

# Variable Speed Scoop Coupling

Specifications:

Rating Table for SC and SC - HT:

<b>Maximum Ratings in KW at Different Input Speeds RPM.</b>										
<b>MODEL</b>	<b>500</b>	<b>600</b>	<b>750</b>	<b>900</b>	<b>1000</b>	<b>1200</b>	<b>1500</b>	<b>1800</b>	<b>3000</b>	<b>3600</b>
SC-7	—	5	10	17	23	39	75	100	—	—
SC-8	—	7	14	24	32	56	100	173	—	—
SC-9	—	13	25	44	60	104	205	300	—	—
SC-10	—	25	49	85	116	200	350	425	—	—
SC-11 A	20	35	68	118	162	280	500	680	—	—
SC-11	29	51	100	172	236	408	725	1100	—	—
SC-12	52	90	176	304	416	720	1250	2000	—	—
SC-13	74	128	250	432	592	1024	1700	2300	—	—
SC-880	111	192	375	648	890	1600	2300	2600	—	—
SC-14	252	435	850	1468	1850	2300	—	—	—	—
SC-14-233-2	326	563	1100	1525	2090	3000	—	—	—	—
SC-16	740	1280	2500	3300	3500	—	—	—	—	—
SC-1330	1250	2160	3200	3840	—	—	—	—	—	—
SC-390-233-2	—	—	—	—	—	—	—	—	300	400
SC-422-233-2	—	—	—	—	—	—	—	—	600	740
SC-500-233-2	—	—	—	—	—	—	—	—	1250	1500
SC-580-311	—	—	—	—	—	—	—	—	3000	3300
SC-630-311	—	—	—	—	—	—	—	—	4600	—

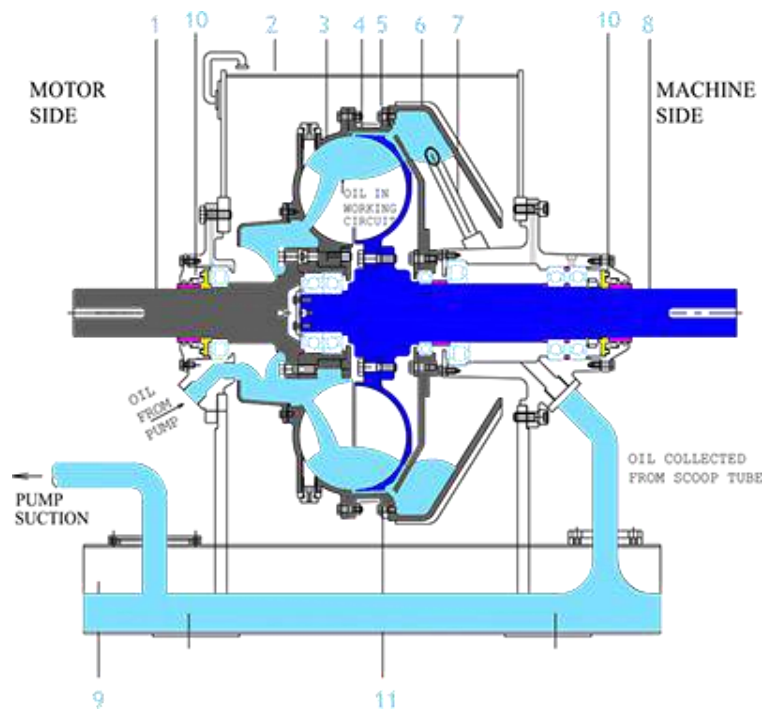
Dimension Table for SC and SC – HT:

<b>DIMENSION TABLE SC &amp; SC-HT</b>								
<b>MODEL</b>	<b>B</b>	<b>A1 C/C</b>	<b>A2 C/C</b>	<b>W1</b>	<b>W2</b>	<b>CH</b>	<b>H1</b>	<b>OIL QTY**</b>
SC-7	855	370	680	630	630	475	276	60
SC-8	810	360	915	835	835	493	287	94
SC-9	1015	440	915	835	835	575	350	114
SC-10	1137	560	1075	1000	1000	610	409	160
SC-11 A	1150	560	1075	1000	1000	610	409	156
SC-11	1261	590	1240	1100	1100	630	431	189
SC-12	1267	590	1240	1100	1100	745	500	237
SC-12	1310	590	1240	1100	1100	745	500	237
SC-13	1398	650	1390	1250	1250	765	505	339
SC-13	1398	650	1390	1250	1250	815	505	339
SC-880	1488	750	1650	1500	1500	860	569	456
SC-14	1640	850	1800	1600	1600	1000	650	612
SC-14	1950	940	1800	1800	1600	1060	760	688
SC-16	1950	940	1800	1800	1600	1060	760	864
SC-1330	1950	1126	2020	1800	1800	1160	830	1296
SC-390-233-2	915	370	680	630	630	575	417	90
SC-422-233-2	1110	450	750	850	650	630	330	140
SC-500-233-2	1250	600	1240	1000	1100	660	350	235
SC-580-311	1505	744	1410	1260	1260	800	417	405
SC-630-311*								

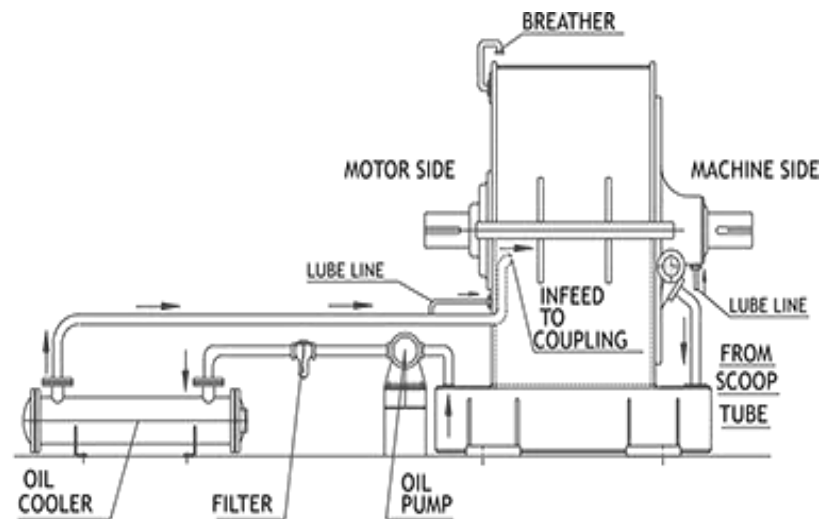
- Details on request.
- Oil quantity reqd. in pipe line, cooler & filter will be extra.

Variable Speed Type:

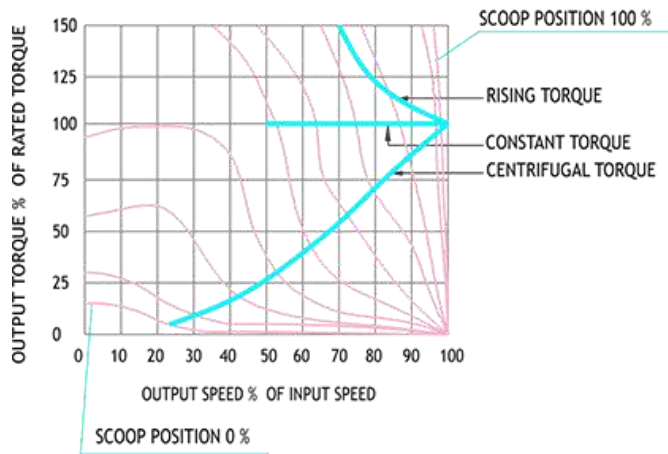
Variable Speed Scoop Coupling Model



Oil Flow Circuit Diagram:



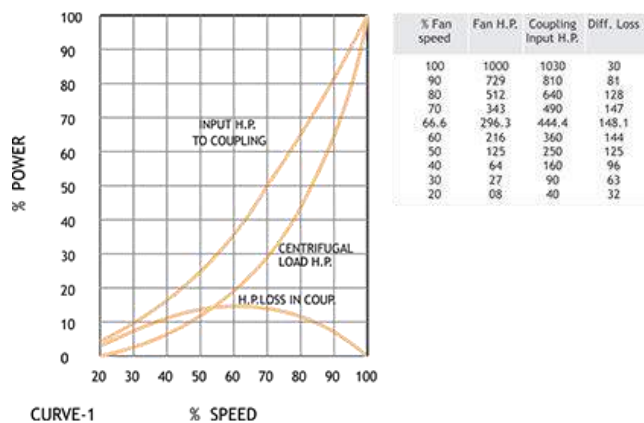
## Characteristics Curve:



## ENERGY SAVING THROUGH FLUIDOMAT SC COUPLINGS:

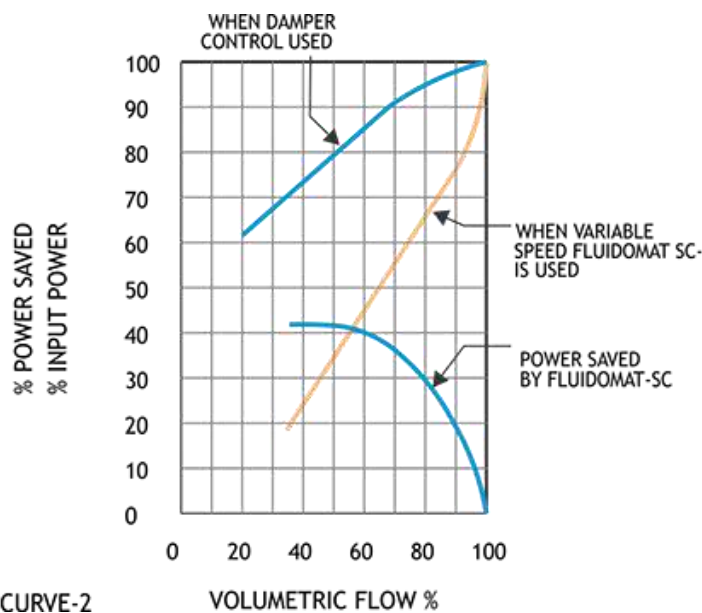
Fluidomat SC provides large energy saving in various drives. In centrifugal machines the discharge of fluid is proportional to the machine speed. The discharge can be varied either by throttle control or by speed control. In throttle control, because additional pressure is exerted therefore the machine requires high energy consumption and also causes high-rate wear of pump fan. On the other hand, if speed of pump/fan is reduced to control the discharge then power demand reduces by cube of speed and therefore large amount of energy is saved. Fluidomat SC offers stepless speed variation in range of 5:1 for centrifugal loads and saves high amount of energy. It thus earns money through energy savings.

## Fan And Fluidomat-Sc Typical Power Speed Characteristics:



**Curve 1** Shows the power required by a centrifugal machine at different speeds. In the same figure the power required by the system is shown if Fluidomat SC is used for speed variations. Fluidomat SC is an ideal equipment for speed variations of centrifugal machines & thus discharge control. Slip power losses in the coupling are also shown in the characteristic curve.

### Power Required for Centrifugal Fan & Power Saving by Fluidomat-Sc



**Curve 2** shows the typical example of power saved at different discharge values when Fluidomat SC is used. The power saving can be in the range of 10-40% depending on operation and flow requirements. Since Fluidomat SC starts motor on NO LOAD therefore motor can be rated for consumed power and not for starting duty. By reducing the power rating of the motor, energy is further saved due to improved efficiency and power factor of the motor. At the same time, high-cost slipping motors can be replaced by rugged squirrel cage motors which are low in cost and require very low maintenance.

# Motor & Machine Side of Fluidomat Sc:

