Preload change at matched spindle bearing sets by changing the spacer width

Series S 619.. C

Effect at Situation	O-Arrangement	X-Arrangement
Width of inner spacer smaller than outer spacer	Increase of preload	Decrease of preload
Width of outer spacer smaller than inner spacer	Decrease of preload	Increase of preload

Spacer width reduction for changing the preload

Δ-Preload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
S 619/5 C	6	5	18	5	36
S 619/6 C	7	5	20	5	40
S 619/7 C	8	5	23	5	46
S 619/8 C	12	6	30	6	70
S 619/9 C	12	7	35	5	75
S 61900 C	12	7	40	5	75
S 61901 C	15	6	40	6	85
S 61902 C	22	8	43	8	140
S 61903 C	25	8	70	8	150
S 61904 C	35	9	75	8	220
S 61905 C	40	9	110	9	240
S 61906 C	40	8	120	8	240
S 61907 C	55	9	165	9	330
S 61908 C	75	11	230	11	460
S 61909 C	80	9	230	10	460
S 61910 C	80	9	230	10	460
S 61911 C	90	11	280	11	560
S 61912 C	100	11	300	11	600
S 61913 C	100	10	300	10	600
S 61914 C	130	11	370	11	740
S 61915 C	150	12	450	12	900
S 61916 C	180	13	540	13	1090
S 61917 C	200	14	610	14	1220
S 61918 C	210	14	620	14	1240
S 61919 C	210	14	630	14	1250
S 61920 C	260	16	790	16	1570
S 61921 C	270	16	800	16	1610
S 61922 C	270	16	820	16	1640
S 61924 C	340	18	1030	18	2060

Δ-Preload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
HY S 619/5 C	6	5	18	5	36
HY S 619/6 C	7	5	20	5	40
HY S 619/7 C	8	4	23	5	46
HY S 619/8 C	12	5	35	6	70
HY S 619/9 C	12	6	40	5	75
HY S 61900 C	12	6	40	5	75
HY S 61901 C	15	5	43	5	85
HY S 61902 C	22	7	70	7	140
HY S 61903 C	25	7	75	7	150
HY S 61904 C	35	8	110	8	220
HY S 61905 C	40	8	120	8	240
HY S 61906 C	40	7	120	7	240
HY S 61907 C	55	8	165	8	330
HY S 61908 C	75	10	230	10	460
HY S 61909 C	80	9	230	9	460
HY S 61910 C	80	9	230	9	460
HY S 61911 C	90	10	280	10	560
HY S 61912 C	100	10	300	10	600
HY S 61913 C	100	9	300	10	600
HY S 61914 C	130	10	370	10	740
HY S 61915 C	150	11	450	11	900
HY S 61916 C	180	12	540	12	1090
HY S 61917 C	200	13	610	13	1220
HY S 61918 C	210	12	620	13	1240
HY S 61919 C	210	13	630	13	1250
HY S 61920 C	260	15	790	15	1570
HY S 61921 C	270	14	800	15	1610
HY S 61922 C	270	14	820	15	1640
HY S 61924 C	340	16	1030	16	2060

GMN Paul Müller Industrie GmbH & Co. KG
Äußere Bayreuther Straße 230 · D-90411 Nürnberg
Phone: +49 911-5691-225, 229, 217, 326
Fax: +49 911-5691-587
vertrieb.kula@gmn.de
www.gmn.de

Preload change at matched spindle bearing sets by changing the spacer width

Series S 619.. E

Effect at Situation	O-Arrangement	X-Arrangement
Width of inner spacer smaller than outer spacer	Increase of preload	Decrease of preload
Width of outer spacer smaller than inner spacer	Decrease of preload	Increase of preload

Spacer width reduction for changing the preload

Δ-Preload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
S 61900 E	22	5	70	5	140
S 61901 E	25	4	75	5	150
S 61902 E	35	5	110	6	220
S 61903 E	40	5	120	6	240
S 61904 E	55	6	170	6	340
S 61905 E	60	5	180	6	360
S 61906 E	60	6	190	6	380
S 61907 E	90	6	260	7	520
S 61908 E	120	7	360	7	720
S 61909 E	120	7	360	7	720
S 61910 E	120	7	370	7	740
S 61911 E	150	7	440	8	880
S 61912 E	150	7	460	8	920
S 61913 E	160	7	470	8	940
S 61914 E	200	8	590	8	1180
S 61915 E	230	8	700	9	1400
S 61916 E	280	9	850	10	1710
S 61917 E	320	10	960	10	1910
S 61918 E	330	9	980	10	1960
S 61919 E	330	9	990	10	1990
S 61920 E	410	11	1240	12	2470
S 61921 E	420	11	1260	12	2520
S 61922 E	420	10	1270	11	2550
S 61924 E	540	12	1620	13	3240

Δ-Preload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
HY S 61900 E	22	4	70	4	140
HY S 61901 E	25	4	75	4	150
HY S 61902 E	35	5	110	5	220
HY S 61903 E	40	5	120	5	240
HY S 61904 E	55	5	170	6	340
HY S 61905 E	60	5	180	5	360
HY S 61906 E	60	5	190	5	380
HY S 61907 E	90	5	260	6	520
HY S 61908 E	120	7	360	7	720
HY S 61909 E	120	6	360	6	720
HY S 61910 E	120	6	370	6	740
HY S 61911 E	150	6	440	7	880
HY S 61912 E	150	6	460	7	920
HY S 61913 E	160	6	470	7	940
HY S 61914 E	200	7	590	8	1180
HY S 61915 E	230	7	700	8	1400
HY S 61916 E	280	8	850	9	1710
HY S 61917 E	320	9	960	9	1910
HY S 61918 E	330	9	980	9	1960
HY S 61919 E	330	8	990	9	1990
HY S 61920 E	410	10	1240	10	2470
HY S 61921 E	420	10	1260	10	2520
HY S 61922 E	420	10	1270	10	2550
HY S 61924 E	540	11	1620	12	3240

GMN Paul Müller Industrie GmbH & Co. KG
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vertrieb.kula@gmn.de
www.gmn.de

Preload change at matched spindle bearing sets by changing the spacer width

Series KH 619.. C/E

Effect at Situation	O-Arrangement	X-Arrangement
Width of inner spacer smaller than outer spacer	Increase of preload	Decrease of preload
Width of outer spacer smaller than inner spacer	Decrease of preload	Increase of preload

Spacer width reduction for changing the preload

Δ-Perload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
KH 61900 C	7	4	21	4	45
KH 61901 C	7	4	22	4	45
KH 61902 C	10	4	30	4	60
KH 61903 C	11	4	35	4	65
KH 61904 C	20	6	60	6	120
KH 61905 C	22	6	65	6	130
KH 61906 C	23	5	70	6	140
KH 61907 C	25	5	80	5	150
KH 61908 C	35	6	100	7	210
KH 61909 C	35	6	110	6	220
KH 61910 C	40	5	110	6	230
KH 61911 C	50	7	150	7	300
KH 61912 C	50	7	160	7	310
KH 61913 C	55	6	160	7	320
KH 61914 C	65	7	200	7	390

Δ-Perload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
HY KH 61900 C	7	3	21	4	45
HY KH 61901 C	7	3	22	4	45
HY KH 61902 C	10	4	30	4	60
HY KH 61903 C	11	4	35	4	65
HY KH 61904 C	20	5	60	6	120
HY KH 61905 C	22	5	65	5	130
HY KH 61906 C	23	5	70	5	140
HY KH 61907 C	25	5	80	4	150
HY KH 61908 C	35	5	100	6	210
HY KH 61909 C	35	5	110	6	220
HY KH 61910 C	40	5	110	6	230
HY KH 61911 C	50	6	150	6	300
HY KH 61912 C	50	6	160	6	310
HY KH 61913 C	55	5	160	6	320
HY KH 61914 C	65	6	200	7	390

Δ-Perload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
KH 61900 E	11	3	35	3	70
KH 61901 E	12	3	35	3	70
KH 61902 E	16	3	50	4	100
KH 61903 E	17	3	50	3	100
KH 61904 E	30	4	90	5	180
KH 61905 E	35	4	100	5	200
KH 61906 E	35	4	110	4	220
KH 61907 E	40	4	120	4	240
KH 61908 E	55	4	160	5	330
KH 61909 E	60	4	170	5	350
KH 61910 E	60	4	180	5	360
KH 61911 E	80	5	240	5	480
KH 61912 E	80	5	240	5	490
KH 61913 E	80	5	250	5	500
KH 61914 E	100	5	310	6	620

Δ-Perload Type	L [N]	Difference [micron]	M [N]	Difference [micron]	S [N]
HY KH 61900 E	11	3	35	3	70
HY KH 61901 E	12	3	35	3	70
HY KH 61902 E	16	3	50	3	100
HY KH 61903 E	17	3	50	3	100
HY KH 61904 E	30	4	90	4	180
HY KH 61905 E	35	4	100	4	200
HY KH 61906 E	35	4	110	4	220
HY KH 61907 E	40	3	120	4	240
HY KH 61908 E	55	4	160	5	330
HY KH 61909 E	60	4	170	5	350
HY KH 61910 E	60	4	180	4	360
HY KH 61911 E	80	4	240	5	480
HY KH 61912 E	80	4	240	5	490
HY KH 61913 E	80	4	250	5	500
HY KH 61914 E	100	5	310	5	620

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