

10.16 Load Ratings

Metal Hinges

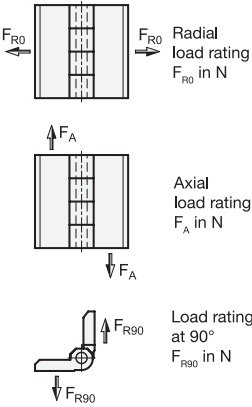
Load Rating of Metal Hinges in Ascending Order of the Standard Numbers

An extensive series of tests were carried out with the hinges listed below.

The hinges were slowly loaded and relieved at room temperature with incrementally increasing force. After load relieve, a deformation irrelevant in terms of function and appearance remained at the listed values for F_A , F_{R0} and F_{R90} . The breaking loads were in most cases multiples above the specified value.

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 envisaged use. Ambient factors and ageing may influence the specified values.



Article No.	Radial load rating		Axial load rating
	F_{R0} in N	F_{R90} in N	
GN 127	-ZD-52-40	1000	600
	-ZD-64-50	1700	900
	-ZD-76-60	2000	1150
	-A4-52-40	1500	600
	-A4-64-50	2300	900
GN 129	-A4-76-60	2800	1150
	-12-D	1000	1000
	-12-Z	600	800
	-16-D	1500	2200
	-16-Z	900	1200
GN 129.2	-45-40-*	1200	2500
	-50-51-*	1000	2300
	-53-40-*	1000	2300
	-61-51-*	1000	2300
GN 129.3	-66-55-ST	1000	2000
	-91-55-ST	1000	2000
GN 129.5	-12-D-*	1000	1500
	-16-D-*	1500	2200
GN 136	-ST-30-30	500	500
	-ST-30-45	750	700
	-ST-40-40	1000	1000
	-ST-40-60	1500	1300
	-ST-45-30	500	450
	-ST-50-50	2000	1000
	-ST-50-75	2250	1300
	-ST-60-30	500	450
	-ST-60-40	1000	1000
	-ST-60-60	2500	1000
	-ST-60-90	3000	1200
	-ST-75-50	2000	1000
	-ST-80-40	1000	1000
	-ST-90-60	2500	1000
	-ST-100-50	1600	700
	-ST-120-60	2500	1000
	-NI-30-30	500	500
	-NI-30-45	750	700
	-NI-40-40	1000	1000
	-NI-40-60	1500	1300
	-NI-45-30	500	450
	-NI-50-50	2000	1000
	-NI-50-75	2250	1300
	-NI-60-30	500	450
	-NI-60-40	1000	1000
	-NI-60-60	2500	1000
	-NI-60-90	3000	1200
	-NI-75-50	2000	1000
	-NI-80-40	1000	1000
	-NI-90-60	2500	1000
	-NI-100-50	1600	700
	-NI-120-60	2500	1000

Article No.		Radial load rating		Axial load rating
		F _{R0} in N	F _{R90} in N	F _A in N
GN 138	-ZD-40-42-A	1500	4000	1000
	-ZD-40-65-A	2500	4500	1750
	-ZD-50-52-A	3000	5000	2000
	-ZD-50-80-A	3500	6000	2500
	-ZD-60-62-A	4000	6500	2900
	-ZD-60-95-A	4500	7000	3100
	-ZD-80-82-A	5000	8000	3500
	-ZD-80-125-A	6000	9000	4100
GN 139.1	-49-101	1000	1000	1500
	-79-101	500	500	750
GN 139.2	-49-101	1000	1950	1500
	-79-101	500	500	750
GN 139.5	-76-126	2000	2000	2000
GN 139.6	-76-126	2000	2000	2000
GN 161	-57	1150	1500	600
	-68	1500	1200	750
	-80	2500	2500	1000
GN 235	-NI-40-45	2500	3000	2500
	-NI-45-45	2500	3000	2500
	-NI-50-45	2500	3000	2500
	-NI-50-55	3000	4000	2200
	-NI-55-55	3000	4000	2200
	-NI-60-55	3000	4000	2200
	-NI-60-65	3500	4500	1800
	-NI-68-65	3500	4500	1800
	-NI-76-65	3500	4500	1800
	-ZD-40-45	1000	2000	1700
	-ZD-45-45	1000	2000	1700
	-ZD-50-45	1000	2000	1700
	-ZD-50-55	1500	2500	1500
	-ZD-55-55	1500	2500	1500
	-ZD-60-55	1500	2500	1500
	-ZD-60-65	2500	3500	1200
	-ZD-68-65	2500	3500	1200
	-ZD-76-65	2500	3500	1200
GN 237	-AL-30-30-A-EL	1000	800	500
	-AL-40-40-A-EL	2000	2800	1000
	-AL-50-50-A-EL	3000	4300	2300
	-AL-60-60-A-EL	5000	4600	4100
	-NI-30-30-A-GS	1800	800	800
	-NI-40-40-A-GS	4000	3000	2100
	-NI-50-50-A-GS	6900	3200	2600
	-NI-60-60-A-GS	10000	5000	5000
	-NI-40-40-C	2300	1000	2000
	-NI-50-50-C	2800	1300	2000
	-NI-60-60-C	4500	1500	3900
	-A4-30-30-A-GS	1700	750	750
	-A4-40-40-A-GS	4000	3000	2100
	-A4-50-50-A-GS	6500	3200	2550
	-A4-60-60-A-GS	10000	5000	5000
	-ZD-30-30-A	1200	750	500
	-ZD-40-40-A	2100	2000	1200
	-ZD-50-50-A	3500	2500	2100
	-ZD-60-60-A	6000	5000	3200
	-ZD-40-40-C	1700	1900	900
	-ZD-50-50-C	3500	2000	2000
	-ZD-60-60-C	4000	2500	3000



TECHNICAL DATA

Load Rating of Metal Hinges
continued

Article No.	Radial load rating		Axial load rating
	F_{R0} in N	F_{R90} in N	
GN 237	-NI- 63-50-A-GS	4000	1500
	-NI- 76-50-A-GS	4000	1200
	-NI- 90-60-A-GS	4500	1500
	-NI-120-60-A-GS	4500	1200
	-ZD-63-50-A	2600	1500
	-ZD-76-50-A	3000	1300
	-ZD-90-60-A	4500	1500
	-ZD-120-60-A	4500	1300
	-ZD-63-50-C	2800	1500
	-ZD-76-50-C	3000	1300
	-ZD-90-60-C	3500	2000
	-ZD-120-60-C	5000	1500
GN 237.3	-A4-50-50-A	3900	2900
	-A4-50-50-B	5900	3900
	-A4-63-50-A	3900	2900
	-A4-63-50-B	5900	3900
	-A4-76-50-A	6000	2900
	-A4-76-50-B	7900	3900
	-A4-60-60-A	4900	3900
	-A4-60-60-B	7400	5900
	-A4-80-80-A	5900	5900
	-A4-80-80-B	11900	8900
	-A4-90-60-A	4900	3900
	-A4-90-60-B	7400	5900
	-A4-120-60-A	7400	3900
	-A4-120-60-B	9900	5900
	-A4-120-80-A	5900	5900
	-A4-120-80-B	11900	8900
	-A4-160-80-A	11900	5900
	-A4-160-80-B	15900	8900
	-NI-50-50-A	6000	3000
	-NI-50-50-B	10000	5000
	-NI-63-50-A	6000	3000
	-NI-63-50-B	1000	5000
	-NI-76-50-A	7000	4000
	-NI-76-50-B	13000	7000
	-NI-60-60-A	8000	6000
	-NI-60-60-B	15000	10000
	-NI-80-80-A	10000	8000
	-NI-80-80-B	22000	13000
	-NI-90-60-A	8000	6000
	-A4-90-60-B	15000	10000
	-A4-120-60-A	10000	6000
	-A4-120-60-B	2100	13000
	-A4-120-80-A	1000	8000
	-A4-120-80-B	22000	13000
	-A4-160-80-A	13000	10000
	-A4-160-80-B	28000	15000
GN 238	-42-42-BJ	1500	1050
	-42-42-EJ	1000	1200
	-42-42-NJ	1250	1500
	-50-50-BJ	1500	1500
	-50-50-EJ	1500	1500
	-50-50-NJ	1800	2000
	-60-60-BJ	2500	1500
	-60-60-EJ	2000	1500
	-60-60-NJ	3700	2550



Technical Data

TECHNICAL DATA

Load Rating of Metal Hinges
continued

Article No.		Radial load rating		Axial load rating
		F _{R0} in N	F _{R90} in N	F _A in N
GN 337	-NI-40-40-A-GS	3000	3500	2000
	-NI-50-50-A-GS	5000	3500	2500
	-NI-60-60-A-GS	6000	6000	5000
GN 337	-ZD-40-40-A	2200	1600	1500
	-ZD-50-50-A	3000	2500	2500
	-ZD-60-60-A	4300	3500	3100
GN 437	-A4-40-40-A	2500	1500	1200
	-A4-50-50-A	3200	2000	1600
	-A4-60-60-A	4500	2400	2000
	-ZD-40-40-A	2500	1500	1200
	-ZD-50-50-A	3200	2000	1600
	-ZD-60-60-A	4500	2400	2000
GN 437.1	-ZD-60-60-A	2800	2300	2000
GN 437.2	-ZD-60-60-A	3000	2800	2000
GN 437.3	-ZD-60-60	2300	2000	1700
GN 437.4	-ZD-60-60	2800	2300	1700
GN 938	-ZD-92-60-4	2800	2300	1800
	-ZD-122-90-8	6200	6200	2400
GN 1362	-NI-60-30-A	1500	1700	2750
	-NI-60-40-A	1500	1950	3750
	-NI-60-60-A	1750	1350	4250
	-NI-80-30-A	1500	1700	2750
	-NI-80-40-A	1500	1950	3750
	-NI-80-80-A	3000	1500	6750
	-NI-100-100-A	3500	1750	7250
GN 1364	-NI- 70-50-B	2750	2000	3750
	-NI-105-50-B	2750	2000	3750
	-NI-140-50-B	2750	2000	3750
GN 1366	-ST-60-30-A	9500	3750	5750
	-ST-120-30-A	9500	3750	5750
	-ST-160-30-A	9500	3750	5750
	-ST-60-40-A	10000	4350	7000
	-ST-120-40-A	10000	4350	7000
	-ST-160-40-A	10000	4350	7000
	-ST-60-50-A	12000	5000	7750
	-ST-120-50-A	12000	5000	7750
	-ST-160-50-A	12000	5000	7750
	-ST-60-60-A	17500	5500	11000
	-ST-120-60-A	17500	5500	11000
	-ST-160-60-A	14000	7000	11000
	-ST-160-80-A	19000	7500	13500
	-ST-200-80-A	19000	7500	13500
	-ST-160-100-A	26000	9750	17500
	-ST-200-100-A	26000	9750	17500
	-ST-220-100-A	26000	9750	17500
	-ST-60-40-S	10000	4350	7000
	-ST-120-40-S	10000	4350	7000
	-ST-160-40-S	10000	4350	7000
	-ST-60-50-S	12000	5000	7750
	-ST-120-50-S	12000	5000	7750
	-ST-160-50-S	12000	5000	7750
	-ST-60-60-S	17500	5500	11000
	-ST-120-60-S	17500	5500	11000
	-ST-160-60-S	14000	7000	11000
	-ST-160-80-S	19000	7500	13500
	-ST-200-80-S	19000	7500	13500
	-ST-160-100-S	26000	9750	17500
	-ST-200-100-S	26000	9750	17500
	-ST-220-100-S	26000	9750	17500

