



## STROKE LENGTHS

Standard stroke lengths for each bore size and cylinder style are listed in



this catalog. Non-standard stroke lengths (not listed in the catalog) up to 24" for single acting cylinders and 36" for double acting cylinders are available. Stroke length should be specified in inches and fractions of an inch. Consult the factory for other requirements.

In applications, attention should be given to minimizing the side load on the rod to insure a smooth stroke without binding. Also, in applications where the cylinder rod is subjected to an unsupported column load, the load on the rod should be less than the force shown in the table below to prevent buckling of the rod.

Maximum Load (lbs) to Prevent Buckling of the Rod										Rod Thread	Bore Size	Series	Rod Size	Rod Flats
Rod dia.	Rod Length													
	1"	5"	10"	15"	20"	25"	30"	35"	40"					
1/8"	110	12	3	1.3						#5-40 UNC-2A	5/16"	05	1/8"	none
3/16"	262	59	15	6.6	3.7					#10-32 UNF-2A	1/2"	08	3/16"	none
1/4"	478	190	47	21	12	7.5				#10-32 UNF-2A	5/8"	10	3/16"	none
5/16"	756	451	116	52	29	19	13			1/4-28 UNF-2A	3/4"	12	1/4"	0.218
3/8"	1091	786	240	106	60	38	27	20		1/4-28 UNF-2A	7/8"	14	1/4"	0.218
7/16"	1490	1184	444	197	111	71	49	36	28	5/16-24 UNF-2A	1 1/16"	17	5/16"	0.250
1/2"	1950	1645	757	336	189	120	84	62	47	3/8-24 UNF-2A	1 1/4"	20	3/8"	0.312
5/8"	3055	2750	1795	821	462	295	205	150	115	7/16-20 UNF-2A	1 1/2"	24	7/16"	0.375
3/4"	4405	4100	3140	1700	950	613	425	312	240	1/2-20 UNF-2A	1 3/4"	28	1/2"	0.437
										1/2-20 UNF-2A	2"	32	5/8"	0.500
										1/2-20 UNF-2A	2 1/2"	40	5/8"	0.500
										5/8-18 UNF-2A	3"	48	3/4"	0.625

## CUSTOM CYLINDERS

If your application requires a custom feature that you do not see in our catalog please contact our distributor in your area for assistance. We manufacture a wide variety of special cylinders. Examples of our custom cylinder capabilities would include: stroke and rod modifications, special mounting configurations and ports, seal and lubrication options, integrated valving and adjustable stroke cylinders. We also provide application based special cylinder design for those customers having unique parameters.

## FREE CYLINDER SAMPLE PROGRAM

We invite competitive comparisons. If you are an OEM that uses air cylinders, Clippard will provide a free sample for your evaluation. Contact us or your local distributor and ask for the "Free Sample Cylinder" request form.

