

Mandrels

Short Series Mandrel Expansion Ranges



Expander	Units	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		MS & MPS	Expansion Range		
		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max		Min	Max	
B - X111	in. mm	1.102 28.0	1.299 33.0	#1	1.102 28.0	1.183 30.0	#2	1.124 28.5	1.234 31.3	#3	1.189 30.2	1.299 33.0													
B - X118	in. mm	1.181 30.0	1.378 35.0	#1	1.181 30.0	1.262 32.1	#2	1.203 30.6	1.313 33.4	#3	1.268 32.2	1.378 35.0													
B - X126	in. mm	1.26 32.0	1.496 38.0	#2	1.26 32.0	1.366 34.7	#3	1.342 34.1	1.431 36.3	#4	1.407 35.7	1.496 40.0													
B - X134	in. mm	1.339 34.0	1.575 40.0	#3	1.339 34.0	1.432 36.4	#4	1.407 35.7	1.497 38.0	#5	1.485 37.7	1.575 40.0													
B - X142	in. mm	1.417 36.0	1.673 42.5	#3	1.417 36.0	1.489 37.8	#4	1.486 37.7	1.554 39.5	#5	1.564 39.7	1.632 41.5	#6	1.605 40.8	1.673 42.5										
B - X150	in. mm	1.496 38.0	1.752 44.5	#3	1.496 38.0	1.568 39.8	#4	1.565 39.7	1.633 41.5	#5	1.643 41.7	1.711 43.5	#6	1.684 42.8	1.752 44.5										
B - X158	in. mm	1.575 40.0	1.85 47.0	#4	1.575 40.0	1.613 41.0	#5	1.622 41.2	1.691 43.0	#6	1.663 42.3	1.732 44.0	#7	1.722 43.7	1.791 45.5	#8	1.781 45.2	1.85 47.0							
B - X166	in. mm	1.654 42.0	1.929 49.0	#4	1.654 42.0	1.692 43.0	#5	1.701 43.2	1.77 45.0	#6	1.742 44.3	1.811 46.0	#7	1.801 45.8	1.807 47.5	#8	1.86 47.3	1.929 49.0							
B - X174	in. mm	1.732 44.0	2.027 51.5	#4	1.732 44.0	1.79 45.5	#5	1.799 45.7	1.868 47.4	#6	1.84 46.7	1.909 48.5	#7	1.899 48.2	1.968 50.0	#8	1.958 49.7	2.027 51.5							
B - X181	in. mm	1.811 46.0	2.126 54.0	#7	1.811 46.0	1.889 48.0	#8	1.88 47.7	1.948 49.5	#9	1.938 49.2	2.006 51.0	#10	1.993 50.6	2.061 52.3	#11	2.017 51.2	2.126 54.0							
B - X189	in. mm	1.89 48.0	2.205 56.0	#7	1.89 48.0	1.968 50.0	#8	1.958 49.7	2.027 51.5	#9	2.016 51.2	2.085 53.0	#10	2.071 52.6	2.14 54.4	#11	2.095 53.2	2.205 56.0							
B - X197	in. mm	1.969 50.0	2.362 60.0	#6	1.969 50.0	2.066 52.5	#7	2.057 52.2	2.125 54.0	#8	2.116 53.7	2.184 55.5	#9	2.174 55.2	2.242 56.9	#10	2.229 56.6	2.297 58.3	#11	2.253 57.2	2.362 60.0		2.253 57.2	2.362 60.0	
B - X205	in. mm	2.047 52.0	2.441 62.0	#7	2.047 52.0	2.126 54.0	#8	2.116 53.7	2.185 55.5	#9	2.174 55.2	2.243 57.0	#10	2.229 56.6	2.298 58.4	#11	2.253 57.2	2.363 60.0	#12	2.331 59.2	2.441 62.0		2.331 59.2	2.441 62.0	
B - X213	in. mm	2.126 54.0	2.52 64.0	#7	2.126 54.0	2.205 56.0	#8	2.197 55.8	2.264 57.5	#9	2.255 57.3	2.322 59.0	#10	2.31 58.7	2.377 60.4	#11	2.334 59.3	2.442 62.0	#12	2.412 61.3	2.52 64.0		2.412 61.3	2.52 64.0	
B - X221	in. mm	2.205 56.0	2.598 66.0	#7	2.205 56.0	2.283 58.0	#8	2.274 57.8	2.342 59.5	#9	2.332 59.2	2.4 61.0	#10	2.387 60.6	2.455 62.4	#11	2.411 61.2	2.52 64.0	#12	2.489 63.2	2.598 66.0		2.489 63.2	2.598 66.0	
B - X229	in. mm	2.283 58.0	2.677 68.0	#8	2.283 58.0	2.342 59.5	#9	2.331 59.2	2.4 61.0	#10	2.386 60.6	2.455 62.4	#11	2.41 61.2	2.52 64.0	#12	2.488 63.2	2.598 66.0	#13	2.567 65.2	2.677 68.0		2.567 65.2	2.677 68.0	
B - X237	in. mm	2.362 60.0	2.756 70.0	#8	2.362 60.0	2.421 61.5	#9	2.41 61.2	2.479 63.0	#10	2.465 62.6	2.534 64.4	#11	2.489 63.2	2.599 66.0	#12	2.567 65.2	2.677 68.0	#13	2.646 67.2	2.756 70.0		2.646 67.2	2.756 70.0	
B - X244	in. mm	2.441 62.0	2.835 72.0	#8	2.441 62.0	2.5 63.5	#9	2.489 63.2	2.558 65.0	#10	2.544 64.6	2.61 66.4	#11	2.568 65.2	2.678 68.0	#12	2.646 67.2	2.756 70.0	#13	2.725 69.2	2.835 72.0		2.725 69.2	2.835 72.0	
B - X252	in. mm	2.52 64.0	2.913 74.0	#10	2.52 64.0	2.612 66.3	#11	2.568 65.2	2.667 68.0	#12	2.646 67.2	2.755 70.0	#13	2.725 69.2	2.834 72.0	#14	2.804 71.2	2.913 74.0							
B - X260	in. mm	2.598 66.0	2.992 76.0	#10	2.598 66.0	2.691 68.4	#11	2.647 67.2	2.756 70.0	#12	2.725 69.2	2.834 72.0	#13	2.804 71.2	2.913 74.0	#14	2.883 73.2	2.992 76.0							
B - X268	in. mm	2.667 68.0	3.071 78.0	#10	2.667 68.0	2.77 70.4	#11	2.725 69.2	2.835 72.0	#12	2.803 71.2	2.913 74.0	#13	2.882 73.2	2.992 76.0	#14	2.961 75.2	3.071 78.0							
B - X276	in. mm	2.756 70.0	3.15 80.0	#12	2.756 70.0	2.887 73.3	#13	2.857 72.6	2.966 75.3	#14	2.936 74.6	3.045 77.3	#15	2.988 75.9	3.097 78.7	#16	3.041 77.2	3.15 80.0							
B - X284	in. mm	2.835 72.0	3.228 82.0	#12	2.835 72.0	2.965 75.3	#13	2.935 74.5	3.044 77.3	#14	3.014 76.5	3.123 79.3	#15	3.066 77.9	3.175 80.6	#16	3.119 79.2	3.228 82.0							
B - X292	in. mm	2.913 74.0	3.307 84.0	#12	2.913 74.0	3.044 77.3	#13	3.014 76.5	3.123 79.3	#14	3.093 78.6	3.202 81.3	#15	3.15 79.9	3.25 82.7	#16	3.198 81.2	3.307 84.0							
B - X300	in. mm	2.992 76.0	3.386 86.0	#12	2.992 76.0	3.123 79.3	#13	3.094 78.6	3.202 81.3	#14	3.173 80.6	3.281 83.3	#15	3.225 81.9	3.333 84.7	#16	3.278 83.3	3.386 86.0							
B - X308	in. mm	3.071 78.0	3.465 88.0	#15	3.071 78.0	3.177 80.7	#16	3.119 79.2	3.23 82.0	#17	3.151 80.0	3.304 83.9	#18	3.231 82.1	3.384 86.0	#19	3.312 84.1	3.465 88.0							
B - X315	in. mm	3.15 80.0	3.622 92.0	#14	3.15 80.0	3.282 83.4	#15	3.225 81.9	3.334 84.7	#16	3.278 83.3	3.387 86.0	#17	3.31 84.1	3.461 87.9	#18	3.39 86.1	3.541 89.9	#19	3.471 88.2	3.622 92.0		3.471 88.2	3.622 92.0	
B - X323	in. mm	3.228 82.0	3.701 94.0	#14	3.228 82.0	3.361 85.4	#15	3.304 83.9	3.413 86.7	#16	3.357 85.3	3.466 88.0	#17	3.389 86.1	3.54 89.9	#18	3.469 88.1	3.62 91.9	#19	3.55 90.2	3.701 94.0		3.55 90.2	3.701 94.0	
B - X331	in. mm	3.307 84.0	3.78 96.0	#14	3.307 84.0	3.44 87.4	#15	3.383 85.9	3.492 88.7	#16	3.436 87.3	3.545 90.0	#17	3.468 88.1	3.619 91.9	#18	3.548 90.1	3.699 94.0	#19	3.629 92.2	3.78 96.0		3.629 92.2	3.78 96.0	
B - X339	in. mm	3.386 86.0	3.858 98.0	#14	3.386 86.0	3.518 89.4	#15	3.461 87.9	3.57 90.7	#16	3.514 89.2	3.623 92.0	#17	3.546 90.1	3.697 93.9	#18	3.626 92.1	3.777 95.9	#19	3.707 94.1	3.858 98.0		3.707 94.1	3.858 98.0	
B - X347	in. mm	3.465 88.0	3.937 100.0	#14	3.465 88.0	3.597 91.4	#15	3.539 89.9	3.649 92.7	#16	3.592 91.2	3.702 94.0	#17	3.624 92.0	3.776 95.9	#18	3.704 94.1	3.856 97.9	#19	3.785 96.1	3.937 100.0		3.785 96.1	3.937 100.0	
B - X355	in. mm	3.543 90.0	4.016 102.0	#17	3.543 90.0	3.696 93.9	#18	3.626 92.1	3.776 95.9	#19	3.707 94.1	3.857 98.0	#20	3.786 96.2	3.936 100.0	#21	3.866 98.2	4.016 102.0							
B - X363	in. mm	3.622 92.0	4.094 104.0	#17	3.622 92.0	3.774 95.9	#18	3.704 94.1	3.854 97.9	#19	3.785 96.1	3.935 99.9	#20	3.863 98.1	4.014 102.0	#21	3.944 100.2	4.094 104.0							
B - X370	in. mm	3.701 94.0	4.173 106.0	#17	3.701 94.0	3.853 97.9	#18	3.782 96.1	3.933 99.9	#19	3.863 98.1	4.014 102.0	#20	3.942 100.1	4.093 104.0	#21	4.022 102.1	4.173 106.0							
B - X378	in. mm	3.78 96.0	4.252 108.0	#17	3.78 96.0	3.932 99.9	#18	3.862 98.1	4.012 101.9	#19	3.934 100.1	4.093 104.0	#20	4.022 102.1	4.172 106.0	#21	4.102 104.2	4.252 108.0							
B - X386	in. mm	3.858 98.0	4.331 110.0	#17	3.858 98.0	4.011 101.9	#18	3.94 100.0	4.091 103.9	#19	4.012 101.9	4.17 106.0	#20	4.1 104.1	4.251 108.0	#21	4.18 106.1	4.331 110.0							
B - X394	in. mm	3.937 100.0	4.407 111.9	#17	3.937 100.0	4.087 103.8	#18	4.018 102.1	4.167 105.8	#19	4.099 104.1	4.248 107.9	#20	4.178 106.1	4.327 109.9	#21	4.258 108.2	4.4 111.9							

Mandrel Lengths		
Mandrel Number	B-1000	B-2000 & B-3000
	MPS	MS
1 - 10	7.000" (177.8mm)	12.188" (309.6mm)
11 - 16	8.000" (203.2mm)	13.188" (335.0mm)
17 - 2		