



* MALE ROD END SHOWN See sheet 4 for male & female variations and dimensions

⊗ Single Slotted CUSH. ADJ.

⊗ Cross Slotted CUSH. Relief (Fixed)

CYLINDER SIZE	ROD DIA. E E	E	D	A	AA	B	F	H BSPP.	J	K	R	VO	VG	UU	VJ	VM	VF	VH	VN	VV															
HB 15 1.50" BORE	0.625" STD. 15.87	0.63" 15.87	2.00" 50.8	5.00"	2.50"	2.88"	0.38"	1/2"	1.75"	1.50"	0.50"	0.88"	0.84"	0.44"	1.63"	6.75"	0.75"	0.88"	0.38"	0.63"															
	1.000" 25.4	1.00" 25.4	2.38" 60.32	127.0	63.5	73.02	9.52	1/2"	44.45	38.1	12.7	22.22	21.33	11.11	41.27	171.45	19.05	22.22	9.52	15.87															
HB 20 2.00" BORE	1.000" STD. 25.4	0.75" 19.05	2.38" 60.32	5.25"	3.00"	2.88"	0.62"	1/2"	1.75"	1.50"	0.63"	0.94"	1.09"	0.56"	2.05"	7.13"	0.81"	1.00"	0.50"	0.81"															
	1.375" 34.92	1.00" 25.4	2.63" 66.68	133.35	76.2	73.02	15.87	1/2"	44.45	38.1	15.87	23.81	28.57	14.28	52.38	180.97	20.63	25.4	12.7	20.63															
HB 25 2.50" BORE	1.000" STD. 25.4	0.75" 19.05	2.38" 60.32	5.38"	3.50"	3.00"	0.62"	1/2"	1.75"	1.50"	0.63"	0.94"	1.34"	0.56"	2.55"	7.25"	N/A	1.00"	0.50"	N/A															
	1.375" 34.92	1.00" 25.4	2.63" 66.68																		136.52	88.9	76.2	15.87	44.45	38.1	15.87	23.81	33.33	14.28	64.00	184.15	25.4	12.7	
	1.750" 44.45	1.25" 31.75	2.88" 73.02																		88.9	76.2	15.87	44.45	38.1	15.87	23.81	33.33	14.28	64.00	184.15	25.4	12.7		
HB 32 3.25" BORE	1.375" STD. 34.92	0.88" 22.22	2.75" 69.85	6.25"	4.50"	3.50"	0.75"	3/4"	2.00"	1.75"	0.75"	1.13"	1.50"	0.69"	3.25"	8.50"	N/A	1.25"	0.63"	N/A															
	1.750" 44.45	1.13" 28.57	3.00" 76.2																		158.75	114.3	88.9	19.05	50.8	44.45	19.05	28.57	38.1	17.46	82.55	215.90	31.75	15.87	
	2.000" 50.8	1.25" 31.75	3.13" 79.38																		158.75	114.3	88.9	19.05	50.8	44.45	19.05	28.57	38.1	17.46	82.55	215.90	31.75	15.87	
HB 40 4.00" BORE	1.750" STD. 44.45	1.00" 25.4	3.00" 76.2	6.63"	5.00"	3.75"	0.88"	3/4"	2.00"	1.75"	0.75"	1.13"	1.81"	0.69"	3.82"	8.88"	N/A	1.25"	0.63"	N/A															
	2.000" 50.8	1.13" 28.57	3.13" 79.37																		168.27	127.0	95.25	22.22	50.8	44.45	19.05	28.57	46.03	17.46	96.83	225.42	31.75	15.87	
	2.500" 63.5	1.38" 34.92	3.38" 85.73																		168.27	127.0	95.25	22.22	50.8	44.45	19.05	28.57	46.03	17.46	96.83	225.42	31.75	15.87	
HB 50 5.00" BORE	2.000" STD. 50.8	1.13" 28.57	3.13" 79.37	7.13"	6.50"	4.25"	0.88"	3/4"	2.00"	1.75"	1.06"	1.50"	2.31"	0.94"	4.95"	10.13"	N/A	1.50"	0.75"	N/A															
	2.500" 63.5	1.38" 34.92	3.38" 85.73																		180.97	165.1	107.95	22.22	50.8	44.45	26.98	38.1	58.73	23.81	125.41	257.13	38.1	19.05	
	3.000" 76.2	1.38" 34.92	3.38" 85.73																		180.97	165.1	107.95	22.22	50.8	44.45	26.98	38.1	58.73	23.81	125.41	257.13	38.1	19.05	
	3.500" 88.9	1.38" 34.92	3.38" 85.73																		180.97	165.1	107.95	22.22	50.8	44.45	26.98	38.1	58.73	23.81	125.41	257.13	38.1	19.05	
HB 60 6.00" BORE	2.500" STD. 63.5	1.25" 31.75	3.50"	8.38"	7.50"	4.88"	1.00"	1.00"	2.25"	2.25"	1.12"	1.69"	2.56"	1.06"	5.73"	11.75"	N/A	1.75"	0.88"	N/A															
	3.000" 76.2	1.25" 31.75																			88.9	212.72	190.50	132.82	25.4	57.15	57.15	28.57	42.86	64.00	26.98	146.05	298.45	44.45	22.22
	3.500" 88.9	1.25" 31.75																			88.9	212.72	190.50	132.82	25.4	57.15	57.15	28.57	42.86	64.00	26.98	146.05	298.45	44.45	22.22
	4.000" 101.6	1.25" 31.75																			88.9	212.72	190.50	132.82	25.4	57.15	57.15	28.57	42.86	64.00	26.98	146.05	298.45	44.45	22.22
HB 70 7.00" BORE	3.000" STD. 76.2	1.25" 31.75	3.81"	9.50"	8.50"	5.38"	1.00"	1,1/4"	2.75"	2.75"	1.25"	1.81"	3.13"	1.19"	6.58"	13.13"	N/A	2.00"	1.00"	N/A															
	3.500" 88.9	1.25" 31.75																			96.83	241.3	215.9	136.52	25.4	69.85	69.85	31.75	46.03	79.37	30.16	166.68	333.37	50.8	25.4
	4.000" 101.6	1.25" 31.75																			96.83	241.3	215.9	136.52	25.4	69.85	69.85	31.75	46.03	79.37	30.16	166.68	333.37	50.8	25.4
	5.000" 127.0	1.25" 31.75																			96.83	241.3	215.9	136.52	25.4	69.85	69.85	31.75	46.03	79.37	30.16	166.68	333.37	50.8	25.4
HB 80 8.00" BORE	3.500" STD. 88.9	1.25" 31.75	3.94"	10.50"	9.50"	6.13"	1.00"	1,1/2"	3.00"	3.00"	1.38"	2.00"	3.38"	1.31"	7.50"	14.50"	N/A	2.00"	1.13"	N/A															
	4.000" 101.6	1.25" 31.75																			100.0	266.7	241.3	155.57	25.4	76.2	76.2	34.92	50.8	85.72	33.33	190.5	368.3	50.8	28.57
	5.000" 127.0	1.25" 31.75																			100.0	266.7	241.3	155.57	25.4	76.2	76.2	34.92	50.8	85.72	33.33	190.5	368.3	50.8	28.57
	5.500" 139.7	1.25" 31.75																			100.0	266.7	241.3	155.57	25.4	76.2	76.2	34.92	50.8	85.72	33.33	190.5	368.3	50.8	28.57