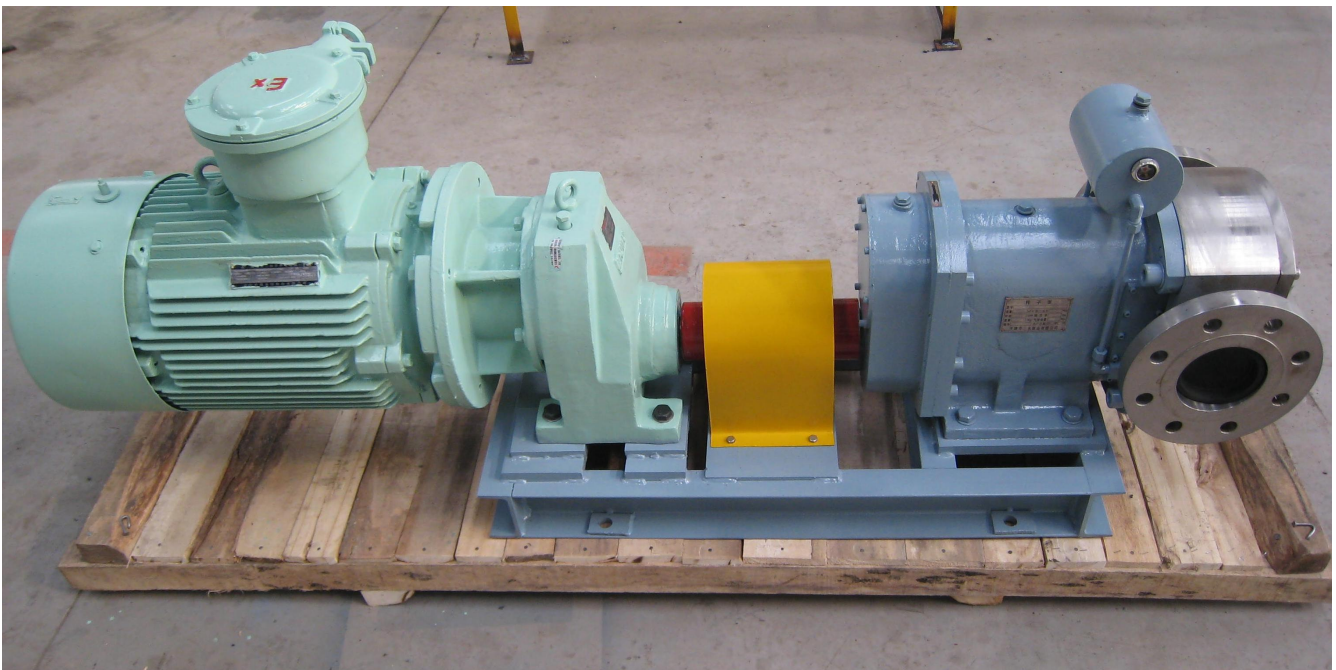


SMR ROTOR PUMP

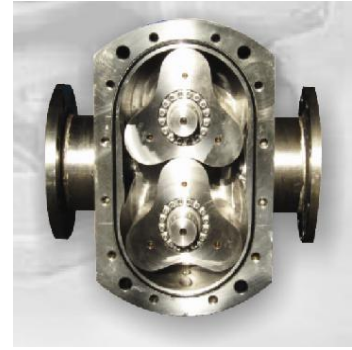


Http://: www.tj-sunmoon.com.cn

E-mail: pump@tj-sunmoon.com.cn

1. Introduction

SMR rotor pump is designed with the reference of the advanced technology and concepts from Europe, the optimized design and manufacture make pumps has the advantages of high efficiency, little abrasion, long service life and low noise. SMR rotor pumps have been widely used in petroleum, chemical, fiber, pharmaceutical, and the production of food, paint and paper, and sewage treatment industries.



2. Advantages

- ① No mechanical wear, low noise and long life as a certain clearance is maintained between two rotors, and between the rotor and the cylinder.
- ② The simple disassembly and assembly, convenient maintenance, easy cleaning, less wearing parts.
- ③ Has a pump body insulation, sealing and cooling system, for the high temperature medium conveying.
- ④ High efficiency and energy saving, low failure rate.
- ⑤ By using different materials, various mediums can be conveyed; mixture of liquid and gas can be pumped.
- ⑥ Realize the flow adjustment under constant pressure, suitable for frequency control.
- ⑦ Flange, clamps, screw etc. are used in the connection with pipeline, easy to install.

3. Application field

The pump can convey various mediums as below:

Petrochemical:	heavy oil, crude oil, asphalt, fuel oil, grease, lubricant, oil additives, gasoline, kerosene, diesel, various resins etc.
Coal chemical:	coal asphalt, coal tar.
Chemical fiber:	slurry, viscose, polyester etc.
Chemical industry:	Glycerin, sorbitol, cosmetics, shampoo, toothpaste, cleansing cream, soap, washing powder slurry, titanium dioxide, ink, paint, latex paint, glue, and various materials with high viscosity, polymer and carbamide.

Foods: chocolate, milk, dairy products, juice, jam, sauces, syrups, honey, beverages, spices, vegetable oil, soy protein, xanthan gum, starch, yeast solution.

Pharmaceutical: syrup, health products, medicine

Paper: paper pulp, adhesives, additives.

Glass fiber: infiltration agent.

Environmental: sewage, sludge, chemicals etc.
protection

4. Range of performance

Volume: 0~600m³/h

Pressure: 0~1.5Mpa

Medium viscosity: 1~100000cst

Medium temperature: 0~320 °C (conveying high-temperature material, pls.
see detailed specification when ordering)

5. Coding description:

SMR6A - 1S - W1

| | L material code

| L Seal type (1S- mechanical seal 0S- stuffing seal)

L Rotor pump specifications

6. Material code

Material Code	Cylinder	Rotor	Shaft	Bearing seat
W1	ZG30	38CrMoAl	42CrMo	QT450-10
W2	2Cr13	2Cr13	2Cr13	QT450-10
W3	SS304	SS304	SS630	QT450-10
W4	SS316	SS316	SS630	QT450-10
W5	SS316L	SS316L	SS630	QT450-10

7. Rotor pump performance parameters

Model	Pressure (MPa)	Volume (m ³ /h)	Rotational Speed(rpm)	Power(kw)	Matched gear motor	Inlet/outlet diameter (mm)
SMR0.1A	0.5	2.59	398	1.25	YCJ71-398rpm-1.5kw	DN32
	1.0	1.21	399	1.75	YCJ71-399rpm-2.2kw	
	1.2	0.66	399	1.95	YCJ71-399rpm-2.2kw	
SMR1A	0.5	3.2	366	2.3	YCJ71-366rpm-3kw	DN50
	1.0	1.3	360	3.15	YCJ80-360rpm-4kw	
	1.5	0.6	385	4	YCJ80-385rpm-5.5kw	
SMR2A	0.5	5.82	366	2.75	YCJ71-366rpm-3kw	DN75
	1.0	3.83	360	3.97	YCJ80-360rpm-4kw	
	1.5	2.0	385	5.19	YCJ80-385rpm-5.5kw	
SMR3	0.5	11.8	360	3.75	YCJ80-360rpm-4kw	DN100
	1.0	9.2		5.92	YCJ100-357rpm-7.5kw	
	1.5	6.6		8.09	YCJ100-359rpm-11kw	
SMR4	0.5	12.9	385	4.04	YCJ80-385rpm-5.5kw	DN100
	1.0	9.26	357	6.46	YCJ100-357rpm-7.5kw	
	1.5	5.62	359	8.8	YCJ100-359rpm-11kw	
SMR4A	0.5	26.4	357	6.77	YCJ100-357rpm-7.5kw	DN100
	1.0	21.6	359	11.41	YCJ112-359rpm-15kw	
	1.5	16.8	375	16.05	ZDY100-4-I+18.5kw	
SMR4C	0.5	34.74	359	7.91	YCJ100-359rpm-11kw	DN100
	1.0	30.40	359	13.61	YCJ112-359rpm-15kw	
	1.5	28.33	375	20.14	ZDY125-4-I+22kw	
SMR5	0.5	60	359	12.44	YCJ112-359rpm-15kw	DN125
	1.0	57	375	21.88	ZDY125-4-I +22kw	
	1.5	52	375	31.32	ZDY125-4-I +37kw	
SMR5C	0.5	67.60	359	13.89	YCJ112-359rpm-15kw	DN100
	1.0	56.86	335	22.62	ZDY125-4.5-I +30kw	
	1.5	52.06	335	32.39	ZDY125-4.5-I +37kw	
SMR6	0.5	91	375	17.3	ZDY125-4-I +18.5kw	DN150
	1.0	84.8		30.86	ZDY125-4-I +37kw	
	1.5	78		44.42	ZDY160-4-I +45kw	
SMR6A	0.5	117.4	335	21.29	ZDY125-4.5-I +30kw	DN150
	1.0	110.6		38.96	ZDY160-4.5-I +45kw	
	1.5	103.8		56.63	ZDY160-4.5-I +75kw	
SMR7	0.5	147.5	300	25.39	ZDY125-5-I +30kw	DN150
	1.0	140.24		47.27	ZDY160-5-I +55kw	
	1.5	132.98		69.15	ZDY160-5-I +75kw	
SMR8	0.5	173.78	300	29.34	ZDY160-5-I +37kw	DN150
	1.0	166.3		54.99	ZDY160-5-I +75kw	
	1.5	158.82		80.64	ZDY160-5-I +90kw	
SMR9	0.5	232	270	39.9	ZDY160-5.6-I+45kw	DN200
	1.0	223		73	ZDY160-5.6-I+75kw	
	1.5	215		108	ZDY200-5.6-I+132kw	

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SMR10	0.5	590	270	97	ZDY250-5.6-I+110kw	DN300
	1.0	550		175	ZDY355-5.6-I+200kw	
	1.5	510				

Model	Pressure (MPa)	Volume (m³/h)	Rotational Speed (rpm)	Power(kw)	Matched gear motor	Inlet/outlet diameter (mm)
SMR0.1A	0.5	4.5	587	2.04	YCJ71-587rpm-2.2kw	DN32
	1.0	3.15	587	2.8	YCJ71-587rpm-3kw	
	1.5	1.69	571	3.56	YCJ80-571rpm-4kw	
SMR1A	0.5	6.6	571	3.79	YCJ80-571rpm-4kw	DN50
	1.0	4.6	575	5.1	YCJ80-575rpm-5.5kw	
	1.5	2.6	545	6.41	YCJ100-545rpm-7.5kw	
SMR2A	0.5	10.8	575	4.5	YCJ80-575rpm-5.5kw	DN75
	1.0	8.19	541	6.29	YCJ100-541rpm-7.5kw	
	1.5	6.3	544	8.08	YCJ100-544rpm-11kw	
SMR3	0.5	19.5	541	5.97	YCJ100-541rpm-7.5kw	DN100
	1.0	17	544	9.23	YCJ100-544rpm-11kw	
	1.5	14.5	544	12.49	YCJ100-544rpm-15kw	
SMR4	0.5	21.5	541	6.42	YCJ100-541rpm-7.5kw	DN100
	1.0	17.9	544	10.05	YCJ100-544rpm-11kw	
	1.5	14.3	544	13.68	YCJ112-544rpm-15kw	
SMR4A	0.5	43	544	10.64	YCJ112-544rpm-15kw	DN100
	1.0	37	535	17.5	ZDY100-2.8-I+18.5kw	
	1.5	32	535	24.36	ZDY100-2.8-I+30kw	
SMR4C	0.5	47.8	475	10.72	ZDY100-3.15-I+15kw	DN100
	1.0	43.5		18.24	ZDY100-3.15-I+22kw	
	1.5	39.7		25.76	ZDY100-3.15-I+30kw	

Model	Pressure (MPa)	Volume (m³/h)	Rotational Speed (rpm)	Power(kw)	Matched gear motor	Inlet/outlet diameter (mm)
SMR0.1A	0.5	6.05	720	2.85	Y132M-8B3-3kw	DN32
	1.0	4.70		3.85	Y160M1-8B3-4kw	
	1.5	3.35		4.85	Y160M2-8B3-5.5kw	
SMR1A	0.5	9.33	720	5.40	Y160L-8B3-7.5kw	DN50
	1.0	7.39		7.09	Y180L-8B3-11kw	
	1.5	5.45		8.78	Y180L-8B3-11kw	
SMR2A	0.5	14.5	720	6.32	Y160L-8B3-7.5kw	DN75
	1.0	12.5		8.74	Y180L-8B3-11kw	
	1.5	10.5		11.16	Y200L-8B3-15kw	
SMR3	0.5	27.43	720	8.33	Y180L-8B3-11kw	DN100
	1.0	24.82		12.67	Y200L-8B3-15kw	
	1.5	22.20		17.01	Y225S-8B3-18.5kw	
SMR4	0.5	30.28	720	8.94	Y180L-8B3-11kw	DN100
	1.0	26.62		13.77	Y200L-8B3-15kw	
	1.5	22.96		18.6	Y225M-8B3-22kw	

SMR4A	0.5	59.73	720	14.67	Y200L-8B3-15kw	DN100
	1.0	54		22.93	ZDY100-2-I+30kw	
	1.5	48.27		31.19	ZDY100-2-I+37kw	

Model	Pressure (MPa)	Volume (m ³ /h)	Rotational Speed (rpm)	Power(kw)	Matched gear motor	Inlet/outlet diameter (mm)
SMR0.1A	0.5	8.55	960	4.1	Y132M-6B3-5.5kw	DN32
	1.0	7.2		5.44	Y160M1-6B3-7.5kw	
	1.5	5.85		6.78	Y160M1-6B3-7.5kw	
SMR1A	0.5	13.38	960	7.70	Y160L-6B3-11kw	DN50
	1.0	11.44		9.95	Y160L-6B3-11kw	
	1.5	9.5		12.20	Y180L-6B3-15kw	

To get the installation drawing, please contact TJ Sunmoon, Tel: 022-26816483

8. Successful application:

Coal chemical industry:

- Coking Plant of Jinan Steel Company uses rotor pumps model SMR4B-1S-W1 in high temperature coal tar process.
- Gude Chemical Company uses rotor pumps model SMR4B-1S-W1 and SMR2A-1S-W1 in high temperature coal tar process.

Petroleum, chemical industry:

- PetroChina Ningxia Petrochemical Company uses rotor pumps model SMR5D-1S-W1 to convey crude oil.
- PetroChina Dagang Petrochemical Company uses rotor pumps model SMR6A-1S-W1 to convey crude oil for the million-ton crude oil reserves.
- Shandong Haili chemical Limited uses rotor pumps model SMR4A-1S-W1 to convey synthesized heavy oil.
- Merlin Chemical Group uses rotor pump model SMR4B-1S-W3 to convey fluorine resin solution.
- Suzhou Chemical Industry Company uses rotor pump model SMR4A-1S-W3 to convey titanium dioxide.
- Qingdao Kehai Biological Chemical Company uses rotor pump model SMR2A-1S-W3 to convey meconic acid slurry .

Chemical fertilizer industry:

- Yankuang Lunan Chemical Fertilizer Plant uses rotor pump model SMR4B-1S-W3 to convey carbamide solution for tower granulation.
- Luxi Chemical Company uses rotor pump model SMR4B-1S-W3 to convey carbamide solution for compound fertilizer spraying granulation.
- Hongri Riakang Company uses rotor pump model SMR4B-1S-W3 to convey carbamide solution for

compound Fertilizer spraying granulation.

Sewage treatment:

- Dongguan Waste Water Treatment Plant uses sewage rotor pump model: SMR6-1S-W3.
- Taishan Fiberglass Company uses sewage rotor pump model SMR3-1S-W3.
- Xinxiang Chemical Fiber uses sewage rotor model SMR2A-1S-W3.

Chemical fiber industry:

- Hubei Bora Jingwei Chemical Fiber uses slurry rotor pump model SMR6-1S-W3 and SMR6A-1S-W3
- Manasi Aoyang Technology Limited uses slurry rotor pump model SMR6-1S-W3.
- Xinxiang Chemical Fiber uses slurry rotor pump model SMR6-1S-W3 and SMR5-1S-W3
- Dandong Jidan Fiber uses slurry rotor pump model SMR6-1S-W3 and SMR4C-1S-W3 (equivalent to IC40S).
- Manasi Shunquan Chemical Limited uses slurry rotor pump model SMR6-1S-W3.
- Xiaoshan Fulida Textile Fiber Limited uses slurry pump model SMR5C-1S-W3(IC50S/0350).

Food industry:

- Zibo Jiayi Yellow River Dragon Biological Engineering Company (U.S. invested) uses rotor pump models SMR6-1S-W3 and SMR4a-1S-W3 for Xanthan gum.
- Shunda Group uses rotor pump model SMR6-1S-W3 for Xanthan gum.
- Haoliyou Food Company Limited uses rotor pump model SMR0.1-1S-W3 for food oil.
- Shenzhen Jindi Food Company uses rotor pump SMR1-1S-W3 to convey chocolate.
- Shanghai Huiyuan Fruit Juice Food Company uses rotor pump model SMR4-1S-W3 to convey juice.
- Shanghai Shenmei Cola Food Limited uses rotor pump model SMR4-1S-W4 to deliver syrup .
- Beijing Andrew Food Company uses rotor pump model SMR4-1S-W4 to convey ketchup.
- Shandong Ahua Health Food Company uses rotor pump model SMR1-1S-W3 to convey soybean protein.
- Tianjin Wanfanshun Ham Food Company uses pump rotor model SMR0.1-1S-W3 to convey batching.

9. On-site pictures



Rotor pump conveying high temperature coal tar in coking plant coal (≤320°C)



Hygiene rotor pump for food



Chemical fiber factory slurry transport pump



Cam rotor pump for petrochemical plant



Rotor pump delivery heavy hydrocarbon



Chemical fiber factory slurry transport pump