



# INTERNAL GEAR

P U M P S



H I G H Q U A L I T Y



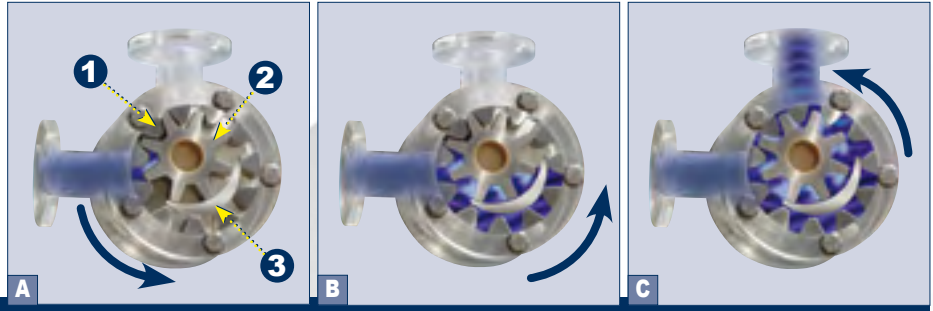
V E R S A T I L I T Y



D U R A B L E H E A V Y

## VICTOR PUMPS





The R - internal gear pumps are self-priming positive displacement rotary pumps. Two gears generate the flow: the rotor ① and the idler ②. The rotor moves the internal idler. As the gears rotate, liquid is drawn into the spaces created between the gears and smoothly moved toward the discharge port, where the divider ③, called crescent, closes the free space between the two gears. When the gears mesh, the liquid is slowly forced out of the pump. The result is a constant, smooth flow with no pulsations.

## OPERATING RANGE

<b>A</b>	Additives	Creosote	Glue	Lube oil	Polyol
	Adhesive	Diesel Fuel	Glycerine	Mineral oil	Printing ink
	Asphalt	Emulsions	Glycol	Molasses	Resin
	Bitumen	Epoxy resins	Grease	Naphtha	Soap
	Chemicals	Fats	Heat transfer oil	Oil	Starch
	Chocolate	Foams	Hot melt	Paint	Tar
	Coal Tar	Fuel oil	Ink	Paraffin	Varnish
	Coatings	Gasoline	Isocyanate	Petrol	Viscose
	Colours	Gelatine	Kerosene	Pitch	Wax
	Cream	Glucose	Lacquer	Polymer	and many more...
					<b>Z</b>

- With liquids of any viscosity and temperature, which can be corrosive, abrasive and dangerous for the environment.
- Used for transfer, dosing, processing, loading and unloading.
- In chemical, ink, paint, construction, chocolate and oil-industry, in refineries and storage facilities.

## ADVANTAGES



The heating jacket around the casing allows a better and constant heating of the product where it is required: in the gears. Inspections can be done with the casing connected to the pipes. For temperature-sensitive fluids it is available the heating jacket around the complete pump.

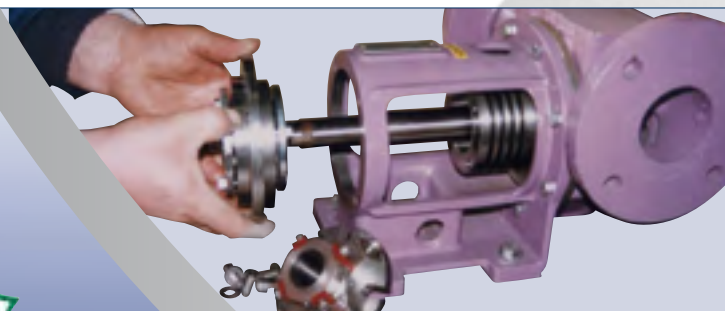
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- Self-priming.
- The capacity is directly proportional to the rotation speed.
- Non pulsating constant flow, therefore no vibrations on fittings, valves or couplings.
- No foaming or churning of the liquid.
- Only one shaft seal or with magnetic coupling.
- Heating jacket around the casing in one cast 1.
- Full performance is available in either direction of rotation 2.
- The casing can be rotated and delivered with 90° or 180° (in-line) ports.
- Relief valve against over-pressure incorporated in the pump.
- Heavy-duty construction optimized for rare maintenance.



To optimise the installation of the pipes in existing or new plants, the casing can be rotated as required. On request also available with 180° (in-line) ports.

2



To easily dismount the mechanical seal from backside, a ball bearing cartridge is available on request.

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Friendly maintenance through the pump cover.

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# TECHNICAL DATA

# R INTERNAL GEAR PUMPS

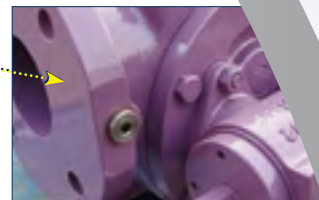
<b>CAPACITY</b>	up to 360 m <sup>3</sup> /h (6000 l/min)
<b>PRESSURE</b>	up to 16 bar
<b>VISCOSITY</b>	up to over 100.000 mm <sup>2</sup> /s (cSt)

<b>TEMPERATURE</b>	from -60°C up to +300°C
<b>PRESSURE</b>	cast iron, ductile iron or stainless steel
<b>PORTS</b>	from DN40 to DN250

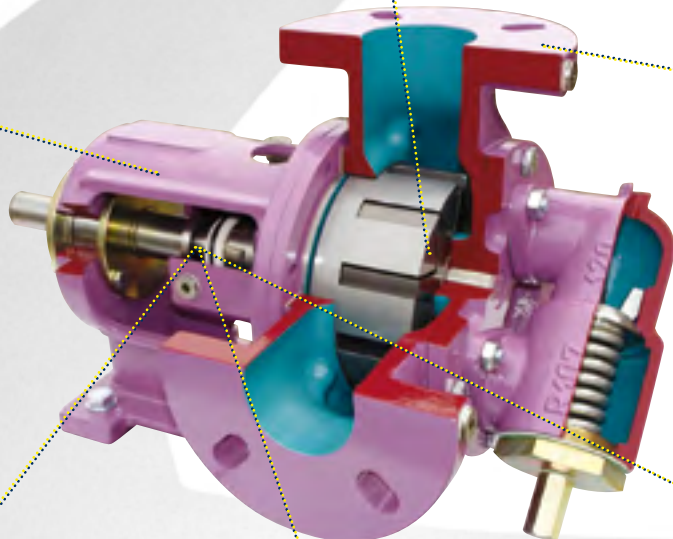
Bearing housing with external oversized and maintenance-free ball bearing to take axial and radial loads (e.g. for belt-drive). The position of the bearing can be changed to optimize the tolerance of the gears. Collect chamber for possible leakages from packing or mechanical seal.



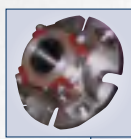
Standard in cast iron pumps:  
steel rotor **1**, hardened steel shaft **3**,  
cast iron idler **2**.



DIN or ASA flanged ports with through-holes for easy installation. 1/4" threaded holes for Vacuum-meter and Manometer.



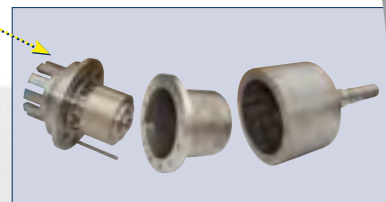
Packing



Cartridge



Quench with reservoir



Seal-less with magnetic coupling

Mechanical seal also with quench,  
double mechanical seal also as cartridge

## PERFORMANCES

TYPE (l/rotation)	PORTS DN PN16 (inches)	VISCOSITY mm <sup>2</sup> /s (cSt)	SPEED RPM	CAPACITY m <sup>3</sup> /h	REQUIRED POWER AT		WEIGHT kg
					4 bar kW	8 bar kW	
<b>R 35</b> (0,043)	40 (1 1/4")	200	1450	3,7	1,4	1,7	18
		4000	720	1,9	1,2	1,4	
		25000	450	1,2	1	1,2	
<b>R 40</b> (0,08)	40 (1 1/4")	200	1450	7	2	2,8	18
		4000	720	3,5	1,6	2	
		25000	450	2,2	1,3	1,6	
<b>R 50</b> (0,22)	50 (2")	200	960	12,6	3	4,5	32
		4000	560	7,5	2,7	3,6	
		25000	355	5	2,2	2,8	
<b>R 65</b> (0,48)	65 (2 1/2")	200	720	20,5	5,6	8,1	50
		4000	450	13	5	6,6	
		25000	280	8,3	3,6	4,6	
<b>R 80</b> (1,15)	80 (3")	200	560	38	7,9	12,4	84
		4000	355	25	8,1	11,1	
		25000	224	16	6,7	8,6	
<b>R105</b> (2,25)	100 (4")	200	450	62	11,8	19,1	152
		4000	280	39	12,6	17,3	
		25000	180	25	11,5	14,7	
<b>R151</b> (3,8)	150 (6")	200	400	90	15,5	26,2	215
		4000	315	73	21,6	30,3	
		25000	200	47	19	24,8	
<b>R180</b> (6,8)	150 (6")	200	315	132	23,1	38,4	215
		4000	200	84	17,8	29,6	
		25000	125	53	17,3	28,8	
<b>R200</b> (14)	200 (8")	200	315	260	52,4	82,1	215
		4000	200	167	45,7	65	
		25000	125	105	34,6	46,9	
<b>R250</b> (21)	250 (10")	200	280	350	65,9		215
		4000	180	230	61,3		
		25000	112	140	46		





R 35 with magnetic coupling g for isocyanate



R 65 for paint



12 IMPORTANT QUESTIONS FOR INQUIRIES

1. Capacity
2. Delivery pressure
3. Type of liquid
4. Viscosity
5. Pump job
6. Type of installation
7. Suction lift
8. Temperature
9. Old pumping experience
10. Running hours/day
11. Voltage
12. Frequency



R 250 with heating jacket for coal tar



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