

BEAR-LOC® - Lock Length Selection Chart

Lock Selection Procedure:

- Choose hydraulic system pressure (2000 to 5000 psi)
- Use "rod" diameter consistent with structural load requirements
- Determine load to be locked (Maximum design load times desired safety factor).
- Using chart find lock length required.

Example:

- System Pressure - 3000 psi.
- 4 inch Rod.
- $(48,000)(1.25) = 60,000$ Lbs.
- Lock Unit - (-14) 61,600 Lbs.
- Lock Length (L) is 15.25"

1" ROD						4" ROD					
LOCK UNIT	LOCK LENGTH	Series 2000	Series 3000	Series 5000	LOCK LENGTH	LOCK UNIT	LOCK LENGTH	Series 2000	Series 3000	Series 5000	LOCK LENGTH
-2	2.75	800	1760	3550	2.75	-2	3.25	4400	8800	15700	4.25
-3	3.75	1320	2640	5325	3.75	-3	4.25	6600	13200	23550	5.25
-4	4.75	1760	3520	7100	4.75	-4	5.25	8800	17600	31400	6.25
-5	5.75	2200	4400	8875	5.75	-5	6.25	11000	22000	39250	7.25
-6	6.75	2640	5280			-6	7.25	13200	26400	47100	8.25
-7	7.75	3080	6160			-7	8.25	15400	30800	54950	9.25
-8	8.75	3520	7040			-8	9.25	17600	35200	62800	10.25
-9	9.75	3960	7920			-9	10.25	19800	39600	70650	11.25
-10	10.75	4400	8800			-10	11.25	22000	44000	78500	12.25
		1-3/4" ROD				-11	12.25	24200	48400	86350	13.25
-2	2.88	1870	3740	6430	3.12	-12	13.25	26400	52800	94200	14.25
-3	3.88	2800	5610	9650	4.12	-13	14.25	28600	57200	102050	15.25
-4	4.88	3740	7480	12860	5.12	-14	15.25	30800	61600	109900	16.25
-5	5.88	4670	9350	16080	6.12	-15	16.25	33000	66000	117750	17.25
-6	6.88	5610	11220	19300	7.12	-16	17.25	35200	70400	125600	18.25
-7	7.88	6540	13090	22510	8.12	-17	18.25	37400	74800		
-8	8.88	7480	14960	25730	9.12	-18	19.25	39600	79200		
-9	9.88	8410	16830			-19	20.25	41800	83600		
-10	10.88	9350	18700			-20	21.25	44000	88000		
-11	11.88	10280	20570			-21	22.25	46200	92400		
-12	12.88	11220	22440			-22	23.25	48400	96800		
-13	13.88	12150	24310			-23	24.25	50600	101200		
		2-1/2" ROD				-24	25.25	52800	105600		
-2	3.12	2630	5260	9500	3.62	-25	26.25	55000	110000		

-3	4.12	3940	7890	14260	4.62
-4	5.12	5260	10520	19010	5.62
-5	6.12	6570	13150	23750	6.62
-6	7.12	7890	15780	28510	7.62
-7	8.12	9200	18410	33260	8.62
-8	9.12	10520	21040	38020	9.62
-9	10.12	11830	23670	42770	10.62
-10	11.12	13150	26300	47520	11.62
-11	12.12	14460	28930	52270	12.62
-12	13.12	15780	31560	57020	13.62
-13	14.12	17090	34190	61780	14.62
-14	15.12	18410	36820		
-15	16.12	19720	39450		

-26	27.25	57200	114400		
-27	28.25	59400	118800		
-28	29.25	61600	123200		
-29	30.25	63800	127600		
-30	31.25	66000	132000		
		5-1/2	" ROD		
-2	3.5	7000	14000	22120	5.0
-3	4.5	10500	21000	33170	6.0
-4	5.5	14000	28000	44230	7.0
-5	6.5	17500	35000	55290	8.0
-6	7.5	21000	42000	66350	9.0
-7	8.5	24500	49000	77410	10.0
-8	9.5	28000	56000	88460	11.0