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TECHNICAL INFORMATION and DATA

Locking elements

Limitations of:

Elements against loss of clamping load		Used with fasteners of property class			
		4.8	5.8	6.8	8.8
Helical spring lock washers	DIN 127 A a) DIN 127 B a)	2	2–3	–	–
High collar spring lock washers	DIN 7980 b)	2	2–3	2–3	–
Double coil spring lock washers (Thackeray washers)		2	2	2–3	–
Curved spring washers	DIN 137 A c)	3	–	–	–
Waved spring washers	DIN 137 B	2	–	–	–
Conical spring washers	SN 212745	2	2	2–3	–
Curved spring lock washers	DIN 128 A	2	2	2–3	–
Waved spring lock washers	DIN 128 B d)	2–3	3	–	–
Conical spring washers	DIN 6796	2	2	2	3
Disc springs	DIN 2093	3	3	2–3	2–3

Elements against rotating		Used with fasteners of property class			
		< 6.8	8.8	10.9	12.9
Prevailing torque nuts with polyamid insert	DIN 982 DIN 985 DIN 986	2–3	3–4	–	–
Prevailing torque nuts all metallic	DIN 980 V/M	2–3	3–4	–	–
Castle nuts	e.g. DIN 935 p. ex. DIN 935	2–3	–	–	–
Tab washers	DIN 93	2–3	–	–	–
Wire as locking means		3	–	–	–
Microencapsulated screws «Precote®»		1	1	1	1
Anaerobic adhesives «OmniFIT»		1	1	1	1
Polyamid patch coated screws and nuts «Kaflok®»		2	3	–	–

Elements against loss of clamping load and against rotating		Used with fasteners of property class			
		< 6.8	8.8	10.9	12.9
Serrated lock washers	DIN 6798 A/J/V/DD	2–3	–	–	–
Ribbed lock washers e.g. «Schnorr®»		2	3	–	–
Toothed lock washers	DIN 6797 A/J	2–3	–	–	–
Hex nuts with toothed lock washers		2–3	–	–	–
Serrated flange screws		–	–	1–2	1–2
Serrated flange nuts		–	–	1–2	1–2

Elements against loosening		Used with fasteners of property class			
		< 6.8	8.8	10.9	12.9
Prevailing torque nuts with polyamid insert	DIN 982 DIN 985 DIN 986	1–2	2	–	–
Prevailing torque nuts all metallic	DIN 980 V/M	1–2	2	–	–
Polyamid patch coated screws and nuts «Kaflok®»		1	1–2	1–2	1–2
Anaerobic adhesives «omniFIT®»		1	1	1	1

1 = excellent 2 = good 3 = acceptable 4 = critical – = ineffective

Note: polyamid = nylon®

a) The use of DIN 128 A is recommended. The standard DIN 127 is withdrawn. Stainless spring lock washers according DIN 127 B may be used based upon the customer's own experience.
b) The standard DIN 7980 is withdrawn.
c) The use of DIN 137 B is recommended. The standard for DIN 137 type A is withdrawn.
d) The use of DIN 128 A is recommended. The standard for DIN 128 type B is withdrawn.

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