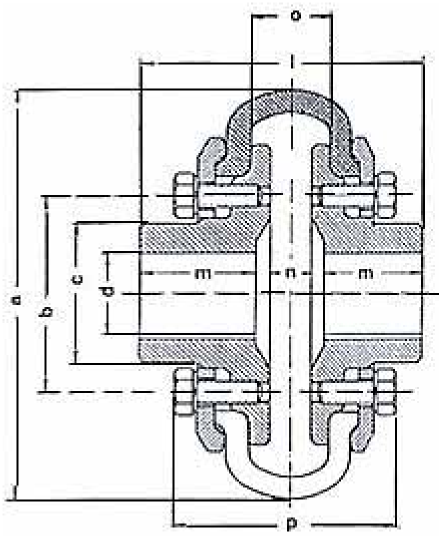
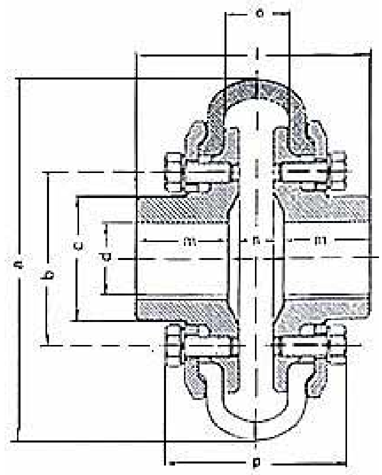
Shaft to shaft coupling S (1) Series



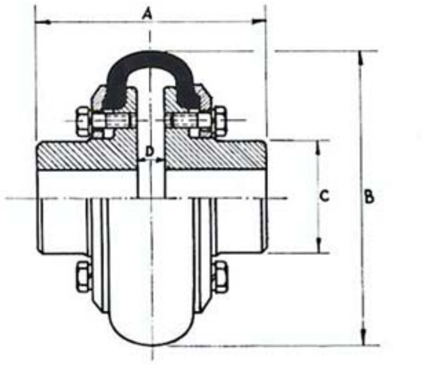
Type	01-1	03-1	06-1	10-1	14-1	18-1	22-1	25-1	26-1	28-1	30-1	31-1
Nominal torque Nm	10	20	50	100	220	450	900	1600	3000	5000	8500	12500
A	86	104	136	178	210	263	310	370	402	450	550	700
B	42	50	65	85	110	140	180	235	260	260	290	360
C	30	34	44	54	70	84	112	150	160	160	183	270
C Long	30	34	48	65	80	95	125	150	160	160	180	260
D Prebored	8	10	10	15	15	25	35	35	40	55	65	75
D maximum	20	22	38	38	50	60	80	100	110	110	120	180
L	50	64	88	125	150	174	200	215	244	280	360	450
L Long hub version	70	88	138	191	252	260	330	345	364	440	520	640
M	20	28	35	47	59	67	75	85	95	110	130	160
M Long hub version	30	40	60	80	110	110	140	150	155	190	210	255
N	10	8	18	31	32	40	50	45	54	60	100	130
O	16	16	18	35	38	44	42	46	50	70	120	150
PD^2 Kg/m^2			0,01	0,05	0,13	0,42	0,90	2,4	3,4	5,7	13,4	44,0
Weight Kg	0,80	1,10	2,40	5,40	9,30	17,5	28	50	59	82	140	327
Weight (Long hub version) Kg	0,90	1,20	2,80	6,60	12	21	45,5	71	82	122	165	400
Torsional angle	6	8	12	16	21	28	19	18	20	22	25	25
Max. speed rpm	4000	4000	4000	3000	3000	3000	2500	2000	2000	1600	1250	900
Tightening torque	1,5	4	6	15	15	25	45	55	60	110	200	240
Type	201	203	203	210	214	218	222	225	426	828	1230	1832

Shaft to shaft coupling S (DVA) Series



Type	DVA 1	DVA 2	DVA 6	DVA 16	DVA 40	DVA 63	DVA 125	DVA 200	DVA 300	DVA 400	DVA 800	DVA 1500
Nominal torque(Nm)	25	50	100	200	400	800	1600	2500	4000	6000	10000	15000
A	86	104	136	178	210	263	310	370	402	450	550	700
B	43	54	68	88	116	140	180	235	260	260	280	360
C	31	40	55	70	92	107	140	150	160	180	210	260
D Prebored	8	10	10	15	15	25	30	35	38	55	70	100
D maximum	22	28	38	48	65	75	100	100	110	120	140	180
L	60	70	110	130	160	190	240	345	364	440	520	640
M	26	30	45	50	65	75	100	150	155	190	210	255
N	8	10	20	30	30	40	40	45	54	60	100	130
O	16	16	18	35	38	44	442	46	50	70	120	150
PD^2 Kg/m^2	0,001	0,004	0,011	0,052	0,14	0,42	0,96	2,73	3,70	6,45	14,6	46,0
Weight Kg	0,84	1,15	2,50	5,40	9,50	17,5	30	71	82	122	185	400
Torsional angle	12	16	16	28	28	28	26	18	20	22	25	25
Max. speed (Rpm)	5000	5000	5000	4000	4000	3000						

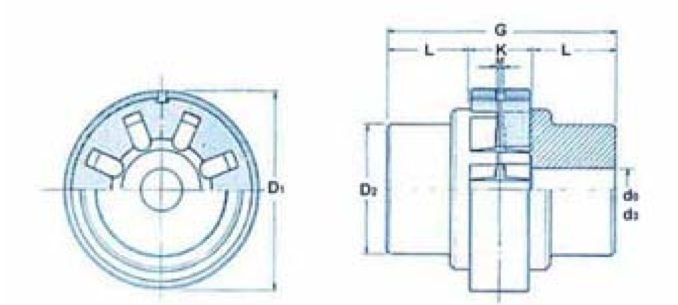
Shaft to shaft coupling M Series



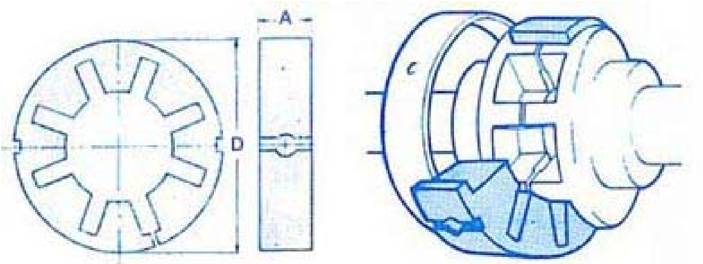
DIMENSIONS AND CHARACTERISTICS

Model M		1	2	3	4	5	6	7	8	9	10	11	12	13
Couple in permanent load	Kp.m	1	3	6	10	22	45	60	90	160	300	500	850	1250
Maximum couple at overiading moment	Kp.m	3	5	20	25	60	120	160	260	470	850	1400	2540	3700
Maximun speed rpm.	Min^{-1}	4000	4000	4000	3000	3000	2000	2000	2000	1600	1600	1250	1000	800
PD^2	Kg/m^2			0,01	0,04	0,1	0,2	0,3	0,8	3,0	3,0	4,9	9	31
Axial misalignment Δ C_A	mm	1	1	1,5	2	2,5	3	3,5	3,5	4,5	5	5,5	6	6
Lateral misalignment Δ C_R	mm	0,7	0,75	1	1,3	1,6	2,1	2,5	2,5	3,0	3,5	3,7	4,2	5,2
Angular misalignment Δ C_W	º	2	2	2	2	2	2	2	2	2	2	2	2	2
Torsional angle ψ x	º	5/6º	5/7º	5/7º	6/8º	6/8º	6/8º	6/8º	6/8º	6/8º	6/8º	8/10º	8/10º	8/10º
		9/10	9/10	9/10	10/12	10/12	10/12	10/12	10/12	10/14	10/14	14/16	14/16	14/16
Axle Ømax	mm	15	22	28	35	44	55	65	75	85	95	110	130	170
ØPreboring	mm					18	22	25	30	30	35	60	75	90
A	mm	50	115	136	157	178	198	220	240	260	300	350	430	520
B	mm	86	110	140	170	210	250	280	320	360	400	450	550	700
C	mm	30	39	48	58	80	95	110	125	140	160	180	205	275
D	mm	10	15	16	17	18	18	18	20	20	20	22	70	80
Weight	mm	0,8	2	3	6	12	20	29	40	56	82	130	215	402
Ref. nr..	mm	12/15	16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85	86/95	96/110	111/130	131/140

Elastic connection Acoflex

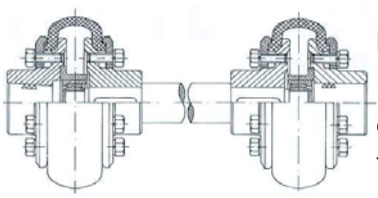


ModelA		00	0	1	2	3	4	5	6	7	8	9	10
Values	Nominal Torque daNm	0,65	2	5	10	20	40	100	200	400	750	1250	2500
	Maximun Torque daNm	2	5	5	25	50	100	250	400	800	1500	2500	4000
	Speed RpMx1000	10	9	8	6,5	4,8	3,5	2,9	2,5	2,2	1,85	1,6	1,25
	Inertia Kgm^2	.	.	.	0,02	0,05	0,2	0,62	1,75	3,3	19,8	19,8	48
Measures	D_1	42	60	80	107	140	176	225	268	307	432	432	532
	D_2	34	52	64	80	86	110	140	180	205	242	280	330
	Max bore d_3	16	24	32	42	50	65	85	110	130	150	180	210
	Pre-bore d0	6	8	14	17	19	24	29	39	48	62	73	96
	Total Length G	47	71	91	126	154	177	213	257	307	378	418	472
	K	14	18	24	34	45	55	63	73	81	91	102	123
	Keyway Lenght L	17	27	34	46	55	61	75	92	113	144	158	180
Tolerances	Assembly M	1	1	2	2	2	3	3	3	3	4	4	4
	Axial +mm	+1	+1	+1,5	+1,5	+2	+2	+3	+3	+3	+4	+4	+4
	Radial mm	0,5	0,5	1	1	1	1,5	1,5	1,5	1,5	1,5	2	2
	Angular ang^0	2º	2º	2º	2º	2º	1º30	1º30	1º30	1º	1º	1º	1º
Kg		0,3	0,9	1,8	4	7,5	14	28	52	80	145	215	350



RA	00	0	1	2	3	4	5	6	7	8	9	10
A	12	16	22	32	42	51	59	67	75	84	94	104
D	39	57	73	97	128	163	209	251	289	347	407	504

Floating Axle Coupleing 2M Series



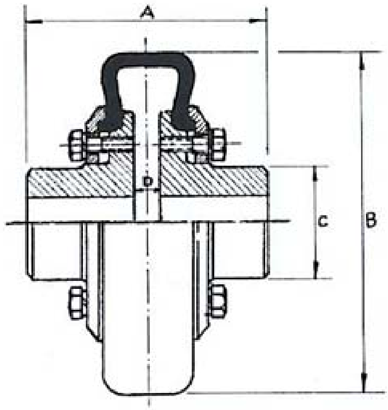
Each coupling consists of two complete couplings joined by a floating axle and supported by ball-and-socket joints with circlips that hold the joint in place.

Each joint allows up to 3 degrees angular misalignment and full axial movement of each coupling.

The 2 M Series is manufactured in all models from M-2 to M-10 inclusive.

The length of the axle is variable, depending upon the needs of each case.

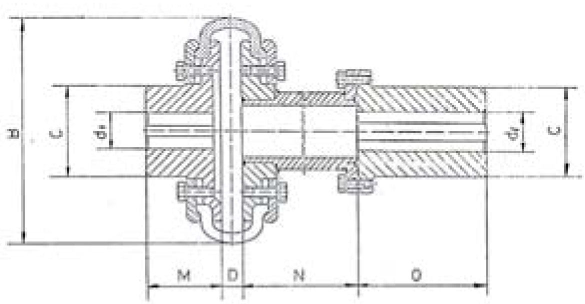
Une-Flex Couplings F.F. Series For drive with sliding rotor motors



DIMENSIONS AND CHARACTERISTICS

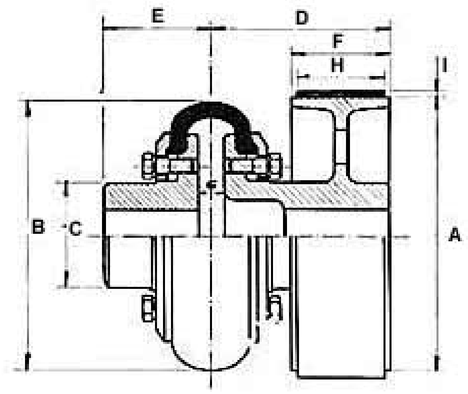
Model f.f		1	2	3	4	5	6	7
Couple in permanent load	Kp.m	0,3	0,7	1,7	4	8	13	20
Maximum couple at overioading moment	Kp.m	3	7,5	15	30	70	120	200
Maximum speed r.p.m.	min.-1	3000	3000	1500	1500	1500	1500	1000
Flywheel effect	Kg/m^2		0,015	0,045	0,13	0,17	0,32	0,89
Torsion angle	0	4º	5º	6º	7º	8º	9º	10º
Axle Ø max	Max	22	32	38	55	55	65	75
A	mm	65	92	117	142	178	207	233
B	mm	134	172	222	280	330	376	400
C	mm	34	48	65	80	80	95	110
D	mm	9	12	12	12	14	14	18
Ø Preboring	mm			16	18	18	18	25
Weight	Kp	1	3,5	7	11,5	14,5	22	35
Axial misalignment ΔC_A	mm	± 6	± 6	± 8	± 8	± 8	± 8	± 8
Lateral misalignment ΔC_R	mm	0,7	1	1,4	1,6	1,9	1,9	2,6
Angular misalignment ΔC_W	mm	2	2	2	2	2	2	2
Ref. nr..	mm	U201	U202	U203	U204	U205	U206	U207

Spacer coupling MTD Series

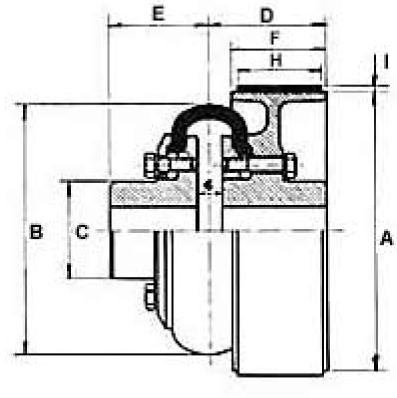


Model		2TD	3TD	4TD	5TD	5TD	7TD	8TD	9TD
Couple in permanent load	Kp.m.	2	6	10	22	45	60	90	160
B	mm.	110	140	170	210	250	280	320	360
C	mm.	50	55	70	93	107	112	140	160
D	mm.	15	16	17	18	18	18	20	20
d_1 max	mm.	35	38	48	68	80	80	90	105
M	mm.	25	25	26	33	48	48	52	92
N	mm.	140	140	140	140	140	140	180	180
O	mm.	35	40	45	80	80	90	100	110
Ref. Banda	mm.	16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85

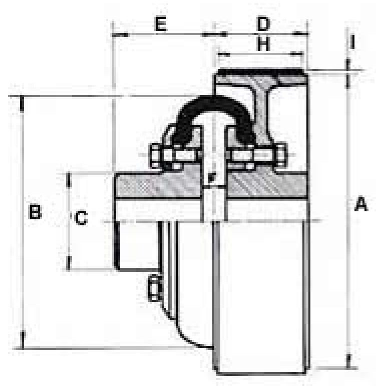
UNE-FLEX Coupling With Brake-Pulley F S Series



MOD. F.C.



MOD. F.L.

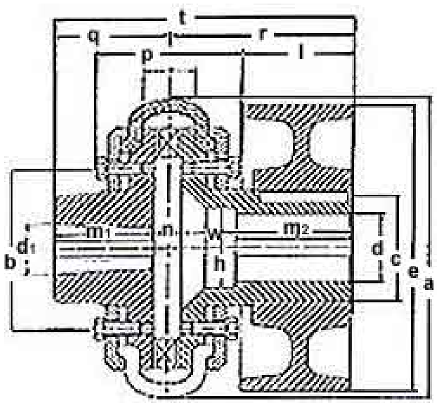


MOD. F.C.

DIMENSIONS AND CHARACTERISTICS

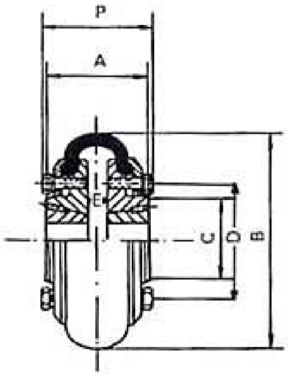
Model f-s		1	2	3	4	5	6	7	8	9	10
Couple motor in permanent load	Kp.m	-	2	6	10	22	45	60	90	160	300
Maximum speed rpm.	Min^{-1}	1500	1500	1500	1500	1500	1500	1500	1250	1250	1000
Torsional angle	º	5/7º	5/7º	5/7º	6/8º	6/8º	6/8º	6/8º	6/8º	6/8º	6/8º
Flywheel effect	km./m.2	-	0,02	0,06	0,12	0,3	0,6	0,85	2,3	6	13,8
A, mod.F-S mod.F-S y F-C	mm. mm.	100 100	125 133	150 160	175 200	200 250	225 300	250 350	310 400	400 450	500 55
Eje ⌀max.	mm.	15	22	28	35	44	55	65	75	85	95
B	mm.	80	110	140	170	210	250	280	320	360	400
C	mm.	32	39	48	58	80	95	110	125	140	160
D, Mod. F-S Mod. F-I Mod.F-C	mm.	70 48 35	82 55 42	100 65 50	120 82 65	140 98 80	160 115 95	185 132 110	205 150 125	240 170 140	280 190 160
E	mm.	45	57	68	78	89	99	109	120	130	150
F, Mod.F-S Mod. F-I	mm.	35 35	42 42	50 50	65 65	80 80	95 95	110 110	125 125	150 140	190 160
G	mm.	14	15	16	17	18	18	18	20	20	20
H	mm.	30	37	45	60	75	90	105	120	130	150
I	mm.	6	6	6	6	8	8	8	10	10	12
Weight F-S	Kg.	2	4	6	10	18	30	53	73	106	155
Weight F-I	Kg.	1,5	4	6	12	20	38	48	75	105	160
Ref. N.		12/15	16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85	86/95

Une-Flex Couplings With Brake-Pulley Series S

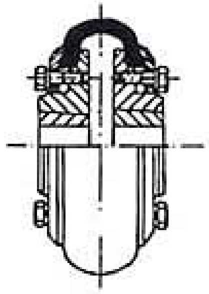


Type	14p-200	18p-200	18p250	22p-315	25p-315	25p-400	26p-400	26p-500	28p-630	30p-360	30p-710
Nominal torque	220	450	450	900	1600	1600	3000	3000	5000	8500	8500
Max. speed	3000	2500	2500	2500	2000	2000	2000	2000	1600	1250	1250
PD^2 Kg/m^2	0,075	0,142	0,24	0,58	0,93	1,55	1,85	3,10	8,50	9,00	15,25
Weight Kg	19	28	36	63	83	108	118	150	225	260	340
Tightening torque (Nm)	20	25	25	35	55	55	60	60	110	200	200
A	210	263	263	310	370	370	402	402	450	550	550
B	110	140	140	180	235	235	260	260	260	280	280
C	85	85	100	125	140	140	140	140	150	170	170
D1 maximum	55	65	65	85	100	100	110	110	110	130	130
D1D2 Prebored	20	20	25	30	35	35	35	35	55	70	70
D2 maximum	50	50	60	80	90	90	90	90	100	120	120
E	200	200	250	315	315	400	400	500	630	630	710
H	60	70	70	98	105	105	110	110	125	140	140
L	213	235	255	298	338	370	398	443	521	556	595
M1	90	102	84,5	84,5	84,5	107,5	123	133	143	153,5	163,5
M2	90	80	100	120	120	120	130	160	210	210	235
N	20	24	24	20	22	22	24	24	40	90	90
O	38	44	44	42	46	46	50	50	70	120	120
P	105	121	121	138	148	148	152	152	188	280	280
Q	85	98	98	100	132,5	132,5	163	178	185	180	190
R	128	137	157	198	205,5	237,5	235	265	336	376	405
T	75	75	95	118	118	150	180	190	236	236	265
W	28	45	45	68	68	74,5	93	93	106	125	125
Tyre	214	218	222	225	426	426	426	426	828	1230	1230

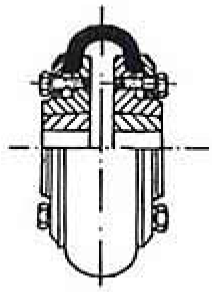
Une-Flex Coupling With Conical Bushing F Series



Ejecution H.H.



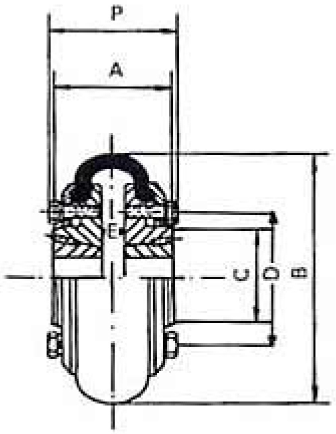
Ejecution H.F.



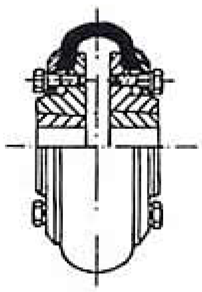
Ejecution F.F.

Model		40	50	60	70	80	90	100	110	120	140	160	200
Couple in premanent load	Nm	30	75	130	250	350	500	600	720	1000	2100	4300	8700
Maximum couple	Nm	900	220	380	700	1000	1500	1800	2100	3000	6000	12500	25000
Maximum speed rpm.	mm^{-1}	4500	4500	4000	3600	3100	2800	3600	2300	2100	1800	1500	1300
Axke ϕ max	mm.	28	32	42	42	50	60	60	75	75	90	100	110
ϕ max. Without bushings	mm.	30	38	45	50	60	70	80	90	100	130	140	150
A	mm.	53	53	73	77	84	87	114	115	122	200	228	270
P	mm.	63	74	86	92	100	103	110	125	142	156	160	184
B	mm.	104	133	165	187	211	235	254	279	314	359	402	508
C	mm.	50	79	70	80	95	108	113	134	140	178	180	205
E	mm.	22	25	33	24	26	29	29	25	29	33	30	48
Bushing		1108	1210	1610	1610	2012	2517	2517	3020	3020	3525	4030	4035

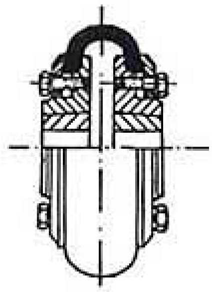
Une-Flex Coupling With Conical Bushing T Series



Ejecution H.H.



Ejecution H.F.



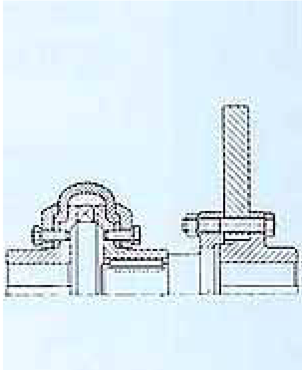
Ejecution F.F.

Advantages

- There is no need to make keys and so, the coupling is ready for assembly.
- It is possible to assemble the coupling on a different axle, changing only the conical bushing.
- Easy removal by means of the extractor screw.
- Before placing the conical bushing on the coupling, every must be cleaned. Only the screws can be greased before assembly.

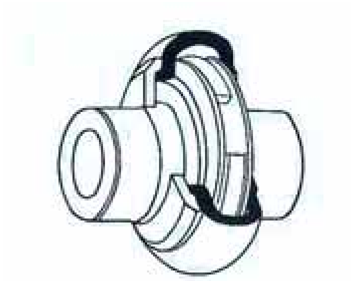
Modelo		**2T**	**3T**	**4T**	**5T**	**6T**	**7T**	**8T**	**9T**	**10T**	**11T**
Couple in permanent load	Kp.m.	2	6	10	22	45	60	90	160	300	500
Maximum couple	Kp.m.	5	20	25	60	120	160	26	470	850	1.400
Masimum speed	min-1	4.000	4.000	3.000	3.000	3.000	2.500	2.000	1.600	1.600	1.250
PD2	kg./m.2	0,0009	0,0023	0,015	0,031	0,11	0,18	0,2	0,65	0,84	1,52
Axle Ømax.	mm	28	28	35	45	60	60	75	90	100	110
Ømax. without bushings	mm	35	38	48	68	78	83	90	105	115	130
A	mm	53	53	73	84	114	115	122	200	228	270
P	mm	63	74	86	100	110	125	142	156	160	184
B	mm	110	140	170	210	250	280	320	360	400	450
C	mm	50	55	70	93	107	112	140	160	180	200
D	mm	61	68	88	110	140	152	178	202	225	252
E	mm	15	16	17	18	18	20	20	20	20	20
Screws		12 M-6	16 M-6	16 M-8	24 M-8	16 M-12	16 M-14	16 M-16	16 M-16	24 M-16	24 M-16
Bushing		1108	1108	1610	2012	2517	2517	3020	3535	4040	4545
Ref. nr.		16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85	86/95	96/110

With Disc-Brake

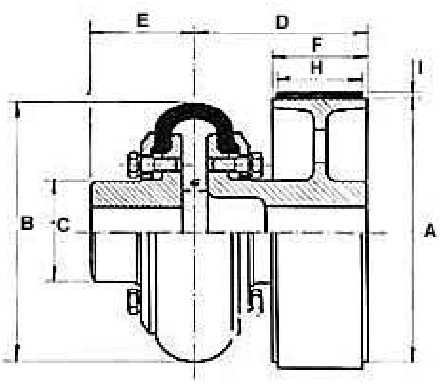


UNE-FLEX disk-applied couplings for disk brakes are used to transmit horizontal and vertical motions in lifting machinery and conveying systems (heavy-duty cranes, elevators, conveyor belts, etc...) and also in machinery in general: rolling mills, calenders, etc… UNE-FLEX disk- applied couplings are specially designed to endure great responsibility situations and, in general for any requirements that other models cannot provide. Its characteristics and design confer UNE-FLEX disk-applied couplings a great capacity for energy dissipation and mounting facilities. Our technical department will solve any problem in accordance with your specific requirements

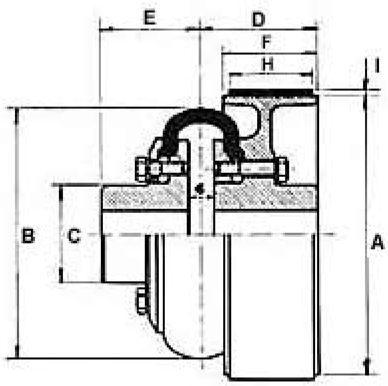
Coupling With Safety Mortises



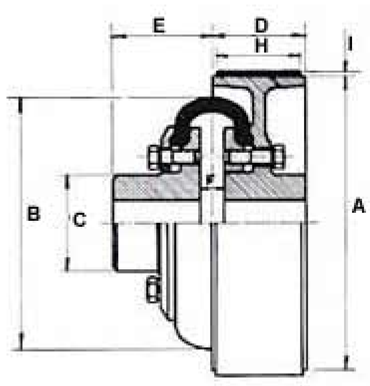
ALL UNE-FLEX couplings con be supplied with safety mortises. These mortises are used as an element of safety, as, in case of the rubber flector breaking, due to mishandling, they prevent the load from falling.
Uses: Their use is recommended for crane istallations, winches, etc.



MOD. F.C.

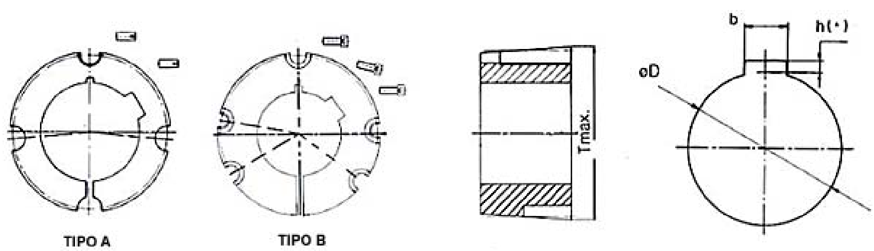


MOD. F.L.



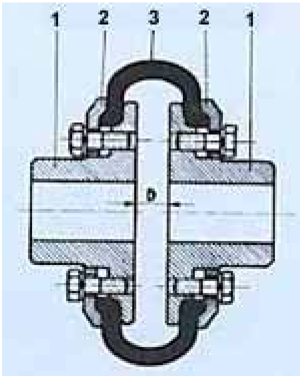
MOD. F.C.

Conical Bushings



D mm.	b mm	H mm.		1008	1108	1210	1215	1610	1615	2012	2517	3020	3030	3525	3535	4040	4045	5050
			*															
9	3	1,4	-	#	# (2)													
10	3	1,4	-	#	# (2)													
11	4	1,8	-	#	# (2)	# (2)	# (2)											
12	4	1,8	-	#	#	#	#											
14	5	2,3	-	#	#	#	#	#	#	# (2)								
16	5	2,3	-	#	#	#	#	#	#	# (2)	# (2)							
18	6	2,8	-	#	#	#	#	#	#	#	#							
19	6	2,8	-	#	#	#	#	#	#	#	#							
20	6	2,8	-	#	#	#	#	#	#	#	#							
22	6	2,8	-	#	#	#	#	#	#	#	#							
24	8	3,3	1,3	#	#	#	#	#	#	#	#							
25	8	3,3	1,3	#	#	#	#	#	#	#	#	# (2)						
28	8	3,3	1,3		#	#	#	#	#	#	#	# (2)						
30	8	3,3	-			#	#	#	#	#	#	# (2)						
32	10	3,3	1,3			#(*)	#(*)	#	#	#	#	# (2)						
35	10	3,3	1,3					#	#	#	#	#	#	# (2)	#			
38	10	3,3	-					#	#	#	#	#	#	# (2)	#			
40	12	3,3	1,3					#(*)	#(*)	#	#	#	#	# (2)	#	#		
42	12	3,3	-					#(*)	#(*)	#	#	#	#	# (2)	#	#		
45	14	3,8	-							#	#	#	#	# (2)	#	#		
48	14	3,8	-							#	#	#	#	# (2)	#	#		
50	14	3,8	2,8							#(*)	#	#	#	# (2)	#	#		
55	16	4,3	-								#	#	#	# (2)	#	#	#	
60	18	4,4	-								#	#	#	# (2)	#	#	#	
65	18	4,4	-									#	#	# (2)	#	#	#	
70	20	4,9	-									#	#	# (2)	#	#	#	#
75	20	4,9	-									#	#	# (2)	#	#	#	#
80	22	5,4	-											# (2)	#	#	#	#
85	22	5,4	-											# (2)	#	#	#	#
90	25	5,4	-											# (2)	#(*)	#	#	#
95	25	5,4	3,4													#	#	#
100	28	6,4	-													#(*)	#	#
105	28	6,4	5,4														#	#
110	28	6,4	-														#	#
115	32	7,4	-															#
120	32	7,4	-															#
125	32	7,4	-															# (2)
Type				A	A	A	A	A	A	A	A	A	A	B	B	B	B	B
Tmax.			mm.	35,0	38,0	47,5	47,5	57,0	57,0	70,0	85,5	108,0	108,0	127,0	127,0	146,0	162,0	177,5
Screws				1/4" X 1/2"	1/4" X 1/2"	3/8" X 5/8"	3/8" X 5/8"	3/8" X 5/8"	3/8" X 5/8"	7/16" X 7/8"	1/2" X 1/1"	5/8" X 11/4"	5/8" X 11/4"	1/1" X 11/2"	1/1" X 11/2"	5/8" X 13/4"	3/4" X 2"	7/8" X 21

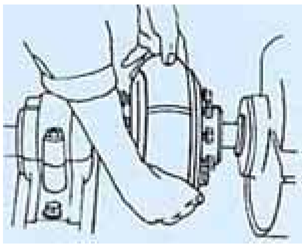
Coupling Assembly UNE-FLEX



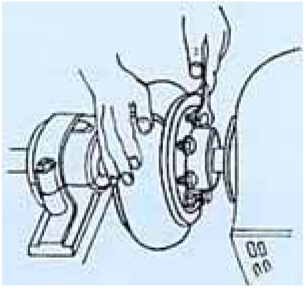
Join the two halves of the coupling and pressure rings to the pivots of the axles.

Draw back the machine with the two halves until the D measurement, as indicated in the table, is reached.

Align the axles until distance D between the two halves of the coupling is reached. Normally, it is sufficient to carry-out adjustments with simple measuring tools since small inaccuracies in the coupling assembly can be permitted. For quick turning couplings, it is recommended to adjust more precisely with a template, since, if this is not done, the subsequent knocking could harm the working-life of the flectors. As for axle couplings with safety mortises or grips, the two halves of the coupling should be assembled in such a way that the mortise surfaces of both halves form a 45°angle.



The cut flectors (3) are set on the coupling halves so that the edges of the cut form a channel of 2-10 mm., according to coupling size. For large couplings, before tightening the pressure rings, tighten the rubber type using clamp bands.

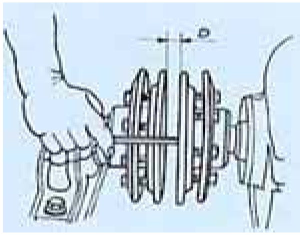


It screws the pressure hoops so that two diametrically opposite screws are tightened simultaneously and the thickness of the rim fit in the 2/3 of its nonsubject thickness is pressed approximately.

B) Replacement of flectors.

1. Loosen pressure ring screws until flector is freed.
2. Remove worn flector.
3. Replace it with new flector.
4. Tighten screws.

We ask you to indicate flector number, clearly marked on flector, when ordering replacements.



Model	2	3	4	5	6	7	8	9	10	11	12	13
Couple deserrage Kp.m.	0,4	0,6	1,5	2	3	4	5	6	7	11	14	20

Model	1	2	3	4	5	6	7	8	9	10	11	12	13
D.	14	15	16	17	18	18	18	20	20	20	22	70	80

Selection

In order to determine the type of coupling to be used the following formula should be applied:

$$M = \frac{NCV}{n} .716.2K$$

$$M = \frac{NkW}{n} \cdot 973.5\ K$$

M= Torque in permanent load.

N= Driving-motor power (CV or KW).

n= Minimum speed of the connected axles (rpm).

k= Multipuling co-efficient.

The value obtained on applying the formula should be less than or egual to that indicated in the tables of sizes and powers that refer to the corresponding coupling in the colum "Torque in permanent load".

VALUE OF - K	Machine Type				
	1	2	3	4	5
Electric Motor Steam Turbine Transmissions	1	1,5	2	2,5	3
Steam machine Gas machine Hydraulic turbine Diesel 4-6 cylinders	1,5	2	2,5	3	3,5
Diesel 2-3 cylinders 4 stroke motor	2,2	2,5	2,8	3,2	3,2
Diesel 1-2 cylinders 4 stroke motor	2,6	2,8	3	3,5	4

Notes: The values indicated in the above table are by no means applicable to every case. If i for example, one of the machines to be coupled displays such a degree of irregularity that it is judged necessary to carry-out technical investigations of the oscillations. then it is recommended to proceed to the selection of the multiplying co-efficient using the enclosed questionnaire.

The Following groups apply to the machines being driven:
Guidance for different groups of machines to help find K-coefficient.

TYPE 1. Continual load machines: Generators (electrogenetic group). Conveyor belts. Small hoisting equipment of up to six starts, per hour. Low power machinery for working wood. Small fans. Small machines of which principal movement is rotation. Small centrifugal pumps.

TYPE 2. Variable load machines: Small hoists Generators Winches. Hoisting equipment of up to 120 starts per hour. Conveyor chains Crane movement mechanism. Sand blast equipment Textile machinery. Transmissions. Conveyors Turbo blowers (gas blowers : compressors). Fans Machine-tools in which main movement is rotation. Large winches. Centrifugal pumps.

TYPE 3. Normal size to heavy machinery: Heavy hoists .Revolving ovens Tannin barrels. Cylinder grinders. Refrigerating drums Continuous Ring Looms Mechanical mixers Cutters. Sharpening machines Washing machines. Looms. Brick presses. Fans Hoisting equipment of up to 300 starts per hour. Translation mechanism.

TYPE 4. Heavy machinery : Dredge control mechanism. Briquette presses. Rubber rollers. Ventilators for mines. Machinery for sand papering wood. Sand and paper grinders. Pumps with immersible piston. Cleaning drums. Machinery of oscillating movement. Compoud grinders. Cement grinders. Draw benches Hoisting mechanisms. Hoisting equipment of more than 300 starts per hour.

TYPE 5. Heavy machinery: of variable energy consumption: Large drilling installations Machinery forglossing sheets of paper. Horizontal and reciprocating vertical saws Presses. Paper calenders. Roller trains for laminators. Drier rollers Small rollers for metals Centrifuges. Roller equipment for paper.

NOTE: To carry out the correct selection of a coupling,an indication of powerand speed is generallysuMcient Itis, however, better to have the following information as well:
NECESSARY DATA TO CHOOSE THE APPPOPIATE UNE-FLEX COUPLING DRIVEN BY ELECTPIC MOTOR

1. Kind of motor (make, type, running factor in ED %
2. Power of motor CV or KW.
   Speed in r.p.m.
3. Couple of start of the motor: C = m.Kp.
4. Type of machine to be driven.
5. Whether operation is continuous or intermittent.
6. Number of starts per hour.
7. Whether operation conditions are uniform. irregular or special, and if there is any running change

Example:

The elevator bucket is driven by a motor of 16kW.n= 1.450rp.m., by means of a reducer whose outlet axle rotates at a speed of n= 180 r.p.m. The motor and reducer are protected by a UNE-FLEX flexible axle coupling.

1. COUPLING BETWEEN MOTOR AND REDUCER
   N= 16KW.
   n=1450r.p.m.

   $$M = \frac{NkW}{n} \cdot 973.5\ K$$

   Elevator buckets figure in group 2 of the classification. under "variable load machinery". The multiplying co-efficient K = 1,5 figures in the k value table under heading 2 and in the classification of machines driven by "electric motor".

   $$M = \frac{16}{1450} \cdot 973.5K\ .\ 1.5 = 16kp.m$$

   Then, according to the power table. the appropriate coupling for a torque of 16 kp.m. is model M-5.

2. COUPLING BETWEEN REDUCER AND ELEVATOR, BUCKET MECHANISM
   N= 16KW.
   n=180 rpm

   $$M = \frac{NkW}{n} \cdot 973.5\ K$$

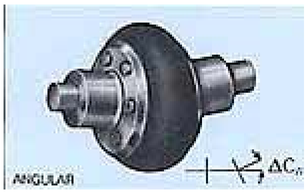
   $$M = \frac{16}{180} \cdot 973.5K\ .\ 1.5 = 129.8\ kp.m$$

   Consulting the power table, coupling model M-9 with 160 kp.m is the appropriate one for the transmission of a torque of 129,8 kp.m.

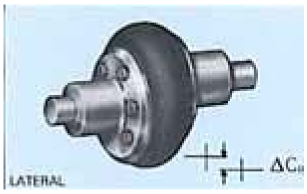
general characteristics

The new idea in flexible couplings… with a flexible body that compensates all the combinations of improper misalignments and protects all the elements that intervene in the transmission.

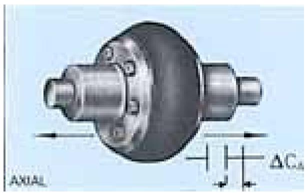
The UNE-FLEX coupling eliminates all alignment defects. It's ability to achieve multiple displacements surpasses mor complex coupling mechanisms, and, none the less it operates with the simplicity and safety of a modern rubber tyre.



This new coupling has been made possible by the technological advances that have contributed to the wonders of present day rubber tyres, designed to carry huge loads at high speeds and to withstand tremendous impacts.



The fundamental element of the UNE-FLEX coupling is a rubber tyre reinforced with a synthetic mesh. It alone adapts itself to the workconditions, absorbing all axial, lateral angular and torsional misalignments and preventing the transmission of vibrations to the machines to which are coupled. It compensates the defect of angular misalignments to 3º, lateral misalignment 4 mm, and axial misalignment 6mm.

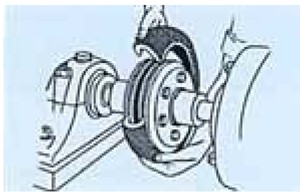


The UNE-Flex couplings cushion the effects of overloading. It absorbs the vibrations, thus lessening noise and protecting the machine from the destructive effects of vibration.

There is no metal to metal contact between the axles and the hubs are completely isolated. No lubrication needed.

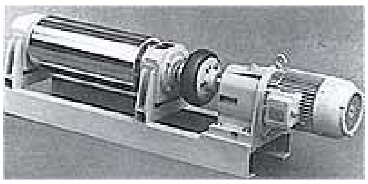
Replacement: Easy and practical. There is no need to move neither the motor nor the machine: it is sufficient to release the lateral washers, thus freeing the coupling.

All this leads to a better running of the machine and a longer life for the whole of the installation.

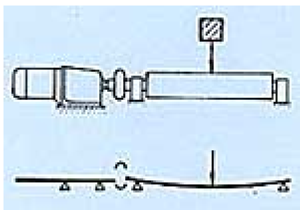


Field application	
• Iron and steel industry.	• Pump installations.
• Shipbuilding.	• Current generators.
• Compressors.	• Hoisting equipment.
• Paper machinery.	• Machine-tools.
• Cement installations.	

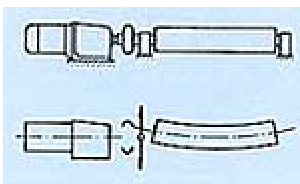
THE UNE-FLEX coupling is used for individual roller drive in which it is advisable to avoid open reduction gearing and to use a highly flexible, slack free coupling.



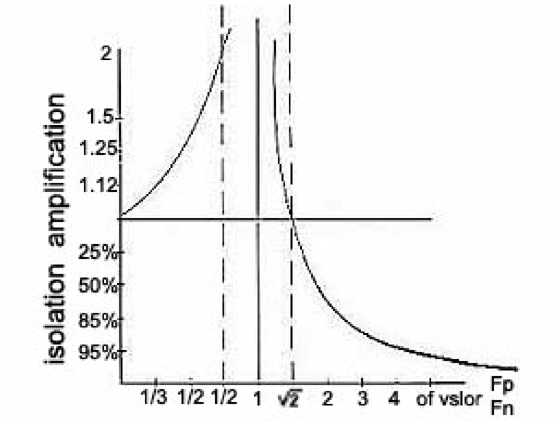
Individual drive of a roller through a highly flexible, slack free UNE-FLEX coupling and roller table geared motor. There are a number of important features with this arrangement.



- The intermediate coupling prevents direct heat conduction from the roller to the gearbox and to the motor so that neither gearbox lubrication nor motor insulation are adversely affected.
- Most of the vibration and shock produced when the conveyed material runs on to the roller, and especially when it is laid on it is isolated from the drive.
- Sagging of the roller, which can often be seen when working conditions become heavy, has no adverse effect on the gearing.



Damping Insulation Dynamic Torsional Stiffness



$$\% \text{ Isolation} = 100 \left| 1 - \frac{1}{\left(\frac{Fp}{Fn}\right)^2 - 1} \right|$$

Resonance takes place when $\left(\frac{Fp}{Fn}\right)$ = lies between $\frac{1}{\sqrt{2}}$ and $\left(\frac{Fp}{Fn}\right) = \sqrt{2}$

When $\frac{Fp}{Fn}$ >= 3, the insulation can be considered as good

Fp = Perturbing frequency. Usually the lowest rotating speed is taken: $Fp = \frac{n}{60}$ r.p.m.

Fn = natural frequency

For two roating mass system, $Fn = \frac{1}{2\pi}\sqrt{ktdyn \frac{Jm + Jr}{Jm^{*}Jr}}$

Where Jm*Jr = inestia of the drining und and the drive unit

$$Ktdyn = \frac{\Delta \text{ Par transmitido}}{\Delta \text{ angle tarsion}}$$

According to the above mentioned the insulation will grow when the dynamic torsional stifdness decreases, that is, when the torsion angle grows.

On varying the torsional stiffness we will vary the % of insulation.

R Tyre

Model Bandaje		12/15	16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85	86/95	96/110	111/130	131/170
Rigidity torsional al 100% par no.	Kp.m.rad	21	40	75	155	290	650	840	1300	2550	4260	5400	6100	9800
75%		20	36	72	145	270	590	780	1190	200	3800	5100	5540	9450
50%		18	34	71	135	250	490	675	990	1450	2800	3150	4550	8900
25%		15	31	68	105	220	390	580	770	980	1900	2250	3380	8900

X Tyre

Model Bandaje		12/15	16/22	23/28	29/35	36/44	45/55	56/65	66/75	76/85	86/95	96/110	111/130	131/170
Rigidity torsional al 100% par no.	Kp.m.rad	55	110	375	575	750	1100	1390	1700	5350	8500	8500	14000	3200
75%		55	110	375	575	750	1100	1340	1580	400	6745	7480	14000	3200
50%		55	110	375	575	750	840	1210	1575	3150	5945	5640	14000	3200
25%		55	110	375	575	750	750	1120	1490	2600	4900	3645	14000	3200