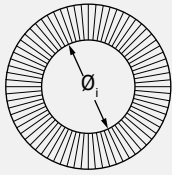


STEEL ORIGINAL WASHERS

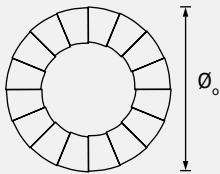
DIMENSIONS

Delta Protekt® Zinc Flake Coating

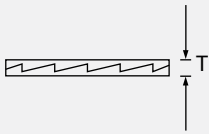
Through hardened EN 1.7182



NL3-NL8sp
Ø_i±0.1 mm
NL3/8"-NL42
Ø_i±0.2 mm
NL45-NL130
Ø_i+0.5 / -0.0 mm



NL3-NL1"sp
Ø_o±0.2 mm
NL27-NL42
Ø_o±0.3 mm
NL45-NL130
Ø_o+0.0 / -2.0 mm



NL3-NL42
T±0.25 mm
NL45-NL130
T±0.75 mm

Note that washers with thickness 6.6 mm have a thickness tolerance +0.0 / -0.5 mm

Nord-Lock steel washers in sizes NL3-NL52 with zinc flake coating are standard stock items.

Torque guidelines



2D/3D CAD models



- Torque guidelines:
Web app: torquelator.nord-lock.com
www.nord-lock.com/torque

- 2D/3D CAD models:
www.nord-lock.com/cad

Bolt size	Metric	UNC	Product designation	Ø _i [mm]	Ø _o [mm]	Thickness T [mm]	Approx. weight kg/100 pairs	Min. Package [pairs]
M3	#5		NL3	3.4	7.0	1.8	0.03	200
M3.5	#6		NL3.5	3.9	7.6	1.8	0.04	200
M3.5	#6		NL3.5sp	3.9	9.0	1.8	0.06	200
M4	#8		NL4	4.4	7.6	1.8	0.04	200
M4	#8		NL4sp	4.4	9.0	1.8	0.06	200
M5	#10		NL5	5.4	9.0	1.8	0.05	200
M5	#10		NL5sp	5.4	10.8	1.8	0.11	200
M6			NL6	6.5	10.8	1.8	0.07	200
M6			NL6sp	6.5	13.5	2.5	0.20	200
		1/4"	NL1/4"	7.2	11.5	2.5	0.08	200
		1/4"	NL1/4"sp	7.2	13.5	2.5	0.18	200
M8	5/16"		NL8	8.7	13.5	2.5	0.15	200
M8	5/16"		NL8sp	8.7	16.6	2.5	0.28	200
		3/8"	NL3/8"	10.3	16.6	2.5	0.23	200
		3/8"	NL3/8"sp	10.3	21.0	2.5	0.48	200
M10			NL10	10.7	16.6	2.5	0.22	200
M10			NL10sp	10.7	21.0	2.5	0.47	200
M11	7/16"		NL11	11.4	18.5	2.5	0.29	200
M12			NL12	13.0	19.5	2.5	0.29	200
M12			NL12sp	13.0	25.4	3.4	0.93	100
		1/2"	NL1/2"	13.5	19.5	2.5	0.27	200
		1/2"	NL1/2"sp	13.5	25.4	3.4	0.90	100
M14	9/16"		NL14	15.2	23.0	3.4	0.56	100
M14	9/16"		NL14sp	15.2	30.7	3.4	1.41	100
M16	5/8"		NL16	17.0	25.4	3.4	0.67	100
M16	5/8"		NL16sp	17.0	30.7	3.4	1.28	100
M18			NL18	19.5	29.0	3.4	0.89	100
M18			NL18sp	19.5	34.5	3.4	1.58	100
		3/4"	NL3/4"	20.0	30.7	3.4	1.05	100
		3/4"	NL3/4"sp	20.0	39.0	3.4	2.21	100
M20			NL20	21.4	30.7	3.4	0.93	100
M20			NL20sp	21.4	39.0	3.4	2.09	100
M22	7/8"		NL22	23.4	34.5	3.4	1.25	100
M22	7/8"		NL22sp	23.4	42.0	4.6	3.19	50
M24			NL24	25.3	39.0	3.4	1.74	100
M24			NL24sp	25.3	48.5	4.6	4.51	50
		1"	NL1"	27.9	39.0	3.4	1.53	100
		1"	NL1"sp	27.9	48.5	4.6	4.20	50
M27			NL27	28.4	42.0	5.8	3.14	50
M27			NL27sp	28.4	48.5	5.8	5.27	25
M30	1 1/8"		NL30	31.4	47.0	5.8	4.10	50
M30	1 1/8"		NL30sp	31.4	55.0	5.8	7.00	25
M33	1 1/4"		NL33	34.4	48.5	5.8	3.89	25
M33	1 1/4"		NL33sp	34.4	58.5	5.8	8.00	25
M36	1 3/8"		NL36	37.4	55.0	5.8	5.49	25
M36	1 3/8"		NL36sp	37.4	63.0	5.8	8.58	25
M39	1 1/2"		NL39	40.4	58.5	5.8	5.89	25
M42			NL42	43.2	63.0	5.8	7.97	25
M45	1 3/4"		NL45	46.2	70.0	7.0	10.20	25
M48			NL48	49.6	75.0	7.0	12.00	25
M52	2"		NL52	53.6	80.0	7.0	13.00	25
M56	2 1/4"		NL56	59.1	85.0	7.0	13.50	10
M60			NL60	63.1	90.0	7.0	15.20	10
M64	2 1/2"		NL64	67.1	95.0	7.0	16.70	10
M68			NL68	71.1	100.0	9.5	28.20	1
M72			NL72	75.1	105.0	9.5	30.70	1
M76	3"		NL76	79.1	110.0	9.5	33.30	1
M80	3 1/8"		NL80	83.1	115.0	9.5	36.00	1
M85			NL85	88.1	120.0	9.5	37.80	1
M90			NL90	92.4	130.0	9.5	47.70	1
M95			NL95	97.4	135.0	9.5	49.80	1
M100	4"		NL100	103.4	145.0	9.5	58.90	1
M105			NL105	108.4	150.0	9.5	61.30	1
M110			NL110	113.4	155.0	9.5	63.50	1
M115			NL115	118.4	165.0	9.5	75.30	1
M120			NL120	123.4	170.0	9.5	77.90	1
M125			NL125	128.4	173.0	9.5	76.60	1
M130	5"		NL130	133.4	178.0	9.5	79.20	1