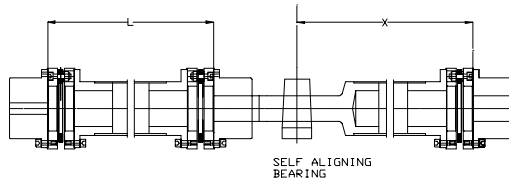


Metaflex Floating Shafts Type SN , SF , SV and SVA



Metaflex Flexible shafts are ideally suitable for connecting machines relatively far apart . Typical uses are Paper Machinery Drive , Vertical Pump Drive.

Shafts are available in fixed Length as well as adjustable Lengths with Shrink Disc/ Splines. Hollow tubes are used to fabricate shafts. Shafts are ligh weight and require very little maintenance. Lubrication is required only for intermediate bearings.

Tube Size is selected to ensure operation well away from critical whirling speed.

$$N_{cr} = 1.16 \cdot 10^5 \cdot (D_o^2 + D_i^2)^{0.5} / L^2 \text{ RPM}$$

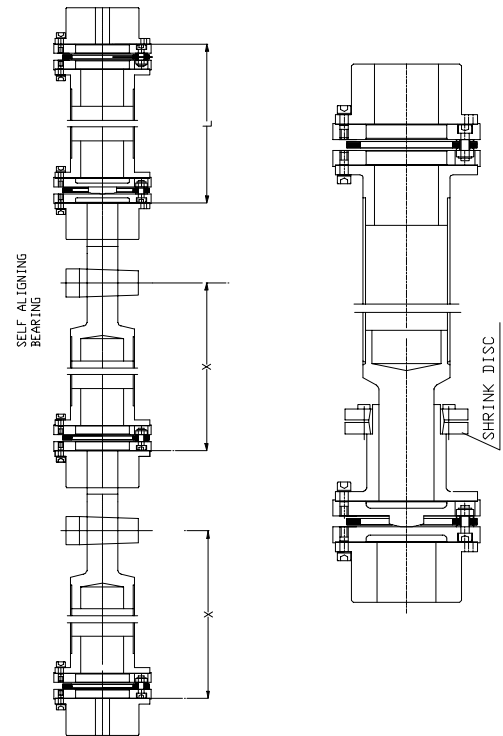
Where D_o is Tube OD in metre , D_i is Tube ID in metre , L is span in metre.

For semifloating shaft type SF , span is bearing centre to cr of disc pack

For Floating Shaft Type SN , SV , SVA , span is centre of Disc pack to Cr of disc pack

Tube OD mm	Max Span in mm L for SF,SV, SVA X for Type SF			Tube per metre		Shaft Size Type SN/SF/SV/SVA
	1500 RPM	1000 RPM	750 RPM	Weight Kg	MR ² Kg.m ²	
33.4	1570	1930	2230	2	0.001	65
44.5	1830	2240	2590	3	0.001	65,80
50.8	1960	2560	2780	3.5	0.002	80,100
57.2	2090	2700	2960	3.9	0.003	100
63.5	2200	2830	3110	4.8	0.004	125,150
69.8	2300	2970	3270	5.3	0.006	162,180,200
76.2	2420	3210	3430	5.8	0.008	162,180,200
88.9	2620	3440	3710	6.9	0.012	200,220,225,250
101.6	2810	3640	3970	8.8	0.022	250,262,300,312
114.3	2970	3840	4200	13	0.039	250,262,300,312
127	3140	4060	4440	14.5	0.055	300,312,350
141.3	3320	4410	4690	16.2	0.075	300,312,350,375
168.3	3600	5000	5000	28.2	0.18	375,425,450
219.1	4120	5000	5000	on req	on req	500,550,600
273.1	4610	5000	5000	on req	on req	550,600,700,750

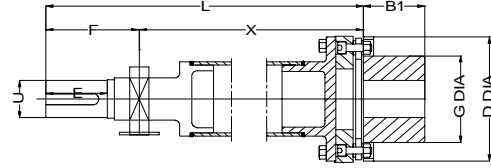
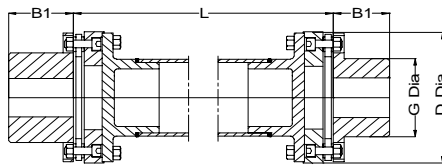
The above is rough indicative- for information only.



**Type SVA - Adjustable
With Shrink Discs
Length adjustment in
Stationary Condition only**



Metaflex Floating Shaft Couplings



Series 80 SN

Series 80 SF

Size	Nominal HP/100 RPM	Nominal Torque Nm	Peak Torque Nm	Max Bore mm	D	G	B1
65	0.45	32	64	24	66	34	28
80	0.9	64	128	28	75	40	30
100	1.8	128	256	32	87	46	32
125	2.6	185	370	42	102	59	41
150	4	285	570	42	105	62	45
162	7	500	1000	48	115	71	48
180	9	640	1280	55	130	78	55
200	12	855	1710	55	143	84	54
220	15	1070	2140	65	143	93	62
225	18	1282	2562	65	148	93	67
250	25	1780	3560	80	173	114	76
262	33	2350	4700	80	173	114	76
300	56	3990	7980	90	203	128	86
312	56	3990	7980	100	203	140	86
350	70	4990	9980	105	227	150	95
375	100	7125	14250	115	252	170	102
425	140	9975	19950	120	273	178	108
450	170	12110	24220	135	293	194	114
500	270	19230	38460	155	333	226	127
550	400	28500	57000	180	373	256	148
600	500	35625	71250	190	412	276	153
700	800	57000	114000	220	470	318	178
750	1100	78375	156750	220	510	321	191
800	1600	114000	228000	240	553	349	210

Size	Weight		Inertia MR ²		End Float		Bolt Torque Nm
	SN Kg	SF Kg	SN Kg.m ²	SF Kg.m ²	SN mm	SF mm	
65	1.5	1.8	0.001	0.001	1.00	0.50	6
80	2.1	2.0	0.002	0.001	1.20	0.60	10
100	3.0	2.2	0.003	0.002	2.00	1.00	24
125	4.7	3.7	0.007	0.004	2.00	1.00	24
150	4.8	3.8	0.007	0.004	1.30	0.65	24
162	6.6	5.8	0.011	0.007	1.30	0.65	24
180	9.2	8.0	0.020	0.012	1.50	0.75	48
200	11.0	9.7	0.030	0.018	1.80	0.90	48
220	13.5	13.5	0.043	0.026	2.00	1.00	48
225	14.5	13.5	0.044	0.027	1.40	0.70	48
250	20	19	0.082	0.050	2.20	1.10	48
262	20	19	0.082	0.050	1.50	0.75	48
300	34	31	0.19	0.116	3.00	1.50	200
312	30	27	0.17	0.104	1.90	0.95	80
350	42	35	0.30	0.18	2.00	1.00	200
375	55	49	0.47	0.29	2.30	1.15	200
425	75	64	0.77	0.47	2.50	1.25	400
450	97	on req	1.15	on req	2.80	1.40	400
500	122	on req	1.95	on req	3.00	1.50	400
550	155	on req	3.0	on req	3.20	1.60	540
600	205	on req	4.9	on req	3.70	1.85	700
700	314	on req	9.8	on req	4.10	2.05	1400
750	395	on req	14.2	on req	4.60	2.30	1800
800	580	on req	26.0	on req	5.00	2.50	2400

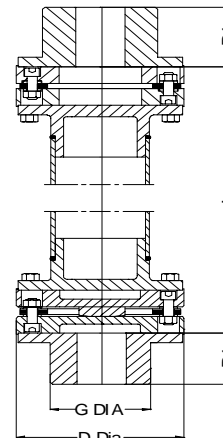
Note - Mass and Inertia are excluding tube and at max bore. Max misalignment 0.5 deg/pack
 For Maximum Length , Permissible speeds and Tube Dia - see Selection Table.



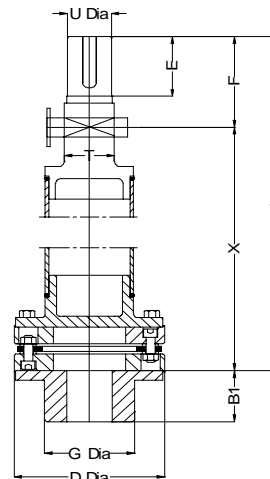
Metaflex Vertical Floating Shaft Coupling

Size	Nominal HP/100 RPM	Nominal Torque Nm	Peak Torque Nm	Max Bore mm	D	G	B1
65	0.45	32	64	28	66	42	28
80	0.9	64	128	38	75	54	30
100	1.8	128	256	42	87	60	32
125	2.6	185	370	48	102	70	41
150	4	285	570	48	105	69	45
162	7	500	1000	55	115	80	48
180	9	640	1280	65	130	90	55
200	12	855	1710	70	143	100	54
220	15	1070	2140	80	143	112	62
225	18	1282	2562	75	148	110	67
250	25	1780	3560	80	173	130	76
262	33	2350	4700	90	173	130	76
300	56	3990	7980	110	203	157	86
312	56	3990	7980	110	203	157	86
350	70	4990	9980	115	227	162	95
375	100	7125	14250	130	252	187	102
425	140	9975	19950	130	273	191	108
450	170	12110	24220	145	293	211	114
500	270	19230	38460	175	333	251	127
550	400	28500	57000	190	373	270	148
600	500	35625	71250	210	412	as reqd	153
700	800	57000	114000	240	470	as reqd	178
750	1100	78375	156750	270	510	as reqd	191
800	1600	114000	228000	300	553	as reqd	210

Series 80 SV



Size	Weight		Inertia MR^2		End Float		Bolt Torque Nm	Bolt Torque ##
	SV	SF	SV	SF	SV	SF(*)		
	Kg	Kg	Kg.m^2	Kg.m^2	mm	mm	#	##
65	1.9	2.0	0.001	0.001	1.00	0.50	6	6
80	2.7	2.3	0.002	0.002	1.20	0.60	10	6
100	4.1	2.7	0.004	0.003	2.00	1.00	24	10
125	6.0	4.3	0.009	0.005	2.00	1.00	24	24
150	6.1	4.4	0.009	0.005	1.30	0.65	24	24
162	8.1	6.6	0.014	0.008	1.30	0.65	24	48
180	11.0	9.5	0.027	0.016	1.50	0.75	48	48
200	14.0	11.2	0.040	0.024	1.80	0.90	48	48
220	16.8	15.1	0.043	0.026	2.00	1.00	48	48
225	17.5	13.5	0.044	0.027	1.40	0.70	48	48
250	24.4	21.2	0.105	0.064	2.20	1.10	48	48
262	24.2	21.1	0.105	0.064	1.50	0.75	48	48
300	43.2	35.7	0.25	0.152	3.00	1.50	200	80
312	36.8	30.4	0.22	0.134	1.90	0.95	80	80
350	53	40.5	0.40	0.244	2.00	1.00	200	200
375	68	55.6	0.60	0.366	2.30	1.15	200	200
425	94	74	1.00	0.61	2.50	1.25	400	400
450	121	on req	1.48	on req	2.80	1.40	400	400
500	150	on req	2.49	on req	3.00	1.50	400	400
550	187	on req	3.8	on req	3.20	1.60	540	540
600	255	on req	6.7	on req	3.70	1.85	700	700
700	388	on req	12.8	on req	4.10	2.05	1400	1400
750	480	on req	17.7	on req	4.60	2.30	1800	1400
800	680	on req	30.0	on req	5.00	2.50	2400	1400



Type SF

Note - Mass and Inertia are excluding tube and at max bore. Max misalignment 0.5 deg/pack
 For Maximum Length , Permissible speeds and Tube Dia - see Selection Table.
 (+) indicates only axial extension , (-) indicates axial compression , (*) indicates expansion as well as compression

Also Available SV Adjustable with Shrink Discs or Splines - Details on Request
Unique Transmission (India) Pvt Ltd

