

SHELL AND TUBE TYPE HEAT EXCHANGER

# SL/SLR Series

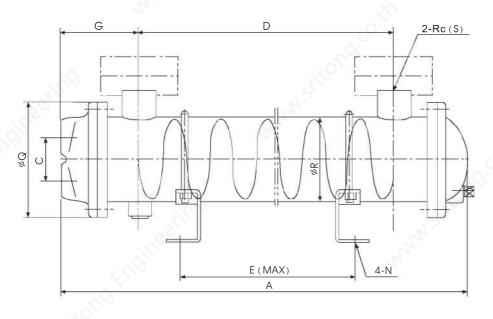


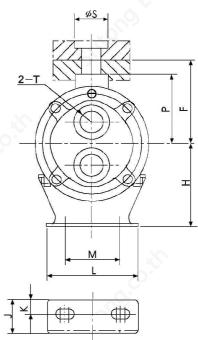
Our heat exchangers are widely used in plastic machinery, air compressor, cooling system, hydraulic system, power generation and petrol, chemistry, metallurgy, air separation system, textile, unclear and so on. With rich experience in design and fabrication of heat exchanger, we can provide you with optimal heat exchanging solution according to your conditions.

### ■ Main characteristic of SL/SLR series

- 1. Screw-guide baffle leads the oil flow in a spiral way, in succession and well-distributed. It overcomes the "dead corner" during heat exchanging of the traditional deflector, hence the efficiency is high, pressure drop is low.
- 2. The cooling tube is made of copper to roll fin outside. The product have larger heat surface but small size and weight.
- 3. There are 2 or 4 passes in the tube side, large flow of oil (large lead of baffle) and small flow (small lead of baffle) in the shell side. Various type of product can meet customer's different requirement.
- 4. Manufacture according to technology and production management of Japan KAMUI. The quality of Foshan KAMUI is stable and reliable.
- 5.SL series shell and tube heat exchanger is a new-type one, which is produced according to the most advanced technology introduced from Japan. It has been registered patent in China, Japan, USA and Taiwan District.

## I . The construction scheme for SL/SLR series.

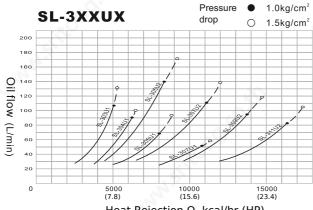




# II. Specification and Dimension for SL/SLR series.

Туре	А	С	D	E	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т
SL-303	309		152	107								~	(9)				
304	381		224	179								::(0					
305	453		296	251								6				Rc3/4	
307	597		440	395							3						
309	741	45	584	539	85	81	87	35	15	95	58	11x20	62	120	89	ø 28.5	Rc3/4
311	885		728	683												(DN20)	.00
313	1030		872	827													.0.
315	1172	Ď, Ť	1015	970													
SL-408	469		284	240													
411	613		428	384													
415	757		572	528											c	Rc1 <sup>1</sup> / <sub>4</sub>	
418	901	60	716	672	110	95	125	50	20	160	110	18x22	87	150	114	ø 43	Rc3/4
421	1045		860	816											1/2	(DN32)	
424	1188		1003	959		~0										(51102)	
428	1261		1076	1032													
SL-509	494		262	198	<b>~</b>												
518	638		406	342													
526	854		622	558								_0\				Rc1 <sup>1</sup> / <sub>2</sub>	
534	1070	70	838	774	130	121	160	50	20	180	120	18x25	105	180	139	ø 52	Rc1
542	1286		1054	990												(DN40)	
549	1501		1269	1205	1											(DINTO)	
554	1612		1380	1316													- 5

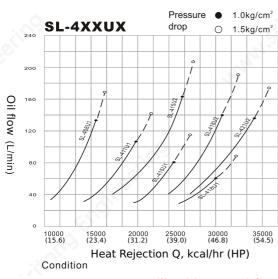
## III . Performance curve for SL/SLR series.



Heat Rejection Q, kcal/hr (HP) Condition

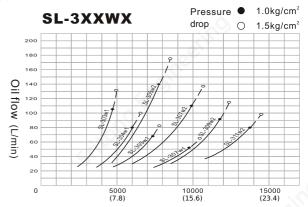
Fluid:equal to ISOVG-32

Water inlettemp: 30° C Oil outlet temp:  $50^{\circ}\,$  C Flow of water: MAX 40 L/min



Fluid:equal to ISOVG-32 Oil outlet temp: 50° C

Water inlettemp: 30° C Flow of water: MAX 60 L /min

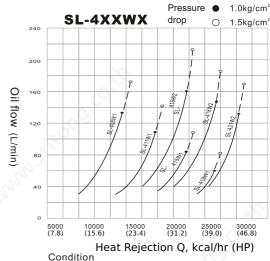


Heat Rejection Q, kcal/hr (HP)

Condition

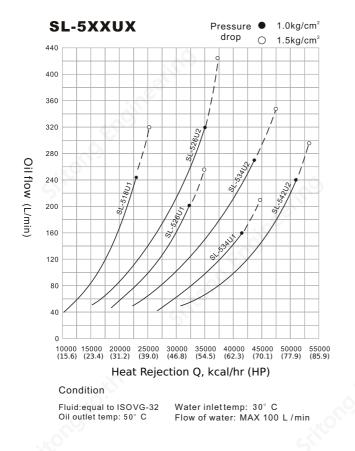
Fluid:equal to ISOVG-32 Oil outlet temp:  $50^{\circ}$  C

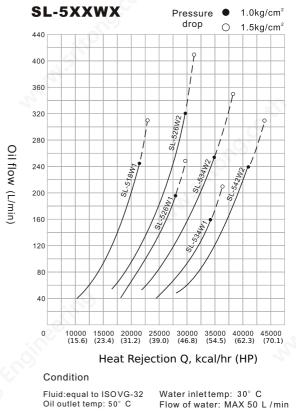
Water inlettemp: 30° C Flow of water: MAX 20 L /min



Fluid:equal to ISOVG-32 Oil outlet temp: 50° C

Water inlettemp: 30° C Flow of water: MAX 30 L/min





#### IV, Selection method for SL/SLR.

- 1. Calculate heat rejection needed Q(Kcal/hr)
  - (1). Calculate it according to temperature and flow of oil Q=Cpq(T1-T2)

    In the formular: C---specific heat of oil p---density of oil q---flow of oil T1---inlet temperature T2---outlet temperature.
  - (2) .Calculate it according to the calorific value of hydraulic system Q=Pr-Pc-Phc In the formular:Pr---input power of the system Pc---effective output power Phc---heat dissipated power of tank,pipeline.
- 2. Choose the right model

Check the performance curve base on calculated heat rejection and flow rate, on the right of the cross point is model needed.

3. Additional instruction

There may be difference in condition between actual use and performance test. Select towards small type cooler when the viscidity of oil is small, the flow of water is large and  $\triangle T$  is large also. And vice versa. We provide selection service, if needed.

#### V Notice

- 1. This series only suitable to fresh water.
- 2.Max. working pressure of oil side is 1.0MPa, water side is 0.5MPa.
- 3. During freezing seasons, you should discharge the fresh water from the cooler when the system off work.
- 4. At least clean the inside of the cooler (water side) every 6 months to maintain good performance.