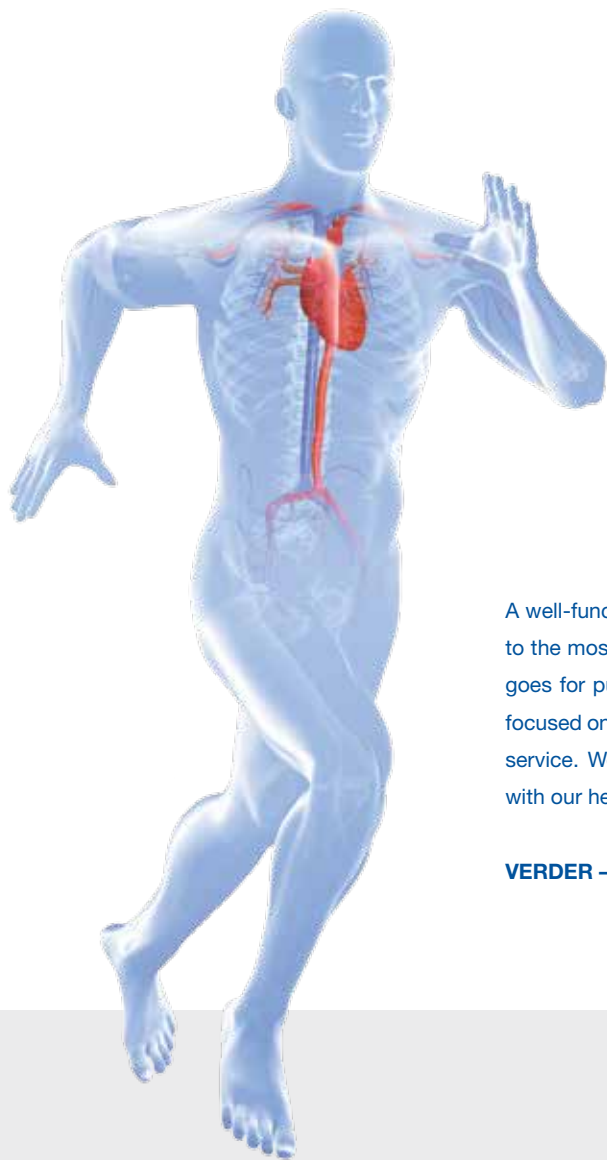


# VERDERFLEX ROLLIT

Lubricant bath free hose pump





A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pump and service. We do so with energy, dedication and most importantly, with our heart.

**VERDER – PASSION FOR PUMPS**

*Represented by:*

**KGO**  
**Group Ltd.**

*"The Benefit of Experience"*  
Engineered pump  
& process systems

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info@kgogroup.com

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# **SIMPLE. CLEAN. FAST AND FLEXIBLE.**

The Verderflex Rollit delivers maximum performance from a lubricant bath free peristaltic pump. It eliminates the risk of product or workplace contamination. It optimises the requirements of discharge pressure with minimal power consumption reducing running and installation costs. Innovative hose clamping shorten hose changes to minutes for fast job changeovers.

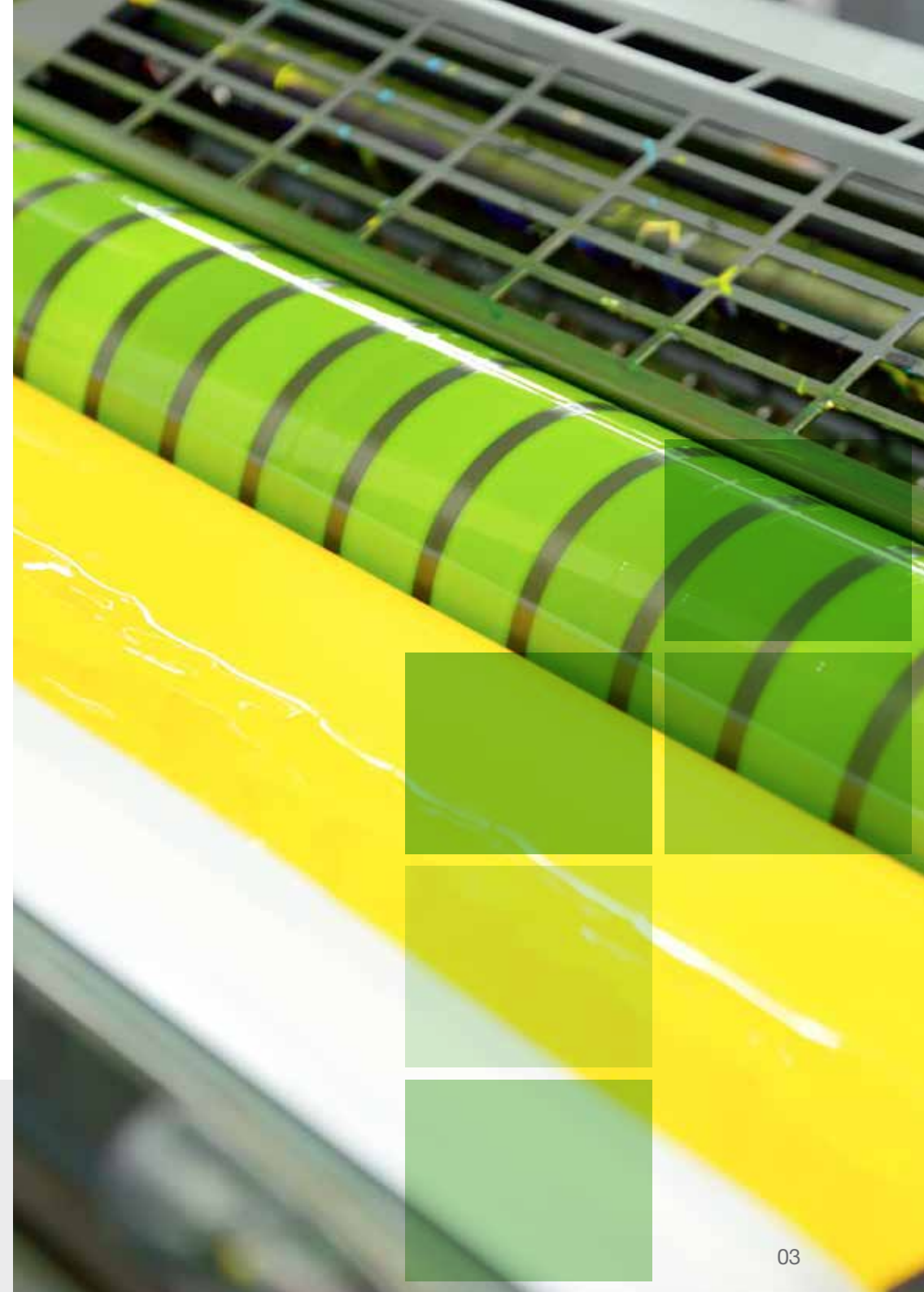
**SIMPLE – 2 OR 4 BAR PRESSURE**

**CLEAN – NO LUBRICANT BATH**

**FAST – EASY HOSE CHANGES**

**FLEXIBLE – SINGLE OR DOUBLE HEAD PUMPS,  
HYGIENIC OR ATEX VERSIONS, FIXED OR MOBILE**

Combining these advantages results in the next generation of clean, dependable process safe peristaltic pumps.





**VERDERFLEX<sup>®</sup>**  
**ROLLIT**



DEPENDABLE  
**THE NEXT GENERATION**  
**PROCESS-SAFE PERISTALTIC PUMPS**



The Verderflex Rollit peristaltic pump is a so-called 'dry runner'. The Rollit is the ideal solution for the transfer and dosing of abrasive, corrosive or shear-sensitive liquids in a wide variety of industries. Without a lubricant bath to drain, hose changeovers take minutes, speeding up job changeovers e.g. in food or paint transfer. Only the cleanable hose comes into contact with the liquid, minimising cross contamination risks. For food or sanitary requirements, sterilisable hose options include FDA or FDA & EC food grade materials. The very gentle pumping action of a peristaltic pump is ideal for shear-sensitive liquids or damage prone fluids such as live cultures, fragile fruits or polymers.

Additionally these pumps can pump liquids containing entrapped gases or likely to offgas and will dry self-prime to 7 or 8 mwc.

Dry-running systems are optimised for medium pressures up to 4 bar, offering many advantages including no lubricant bath, a much simpler hose change and much lower energy consumption with the same performance.

- **Lubricant bath free hose pump**
- **Hose and job change in the shortest possible time**
- **Only the hose is in contact with the fluid**
- **3-roller system for less pulsation**
- **Less energy consumption than a wet runner system**
- **ATEX and Hygienic versions available**

# SIMPLE & EASY

The Rollit pump family was developed to be simply operated and easily maintained. The family is known for its simple hose change in minutes. The pump consists of only a few components and only the hose comes into contact with the fluid.

The Rollit's range of hose materials allows a large range of liquids to be pumped.

The Rollit's PTFE rollers have near-zero friction on the hose surface. They generate no additional heat in the pumped liquid, an ideal combination for very shear sensitive products.

## **Simple connection design**


Flanges are retained with the minimum number of bolts and inserts push fit into the hose.

## **Self locating hose**

On the standard 2 bar hose, an extruded profile centrally locates the hose between the PTFE guides. On the hygienic and 4 bar pumps, the hose is located between pairs of guides.

## **Minimal tools**

With 2 x M8 bolts per flange only a single standard 13mm socket or spanner is needed to change the hose

- 
- **Simple hose change (no lubricant bath to drain)**
  - **Less components**
  - **Easy installation and maintenance**
  - **Ideal for many fluids**
  - **Low shear with no additional heat generation**



# SIMPLE HOSE CHANGE

The Verderflex Rollit hose pump delivers maximum performance for a lubricant bath free pump. It eliminates the risk of product or workplace contamination whilst balancing the requirements of discharge pressure with power consumption to minimise both running and installation costs. The innovative system connections reduce job changeover times to less than 3 minutes for a hose change in a variety of pump formats and configurations.

## **LOWER TORQUE > LOWER POWER CONSUMPTION > LOWER OPERATING COSTS**

The Rollit is ideal for use at the 2 bar or lower pressures associated with transfer applications (simply moving a product from A to B). This allows every Rollit to use either an extruded or moulded tube that lowers the torque requirements compared to a higher pressure peristaltic pump using a nylon re-enforced hose.

**LOWER TORQUE**  
▼  
**LOWER INSTALLED POWER**  
▼  
**LOWER EQUIPMENT RATINGS\***  
▼  
**LOWER INSTALLATION COSTS!**

*\* Cable, starters, overloads, possibly single phase power not 3 phase*



PRODUCT VIDEOS AT  
[WWW.VERDERLIQUIDS.COM](http://WWW.VERDERLIQUIDS.COM)

# CLEAN & HYGIENIC

The Rollit Hygienic series were developed to meet the stringent requirements of the most demanding users. The series uses a white food grade hose complying with both FDA CFR21 and EU 10/2011 (EC/1935) requirements.

Hygienic pumps have a range of industry specific connector options including DIN 11851 and Tri-Clamp standards.

Pumps can be supplied for fixed locations or with mobile base plates where the pump is shared between production lines. Twin head pumps can be supplied with offset rotors for near zero pulsation for processes such as ultra filtration.



- No lubricant bath
- No (cross) contamination
- Hygienic pump
- FDA, EU 10/2011 (EC/1935)





# RELIABLE HOSES

## DURABLE & LONG LIFE SPAN

The hose is the heart of any peristaltic pump and recognising this importance has resulted in the development of the Verderflex Rollit's hose range. The requirements for low pressure, dry running pumps impose different demands on each pump's hose compared to those for other Verderflex pumps. Specifically, hoses made from high performance, not reinforced elastomers can be used with low friction Teflon rollers to minimise heat generation and extend service lives and keep product heat transfer to an absolute minimum. By matching this technology with the pump's maximum working pressure the longest hose lives can be achieved whilst minimising torque requirements for low power consumption, reducing energy costs. A range of proven hose materials provide maximum mechanical strength, high abrasion resistance and food industry approvals.



	NR	CR	FN	VP
<b>Material</b>	Natural Rubber	Neoprene	Food Grade Natural Rubber	Verderprene
<b>Suitable for</b>	Slightly aggressive chemicals, highly abrasive sludges, inorganic liquids	Oily, greasy, organic liquids	Food	Food and pharmaceuticals, corrosive, diffusing Chemicals, inorganic liquids
<b>Colour</b>	Black	Black	Black	Cream
<b>Code</b>	Natural Rubber	N	F	
<b>Temperature</b>	60°C Continuous, 80°C short term	60°C Continuous, 80°C short term	60°C Continuous, 80°C short term	80°C Continuous, 95°C short term
<b>Maximum Pressure</b>	2 / 4 Bar	2 Bar	2 Bar	2 Bar
<b>Guide Profile on Hose</b>	2 Bar only	Yes	Yes	No
<b>FDA CFR 21</b>			Yes	Yes
<b>EC 10/2011 (EC/1935)</b>				Yes



*Single or Twin head*

- Single/Twin head
- Hygienic
- 2/4 bar models
- A huge variety of connections and options
- Different tubes



*Rollit hygienic version*

*2 and 4 bar operation*



FLEXIBLE  
**MANY POSSIBLE PUMP STYLES**

# FLEXIBLE MANY EXECUTIONS

All Verderflex Rollit pumps are versatile and have a huge flexibility to meet your process needs.

## **Twin headed pumps**

The Rollit T series lubricant bath free hose pumps are dual headed roller pumps, they have higher flow ratings and provide more stable flow with less pulsation.

## **Hygienic**

The Rollit hygienic version is designed for applications in the biotechnology, chemical, food, pharma and many other industries. It features a Verderprene hose complying to FDA CFR21 and EU 10/2011 (EC/1935) food standards and can be optionally supplied ATEX rated.

## **2 and 4 bar operation**

With dedicated 2 and 4 bar working pressure options, pumps can be optimally matched to their operating duty for the most efficient solution.

## **Light weight, compact and mobile**

Being purpose designed for low to medium pressures, the Rollit family maximises flow rates in the whilst minimising pump weights and footprints so compact, mobile pumps can be produced.

## **Extensive connection options**

The innovative hose connection supports a wide range of system connections including Hose Barbs, flanged, threaded, hygienic and Quick Connect Couplings.

## **Different tubes**

The Rollit's range of hose materials allows a large range of liquids to be pumped.





# OPTIONS & ACCESSORIES

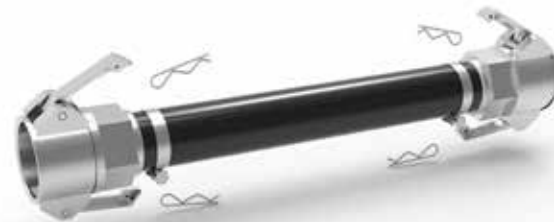
- Mobile base plate
- Extensive connection options
- Hose burst system
- Inverters & local pump controllers
- DIN and ANSI flanges
- Hygienic flanges
- Y Manifolds



4



5



# VERSATILE **OPTIONS**

## ❶ Mobile base plate

In many situations pumps are shared between production lines, transferring batches of product to the processing machines. For maximum equipment utilisation pumps can be supplied on mobile baseplates in carbon or stainless steel complete with miniature local pump controllers, flying power leads and quick connect hoses and lances.

## ❷ Extensive connection options

The innovative hose connection allows easy customisation of the system connections including

- Hose Barbs in Polypropylene or 316 Stainless Steel
- BSP & NPT Threads
- Quick Connect Camlock Couplings
- DIN & ANSI Flanges
- Hygienic flanges : DIN 11851 & Tri-Clamp
- Y Manifolds

## ❸ Hose Burst System

A range of sensors can detect product presence inside the pump housing. Such might happen when a hose fails. The hose burst system can switch off the pump via an additional relay.

## ❹ Inverters and Local Pump Controllers

Most pumps use three-phase motors and a frequency converter or inverter. This allows easy flow rate adjustment. Less complex local pump controllers with simple stop-start-reverse switches are regularly supplied on mobile pump units.

## ❺ Connection Hoses

Flexible hoses are recommended for both the suction and discharge connections and are available in a range of lengths, connection options and materials.

❶



❷



❸



# ROLLIT SERIES

## TECHNOLOGY ON THE SPOT

### Single headed pumps

The standard for the main industrial applications is the Verderflex Rollit single headed pump.



Model	RL10	RL15	RL25	RL35	RL50
Maximum flow rate (l/h)	140	500	2200	6000	12500
Maximum speed (rpm)	165	165	165	165	165
Hose ID (mm)	10	15	25	35	50
Hose material	NR, CR, FN	NR, CR, FN	NR, CR, FN	NR, CR, FN	NR, CR, FN
Maximum pressure (bar)	2	2	2	2	2
Suction lift (mwc)	7	7	7	7	7
Max. motor power (kW)	0,37	0,37	0,37	1,5	2,2
Weight with drive (kg)	30	35,5	43,5	82	108
FDA CFR21	FN	FN	FN	FN	FN



### Twin headed pumps

The Rollit T series lubricant bath free hose pumps are dual headed roller pumps, they have higher flow ratings and provide more stable flow with less pulsation. Shear sensitive and gentle pumping (max pressure 2 bar).



Model	RL10T	RL15T	RL25T	RL35T	RL50T
Maximum flow rate (l/h)	250	950	4400	11500	24500
Maximum speed (rpm)	165	165	165	165	165
Hose ID (mm)	10	15	25	35	50
Hose material	NR, CR, FN	NR, CR, FN	NR, CR, FN	NR, CR, FN	NR, CR, FN
Maximum pressure (bar)	2	2	2	2	2
Suction lift (mwc)	7	7	7	7	7
Max Motor Power (kW)	0,37	0,55	1,1	3	4
Weight with drive (kg)	35	55	74	123	162
FDA CFR21	FN	FN	FN	FN	FN

# ROLLIT SERIES

## TECHNOLOGY ON THE SPOT

### High pressure pumps

The higher pressure version Rollit P has a maximum operating pressure of 4 bar.



Model	RL15P	RL15TP	RL25P	RL25TP	RL35P	RL35TP
Maximum flow rate (l/h)	500	950	2500	5000	5500	10000
Maximum speed (rpm)	165	165	165	165	165	165
Hose ID (mm)	15	15	25	25	35	35
Hose material	NR	NR	NR	NR	NR	NR
Maximum pressure (bar)	4	4	4	4	4	4
Suction lift (mwc)	8	8	8	8	8	8
Max motor power (kW)	0,37	0,55	0,55	1,5	1,5	3
Weight with drive (kg)	35,5	55	43,5	74	82	123
FDA CFR21	-	-	-	-	-	-

### Hygienic pumps

The Verderflex Rollit hygienic pump series lubrication bath free hose pumps is designed for applications in the biotechnology, chemical, food, pharma and many other industries.



Model	RL19H	RL19TH	RL30H	RL30TH	RL35H	RL35TH
Maximum flow rate (l/h)	500	851	2683	4534	3816	6954
Maximum speed (rpm)	165	165	165	165	165	165
Hose ID (mm)	19	19	30	30	30	30
Hose material	VP	VP	VP	VP	VP	VP
Maximum pressure (bar)	2	2	2	2	2	2
Suction lift (mwc)	7	7	7	7	7	7
Max motor power (kW)	0,37	0,55	0,37	1,1	1,5	3
Weight with drive (kg)	35,5	55	43,5	62,7	82	123
FDA CFR21	✓	✓	✓	✓	✓	✓
EC 10/2011	✓	✓	✓	✓	✓	✓



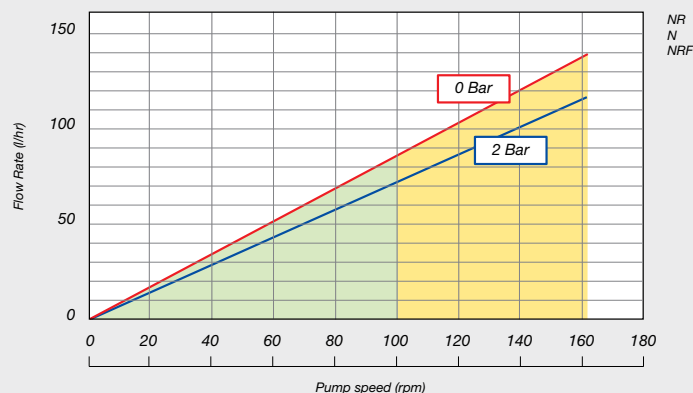
# ROLLIT SERIES – FLOW RATES AT A GLANCE

## Instructions

- 1 Select the required flow rate at the vertical axis (Y axis).
- 2 From this point go across until you reach the color line that corresponds to your calculated pressure.
- 3 At this point on the horizontal (X) axis underneath, you can see the required pump speed.

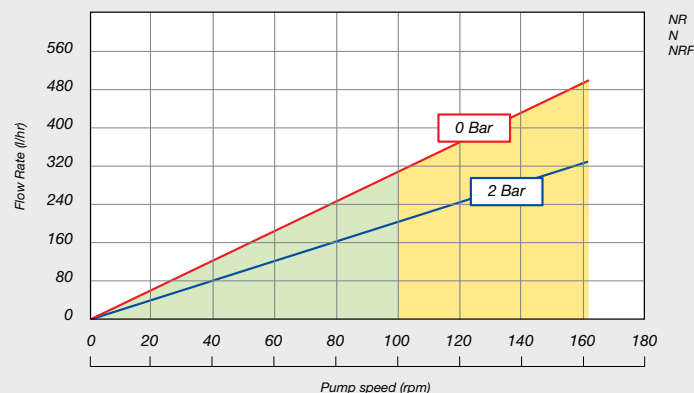
### RL10

0 Bar 0.014 l/rev  
2 Bar 0.012 l/rev



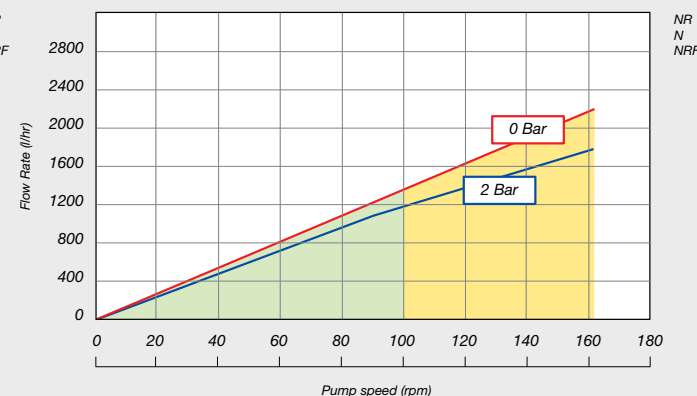
### RL15

0 Bar 0.052 l/rev  
2 Bar 0.033 l/rev



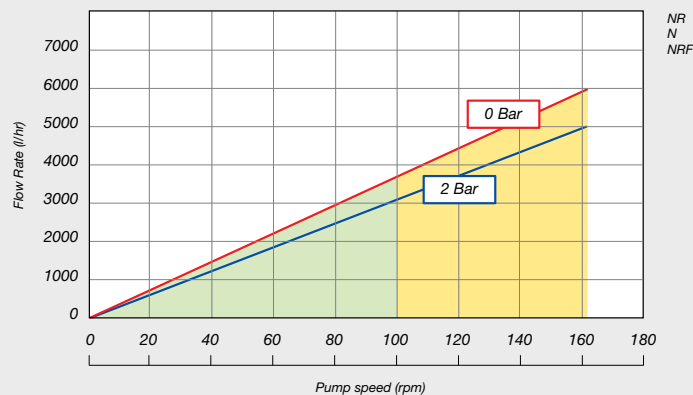
### RL25

0 Bar 0.222 l/rev  
2 Bar 0.178 l/rev



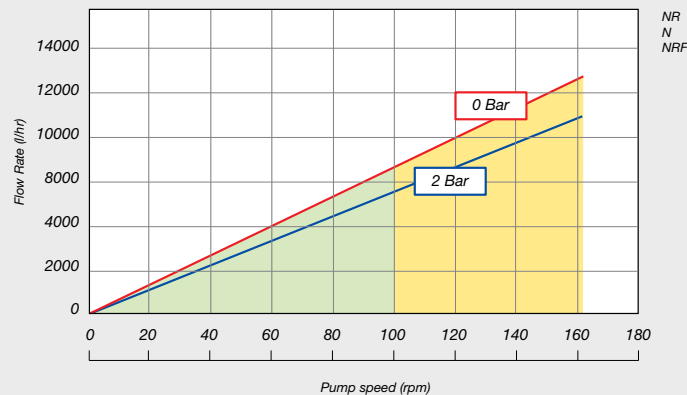
### RL35

0 Bar 0.625 l/rev  
2 Bar 0.521 l/rev



### RL50

0 Bar 1.250 l/rev  
2 Bar 1.042 l/rev

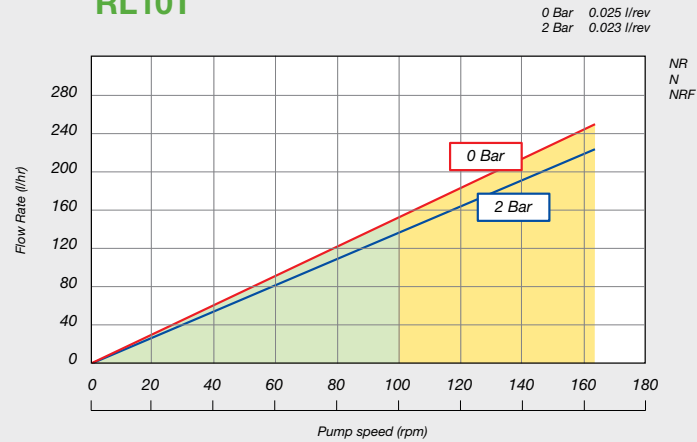


Continuous duty (SP) Standard Pressure Rotor

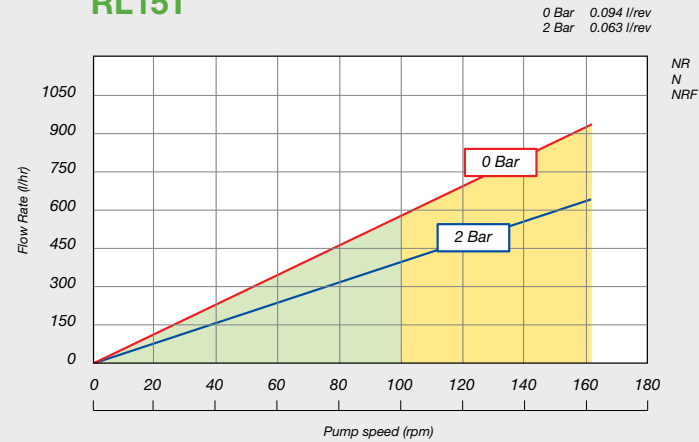
Intermittent use  
Max. 1 h running  
Min. 1 h stopped



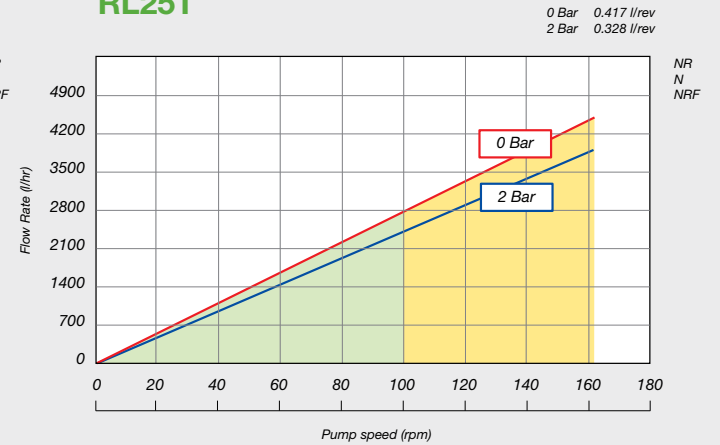
## RL10T



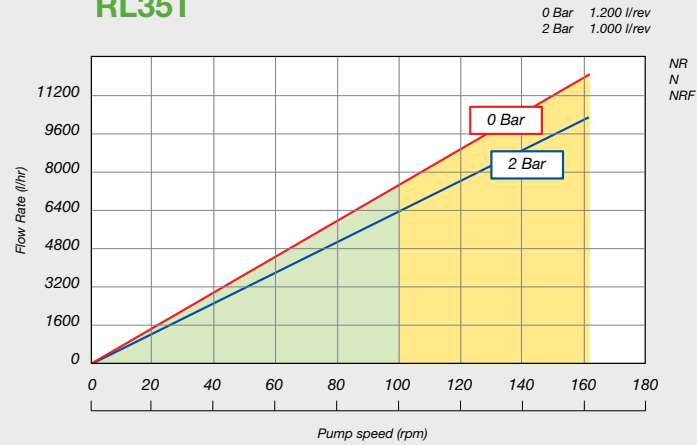
## RL15T



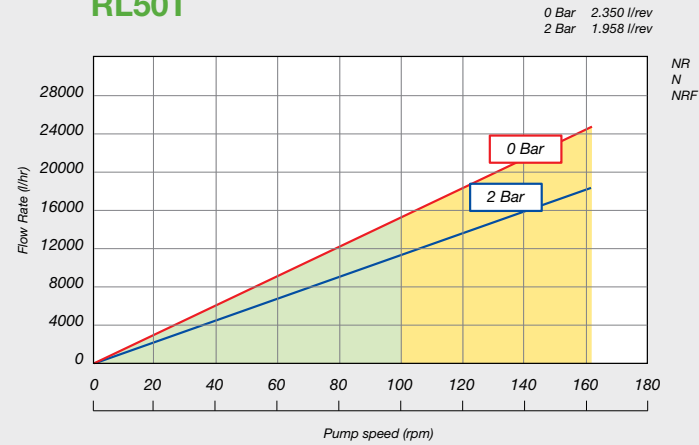
## RL25T



## RL35T



## RL50T



Continuous duty  
(SP) Standard  
Pressure Rotor

Intermittent use  
Max. 1 h running  
Min. 1 h stopped



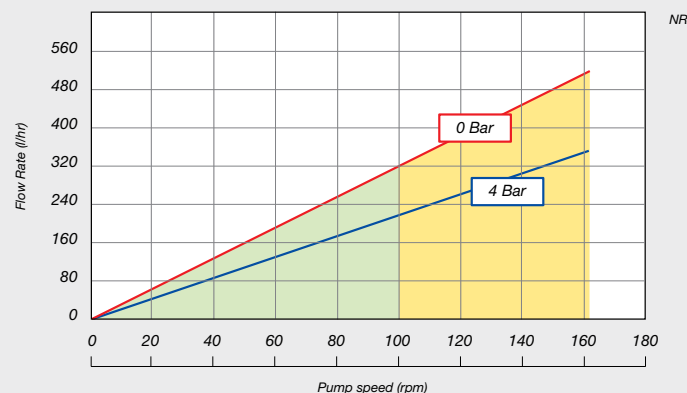
# ROLLIT SERIES – FLOW RATES AT A GLANCE

## Instructions

- 1 Select the required flow rate at the vertical axis (Y axis).
- 2 From this point go across until you reach the color line that corresponds to your calculated pressure.
- 3 At this point on the horizontal (X) axis underneath, you can see the required pump speed.

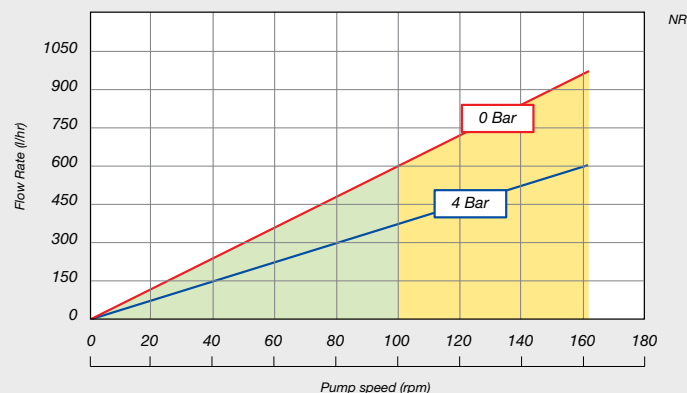
### RL15P

0 Bar 0.052 l/rev  
4 Bar 0.035 l/rev



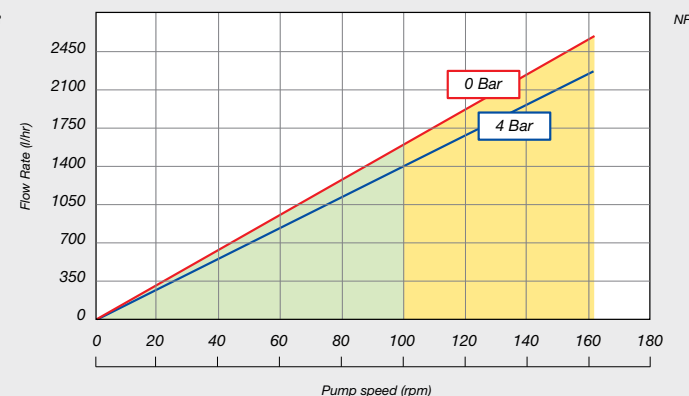
### RL15TP

0 Bar 0.098 l/rev  
4 Bar 0.059 l/rev



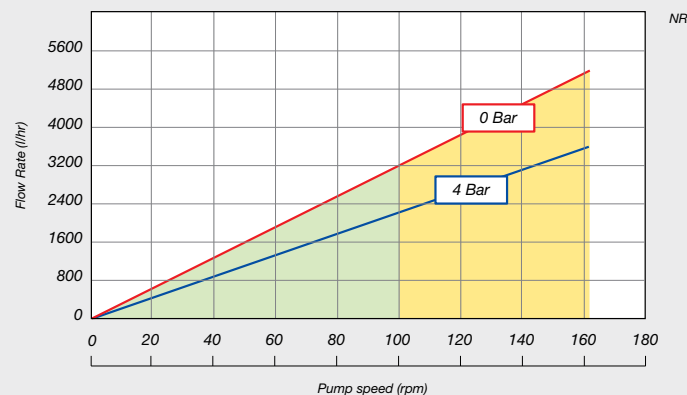
### RL25P

0 Bar 0.255 l/rev  
4 Bar 0.227 l/rev



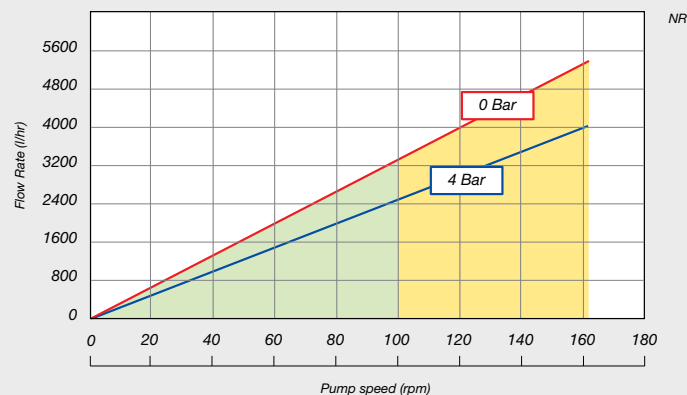
### RL25TP

0 Bar 0.500 l/rev  
4 Bar 0.354 l/rev



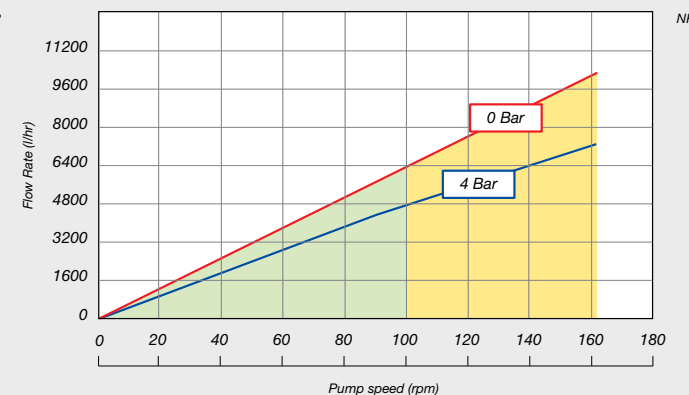
### RL35P

0 Bar 0.556 l/rev  
4 Bar 0.400 l/rev



### RL35TP

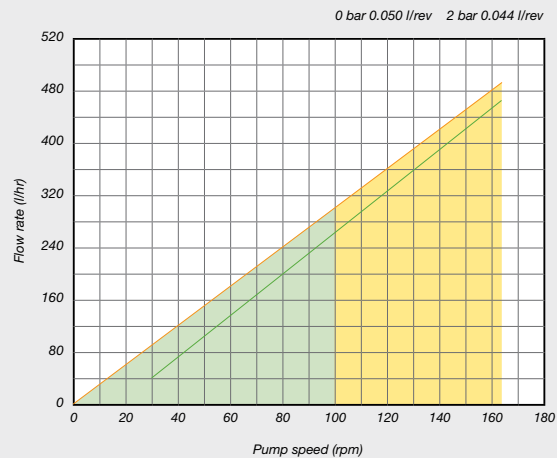
0 Bar 1.000 l/rev  
4 Bar 0.711 l/rev



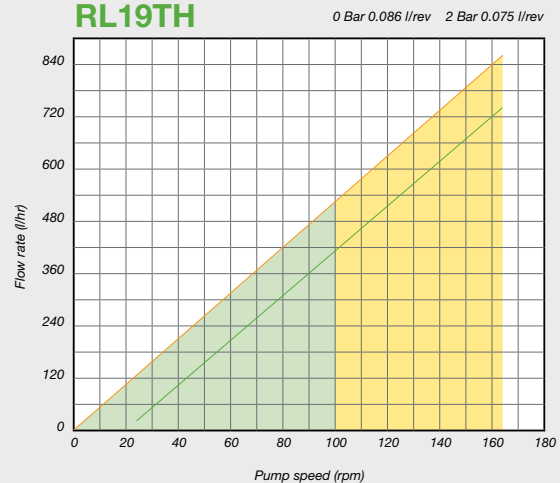
Continuous duty (SP) Standard Pressure Rotor

Intermittent use Max. 1 h running Min. 1 h stopped

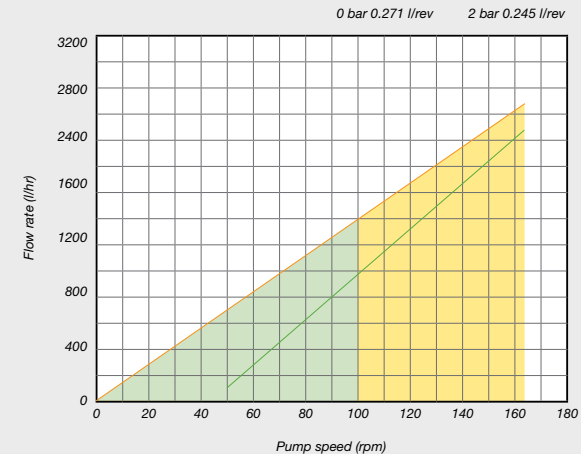
## RL19H



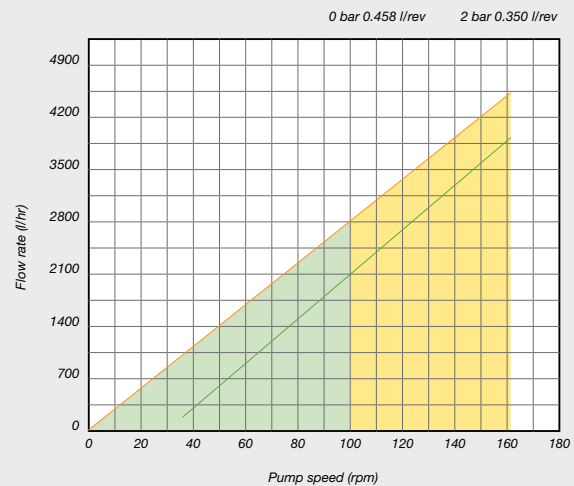
## RL19TH



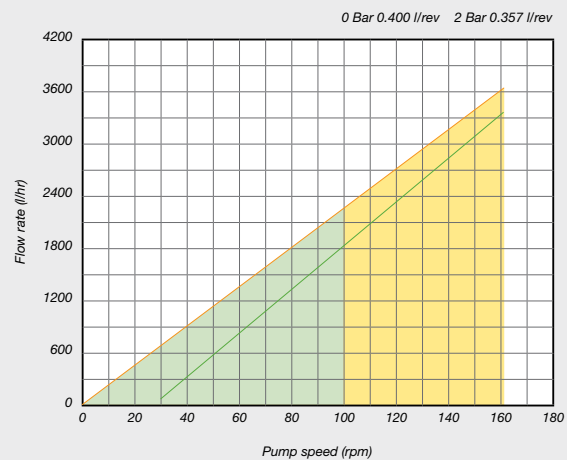
## RL30H



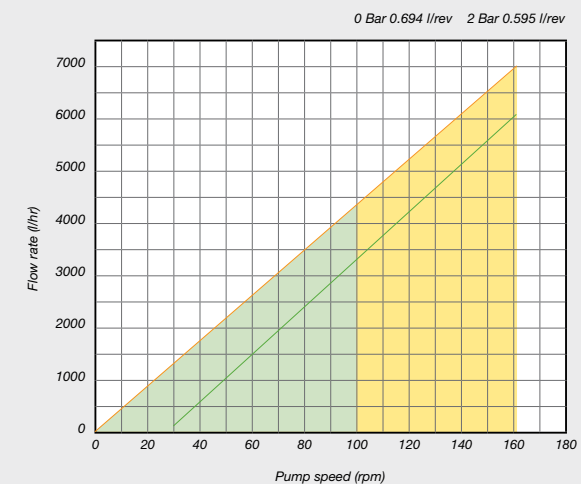
## RL30TH



## RL35H



## RL35TH



Continuous duty  
(SP) Standard  
Pressure Rotor
  Intermittent use  
Max. 1 h running  
Min. 1 h stopped
  0 bar
  2 bar



# THE VERDER GROUP

*The story of the Verder Group began in 1959 when André Verder established a business in supplying pumps. André listened to his customer's needs and provided well-made and innovative product technology that worked for their process.*

The Verder Group experienced rapid growth with its customer-led approach. In the subsequent 30 years, André and his son Andries took the Verder Group worldwide to the USA, Japan, China, India and South Africa with a far-reaching network of distributors.

Today, Verder finds itself as an established supplier to many of the world's blue chip organizations for fluid handling and sample preparation of solids as well as analyzing technologies.

- Family owned
- > 800 Employees
- Verder pumps sold in > 50 countries
- 11 Verder house brands
- Verder affiliated offices in 27 countries

## **Verder Liquids**

The Verder Group comprises two divisions, Verder Liquids and Verder Scientific.

The Verder Liquids division manufactures pumps, mixers and systems.

These pumps are distributed through 27 Verder offices, completed with a worldwide network of local distributors. Verder is offering local presence, local service and fast delivery times.

As a manufacturer, Verder is able to maintain the highest standards for the design, build and testing procedures, which reduces risk and costs to the customer. As a manufacturer, Verder is also able to translate requirements from the market into new products.

Our staff are skilled to know not only about pumps but also about your specific application. We listen to you, our customer, and we are experienced in finding the best pump solution for every application!

**Verderflex®** is a registered trademark of the Verder Group.







# VERDER

passion for pumps

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**KGO**  
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*"The Benefit of Experience"*

Engineered pump  
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