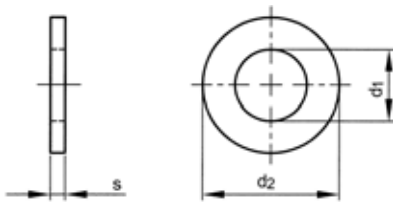
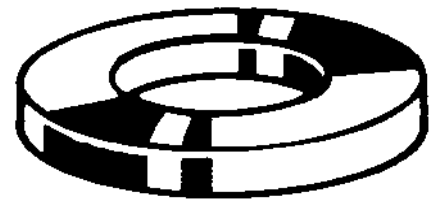


Plain washer



ISO 7089
 DIN 125-1A
 NEN 2269 A



Technical data

For nom.size	d ₁	d ₂	s
M1 (#DIN)	1,1	3,2	0,3
M1,2 (#DIN)	1,3	3,8	0,3
M1,4 (#DIN)	1,5	3,8	0,3
M1,6	1,7	4	0,3
M1,7	1,8	4,5	0,3
M2-5/64	2,2	5	0,3
M2,5	2,7	6	0,5
M2,6	2,8	7	0,5
M3	3,2	7	0,5
M3,5-1/8	3,7	8	0,5
M4-5/32	4,3	9	0,8
M5-3/16	5,3	10	1
M6	6,4	12	1,6
1/4	6,7	12,6	1,6
M7-9/32	7,4	14	1,6
M8-5/16	8,4	16	1,6
M10-3/8	10,5	20	2
M11-7/16 (#DIN)	12	24	2,5
M12-1/2	13	24	2,5
M14-9/16	15	28	2,5
M14,5	14,5	22	2,2
M16-5/8	17	30	3
M18-11/16	19	34	3
M20-3/4	21	37	3
M22-7/8	23	39	3
M24	25	44	4
M26 (#DIN)	27,3	49,5	3,8
M27-1.IN.	28	50	4
M30-1.1/8	31	56	4
M33-1.1/4	34	60	5
M36-1.3/8	37	66	5
M39-1.1/2	40	72	6
M42-1.5/8	43	78	7
M45-1.3/4	46	85	7
M48	50	92	8
M50	52	92	8
M52-2.IN.	54	98	8
M56-2.1/4	58	105	9
M58 (#DIN)	60	110	9
M60	62	110	9
M64-2.1/2	66	115	9
M72 (#DIN)	74,3	123,7	9,75

- Plain washers without chamfer acc. to DIN 125-1 A with a minimum hardness of 140HV.
- Because of the low compression strength these plain washers are exclusively appropriate in combination with bolts with property class < 8.8 c.q. with nuts with property class < 8.

Article groups

Material	Class	Surface treatment	Packaging	Code	Page
St 140HV			Standard	38100	7-4
St 140HV		Zipl	Standard	38031	7-4
St 140HV		ZNTHP-NC6	Standard	38081	7-4
St 140HV		Zipl	Standard	38130	7-4
St 140HV		Zipl	Large	38140	7-5
St 140HV		Zipl yell.p.	Standard	38080	7-5
St 140HV		Zipl blk p.	Standard	38143	7-5
St 140HV		Hot d.g.	Standard	38157	7-5
St 140HV		FLZNNC-NC6	Standard	38152	7-6

Material	Class	Surface treatment	Packaging	Code	Page
St 200HV		Zipl	Standard	38093	7-6
St 200HV		FLZNNC-NC6	Standard	38125	7-6
St.St. A2			Standard	51420	7-6
St.St. A4			Standard	55420	7-6
Al			Standard	45184	7-7
Br			Standard	50060	7-7
Br		Ni.pl.	Standard	50065	7-7
Plastic PA	PA 6.6		Standard	56300	7-7
Plastic PA	PA 6.6		Large	56310	7-8
Ti ASTM			Standard	45930	7-8

38100 Plain washer		L01A
Material	Steel 140HV	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M6	250	38100.060.001	M20	100	38100.200.001	M42	10	38100.420.001
M8	250	38100.080.001	M22	50	38100.220.001	M45	10	38100.450.001
M10	200	38100.100.001	M24	50	38100.240.001	M48	10	38100.480.001
M11	150	38100.110.001	M27	100	38100.270.001	M52	5	38100.520.001
M12	150	38100.120.001	M30	25	38100.300.001	M56	5	38100.560.001
M14	100	38100.140.001	M33	25	38100.330.001	M58	1	38100.580.001
M16	100	38100.160.001	M36	25	38100.360.001	M64	1	38100.640.001
M18	100	38100.180.001	M39	10	38100.390.001	M72	1	38100.720.001

38031 Plain washer without chamfer flatpunched		L01A
Material	Steel 140HV	
Surface treatment	Zinc plated	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	250	38031.030.001	M11	150	38031.110.001	M22	50	38031.220.001
M4	250	38031.040.001	M12	150	38031.120.001	M24	25	38031.240.001
M5	250	38031.050.001	M14	100	38031.140.001	M27	10	38031.270.001
M6	250	38031.060.001	M16	100	38031.160.001	M30	10	38031.300.001
M8	250	38031.080.001	M18	100	38031.180.001			
M10	200	38031.100.001	M20	100	38031.200.001			

38081 Plain washer		L95A
Material	Steel 140HV	
Surface treatment	Galvanized thick Cr3+ passivated	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	250	38081.030.001	M8	250	38081.080.001	M20	100	38081.200.001
M4	250	38081.040.001	M10	200	38081.100.001	M22	50	38081.220.001
M5	250	38081.050.001	M12	150	38081.120.001	M24	50	38081.240.001
M6	250	38081.060.001	M14	100	38081.140.001	M27	25	38081.270.001
M6,4X12,5X1,5	250	38081.064.125	M16	100	38081.160.001	M30	25	38081.300.001
M7	250	38081.070.001	M18	100	38081.180.001			

• Technical brochure available on request.

38130 Plain washer		L01A
Material	Steel 140HV	
Surface treatment	Zinc plated	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M1,6	500	38130.016.001	M2,5	500	38130.025.001	M3	250	38130.030.001
M2	500	38130.020.001	M2,6	500	38130.026.001	M4	250	38130.040.001

38130 Plain washer								
For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M5		250 38130.050.001	M18		100 38130.180.001	M39		10 38130.390.001
M6		250 38130.060.001	M20		100 38130.200.001	M42		10 38130.420.001
M7		250 38130.070.001	M22		50 38130.220.001	M45		10 38130.450.001
M8		250 38130.080.001	M24		50 38130.240.001	M48		10 38130.480.001
M10		200 38130.100.001	M26		50 38130.260.001	M52		5 38130.520.001
M11		150 38130.110.001	M27		25 38130.270.001	M56		5 38130.560.001
M12		150 38130.120.001	M30		25 38130.300.001	M60		5 38130.600.001
M14		100 38130.140.001	M33		25 38130.330.001	M64		5 38130.640.001
M16		100 38130.160.001	M36		25 38130.360.001			

38140 Plain washer		L01A
Material	Steel 140HV	
Surface treatment	Zinc plated	
Packaging	Large	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3		2500 38140.030.001	M8		2000 38140.080.001	M16		400 38140.160.001
M3,5		2500 38140.035.001	M10		1000 38140.100.001	M20		250 38140.200.001
M4		2500 38140.040.001	M11		500 38140.110.001	M24		250 38140.240.001
M5		2500 38140.050.001	M12		500 38140.120.001			
M6		2000 38140.060.001	M14		400 38140.140.001			

38080 Plain washer		L01A
Material	Steel 140HV	
Surface treatment	Zinc plated yellow passivated	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3		250 38080.030.001	M10		200 38080.100.001	M20		100 38080.200.001
M4		250 38080.040.001	M11		150 38080.110.001	M22		50 38080.220.001
M5		250 38080.050.001	M12		150 38080.120.001	M24		50 38080.240.001
M6		250 38080.060.001	M14		100 38080.140.001	M27		25 38080.270.001
M7		250 38080.070.001	M16		100 38080.160.001	M30		25 38080.300.001
M8		250 38080.080.001	M18		100 38080.180.001	M33		25 38080.330.001

38143 Plain washer		L01A
Material	Steel 140HV	
Surface treatment	Zinc plated black passivated	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3		250 38143.030.001	M8		250 38143.080.001	M16		100 38143.160.001
M4		250 38143.040.001	M10		200 38143.100.001	M20		100 38143.200.001
M5		250 38143.050.001	M12		150 38143.120.001			
M6		250 38143.060.001	M14		100 38143.140.001			

38157 Plain washer		L01A
Material	Steel 140HV	
Surface treatment	Hot dip galvanized	
Packaging	Standard	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M10		200 38157.100.001	M16		100 38157.160.001	M20		100 38157.200.001
M12		150 38157.120.001	M18		100 38157.180.001	M24		100 38157.240.001

38152	Plain washer							L01A
Material		Steel 140HV						
Surface treatment		Zinc flake Cr6+ free - ISO 10683 flZnnc						
Packaging		Standard						

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M6		250 38152.060.001	M14		100 38152.140.001	M27		50 38152.270.001
M8		250 38152.080.001	M16		100 38152.160.001	M30		25 38152.300.001
M10		200 38152.100.001	M20		100 38152.200.001			
M12		150 38152.120.001	M24		50 38152.240.001			

38093	Plain washer							L01A
Material		Steel 200HV						
Surface treatment		Zinc plated						
Packaging		Standard						

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M6		250 38093.060.001	M16		100 38093.160.001	M30		25 38093.300.001
M8		250 38093.080.001	M18		100 38093.180.001	M33		25 38093.330.001
M10		200 38093.100.001	M20		100 38093.200.001	M36		25 38093.360.001
M12		150 38093.120.001	M24		50 38093.240.001			
M14		100 38093.140.001	M27		25 38093.270.001			

38125	Plain washer							L01A
Material		Steel 200HV						
Surface treatment		Zinc flake Cr6+ free - ISO 10683 flZnnc						
Packaging		Standard						

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M6		250 38125.060.001	M12		150 38125.120.001	M24		50 38125.240.001
M8		250 38125.080.001	M16		100 38125.160.001	M30		25 38125.300.001
M10		200 38125.100.001	M20		100 38125.200.001			

7

51420	Plain washer							R05A
Material		Stainless steel A2						
Packaging		Standard						

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M1,2		200 51420.012.001	M8		500 51420.080.001	M20		200 51420.200.001
M1,6		200 51420.016.001	3/8		200 51420.096.001	M22		100 51420.220.001
M2		200 51420.020.001	M10		500 51420.100.001	7/8		50 51420.222.001
M2,5		200 51420.025.001	7/16		200 51420.111.001	M24		100 51420.240.001
M3		500 51420.030.001	M12		500 51420.120.001	1.IN.		25 51420.254.001
M3,5		500 51420.035.001	1/2		200 51420.127.001	M27		50 51420.270.001
M4		500 51420.040.001	M14		200 51420.140.001	M30		50 51420.300.001
M5		500 51420.050.001	9/16		100 51420.142.001	1.1/4		25 51420.317.001
M6		500 51420.060.001	5/8		100 51420.158.001	M33		50 51420.330.001
1/4		250 51420.063.001	M16		200 51420.160.001	M36		50 51420.360.001
M7		500 51420.070.001	M18		200 51420.180.001	1.1/2		25 51420.381.001
5/16		250 51420.079.001	3/4		100 51420.191.001	M42		20 51420.420.001

55420	Plain washer							R45A
Material		Stainless steel A4						
Packaging		Standard						

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M1,6		200 55420.016.001	M2		200 55420.020.001	M3		500 55420.030.001
M1,7 *		2000 55420.017.001	M2,5		200 55420.025.001	M3,5 *		1000 55420.035.001

55420 Plain washer								
For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M4	500	55420.040.001	M14	200	55420.140.001	1.1/8	25	55420.285.001
M5	500	55420.050.001	5/8	100	55420.158.001	M30	50	55420.300.001
M6	500	55420.060.001	M16	200	55420.160.001	1.1/4	25	55420.317.001
1/4	250	55420.063.001	M18	200	55420.180.001	M33	50	55420.330.001
M7	500	55420.070.001	3/4	100	55420.191.001	M36	50	55420.360.001
5/16	250	55420.079.001	M20	200	55420.200.001	M39 *	25	55420.390.001
M8	500	55420.080.001	M22	100	55420.220.001	M42 *	25	55420.420.001
3/8	200	55420.096.001	7/8	50	55420.222.001	M45 *	10	55420.450.001
M10	500	55420.100.001	M24	100	55420.240.001	M50 *	10	55420.500.001
M12	500	55420.120.001	1.IN.	50	55420.254.001	M52 *	10	55420.520.001
1/2	100	55420.127.001	M27	50	55420.270.001			

45184 Plain washer		W010	
Material	Aluminium		
Packaging	Standard		
	ISO ≈7089		
	DIN ≈125-1A		
	NEN ≈2269 A		



For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	250	45184.030.001	M6	250	45184.060.001	M12	150	45184.120.001
M4	250	45184.040.001	M8	250	45184.080.001	M16	100	45184.160.001
M5	250	45184.050.001	M10	200	45184.100.001			

50060 Plain washer		M11F	
Material	Brass		
Packaging	Standard		



For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	250	50060.030.001	M8	250	50060.080.001	M18	50	50060.180.001
M4	250	50060.040.001	M10	100	50060.100.001	M20	50	50060.200.001
M5	250	50060.050.001	M12	100	50060.120.001	M24	50	50060.240.001
M6	250	50060.060.001	M14	100	50060.140.001			
M7	250	50060.070.001	M16	100	50060.160.001			

50065 Plain washer		M11F	
Material	Brass		
Surface treatment	Nickel plated		
Packaging	Standard		



For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	250	50065.030.001	M8	250	50065.080.001	M20	50	50065.200.001
M4	250	50065.040.001	M10	100	50065.100.001	M24	50	50065.240.001
M5	250	50065.050.001	M12	100	50065.120.001			
M6	250	50065.060.001	M16	100	50065.160.001			

56300 Plain washer		W02A	
Material	Plastic Polyamide (nylon)		
Class	PA 6.6		
Packaging	Standard		



For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M2	200	56300.020.001	M10	100	56300.100.001	M24	50	56300.240.001
M2,5	200	56300.025.001	M12	100	56300.120.001	M27	50	56300.270.001
M3	200	56300.030.001	M14	100	56300.140.001	M30	50	56300.300.001
M4	200	56300.040.001	M14,5	100	56300.145.001	M33	50	56300.330.001
M5	200	56300.050.001	M16	50	56300.160.001	M36	50	56300.360.001
M6	200	56300.060.001	M20	50	56300.200.001			
M8	200	56300.080.001	M22	50	56300.220.001			

56310 Plain washer		W02A
Material	Plastic Polyamide (nylon)	
Class	PA 6.6	
Packaging	Large	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M3	1000	56310.030.001	M8	1000	56310.080.001	M16	500	56310.160.001
M4	1000	56310.040.001	M10	500	56310.100.001	M20	500	56310.200.001
M5	1000	56310.050.001	M12	500	56310.120.001			
M6	1000	56310.060.001	M14	500	56310.140.001			

45930 Plain washer		W01A
Material	Titanium ASTM	
Packaging	Standard	
	ISO ≈7089	
	DIN ≈125-1A NEN ≈2269 A	

For nom. size	☒	Art.number	For nom. size	☒	Art.number	For nom. size	☒	Art.number
M6	25	45930.060.001	M8	25	45930.080.001	M10	25	45930.100.001

- Titanium ASTM Grade 2 (materialnumber 3.7035) with a high percentage of pure titanium, ensures product stability and -suitability in extremely corrosive environments where other materials i.e. stainless steel fail.
- Titanium Grade 2 is also suitable for other light loaded applications.