



# the most **dependable** range of positive displacement **pumps**



## Internal gear pump 'RIG'

### Applications :

- Steam or hot oil jacketed construction for LSHS / Bitumen Pumping
- Liquids of any viscosity and temperature, which can be corrosive, abrasive and dangerous for the environment.
- With hardened and ground gear for handling low viscous liquids.
- With profile ground gear for high pressure duties, at low noise levels.
- For transfer, dosage, processing, loading and unloading duties
- Used in chemical, paint, ink, sugar, construction, confectionery, oil industries, refineries and storage installations.

### Typical liquid list :

Asphalt, Butter, Emulsion, Grease, Glucose, Crude oil, Castor oil, Coconut oil, LABSA, Epoxy resin, Furnace oil, Chocolate, Glycerin, Gum, Ink, Molasses, Soap, Polyol, Plasticizers, Sodium silicate, Wax, Resins, polymers, etc.

### Range :

Capacity	:	upto 3000 lpm
Pressure	:	15 bar
Temperature	:	upto 375 C
Viscosity	:	upto 1,000,000 cSt

### Material of construction :

#### Standard

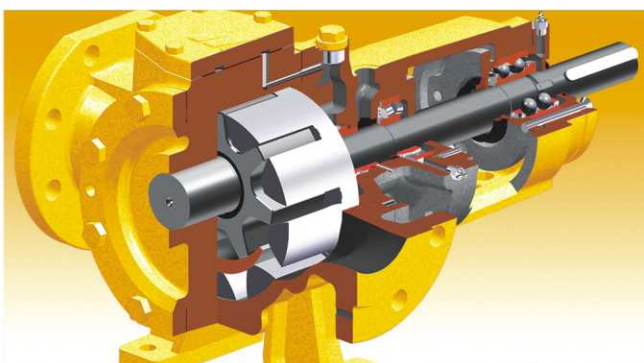
Casing	:	CI, IS, 210 GR 35
Shaft & gears	:	EN-24HG
Bush	:	Sintered bronze
Mechanical Seal	:	TC / TC Viton

#### Optional

Casing	:	SS 316 / SS 304
Shaft & gears	:	SS 316 / SS 304
Mechanical Seal	:	TC / TC Viton

### Advantages :

- External ball bearing to take care of radial forces.
- Suitable to operate with reduction gear box. vee belt drive, variable drives etc.
- Self-priming.
- Optimized for very low maintenance.
- Bidirectional with full performance.
- Non- pulsating constant flow and no foaming.
- One shaft and shaft seal.
- Seal flexibility, mechanical seal, oil seal or gland packing.
- Built in safety relief valve a standard part to safe guard the pump and system against over pressure



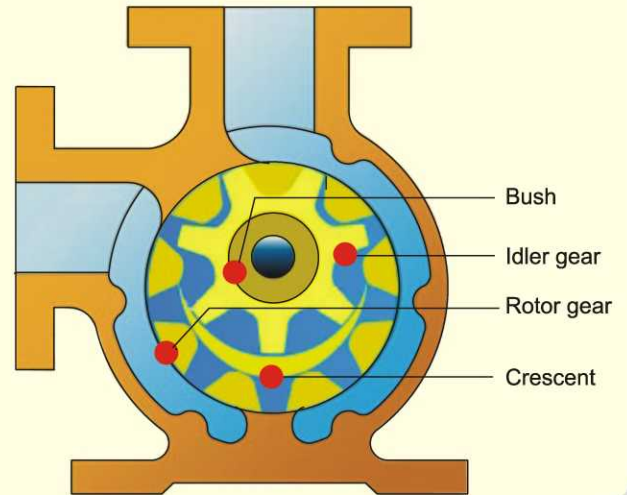
### Working principle :

Rovar internal gear pumps are self priming positive displacement rotary pumps, two gears, the rotor and the idler, generate the flow.

With every revolution of the pump shaft a definite amount of liquid enters the pump through the suction port.

The liquid fills the spaces between the teeth of rotor and idler which transport the liquid on either side of a crescent and move smoothly to the discharge side. When the gears re-mesh, the liquid forced out of the pump.

### Cross sectional view



### Performance of RIG series :

Model	Size Inlet & Outlet ANSI flange (DIN flange mm)	Viscosity cSt	Speed rpm	Capacity lpm	Power Requirement kW		Weight kg
					4 Bar	10 Bar	
RIG 20	½" x ½" BSP	250	1450	25	0.7	1.4	5
		5000	960	10	0.6	1.2	
RIG 60	1" x 1" BSP	250	1450	60	1.2	1.5	11
		5000	960	40	1.0	1.4	
RIG 100	1½" x 1½" (40)	250	1450	100	1.5	2	14
		5000	960	70	1.3	1.6	
		30000	500	35	1.1	1.3	
RIG 250	2" x 2" (40)	250	1450	250	3	4.5	34
		5000	960	160	2.2	3.3	
		30000	400	75	1.5	2.9	
RIG 350	2½" x 2½" (65)	250	1450	350	5.2	7.9	48
		5000	720	170	3.2	6.4	
		30000	350	90	2.1	4.4	
RIG 700	3" x 3" (80)	250	1450	700	8.2	12.3	72
		5000	720	450	5.3	10.2	
		30000	250	300	3.2	5.4	
RIG 1200	4" x 4" (100)	250	960	1200	15.3	22.5	170
		5000	720	875	12.0	18.5	
		30000	200	300	8.7	12.0	
RIG 1900	6" x 6" (150)	250	960	1900	23.5	30.2	250
		5000	500	1200	18.9	26.0	
		30000	200	525	14.8	23.0	

The company reserves the right to change any specification without prior notice



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An ISO 9001:2008 certified company

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