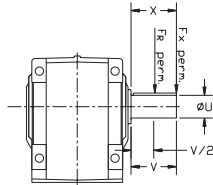




HOW TO ORDER

SOLID OUTPUT SHAFT WITH STANDARD BEARING - RHB GEARMOTORS AND REDUCERS

Permissible Overhung Loads at Service Factor SF = 1.0



1. Calculation based on bearing life

$$F_{x \text{ perm. } 1} = F_{R \text{ perm}} \frac{y}{z + x} \quad [\text{lb } \{ \}]$$

2. Calculation based on mechanical strength

$$F_{x \text{ perm. } 2} = \frac{a}{x} \quad [\text{lb } \{ \}]$$

The lower value $F_{x \text{ perm.}}$ of the two calculation results is the permissible overhung load. If values on tables are not sufficient for requirement, please consult Application Engineering, stating load direction.

NOTE: The allowable overhung loads in the table above were calculated for the maximum output torque condition. Higher allowable overhung loads are often possible for many applications. Please contact Application Engineering for application specific overhung load calculations.

Type (Stages)	y in/mm	z in/mm	a Lb-in / kNm	u in/mm	v in/mm	FR perm. in (lbf) for x=u for output speeds n2 in min-1							
						<= 16	<= 25	<= 40	<= 63	<= 100	<= 160	<= 250	<= 400
B_38	4.80	3.82	1390	1.000	1.97	1730	1429	1150	926	726	617	620	589
	122	97	157	25	50								
B_48	5.20	3.82	1735	1.375	2.76	1599	1321	1063	856	671	570	573	544
	132	97	196	35	70								
B_68	5.94	4.76	2222	1.250	2.36	2419	1983	1591	1266	1149	1110	1032	935
	151	121	251	30	60								
B_88	6.34	4.76	2726	1.625	3.15	2269	1860	1492	1187	1078	1041	968	877
	161	121	308	40	80								
B_108	7.48	5.91	3939	1.625	3.15	6506	5569	4717	4098	3769	3399	3048	2698
	190	150	445	40	80								
B_128	7.87	5.91	6028	2.000	3.94	6150	5264	4459	3873	3562	3213	2881	2550
	200	150	681	50	100								
B_148	8.86	6.89	8886	2.000	3.94	10936	9358	7913	6722	6200	5633	5073	4505
	225	175	1004	50	100								
B_168	9.65	6.89	15321	2.750	5.51	9966	8528	7211	6126	5650	5133	4623	4105
	245	175	1731	70	140								
B_188	10.31	7.95	13197	2.375	4.72	13336	11326	9501	8196	7688	7046	6377	5683
	262	202	1491	60	120								
B_208	11.1	7.95	24464	3.188	6.69	12304	10450	8766	7562	7093	6501	5884	5243
	282	202	2764	80	170								
B_228	12.99	10.24	19039	2.875	5.51	22350	19106	16159	13651	12342	11339	10282	9185
	330	260	2151	70	140								
B_248	13.78	10.24	30288	3.625	6.69	20968	17925	15160	12807	11579	10638	9646	8617
	350	260	3422	90	170								
B_268	15.67	12.13	46158	3.625	6.69	21381	18035	14996	12561	11951	11162	10246	9207
	398	308	5215	90	170								
B_288	16.06	12.13	40148	4.000	8.27	20816	17559	14600	12229	11635	10867	9975	8964
	408	308	4536	100	210								
B_308	18.56	14.23	82058	4.375	8.27	32783	27792	23263	19423	17607	16566	15278	13774
	472	362	9271	110	210								
B_328	18.98	14.23	63763	4.750	8.27	32045	27166	22739	18986	17210	16193	14934	13464
	482	362	7204	120	210								

Bold - standard shaft

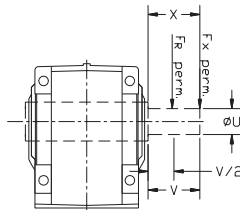
MOUNTING POSITIONS PAGE 7	SELECTION OIL QUANTITIES PAGE 7	SELECTION GEARMOTORS PAGE 49	DIMENSIONS PAGE 92
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HOW TO ORDER

HOLLOW OUTPUT SHAFT WITH STANDARD BEARING - RHB GEARMOTORS AND REDUCERS

Permissible Overhung Loads at Service Factor SF = 1.0



1. Calculation based on bearing life

$$F_x \text{ perm. } 1 = F_R \text{ perm. } \frac{y}{z + x} \quad [\text{lb } \{ \}]$$

The lower value $F_x \text{ perm.}$ of the two calculation results is the permissible overhung load. If values on tables are not sufficient for requirement, please consult Application Engineering, stating load direction.

NOTE: The allowable overhung loads in the table above were calculated for the maximum output torque condition. Higher allowable overhung loads are often possible for many applications. Please contact Application Engineering for application specific overhung load calculations.

Type (Stages)	y in/mm	z in/mm	u in/mm	v in/mm	FR perm. in (lbf) for x=u for output speeds n2 in min-1							
					<= 16	<= 25	<= 40	<= 63	<= 100	<= 160	<= 250	<= 400
B_38	5.20	3.82	1.250	2.76	1730	1429	1150	926	726	617	620	589
	132	97	30	70								
B_48	5.94	4.76	1.375	2.76	2419	1983	1591	1266	1149	1110	1032	935
	151	121	35	70								
B_68	7.48	5.91	1.500	3.15	2355	1872	1447	1209	1255	1214	1129	1021
	190	150	40	80								
	7.87	5.91	1.4375	3.94								
B_88	8.56	6.89	2.000	3.94	3612	2862	2177	1641	1774	1783	1696	1556
	225	175	50	100								
	9.65	6.89	1.9375	5.51								
B_108	10.71	7.95	2.375	5.51	3984	3028	2167	1725	2065	2150	2088	1938
	272	202	60	140								
	11.30	7.95	2.4375	6.69								
B_128	13.58	10.24	2.750	6.69	5949	4605	3402	2407	2511	2776	2769	2619
	345	260	70	170								
	13.58	10.24	2.9375	6.69								
B_148	15.47	12.13	3.625	6.69	4565	3122	1866	946	1862	2413	2572	2527
	393	308	80	170								
	16.26	12.13	3.4375	8.27								
B_168	18.37	14.23	4.000	8.27	6984	4932	3112	1597	2049	3114	3506	3541
	467	362	100	210								
	18.37	14.23	3.9375	8.27								
	467	362	110	210								

Bold - standard shaft

MOUNTING POSITIONS PAGE 7	SELECTION OIL QUANTITIES PAGE 7	SELECTION GEARMOTORS PAGE 49	DIMENSIONS PAGE 92
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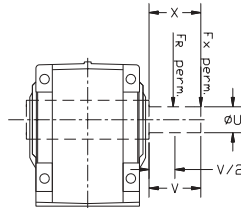
RHB-15



HOW TO ORDER

HOLLOW OUTPUT SHAFT WITH HEAVY DUTY BEARINGS - RHB GEARMOTORS AND REDUCERS

Permissible Overhung Loads at Service Factor SF = 1.0



1. Calculation based on bearing life

$$F_{x \text{ perm. } 1} = F_{R \text{ perm.}} \frac{y}{z + x} \quad [\text{lb}_f]$$

The lower value $F_{x \text{ perm.}}$ of the two calculation results is the permissible overhung load. If values on tables are not sufficient for requirement, please consult Application Engineering, stating load direction.

NOTE: The allowable overhung loads in the table above were calculated for the maximum output torque condition. Higher allowable overhung loads are often possible for many applications. Please contact Application Engineering for application specific overhung load calculations.

Type (Stages)	y in/mm	z in/mm	u in/mm	v in/mm	FR perm. in (lbf) for x=u for output speeds n2 in min-1							
					<= 16	<= 25	<= 40	<= 63	<= 100	<= 160	<= 250	<= 400
B_38	NO HEAVY DUTY OPTION											
B_48	NO HEAVY DUTY OPTION											
B_68	7.48	5.91	1.500	3.15	6506	5569	4717	4098	3769	3399	3048	2698
	190	150	40	80								
B_88	7.87	5.91	1.4375	3.94	6150	5264	4459	3873	3562	3213	2881	2550
	200	150	45	100								
B_108	8.56	6.89	2.000	3.94	10936	9358	7913	6722	6200	5633	5073	4505
	225	175	50	100								
B_128	9.65	6.89	1.9375	5.51	9966	8528	7211	6126	5650	5133	4623	4105
	245	175	60	140								
B_148	10.71	7.95	2.375	5.51	13336	11326	9501	8196	7688	7046	6377	5683
	272	202	60	140								
B_168	11.30	7.95	2.4375	6.69	12304	10450	8766	7562	7093	6501	5884	5243
	287	202	70	170								
B_188	13.58	10.24	2.750	6.69	22350	19106	16159	13651	12342	11339	10282	9185
	345	260	70	170								
B_208	13.58	10.24	2.9375	6.69	20968	17925	15160	12807	11579	10638	9646	8617
	345	260	80	170								
B_228	15.47	12.13	3.625	8.27	21381	18035	14996	12561	11951	11162	10246	9207
	393	308	80	210								
B_248	16.26	12.13	3.4375	8.27	20816	17559	14600	12229	11635	10867	9975	8964
	413	308	90	210								
B_268	18.37	14.23	4.000	8.27	32783	27792	23263	19423	17607	16566	15278	13774
	467	362	100	210								
B_288	18.37	14.23	3.9375	8.27	32045	27166	22739	18986	17210	16193	14934	13464
	467	362	110	210								

Bold - standard shaft

MOUNTING POSITIONS PAGE 7	SELECTION OIL QUANTITIES PAGE 7	SELECTION GEARMOTORS PAGE 49	DIMENSIONS PAGE 92
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