OVERHUNG LOAD

LOW SPEED SHAFT

When overhung and/or thrust loads are applied to shaft extensions, it is required to verify whether these loads are permissible or not.

OVERHUNG LOAD

The overhung load results from the following formula:

$$Fr = \frac{63025 \times HP}{N} \times \frac{2}{D} \times Cf \times Lf$$

Fr: Calculated overhung load (LBS)

HP: Horsepower transmitted by shaft (HP)

N: Shaft speed (rpm)

D: Pitch dia of the drive component (inch)

Cf: Load connection factor (See Table)

Lf: Load location factor (See Table)

Verify that the calculated overhung load is equal to or less than the allowable overhung load shown on next page.

THRUST LOAD

Verify that the thrust load is equal to or less than the allowable thrust load shown on next page.

EXAMPLE

Application: Belt conveyor

Horsepower Transmitted: 40 HP

Output Speed: 69 RPM

Paramax Selected:

Model: SM8035P3-RL-25

Ratio: 25.374

Mechanical rating: 65 HP at 1800 rpm

Chain sprocket on the slow speed shaft:

Pitch dia: 17.2 inch

Center line of the load from the shoulder: 3 inch

Overhung Load

HP = 40 (HP), N = 69 (rpm), D = 17.2 (inch)

Cf = 1.0, Lf = 1.02

$$Fr = \frac{63025 \times 40}{69} \times \frac{2}{17.2} \times 1.0 \times 1.02$$

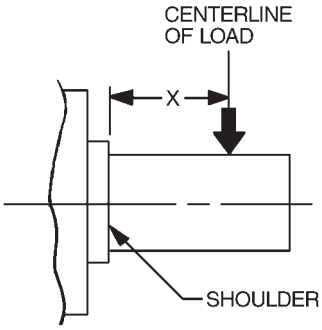
= 4333 (LBS)

Allowable Overhung Load: 5000 LBS

Verification: 4333 LBS < 5000 LBS

Cf: LOAD CONNECTION FACTOR

TYPE OF CONNECTION	Cf
General Purpose Chain	1.0
Machined Gear or Pinion	1.25
V-Belt	1.5
Flat Belt	2.5



Lf: LOAD LOCATION FACTOR AT SLOW SPEED SHAFT

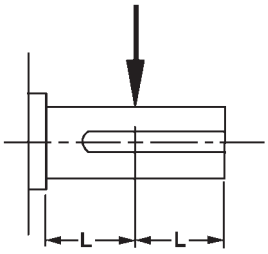
X		SIZE													
mm	inch	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
50	2	0.98	0.93	0.94	0.90										
75	3	1.08	1.02	1.02	0.98	0.93	0.94	0.91							
100	4	1.19	1.11	1.10	1.05	0.99	0.99	0.95	0.92	0.93	0.90	0.91	0.91	0.92	
125	5		1.20	1.19	1.12	1.05	1.05	1.00	0.96	0.97	0.94	0.94	0.94	0.95	0.91
150	6		1.29	1.27	1.19	1.11	1.10	1.05	1.00	1.00	0.97	0.97	0.97	0.97	0.94
175	7				1.26	1.18	1.16	1.10	1.04	1.04	1.00	1.00	1.00	1.00	0.97
200	8					1.24	1.22	1.15	1.09	1.07	1.04	1.03	1.03	1.03	1.00
225	9							1.20	1.13	1.11	1.07	1.07	1.07	1.06	1.03
250	10							1.25	1.17	1.14	1.11	1.10	1.10	1.09	1.05
300	12								1.25	1.21	1.17	1.16	1.16	1.15	1.11
350	14										1.24	1.22	1.22	1.21	1.17
400	16													1.26	1.23

NOTES: 1. Consult factory for higher overhung and/or thrust load capacity requirements
2. Consult factory for sizes 8120 - 8135.

ALLOWABLE EXTERNAL LOADS

SELECTION KEY TABLE

SHAFT POSITION	REDUCTION	SELECTION KEY	
		①	②
Parallel Shaft	Double	RL, LR, BL	RR, LL, BR
	Triple		
	Quadruple		
Right Angle Shaft	Double	RR, LL	RL, LR
	Triple	RL, LR	RR, LL
	Quadruple	RR, LL	RL, LR



ALLOWABLE OVERHUNG LOAD AT SLOW SPEED SHAFT: Selection Key = ① UNIT: LBS. X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	25	30	52	52	79	87	97	173	224	309	314	432	377	500	620			
	160	25	30	50	58	88	94	105	199	244	327	353	450	391	528	770	630	990	740
	100	25	27	50	69	101	106	123	222	274	331	373	413	415	552	900	770	1160	920
	63	25	27	50	83	116	132	149	295	282	323	371	400	428	681	1080	948	1430	1160
	40	25	27	50	83	115	159	181	316	281	309	370	390	437	721	1270	1146	1650	1430
	25	25	27	50	82	115	183	221	313	275	304	367	375	415	711	1270	1270	1650	1650
Heavy Duty	250				67	126	159	157	275	318	357	406	480	563	712	8500			
	160				73	125	175	174	308	297	340	392	450	482	751	1030	920	1410	1210
	100				87	120	183	207	336	285	331	374	413	438	766	1190	1080	1650	1450
	63				87	120	183	257	335	282	323	372	400	428	749	1270	1270	1650	1650
	40				87	119	183	264	334	281	309	371	390	437	721	1270	1270	1650	1650
	25				85	117	183	264	330	275	304	368	375	415	711	1270	1270	1650	1650

The allowable overhung loads given above apply to loading in the middle of the slow speed shaft extension. Refer to the load location factor: L_f for other locations.

ALLOWABLE OVERHUNG LOAD AT SLOW SPEED SHAFT: Selection Key = ② UNIT: LBS. X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	20	39	46	27	42	35	35	99	131	219	180	295	211	342				
	160	25	39	55	30	50	41	41	124	144	231	216	310	207	348				
	100	26	39	59	40	60	49	56	142	167	249	238	329	227	375				
	63	26	39	59	55	82	73	79	213	234	332	345	449	325	496				
	40	26	39	59	71	105	101	111	289	329	386	457	529	447	562				
	25	26	39	59	91	123	134	151	374	384	384	483	683	612	793				
Heavy Duty	250				41	101	103	90	201	257	350	338	479	429	558				
	160				47	116	116	102	232	281	370	383	501	444	587				
	100				61	123	135	133	260	316	395	421	532	472	616				
	63				87	123	183	179	342	391	420	491	678	601	768				
	40				94	123	183	244	431	431	435	543	683	727	858				
	25				94	123	183	264	405	384	384	482	683	727	842				

The allowable overhung loads given above apply to loading in the middle of the slow speed shaft extension. Refer to the load location factor: L_f for other locations.

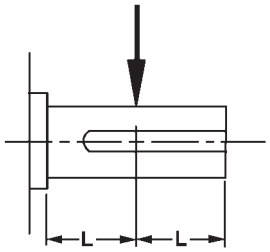
ALLOWABLE THRUST LOAD AT SLOW SPEED SHAFT UNIT: LBS. X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	15	26	39	41	61	60	59	52	70	116	101	112	112	171	170			
	160	15	26	39	46	61	66	67	65	77	119	119	111	111	171	187	130		
	100	15	26	39	57	61	88	89	73	97	133	131	121	121	187	187	187		
	63	15	26	39	57	61	88	122	109	121	134	183	167	167	187	187	187		
	40	15	26	39	57	61	88	127	127	134	134	187	187	187	187	187	187		
	25	15	26	39	57	61	88	127	127	134	134	187	187	187	187	187	187		
Heavy Duty	250	8	11	5	19	61	51	41	127	134	134	187	187	187	187	187			
	160	11	13	8	22	61	56	47	127	134	134	187	187	187	187	187	187		
	100	15	17	12	33	61	66	61	127	134	134	187	187	187	187	187	187	280	280
	63	15	24	19	42	61	88	81	127	134	134	187	187	187	187	187	187	280	280
	40	15	26	26	54	61	88	110	127	134	134	187	187	187	187	187	187	280	280
	25	15	26	37	57	61	88	127	127	134	134	187	187	187	187	187	187	280	280

ALLOWABLE EXTERNAL LOADS

SELECTION KEY TABLE

SHAFT POSITION	REDUCTION	SELECTION KEY	
		①	②
Parallel Shaft	Double	RL, LR, BL	RR, LL, BR
	Triple		
	Quadruple		
Right Angle Shaft	Double	RR, LL	RL, LR
	Triple	RL, LR	RR, LL
	Quadruple	RR, LL	RL, LR



ALLOWABLE OVERHUNG LOAD AT SLOW SPEED SHAFT: Selection Key = ① UNIT: KGF X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	11.5	14	24	24	36	39	44	78	102	140	142	196	171	227	285			
	160	11.5	14	23	26.5	40	43	48	90	111	148	160	204	177	239	350	290	450	340
	100	11.5	12.5	23	31	46	48	56	101	124	150	169	187	188	250	410	350	530	420
	63	11.5	12.5	23	38	53	60	68	134	128	146	168	181	194	309	490	430	650	530
	40	11.5	12.5	23	38	52	72	82	143	127	140	168	177	198	327	580	520	750	650
	25	11.5	12.5	23	37	52	83	100	142	125	138	166	170	188	322	580	580	750	750
Heavy Duty	250				30	57	72	71	125	144	162	184	218	255	323	390			
	160				33	57	79	79	140	135	154	178	204	219	341	470	420	640	550
	100				39	54	83	94	152	129	150	170	187	199	347	540	490	750	660
	63				39	54	83	117	152	128	146	169	181	194	340	580	580	750	750
	40				39	54	83	120	151	127	140	168	177	198	327	580	580	750	750
	25				39	53	83	120	150	125	138	167	170	188	322	580	580	750	750

The allowable overhung loads given above apply to loading in the middle of the slow speed shaft extension. Refer to the load location factor: L_f for other locations.

ALLOWABLE OVERHUNG LOAD AT SLOW SPEED SHAFT: Selection Key = ② UNIT: KGF X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	9.5	18	21	12.5	19.5	16	16	45	59	99	82	134	96	155				
	160	11.5	18	25	14	23	19	19	56	65	105	98	141	94	158				
	100	12	18	27	18.5	27.5	22.5	25.5	64	76	113	108	149	103	170				
	63	12	18	27	25	37	33	36	97	106	151	156	204	147	225				
	40	12	18	27	32	48	46	50	131	149	175	207	240	203	255				
	25	12	18	27	41	56	61	68	170	174	174	219	310	278	360				
Heavy Duty	250				19	46	47	41	91	117	159	153	217	195	253				
	160				21	53	53	46	105	127	168	174	227	201	266				
	100				28	56	61	60	118	143	179	191	241	214	279				
	63				39	56	83	81	155	177	190	223	307	273	348				
	40				43	56	83	111	195	195	197	246	310	330	389				
	25				43	56	83	120	184	174	174	219	310	330	382				

The allowable overhung loads given above apply to loading in the middle of the slow speed shaft extension. Refer to the load location factor: L_f for other locations.

ALLOWABLE THRUST LOAD AT SLOW SPEED SHAFT UNIT: KGF X 100

Bearings	S.S. SHAFT (RPM)	SIZE																	
		8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115	8120	8125	8130	8135
Standard	250	7	12	18	19	28	27.5	27	24	32	53	46	51	51	78	79			
	160	7	12	18	21	28	30	30	29.5	35	54	54	50	50	78	85	63		
	100	7	12	18	26	28	40	40	33	44	60	59	55	55	85	85	85		
	63	7	12	18	26	28	40	55	49	55	61	83	76	76	85	85	85		
	40	7	12	18	26	28	40	58	58	61	61	85	85	85	85	85	85		
	25	7	12	18	26	28	40	58	58	61	61	85	85	85	85	85	85		
Heavy Duty	250	4	5	2	9	28	23.5	19	58	61	61	85	85	85	85	85			
	160	5	6	4	10	28	25.5	21.5	58	61	61	85	85	85	85	85	85		
	100	7	8	5	15	28	30	28	58	61	61	85	85	85	85	85	85	130	130
	63	7	11	9	19.5	28	40	37	58	61	61	85	85	85	85	85	85	130	130
	40	7	12	12	24.5	28	40	50	58	61	61	85	85	85	85	85	85	130	130
	25	7	12	17	26	28	40	58	58	61	61	85	85	85	85	85	85	130	130

ALLOWABLE EXTERNAL LOADS

PARALLEL SHAFT (U.S.)

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:LBS.**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
P2	6.3 - 8	1800	550	770	330	–	–	–	550	550	5950	5950	6610	6610	9810	9700
		1500	550	770	880	–	–	–	550	880	6280	6280	7050	7050	10360	10250
		1200	550	660	770	–	–	-	880	1980	6830	6830	8040	7490	11020	11020
		1000	550	660	770	–	–	–	880	4630	7490	7600	9260	8260	11900	11900
		900	550	660	770	–	–	–	880	5400	8040	7820	10030	8700	12560	12560
		750	550	660	770	–	–	–	990	5840	8590	8040	10690	9480	13340	13340
	9 - 10	1800	660	770	880	–	–	–	440	2860	6500	6390	7600	7050	10800	10580
		1500	660	770	880	770	–	1210	1320	5400	7160	6830	8700	7490	11790	11240
		1200	660	770	880	1540	550	2640	3630	6610	8260	7710	10140	8370	13110	12450
		1000	660	770	880	1870	1320	2860	5180	6610	9370	8480	11350	9370	14330	13560
		900	660	770	880	1870	1650	2860	5510	6500	9810	8820	12120	10140	14990	14330
		750	660	770	880	1870	2310	2860	5510	6500	10360	9040	12890	10910	16090	15100
	11.2 - 20	1800	660	880	990	1870	1980	1980	2420	5620	7380	6610	9040	7270	12230	10800
		1500	660	880	990	1980	2640	2970	4290	5620	8370	7160	10140	7930	13340	11680
		1200	660	880	990	1980	2640	2970	5620	5620	9480	8040	11570	9040	14770	13110
		1000	660	880	990	1980	2640	2970	5620	5620	10580	8820	12780	10250	15980	14220
		900	660	880	990	1980	2640	2970	5620	5620	11020	9150	13560	11020	16750	14990
		750	660	880	990	1980	2640	2970	5620	5620	11570	9590	14330	11790	18080	15760

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:LBS.**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
P3	20 - 25	1800	440	660	440	660	770	770	660	1430	3410	3410	3850	3740	2750	2750
		1500	440	660	440	660	770	880	660	1760	3410	3410	3850	3740	2640	2640
		1200	440	660	440	660	770	1100	1210	2200	3300	3300	3850	3630	2420	2420
		1000	440	660	440	660	770	1210	1320	2420	3300	3300	3850	3630	2310	2310
		900	440	660	440	660	770	1320	1430	2420	3300	3190	3850	3630	2310	2200
		750	440	660	440	660	770	1430	1650	2420	3300	3190	3850	3630	2200	2200
	28 - 50	1800	440	660	550	660	880	1210	1320	2200	3740	3630	4410	4180	2860	3300
		1500	440	660	550	660	880	1320	1540	2640	3740	3630	4410	4180	2750	3190
		1200	440	660	550	660	880	1540	1760	2750	3740	3630	4410	4180	2750	3080
		1000	440	660	550	660	880	1650	1980	2750	3740	3520	4410	4070	2750	2970
		900	440	660	550	660	880	1760	2090	2750	3740	3520	4410	4070	2750	2970
		750	440	660	550	660	880	1760	2200	2750	3740	3520	4410	4070	2750	2860
	56 - 90	1800			660	880	990	1980	2200	3190	3960	3850	4850	4630	3850	2640
		1500			660	880	990	2090	2420	3630	3960	3850	4850	4630	3850	2420
		1200			660	880	990	2090	2530	3630	3960	3850	4850	4630	3850	2420
		1000			660	880	990	2090	2530	3630	3960	3850	4850	4630	3850	2420
		900			660	880	990	2090	2530	3630	3960	3850	4850	4630	3850	2420
		750			660	880	990	2090	2530	3630	3960	3850	4850	4630	3740	2310
P4	80 - 450	1800			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740
		1500			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740
		1200			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740
		1000			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740
		900			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740
		750			440	660	550	770	880	1100	3410	3410	4740	4740	4740	4740

NOTE: The allowable overhung loads shown in these tables apply to loading in the middle of the high speed shaft extension. For other locations, consult factory.

ALLOWABLE EXTERNAL LOADS

PARALLEL SHAFT (METRIC)

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:KGF**

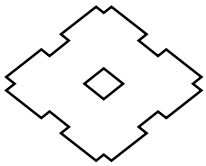
		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
P2	6.3 - 8	1800	250	350	150	–	–	–	250	250	2700	2700	3000	3000	4450	4400
		1500	250	350	400	–	–	–	250	400	2850	2850	3200	3200	4700	4650
		1200	250	300	350	–	–	-	400	900	3100	3100	3650	3400	5000	5000
		1000	250	300	350	–	–	–	400	2100	3400	3450	4200	3750	5400	5400
		900	250	300	350	–	–	–	400	2450	3650	3550	4550	3950	5700	5700
		750	250	300	350	–	–	–	450	2650	3900	3650	4850	4300	6050	6050
	9 - 10	1800	300	350	400	–	–	–	200	1300	2950	2900	3450	3200	4900	4800
		1500	300	350	400	350	–	550	600	2450	3250	3100	3950	3400	5350	5100
		1200	300	350	400	700	250	1200	1650	3000	3750	3500	4600	3800	5950	5650
		1000	300	350	400	850	600	1300	2350	3000	4250	3850	5150	4250	6500	6150
		900	300	350	400	850	750	1300	2500	2950	4450	4000	5500	4600	6800	6500
		750	300	350	400	850	1050	1300	2500	2950	4700	4100	5850	4950	7300	6850
	11.2 - 20	1800	300	400	450	850	900	900	1100	2550	3350	3000	4100	3300	5550	4900
		1500	300	400	450	900	1200	1350	1950	2550	3800	3250	4600	3600	6050	5300
		1200	300	400	450	900	1200	1350	2550	2550	4300	3650	5250	4100	6700	5950
		1000	300	400	450	900	1200	1350	2550	2550	4800	4000	5800	4650	7250	6450
		900	300	400	450	900	1200	1350	2550	2550	5000	4150	6150	5000	7600	6800
		750	300	400	450	900	1200	1350	2550	2550	5250	4350	6500	5350	8200	7150

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:KGF**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
P3	20 - 25	1800	200	300	200	300	350	350	300	650	1550	1550	1750	1700	1250	1250
		1500	200	300	200	300	350	400	300	800	1550	1550	1750	1700	1200	1200
		1200	200	300	200	300	350	500	550	1000	1500	1500	1750	1650	1100	1100
		1000	200	300	200	300	350	550	600	1100	1500	1500	1750	1650	1050	1050
		900	200	300	200	300	350	600	650	1100	1500	1450	1750	1650	1050	1000
		750	200	300	200	300	350	650	750	1100	1500	1450	1750	1650	1000	1000
	28 - 50	1800	200	300	250	300	400	550	600	1000	1700	1650	2000	1900	1300	1500
		1500	200	300	250	300	400	600	700	1200	1700	1650	2000	1900	1250	1450
		1200	200	300	250	300	400	700	800	1250	1700	1650	2000	1900	1250	1400
		1000	200	300	250	300	400	750	900	1250	1700	1600	2000	1850	1250	1350
		900	200	300	250	300	400	800	950	1250	1700	1600	2000	1850	1250	1350
		750	200	300	250	300	400	800	1000	1250	1700	1600	2000	1850	1250	1300
	56 - 90	1800			300	400	450	900	1000	1450	1800	1750	2200	2100	1750	1200
		1500			300	400	450	950	1100	1650	1800	1750	2200	2100	1750	1100
		1200			300	400	450	950	1150	1650	1800	1750	2200	2100	1750	1100
		1000			300	400	450	950	1150	1650	1800	1750	2200	2100	1750	1100
		900			300	400	450	950	1150	1650	1800	1750	2200	2100	1750	1100
		750			300	400	450	950	1150	1650	1800	1750	2200	2100	1700	1050
P4	80 - 450	1800			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150
		1500			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150
		1200			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150
		1000			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150
		900			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150
		750			200	300	250	350	400	500	1550	1550	2150	2150	2150	2150

NOTE: The allowable overhung loads shown in these tables apply to loading in the middle of the high speed shaft extension. For other locations, consult factory.

ALLOWABLE EXTERNAL LOADS



RIGHT ANGLE SHAFT (U.S.)

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:LBS.**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
R2	6.3 - 8	1800	1210	1430	1650	2640	2310	2200	2640	2090						
		1500	1320	1540	1870	2970	2640	2640	3190	2200						
		1200	1320	1760	2090	3300	3190	3300	4070	3190						
		1000	1320	1870	2310	3630	3410	3740	4740	4290						
		900	1320	1980	2310	3740	3630	3960	4960	4850						
		750	1320	1980	2530	3960	3850	4180	5290	5290						
	9 - 10	1800	1430	1650	2090	3190	2860	3300	3410	2530		6390		–		–
		1500	1430	1760	2310	3520	3190	3740	4070	3080		6830		–		–
		1200	1430	1980	2530	3960	3630	4410	4850	4410		7600		–		–
		1000	1430	1980	2640	4180	3960	4960	5510	5400		8370		–		–
		900	1430	1980	2640	4290	4070	5180	5730	5840		8820		–		–
		750	1430	1980	2640	4520	4290	5510	6170	6280		9370		–		–
	11.2 - 20	1800	1540	1760	2310	3410	2970	3850	4070	4410		7160		–		–
		1500	1540	1980	2530	3740	3410	4290	4630	5070		7820		–		–
		1200	1540	2090	2750	4180	3850	4960	5510	5950		8700		–		1430
		1000	1540	2090	2750	4410	4180	5510	6170	6830		9480		–		2860
		900	1540	2090	2750	4520	4290	5620	6390	7270		9920		–		3740
		750	1540	2090	2750	4740	4520	5950	6830	7710		10470		–		5400

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:LBS.**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
R3	20 - 25	1800			1430	1980	2420	3300	3080	3190	2310	2310	2530	2530	2090	2090
		1500			1430	1980	2640	3630	3410	3740	3190	3190	3520	3520	3300	3300
		1200			1430	1980	2860	4070	3960	4290	4070	4070	4740	4740	4960	4960
		1000			1430	1980	2860	4290	4290	4850	4740	4740	5510	5510	6170	6170
		900			1430	1980	2860	4520	4410	4960	4850	4850	5840	5840	6720	6720
		750			1430	1980	2860	4740	4630	5290	5290	5290	6280	6280	7270	7270
	28 - 50	1800			1540	2090	2750	3740	3410	4520	4630	3960	4960	2860	6390	5290
		1500			1540	2090	2860	4180	3850	4960	5180	4290	5620	3630	7270	5840
		1200			1540	2090	2970	4520	4290	5620	5950	4850	6500	4740	8370	6610
		1000			1540	2090	2970	4850	4630	6170	6610	5400	7270	5620	9370	7270
		900			1540	2090	2970	4850	4740	6280	6830	5620	7600	5950	9920	7600
		750			1540	2090	2970	4850	4960	6610	7160	5950	8040	6390	10470	7930
	56 - 90	1800			1540	2090	3080	4290	4410	5510	6060	6060	6500	6500	7820	7490
		1500			1540	2090	3080	4630	4850	6060	6610	6610	7270	7160	8700	8260
		1200			1540	2090	3080	4960	5400	6720	7380	7380	8150	8150	9810	9480
		1000			1540	2090	3080	4960	5620	7160	8040	8040	8930	8930	10800	10470
		900			1540	2090	3080	4960	5840	7380	8260	8260	9370	9260	11350	11020
		750			1540	2090	3080	4960	6060	7710	8700	8700	9810	9810	11900	11680
R4	80 - 400	1800				1540	1540	2090	3080	4180	4630	4410	6060	5840	4850	4520
		1500				1540	1540	2090	3080	4520	5070	4850	6500	6280	5290	5070
		1200				1540	1540	2090	3080	4960	5510	5400	7270	6940	5950	5730
		1000				1540	1540	2090	3080	4960	5840	5620	7710	7490	6500	6170
		900				1540	1540	2090	3080	4960	5950	5840	7930	7600	6610	6390
		750				1540	1540	2090	3080	4960	6170	6060	8260	7930	6940	6720

NOTE: The allowable overhung loads shown in these tables apply to loading in the middle of the high speed shaft extension. For other locations, consult factory.

ALLOWABLE EXTERNAL LOADS

RIGHT ANGLE SHAFT (METRIC)

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:KGF**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
R2	6.3 - 8	1800	550	650	750	1200	1050	1000	1200	950						
		1500	600	700	850	1350	1200	1200	1450	1000						
		1200	600	800	950	1500	1450	1500	1850	1450						
		1000	600	850	1050	1650	1550	1700	2150	1950						
		900	600	900	1050	1700	1650	1800	2250	2200						
		750	600	900	1150	1800	1750	1900	2400	2400						
	9 - 10	1800	650	750	950	1450	1300	1500	1550	1150		2900		–		–
		1500	650	800	1050	1600	1450	1700	1850	1400		3100		–		–
		1200	650	900	1150	1800	1650	2000	2200	2000		3450		–		–
		1000	650	900	1200	1900	1800	2250	2500	2450		3800		–		–
		900	650	900	1200	1950	1850	2350	2600	2650		4000		–		–
		750	650	900	1200	2050	1950	2500	2800	2850		4250		–		–
	11.2 - 20	1800	700	800	1050	1550	1350	1750	1850	2000		3250		–		–
		1500	700	900	1150	1700	1550	1950	2100	2300		3550		–		–
		1200	700	950	1250	1900	1750	2250	2500	2700		3950		–		650
		1000	700	950	1250	2000	1900	2500	2800	3100		4300		–		1300
		900	700	950	1250	2050	1950	2550	2900	3300		4500		–		1700
		750	700	950	1250	2150	2050	2700	3100	3500		4750		–		2450

ALLOWABLE OVERHUNG LOAD AT HIGH SPEED SHAFT **UNIT:KGF**

		RPM	8015	8025	8035	8045	8055	8065	8075	8085	8090	8095	8100	8105	8110	8115
R3	20 - 25	1800			650	900	1100	1500	1400	1450	1050	1050	1150	1150	950	950
		1500			650	900	1200	1650	1550	1700	1450	1450	1600	1600	1500	1500
		1200			650	900	1300	1850	1800	1950	1850	1850	2150	2150	2250	2250
		1000			650	900	1300	1950	1950	2200	2150	2150	2500	2500	2800	2800
		900			650	900	1300	2050	2000	2250	2200	2200	2650	2650	3050	3050
		750			650	900	1300	2150	2100	2400	2400	2400	2850	2850	3300	3300
	28 - 50	1800			700	950	1250	1700	1550	2050	2100	1800	2250	1300	2900	2400
		1500			700	950	1300	1900	1750	2250	2350	1950	2550	1650	3300	2650
		1200			700	950	1350	2050	1950	2550	2700	2200	2950	2150	3800	3000
		1000			700	950	1350	2200	2100	2800	3000	2450	3300	2550	4250	3300
		900			700	950	1350	2200	2150	2850	3100	2550	3450	2700	4500	3450
		750			700	950	1350	2200	2250	3000	3250	2700	3650	2900	4750	3600
	56 - 90	1800			700	950	1400	1950	2000	2500	2750	2750	2950	2950	3550	3400
		1500			700	950	1400	2100	2200	2750	3000	3000	3300	3250	3950	3750
		1200			700	950	1400	2250	2450	3050	3350	3350	3700	3700	4450	4300
		1000			700	950	1400	2250	2550	3250	3650	3650	4050	4050	4900	4750
		900			700	950	1400	2250	2650	3350	3750	3750	4250	4200	5150	5000
		750			700	950	1400	2250	2750	3500	3950	3950	4450	4450	5400	5300
R4	80 - 400	1800				700	700	950	1400	1900	2100	2000	2750	2650	2200	2050
		1500				700	700	950	1400	2050	2300	2200	2950	2850	2400	2300
		1200				700	700	950	1400	2250	2500	2450	3300	3150	2700	2600
		1000				700	700	950	1400	2250	2650	2550	3500	3400	2950	2800
		900				700	700	950	1400	2250	2700	2650	3600	3450	3000	2900
		750				700	700	950	1400	2250	2800	2750	3750	3600	3150	3050

NOTE: The allowable overhung loads shown in these tables apply to loading in the middle of the high speed shaft extension. For other locations, consult factory.