

Flexibility

The terms Flexibility and Minimum Bend Radius are often used interchangeably. However, while closely related, their meanings are different.

Minimum Bend Radius is generally defined as the smallest radius to which a hose can be bent without damage. Tigerflex™ defines damage as a 5% reduction of the hose OD at the bend point (before kinking/collapse). Other manufacturers may define damage as complete hose kinking/collapse.

Flexibility is defined as the amount of force required in order to bend the hose to a specified radius without kinking. In order to provide a better understanding of the flexibility of Tigerflex™ hoses we've performed extensive force-to-bend testing. This data provides a clearer picture of the actual flexibility of our hoses in order to assist in your hose selection process.

Food Grade			
Series	Force to Bend (lbs/F) *		
	2" ID x 3 ft	3" ID x 5 ft	4" ID x 7 ft
GTF/GTFE	0.3	0.8	3.5
UVF	2.5	3.6	5.5
WT	4.5	6.5	16.0
WE	5.5	8.8	21.4
2001	5.6	9.0	21.0
PF	-	13.0	19.0
WBS	5.5	13.1	22.0
WSTF	-	14.0	22.0
VOLT	7.8	15.0	22.0
MILK-LT	10.0	15.0	-
MILK	11.0	17.0	-
FT	13.0	24.0	41.0
2020	-	31.0	41.0
VLT-SD	-	33.0	42.4

Material Handling			
Series	Force to Bend (lbs/F) *		
	2" ID x 3 ft	3" ID x 5 ft	4" ID x 7 ft
UV2	3.4	5.5	7.0
BARK	-	-	7.6
MULCH-LT	-	-	8.0
TR1	3.4	5.0	8.0
GC-C	-	-	9.0
UBK	6	8	11.5
UV3	-	7.0	13.0
UFC	4.8	8.0	12.2
UF1	4.8	8.0	12.2
UVPE	5.5	7.5	-
AMPH-BK	5.5	10.0	15.5
UF2	5.5	10.1	17.2
MULCH	-	-	18.2
THT	-	10.8	18.9

Ducting			
Series	Force to Bend (lbs/F) *		
	2" ID x 3 ft	3" ID x 5 ft	4" ID x 7 ft
CG/CG-SL	0.5	1.2	2.1
GT/GTG	0.5	1.5	2.8
LK/LKC	-	1.8	3.0
UV1/UV	3.0	3.7	5.5

Liquid Suction			
Series	Force to Bend (Lbs./F) *		
	2" ID x 3 ft.	3" ID x 5 ft.	4" ID x 7 ft.
WH/SH	2.8	2.5	3.5
MH	2.8	-	-
WOR	2.8	5.3	10.0
W	4.0	9.5	7.3
WG	4.5	10.0	15.0
BW	7.8	12.3	19.5
ORV	10.0	12.0	-
TG/TY	12.0	11.2	22.0
TRED/TBLU	12.0	11.2	22.0
WST	-	14.0	21.0
CF	14.5	14.0	28.5
TSD	14.8	18.8	-
H/J/K	12.1	24.0	34.0
OV	19.0	29.0	-
S	24.6	29.0	35.5
F/G	26.0	31.0	47.0

A lower force-to-bend value indicates a more flexible hose.

*Values listed indicated pounds of force required to bend a straight length of hose to 180° at 68°F.

These recommendations are based on our laboratory test reports which are, to the best of our knowledge, complete and accurate. However, actual hose force-to-bend requirements can vary due to many factors such as hose age and manufacturing tolerances. Therefore, no guarantee is expressed or implied by our publication of this chart. If doubt exists, we advise that a sample of the hose in question be obtained and tested under actual conditions. These values are provided for reference only and are subject to change.

