

# Laing heating pumps

... reliable pumps for new and renovated buildings  
with capacities up to 4m<sup>3</sup>/h



- Blockage-resistant and maintenance-free wet running pump
- Large bearing ball guarantees long service life
- No start-up problems at the beginning of the season
- Silent operation during entire pump service life
- Fully encapsulated motor as standard
- Reliably protected against corrosion
- Simple cost-efficient rotor and motor replacement

**LAING**

einfach · gut · aus prinzip

## Laing heating pumps

### Application

Laing heating pumps are used to circulate hot water in central heating systems with capacities of up to 4 m<sup>3</sup>/h. Installed on the feedside behind the mixing valve, they transport the heated water from the boiler to the radiators or the underfloor or wall heaters.

Since the connection sizes are standardised, the installation of a Laing heating pump presents no problems, even in systems in which third party pumps have to be replaced. Other areas of use: Industrial circulation systems and cold water systems.

### Design

Laing pumps operate according to the spherical motor principle. The only moving part in the pump is a spherically shaped rotor/impeller unit supported by an ultra-hard, low-wear ceramic ball. This bearing ball was significantly increased in size in the new generation of Laing heating pumps which results in exceptional service life and reliability even under difficult operating conditions. This type of bearing reliably eliminates bearing play. This means that the pump continues to work silently, even after years of use; one advantage which conventional pumps cannot offer, as they become increasingly louder due to their cylindrical bearing.

Laing heating pumps generally do not require maintenance. The rotor, which is magnetically held in place, automatically avoids smaller dirt particles and cannot be blocked by them. The pumps do not have to be "run in" at the beginning of a heating period. Unblocking devices like those in other heating pumps are not necessary. As the rotor can be replaced easily, it is seldom necessary to replace the entire pump or motor when the service life expires.

Laing heating pumps are simple to install. The pump housing can be integrated in piping insulation particularly economically, as the special design means that approx. 70% of the motor heat is dissipated to the transport medium. The stators in LAING heating pumps are completely encapsulated by default. This reliably prevents corrosion problems – even when used with cold water.

In the new generation of Laing heating pumps, all moving pump parts are corrosion-resistant. The primary use of stainless steel in the pump housing ensures that no corrosion damage which could lead to blockage occurs. The integrated power switch facilitates the adjustment of the pump capacity to the heating system.

### Model S5-36/362 G



### Technical data

Motor design:	Shaftless spherical motor
Max. system pressure:	10 bar
Electrical connection:	230 V, 50 Hz *
System temperature:	- 10°C to + 110°C (non-freezing)
Protection class / Insulation:	IP 42 / F
Acceptable media:	Heating circuit water (VDI 2035) water/glycole-mixtures** Other medias on request

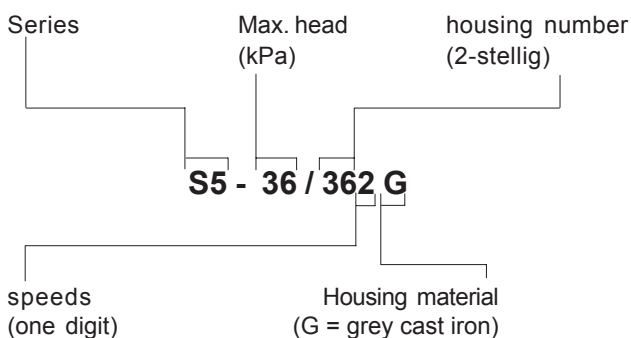
### Max. power consumption:

S4:	65 W / 0,3 A
S5:	100 W / 0,5 A (switch setting II) 80 W / 0,47 A (switch setting I)
S6:	130 W / 0,6 A (switch setting II) 115 W / 0,55 A (switch setting I)

\* Other connected load on request


\*\*check pump performance for mixtures of 20% or more glycole

### Model designation




## Laing heating pumps


### Product range model S4

		1 1/2" male for 1" union fitting	2" male for 1 1/4" union fitting	Pump housing length		Product category
Model	Part No.	RG 1" *	RG 1 1/4" *	180 mm	130 mm	
S4-36/360 G	20 00 221	●		●		C
S4-36/370 G	20 00 222		●	●		C
S4-36/350 G	20 00 220	●			●	C

### Product range model S5


		1 1/2" male for 1" union fitting	2" male for 1 1/4" union fitting	Pump housing length		Product category
Model	Part No.	RG 1" *	RG 1 1/4" *	180 mm	130 mm	
S5-36/362 G	20 00 301	●		●		C
S5-36/372 G	20 00 302		●	●		C
S5-36/352 G	20 00 300	●			●	C
S5-58/362 G	20 00 401	●		●		C
S5-58/372 G	20 00 402		●	●		C
S5-58/352 G	20 00 400	●			●	C

### Product range model S6

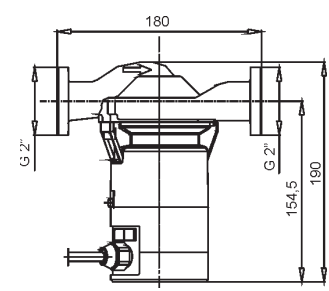
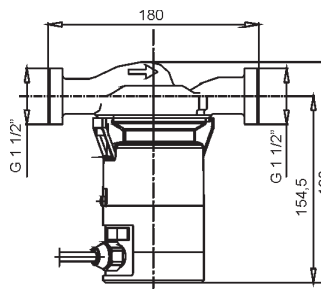
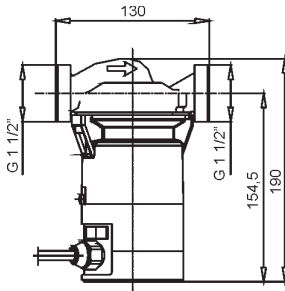
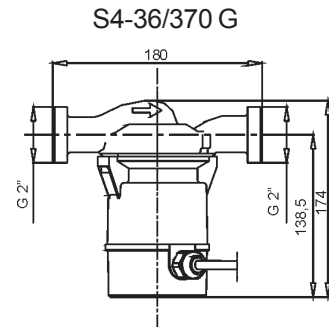
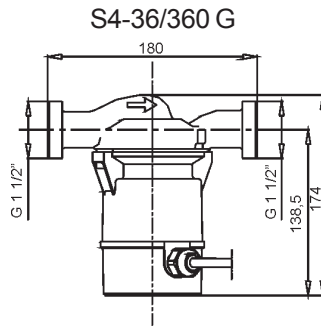
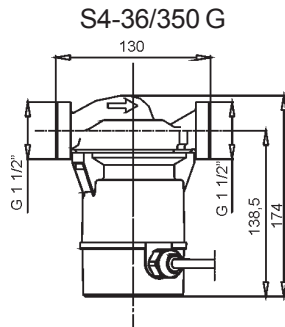
		1 1/2" male for 1" union fitting	2" male for 1 1/4" union fitting	Pump housing length		Product category
Model	Part No.	RG 1" *	RG 1 1/4" *	180 mm	130 mm	
S6-36/362 G	20 00 501	●		●		C
S6-36/372 G	20 00 502		●	●		C
S6-36/352 G	20 00 500	●			●	C
S6-61/362 G	20 00 601	●		●		C
S6-61/372 G	20 00 602		●	●		C
S6-61/352 G	20 00 600	●			●	C

\*Union connections are not included in pump deliveries - please order separately.

### Accessories, components and spare parts for heating circulators

	Model	Part No.	Description	Product category
	RG 1"	95 00 015	2 pieces 1" half union grey cast iron (1 1/2" female x 1" female)	C
	RG 1 1/4"	95 00 016	2 pieces 1 1/4" half union grey cast iron (2" female x 1 1/4" female)	C
	F17	95 00 797	Rotor for series S4 - 36 / 350 + 360 + 370 G, including gasket	C
	F15	95 00 795	Rotor for series S5 - 36 / 352 + 362 + 372 G, including gasket	C
	F05	95 00 785	Rotor for series S5 - 58 / 352 + 362 + 372 G, including gasket	C
	F08	95 00 788	Rotor for series S6 - 36 / 352 + 362 + 372 G, including gasket	C
	F09	95 00 789	Rotor for series S6 - 61 / 352 + 362 + 372 G, including gasket	C

## Dimensional drawings

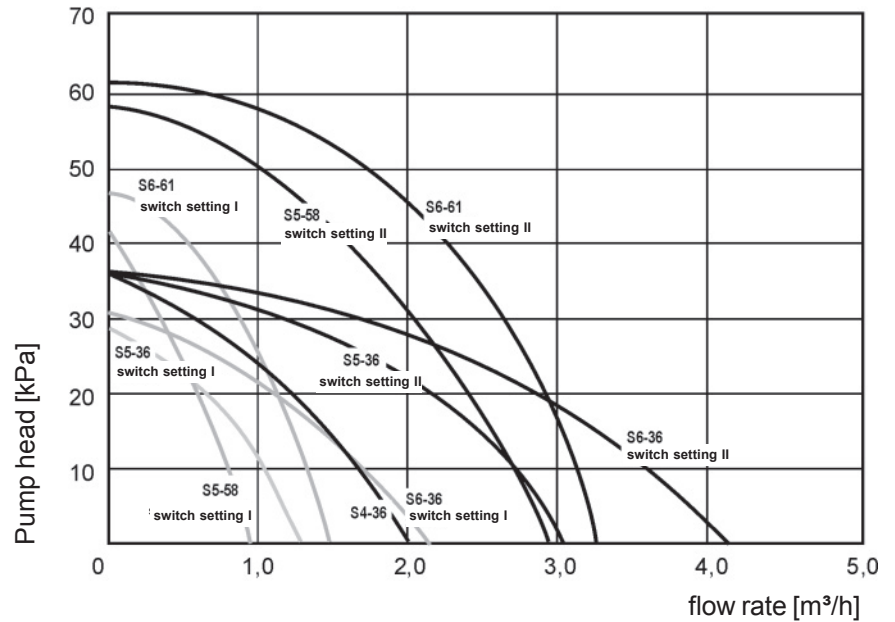


S5-36/352 G, S5-58/352 G  
S6-36/352 G, S6-61/352 G

S5-36/362 G, S5-58/362 G  
S6-36/362 G, S6-61/362 G

S5-36/372 G, S5-58/372 G  
S6-36/372 G, S6-61/372 G

## Pump curves



## About us

Since the 1950s we at Laing have worked in the areas of research, development and production of pumps and heating products. More than 1000 patents worldwide resulted from this work. The original R&D institute located in Southern Germany has over the years evolved into an international company with additional locations in the US, Japan and Hungary and with more than 400 employees. Today, our program consists of:

- Pumps (Shaftless spherical motor pumps)
- Floor heating system connection
- Special products
- Heating controls
- Electrical heaters

We are a flexible and competent partner in the area of pumping and heating.  
We invite you to try our high quality, economic products.

# LAING

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