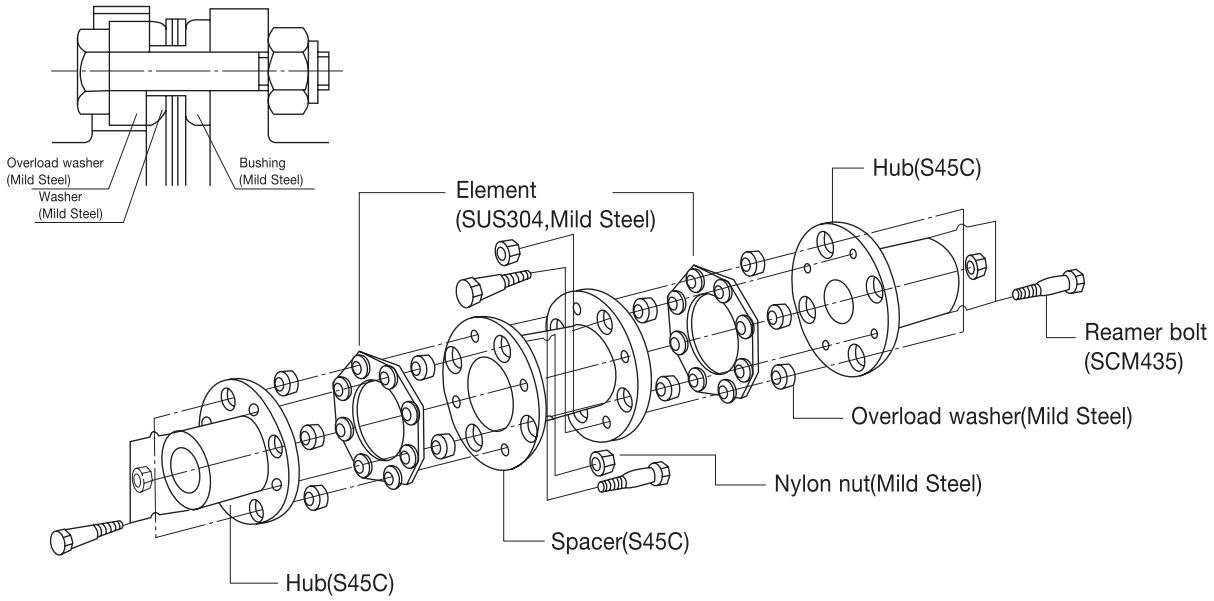
- → 축단간(軸端間)거리(space Type, Floating Type만 적용함)
  length of 'SHAFT ENDS' (only space and Floating Type use)
- → 피동(被動)쪽 축(軸)가공 칫수 및 축(軸)고정 방법
  Bore size and the method of fitting with shaft on the driven shaft
- → 구동(驅動)쪽 축(軸)가공 칫수 및 축(軸)고정 방법
  Bore size and the method of fitting with shaft on the driving shaft
  EX) 20K : Bore size Ø20, use KEY WAY.
  20S25 : Bore size Ø20, use SPAN RING(POWER LOCK)
  16T : Bore size Ø16, TAPER 1/10
- → Type of HUB(N : standard HUB, P, Z : special HUB, K : P+Z HUB ←See dimensions)
  EX) NN : 양쪽 shaft 표준 허브 사용
  NP : 한쪽 shaft는 표준, 다른쪽은 특정 허브(P-HUB)사용
  NZ : 한쪽 shaft는 표준, 다른쪽은 특정 허브(Z-HUB)사용
  (위와 같은 방식으로 HUB종류를 다양하게 조합하여 사용할 수 있습니다.)
  HUBS are available in several different types for various applications.
- → Size No.
- → Model No.

Design features of 4-bolt coupling



Standard materials are shown in parentheses.

Design features of 6-12-bolt coupling



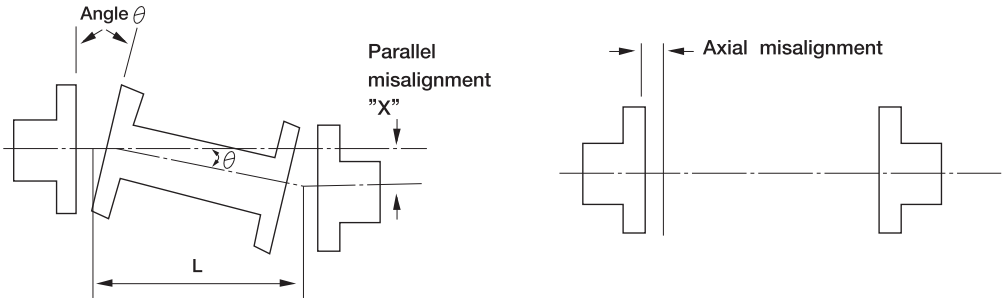
Standard materials are shown in parentheses.

PERFORMANCE

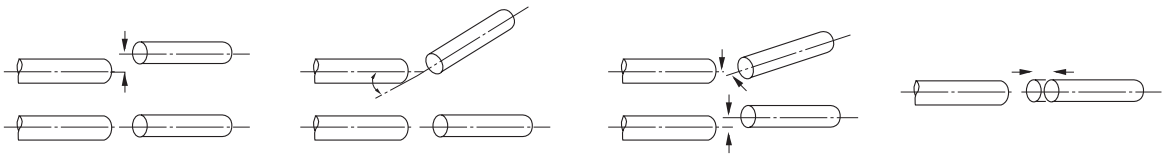
성능/DISPLACEMENT

커플링의 축 방향 이동 및 편심은 Flexible element의 Bolt수 및 운전속도에 따라 결정됩니다. 축 방향 이동 및 편심은 서로 상관 관계에 있으며 한 방향이 증가하면 한 방향이 감소하기 때문에 동시에 고려할 필요가 있습니다. 구동부 축과 피구동부 축의 편심은 Flexible element의 각 변위 (△θ)에 의합니다.

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 sholuld be taken into consideration concurrently. The parallel displacement between the driving and driven shafts is absorbed by the angle(△θ)of the flexible elements, as shown in the following.



MISALIGNMENT

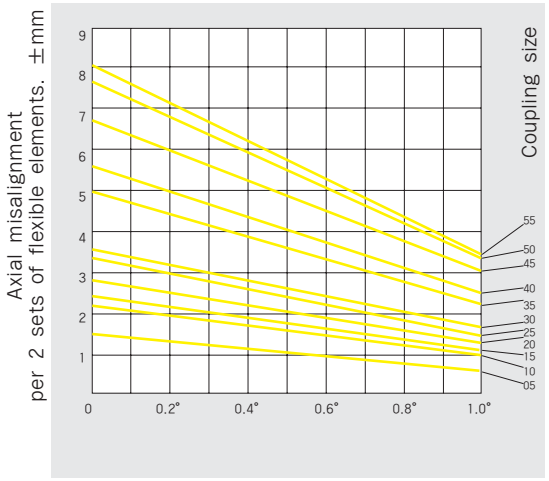


축은 여러가지 요인에 의해 편심 및 편각이 발생합니다. 열변동, 베어링마모, 진동, 기초공사의 침전 등으로 인하여 축정렬을 변경시킬 수 있습니다.
최초의 축정렬이 정확하지 못한 상태에서 카플링에 과부하가 발생하면, 편심응력을 흡수할 여력이 없어져 기대한 운전수명을 갖지 못하게 됩니다.
위의 그림은 편심 및 편각, 축 유동오차 변위를 나타낸 것으로 실제로는 이 모든 변위가 복합적으로 발생합니다.
중앙 Disk coupling은 Disk Element 1Set당 1°의 편각을 허용합니다.(4-Bolt기준)

The shafts may be misaligned by various causes, such as the effects of heat, settling foundation, vibration and worm bearing etc.
The initial misalignment and heavy stresss imposed on the coupling will coupling life due to small capacity of absorbing misalignment.
Any or all of the misalignments shown in the above illustrations are present in all connected drives.
The ***Jac*** Disk coupling permits angular misalignment of up to 1° per flexible element.(in the case of a four-Bolt coupling)

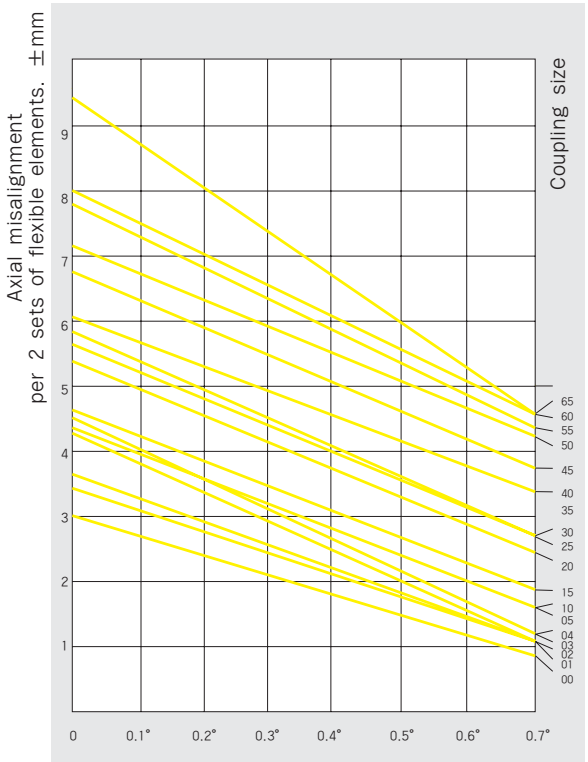
END FLOAT

A - TYPE (4Bolt)

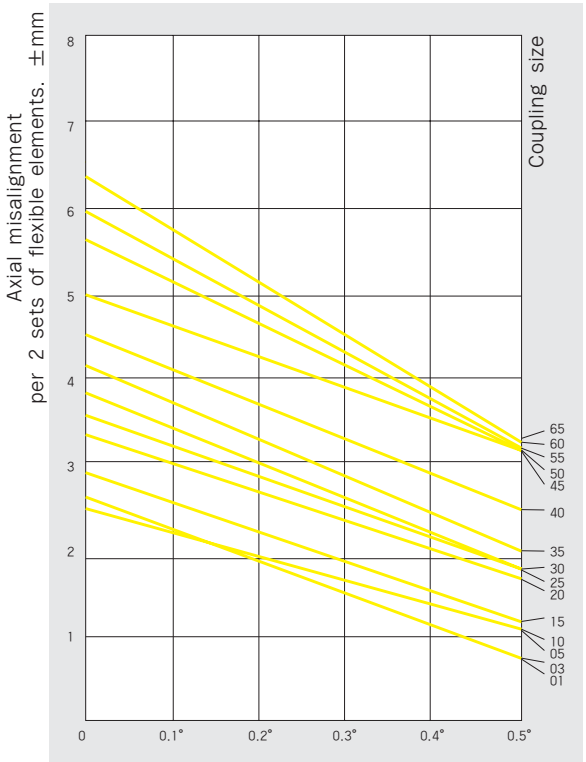


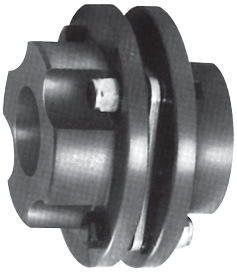
- 많은 구동 기기는 축 방향 이동의 허용을 필요로 합니다. DISK카플링은 최소의 end thrust로써 커다란 축 방향 이동을 허용합니다. 허용 축 방향 이동 (axial displacement)과 편각과의 관계표를 참고하십시요. graph값 이내에서 카플링을 사용하는 것은 카플링 수명을 보장합니다.
- Most driving equipment requires the absorption of axial displacement(end float). ***Jac*** Couplings permit great axial displacement with minimum end thrust. The graph shows the degrees of maximum allowable axial displacement in relation to various amounts of angular displacement. Good durability of the couplings is secured by working within the indicated limltes.
- The arrangement of plate packs provides ***Jac*** couplings with very high degree of torsional stiffness and ensures transmission of torque free from rotational backlash but permits parallel offset displacement, angular displacement, and axial displacement of shafts.

E - TYPE (6Bolt)

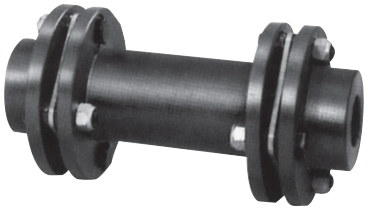


G - TYPE (8Bolt)



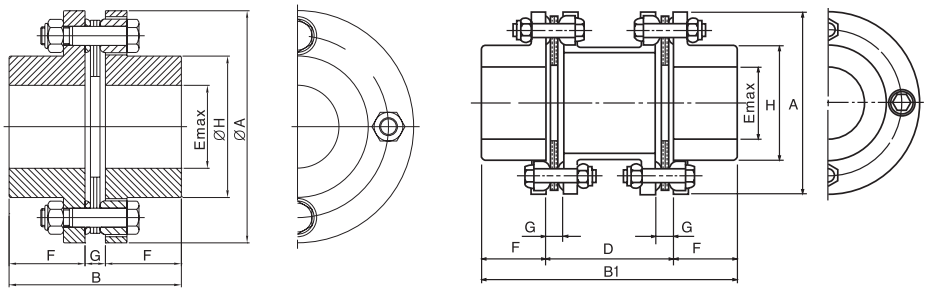


A3- TYPE



AX, A4 - TYPE

A5 - TYPE

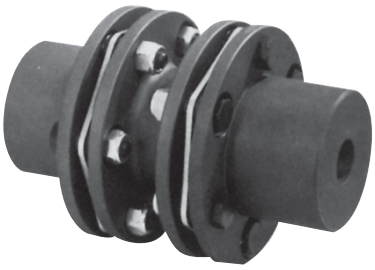


(A3 - TYPE) 4-Bolt

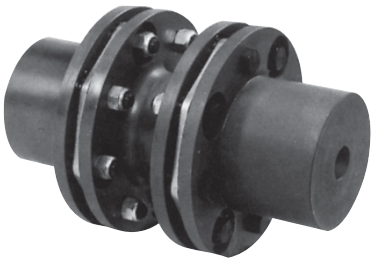
Size No.	Basic torque (Kg.m)	Max radial load (kg)	Max. rpm	표준허브(N-Hub)						특정허브(K-Hub)			Weight (kg)	GD² (kg·㎠)
				A	B	Emax	F	G	H	P-Hub	Z-Hub			
										F	H	Emax		
05	3.4	15	47,000	67.4	56.9	22	25.4	6.1	33.1	40	47	32	0.6	8
10	9.2	25	39,000	81.1	57.4	32	25.4	6.6	45.8	40	58	40	1.1	24
15	18	56	34,000	92.8	65.8	35	28.7	8.4	50.8	45	66	42	1.7	48
20	25	83	30,000	103.7	78.2	42	33.5	11.2	61.0	50	77	48	2.4	80
25	43	120	25,000	125.8	93.9	50	41.1	11.7	71.2	60	92	60	4.3	224
30	79	180	22,000	143.0	107.3	60	47.8	11.7	83.9	70	104	70	6.9	440
35	130	270	19,000	168.0	131.2	72	57.2	16.8	105.5	85	129	85	11.5	1080
40	210	380	16,000	194.1	144	82	63.5	17.0	118.2	100	147	95	16.4	2080
45	340	450	15,000	214.2	174.0	95	76.2	21.6	137.2	115	166	110	28.0	3520
50	500	610	13,000	246.2	201.7	108	88.9	23.9	156.3	135	191	120	37.0	7200
55	650	770	11,000	275.6	230.4	118	101.6	27.2	169.0	150	209	130	51.0	12800

(Ax, A4 - TYPE) 4-Bolt Spacer Type

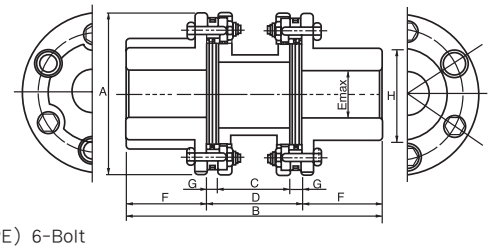
Size No.	Basic torque (kg · m)	Max. Speed rpm	A4(Standard)			AX(Short)			AB(Custom)		
			D	Weight (kg)	GD² (kg · cm²)	D	Weight	GD²	Ba	D	D Max
05	3.4	47,000	88.9	1.2	18	36	1.1	17.8	2F + D	고객주문 사양	300
10	9.2	39,000	88.9	1.9	44	39	1.7	41			200
15	18	34,000	101.6	2.9	84	47	2.7	79			250
20	25	30,000	127.0	7.1	396	53	6.6	136			250
25	43	25,000	127.0	7.1	386	62	6.6	337			350
30	79	22,000	127.0	10.8	386	69	6.6	775			350
35	130	19,000	127.0	16.3	1680	78	15.6	1628			300
40	210	6,000	139.7	24.7	3400	89	24.0	3317			350
45	340	15,000	152.4	32.5	5600	97	31.5	5428			350
50	500	13,000	177.8	50.0	11200	109	48.4	10865			350
55	650	11,000	177.8	75.0	20400	134	73.9	20127			400

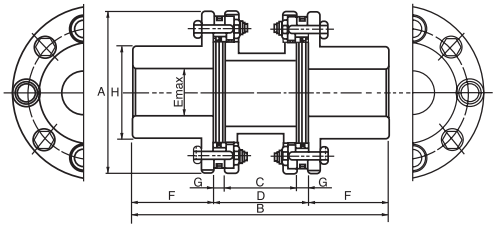


E4-TYPE



G4-TYPE





(E4 TYPE) 6-Bolt

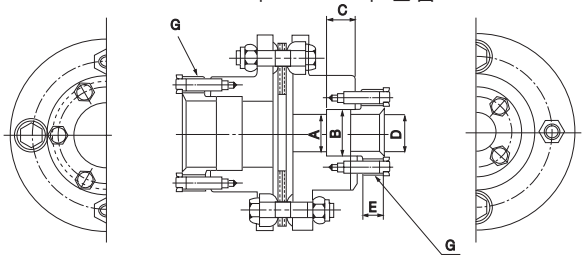
Size No.	Torque (kg · m)	A (㎜)	B (㎜)	C (㎜)	(1) D (㎜)	E Max (㎜)	F (㎜)	G (㎜)	H (㎜)	Max (rpm)	Weight W (Kg)	Inertial Effect GD^2 (Kg · ㎡)	Torsional stiffness (Kg · m/rad)	(2) Allow-able End Float (±㎜)	(3) Axial Spring Constat (kg/㎜)
00	58	119	168	39.4	60	51	54	10.3	74	26,000	6.0	0.03	0.45×10^5	3.0	16.5
01	94	137	198	50.0	72	55	63	11.0	81	23,000	9.1	0.06	0.69×10^5	3.4	21.1
02	174	161	238	67.2	90	67	74	11.4	97	19,000	16.9	0.14	0.94×10^5	3.6	28.0
03	341	180	269	82.4	109	72	80	13.3	104	17,000	21.6	0.26	1.61×10^5	4.2	45.7
04	500	212	308	87.6	118	85	95	15.2	124	15,000	35.1	0.59	3.14×10^5	4.5	60.6
05	620	276	377	118	153	111	112	17.5	161	11,600	65.1	1.8	3.98×10^5	3.9	42.2
10	840	276	377	115	153	111	112	19.0	161	11,600	66.1	1.9	4.95×10^5	3.9	59.5
15	1,090	308	440	134	172	133	134	19.0	193	10,300	107.8	3.7	7.34×10^5	4.2	57.0
20	1,820	346	497	148	191	152	153	21.5	218	9,200	156.1	6.7	1.22×10^6	4.9	76.2
25	2,690	375	553	175	223	165	165	24.0	240	8,500	211.8	10.6	1.70×10^6	5.2	85.7
30	3,410	410	610	195	254	178	178	29.5	258	7,800	274.5	16.5	2.17×10^6	5.4	99.2
35	4,070	445	646	211	270	187	188	29.5	272	7,200	333.3	23.9	2.44×10^6	5.6	103.4
40	4,720	470	686	212	274	205	206	31.0	297	6,800	399.2	30.7	2.99×10^6	6.3	102.0
45	6,100	511	749	223	287	231	231	32.0	334	6,200	525.3	48.0	3.86×10^6	6.7	100.5
50	7,620	556	800	227	292	254	254	32.5	364	5,700	676.3	72.9	4.80×10^6	7.3	113.3
55	9,440	587	839	243	311	263	264	34.0	382	5,400	803.4	100.6	6.09×10^6	7.8	123.2
60	10,890	629	895	274	343	275	276	34.5	399	5,000	954.1	137.4	6.60×10^6	8.7	131.0
65	13,070	654	934	285	356	289	289	35.5	419	4,800	1,095.3	176.9	7.98×10^6	8.9	138.3

(G4 TYPE) 8-Bolt

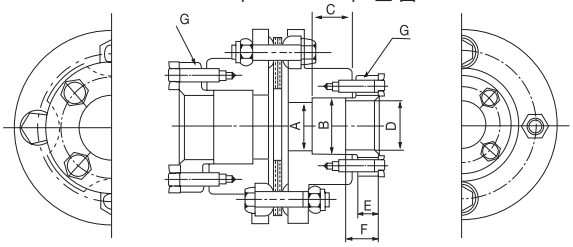
Size No.	Torque (kg · m)	A (㎜)	B (㎜)	C (㎜)	D (㎜)	Emax (㎜)	F (㎜)	G (㎜)	H (㎜)	Max (rpm)	Weight (kg)	GD^2 (kg · m^2)	Allowable Endfloat (±㎜)	Torsional Stiffness (kg · m)
01	392	214	333	92.6	117	95	108	12.2	137	15,000	38.0	0.65	2.1	7.3
03	726	246	369	99.6	127	108	121	13.7	156	13,000	55.5	1.24	2.1	15.9
05	915	276	421	118	153	111	134	17.5	161	11,600	72.2	1.8	2.1	22.1
10	1,100	276	421	115	153	111	134	19.0	161	11,600	73.3	1.8	2.1	22.1
15	1,570	308	492	134	172	133	160	19.0	193	10,300	119.7	3.7	2.4	45
20	2,610	346	557	146	191	152	183	22.5	218	9,200	174.3	6.8	2.9	58
25	3,850	375	619	167	223	165	198	28.0	240	8,500	233.8	10.8	3.1	110
30	4,810	410	682	192	254	178	214	31.0	258	7,800	305.3	16.7	3.3	150
35	5,820	445	720	208	270	187	225	31.0	272	7,200	367.4	25.0	3.6	170
40	6,570	470	768	206	274	205	247	34.0	297	6,800	447.5	31.1	4.0	170
45	8,530	511	843	221	287	231	278	35.0	334	6,200	591.6	48.0	4.5	170
50	10,530	556	902	218	292	254	305	37.0	364	5,700	761.4	74.7	5.0	310
55	13,070	587	945	236	311	263	317	37.5	382	5,400	901.9	101.6	5.2	360

Design standard for Span ring HUB and Thrust Flange

N-HUB와 N-HUB의 결합



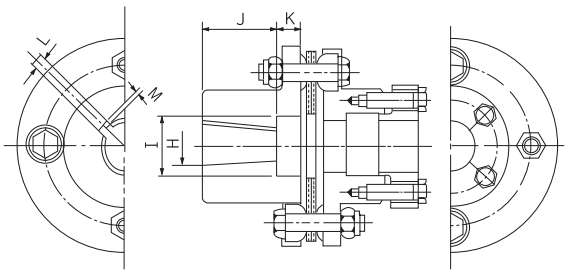
Z-HUB와 N-HUB의 결합



• N-HUB : 표준HUB • Z-HUB : 스페샬HUB

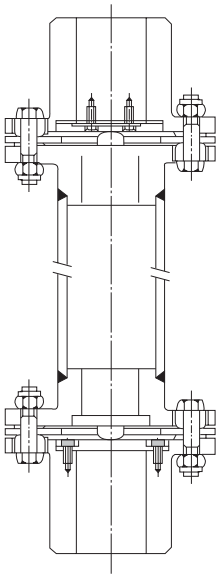
ø A (H7 ㎜) SHAFT DIA	ø B (H7 ㎜) SPAN RING OUT DIA	적용 SPAN RING SIZE	C (㎜) SPAN RING 삽입부분 깊이 1EA사용	C (㎜) SPAN RING 삽입부분 깊이 2EA사용	ø D (㎜) +0.05 +0.10	E (㎜)	최소적용 카프링 규격 MINIMUM APPLICABLE COUPLING SIZE	G BOLT USED
15	19	15×19	8	14.6	15	10	A3-05Z A3-10N	4-M6×20L
16	20	16×20			16			
17	21	17×21			17			
18	22	18×22			18			
19	24	19×24			19			
20	25	20×25			20		A3-05Z A3-10N A3-15N	4-M6×25L
22	26	22×26			22		A3-10N A3-15N	4-M6×20L
								4-M6×25L
24	28	24×28			24	12	A3-10Z A3-15N A3-20N	4-M6×20L
25	30	25×30			25			4-M6×25L
28	32	28×32			28			6-M6×25L
30	35	30×35			30			
32	36	32×36			32		A3-15N A3-20N	
35	40	35×40	9	15	35		A3-15N A3-20N A3-25N	
36	42	36×42			36		A3-20N A3-25N	6-M8×30L
38	44	38×44			38	15	A3-20Z A3-25N	4-M8×30L
								6-M8×30L
40	45	40×45	10	16.5	40		A3-20Z A3-25N A3-30N	4-M8×30L
42	48	42×48			42			6-M8×30L
								6-M8×30L
45	52	45×52	13	21.5	45		A3-25Z A3-30N A3-35N	4-M8×30L
48	55	48×55			48			6-M8×30L
								6-M8×30L
50	57	50×57			50		A3-30Z A3-35N	4-M8×30L
55	62	55×62			55			6-M8×25L

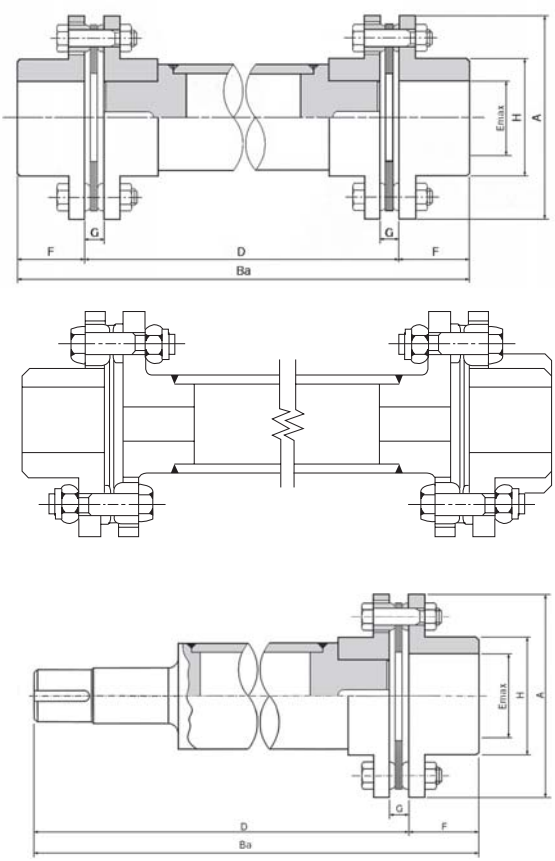
Design standards for tapered-shaft bores



COUPLING SIZE	ø H	ø I	J	K	L	M	TAPER
A3-05-11T	11	21	16	9.4	4H7	1.2	1/10
A3-10-11T	11						
A3-05-16T	16	25	29.5	10.5	5F7	1.5	
A3-10-16T	16						
A3-15-16T	15.46			4.6			
A3-20-16T	16			4			
A3-25-16T	16			11.6			

Floating shaft type coupling





* "D"는 측간 거리를 말하며 주문시 정확히 알려 주셔야 하며 칫수 기호는 표준형 규격과 동일합니다.

* "D" is the distance between shaft ends. Please give us the further information on "D" when you order.

Rotation limitations for standard floating shaft coupling

4Bolts Type (A-TYPE)

Size No.	Maximum Shaft Diameter(mm)		Maximum Span DMax (mm) for Various Speed(rpm)								
	Standard Hub	Z(K) Hub	1800	1500	1200	1000	900	750	720	600	500
10	32	40	1610	1760	1970	2160	2280	2500	2550	2790	3060
15	35	42	1690	1850	2070	2270	2390	2620	2670	2930	3210
20	42	48	1880	2050	2300	2520	2650	2910	2970	3250	3560
25	50	60	2010	2210	2470	2700	2850	3120	3190	3490	3830
30	58	70	2220	2430	2720	2980	3140	3440	3510	3850	4210
35	74	85	2500	2740	3060	3350	3540	3870	3950	4330	4750
40	83	95	2690	2950	3300	3610	3800	4180	4250	4660	5120
45	95	110	2890	3170	3540	3880	4090	4490	4570	5010	5500
50	109	120	3100	3400	3800	4160	4390	4820	4910	5370	5900
55	118	130	3230	3540	3960	4330	4560	5010	5100	5590	

6Bolts Type (E-TYPE)

Maximum distance between shaft ends DMax (mm) for Various Speed(rpm)										
Size No.	Standard Hub	1800	1500	1200	1000	900	750	720	600	500
00	51	2010	2210	2470	2700	2850	3120	3190	3490	3830
01	55	2220	2430	2720	2980	3140	3440	3510	3850	4210
02	67	2500	2740	3060	3350	3540	3870	3950	4330	4750
03	72	2890	3170	3540	3880	4090	4490	4570	5010	5500
04	85	3100	3400	3800	4160	4390	4820	4910	5370	5900
05	111	3100	3400	3800	4160	4390	4820	4910	5370	5900
10	111	3100	3400	3800	4160	4390	4820	4910	5370	5900
15	133	3230	3540	3960	4330	4560	5010	5100	5590	
20	152	3720	4070	4560	4990	5250	5770	5880		
25	165	3720	4070	4560	4990	5250	5770	5880		

8Bolts Type (G-TYPE)

Maximum distance between shaft ends DMax (mm) for Various Speed(rpm)										
Size No.	Standard Hub	1800	1500	1200	1000	900	750	720	600	500
01	95	2890	3170	3540	3880	4090	4490	4570	5010	5500
03	108	3100	3400	3800	4160	4390	4820	4910	5370	5900
05	111	3100	3400	3800	4160	4390	4820	4910	5370	5900
10	111	3100	3400	3800	4160	4390	4820	4910	5370	5900
15	133	3230	3540	3960	4330	4560	5010	5100	5590	
20	152	3720	4070	4560	4990	5250	5770	5880		
25	165	3680	4030	4510	4940	5200	5710	5810		

취급상의 주의점 / Instruction for Installation and Maintenance

1. 측단간의 거리는 칫수표 "G"값을 참조하십시오.
   허용범위는 ±0.25mm입니다.

2. 편각을 확인합니다.(Fig.1)
   (a) 다이알 게이지를 한쪽의 Hub에 고정하고 그 Hub를 회전시켜 다이알 게이지의 눈금으로 "0"point를 결정합니다.
   (b) 다이알 게이지 측 커플링을 360°회전시켜 다이알 게이지 흔들리는 눈금이 최소로 될때까지 조정합니다. 편각이 0.1°가 있는 경우의 측면 흔들림은 아래표와 같습니다.
   (c) 편심·편각이 허용 범위내에 있는지 재확인하여 주십시오.

1. Distance between shaft ends
   To have coupling in the correct position, see both flange faces(G dimensions) within ±0.25mm, except in special cases.
2. Angular misalignment(Fig.1)
   (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 shows smallest deflection reading. Peripheral face deflection for an angular misalignment of 0.1° is as 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 when reading gauge.

table 1.

Size No.		05	10	15	20	25	30	35	40	45	50	55
Gauge Reading (Tir mm)	Type A	0.12	0.15	0.16	0.20	0.22	0.25	0.29	0.34	0.40	0.43	0.48

3. 편심을 확인합니다.(Fig.2)
   (a) 축의 편심은 다이알 게이지를 구동축 허브에 고정하고, 구동측 축을 회전시키면서 피동측 허브의 외경 다이알 게이지 수치를 체크합니다.
   플랜지(D) 1000mm당 2mm의 편심은 편각 0.1°입니다.
   (b) 설비를 움직이거나 받침판을 이용하여 최대 허용치 이내로 조정하고 재확인하여 주십시오.

4. 오랜 수명을 유지하기 위해서는 설치 시운전후 2시간 이내에 편심 편각을 재확인하여 주십시오. 재조립시 Nut는 규정된 Torque값으로 확실히 채결해 주시고 Nut의 사용은 10회 정도가 적당합니다.

3. Parallel misalignment(Fig.2)
   (a) To measure parallel misalignment of shafts, fix a dial gauge on the driving side hub and, while rotating the driving shaft, read the dial gauge at the periphery of the driven hub. A parallel misalignment of 2mm per 1,000mm distance between flange faces (D) results in an angular misalignment of 0.1°
   (b) Recheck angular misalignment and verify that it is sufficiently small.
4. To assure the unlimited service life of the coupling, recheck it for parallel and angular misalignment after a short period(1-2 hours) of actual operation. At that time, refasten bolts and nuts using the rated torque. Test results indicate that the permissible maximum number of use times of nylon nuts do not exceed 10. If this process is repeated 10 times or more, spare nuts should prepared.

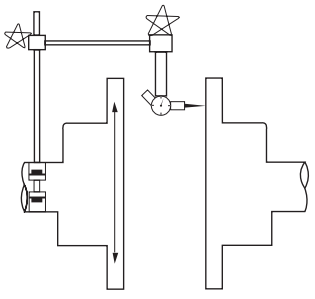


Fig. 1

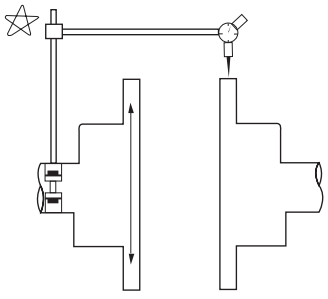


Fig. 2