

DYWIDAG THREADBAR® Properties – Reinforcing Steel per ASTM A615

THREADBAR® Designation	Maximum THREADBAR® Diameter		Minimum Yield Stress (f_y)		Nominal Cross Section Area (A_s)		Minimum Yield Load ($f_y \times A_s$)		Nominal Weight		
	mm	in	mm	ksi	MPa	in ²	mm ²	kips	kN	lbs/ft	kg/m
Grade 75 and 80 THREADBAR®											
#6	19	0.86	22	75	517	0.44	284	33.0	147	1.50	2.23
#7	22	0.99	25	75	517	0.60	387	45.0	200	2.04	3.04
#8	25	1.12	28	75	517	0.79	510	59.3	264	2.67	3.97
#9	29	1.26	32	75	517	1.00	645	75.0	334	3.40	5.06
#10	32	1.43	36	75	517	1.27	819	95.3	424	4.30	6.40
#11	36	1.61	41	75	517	1.56	1,006	117.0	520	5.31	7.90
#14	43	1.86	47	80	552	2.25	1,452	180.0	801	7.65	11.38
#18	57	2.50	64	80	552	4.00	2,581	320.0	1,423	13.60	20.24
#20	63	2.72	69	80	552	4.91	3,168	393.0	1,748	16.70	24.85
#24*	75	3.18	81	75	517	7.06	4,555	529.5	2,355	24.09	35.85
#28*	90	3.68	94	75	517	9.62	6,206	721.7	3,209	32.79	48.80
Grade 100 THREADBAR®											
#6	19	0.86	22	100	689	0.44	284	44.0	196	1.50	2.23
#7	22	0.99	25	100	689	0.60	387	60.0	267	2.04	3.04
#8	25	1.12	28	100	689	0.79	510	79.0	351	2.67	3.97
#9	29	1.26	32	100	689	1.00	645	100.0	445	3.40	5.06
#10	32	1.43	36	100	689	1.27	819	127.0	565	4.30	6.40
#11	36	1.61	41	100	689	1.56	1,006	156.0	694	5.31	7.90
#14	43	1.86	47	100	689	2.25	1,452	225.0	1,001	7.65	11.38
#18	57	2.50	64	100	689	4.00	2,581	400.0	1,779	13.60	20.24
#20	63	2.72	69	100	689	4.91	3,168	491.0	2,184	16.70	24.85

Note: Maximum allowable temporary tension is 95% of minimum yield load. Standard mill length is 60 ft (#6 through #24) and 53 ft for #28, and available cut-to-length as needed. *Threadbar sizes not listed by ASTM A615 but yield strength is in conformance with A615 standard.

GRADE 150 DYWIDAG THREADBAR® Properties – Prestressing Steel per ASTM A722

THREADBAR® Designation		Maximum THREADBAR® Diameter		Minimum Ultimate Tensile Strength (f_u)		Nominal Cross Section Area (A_s)		Minimum Ultimate Tensile Load ($f_u \times A_s$)		Nominal Weight	
in	mm	in	mm	ksi	MPa	in ²	mm ²	kips	kN	lbs/ft	kg/m
1	26	1.200	30	150	1,034	0.85	548	127.5	567	3.01	4.48
1 ¼	32	1.445	37	150	1,034	1.25	806	187.5	834	4.39	6.53
1 ⅝	36	1.630	41	150	1,034	1.58	1,019	237.0	1,054	5.56	8.27
1 ¾	46	2.075	53	150	1,034	2.58	1,665	387.0	1,721	9.37	13.94
2 ¼ *	57	2.482	63	150	1,034	4.08	2,632	612.0	2,722	14.55	21.65
2 ½ *	65	2.790	71	150	1,034	5.16	3,329	774.0	3,443	18.20	27.08
3 *	75	3.146	80	150	1,034	6.85	4,419	1,028	4,571	24.09	35.85

Note: Maximum allowable temporary test tension is 80% of minimum ultimate tensile load. Standard mill lengths are 60 ft for 1", 1 ¼", 1 ⅝" and 1 ¾" and 45 ft for 2 ¼", 2 ½" and 3" bars and available cut-to-length as needed. Cold rolled DYWIDAG THREADBARS meet strength requirement of ASTM A-722.

WARNING: DO NOT WELD on or near ASTM A-722 prestressing bars or their anchorages.



DYWIDAG THREADBAR® Properties – Reinforcing Steel Hardware Dimensions

THREADBAR® Designation	Hexnut Length H		Coupler Length B		Coupler Outer Diameter ØC		Maximum Angle Compensation* α	Beveled Washer Diameter** ØV	
	in	mm	in	mm	in	mm		in	mm
GRADE 75, 80 THREADBAR®									
#6	1.43	36	3.12	79	1.22	31	19	1.78	45
#7	1.71	43	3.73	95	1.41	36	21	2.26	57
#8	1.84	47	4.03	102	1.59	40	19	2.56	65
#9	2.30	58	5.02	128	1.79	45	20	2.88	73
#10	2.56	65	5.70	145	2.02	51	21	3.20	81
#11	2.89	73	6.37	162	2.25	57	20	3.27	83
#14	3.55	90	7.82	199	2.65	67	20	3.25	83
#18	4.23	107	9.35	237	3.50	89	20	4.00	102
#20	4.85	123	10.38	264	3.86	98			
#24	4.10	104	9.20	234	4.75	121			
#28	4.80	122	10.61	269	5.38	137			
GRADE 100 THREADBAR®									
#6	2.88	73	6.25	159	1.25	32	19	1.78	45
#7	3.13	80	7.00	178	1.50	38	21	2.26	57
#8	3.38	86	7.13	181	1.75	44	19	2.56	65
#9	3.50	89	7.25	184	1.88	48	20	2.88	73
#10	3.75	95	7.50	191	2.13	54	21	3.20	81
#11	3.88	99	8.00	203	2.38	60	20	3.27	83
#14	4.50	114	8.25	210	2.75	70	20	3.25	83
#18	5.25	133	10.50	267	3.63	92	20	4.00	102
#20	6.00	152	12.25	311	4.00	102			

*Using two washers in a set. Solutions for larger bars and angles are available. Consult with your local DYWIDAG Sales Engineer.
Nuts and couplers lengths are for uncoated bars. Consult DYWIDAG Sales Engineer for oversize hardware.

DYWIDAG 150 THREADBAR® – Prestressing Steel Hardware Dimensions

THREADBAR® Designation	Anchor Nut / Hex Nut Length A / H		Coupler Length B		Coupler Outer Diameter ØC		Maximum Angle Compensation* α	Wedge Washer Diameter ØW	
	in	mm	in	mm	in	mm		in	mm
1	2.36/2.63	60/67	6.25	159	2.00	51	20	4.55	116
1 ¼	3.15/2.88	80/73	6.75	171	2.38	60	20	5.55	141
1 ⅜	3.53/3.88	90/99	8.75	222	2.75	70	20	5.55	141
1 ¾	4.48/4.50	123/114	9.00	229	3.13	80	20	7.20	183
2 ¼ *	-/3.63	-/92	8.25	210	3.13	80			
2 ½	-/5.00	-/127	10.75	273	4.50	114			
3	-/5.00	-/127	11.00	279	5.25	133			

*Using two washers in a set. Solutions for larger bars and angles are available. Couplers are not necessarily intended to thread all the way through.
Consult with your local DYWIDAG Sales Engineer. Nuts and couplers lengths are for uncoated bars. Consult DYWIDAG Sales Engineer for oversize hardware.

