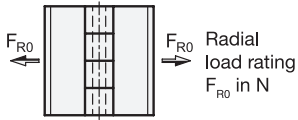
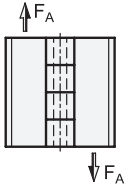


Load Rating of Plastic Hinges

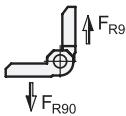
in Ascending Order of the Standard Numbers



Radial load rating
 F_{R0} in N



Axial load rating
 F_A in N



Load rating at 90°
 F_{R90} in N

The values given in (...) are the breaking loads determined in a series of tests. They are designed to estimate the safety factor.

When attaching the different hinges, a maximum tightening torque must not be exceeded.

The details given on load rating are non-binding guide values without any liability. In general, they do not constitute a warranty of quality. The user must determine from case to case if a product is suitable for the intended purpose.

Article no.	Radial load rating		Axial load rating		Max. tightening torque of the hinge attachment in Nm		
	F_{R0} in N	F_{R90} in N	F_A in N		Bore	Thread	Bolt
GN 122.1-45-50-SH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
-45-50-CH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
-45-50-EH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
GN 122.2-45-50-SH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
-45-50-CH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
-45-50-EH	350 (1970)	345 (620)	300 (1220)		1,5	-	-
GN 151 -39-40-A	240 (2220)	100 (730)	200 (2050)		-	5	-
-39-40-B	230 (1760)	180 (1330)	137 (1800)		1	-	-
-39-40-C	290 (2030)	280 (1520)	130 (2080)		1	-	-
-48-49-A	440 (3070)	170 (1470)	400 (3770)		-	5	-
-48-49-B	310 (2530)	250 (1620)	360 (3080)		2	-	-
-48-49-C	310 (2880)	320 (2490)	300 (2960)		2	-	-
-48-49-D	360 (1970)	200 (1680)	370 (3070)		-	-	5
-48-49-E	320 (1970)	200 (1620)	360 (3070)		2	-	5
-48-49-F	280 (1970)	200 (1680)	370 (2960)		2	-	5
-48-49-G	360 (1970)	200 (1470)	370 (3070)		-	5	5
-48-49-H	320 (2530)	170 (1470)	360 (3080)		2	5	-
-48-49-I	280 (2880)	170 (1470)	400 (2960)		2	5	-
-64-65-A	690 (5670)	220 (2280)	640 (4570)		-	5	-
-64-65-B	490 (5790)	260 (3190)	510 (5280)		5	-	-
-64-65-C	720 (6270)	240 (4180)	520 (4760)		3	-	-
-64-65-D	460 (6620)	220 (3190)	510 (5890)		-	-	5
-64-65-E	460 (5790)	220 (3190)	510 (5280)		3	-	5
-64-65-F	460 (6270)	220 (3190)	510 (4760)		5	-	5
-64-65-G	460 (5670)	220 (2280)	510 (4570)		-	5	5
-64-65-H	460 (5670)	220 (2280)	510 (4570)		5	5	-
-64-65-I	690 (5670)	220 (2280)	640 (4570)		3	5	-
-98-98-A	2120 (17940)	590 (5210)	970 (7660)		-	5	-
-98-98-B	2060 (13670)	540 (4760)	1050 (4860)		5	-	-
-98-98-C	1230 (10460)	510 (4100)	1110 (6730)		5	-	-

Article no.	Radial load rating				Axial load rating		Max. tightening torque of the hinge attachment in Nm		
	F _{R0} in N		F _{R90} in N		F _A in N		Bore	Thread	Bolt
GN 151 -98-98-D	1730	(16190)	460	(3690)	890	(5950)	-	-	5
-98-98-E	1730	(13670)	460	(3690)	890	(4860)	5	-	5
-98-98-F	1230	(10460)	460	(3690)	890	(5950)	5	-	5
-98-98-G	1730	(16190)	460	(3690)	890	(5950)	-	5	5
-98-98-H	2060	(13670)	540	(4760)	970	(4860)	5	5	-
-98-98-I	1230	(10460)	510	(4110)	970	(6730)	5	5	-
GN 151.1-48-49-A	470	(3250)	110	(1540)	330	(3250)	-	5	-
-48-49-B	370	(3300)	320	(2490)	380	(3600)	2	-	-
-48-49-C	310	(2880)	320	(2490)	300	(2960)	2	-	-
-65-65-A	1550	(7780)	760	(3820)	1150	(5780)	-	5	-
-65-65-B	1000	(6550)	720	(3980)	810	(5410)	3	-	-
-65-65-C	1010	(7010)	790	(3960)	840	(5680)	3	-	-
GN 151.2-48-49-C	310	(2880)	320	(2490)	300	(2960)	2	-	-
-64-65-C	720	(6270)	240	(4180)	520	(4760)	3	-	-
-98-98-C	1230	(10460)	510	(4100)	1110	(6730)	5	-	-
GN 151.3-40-40-SH	300	(1500)	200	(750)	300	(1500)	2	-	-
-40-40-EH	300	(1500)	200	(750)	300	(1500)	2	-	-
-49-49-SH	500	(3100)	300	(1300)	400	(2500)	2	-	-
-49-49-EH	500	(3100)	300	(1300)	400	(2500)	2	-	-
-65-65-SH	800	(4500)	500	(2200)	800	(4400)	2	-	-
-65-65-EH	800	(4500)	500	(2200)	800	(4400)	2	-	-
GN 151.4-64-65	490	(5790)	260	(3190)	519	(5280)	3	-	-
GN 151.5-40-40-4,5-SH	300	(1500)	200	(750)	300	(1500)	2	-	-
-40-40-4,5-EH	300	(1500)	200	(750)	300	(1500)	2	-	-
-49-49-5,5-SH	400	(3000)	300	(1600)	500	(2900)	2	-	-
-49-49-5,5-EH	400	(3000)	300	(1600)	500	(2900)	2	-	-
-49-49-6,5-EH	400	(3000)	300	(1600)	500	(2900)	2	-	-
-65-65-6,5-SH	800	(4400)	500	(2200)	800	(4500)	2	-	-
-65-65-6,5-EH	800	(4400)	500	(2200)	800	(4500)	2	-	-
GN 154 -26-30-A	70	(490)	60	(500)	60	(690)	-	1	-
-26-30-B	40	(340)	30	(390)	60	(690)	-	1	1
-26-30-C	110	(720)	70	(670)	100	(830)	0,5	1	-
-26-30-D	40	(340)	30	(390)	70	(750)	-	-	1
-26-30-E	40	(340)	30	(390)	60	(690)	-	1	1
-26-30-F	50	(450)	30	(350)	60	(730)	0,5	-	1
-34-40-A	150	(1340)	100	(700)	160	(1710)	-	4	-
-34-40-B	140	(880)	50	(700)	110	(1230)	-	4	1,5
-34-40-C	150	(1220)	130	(1110)	120	(1620)	1	4	-
-34-40-D	140	(880)	50	(730)	110	(1230)	-	-	1,5
-34-40-E	140	(880)	50	(700)	110	(1230)	-	4	1,5
-34-40-F	140	(820)	100	(860)	150	(1480)	1	-	1,5
-41-48-A	260	(1700)	120	(1640)	260	(2440)	-	5	-
-41-48-B	240	(1700)	110	(1640)	260	(1770)	-	5	3
-41-48-C	240	(1890)	290	(1870)	330	(2530)	2	5	-
-41-48-D	240	(1840)	110	(1740)	290	(1770)	-	-	3
-41-48-E	240	(1700)	110	(1640)	260	(1770)	-	5	3
-41-48-F	120	(1200)	110	(970)	150	(2170)	2	-	3



Article no.	Radial load rating		Axial load rating		Max. tightening torque of the hinge attachment in Nm		
	F_{R0} in N	F_{R90} in N	F_A in N	Bore	Thread	Bolt	
GN 154 -56-66-A	320 (2520)	220 (2250)	450 (4130)	-	5	-	
-56-66-B	260 (1700)	220 (1580)	450 (3260)	-	5	5	
-56-66-C	410 (2610)	310 (2830)	430 (3660)	5	5	-	
-56-66-D	260 (1700)	240 (1580)	470 (3260)	-	-	5	
-56-66-E	260 (1700)	220 (1580)	450 (3260)	-	5	5	
-56-66-F	280 (1770)	180 (1610)	350 (3090)	5	-	5	
GN 155 -45-30-A	140 (1040)	50 (310)	50 (660)	-	1	-	
-45-30-B	120 (980)	20 (300)	50 (640)	0,5	-	-	
-45-30-C	110 (1040)	60 (560)	40 (460)	-	-	1	
-45-30-D	110 (1040)	50 (310)	40 (460)	-	1	1	
-45-30-E	120 (980)	20 (300)	50 (640)	0,5	1	-	
-45-30-F	110 (980)	20 (300)	40 (460)	0,5	-	1	
-58-40-A	230 (1920)	60 (590)	90 (1110)	-	4	-	
-58-40-B	370 (2460)	80 (1210)	150 (1580)	1	-	-	
-58-40-C	300 (2440)	60 (590)	90 (1110)	-	-	2	
-58-40-D	230 (1920)	60 (590)	90 (1110)	-	4	2	
-58-40-E	230 (1920)	60 (590)	90 (1110)	1	4	-	
-58-40-F	300 (2440)	60 (590)	90 (1110)	1	-	2	
-70-48-A	440 (2890)	190 (1290)	160 (1260)	-	5	-	
-70-48-B	410 (2850)	150 (1440)	300 (2160)	2	-	-	
-70-48-C	310 (2870)	160 (1190)	190 (1900)	-	-	5	
-70-48-D	310 (2870)	160 (1190)	160 (1260)	-	5	5	
-70-48-E	410 (2850)	150 (1290)	160 (1260)	5	5	-	
-70-48-F	310 (2850)	150 (1190)	190 (1900)	2	-	5	
-97-66-A	500 (2480)	310 (2250)	530 (4160)	-	5	-	
-97-66-B	690 (3450)	260 (2920)	440 (3160)	5	-	-	
-97-66-C	700 (3490)	270 (1830)	240 (2670)	-	-	5	
-97-66-D	500 (2480)	270 (1830)	240 (2670)	-	5	5	
-97-66-E	500 (2480)	260 (2250)	440 (3160)	5	5	-	
-97-66-F	690 (3450)	260 (1830)	240 (2670)	5	-	5	
GN 157 -70-50-6,5	380 (3830)	190 (1950)	200 (2440)	3	-	-	
-70-50-8,5	380 (3830)	190 (1950)	200 (2440)	3	-	-	
-80-102-6,5	4500 (10000)	2000 (4000)	2000 (4000)	5	-	-	
GN 158 -70-50-A	2220 (4450)	710 (2250)	730 (4170)	-	5	-	
-70-50-B	1490 (2970)	460 (2120)	1740 (3470)	5	-	-	
-70-50-C	2180 (4350)	510 (2220)	1420 (4410)	-	-	4	
GN 159 -54-17-17	1850 (3710)	300 (1700)	440 (2570)	5	-	-	
-64-17-22	1750 (3490)	590 (870)	320 (2280)	5	-	-	
-69-17-25	1760 (3520)	190 (780)	240 (2150)	5	-	-	
-84-17-32	1600 (3190)	180 (850)	280 (1510)	5	-	-	
-74-22-22	1750 (3490)	220 (870)	320 (2280)	5	-	-	
-79-22-25	1750 (3490)	390 (780)	240 (2150)	5	-	-	
-94-22-32	1600 (3190)	180 (850)	280 (1510)	5	-	-	
-84-25-25	1760 (3520)	190 (780)	240 (2150)	5	-	-	
-99-25-32	1600 (3190)	180 (780)	240 (1510)	5	-	-	
-114-32-32	1600 (3190)	180 (850)	280 (1510)	5	-	-	

Article no.	Radial load rating		Axial load rating		Max. tightening torque of the hinge attachment in Nm		
	F_{R0} in N	F_{R90} in N	F_A in N		Bore	Thread	Bolt
GN 159.1-89-35-35	1850 (3710)	300 (1700)	440 (2570)		5	-	-
-109-40-40	1750 (3490)	220 (870)	320 (2280)		5	-	-
-99-40-40	1750 (3490)	220 (870)	320 (2280)		5	-	-
-119-45-45	1750 (3490)	220 (870)	320 (2280)		5	-	-
-104-42,5-42,5	1760 (3520)	190 (780)	240 (2150)		5	-	-
-124-47,5-47,5	1750 (3490)	190 (780)	240 (2150)		5	-	-
-134-50-50	1760 (3520)	190 (780)	240 (2150)		5	-	-
-119-50-50	1600 (3190)	180 (850)	280 (1510)		5	-	-
-139-55-55	1600 (3190)	180 (850)	280 (1510)		5	-	-
-149-57,5-57,5	1600 (3190)	180 (780)	240 (1510)		5	-	-
GN 160 -28-64-A	200	-	590		-	5	-
-28-64-B	200	-	590		-	-	5
-28-64-C	200	-	590		-	5	5
-28-64-D	200	-	590		-	5	5
GN 160.1-35-64	200	-	290		5	-	-
GN 222 -50-65-SH	2070 (5060)	1630 (3380)	1320 (4480)		4	-	-
-50-65-EH	1940 (4900)	970 (3140)	1520 (3840)		4	-	-
GN 233 -37-43	1400 (1800)	500 (1000)	700 (1100)		1	-	-
-57-64	2250 (3200)	1500 (2500)	1500 (2350)		3	-	-
GN 233.3-55-67-O	3500	1900	2100		6	-	-
-55-67-L-1	3500	1900	2100		6	-	-
-55-67-L-2	3500	1900	2100		6	-	-
-55-67-R-1	3500	1900	2100		6	-	-
-55-67-R-2	3500	1900	2100		6	-	-
GN 236 -75-60	2700	2130	1800		5	-	-
GN 237.1-30-30-A	(1700)	(1000)	(1400)		3	-	-
-30-30-B	(1700)	(850)	(1300)		3	-	-
-40-40-A	(1900)	(1280)	(1900)		3	-	-
-40-40-B	(1600)	(1000)	(1900)		5	-	-
-40-40-C	(1900)	(1000)	(2000)		-	-	5
-40-40-D	(1900)	(1000)	(1900)		3	-	5
-40-40-E	(1600)	(1000)	(1900)		5	-	5
-50-50-A	(2400)	(1720)	(2630)		5	-	-
-50-50-B	(2410)	(1360)	(2860)		5	-	-
-50-50-C	(2560)	(2100)	(2340)		-	-	5
-50-50-D	(2400)	(1720)	(2340)		5	-	5
-50-50-E	(2410)	(1360)	(2340)		5	-	5
-60-60-A	(2960)	(3070)	(3320)		5	-	-
-60-60-B	(2810)	(2170)	(3440)		5	-	-
-60-60-C	(3940)	(2130)	(3000)		-	-	5
-60-60-D	(2960)	(2130)	(3000)		5	-	5
-60-60-E	(2810)	(2130)	(3000)		5	-	5
GN 237.1-40-40-A-VDB	200 (1900)	200 (1200)	100 (1600)		3	-	-
-50-50-A-VDB	200 (3100)	200 (2000)	100 (2100)		5	-	-
-40-40-A-MDB	100 (1800)	100 (950)	50 (1100)		2	-	-
-50-50-A-MDB	100 (3000)	100 (1200)	50 (1900)		5	-	-



Article no.	Radial load rating		Axial load rating		Max. tightening torque of the hinge attachment in Nm		
	F_{R0} in N	F_{R90} in N	F_A in N		Bore	Thread	Bolt
GN 237.1-30-30-A-WS	(1700)	(1000)	(1400)		3	-	-
-40-40-A-WS	(1900)	(1280)	(1900)		3	-	-
-50-50-A-WS	(2400)	(1720)	(2630)		5	-	-
-60-60-A-WS	(2960)	(3070)	(3320)		5	-	-
GN 237.1-63-50-A	(1600)	(1000)	(800)		5	-	-
-76-50-A	(1500)	(1000)	(600)		5	-	-
-90-60-A	(2300)	(700)	(900)		5	-	-
-120-60-A	(2000)	(800)	(1000)		5	-	-
GN 237.1-64-40-AS	(1800)	(1200)	(1500)		3	-	-
-88-40-AS	(2000)	(1400)	(1800)		3	-	-
-77-50-AS	(3000)	(1500)	(2100)		5	-	-
-104-50-A	(3300)	(2200)	(2700)		5	-	-
-90-60-AS	(4200)	(3000)	(2800)		5	-	-
-120-60-AS	(3800)	(2300)	(3700)		5	-	-
GN 237.1-64-40-AG	420 (2500)	420 (1000)	300 (750)		3	-	-
-77-50-AG	480 (3500)	480 (1000)	270 (1040)		5	-	-
-90-60-AG	370 (5000)	370 (2500)	250 (1200)		5	-	-
GN 239.3-70-60-SH	3010	1310	2920		5	-	-
-70-60-CH	1200	1360	960		4	-	-
GN 239.4-70-53	2800	1300	2100		5	-	-
GN 239.6-60-110	2800	1300	2100		5	-	-
GN 239.7-60-70	7600	5800	4500		5	-	-
-60-110	7600	5800	4500		5	-	-
GN 337.1-40-40	500	400	800		3	-	-
-50-50	1100	700	1200		5	-	-
-60-60	1600	1250	2050		5	-	-