

DYWIDAG THREADBARS - TECHNICAL DATA [METRIC UNITS]

April 16th, 2018, DSI Surrey, BC

STEEL GRADE	Nominal Bar Diameter		Max. Bar ϕ Across Ribs	Nominal Cross Section Area A_s	Yield Load $P_y = f_y A_s$	Ultimate Load $P_u = f_u A_s$	Nominal Weight	Mill Length	Direction of Thread
	mm								
1100 MPa (f_u) Hot-Rolled Threadbar Form-Ties, Post-Tensioning, Ground Anchors	15	5/8"	17.6	177	159	195	1.44	5.8	R
	20	7/8"	23.0	316	284	348	2.60	11.8	R
1035 MPa (f_u) Prestressing Steel per ASTM A722 Hot-Rolled Threadbar PT Ground Anchors Post-Tensioning * Cold-Rolled Threadbar	26	1"	30.5	548	457	567	4.48	18.3	R
	32	1 1/4"	36.6	806	673	834	6.53	18.3	R
	36	1 3/8"	41.4	1,019	851	1,054	8.27	18.3	R
	46	1 3/4"	52.7	1,665	1,378	1,721	13.94	18.3	R
	* 57	2 1/4"	63.0	2,632	2,179	2,722	21.65	13.7	R
	* 66	2 1/2"	70.9	3,329	2,754	3,443	27.08	13.7	R
* 75	3"	79.9	4,419	3,656	4,571	35.85	13.7	R	
517 MPa, ** 550 MPa (f_y) Reinforcing Steel per ASTM A615, CSA G30.18 Hot-Rolled Threadbar Tie Rods Hanging Rods Micropiles (GEWI-Piles) Anchor Bolts Concrete Reinforcing Ground Anchors Seismic Anchors Rock Bolts Soil Nailing Precast Connections * Cold-Rolled Threadbar	19	#6	21.8	284	147	196	2.23	14.7	L
	22	#7	25.1	387	200	267	3.04	18.3	L
	25	#8	28.4	510	264	351	3.97	18.3	L
	29	#9	32.0	645	334	445	5.06	18.3	L
	32	#10	36.3	819	424	565	6.40	18.3	L
	36	#11	40.9	1,006	520	694	7.90	18.3	L
	** 43	#14	47.2	1,452	801	1,050	11.38	18.3	R
	** 57	#18	63.5	2,581	1,423	1,868	20.24	18.3	R
	** 63	#20	69.0	3,168	1,748	2,293	24.85	18.3	L
	* 75	#24	80.8	4,555	2,355	3,141	35.85	13.7	L
* 90	#28	93.5	6,206	3,209	4,279	48.80	13.7	L	
690 MPa (f_y) Reinforcing Steel per ASTM A615, CSA G30.18 Hot-Rolled Threadbar Tie Rods Hanging Rods Micropiles (GEWI-Piles) Anchor Bolts Concrete Reinforcing Ground Anchors Seismic Anchors Rock Bolts Soil Nailing Precast Connections	19	#6	21.8	284	196	234	2.23	14.7	L
	22	#7	25.1	387	267	319	3.04	18.3	L
	25	#8	28.4	510	351	421	3.97	18.3	L
	29	#9	32.0	645	445	534	5.06	18.3	L
	32	#10	36.3	819	565	677	6.40	18.3	L
	36	#11	40.9	1,006	694	832	7.90	18.3	L
	43	#14	47.2	1,452	1,001	1,201	11.38	18.3	R
	57	#18	63.5	2,581	1,779	2,135	20.24	18.3	R
	63	#20	69.0	3,168	2,184	2,621	24.85	18.3	L
500 MPa (f_y) Tempcore Threadbar Equivalent to ASTM A706 Hot-Rolled Threadbar Charpy V-Notch Toughness: Min. 27 Joule @ -40°C Anchors & Anchor Bolts Reinforcing & Restrainers Cold Temperature Applications	20T	20 ϕ	23.0	314	157	173	2.47	11.8	L
	25T	25 ϕ	27.9	491	246	270	3.85	11.8	L
	28T	28 ϕ	31.2	616	308	339	4.83	11.8	L
	32T	32 ϕ	35.7	804	402	442	6.31	11.8	L
	40T	40 ϕ	44.7	1,260	628	691	9.87	11.8	L
	50T	50 ϕ	55.6	1,960	982	1,080	15.41	11.8	L

Approximate Modulus of Elasticity: E=205,000 MPa

Maximum temporary stress for ground anchors: 80% of ultimate load for Grade 1035 & 1100 MPa bars

90% of yield load for Grade 517, 550 and 690 MPa bars

