

# Nord-Lock 254 SMO® washers

EN 1.4547 or equivalent, surface hardened

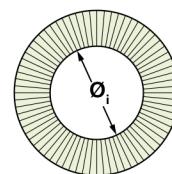
254 SMO® is a high performance austenitic stainless steel (according to EN 1.4547) with greater mechanical strength and resistance against corrosion than most austenitic stainless steel grades. The material is resilient against pitting and crevice corrosion due to high contents of chromium, nickel, molybdenum and nitrogen. Nord-Lock 254 SMO® washers are specially designed for chloride rich processes and salt water solutions / atmospheres, i.e. environments where stainless steel washers made of EN 1.4404 are not suitable.

## Dimension chart

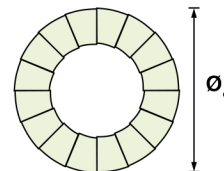
Washer size	Bolt size		$\phi_i$ [inch]	$\phi_o$ [inch]	Thickness T [inch]	Min. package [pairs]	Approx weight lbs / 100 pairs
	UNC	Metric					
NL3ss-254	#5	M3	0.13	0.28	0.09	200	0.09
NL3.5ss-254	#6	M3.5	0.15	0.30	0.09	200	0.09
NL3.5spss-254	#6	M3.5	0.15	0.35	0.09	200	0.15
NL4ss-254	#8	M4	0.17	0.30	0.09	200	0.09
NL4spss-254	#8	M4	0.17	0.35	0.09	200	0.15
NL5ss-254	#10	M5	0.21	0.35	0.09	200	0.13
NL5spss-254	#10	M5	0.21	0.43	0.09	200	0.24
NL6ss-254		M6	0.26	0.43	0.09	200	0.20
NL6spss-254		M6	0.26	0.53	0.08	200	0.35
NL1/4"ss-254	1/4"		0.28	0.45	0.09	200	0.20
NL1/4"spss-254	1/4"		0.28	0.53	0.09	200	0.33
NL8ss-254	5/16"	M8	0.34	0.53	0.08	200	0.26
NL8spss-254	5/16"	M8	0.34	0.65	0.08	200	0.48
NL3/8"ss-254	3/8"		0.41	0.65	0.08	200	0.42
NL3/8"spss-254	3/8"		0.41	0.83	0.09	200	0.84
NL10ss-254		M10	0.42	0.65	0.08	200	0.40
NL10spss-254		M10	0.42	0.83	0.08	200	0.82
NL11ss-254	7/16"	M11	0.45	0.73	0.09	200	0.57
NL12ss-254		M12	0.51	0.77	0.08	200	0.51
NL12spss-254		M12	0.51	1.00	0.13	100	1.83
NL1/2"ss-254	1/2"		0.53	0.77	0.08	200	0.53
NL1/2"spss-254	1/2"		0.53	1.00	0.12	100	1.76
NL14ss-254	9/16"	M14	0.60	0.91	0.12	100	1.08
NL14spss-254	9/16"	M14	0.60	1.21	0.12	100	2.49
NL16ss-254	5/8"	M16	0.67	1.00	0.12	100	1.30
NL16spss-254	5/8"	M16	0.67	1.21	0.13	100	2.49
NL18ss-254		M18	0.77	1.14	0.13	100	1.76
NL18spss-254		M18	0.77	1.36	0.13	100	3.44
NL3/4"ss-254	3/4"		0.79	1.21	0.13	100	2.12
NL3/4"spss-254	3/4"		0.79	1.54	0.13	100	4.72
NL20ss-254		M20	0.84	1.21	0.12	100	1.83
NL20spss-254		M20	0.84	1.54	0.13	100	4.36
NL22ss-254	7/8"	M22	0.92	1.36	0.13	100	2.62
NL22spss-254	7/8"	M22	0.92	1.65	0.13	50	5.34
NL24ss-254		M24	1.00	1.54	0.13	100	3.64
NL24spss-254		M24	1.00	1.91	0.13	50	7.72
NL1"ss-254	1"		1.10	1.54	0.13	100	3.13
NL1"spss-254	1"		1.10	1.91	0.23	50	11.90
NL27ss-254		M27	1.12	1.65	0.22	50	6.83
NL27spss-254		M27	1.12	1.91	0.22	25	11.77
NL30ss-254	1 1/8"	M30	1.24	1.85	0.22	50	8.90
NL33ss-254	1 1/4"	M33	1.35	1.91	0.23	25	8.51
NL36ss-254	1 3/8"	M36	1.47	2.17	0.23	25	12.13
NL39ss-254	1 1/2"	M39	1.59	2.30	0.23	25	14.85

Nord-Lock washers made of 254 SMO® quality are standard stock items, yet subject to prior sale.

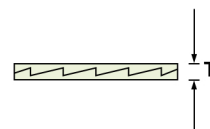
NL3ss-254–NL8ss-254  
 $\phi_i \pm 0.004$  inch  
 NL10ss-254–NL39ss-254  
 $\phi_i \pm 0.008$  inch



NL3ss254 –NL24ss -254  
 (NL1"ss-254)  
 $\phi_o \pm 0.008$  inch  
 NL27ss-254–NL39ss-254  
 $\phi_o \pm 0.012$  inch



NL3ss-254 –NL39ss-254  
 T  $\pm 0.01$  inch



- Please consult our website for current dimensions and 2D / 3D CAD models: [www.nord-lock.com/cad](http://www.nord-lock.com/cad)
- Information regarding changes in materials and dimensions are available through [www.nord-lock.com/pcn](http://www.nord-lock.com/pcn)

## Torque guidelines

Nord-Lock 254 SMO® washers with **stainless steel bolt**, lubricated with copper/graphite paste (Molykote® 1000).

Washer size	Bolt size	Pitch [TPI]	316ss, G <sub>f</sub> =65% $\mu_{th}=0.12, \mu_h=0.13$		304ss, G <sub>f</sub> =65% $\mu_{th}=0.14, \mu_h=0.13$	
			Torque [ftlb]	Clamp load [lb]	Torque [ftlb]	Clamp load [lb]
NL3ss-254	#5	40	0.6	342	0.7	342
NL3.5ss-254	#6	32	0.8	392	0.9	392
NL4ss-254	#8	32	1.4	602	1.5	602
NL5ss-254	#10	24	2.1	756	2.3	756
NL1/4"ss-254	1/4	20	5.1	1,368	5.3	1,368
NL8ss-254	5/16	18	10	2,249	11	2,249
NL3/8"ss-254	3/8	16	18	3,320	19	3,320
NL11ss-254	7/16	14	28	4,553	30	4,553
NL1/2"ss-254	1/2	13	43	6,072	46	6,072
NL14ss-254	9/16	12	62	7,781	66	7,781
NL16ss-254	5/8	11	85	9,663	90	9,663
NL3/4"ss-254	3/4	10	103	9,884	110	9,884
NL22ss-254	7/8	9	165	13,637	176	13,637
NL1"ss-254	1	8	250	17,886	266	17,886
NL30ss-254	1 1/8	7	355	22,542	377	22,542
NL36ss-254	1 3/8	6	649	34,089	691	34,089

Cu/C paste = Copper/graphite paste (Molykote® 1000)

G<sub>f</sub> = ratio of yield point. When tightening according to guidelines and with no deviation, this is the pre-stress achieved expressed as % of yield point.

$\mu_{th}$  = thread friction coefficient

$\mu_h$  = under head friction coefficient

1 lbf = 4.448 N

1 ft-lb = 1.356 Nm

Thread friction coefficients have theoretical values but are verified through testing. Under head friction coefficients have been established by tests. Torque guidelines for other bolt grades are available through your local Nord-Lock representative.