



1N524

## Straight Centrifugal Pumps

- Cast-iron housing, bronze impeller
- 300 series stainless steel shaft and sleeve
- Mechanical shaft seal with stainless steel, Buna N, carbon/ceramic parts
- Max. liquid temp.: 212°F (100°C)

Pumps have continuous-duty motors to handle liquid transfer, water circulation, booster service, irrigation, spray system, jockey pump, and other general-purpose pumping applications. Close-coupled design has back pull-out for easy maintenance. Vent and drain plugs in all positions. Piping is female thread (NPT), except for 3" outlets which are 12516 ANSI flat-faced flanges.

3-phase pumps do not have overload protection, which must be provided by a starter unit sold separately, see page 160.

3- to 20-HP motors: Max. case working pressure is 175 psig; max. suction pressure is 100 psig; discharge can be rotated in 90° increments. Renewable bronze wear ring. Blue baked-on electrocoat paint finish.

½- to 2-HP motors: Max. case working pressure is 125 psig, except as noted below; discharge can be rotated in 45° increments, except as noted below. Motors are 3500 rpm with NEMA 56J frame, except ODP 3CCV8 is 3500/2900 rpm, 90° increments; TEFC 49UU60, 2VRU5, 49UU50, and 2VRU1 are 3450 rpm with NEMA 143 frame, 4 position increments; and TEFC 3CCV7 3500/2900 rpm, 90° increments.

Note: 1N497, 53DL78, 3CCU7, and 49UU50 have a high head impeller.

HP	Inlet Size	Outlet Size	Max. GPM @ Head	Min. GPM @ Head	Best Efficiency GPM @ Head*	1-PHASE, ODP (OPEN DRIPPROOF)						3-PHASE, ODP (OPEN DRIPPROOF)							
						Max. Head†	Voltage	Amps	Mfr. Model	Item No.	Max. Head†	Voltage	Amps	Mfr. Model	Item No.				
½ hp	¼ in NPT	1 in NPT	29 @ 20 ft	10 @ 37 ft	20 @ 30 ft	40 ft	120/240V AC	10.8/5.4	1BF40312	1N524	40 ft	208 to 240/480V AC	2.0-1.9/0.95	1BF40334	1N523				
	¼ in NPT	1 in NPT	37 @ 20 ft	10 @ 48 ft	22 @ 40 ft	52 ft	120/240V AC	10.8/5.4	1BF10312	1N544	52 ft	208 to 240/480V AC	2.0-1.9/0.95	1BF10334	1N543				
½ hp	¼ in NPT	1 in NPT	43 @ 20 ft	10 @ 57 ft	25 @ 47 ft	60 ft	120/240V AC	10.8/5.9-5.4	1BF10512	1N542	60 ft	208 to 240/480V AC	2.6-2.4/1.2	1BF10534	1N541				
	½ in NPT	1¼ in NPT	66 @ 17 ft	20 @ 28 ft	42 @ 22 ft	29 ft	120/240V AC	10.8/5.9-5.4	2BF40512	1N502	29 ft	208 to 240/480V AC	2.6-2.4/1.2	2BF40534	1N501				
	½ in NPT	1¼ in NPT	66 @ 20 ft	20 @ 34 ft	50 @ 30 ft	36 ft	120/240V AC	10.8/5.9-5.4	2BF10512	1N520	36 ft	208 to 240/480V AC	1.8-1.8/0.85	2BF10534	3CCV8				
¾ hp	¼ in NPT	1 in NPT	50 @ 30 ft	10 @ 80 ft	32 @ 65 ft	83 ft	120/240V AC	14.0/7.5-7.0	1BF10712	1N540	83 ft	208 to 240/480V AC	3.7-3.6/1.8	1BF10734	1N539				
	½ in NPT	1¼ in NPT	80 @ 30 ft	20 @ 52 ft	55 @ 45 ft	52 ft	120/240V AC	14.0/7.5-7.0	2BF10712	1N518	52 ft	208 to 240/480V AC	3.7-3.6/1.8	2BF10734	1N517				
1 ½ hp	¼ in NPT	1 in NPT	58 @ 40 ft	10 @ 116 ft	37 @ 95 ft	118 ft	120/240V AC	21.2/11.1-10.6	1BF11512	1N536	118 ft	208 to 240/480V AC	6-5.8/2.9	1BF11534	1N535				
	½ in NPT	1 in NPT	55 @ 40 ft	10 @ 106 ft	35 @ 85 ft	108 ft	120/240V AC	17.4/9.0-8.7	1BF11012	1N538	108 ft	208 to 240/480V AC	4.4-4.2/2.1	1BF11034	1N537				
1 ½ hp	½ in NPT	1¼ in NPT	96 @ 50 ft	20 @ 78 ft	66 @ 70 ft	79 ft	120/240V AC	21.2/11.1-10.6	2BF11512	1N514	79 ft	208 to 240/480V AC	6.0-5.8/2.9	2BF11534	1N513				
	½ in NPT	1¼ in NPT	84 @ 40 ft	20 @ 60 ft	60 @ 53 ft	61 ft	120/240V AC	17.4/9.0-8.7	2BF11012	1N516	61 ft	208 to 240/480V AC	4.4-4.2/2.1	2BF11034	1N515				
2 hp	½ in NPT	1¼ in NPT	100 @ 66 ft	20 @ 101 ft	75 @ 85 ft	102 ft	120/240V AC	26.0/13.8-13	2BF12012	1N512	102 ft	208 to 230/460V AC	6.8-6.4/3.2	2BF12034	1N511				
	2 in NPT	1½ in NPT	140 @ 25 ft	40 @ 132 ft	87 @ 104 ft	139 ft	120/208 to 240V AC	28/14.7-14	3BF1H1AOH	1N497	139 ft	208 to 240/480V AC	9.5-9.0/4.5	3BF1HBAOH	53DL78				
3 hp	2 in NPT	1½ in NPT	155 @ 35 ft	40 @ 110 ft	110 @ 85 ft	113 ft	120/208 to 240V AC	28/14.7-14	3BF1H1CO	3CC19	113 ft	208 to 240/480V AC	9.5-9.0/4.5	3BF1HBCO	53DL79				
	3 in NPT	2½ in NPT	190 @ 45 ft	50 @ 60 ft	125 @ 55 ft	61 ft	120/208 to 240V AC	28/14.7-14	4BF1H1KO	1N483	61 ft	208 to 240/480V AC	9.5-9.0/4.5	4BF1H1KO	53DL77				
	2 in NPT	1½ in NPT	180 @ 66 ft	40 @ 146 ft	125 @ 115 ft	150 ft	120/208 to 240V AC	27.4-2.27	3BF1J1AO	1N494	150 ft	208 to 240/480V AC	12.6	3BF1J1AO	49UU52				
5 hp	3 in NPT	2½ in NPT	220 @ 65 ft	50 @ 85 ft	150 @ 78 ft	89 ft	208 to 240V AC	27.4-2.27	4BF1J1HO	1N481	89 ft	208 to 240/480V AC	12.6	4BF1J1HO	49UU46				
	2 in NPT	1½ in NPT	210 @ 63 ft	50 @ 160 ft	130 @ 140 ft	165 ft	240V AC	37	5BF1K1HO	3CCU1	165 ft	208 to 240/480V AC	17.2/8.6	5BF1K1HO	49UU37				
7 ½ hp	3 in NPT	2½ in NPT	250 @ 90 ft	50 @ 118 ft	195 @ 103 ft	125 ft	240V AC	42	4BF1K1FO	1N479	125 ft	208 to 240/480V AC	17.2/8.6	4BF1K1FO	49UU45				
	4 in Flange	3 in Flange	450 @ 30 ft	100 @ 90 ft	300 @ 73 ft	91 ft	240V AC	37	6BF1K1EO	3CCU2	91 ft	208 to 240/480V AC	17.2/8.6	6BF1K1EO	49UU31				
	2 in NPT	1½ in NPT	230 @ 90 ft	50 @ 200 ft	150 @ 170 ft	200 ft	240V AC	46	5BF1L1CO	3CCU4	200 ft	208 to 240/480V AC	25/12.5	5BF1L1CO	49UU39				
10 hp	3 in NPT	2½ in NPT	290 @ 110 ft	100 @ 148 ft	220 @ 128 ft	149 ft	240V AC	46	4BF1L1DO	3CCU3	149 ft	208 to 240/480V AC	25/12.5	4BF1L1DO	49UU48				
	2 in NPT	1½ in NPT	255 @ 160 ft	50 @ 260 ft	180 @ 220 ft	—	—	—	—	—	260 ft	208 to 240/480V AC	35/17.5	5BF1M1BO	49UU38				
15 hp	4 in Flange	3 in Flange	580 @ 55 ft	150 @ 157 ft	400 @ 125 ft	—	—	—	—	—	160 ft	208 to 240/480V AC	35/17.5	6BF1M1BO	49UU32				
20 hp	2 in NPT	1½ in NPT	235 gpm @ 200 ft	100 gpm @ 225 ft	180 @ 240 ft	—	—	—	—	—	—	—	—	—	275 ft	240/460V AC	45.0/22.5	5BF1NBA0	429H98

\* Use "Best Efficiency GPM @ Head" for optimum performance. † To convert to psi, divide total feet of head by 2.31.