

α ALPHA FLUID COUPLING

Fluid couplings transfer the power and torque from the prime mover to driven machine by means of fluid medium. Since there is no mechanical connection between input and output members, the power is transmitted smoothly, absorbing the shock inherent in many driven machines.

The coupling consist of 2 rotating elements, the inner impeller and the outer impeller. The impeller is mounted between the outer impeller and the casing, filled with a prescribed quantity of oil. Both impellers have radial vanes. The input side can be fitted to motor or diesel engine and for output, various options are available like flexible output coupling, V-pulley, stub shaft or brake drum to suit particular installation.

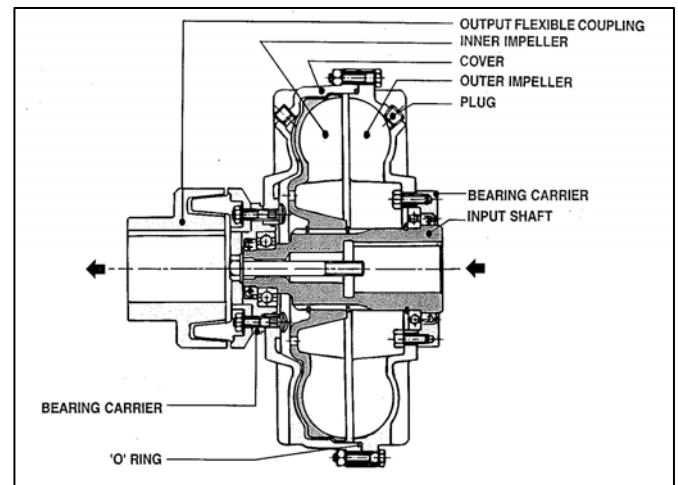
When the prime-mover is at a stand still, the oil is in the central chamber. As the prime-mover starts, the impeller acts as a centrifugal pump thus giving kinetic energy to the fluid. The fluid's kinetic energy is then released on the outer impeller which in principal runs as a turbine. Under the normal working conditions the fluid coupling will operate with 3% slip without loss of torque.

SELECTION

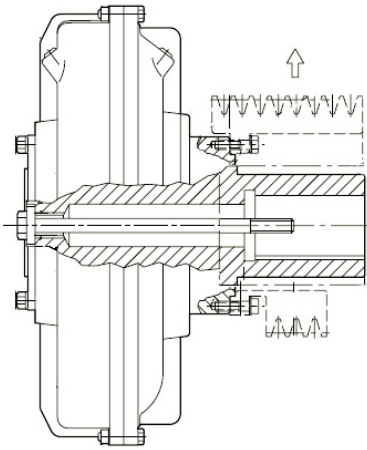
The main criteria is motor power (HP) transmitted at a specific speed (RPM).

Maximum Operating HP/KW Ratings at specific speeds

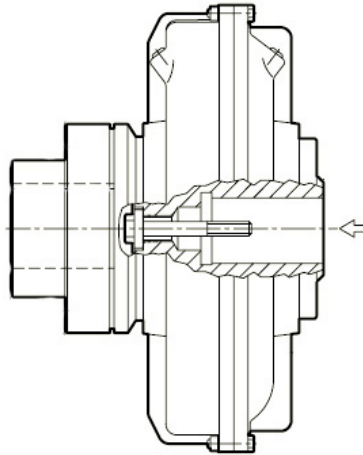
Size	720rpm	960rpm	1440rpm	2900rpm
8K	0.55	1.40	5.25	32.50
	0.41	1.05	3.90	24.36
9K	1.00	2.50	9.50	50.00
	0.75	1.87	7.10	37.50
11K	2.10	5.30	20.00	90.00
	1.57	3.98	15.00	67.50
12K	3.70	9.50	34.00	-
	2.77	7.10	25.50	
13K	6.50	16.00	50.00	-
	4.80	12.00	37.50	
15K	11.40	30.00	80.00	-
	8.60	22.50	60.00	
17K	21.00	55.00	125.00	-
	15.75	41.25	93.75	
19K	35.00	80.00	190.00	-
	26.25	60.00	142.50	



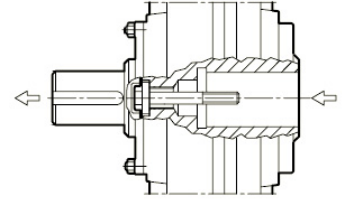
Model : KSD (Pulley type)



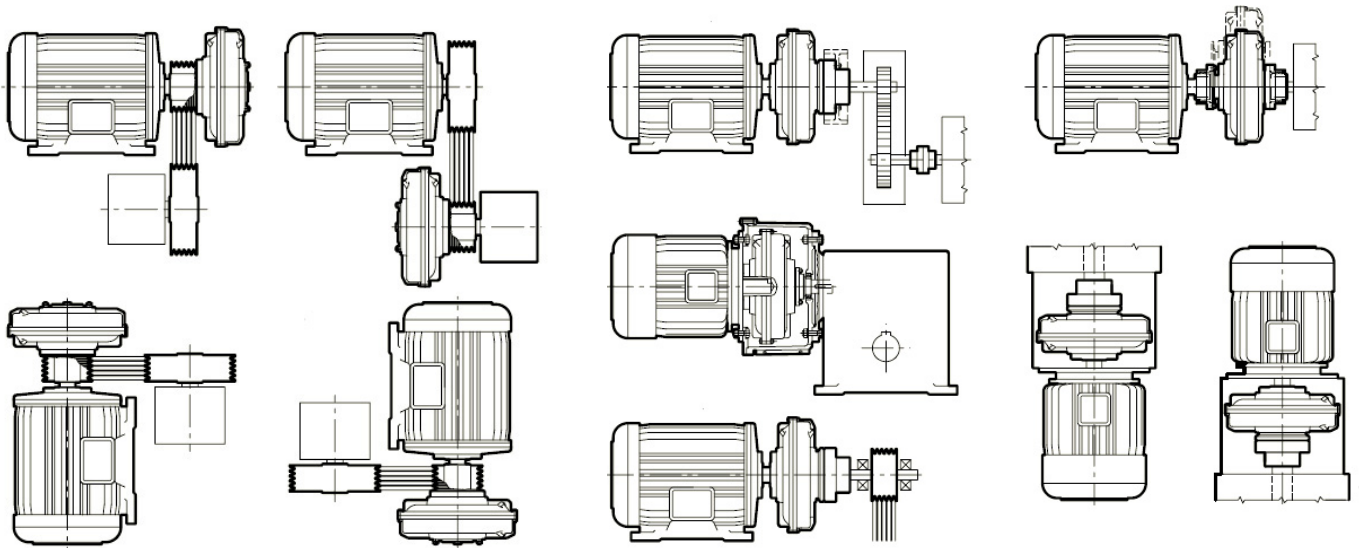
Model : KRG (Flexible coupling)



KRD (Stub Shaft)



Mounting Arrangements for Pulley and In-line type



**Fusible Plug
Safety Device**



125°C

145°C

175°C