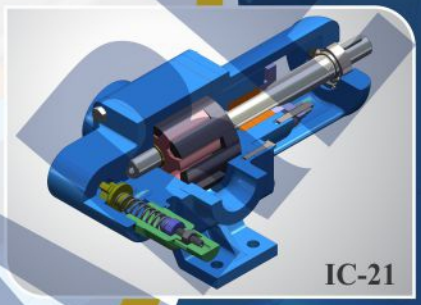
PUMP

TURAKHIA ENTERPRISE

IC

Internal Gear Pump with Crescent


IC-20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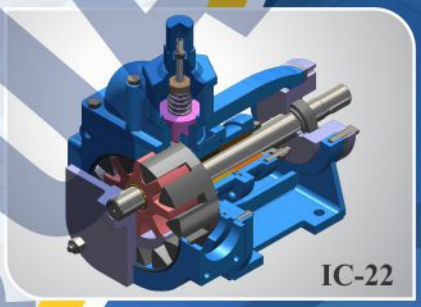
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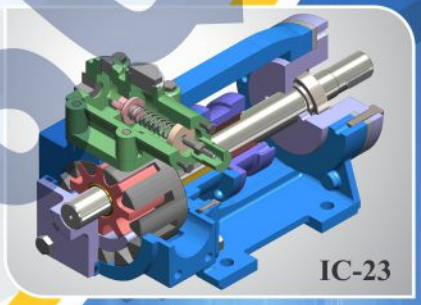
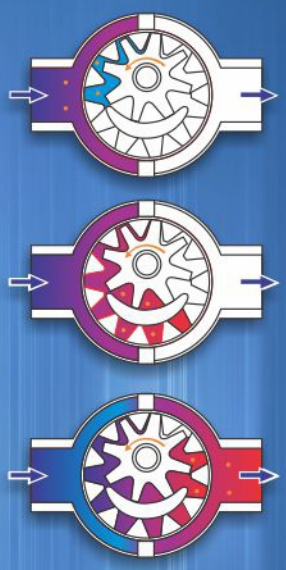

IC-23

- Max Capacity : 250 M^3/Hr
- Max Pressure : 10 BAR
- Temperature Range : -85° to +250°C
- Viscosity : 1,00,000 cSt



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GENERAL INFORMATION

IC

Pumping Principle

Proven Principle of Internal Gear is used in pumping. Rotor (Outer Gear)is keyed to drive shaft whereas idler (Inner Gear) is located eccentrically on a pin on the front cover. Both the gears are in mesh and the ports are sealed by a crescent located on the front cover. As the rotor and idler gear un-mesh, an under pressure is created and the liquid enters the new created cavities. Liquid is transported in sealed pockets to the discharge side. The walls of the pump casing and the crescent are creating a seal and separate suction from discharge side. The rotor and idler gear mesh pushing the liquid into the discharge line. Reversing the shaft rotation will reverse the flow through the pump as well.

Technical Data

Port Size : 1" to 8"
Capacities : up to 4000 LPM
Pressure : up to 10 kg/cm^2
Speed : 100—1440 rpm
Operating Temperature : up to 300 °C
Viscosity : up to 100,000 cSt
Relief Valve : Integral / Optional
Jacketing : Optional—Cooling / Heating
Shaft Sealing : Gland Packing / Single or Double Mechanical Seal / Lip Seal / Magnetical Sealed-Sealless/Grafoil Rings
Mounting : Bracket / Gear Box (Block Pump) / Foot Mounted
Drive : V-Belt Drive / Gear Box / Geared Motor / Direct Drive/ Mechanical Variator / with Built in Speed Reducer

Design Features

- Overhung Design of Shaft
- Low NPSH Required
- Pump & Rotor Clearnces Optimized for Maximum Efficiency
- Self-Priming
- Back Pull Design
- Bi Directional (in most cases)
- Insensitive to Viscosity
- Low Pulsating Discharge
- Excellent for High Viscous Application
- Single Adjustable End Clearance
- Easy to Maintain
- Flexible Design - Application Customized
- All Metal Construction - No Contamination
- Liquid with poor lubricating properties can be pumped easily
- External Bearing enabling ease of access to pump
- Can run dry for reasonable amount of time
- Slow Speed offers better pumping and longer life
- Improved Rotor Profiles for smooth Meshing minimizing Internal losses and Excellent Suction Capabilities

Applications

- Chemical and Pharmaceutical Industry
- Food Industry
- Chemical Processing Plants
- Iron & Steel Industry
- Textile, Leather and Paper Industry
- Rubber and Plastics Industry
- Paint & Ink Industry
- Tar and Bitumen Processing Industry
- Wood Processing and Furniture Industry
- Oil Refining and Many More…

Material Of Construction

Casing : Cast Iron, Ductile Iron, Fabricated Steel, Stainlees Steel
Rotors : Cast Iron & Steel, Stainlees Steel
Shaft : Steel, Stainlees Steel
Idler Pin : Steel, Hardened Steel, Coated, Stainlees Steel
R.V. Parts : Cast Iron, Steel, Stainlees Steel
Bush : Bronze, Gun Metal, Sintered Iron, Sintered Bronze, Carbon Graphite
Bracket : Cast Iron, Steel, Fabricated Steel

Optional MOC Includes Metal like Hast Alloy, Gun Metal & others can be accomodated on request.

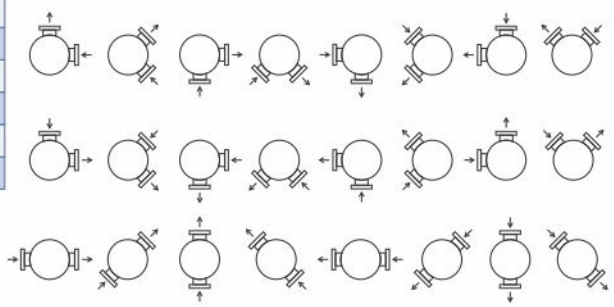
Standard Ratios Availble for Pump with Built - In Speed Reducer are 1:1.5, 1:2, 1:2.5, 1:3, 1:4, 1:5, 1:6

Performance Specification

Pump Model	Standard Port Size in inches	Maximum Flow Rate	Maximum Pump Speed	Maximum Pressure
	Inlet x Outlet	M^3/Hr.	R.P.M.	Kg/cm^2
IC - 20	1.5" x 1.5"	5.5	1800	10
IC - 21	1.5" x 1.5"	9	1800	10
IC - 22	2" x 2"	15	780	10
IC - 23	2.5" x 2.5"	20	640	10
IC - 24	3" x 3"	30	520	10
IC - 25	3" x 3"	45	420	8
IC - 26	4" x 4"	110	350	8
IC - 27	6" x 6"	135	280	8
IC - 28	8' x 8"	250	280	6

Port - *Ing* Options

- Opposite (180°)(Rotatable Casing)
- Right Angle (90°)(Rotatable Casing)
- NPT / BSP / SAE
- Flange (ANSI or DIN Compatible)



We also Manufacture :

Internal Lobe Pumps	Progressive Cavity Pumps	Piston Pumps
External Gear Pumps	Twin Screw Pumps	Peristaltic Pumps
External Lobe Pumps	Triple Screw Pumps	Simplex / Duplex Filters
Shuttle Block Pumps	Flexible Impeller Pumps	Thermic Fluid Pumps

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