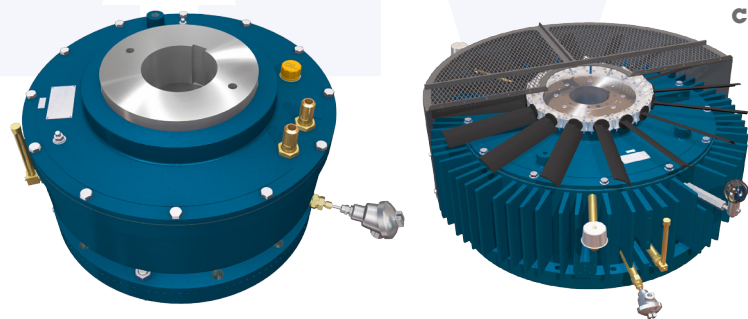


Advanced Vertical (AV) Series

Compact, self contained range of vertical thrust and guide bearings

- Nine frame sizes for shaft diameter range of 68-411 mm
- Axial load capacity up to 738 kN
- Available with single (downward) thrust pads and upper thrust capability
- Radial loads are supported on line pivoted whitmetal faced tilting pads
- Available with water cooling, circulating oil cooling or fan/air cooling



AV Series capacity

A	B	C	D	E	F	G	H	I	J	K	L	M
Frame size	Shaft variant	Max stepped shaft diameter (1)	Max straight/unstepped shaft diameter (1)	Downward max running thrust load (2)	Downward max starting thrust load (3)	Downward max closed valve thrust load (4)	Max radial load (5)	Upward max starting thrust load D only (6)	Upward max running thrust load D only (6)	Upward max starting thrust load B only (6)	Upward max running thrust load B only (6)	Upward transient thrust load (<=10secs) B only (6)
		mm	mm	kN	kN	kN	kN	kN	kN	kN	kN	kN
AV6	SN/BN/DN	68	65	42.3	29	66.8	5.5	16.1	18.7	3.8	6	10.5
	SL/BL	89	84	32.9	22.5	42.1	5.5	-	-	2.6	4.2	7.4
	SXL	105	97	20.2	17.3	32.3	5.5	-	-	-	-	-
AV7	SN/BN/DN	78	74	62	42.5	97.7	7.4	20	29.1	5.5	8.9	15.6
	SL/BL	107	100	46.9	32.1	60	7.4	-	-	3.9	6.2	10.9
	SXL	126	119	28.9	24.8	46.2	7.4	-	-	-	-	-
AV8	SN/BN/DN	90	86	96.9	55.2	127.3	9.8	32.3	47.1	7.5	12	21
	SL/BL	131	124	56.1	38.4	71.8	9.8	-	-	4.5	7.2	12.6
	SXL	153	146	39.8	28.1	52.6	9.8	-	-	-	-	-
AV9	SN/BN/DN	115	109	155.3	88.8	204.1	15.6	44.5	76.8	12.4	19.9	34.8
	SL/BL	160	150	115.2	65.9	151.5	15.6	-	-	8.4	13.4	23.5
	SXL	187	176	88.9	50.8	94.8	15.6	-	-	-	-	-
AV10	SN/BN/DN	142	137	214.8	122.8	282.3	21.7	54.9	94.6	8.8	14.1	24.7
	SL/BL	190	180	163.2	93.2	214.5	21.7	-	-	8.8	14.1	24.7
	SXL/BXL	222	213	126.1	72	165.7	21.7	-	-	8.8	14.1	24.7
AV11	SN/BN/DN	165	156	308.8	173.5	399.2	29.3	86.5	149.1	12.7	20.3	35.5
	SL/BL	225	217	228.5	130.6	300.3	29.3	-	-	12.7	20.3	35.5
	SXL/BXL	263	247	176.6	100.9	232.1	29.3	-	-	12.7	20.3	35.5
AV12	SN/BN/DN	192	187	392.2	224.2	515.6	39.5	107.5	185.4	17.3	27.7	48.5
	SL/BL	256	244	299.2	171	393.2	39.5	-	-	17.3	27.7	48.5
	SXL/BXL	300	288	230.1	131.5	302.5	39.5	-	-	17.3	27.7	48.5
AV13	SN/BN/DN	216	212	518.1	296.1	680.9	48.2	142.6	245.9	23	36.8	64.4
	SL/BL	293	282	391.3	223.6	514.2	48.2	-	-	23	36.8	64.4
	SXL/BXL	343	333	301.8	172.4	396.6	48.2	-	-	23	36.8	64.4
AV14	SN/BN/DN	256	246	738.6	422	970.7	73	172.6	297.7	33.2	53.1	92.9
	SL/BL	352	343	551.5	315.2	724.9	73	-	-	33.2	53.1	92.9
	SXL/BXL	411	396	425.8	243.3	559.6	73	-	-	33.2	53.1	92.9

Notes

- 1 - For straight through unstepped shafts the maximum shaft diameter should be taken from column 'D'.
- 2 - Higher thrust loads can be accommodated. Please consult Michell Bearings for requirements such as API 610.
- 3 - High pressure lift (jacking) for whitmetal pads or PTFE can be provided for applications with starting loads higher than those in column 'F'.
- 4 - Maximum closed valve loads are for guidance only and should be confirmed by Michell Bearings.
- 5 - Maximum radial load will vary, depending upon speed and oil viscosity.
- 6 - Upper thrust load can only be accommodated on bearings with optional surge or upper thrust face.
- 7 - The maximum speed varies with running thrust load, the grade of oil used and the water inlet temperature.
- 8 - All loads are based on whitmetal surfaced pads.