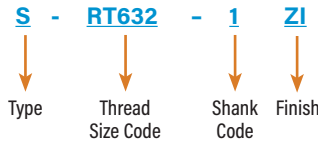


PEM RT® FREE-RUNNING LOCKNUTS

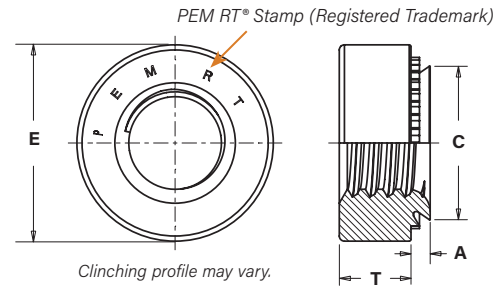
Free-running locking feature allows screw to turn freely until clamp load is applied. If the tightening force is removed, these nuts no longer provide any torsional resistance to rotation until clamp load is reapplied.

- Resistant to vibrational loosening.
- Back side of panel is flush or sub-flush for screw installation.
- Locking feature reusability is not affected by number of on/off cycles.
- Uses same mounting hole and installation tooling as standard S™ nuts.
- Recommended for use in steel or aluminum sheets HRB 80 / HB 150 or less.

PART NUMBER DESIGNATION



PEM RT® free-running locking feature can be added to other PEM® internally threaded nuts.



All dimensions are in inches.

UNIFIED	Thread Size	Type	Thread Code	Shank Code	A (Shank) Max.	Rec. Min. Sheet Thickness (t)	Hole Size In Sheet +.003 -.000	C Max.	E ±.010	T ±.010	Min. Dist Hole To Edge
	.112-40 (#4-40)	S	RT440		0	.030	.030	.166	.165	.250	.070
1					.038	.040					
2					.054	.056					
.138-32 (#6-32)	S	RT632		0	.030	.030	.1875	.187	.280	.070	.22
				1	.038	.040					
				2	.054	.056					
.164-32 (#8-32)	S	RT832		0	.030	.030	.213	.212	.310	.090	.27
				1	.038	.040					
				2	.054	.056					
.190-32 (#10-32)	SS	RT032		0	.030	.030	.250	.249	.340	.090	.28
				1	.038	.040					
				2	.054	.056					
.250-20 (1/4-20)	S	RT0420		0	.045	.047	.344	.343	.440	.170	.34
				1	.054	.056					
				2	.087	.090					
.313-18 (5/16-18)	S	RT0518		1	.054	.056	.413	.412	.500	.230	.38
				2	.087	.090					

All dimensions are in millimeters

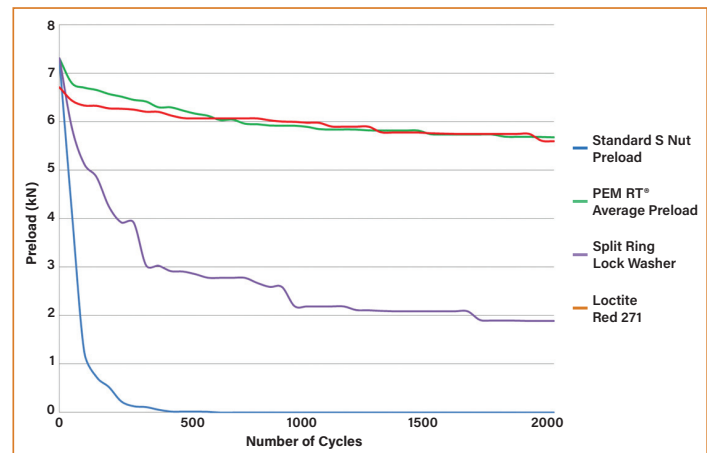
METRIC	Thread Size x Pitch	Type	Thread Code	Shank Code	A (Shank) Max.	Rec. Min. Sheet Thickness (t)	Hole Size In Sheet +0.08	C Max.	E ±0.25	T ±0.25	Min. Dist Hole To Edge
	M3 x 0.5	S	RTM3		0	0.77	0.8	4.22	4.2	6.35	1.5
1					0.97	1					
2					1.38	1.4					
M4 x 0.7	S	RTM4		0	0.77	0.8	5.41	5.38	7.87	2	6.9
				1	0.97	1					
				2	1.38	1.4					
M5 x 0.8	SS	RTM5		0	0.77	0.8	6.35	6.33	8.64	2	7.1
				1	0.97	1					
				2	1.38	1.4					
M6 x 1	S	RTM6		0	0.89	0.92	8.75	8.73	11.18	4.08	8.6
				1	1.15	1.2					
				2	1.38	1.4					
M8 x 1.25	S	RTM8		1	1.38	1.4	10.49	10.47	12.7	5.84	9.65
				2	2.21	2.29					

(1) For maximum performance, we recommend that you use the maximum shank length for your sheet thickness.

The graph represents the clamp load of the joint versus the amount of cycles during transverse vibration testing for an PEM RT® free-running locknut, a standard S nut, a split ring lock washer and Loctite Red 271.

Testing conditions:

- Transverse vibration testing.
- M6 thread size nuts, average of 30 pieces.
- Clamp load applied using metric property class 12.9 screws.
- Nuts tested until loss of clamp load or 2,000 cycles is reached.



Details on PEM RT® vibration resistant thread technology can be found on our web site at: https://www.pemnet.com/files/design_info/techsheets/RT_Thread_Form.pdf