

981, Dhiraj Niwas. Nr. Mahakali Hotel Laheripura New Road.
Vadodara - 390 001. Contact: (M) 98259 52159
Visit: www.pumphouse.co.in
Email: pumphouse98@gmail.com



# ROTARY GEAR PUMPS ("SIG" SERIES)



#### **FEATURES**

- "SURGE" positive displacement gear pumps are self priming pumps which has totally new pumping concept resulting Reliable and simple design.
- Manufacturing techniques ensure more accuracy in dimensions, interchangeability and pump characteristics..
- There are only two pumping elements in internal gearning principle, this result in unmatched suction characteristics that is imposssible in double helical gear pumps.
- There is only one shaft well supported at both ends of rotor for smooth, vibration free running and eliminating bearing problems normally found in the conventional gear pump.
- The noise level is very low and this series needs practically no maintenance and much longer service life then other gear pump. Hence the bearing are lubricated by the pumping fluid and do not need any external lubrication.
- Precision machined components guarantee high volumetric efficiency and overall efficiency.
- Internal gearing principle with axial flow ensures pulsation free continuous flow.
- Compact and light weight design eliminates elaborate foundations.
- Single shaft design permits pump dismantling without removing pump from base or disconnecting pipes. Pump can be serviced in place.

### **APPLICATION**

The SIG series of "SURGE" pumps is used to handle lubricating oils, fuel and other fluids which have lubrication properties. These pumps are ideally suited for following typical application.

- To transfer or circulate the fuel oils.
- Gear lubrication, oil circulation, through cooler, cooling of bearning and in pressure lubrication.
- To transfer all kind of oils without solid particles.
- Boosting of fuel oil pressure for oil burner service and fuel injection pumps.
- Unidirectional flow designs for reversing shaft duties as in machine tools, gear boxes and crane duties.

#### **RANGE**

Pressure : Up to  $10 \text{ kg/cm}^2$ Discharge : 1 LPM to 175 LPM Pipe size : 1/4" BSP to 1 1/2" BSP

#### MATERIAL OF CONSTRUCTION

Pump Body : C.I.Gr.FG 200 Back Cover with R.V. : C.I.Gr.FG 200

Rotor Assembly : Gear-Sintered Iron, Shaft - EN 8

Bush : Sintered Bronze Oil Seal : Nitrile Rubber

Rotor Shaft key : M.S.

O Ring : Nitrile Rubber



981, Dhiraj Niwas. Nr. Mahakali Hotel Laheripura New Road. Vadodara - 390 001. Contact: (M) 98259 52159 Visit: www.pumphouse.co.in Email: pumphouse98@gmail.com









SIG-10, 15 & 20



SIG-40 & 80



SIG-152, 150 & 175

## PERFORMANCE CHART OF ROTARY GEAR PUMPS

MODEL	PIPE SIZE IN MM SUC. X DEL.	DISCHARGE		PRESSURE IN Kg / cm <sup>2</sup>										
				0	0 2 4 6 8 10									
		LPM	M³/Hr	1	Kgs.									
SIG - 1	10 x 10	1	0.06	0.25	0.25	0.25	0.25	0.25	0.50	1.000				
SIG - 2.5	10 x 10	2.5	0.15	0.25	0.25	0.25	0.50	0.50	0.50	1.200				
SIG - 10	15 x 15	10	0.60	0.25	0.25	0.50	0.50	0.75	0.75	3.000				
SIG - 15	15 x 15	15	0.90	0.50	0.50	0.50	0.75	0.75	1.00	3.300				
SIG - 20	15 x 15	20	1.20	0.50	0.50	0.75	0.75	1.00	1.50	3.600				
SIG - 40	25 x 25	40	2.40	0.50	0.50	0.75	1.00	1.50	2.00	6.800				
SIG - 80	40 x 40	80	4.80	1.00	1.00	1.50	2.00	3.00	3.00	8.500				
SIG - 125	40 x 40	125	7.50	2.00	3.00	3.00	5.00	5.00	7.50	24.000				
SIG - 150	40 x 40	150	9.00	2.00	3.00	3.00	5.00	7.50	7.50	25.000				
SIG - 175	40 x 40	175	10.5	2.00	3.00	5.00	5.00	7.50	7.50	26.500				

## **OVER ALL DIMENSIONS OF ROTARY GEAR PUMPS**

MODEL	A	В	С	F	G	J	K	L	ØD	ØD1	M	N	Н	H1	H2	НЗ	P
SIG-1	95	22.5		-	55	-	•	15	10		3	4	30	30	60		14" B.S.P.
SIG - 2.5	98	22.5		•	55			15	10		3	4	30	30	60		14" B.S.P.
SIG - 10	130	37	58	52	106	112	142	22	12.7	9.5	5	5	71	64	102	12	1/2" B.S.P.
SIG - 15	137	38	59	52	106	112	142	22	12.7	9.5	5	5	71	64	102	12	1/2" B.S.P.
SIG - 20	152	35	56	52	106	112	142	22	12.7	9.5	5	5	71	64	102	12	1/2" B.S.P.
SIG - 40	178	52.5	114	74	135	124	145	22	15	9.5	5	5	80	76	146	12	1" B.S.P.
SIG - 80	208	42	100	74	135	140	174	22	15	11.5	5	5	90	86	158	12	1½" B.S.P.
SIG - 125	270	132	194	55	204	190	230	37	24	14	8	7	112	106	310	17	11/2" B.S.P.
SIG - 150	276	132	194	55	204	190	230	37	24	14	8	7	112	106	310	17	1½" B.S.P.
SIG - 175	288	132	194	55	204	190	230	37	24	14	8	7	112	106	310	17	11/2* B.S.P.



