

# Double-layer Self-locking Washer Internal Serrated Washer / External Serrated Washer ▶ Carbon steel ▶ SUS304



Please order according to the diagram

1~2 Select the-Type and parameters in the order of for ordering

Double-layer Self-locking Washer  
 Model(1 Code) - 2 Specification  
**UREXQ - 4**

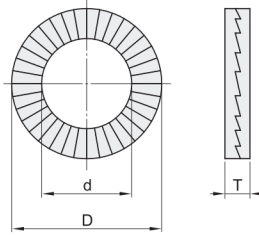
Internal Serrated Washer / External Serrated Washer  
 Model(1 Code) - 2 Specification  
**URFYU - 3**



Discounted Price	Quantity	1~9	10~
Price	100%	Separate Quotation	

Price Excluding Tax (Yuan)

## Double-layer Self-locking Washer



Code	Type	Material	Surface Treatment	Hardness	Heat Resistance Temperature
UREXQ	Double-layer Self-locking Washer	Carbon steel	Dacromet	HRC44~	20~200°C

This product is used in pairs  Applicable Standards for This Product : DIN25201

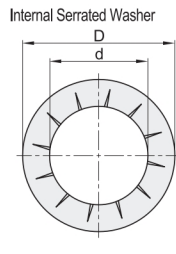
Model Code	Specification	Applicable Bolts	d	D	T Thickness
UREXQ	3	M3	3.4	7	1.8
	4	M4	4.4	7.6	
	5	M5	5.4	9	
	6	M5	6.5	10.8	2.5
	8	M8	8.7	13.5	
	10	M10	10.7	16.6	
	11	M11	11.4	18.5	3.4
	12	M12	13.0	19.5	
	14	M14	15.2	23	
	16	M16	17.0	25.4	5.8
18	M18	19.5	29		
20	M20	21.4	30.7		
22	M22	23.4	34.5		
24	M24	25.3	39		
27	M27	28.4	42		
30	M30	31.4	47		

## Recommended Tightening Torque and Clamping Force

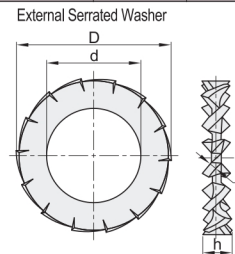
Specification	Applicable bolts M×P	Tightening Torque and Recommended Clamping Force for Carbon Steel Washers and Grade 10.9 Bolts				Tightening Torque and Recommended Clamping Force for Carbon Steel Washers and Grade 10.9 Bolts			
		Oil, G <sub>F</sub> =71% μ <sub>th</sub> =0.13, μ <sub>b</sub> =0.14		GTP600, G <sub>F</sub> =75% μ <sub>th</sub> =0.08, μ <sub>b</sub> =0.13		Oil, G <sub>F</sub> =71% μ <sub>th</sub> =0.13, μ <sub>b</sub> =0.12		GTP600, G <sub>F</sub> =75% μ <sub>th</sub> =0.08, μ <sub>b</sub> =0.11	
		Torque(Nm)	Clamping Force(kN)	Torque(Nm)	Clamping Force(kN)	Torque(Nm)	Clamping Force(kN)	Torque(Nm)	Clamping Force(kN)
3	3×0.5	1.8	3.2	1.6	3.4	2.0	3.9	1.7	4.1
4	4×0.7	4.1	5.6	3.6	5.9	4.6	6.7	4.0	7.1
5	5×0.8	8.1	9.1	7	9.6	9.1	10.9	7.7	11.5
6	6×1.0	14.1	12.9	12.3	13.6	15.8	15.4	13.5	16.3
8	8×1.25	34	23	30	25	38	28	32	30
10	10×1.5	67	37	58	39	75	44	64	47
12	12×1.75	115	54	99	57	128	65	109	68
14	14×2.0	183	74	158	78	204	89	174	94
16	16×2.0	279	100	240	106	311	120	263	127
18	18×2.5	391	123	337	130	437	148	370	156
20	20×2.5	547	156	470	165	610	188	515	198
22	22×2.5	745	194	639	205	831	233	699	246
24	24×3.0	942	225	809	238	1052	270	887	286
27	27×3.0	1375	294	1176	310	1533	352	1288	372
30	30×3.5	1875	358	1608	378	2091	430	1761	454

GTP600 = Graphite Lubrication G<sub>F</sub> = yield rate μ<sub>th</sub> = Thread Friction Coefficient μ<sub>b</sub> = Washer Friction Coefficient  
 1N=0.2251b 1Nm=0.738ft-1b

## Internal Serrated Washer / External Serrated Washer



Code	Type	Main Body		Applicable standards
		Material	Surface Treatment	
URFYU	Internal Serrated Washer	SUS304	—	GB861.2-1987
URGZS	External Serrated Washer			GB862.2-1987



## Internal Serrated Washer

Model Code	Specification	D	d	t	h(about)	Number of teeth (min)
URFYU	2	4.5	2.45	0.3	3t	7
	3	6	3.5	0.4		
	4	8	4.6	0.5		
	5	10	5.6	0.6		8
	6	11	6.76			
	8	15	8.76			
	10	18	10.93	1		12
	12	20.5	12.93			
	16	26	16.93			
	20	33	21.52	1.5	16	

## External Serrated Washer

Model Code	Specification	D	d	t	h(about)	Number of teeth (min)
URGZS	2	4.5	2.45	0.3	3t	9
	3	6	3.5	0.4		
	4	8	4.6	0.5		
	5	10	5.6	0.6		11
	6	11	6.76			
	8	15	8.76			
	10	18	10.93	1		16
	12	20.5	12.93			
	16	26	16.93			
	20	33	21.52	1.5	20	