



PEMBRIL VARIABLE SPEED FLUID COUPLINGS

Type SCR 25W Sizes 18 to 41

The type SCR25W fluid couplings, when installed between a constant speed motor and driven machine, can be employed in a variety of ways depending upon the requirements of the particular application.

Scoop control fluid couplings will provide -

- Stepless variable output speed, using a fixed speed motor, over a range of 5:1 for centrifugal pumps and fans. On constant torque drives a 3:1 speed range may be achieved.
- Control of torque during acceleration of high inertia loads; a good example being the starting of belt conveyors.
- Engaging and disengaging of a drive with a continuously running motor. For example, descaling pumps in steel-works.

The units are readily adaptable for use with manual, remote or automatic control and can be supplied complete with most types of actuators pneumatic, hydraulic, or electric. In addition, special controls are available for certain applications, for example, belt conveyor drives.

Operation

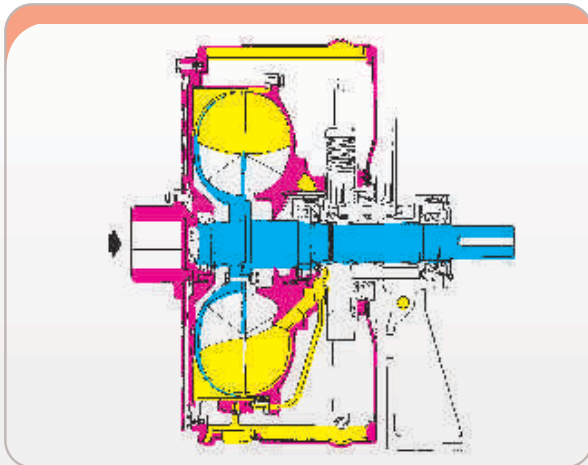
To vary the output speed of a fluid coupling it is necessary to vary the amount of fluid in the working circuit (i.e. between the runner and impeller). In operation, oil in the working circuit escapes

through small leak-off nozzles in the drum of the inner casing assembly and forms a ring inside the rotating reservoir casing. The tip of the hollow scoop tube picks up oil from this rotating ring and returns it to the working circuit via an external cooler, if needed. The volume of oil retained in the working circuit depends on the radial position of the tip of the scoop tube. An external control lever on the scoop housing bracket enables the position of the scoop tube to be adjusted while the unit is running, thus varying the output speed or the torque transmitted.

Construction

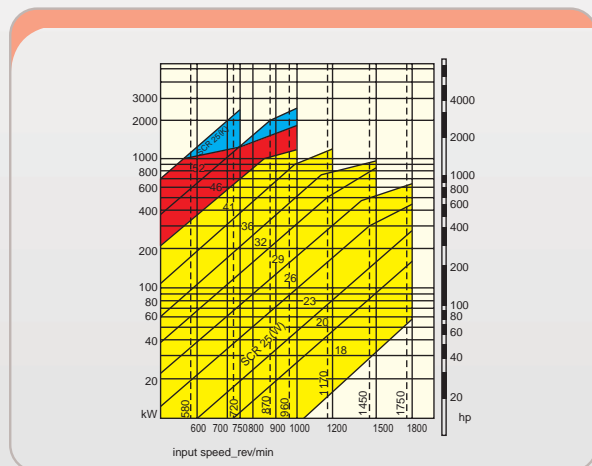
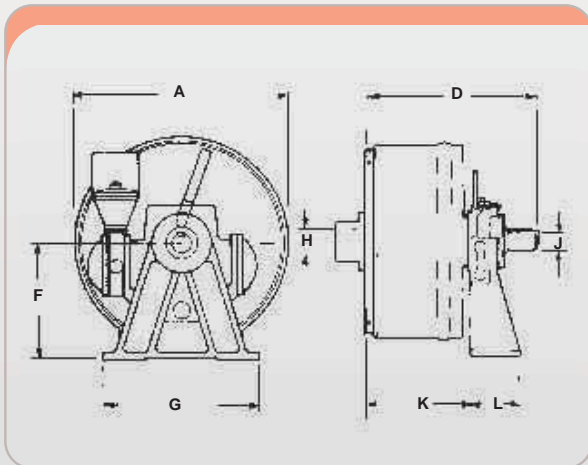
The main rotating casing of the fluid coupling is formed from two steel fabrications which are bolted together on the input end. The impeller and runner, between which oil circulates to transmit power, are aluminium alloy castings. The internal bearing arrangement ensures that no external hydraulic thrust can be created by the fluid coupling. The scoop tube is supported by a stationary cast iron bracket, normally mounted on the bed plate. This design of fluid coupling is provided with semi-flexible input and output mountings, and the weight of the rotating parts is supported by the shafts of the motor and driven machines. Bores and keyways of the input driving boss and output half coupling are finished to suit customers' requirements. Units are available in 10





PEMBRIL VARIABLE SPEED FLUID COUPLINGS

TYPE SCR 25W Sizes 18 to 41



Technical Data

Size	Dimension in MM									Filled Weight (Kg)
	A	D	F	G	H	J	K	L	Q (Litres)	
18	629	563	355	470	85	55	321	152	16	216
20	692	578	355	470	85	55	337	152	21.6	257
23	789	702	457	610	110	70	406	190	31.8	393
26	891	740	457	610	110	70	445	190	47.5	465
29	1018	788	559	711	130	85	445	229	63.5	709
32	1108	886	559	711	130	85	543	229	86	855
36	1254	1016	711	940	150	110	600	276	123	1367
41	1413	1080	711	940	150	110	664	276	184	1640

Premium Energy Transmission Limited

Head Office : P.B. No. 5, Chinchwad, Pune - 411 019, India. Tel. : (91-20) 27475141 / 42 / 43 / 44, Fax : (91-20) 27450287, 27476601.

Branch Offices :

- **Western Region : Mumbai :** Industry Manor, Appasaheb Marathe Marg, Prabhadevi, Mumbai - 400 025. Tel. : (91-22) 24223747, 24365510, Fax : (91-22) 24377730.
- Ahmedabad :** "Jaldarshan", Ashram Road, Navrangpura, Ahmedabad - 380 009. Tel. : (91-79) 26580428/0518/1861, Fax : (91-79) 26587783.
- Nagpur :** "Guman", Pandit Jawaharlal Nehru Marg, Sadar, P.B. No. 129, Nagpur - 440 001. Tel. : (91-712) 2526588, 2524125, 2526038, Fax : (91-712) 2541142.
- **Northern Region : New Delhi :** Express Building Annexe, 9-10, Bahadur Shah Zafar Marg, New Delhi - 110 002. Tel. : (91-11) 23730554 (8 lines), Fax : (91-11) 23359782.
- **Eastern Region : Kolkata :** Thapar House, 25, Brabourne Road, P. B. No. 702, Kolkata - 700 001. Tel. : (91-33) 22423811, 22423780, 22423805, Fax : (91-33) 22424325.
- Ranchi :** Rani Kuthi, 82, Burdwan Compound, P.B. No. 139, Ranchi - 834 001. Tel. : (91-651) 2562651, Fax : (91-651) 2562027.
- **Southern Region : Chennai :** "Wavoo Mansion", 6th Floor, New No. 48, (Old No. 39), Rajaji Salai, Chennai - 600 001. Tel. : (91-44) 25240142, Fax : (91-44) 25224557.
- Bangalore :** 16/3, Ali Asker Road, P. B. No. 216, Bangalore - 560 052. Tel. : (91-80) 22268773/2506, Fax : (91-80) 22253472.
- Hyderabad :** 6-2-47, A. C. Guards, 1st floor, P. B. No. 9, Hyderabad - 500 004. Tel. : (91-40) 23314025, 23390544, 23316446, Fax : (91-40) 23318557.
- Kochi :** 39/5567, M. G. Road, Ernakulam, Kochi - 682 015. Tel. : (91-484) 2359190, 2359372, Telefax : (91-484) 2359589.