

HEAVY DUTY SLURRY PUMPS

MINERALS

Application

BEHRIZ
Save Energy, Save Life



Behriz Pump Saman

■ <http://www.Behrizpump.com>

■ [@Behrizpumpsaman](https://www.instagram.com/Behrizpumpsaman)

■ [\(+98\) 935 6789 000](tel:+989356789000)

This brochure is a general presentation. It does not provide any warranty or guarantee of any kind. All information herein is subject to change without notice.

BEHRIZ
MINERALS

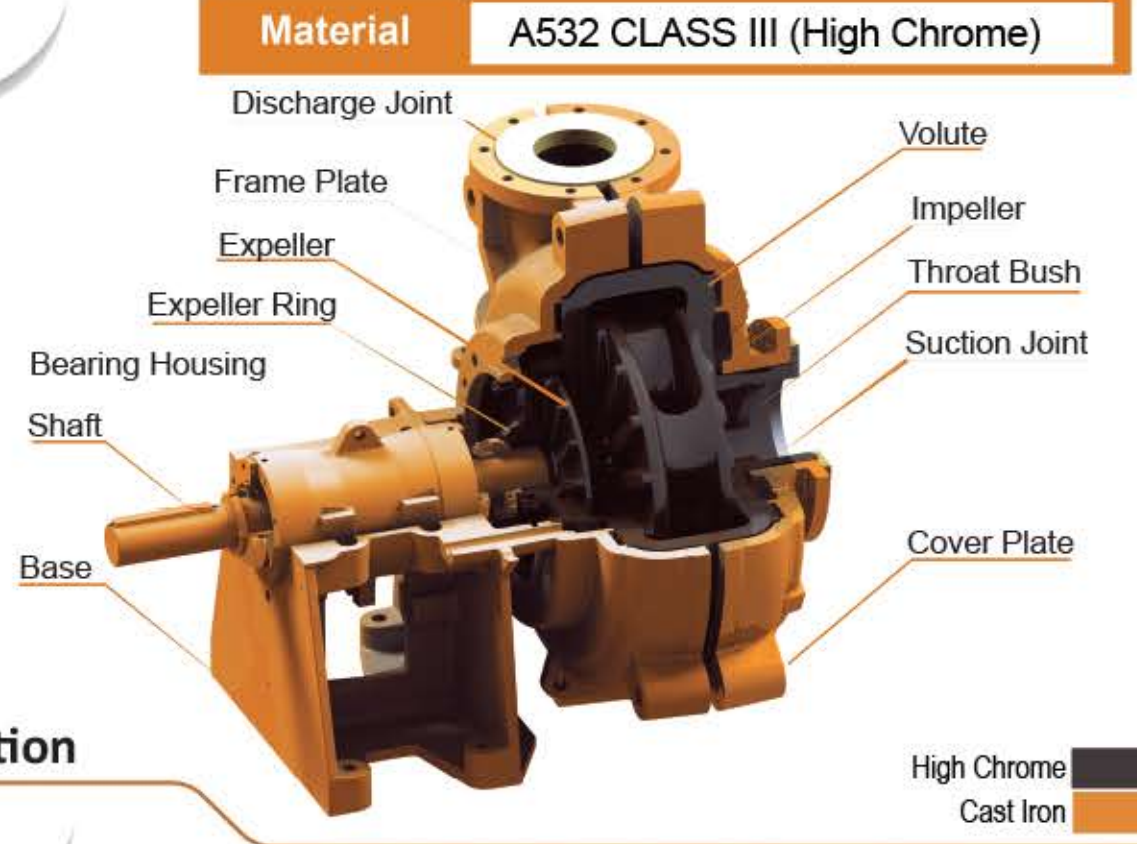
SL/SI (Double/Single Casing) Type Slurry Transportation, Cyclone Feeds,

Heavy Duty Excellent Wear Life Slurry Pumps Regrind, Flotation and Tailings Application

Construction

SL

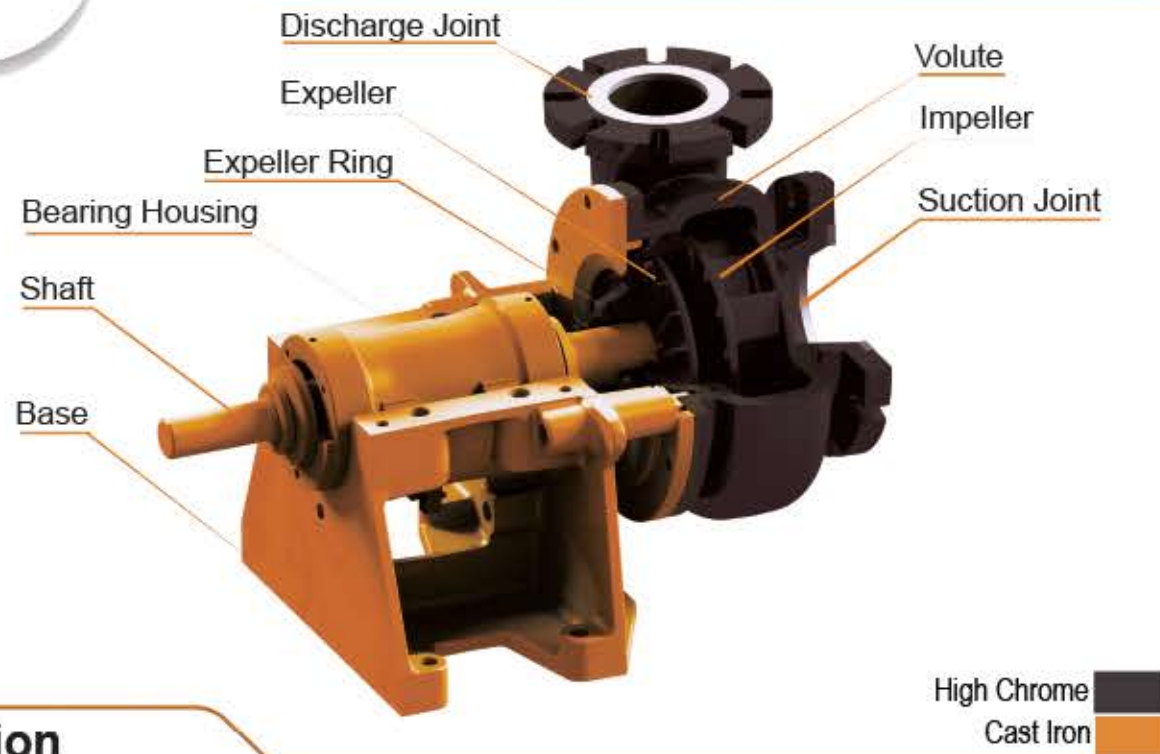
Double Casing



Construction

SI

Single Casing



Application

Slurry Transportation

Mining and Industrial Processes

Designed to offer high performance, reliability and low total cost of ownership



Double Casing



Single Casing

Specification

Materials

Major Parts	Material
Casing (volute)	A 532 CLASS III (High Chrome)
Impeller	A 532 CLASS III (High Chrome)
Expeller	A 532 CLASS III (High Chrome)
Expeller Ring	A 532 CLASS III (High Chrome)
Shaft	ASTM A 420
Throat Bush	A 532 CLASS III (High Chrome)

Specification

Major Parts	Description
Liquid	Slurry, Cyclone Feed, Tailing application
Pressure	1 to 12 (bar)
Flow rate	5 to 400 (l/s)
Flange Size	1-1.5 to 12/10 (inch)
Material	High Chrome, Duplex
Connecting to Drive	Direct Coupling, Pulley & Belt

Selection

Behriz Pump SL / SI Type Slurry Pumps, Quick Selection Chart

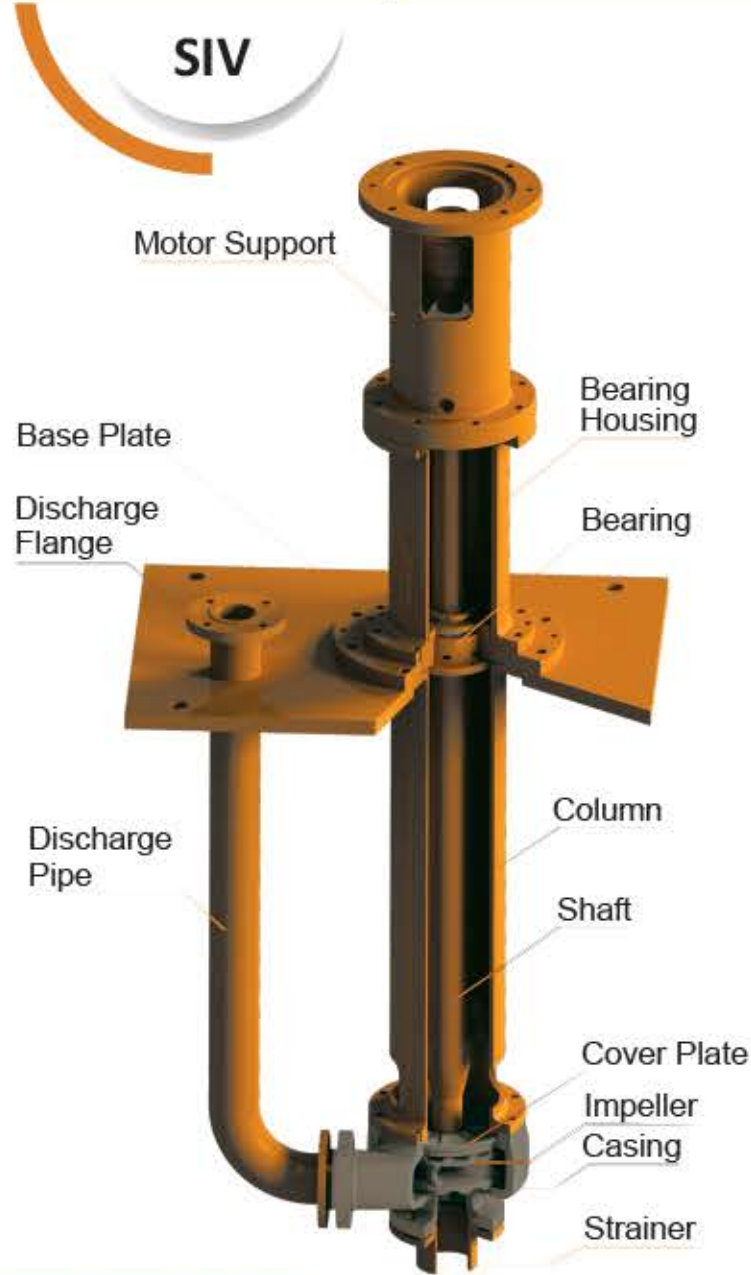


Size	2" - 12"
Capacity	5 - 400 L/s
Total Head	5 - 90 m
Efficiency	70 - 80%
Speed	500 - 3000 rpm
Material	High Chr. - Duplex

SIV (Vertical Cantilever Type Pump)

Slurry Transportation, Tailings Application

Construction



Vertical Single Casing Slurry Pump

Behriz Pump heavy duty sump pumps are available in various standard lengths to suit common sump depths, for very deep sumps or where high shaft speeds limit the length of the pump, a suction extension pipe can be fitted to the bottom inlet to extend the depth of the pump by up to 2 metres.

Shaft

The robust cantilever shaft avoids the need for lower submerged bearings which are often the source of premature bearing failure.

Bearing

Heavy duty roller bearings are used. The bearing assembly is grease lubricated and sealed by labyrinths and V-seals. Both bearings, drive and non-drive end bearings are taper roller types.

Impeller

Wear resistant impellers are designed to produce an optimum balance between wear life and lifetime efficiency. Correct design ensures maximum wear life with a minimum total energy cost over the full service life of the pump.

Casing

Use of single casing volute ensure ease of maintenance. This design also reduces the weight and price of the pump.

Features

Application

- Chemical process
- Heavy minerals
- Paper and pulp
- Mill discharge
- Sugar beet
- Slag granulation
- Bottom boiler and fly ash
- Cyclone feed
- Power utilities

Motor Installation Setting

1 Horizontal Setting



2 Direct Coupling Setting



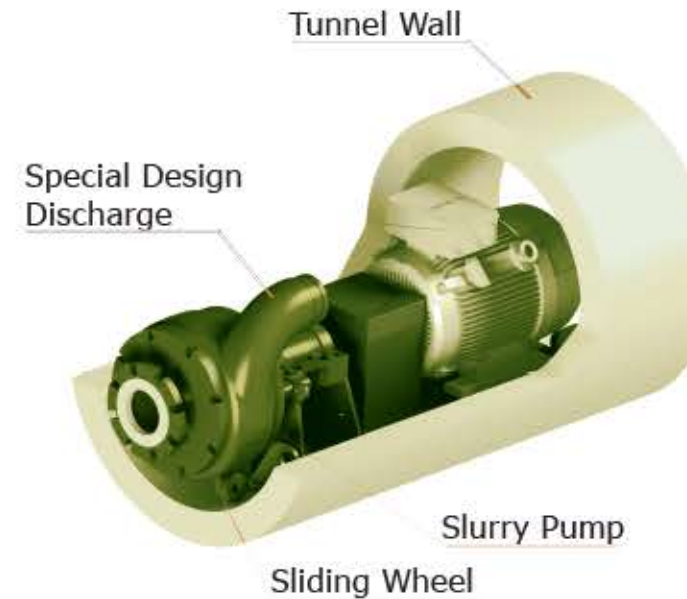
3 Vertical Setting



Special Design for Special Condition

SIT (Where Space is Limited), Lock Seal (Where Suction Pressure is High)

SIT Slurry Pump



Special Design for TBN Application (Tunnel Boring Machine)

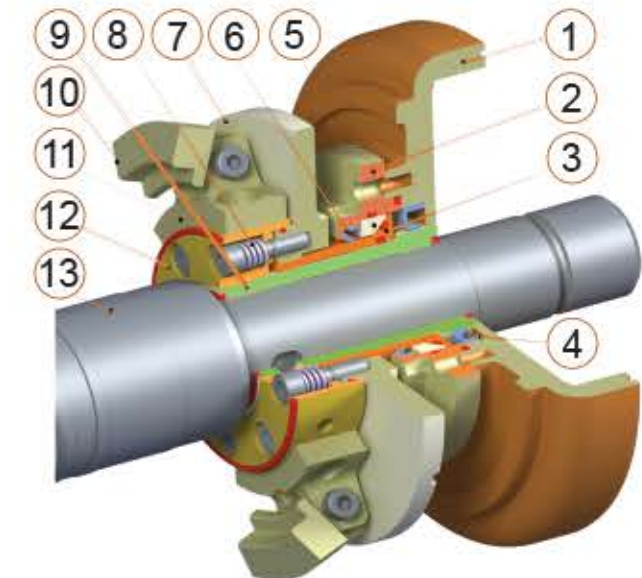
SIT type slurry pumps are specially designed in variable sizes to fit in limited tunnel diameter, resist against wear and discharge slurry medium out of the tunnel.



DRY LOCK STATIC SEAL

The Dry Lock seals combined with the dynamic expeller can be used in cases where the suction pressure is high. Upon start up, centrifugal forces act upon governor weights to open the seal faces and preclude any seal drag and wear. At shut down, isolated springs force the seal faces to close prior to the transition of dynamic sealing to static. Also, a flush port is available to clear any caking materials.

Part No.	Part Name
1	Expeller Ring
2	Stationary Seal Carrier
3	Rotary Seal 01
4	Sleeve Lip Seal
5	Seal Face
6	Rotary Seal Lip Seal
7	Rotary Seal 02
8	Seal Spring
9	Shaft Sleeve
10	Governor Weight
11	Governor
12	Governor Carrier
13	Shaft



General Dimensions, Performance

Slurry Transportation, Cyclone Feeds,

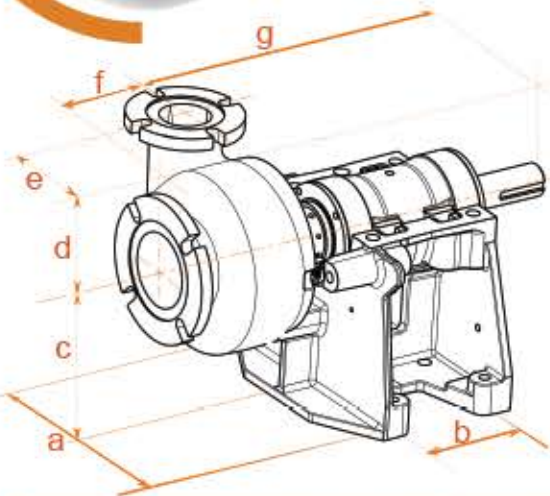
Curves and Flanges Specification

Regrind, Flotation and Tailings Application

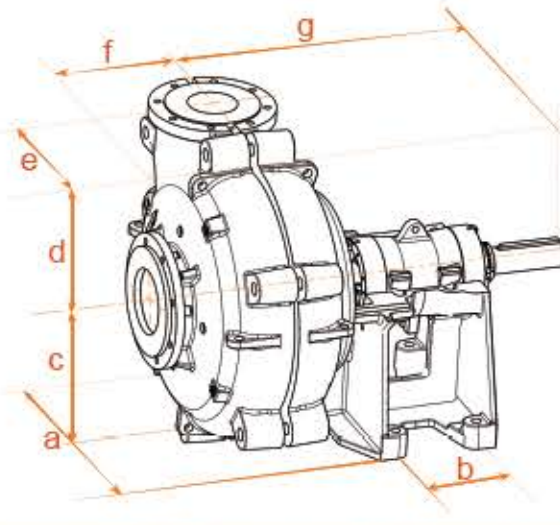
Specification

Dimension

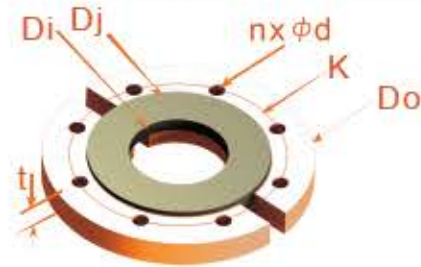
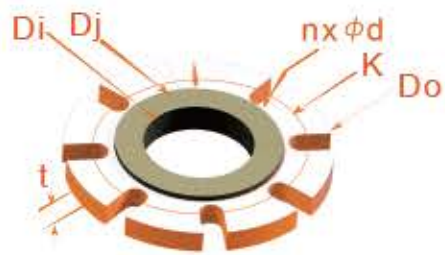
Model:SI



Model:SL

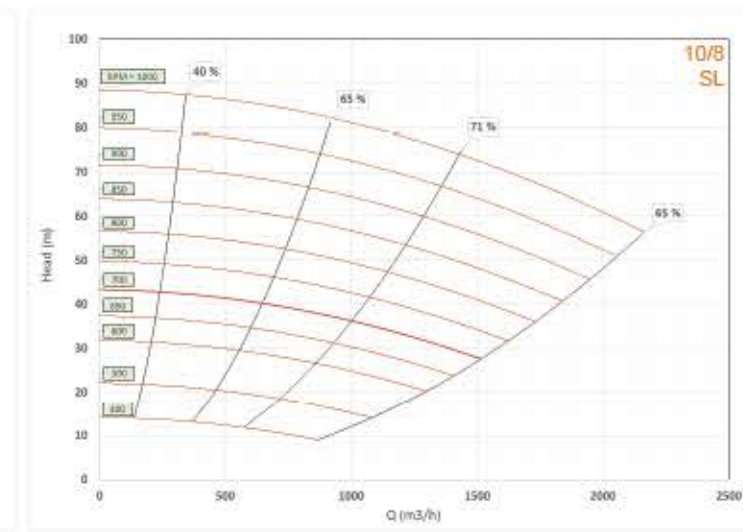
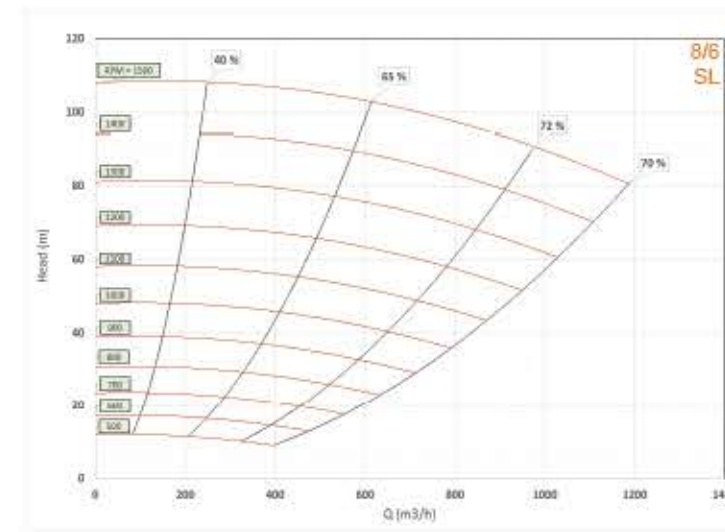
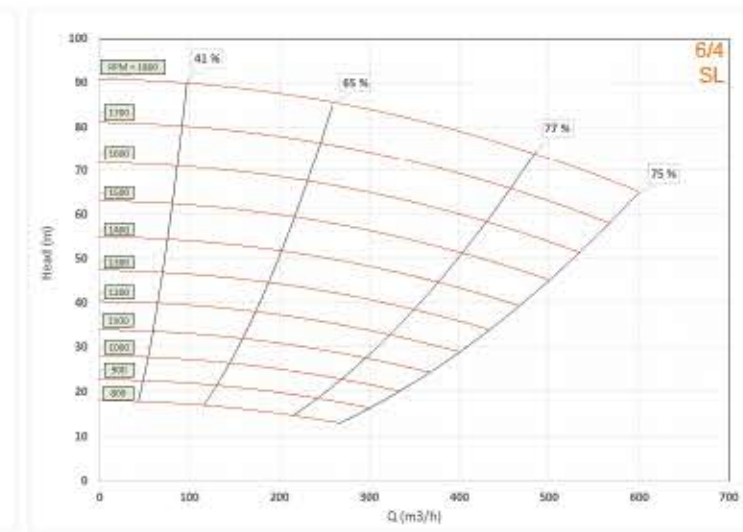
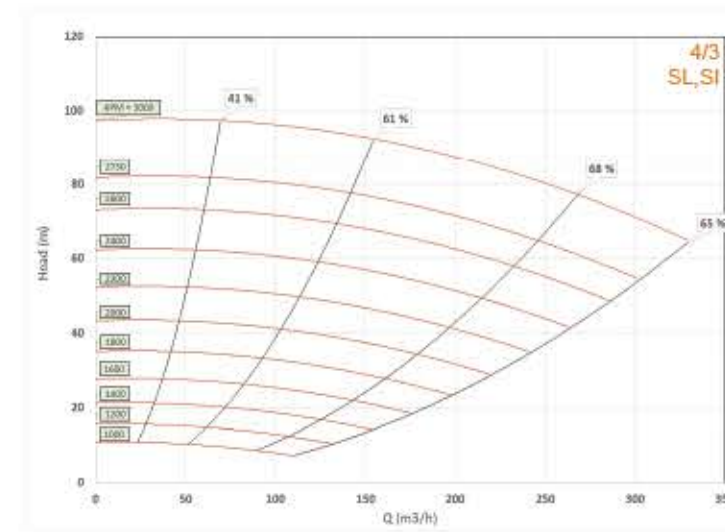
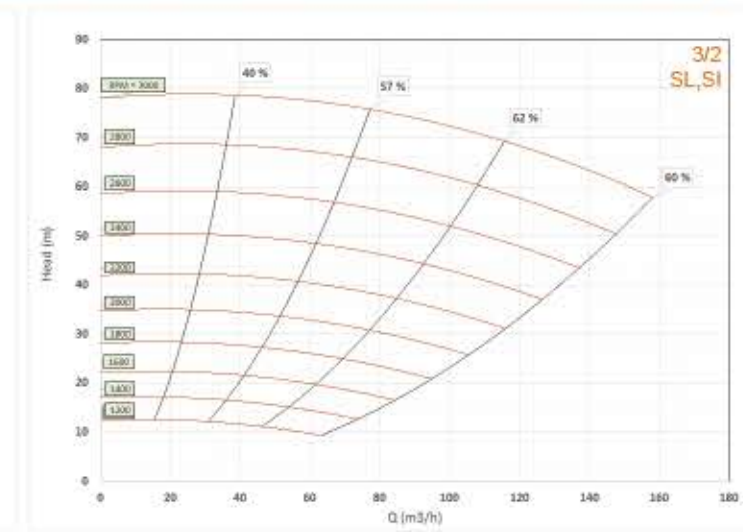
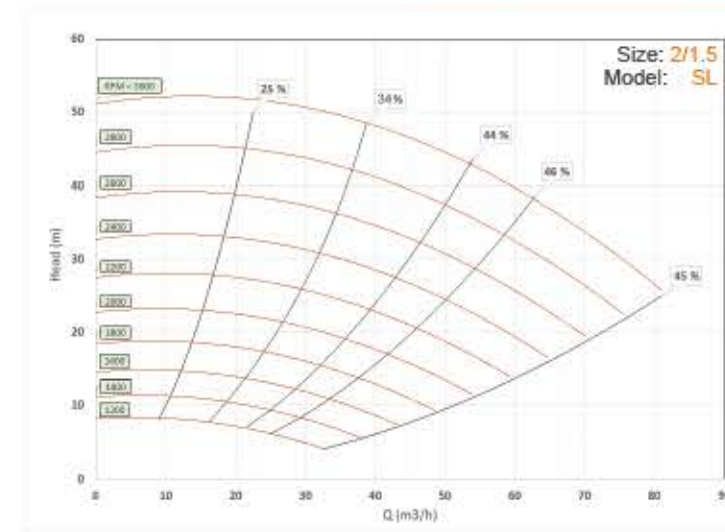


Pump	a(mm)	b(mm)	c(mm)	d(mm)	e(mm)	f(mm)	g(mm)	Weight(kg)
SL- 2/1.5	270	130	180	178	118	120	475	125
SL- 3/2	360	175	253	210	140	155	530	190
SL- 4/3	360	175	253	262	150	188	550	290
SL- 6/4	432	212	330	330	240	223	670	670
SL- 8/6	548	257	455	465	320	308	1003	1600
SI - 3/2	409	175	200	153	140	134	594	175
SI - 4/3	409	175	235	253	150	150	633	240



Pump		Do(mm)	Di(mm)	K(mm)	Dj (mm)	d(mm)	n	t(mm)
SL- 2/1.5	Suction	185	50	146	115	19	4	22
	Discharge	173	37	128	94	16	4	18
SL- 3/2	Suction	220	76	180	140	19	4	26
	Discharge	185	50	145	120	20	4	22
SL- 4/3	Suction	288	100	235	203	22	4	25
	Discharge	231	76	190	154	22	4	24
SL- 6/4	Suction	338	150	290	250	22	4	28
	Discharge	284	100	239	206	22	4	28
SL- 8/6	Suction	406	200	355	330	22	8	27
	Discharge	368	150	325	285	22	8	38
SI - 3/2	Suction	220	75	180	150	20	4	26
	Discharge	185	50	145	115	20	4	25
SI - 4/3	Suction	290	100	230	195	26	4	25
	Discharge	230	75	186	150	26	4	25

Performances



Curve shows approximate performance for **CLEAR WATER** (in accordance with pump testing ISO 2548 class c). For media other than water, corrections must be made for density, viscosity and/or the presence and effects of solids.