



Guideline for greasing GMN spindle bearings with grease density class I

Series 618 and 619 (cage TA / MA)

The standard grease fill is 30% of the free space with a tolerance of $\pm 5\%$ in relation to a 100% grease fill. If a low running friction or particularly smooth running of a bearing is required, 20 - 25% grease fill is recommended. In order to achieve a long service life the grease fill should be 35%.

For bearing series other than S and for cages other than TA the values in the tables can be taken as guiding values. Weight of grease of another density class than class I is to be multiplied by the corresponding correction factor shown in the table below.

Extreme cleanliness during greasing and mounting of the bearings is of utmost importance.

Values in tables in milligrams (mg).
1 gram (g) = 0.035 oz

Bearing type	20%	25%	30%	35%	40%	100%
S 61800	45	57	68	80	91	227
S 61801	50	63	75	88	100	251
S 61802	60	75	90	105	120	300
S 61803	67	84	100	117	134	335
S 61804	150	188	225	263	300	750
S 61805	182	227	272	318	363	908
S 61806	189	237	284	331	379	947
S 61807	239	299	359	419	479	1197
S 61808	270	337	405	472	539	1348

Bearing type	20%	25%	30%	35%	40%	100%
KH 61900	46	57	69	80	92	229
KH 61901	52	64	77	90	103	258
KH 61902	94	118	141	165	188	471
KH 61903	105	131	157	183	209	523
KH 61904	218	272	327	381	436	1089
KH 61905	262	328	393	459	524	1310
KH 61906	360	450	540	630	720	1799
KH 61907	422	528	633	739	845	2111
KH 61908	688	860	1032	1204	1376	3440
KH 61909	760	950	1140	1330	1520	3801
KH 61910	824	1030	1236	1442	1648	4120
KH 61911	1161	1451	1741	2031	2321	5803
KH 61912	1255	1569	1883	2197	2510	6276
KH 61913	1344	1681	2017	2353	2689	6722
KH 61914	2275	2844	3413	3982	4551	11377

Bearing type	20%	25%	30%	35%	40%	100%
S 619/5	23	29	35	41	46	116
S 619/6	34	42	50	59	67	168
S 619/7	38	48	58	67	77	192
S 619/8	68	84	101	118	135	338
S 619/9	75	93	112	131	149	373
S 61900	79	99	119	139	159	396
S 61901	86	108	130	151	173	432
S 61902	155	194	232	271	310	775
S 61903	169	212	254	296	338	846
S 61904	324	405	487	568	649	1622
S 61905	388	485	582	678	775	1939
S 61906	445	556	667	778	889	2224
S 61907	641	802	962	1122	1283	3206
S 61908	1032	1290	1548	1806	2064	5160
S 61909	1151	1438	1726	2014	2302	5754
S 61910	1249	1561	1873	2186	2498	6245
S 61911	1640	2051	2461	2871	3281	8202
S 61912	1750	2187	2625	3062	3499	8749
S 61913	1882	2352	2823	3293	3763	9408
S 61914	2852	3565	4277	4990	5703	14258
S 61915	3207	4009	4810	5612	6414	16035
S 61916	3453	3416	5179	6042	6906	17264
S 61917	4589	5736	6883	8030	9177	22943
S 61918	4826	6032	7239	8445	9652	24129
S 61919	5063	6329	7594	8860	10126	25315
S 61920	6977	8721	10465	12209	13954	34884
S 61921	8508	10636	12763	14890	17017	42542
S 61922	7610	9513	11415	13318	15221	38052
S 61924	10070	12587	15104	17622	20139	50348

Correction factor for grease density class other than density class I ($\zeta = 0.905 \text{ g/cm}^3$)

Density class	Grease density [g/cm ³]	Correction factor
0	0.820 - 0.879	0.94
I	0.880 - 0.930	1.00
II	0.931 - 0.990	1.06
III	0.991 - 1.090	1.15
IV	1.091 - 1.190	1.26
V	1.191 - 1.300	1.37
V/1	1.301 - 1.410	1.50
V/2	1.411 - 1.520	1.62
V/3	1.521 - 1.640	1.74
V/4	1.641 - 1.772	1.88
VI	1.831 - 1.970	2.08