LIQUID-SPECIFIC PRODUCT LINE:
CAST IRON PUMPS
RTPg Series™

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RELATED PRODUCTS

Steel Externals, RTP® Series: Catalog Section 1727

Steel Externals, RTPe Series™: Catalog Section 1768

RTPg30

SERIES DESCRIPTION

The RTPg Series is a cast iron internal gear pump design specifically for Liquid Bulk Transport. The RTPg is a cost effective alternative for applications that do not require stainless steel. It is a great solution for transferring Lubricants, Crude Oil, Fuels, Asphalt, Fertilizers, and much more. The RTPg can provide flows up to 170 GPM (38 m^3/h).

FEATURES & BENEFITS

- Modular porting
  - » Accepts ANSI 4 bolt flange and NPT
- L-Pro™ PTFE double lipseal design
  - » The seal is designed with excellent wear and low friction characteristics to provide longer life and withstand some inevitable dry run.
  - » Seal is located behind the rotor and isolates the shaft support bearings from the process fluid
- Ease of maintenance
  - » Shaft support bearing are seal for life and do not require greasing.
  - » There is only one bushing running in the process fluid.
  - » Easily rebuildable with time saving seal, rebuild, and overhaul kits available.
- Drop in mounting foot for easy competitor replacement.
- Internal gear design allows for bidirectional operation from the factory*

*Internal Relief Valve only provides protection in one direction.

OPERATING RANGE

SERIES	NOMINAL FLOW		MAXIMUM PRESSURE		TEMPERATURE RANGE		VISCOSITY RANGE	
	GPM	m^3h	PSI	Bar	°F	°C	SSU	cSt
RTPg Series™	0 to 170	to 38	125	8.6	to 250	to 120	to 2,500	to 540

LIQUID-SPECIFIC PRODUCT LINE:
CAST IRON PUMPS

RTPg Series™

MODEL NUMBER KEY

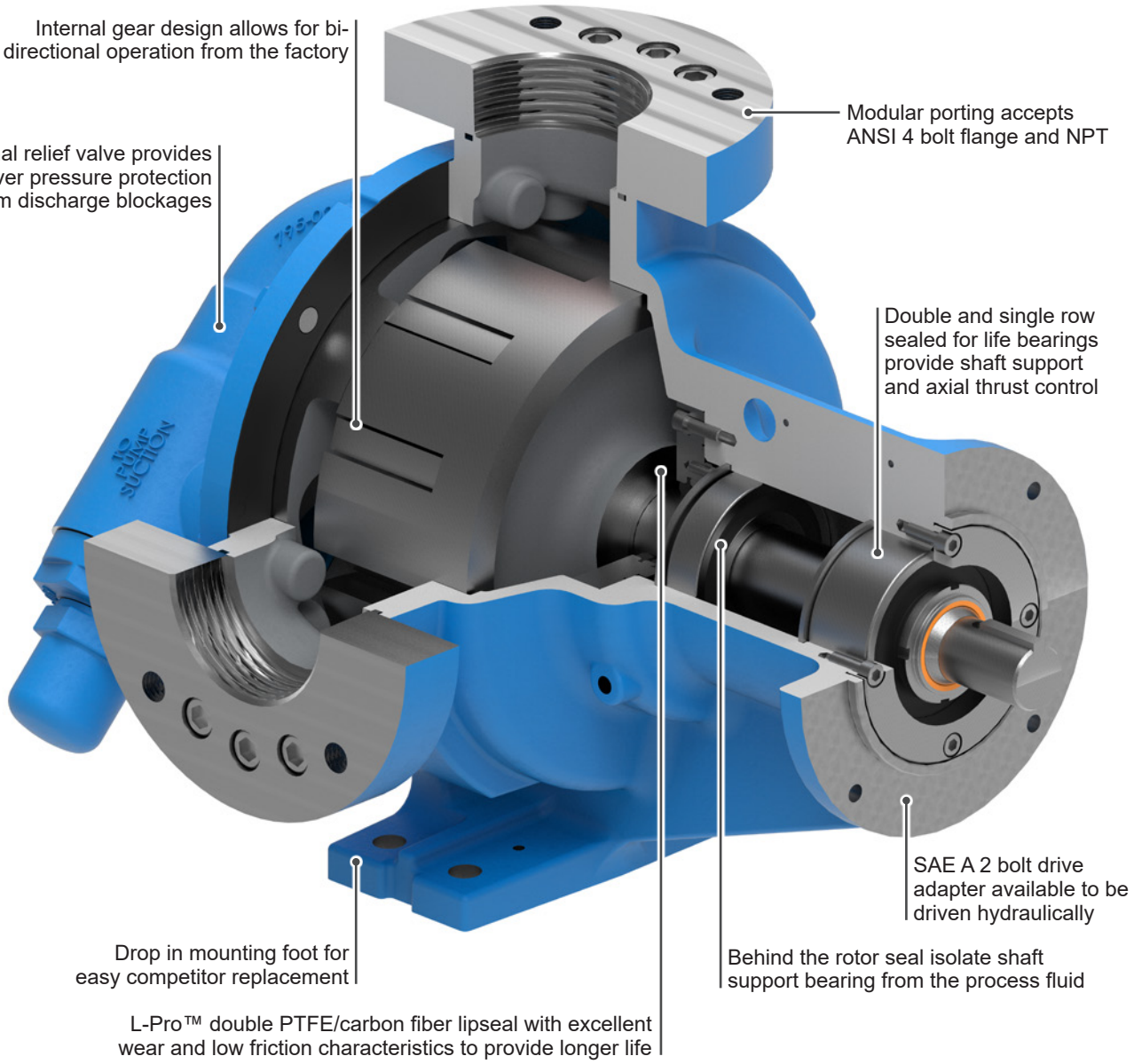
SPECIFICATIONS

Model Number	Standard Port Size	Nominal Pump Rating (100 SSU & below)			Displacement		Maximum Differential Pressure		Maximum Recommended Temperature for Standard Pump		Approx. Shipping Weight with Grease	
	Inches	GPM	m^3/h	RPM	USG/rev.	l/rev.	PSIG	BAR	°F	°C	Lbs.	Kg.
RTPg20	2	135	30	600	0.225	0.85	125	8.6	250	120	138	63
RTPg30	3	170	38	600	0.283	1.07	125	8.6	250	120	156	71

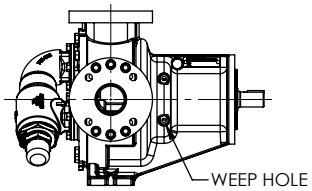
STANDARD MATERIALS OF CONSTRUCTION

Component	Standard Material
Casing	Iron
Head	Iron
Rotor	Iron
Rotor Shaft	Hardened Steel
Idler	Iron
Idler Pin	Hardened Steel
Idler Bushing	Carbon Graphite
Seal	PTFE / Carbon Fiber
Internal Relief Valve	Iron

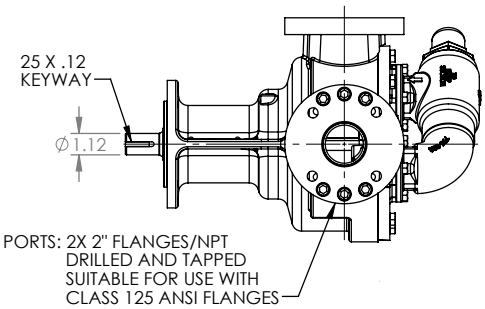
CUTAWAY VIEW & PUMP FEATURES

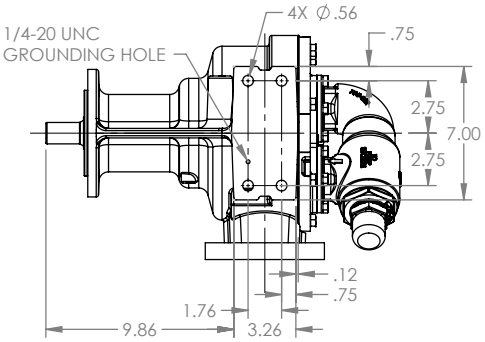


DIMENSIONS – RTPg20

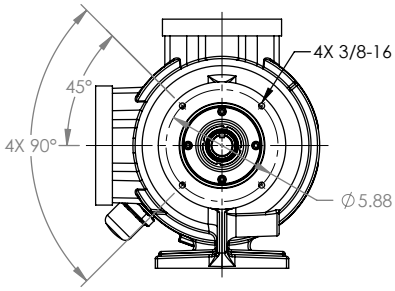


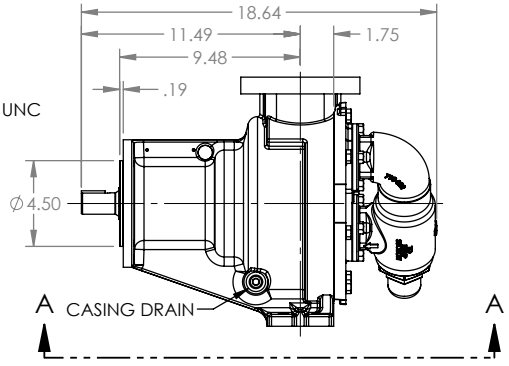
VIEW B-B
SCALE 1 : 10

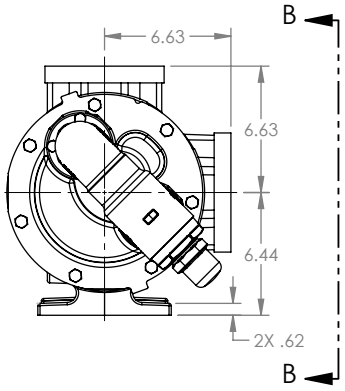




VIEW A-A







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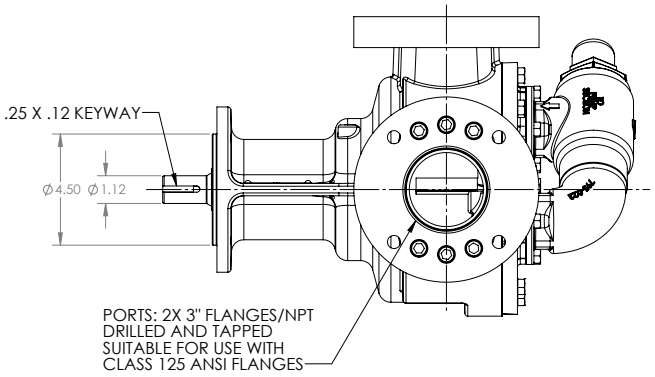

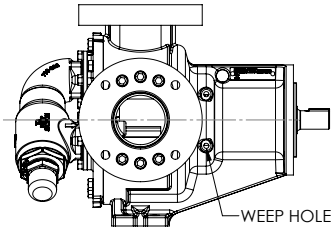

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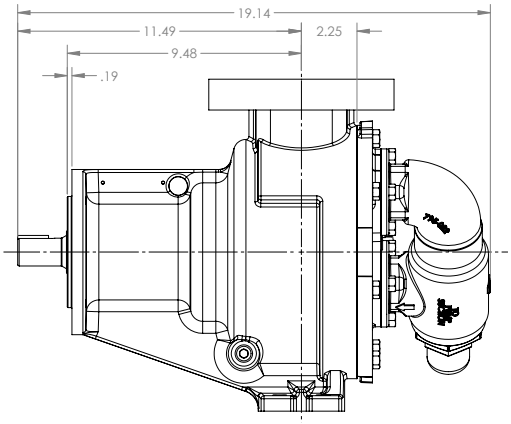

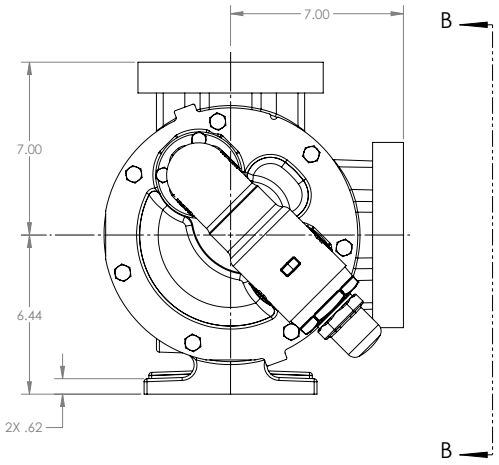

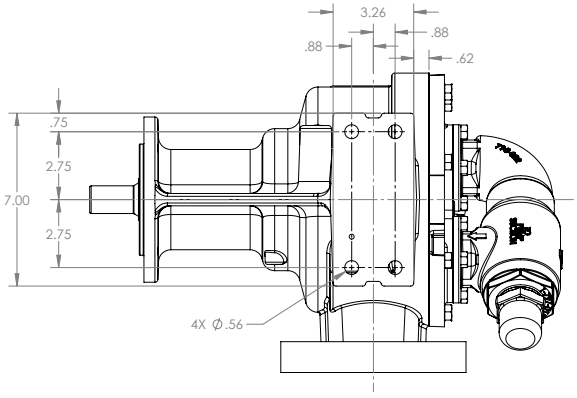

NPSH REQUIRED

Printed performance curves are not available.

Performance curves can be electronically generated with the Viking Pump Curve Generator on vikingpump.com.

$NPSH_R$ data is not available on the curve generator.

NPSH (Net Positive Suction Head): The $NPSH_R$ (Net Positive Suction Head Required by the pump) is given in the table below and applies for viscosities through 750 SSU. $NPSH_A$ (Net Positive Suction Head – Available in the system) must be greater than the $NPSH_R$. For a complete explanation of NPSH, see Application Data Sheet AD-19.

FOR VISCOSITIES UP TO 750 SSU – See $NPSH_R$ table below.

$NPSH_R$ for high viscosities can be estimated using the following method:

1. Calculate line loss for a 1 foot long pipe of a diameter matching the pump inlet port size. Use your flow rate and max viscosity.

2. Convert this value into Feet of Liquid (S.G. 1.0)

3. Add this value to the $NPSH_R$ value in the chart below.

	PUMPS SPEED, RPM					
PUMP SIZE	100	200	300	400	500	600
20	2.1	2.2	3.1	4.7	7.1	10.2
30	2.1	2.2	3.1	4.7	7.1	10.2

$NPSH_R$ – FEET OF LIQUID (Specific Gravity 1.0), Viscosities up to 750 SSU