Pump Pulley Speed Guide For 1725 RPM Motors

Pump Pulley Outside Diameter	Motor Pulley Outside Diameter											
	2-1/2"	2-3/4"	3"	3-1/4"	3-1/2"	3-3/4"	4"	4-1/4"	4-1/2"	4-3/4"	5"	5-1/4"
2-1/2"	1725	-	-	-	-	-	-	-	-	-	-	-
2-3/4"	1574	1725	-	-	-	-	-	-	-	-	-	-
3"	1431	1590	1725	-	-	-	-	-	-	-	-	-
3-1/4"	1310	1460	1604	1725	-	-	-	-	-	-	-	-
3-1/2"	1232	1355	1479	1602	1725	-	-	-	-	-	-	-
3-3/4"	1150	1265	1380	1495	1610	1725	-	-	-	-	-	-
4"	1078	1186	1294	1402	1509	1617	1725	-	-	-	-	-
4-1/4"	1015	1116	1218	1319	1421	1522	1624	1725	-	-	-	-
4-1/2"	958	1054	1150	1246	1342	1438	1533	1629	1725	-	-	-
4-3/4"	908	999	1089	1180	1271	1362	1453	1543	1634	1725	-	-
5"	863	949	1035	1121	1208	1294	1380	1466	1553	1639	1725	-
5-1/4"	821	904	986	1068	1150	1232	1314	1396	1479	1561	1643	1725
5-1/2"	784	863	941	1019	1098	1176	1255	1333	1411	1490	1568	1647
5-3/4"	750	825	900	975	1050	1125	1200	1275	1350	1425	1500	1575
6"	719	791	863	934	1006	1078	1150	1222	1294	1366	1438	1509
6-1/2"	663	730	796	863	929	995	1062	1128	1194	1261	1327	1393
7"	616	678	739	901	863	924	986	1047	1109	1171	1232	1294
8"	539	593	647	701	755	809	863	916	970	1024	1078	1132
9"	479	527	575	623	671	719	767	815	863	910	958	1006
10"	431	474	518	561	604	647	690	733	776	819	863	906
11"	392	431	470	510	549	588	627	666	706	745	784	823
12"	359	395	431	467	503	539	575	611	647	683	719	755
13"	332	365	398	431	464	498	531	564	597	630	663	697
14"	308	339	370	400	431	462	493	524	554	585	616	647
15"	288	316	345	374	403	431	460	489	518	546	575	604
16"	270	296	323	350	377	404	431	458	485	512	539	566

Pump Pulley Outside Diameter	Motor Pulley Outside Diameter											
	5-1/2"	5-3/4"	6"	6-1/2"	7"	8"	9"	10"	11"	12"	13"	14"
5-1/2"	1725	-	-	-	-	-	-	-	-	-	-	-
5-3/4"	1650	1725	-	-	-	-	-	-	-	-	-	-
6"	1581	1653	1725	-	-	-	-	-	-	-	-	-
6-1/2"	1460	1526	1592	1725	-	-	-	-	-	-	-	-
7"	1355	1417	1479	1602	1725	-	-	-	-	-	-	-
8"	1186	1240	1294	1402	1509	1725	-	-	-	-	-	-
9"	1054	1102	1150	1246	1342	1533	1725	-	-	-	-	-
10"	949	992	1035	1121	1208	1380	1552	1725	-	-	-	-
11"	863	902	941	1019	1098	1255	1411	1568	1725	-	-	-
12"	791	827	863	934	1006	1150	1294	1438	1581	1725	-	-
13"	730	763	796	863	929	1062	1194	1327	1460	1592	1725	-
14"	678	708	739	801	863	986	1109	1232	1355	1479	1602	1725
15"	633	661	690	748	805	920	1035	1150	1265	1380	1495	1610
16"	593	620	647	701	755	863	970	1078	1186	1294	1402	1509

Avoid Cavitation Damage

Can you identify and avoid cavitation? Cavitation is the formation and collapse of gaseous cavities in a liquid which causes severe wear or eroding of the metal surfaces in the pump.

The most obvious sign of cavitation is a hammering noise. This noise can be either consistent or intermittent depending upon the degree of cavitation and damage to the pump. Vibration of the pump and system will also be noticeable as the pump is starved of fluid. Eventually flow and pressure will decrease.

It is important to carefully check your system during assembly and operation to avoid the serious damage that can be caused by cavitation.

Check your system for these conditions which may contribute to, or directly cause, cavitation:

- Inadequate inlet line size
- Insufficient inlet flow or excessive suction
- Excessive inlet line length
- Rigid inlet plumbing
- Too many elbows and/or fittings
- Excessive temperature build-up of pumped fluid
- Air leak in inlet plumbing
- Agitation in supply reservoir
- Inadequate increase of inlet flow for fluids of greater specific gravity
- Inadequate increase of inlet flow for higher temperature fluids
- Clogged inlet filters

Q. How can I find the RPM needed to get the specific GPM I want?
A. Desired RPM = desired GPM x $\frac{\text{Rated RPM}}{\text{Rated GPM}}$

Q. I have run my motor at a certain RPM, how do I figure the GPM I'll get?
A. Desired GPM = desired RPM x $\frac{\text{Rated GPM}}{\text{Rated RPM}}$

Q. Is there a simple way to find the approximate horsepower I'll need to run the pump?
A. Electric brake Horsepower Required = $\frac{\text{GPM x PSI}}{1460}$ *(based on 85% overall mechanical efficiency)*

Q. What size motor pulley should I use?
A. Pump Pulley O.D. x $\frac{\text{Pump RPM}}{\text{Motor RPM}}$