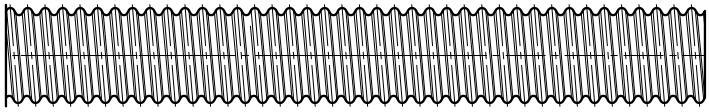
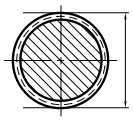
NUCOR® SKYLINE

Reinforcing Steel Grade Fully Threaded Bar

Cold Rolled Threaded Bar & Accessories





Grade 80 ksi Yield Strength / 100 ksi Ultimate Strength									
Bar Designation	**Nominal Diameter** in mm	**Grade**	**Min. Net Area Thru Threads** in^2 mm^2	**Min. Ultimate Strength** kips kN	**Min. Yield Strength** kips kN	**Nominal Weight** lbs/ft kg/m	**Approx. Major Thread Diameter** in mm	**Thread Orientation**	**Max. Length** ft m
#8	1 25	80	0.790 510.0	79.0 351	63.2 281	2.70 4.0	1.125 28.5	Left Hand	60 18.3
#9	1 ⅛ 28	80	1.000 645.0	100.0 445	80.0 356	3.40 5.1	1.250 32.0	Left Hand	60 18.3
#10	1 ¼ 32	80	1.270 819.0	127.0 565	101.6 452	4.30 6.4	1.375 35.0	Left Hand	60 18.3
#11	1 ⅜ 35	80	1.560 1006.0	156.0 670	124.8 555	5.30 7.9	1.500 38.1	Left Hand	60 18.3
#14	1 ¾ 45	80	2.250 1452.0	225.0 1001	180.0 801	7.65 11.4	1.875 47.6	Right Hand	60 18.3
#18	2 ¼ 55	80	4.000 2581.0	400.0 1779	320.0 1423	13.60 20.2	2.438 62.0	Right Hand	60 18.3
#20	2 ½ 64	80	4.910 3168.0	491.0 2184	392.8 1747	16.69 24.8	2.750 70.0	Right Hand	60 18.3
#24	3 76	80	7.070 4561.0	707.0 3145	565.6 2516	24.10 35.9	3.250 82.6	Right Hand	60 18.3
#28	3 ½ 89	80	9.610 6200.0	961.0 4275	768.8 3420	32.70 48.7	3.750 95.3	Right Hand	60 18.3

Cold rolled threaded bars conform to the physical and chemical requirements of ASTM A615 Grade 80 ksi “Standard Specification for Deformed Carbon Steel Bars for Concrete Reinforcement”.

Please note: As we continuously improve the design of our products, product details are subject to change.
† Contact your sales representative for information on hot dip galvanized and epoxy coated bars.

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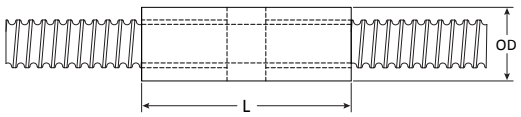
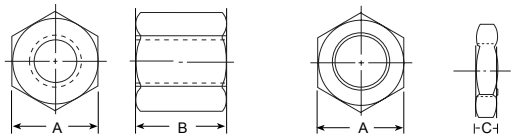
Coupler



Full Load Hex Nut and Jam Nut



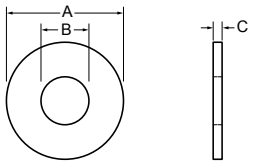
Full Load Hex Nut Jam Nut

Grade 80 Bar – ASTM A108 / A576			
Bar Designation	**OD** in mm	**L** in mm	**Weight** lbs kg
#8	**1**.625 41.3	4.500 114.3	1.55 0.70
#9	**1**.875 47.6	5.000 127.0	2.39 1.08
#10	**2**.125 54.0	5.500 139.7	3.47 1.57
#11	**2**.250 57.2	6.000 152.4	4.02 1.82
#14	3.000 76.2	7.875 200.0	10.4 4.7
#18	3.500 88.9	9.125 231.8	13.93 6.32
#20	4.000 101.6	9.500 241.3	19.86 9.01
#24	4.750 120.6	10.750 243.0	31.01 14.07
#28	5.500 139.7	12.000 304.8	46.20 20.96

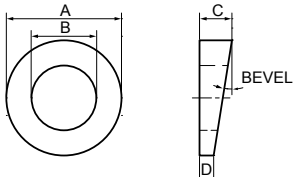
Grade 80 Bar – ASTM A108 / A576**					
Bar Designation	**A** in mm	**B** in mm	**C** in mm	**Weight** lbs / kg	
				Full	Jam
#8	1.625 41.3	2.000 50.8	0.500 12.7	0.81 0.37	0.20 0.09
#9	1.750 44.5	2.000 50.8	0.563 14.3	0.89 0.40	0.25 0.11
#10	2.000 50.8	2.187 55.5	0.625 15.9	1.33 0.60	0.38 0.17
#11	2.250 57.2	2.500 63.5	0.688 17.5	1.96 0.89	0.54 0.24
#14	3.000 76.2	3.250 82.6	0.938 23.8	5.30 2.40	0.9 0.4
#18	3.500 89.0	3.500 89.0	1.000 25.4	5.70 2.60	1.81 0.82
#20	**4**.000 101.6	4.500 114.3	1.125 28.6	10.00 4.50	2.76 1.25
#24*	**4**.750 120.6	4.500 114.3	1.500 38.1	12.98 5.89	4.33 1.96
#28*	**5**.500 139.7	6.000 152.4	1.563 39.7	23.10 10.48	6.02 2.73

* Round collar nut with flats ** #18 & #20 - ASTM A536.

Hardened Washer



Beveled Washer



Grade 80 Bar – ASTM F436				
Bar Designation	**A** in mm	**B** in mm	**C** in mm	**Weight** lbs kg
#8	**2**.250 57.150	1.188 30.175	0.136 3.454	0.110 0.05
#9	**2**.500 63.500	1.375 34.925	0.136 3.454	0.130 0.06
#10	**2**.750 69.850	1.531 38.887	0.136 3.454	0.160 0.07
#11	**3**.000 76.200	1.625 41.275	0.136 3.454	0.190 0.09
#14	**3**.750 95.250	2.125 53.975	0.178 4.521	0.380 0.17
#18	4.500 114.300	2.657 67.488	0.240 6.096	0.710 0.32
#20	5.500 139.700	3.157 80.188	0.240 6.096	1.090 0.49
#24	6.000 152.400	3.625 92.075	0.375 9.525	1.910 0.87
#28	7.000 177.800	4.125 104.775	0.375 9.525	2.680 1.22

Grade 80 Bar – ASTM F436 / A536, 80-55-06 Ductile Cast Iron						
Bar Designation	**A** in mm	**B** in mm	**C** in mm	D in mm	**Bevel** degrees	**Weight** lbs kg
#8	1.75 44.45	1.13 28.58	0.46 11.68	0.17 4.32	9.4	0.21 0.10
#9	2.63 66.68	1.38 31.75	0.93 23.62	0.23 5.84	15	0.69 0.31
#10	2.75 69.85	1.63 41.40	0.97 24.64	0.23 5.84	15	0.66 0.30
#11	3.09 78.49	1.75 44.45	1.06 26.92	0.23 5.84	15	0.93 0.45
#14	**4**.00 101.60	2.13 54.10	1.29 32.77	0.23 5.84	15	1.94 0.88
#18	**4**.60 116.84	2.63 66.80	1.18 29.97	0.37 9.40	10	2.32 1.05
#20	5.00 127.00	3.00 76.20	1.31 33.27	0.43 10.92	10	2.83 1.28
#24	8.00 203.20	3.50 88.90	1.75 44.45	0.43 10.92	10	12.58 5.71
#28	8.00 203.20	4.00 101.60	2.25 57.15	0.84 21.34	10	16.54 7.50

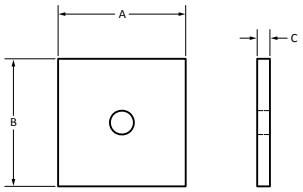
NOTE: Couplers available as "stop type" or "tap through." Tap through couplers require the bars to be torqued against each other at the halfway point in the coupler and fixed with set screws or jam nuts to ensure proper engagement.

NUCOR® SKYLINE

Reinforcing Steel Grade Fully Threaded Bar

Cold Rolled Threaded Bar & Accessories

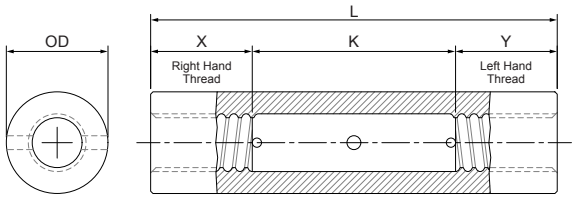
Bearing Plate



Grade 80 Bar – ASTM A572 (Grade 50 - A588)				
Bar Designation	**A** in mm	**B** in mm	**C** in mm	**Weight** lbs kg
#8	8 203.20	8 203.20	¾ 19.05	13.40 6.08
#9	8 203.20	8 203.20	¾ 19.05	13.35 6.06
#10	8 203.20	8 203.20	1 25.40	17.73 8.04
#11	10 254.00	10 254.00	1 25.40	27.86 12.64
#14	10 254.00	10 254.00	1 ½ 38.10	41.37 18.76
#18	10 254.00	10 254.00	2 50.80	54.21 24.59
#20	10 254.00	10 254.00	2 ½ 63.50	67.06 30.42
#24	10 254.00	10 254.00	2 ½ 63.50	65.46 29.69
#28	12 304.80	12 304.80	2 ¾ 69.85	104.26 47.29

Bearing plate dimensions reflect typical sizes. Actual design criteria should be used for specific plate sizing.

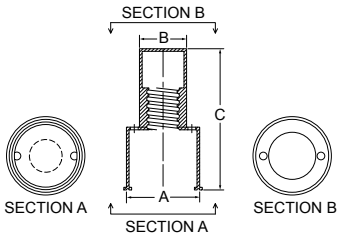
Turnbuckle



Bar Designation	OD in mm	L in mm	X in mm	Y in mm	K in mm
#8	1.625 41.3	10.0 254.0	2.00 50.8	2.00 50.8	6.00 152.4
#9	1.875 47.6	10.0 254.0	2.00 50.8	2.00 50.8	6.00 152.4
#10	2.125 54.0	12.3 312.4	2.25 57.2	2.25 57.2	7.75 196.9
#11	2.250 57.1	13.0 330.2	2.75 69.9	2.75 69.9	7.75 196.9
#14	3.000 76.2	14.0 355.6	3.25 82.6	3.25 82.6	7.50 190.5
#18	3.500 88.9	16.5 419.1	3.50 88.9	3.50 88.9	9.50 241.3
#20	4.000 101.6	21.0 533.4	4.50 114.3	4.50 114.3	12.0 304.80
#24	4.750 120.7	21.5 546.1	4.75 120.7	4.75 120.7	12.0 304.80
#28	5.500 139.7	24.0 609.6	6.00 152.4	6.00 152.4	12.0 304.80

Note: Only cold rolled threads are suitable for use with turnbuckles. The thread direction on the bars must be the opposite to each other in order for the turnbuckle to function.

HDPE Plastic Nut Cap*



HDPE Plastic Nut Caps for Grade 80 Bars			
Bar Designation	**A** in mm	**B** in mm	**C** in mm
#8 – #11	3.5 88.9	2.25 57.2	6.75 171.5
#14 – #28	6.5 165.1	4.25 108.0	10.25 260.4

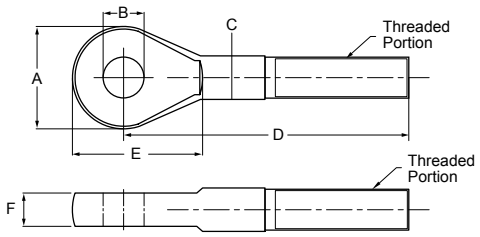
* "O" ring seal in base of cap.

NOTE: Couplers available as "stop type" or "tap through." Tap through couplers require the bars to be torqued against each other at the halfway point in the coupler and fixed with set screws or jam nuts to ensure proper engagement.

Reinforcing Steel Grade Fully Threaded Bar

Cold Rolled Threaded Bar & Accessories

Forged Eye

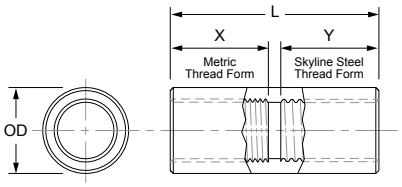


Bar Designation	A in mm	B in mm	C in mm	D in mm	E in mm	F in mm
#14	6.1 155	2.5 63	2.4 60	19.9 505	8.1 207	2.0 50
#18	6.1 155	2.5 63	2.4 60	19.9 505	8.1 207	2.0 50
#20	7.1 180	3.0 76	3.0 76	20.5 520	9.8 248	2.5 63
#24	7.1 180	3.0 76	3.0 76	20.5 520	9.8 248	2.5 63
#28	9.2 230	3.5 88	3.5 90	22.2 565	12.3 312	3.0 75

Made in Germany. Threads on forged eyes will be metric. Conversion couplers available (transition) for all Nucor Skyline thread forms.

Contact your Nucor Skyline sales representative for assistance with connection details.

Transitional Coupler for Forged Eye



Bar Designation	OD in mm	L in mm	X in mm	Y in mm	Weight lb kg
M56 – #14	3.50 88.90	9.8 248.92	4.00 101.6	4.57 116.0	18.4 8.4
M56 – #18	3.50 88.90	9.8 248.92	4.00 101.6	4.57 116.0	15.6 7.1
M72 – #20	4.75 120.65	12.0 304.80	5.38 136.5	5.38 136.5	39.2 17.8
M72 – #24	4.75 120.65	12.0 304.80	5.38 136.5	5.38 136.5	34.9 15.8
M85 – #28	5.50 139.70	13.3 337.82	6.00 152.4	6.00 152.4	48.5 22.0

Corrosion Protection

All threaded bars can be supplied with a protective smooth-walled PVC tube. While the standard PVC tube is 0.035 inches thick, other options are available upon request.

The following additional corrosion protection options are available for all threaded bars:

Single Corrosion Protection (SCP)

Double Corrosion Protection (DCP)

- Encapsulating: Grease or Grout
- Epoxy Coating
- Galvanizing
- Painting
- Plating
- Taping

Oversized accessories are provided to accommodate galvanized and coated bars.

Please contact your Nucor Skyline Geostructural Solutions Representative for recommendations on the system that will best suit your requirements.

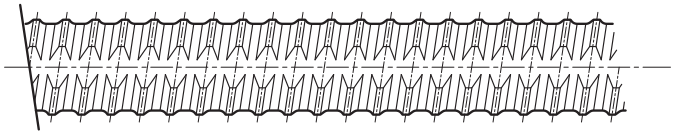
NOTE: Couplers available as "stop type" or "tap through." Tap through couplers require the bars to be torqued against each other at the halfway point in the coupler and fixed with set screws or jam nuts to ensure proper engagement.

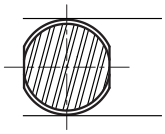
Please note: As we continuously improve the design of our products, product details are subject to change.

NUCOR® SKYLINE

Reinforcing Steel Grade Fully Threaded Bar

Hot Rolled Threaded Bar and Accessories†





Grade 80 ksi Yield Strength / 100 ksi Ultimate Strength							
Bar Designation	**Grade**	**Nominal Diameter** in mm	**Min. Net Area Thru Threads** in² mm²	**Min. Ultimate Strength** kips	**Min. Yield Strength** kips	**Thread Orientation**	**Max. Length** ft m
#6	80	¾ 20	0.44 284	44 196	35.2 157	Left Hand	60 18.3
#7	80	⅞ 22	0.60 387	60 267	48.0 214	Left Hand	60 18.3
#8	80	1 25	0.79 510	79 351	63.2 281	Left Hand	60 18.3
#9	80	1 ⅛ 28	1.00 645	100 445	80.0 356	Left Hand	60 18.3
#10	80	1 ¼ 32	1.27 819	127 565	101.6 452	Left Hand	60 18.3
#11	80	1 ⅜ 35	1.56 1006	156 670	124.8 555	Left Hand	60 18.3
#14	80	1 ¾ 45	2.25 1452	225 1001	180.0 801	Right Hand	60 18.3
#18	80	2 ¼ 55	4.00 2581	400 1779	320.0 1423	Right Hand	60 18.3
#20	80	2 ½ 64	4.91 3168	491 2184	392.8 1747	Right Hand	60 18.3

Hot rolled threaded bars conform to the physical and chemical requirements of ASTM A615 Grade 80 ksi "Standard Specification for Deformed Carbon Steel Bars for Concrete Reinforcement".

Grade 100 ksi Yield Strength / 115 ksi Ultimate Strength							
Bar Designation	**Grade**	**Nominal Diameter** in mm	**Min. Net Area Thru Threads** in² mm²	**Min. Ultimate Strength** kips	Min. Yield Strength kips	**Thread Orientation**	**Max. Length** ft m
#11	100	1 ⅜ 35	1.56 1006	179.4 798	156.0 670	Left Hand	60 18.3
#14	100	1 ¾ 45	2.25 1452	258.6 1150	225.0 1001	Right Hand	60 18.3
#18	100	2 ¼ 55	4.00 2581	460.0 2046	400.0 1779	Right Hand	60 18.3
#20	100	2 ½ 64	4.91 3168	564.7 2512	491.0 2184	Left Hand	60 18.3

Hot rolled threaded bars conform to the physical and chemical requirements of ASTM A615 Grade 100 ksi "Standard Specification for Deformed Carbon Steel Bars for Concrete Reinforcement".

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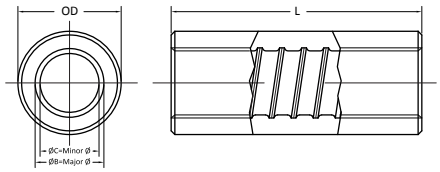
NUCOR® SKYLINE

Reinforcing Steel Grade Fully Threaded Bar

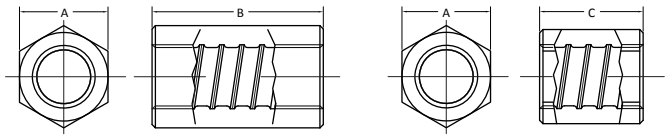
Hot Rolled Threaded Bar and Accessories†

Coupler



Grade 80/100 – ASTM A576, A108				
Bar Designation	**Nominal Diameter** in mm	**OD** in mm	L in mm	**Weight** lbs kg
#6	¾ 20	1.25 31.75	3.125 79.37	0.62 0.28
#7	⅞ 22	1.50 38.10	3.75 95.25	0.93 0.42
#8	1 25	1.625 41.27	4.00 101.60	1.37 0.62
#9	1 ⅛ 28	1.875 47.62	5.00 127.00	2.31 1.05
#10	1 ¼ 32	2.00 50.80	5.75 146.05	2.77 1.26
#11	1 ⅜ 35	2.25 57.15	6.40 162.56	3.79 1.72
#14	1 ¾ 45	2.88 73.15	7.85 192.53	5.49 2.49
#18	2 ¼ 55	3.75 95.25	12.00 304.8	21.9 9.93
#20	2 ½ 64	4.25 107.95	10.15 257.81	25.1 11.39

Full Load Hex Nuts and Jam Nuts

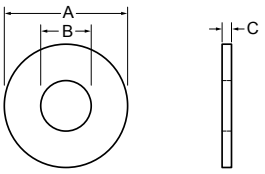


Full Load Hex Nut Jam Nut

Grade 80/100 – ASTM A576, A108						
Bar Designation	**Nominal Diameter** in mm	**A** in mm	**B** in mm	C in mm	**Weight** lbs / kg	
					Full	Jam
#6	¾ 20	1.125 28.57	1.45 36.83	0.87 22.10	0.26 0.12	0.16 0.07
#7	⅞ 22	1.375 34.92	1.75 44.45	0.87 22.10	0.43 0.20	0.21 0.10
#8	1 25	1.50 38.10	2.50 63.50	0.87 22.10	0.56 0.25	0.26 0.12
#9	1 ⅛ 28	1.75 44.45	2.25 57.15	0.87 22.10	0.97 0.43	0.37 0.17
#10	1 ¼ 32	2.00 50.80	2.50 63.50	1.00 25.40	1.43 0.65	0.56 0.25
#11	1 ⅜ 35	2.25 57.15	2.75 69.85	1.00 25.40	1.52 0.69	0.53 0.24
#14	1 ¾ 45	2.50 63.50	3.60 91.44	1.00 25.40	3.02 1.37	0.82 0.37
#18*	2 ¼ 55	3.75 95.25	4.88 123.23	1.50 38.1	8.8 3.99	2.71 1.23
#20*	2 ½ 64	4.25 107.95	4.25 257.81	1.50 38.1	12.3 5.58	4.34 1.97

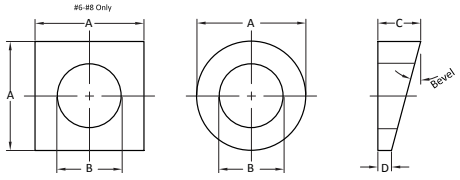
* Round collar nut with flats.

Hardened Washer



Grade 80/100 – ASTM F436					
Bar Designation	**Nominal Diameter** in mm	**A** in mm	**B** in mm	**C** in mm	**Weight** lbs kg
#6	¾ 20	1.75 44.45	0.938 23.83	.136 3.45	0.07 0.03
#7	⅞ 22	2.00 50.80	1.063 27.00	.136 3.45	0.09 0.04
#8	1 25	2.25 57.15	1.188 30.18	.136 3.45	0.11 0.05
#9	1 ⅛ 28	2.50 63.50	1.375 34.92	.136 3.45	0.13 0.06
#10	1 ¼ 32	2.75 69.85	1.531 38.89	.136 3.45	0.16 0.07
#11	1 ⅜ 35	3.00 76.20	1.625 41.27	.136 3.45	0.19 0.09
#14	1 ¾ 45	3.25 82.55	1.77 44.96	.178 4.52	0.30 0.14
#18	2 ¼ 55	6.00 152.40	3.625 92.075	0.375 9.525	1.910 0.87
#20	2 ½ 64	7.00 177.80	4.125 104.775	0.375 9.525	2.680 1.22

Beveled Washer



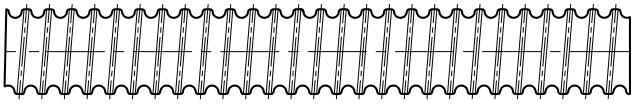
Grade 80/100 – F 436, A536 80-55-06							
Bar Designation	**Nominal Diameter** in mm	**A** in mm	**B** in mm	**C** in mm	**D** in mm	**Bevel** degrees	**Weight** lbs kg
#6	¾ 20	1.75 44.45	.95 24.13	.78 19.81	.32 8.13	15	.32 0.15
#7	⅞ 22	1.75 44.45	1.14 28.96	.78 19.81	.32 8.13	15	.37 0.17
#8	1 25	1.75 44.45	1.14 28.96	.78 19.81	.23 5.84	15	.37 0.17
#9	1 ⅛ 28	2.63 66.80	1.38 31.75	.93 23.62	.23 5.84	15	.64 0.29
#10	1 ¼ 32	2.75 69.85	1.63 41.40	.97 24.64	.23 5.84	15	.66 0.30
#11	1 ⅜ 35	3.09 78.49	1.75 44.45	1.06 26.92	.23 5.84	15	.93 0.45
#14	1 ¾ 45	4.00 10.16	2.13 54.10	1.29 32.77	.23 5.84	15	1.94 0.88
#18	2 ¼ 55	8.00 203.20	3.50 88.90	1.75 44.45	.43 10.92	10	12.58 5.71
#20	2 ½ 64	8.00 203.20	4.00 101.60	2.25 57.15	.84 21.34	10	16.54 7.50

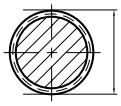
NOTE: Couplers available as "stop type" or "tap through." Tap through couplers require the bars to be torqued against each other at the halfway point in the coupler and fixed with set screws or jam nuts to ensure proper engagement.

NUCOR® SKYLINE

High Strength Steel Threaded Bar

Cold Rolled Threaded Bar & Accessories

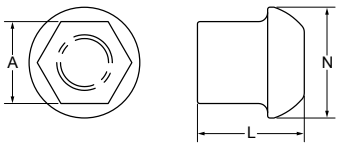




Grade 120 ksi Yield Strength / Grade 150 ksi Ultimate Strength								
Nominal Diameter in mm	**Grade**	**Min. Net Area Thru Threads** in^2 mm^2	**Min. Ultimate Strength** kips kN	**Min. Yield Strength** kips kN	**Nominal Weight** lbs/ft kg/m	**Approx. Major Thread Diameter** in mm	**Thread Orientation**	**Max. Length** ft m
1 26	150	0.850 549	128 567	102 454	3.1 4.6	1 ⅛ 28.6	Left Hand	60 18.3
1 ¼ 32	150	1.250 807	188 834	150 667	4.5 6.7	1 ½ 38.1	Left Hand	60 18.3
1 ⅜ 36	150	1.580 1019	237 1054	190 843	5.7 8.5	1 ⅝ 41.3	Left Hand	60 18.3
1 ¾ 46	150	2.600 1677	390 1735	320 1423	9.1 13.5	2 50.8	Left Hand	60 18.3
2 ¼ 57	150	4.000 2581	600 2669	480 2135	13.6 20.2	2 7⁄16 62.0	Left Hand	60 18.3
2 ½ 65	150	5.190 3350	778 3457	622 2766	18.3 27.2	2 ¾ 69.9	Left Hand	60 18.3
3 75	150	7.060 4554	1059 4702	847 3766	24.0 35.7	3 ¼ 82.6	Left Hand	60 18.3

Nucor Skyline's high strength threaded bar is cold rolled, threaded, quenched and tempered grade 4140 smooth rounds.

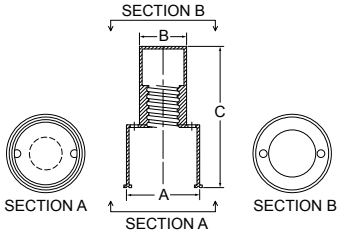
Anchor Nut†



Anchor Nut for High Strength Bar – ASTM A788				
Diameter in mm	**A** in mm	**L** in mm	**N** in mm	**Weight** lbs kgs
1 26	1.750 44.5	2.360 59.9	2.45 62.2	1.44 0.65
1 ¼ 32	2.125 54.0	3.125 79.5	3.15 80.0	3.03 1.37
1 ⅜ 36	2.375 60.3	3.375 85.9	3.5 88.9	4.05 1.84
1 ¾ 46	3.000 76.2	4.000 101.6	4.2 106.7	7.05 3.20
2 ¼ 57	4.250 108.0	5.500 139.7	5.6 142.2	20.24 9.18

† Consult your sales representative for availability of additional threads and grades.

HDPE Plastic Nut Cap*



HDPE Plastic Nut Cap for High Strength Bar			
Nominal Diameter in mm	**A** in mm	**B** in mm	**C** in mm
1 – 1 ⅜ **26 – 36**	3.5 88.9	2.25 57.2	6.75 171.5
1 ¾ – 3 **46 – 75**	6.5 165.1	4.25 108.0	10.25 260.4

* "O" ring seal in base of cap.