

Technical Data for Mounted Guides

Static and dynamic load ratings of the roller guides

Unit size	Size ($\varnothing$) [mm]	Number of supporting rollers for F _z	Number of supporting rollers for F _y	Load rating per roller C _{stat} [N]	Load rating per roller C _{dyn} [N]	Guide distance* in direction x [mm]		Guide distance in direction y [mm]
						l _{x1}	l _{x2}	
Beta 50-C	20	4	2	850	1500	86 (136)	86 (136)	30.5
Beta 50-C-ARS						82	81	
Beta 70-C	20	4	2	850	1500	74 (124)	138.5 (188.5)	41.5
Beta 70-C-ARS						120	182	
Beta 80	20	4	2	850	1500	95 (155)	156.5 (216.5)	42.5
Beta 80-ARS						155	216.5	
Beta 80-C	24	4	-	1240	2750	-	148.5 (208.5)	42.4
		-	2	2300	4200	75 (135)	-	-
Beta 80-C-ARS	24	4	-	1240	2750	-	208.5	42.4
		-	2	2300	4200	135	-	-
Beta 100	28	4	2	1850	3200	136 (256)	223 (343)	47
Beta 110	28	4	2	1850	3200	175 (355)	262 (442)	66
Beta 110-ARS						253	340	
Beta 120	35	4	2	2590	5280	148 (328)	148 (328)	70
Beta 140	35	4	2	2590	5280	202 (382)	202 (382)	98
Beta 140-ARS						192 (272)	192 (272)	
Delta 90	20	4	-	850	1500	-	100 (180)	54.4
	19	-	2	1370	2700	100 (180)	-	-
Sigma 70	20	4	4	850	1500	67 (117)	71 (121.5)	57
Sigma 90	24	4	4	1240	2750	76 (126)	99 (149)	77
Sigma 120	28	4	4	1850	3200	130 (260)	160.5 (290)	99
Sigma 160	35	4	4	2590	5280	145 (295)	177.5 (327.5)	135

The pretensioning per roller is approx. 5 %.

* () = Data for long entire carriage, Beta ARS and Sigma ARH

Dynamic load ratings of the rail guides (THK and Rex = Rexroth)

Unit size	Size	Number of rails	Number of guiding carriages per carriage	Load rating per carriage C _{dyn} [N] THK / Rex	Pretensioning F _v [N] THK / Rex	M _t [Nm] THK / Rex	Guide distance* in direction x [mm]	Guide distance in direction y [mm]
							l _{x1}	l _y
Beta 40	12	1	2	3175 / 2310	-	18,3 / 13,7	83 (163)	-
Beta 60-ZSS	15	1	2	11270 / 9860	564 / 620	127 / 95	102 (152)	-
Beta 60-SSS	15	1	2	11270 / 9860	564 / 620	127 / 95	118 (168)	-
Beta 70-C-ZSS	15	1	2	11270 / 9860	564 / 620	127 / 95	120 (170)	-
Beta 70-C-SSS	15	1	2	11270 / 9860	564 / 620	127 / 95	124 (174)	-
Beta 70-C-ASS	15	1	2	11270 / 9860	564 / 620	127 / 95	164	-
Beta 80-ZSS	20	1	2	17700 / 23400	885 / 1500	286 / 300	131 (191)	-
Beta 80-SSS	20	1	2	17700 / 23400	885 / 1500	286 / 300	128 (188)	-
Beta 80-C	25	1	2	25160 / 28600	1258 / 1820	447 / 410	122 (182)	-
Beta 80-C-ASS	25	1	2	25160 / 28600	1258 / 1820	447 / 410	172	-
Beta 100	20	1	2	17700 / 23400	885 / 1500	286 / 300	152 (272)	-
Beta 100-D-ZSS	15	2	4	11270 / 9860	564 / 620	-	150 (210)	56
Beta 100-D-ASS	15	2	4	11270 / 9860	564 / 620	-	192	56
Beta 100-D-SSS	15	2	4	11270 / 9860	564 / 620	-	141 (201)	56

Dynamic load ratings of the rail guides (THK and Rex = Rexroth)

Unit size	Size	Number of rails	Number of guiding carriages per carriage	Load rating per carriage C_{dyn} [N] THK / Rex	Pretensioning F_v [N] THK / Rex	M_t [Nm] THK / Rex	Guide distance* in direction x [mm]	Guide distance in direction y [mm]
							lx1	ly
Beta 110	25	1	2	25160 / 28600	1258 / 1820	447 / 410	203 (383)	-
Beta 110-ASS	25	1	2	25160 / 28600	1258 / 1820	447 / 410	315	-
Beta 120-ZSS	25	1	2	25160 / 28600	1258 / 1820	447 / 410	142 (322)	-
Beta 120-C	30	1	2	35557 / 36500	1778 / 2540	686 / 630	184 (364)	-
Beta 140-C-ZSS	20	2	4	17700 / 23400	885 / 1500	-	220 (400)	76
Beta 140-C-ASS	20	2	4	17700 / 23400	885 / 1500	-	220 (300)	76
Beta 140-C-SSS	20	2	4	17700 / 23400	885 / 1500	-	210 (390)	76
Beta 165-ZSS	35	1	2	49447 / 51800	2472 / 3350	1214 / 1010	198 (398)	-
Beta 165-SSS	35	1	2	49447 / 51800	2472 / 3350	1214 / 1010	228 (428)	-
Beta 165-C-SSF	30L	2	4	43018 / 46000	2151 / 3200	-	280	128
Beta 180-ZSS	20	2	4	17700 / 23400	885 / 1500	-	176 (396)	84
Beta 180-ASS	20	2	4	17700 / 23400	885 / 1500	-	310	84
Beta 180-SSS	20	2	4	17700 / 23400	885 / 1500	-	233 (453)	84
Beta 180-C-ZSS	25	2	4	25160 / 28600	1258 / 1820	-	272 (492)	84
Beta 180-C-ASS	25	2	4	25160 / 28600	1258 / 1820	-	307	84
Beta 180-C-SSS	25	2	4	25160 / 28600	1258 / 1820	-	233 (453)	84
Delta 110-C	15	2	4	11270 / 9860	564 / 620	-	75 (195)	66
Delta 145-C	20	2	4	17700 / 23400	885 / 1500	-	87 (207)	87
Delta 200	25	2	4	25160 / 28600	1258 / 1820	-	144 (294)	126
Delta 240(-C)	25	2	4	25160 / 28600	1258 / 1820	-	159 (279)	150
Alpha 15B	15	2	4	11270 / 9860	564 / 620	-	94 (164)	105
Alpha 20B	20	2	4	17700 / 23400	885 / 1500	-	143 (243)	160
Alpha 30B	30	2	4	35557 / 36500	1778 / 2540	-	205 (335)	240
Alpha 35B	35L	2	4	57860 / 66700	2893 / 4450	-	286 (436)	336
Gamma 90-ZSS	15	2	4	11270 / 9860	564 / 620	-	135 (285)	73
Gamma 90-ZSSD	15	2	4	11270 / 9860	564 / 620	-	75	73
Gamma 90-ASH	15	2	4	11270 / 9860	564 / 620	-	265	73
Gamma 90-AZS.	15	2	4	11270 / 9860	564 / 620	-	255	90
Gamma 120-ZSS	20	2	4	17700 / 23400	885 / 1500	-	170 (320)	90
Gamma 120-ZSSD	20	2	4	17700 / 23400	885 / 1500	-	80	104
Gamma 120-ASH	20	2	4	17700 / 23400	885 / 1500	-	320	90
Gamma 120-AZS.	20	2	4	17700 / 23400	885 / 1500	-	320	115
Gamma 160-ZSS	25	2	4	25160 / 28600	1258 / 1820	-	208 (408)	120
Gamma 160-ZSSD	25	2	4	25160 / 28600	1258 / 1820	-	208 (408)	120
Gamma 160-ASH	25	2	4	25160 / 28600	1258 / 1820	-	408	120
Gamma 160-AZS.	25	2	4	25160 / 28600	1258 / 1820	-	402	151
Gamma 220-ZSS	25L	2	4	29208 / 37300	1460 / 2430	-	210 (390)	180
Gamma 220-ZSSD	25L	2	4	29208 / 37300	1460 / 2430	-	210 (390)	180
Gamma 220-ASS	25L	2	4	29208 / 37300	1460 / 2430	-	390	180
Gamma 220-AZS.	25L	2	4	29208 / 37300	1460 / 2430	-	440	196
Gamma 280-ZSS	35	2	4	49447 / 51800	2472 / 3350	-	275 (475)	236
Gamma 280-ZSSD	35	2	4	49447 / 51800	2472 / 3350	-	275 (475)	236
Gamma 280-AZSS	35	2	4	49447 / 51800	2472 / 3350	-	480	253

* Data in () refer to long standard carriage