


Sperrkant washer

Dimensions - medium form "M"							Tightening Torque (Nm)		Packaging
For screws of	d min.-max.	D min.-max.	s min.-max.	Weight kg/1000 pcs.	h min. max.	Number of Sperrkanten	8.8	10.9	Packaging
4	4.10-4.40	9.80-10.20	0.95-1.05	0.470	1.25-1.50	16	3,3	4,9	1.000
5	5.10-5.40	11.80-12.20	1.16-1.24	0.790	1.55-1.90	20	6,7	9,8	1.000
6	6.10-6.40	13.77-14.20	1.36-1.44	1.240	1.85-2.20	20	11,5	16,5	1.000
8	8.20-8.56	17.68-18.20	1.36-1.44	2.030	1.95-2.40	24	27,0	40,0	1.000
10	10.20-10.56	21.73-22.25	1.55-1.65	3.490	2.25-2.75	24	54,0	79,0	1.000
12	12.40-12.83	26.73-27.25	1.75-1.85	6.010	2.60-3.10	24	92,0	135,0	500
14	14.40-14.83	29.63-30.25	2.34-2.46	9.370	3.20-3.70	24	145,0	215,0	250
16	16.40-16.83	31.88-32.50	2.44-2.56	10.650	3.45-3.95	28	225,0	330,0	250
18	18.50-19.25	34.38-35.00	2.94-3.06	15.200	4.00-4.50	28	320,0	460,0	250
20	21.00-21.75	39.38-40.00	2.94-3.06	20.400	4.20-4.70	30	460,0	650,0	100
22	23.00-23.75	44.38-45.00	3.44-3.56	30.400	4.80-5.30	30	620,0	890,0	100
24	25.00-25.75	49.38-50.00	3.44-3.56	38.200	5.10-5.60	32	790,0	1.120,0	100
27	28.00-28.85	59.26-60.00	3.91-4.09	69.000	6.10-6.60	36	1.160,0	1.650,0	100
30	31.00-31.85	69.26-70.00	4.41-4.59	109.000	7.30-7.80	36	1.550,0	2.250,0	50

Dimensions - small form "S"							Tightening Torque (Nm)		Packaging
For screws of	d min.-max.	D min.-max.	s min.-max.	Weight kg/1000 pcs.	h min. max.	Number of Sperrkanten	5.8	-	Packaging
4	4.10-4.40	7.80-8.20	0.95-1.05	0.270	1.15-1.40	16	2,0	-	1.000
5	5.10-5.40	9.80-10.20	0.95-1.05	0.400	1.25-1.50	20	4,0	-	1.000
6	6.10-6.40	11.77-12.20	1.16-1.24	0.707	1.55-1.85	20	7,0	-	1.000
8	8.20-8.56	15.77-16.20	1.36-1.44	1.500	1.90-2.40	24	16,5	-	1.000
10	10.20-10.56	19.73-20.25	1.55-1.65	2.640	2.10-2.60	24	32,0	-	1.000
12	12.40-12.83	23.73-24.25	1.55-1.65	3.870	2.20-2.70	24	57,0	-	500

Dimensions - large form "B"							Tightening Torque (Nm)		Packaging
For screws of	d min.-max.	D min.-max.	s min.-max.	Weight kg/1000 pcs.	h min. max.	Number of Sperrkanten	10.9	12.9	Packaging
6	6.10-6.40	17.68-18.20	1.36-1.44	2.470	2.15-2.55	20	16,5	19,5	1.000
8	8.20-8.56	21.73-22.25	1.84-1.96	4.880	2.60-3.00	24	40,0	47,0	1.000
10	10.20-10.56	26.73-27.25	2.34-2.46	9.200	3.20-3.70	24	79,0	92,0	1.000
12	12.40-12.83	31.68-32.30	2.74-2.86	14.620	4.10-4.60	24	135,0	158,0	500

Dimensions - head cap screw form "Z"							Tightening Torque (Nm)		Packaging
For screws of	d min.-max.	D min.-max.	s min.-max.	Weight kg/1000 pcs.	h min. max.	Number of Sperrkanten	8.8	10.9	Packaging
6	6.10-6.40	9.54-9.90	1.36-1.44	0.409	1.50-1.80	20	11,5	16,5	1.000
8	8.20-8.56	12.34-12.70	1.36-1.44	0.670	1.55-1.85	24	27,0	40,0	1.000
10	10.20-10.56	15.74-16.10	1.55-1.65	1.299	1.85-2.20	24	54,0	79,0	1.000
12	12.40-12.83	17.78-18.30	1.75-1.85	1.650	2.05-2.45	24	92,0	135,0	500
14	14.40-14.83	20.88-21.40	2.34-2.46	3.000	2.70-3.10	24	145,0	215,0	250
16	16.40-16.83	24.08-24.60	2.44-2.56	4.400	2.90-3.30	28	225,0	330,0	250

The tightening torques listed below are only valid as an indication - referring to VDI 2230.

Finishings: oiled
zinc-flake coating
other coatings on inquiry



Sperrkant washer toothed

Dimensions - toothed form "K"							Tightening Torque (Nm)	Packaging
For screws of	d min.-max.	D min.-max.	s min.-max.	Weight kg/1000 pcs.	h min.-max.	Number of Sperrkanten	5.8	Packaging
4	4.10-4.40	7.80-8.20	0.97-1.03	0.250	1.20-1.35	16	2,0	1.000
5	5.10-5.40	9.80-10.20	0.97-1.03	0.410	1.25-1.50	20	4,0	1.000
6	6.10-6.40	11.80-12.20	1.16-1.24	0.710	1.50-1.80	20	7,0	1.000
8	8.20-8.56	15.80-16.20	1.36-1.44	1.500	1.90-2.40	24	16,5	1.000
10	10.20-10.56	19.75-20.25	1.56-1.64	2.680	2.15-2.60	24	32,0	1.000
12	12.40-12.83	23.75-24.25	1.56-1.64	3.850	2.15-2.60	24	57,0	500

The tightening torques listed below are only valid as an indication - referring to VDI 2230.

Finishings: oiled
zinc-flake coating
other coatings on inquiry




Sperrkant washer

BN 208010

Dimensions - medium form "M"							Tightening Torque (Nm)	Packaging
For screws of	d min.-max.	D min.-max.	s = b min.-max.	Weight kg/1000 pcs.	h min.-max.	Number of Sperrkanten	0.18 μ	Packaging
4	4.10-4.40	9.80-10.20	0.95-1.05	0.470	1.25-1.50	16	2,8	1.000
5	5.10-5.40	11.80-12.20	1.16-1.24	0.790	1.55-1.90	20	5,3	1.000
6	6.10-6.40	13.77-14.20	1.36-1.44	1.240	1.85-2.20	20	9,1	1.000
8	8.20-8.56	17.68-18.20	1.36-1.44	2.030	1.95-2.40	24	21,8	1.000
10	10.20-10.56	21.73-22.25	1.55-1.65	3.490	2.25-2.75	24	44,0	1.000
12	12.40-12.83	26.73-27.25	1.75-1.85	6.010	2.60-3.10	24	75,0	500
14	14.40-14.83	29.63-30.25	2.34-2.46	9.370	3.20-3.70	24	120,0	250
16	16.40-16.83	31.88-32.50	2.44-2.56	10.650	3.45-3.95	28	180,0	250
18	18.50-19.25	34.38-35.00	2.94-3.06	15.200	4.00-4.50	28	-	250
20	21.00-21.75	39.38-40.00	2.94-3.06	20.400	4.20-4.70	30	-	100
22	23.00-23.75	44.38-45.00	3.44-3.56	30.400	4.80-5.30	30	-	100
24	25.00-25.75	49.38-50.00	3.44-3.56	38.200	5.10-5.60	32	-	1.120,0
27	28.00-28.85	59.26-60.00	3.91-4.09	69.000	6.10-6.60	36	-	100
30	31.00-31.85	69.26-70.00	4.41-4.59	109.000	7.30-7.80	36	-	50

Dimensions - small form "S"							Tightening Torque (Nm)	Packaging
For Screws of	d min.-max.	D min.-max.	s = b min.-max.	Weight kg/1000 pcs.	h min.-max.	Number of Sperrkanten	0.18 μ	Packaging
4	4.10-4.40	7.80-8.20	0.95-1.05	0.270	1.15-1.40	16	2,8	1.000
5	5.10-5.40	9.80-10.20	0.95-1.05	0.400	1.25-1.50	20	5,3	1.000
6	6.10-6.40	11.77-12.20	1.16-1.24	0.707	1.55-1.85	20	9,1	1.000
8	8.20-8.56	15.77-16.20	1.36-1.44	1.500	1.90-2.40	24	21,8	1.000
10	10.20-10.56	19.73-20.25	1.55-1.65	2.640	2.10-2.60	24	44,0	1.000
12	12.40-12.83	23.73-24.25	1.55-1.65	3.870	2.20-2.70	24	75,0	500

Dimensions - large form "B"							Tightening Torque (Nm)	Packaging
For Screws of	d min.-max.	D min.-max.	s = b min.-max.	Weight kg/1000 pcs.	h min.-max.	Number of Sperrkanten	0.18 μ	Packaging
6	6.10-6.40	17.68-18.20	1.36-1.44	2.470	2.15-2.55	20	9,1	1.000
8	8.20-8.56	21.73-22.25	1.84-1.96	4.880	2.60-3.00	24	21,8	1.000
10	10.20-10.56	26.73-27.25	2.34-2.46	9.200	3.20-3.70	24	44,0	1.000
12	12.40-12.83	31.68-32.30	2.74-2.86	14.620	4.10-4.60	24	75,0	500

Dimensions - head cap screw form "Z"							Tightening Torque (Nm)	Packaging
For Screws of	d min.-max.	D min.-max.	s = b min.-max.	Weight kg/1000 pcs.	h min.-max.	Number of Sperrkanten	0.18 μ	Packaging
6	6.10-6.40	9.54-9.90	1.36-1.44	0.409	1.50-1.80	20	9,1	1.000
8	8.20-8.56	12.34-12.70	1.36-1.44	0.670	1.55-1.85	24	21,8	1.000
10	10.20-10.56	15.74-16.10	1.55-1.65	1.299	1.85-2.20	24	44,0	1.000
12	12.40-12.83	17.78-18.30	1.75-1.85	1.650	2.05-2.45	24	75,0	500
14	14.40-14.83	20.88-21.40	2.34-2.46	3.000	2.70-3.10	24	120,0	250
16	16.40-16.83	24.08-24.60	2.44-2.56	4.400	2.90-3.30	28	180,0	250

The tightening torques listed below are only valid as an indication - referring to VDI 2230.

Raw material: stainless and acid-proofed steel, material A4



Sperrkant washer toothed

BN 208010

Dimensions - toothed form "K"							Tightening Torque (Nm)	Packaging
For screws of	d min.-max.	D max.	s min.-max.	Weight kg/1000 pcs.	h min. - max	Number of Sperrkanten	0.18 μ	Packaging
4	4.10-4.40	7.80-8.20	0.97-1.03	0.250	1.20-1.35	16	2,8	1.000
5	5.10-5.40	9.80-10.20	0.97-1.03	0.410	1.25-1.50	20	5,3	1.000
6	6.10-6.40	11.80-12.20	1.16-1.24	0.710	1.50-1.80	20	9,1	1.000
8	8.20-8.50	15.80-16.20	1.36-1.44	1.500	1.90-2.40	24	21,8	1.000
10	10.20-10.56	19.75-20.25	1.56-1.64	2.680	2.15-2.60	24	44,0	1.000
12	12.40-12.80	23.75-24.25	1.56-1.64	3.850	2.15-2.60	24	75,0	500

The tightening torques listed below are only valid as an indication - referring to VDI 2230.

Raw material: stainless and acid-proofed steel, material A4

