



Dynabolt® Sleeve Anchors  
Versatile Heavy-Duty Sleeve Anchors

Sizes

Dynabolt Carbon Steel



Head Style	Anchor Dia. & Drill Bit Size (Threads) Per Inch	Effective Anchor Length* In. (mm)	Bolt Dia./ Threads Per Inch	Minimum Embedment In. (mm)	Max. Thickness of Material to be Fastened In. (mm)	Qty/Wt Per Box Lbs.	Qty/Wt Per Master Carton Lbs.	Zinc Plating	304 Stainless Steel
Acorn Nut	1/4" - 20	5/8 (15.9)	3/16" /24	1/2 (12.7)	1/8 (3.2)	100/ 1.9	1000/ 20	☒	☒
		1-3/8 (34.9)	3/16" /24	1-1/8 (28.6)	1/4 (6.4)	100/ 2.6	1000/ 27	☒	☒
		2-1/4 (57.2)	3/16" /24	1-1/8 (28.6)	1-1/8 (28.6)	100/ 3.7	1000/ 38	☒	☒
Hex Nut	1/4" - 20	5/8 (15.9)	3/16" /24	1/2 (12.7)	1/8 (3.2)	100/ 1.6	1000/ 17	☒	☒
		1-3/8 (34.9)	3/16" /24	1-1/8 (28.6)	1/4 (6.4)	100/ 2.3	1000/ 24	☒	☒
		2-1/4 (57.2)	3/16" /24	1-1/8 (28.6)	1-1/8 (28.6)	100/ 3.4	1000/ 35	☒	☒
	5/16" - 18	1-1/2 (38.1)	1/4" /20	1-1/4 (31.8)	1/4 (6.4)	100/ 4.0	1000/ 41	☒	☒
		2-1/2 (63.5)	1/4" /20	1-1/4 (31.8)	1-1/4 (31.8)	100/ 5.9	800/ 47	☒	☒
	3/8" - 16	1-7/8 (47.6)	5/16" /18	1-1/2 (38.1)	3/8 (9.5)	50/ 3.5	500/ 36	☒	☒
		3 (76.2)	5/16" /18	1-1/2 (38.1)	1-1/2 (38.1)	50/ 4.9	400/ 40	☒	☒
	1/2" - 13	2-1/4 (57.2)	3/8" /16	1-7/8 (47.6)	3/8 (9.5)	25/ 3.3	250/ 34	☒	☒
		3 (76.2)	3/8" /16	1-7/8 (47.6)	1-1/8 (28.6)	25/ 4.0	200/ 33	☒	☒
		4 (101.6)	3/8" /16	1-7/8 (47.6)	2-1/8 (54.0)	25/ 5.3	200/ 44	☒	☒
	5/8" - 11	2-1/4 (57.2)	1/2" /13	2 (50.8)	1/4 (6.4)	25/ 6.3	150/ 38	☒	☒
		3 (76.2)	1/2" /13	2 (50.8)	1 (25.4)	25/ 7.0	150/ 46	☒	☒
4-1/4 (108.0)		1/2" /13	2 (50.8)	2-1/4 (57.2)	10/ 3.9	100/ 41	☒	☒	
3/4" - 10	2-1/2 (63.5)	5/8" /11	2-1/4 (57.2)	1/4 (6.4)	10/ 4.7	50/ 25	☒	☒	
	4 (101.6)	5/8" /11	2-1/4 (57.2)	1-3/4 (44.5)	5/ 3.2	50/ 33	☒	☒	
	6-1/4 (158.8)	5/8" /11	2-1/4 (57.2)	4 (101.6)	5/ 4.3	50/ 44	☒	☒	
Phillips Flat Head	1/4" - 20 (head dia. .477)	1-1/2 (38.1)	3/16" /24	1-1/8 (28.6)	3/8 (9.5)	100/ 1.9	1000/ 21	☒	☒
		2-1/4 (57.2)	3/16" /24	1-1/8 (28.6)	1-1/8 (28.6)	100/ 2.7	1000/ 28	☒	☒
		3-1/8 (79.4)	3/16" /24	1-1/8 (28.6)	2 (50.8)	100/ 3.8	1000/ 38	☒	☒
		4 (101.6)	3/16" /24	1-1/8 (28.6)	2-7/8 (73.0)	100/ 4.7	1000/ 48	☒	☒
	3/8" - 16 (head dia. .722)	2-7/8 (73.0)	5/16" /18	1-1/2 (38.1)	1-3/8 (34.9)	50/ 3.8	500/ 40	☒	☒
Threshold Flat Head	1/4" - 20 (head dia. .385)	4 (101.6)	5/16" /18	1-1/2 (38.1)	2-1/2 (63.5)	50/ 5.3	400/ 4	☒	☒
		5 (127.0)	5/16" /18	1-1/2 (38.1)	3-1/2 (88.9)	50/ 5.6	300/ 40	☒	☒
		6 (152.4)	5/16" /18	1-1/2 (38.1)	4-1/2 (114.3)	50/ 8.0	300/ 48	☒	☒
		6 (152.4)	5/16" /18	1-1/2 (38.1)	4-1/2 (114.3)	50/ 8.0	300/ 48	☒	☒
Round Head	1/4" - 20	1-3/8 (34.9)	3/16" /24	1-1/8 (28.6)	1/4 (6.4)	100/ 1.9	1000/ 20	☒	☒
		2 (50.8)	3/16" /24	1-1/8 (28.6)	7/8 (22.2)	100/ 2.7	1000/ 28	☒	☒
		2-7/8 (73.0)	3/16" /24	1-1/8 (28.6)	1-3/4 (44.5)	100/ 3.7	1000/ 38	☒	☒
3/8" - 16	2-5/8 (66.7)	5/16" /18	1-1/2 (38.1)	1-1/8 (28.6)	50/ 3.9	500/ 41	☒	☒	
Tie Wire	5/16" - 18	1-1/2 (38.1)	1/4" /20	1-1/2 (38.1)	9/32 (7.1)	100/ 4.9	1000/ 50	☒	☒
Hex Coupling (Rod Hanger)	3/8" - 16	1-7/8 (47.6)	3/8" /16 Hanger	1-1/2 (38.1)	-- --	50/ 6.0	250/ 30	☒	☒
		1/2" - 13	2-1/4 (57.2)	1/2" /13 Hanger	1-7/8 (47.6)	-- --	25/ 6.5	125/ 34	☒

Dynabolt Sleeve Anchors Performance Table  
Ultimate Tension and Shear Values In Masonry Units (Lbs/kN)\*

Anchor Dia. In. (mm)	Installation Torque Ft. Lbs. (Nm)	Bolt Dia. In. (mm)	Minimum Embedment Depth In. (mm)	Anchor Type (Steel)	Lightweight				Medium Weight			
					Hollow Core		Grout Filled		Hollow Core		Grout Filled	
					Tension Lbs. (kN)	Shear Lbs. (kN)	Tension Lbs. (kN)	Shear Lbs. (kN)	Tension Lbs. (kN)	Shear Lbs. (kN)	Tension Lbs. (kN)	Shear Lbs. (kN)
1/4 (6.4)	3.5 (4.7)	3/16 (4.8)	1-1/8 (28.6)	Carbon	1,120 (5.0)	1,360 (6.0)	1,120 (5.0)	1,360 (6.0)	1,120 (5.0)	1,620 (7.2)	1,120 (5.0)	1,360 (6.0)
				Stainless	640 (2.8)	1,620 (7.2)	640 (2.8)	1,620 (7.2)	640 (2.8)	1,620 (7.2)	640 (2.8)	1,620 (7.2)
3/8 (9.5)	15 (20.3)	5/16 (7.9)	1-1/2 (38.1)	Carbon	1,360 (6.0)	2,560 (11.4)	1,360 (6.0)	2,560 (11.4)	1,360 (6.0)	2,560 (11.4)	1,360 (6.0)	2,560 (11.4)
				Stainless	1,160 (5.2)	2,560 (11.4)	1,160 (5.2)	2,560 (11.4)	1,160 (5.2)	2,560 (11.4)	1,160 (5.2)	2,560 (11.4)
1/2 (12.7)	25 (33.9)	3/8 (9.5)	1-7/8 (47.6)	Carbon	--	--	2,220 (9.9)	4,000 (17.8)	--	--	2,220 (9.9)	4,000 (17.8)
				Stainless	--	--	2,100 (9.3)	4,000 (17.8)	--	--	2,100 (9.3)	4,000 (17.8)
5/8 (15.9)	55 (74.6)	1/2 (12.7)	2 (50.8)	Carbon	--	--	3,080 (13.7)	6,440 (28.6)	--	--	3,080 (13.7)	6,440 (28.6)
				Stainless	--	--	3,080 (13.7)	6,440 (28.6)	--	--	2,820 (12.5)	6,440 (28.6)
3/4 (19.1)	90 (122.0)	5/8 (15.9)	2-1/2 (63.5)	Carbon	--	--	4,200 (18.7)	10,200 (45.4)	--	--	4,200 (18.7)	10,200 (45.4)
				Stainless	--	--	4,200 (18.7)	10,200 (45.4)	--	--	4,200 (18.7)	10,200 (45.4)

\* Allowable values are based upon a 4 to 1 safety factor. Divide by 4 for allowable load values. The tabulated values are for anchors installed in a minimum of 12 diameters on center and a minimum edge distance of six diameters for 100 percent anchor efficiency. Spacing and edge distance may be reduced to six-diameter spacing and three-diameter edge distance, provided the values are reduced 50 percent. Linear interpolation may be used for intermediate spacings and edge distances.

Combined Shear and Tension Loading—for Dynabolt Anchors

Allowable loads for anchors subjected to combined shear and tension forces are determined by the following equation: (Ps/Pt) + (Vs/Vt) <= 1

Ps = Applied tension load      Vs = Applied shear load      Pt = Allowable tension load      Vt = Allowable shear load