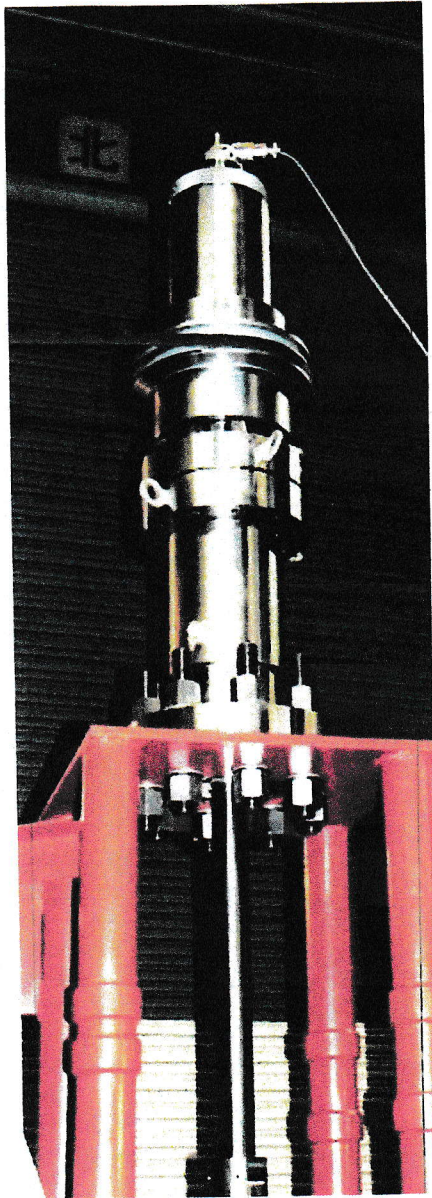


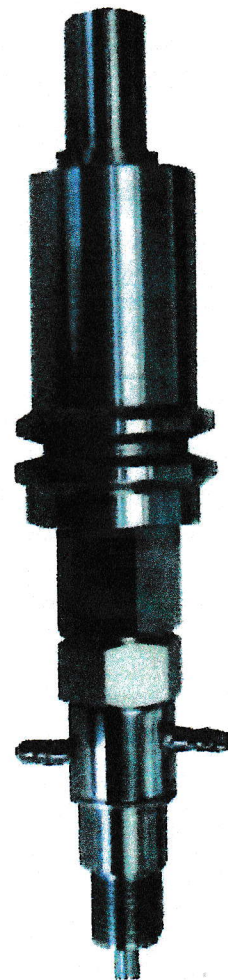
SUZUKI-RIKA MAGNETIC DRIVE

for

PRESSURE REACTOR

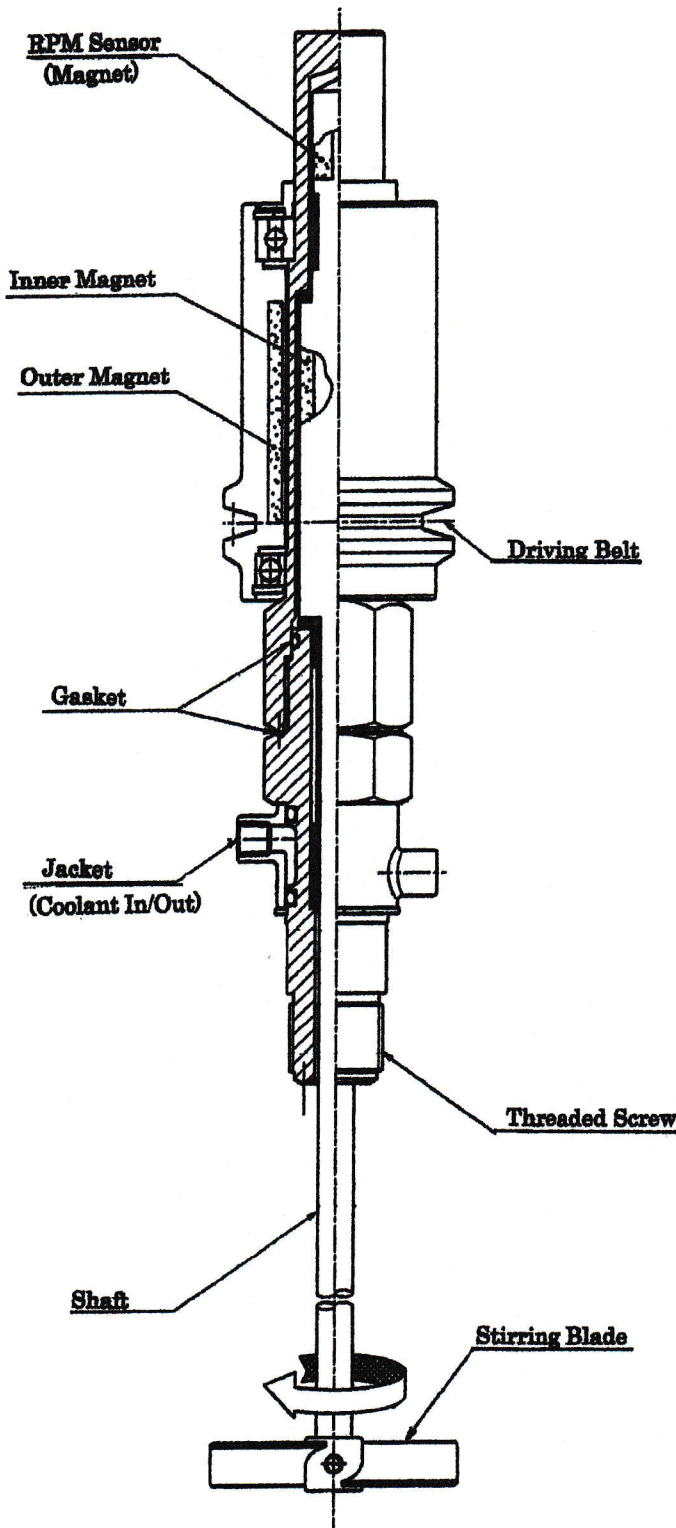


Flange Type
(Magnetic Torque 300N·m)



Screw Type

BASIC STRUCTURE OF SCREW TYPE



Note

Be sure to let flow coolant for the use of the magnetic drive. The decrease of the torque depending on temperatures, the poor rotation due to thermal expansion of bearing unit will cause.

INTRODUCTION

Magnetic Drives are extensively used as a stirrer of pressure reactor for the basic research and development in petro-chemical, resin, pharmaceutical, food and related process industries.

Suzuki-Rika magnetic drives are adopted the rare earth or ferrite magnet to keep the powerful torque. And also, it is processed especially to suppress the frictional heating, since the torque power falls when applying the heat to the magnet.

The magnetic drives showed in this catalog are the typical model, which it is produced by our own designing and know-how. For the custom-made design and manufacture, please be free to contact us.

MATERIALS

All Suzuki-Rika magnetic drives are basically made of SUS316 stainless steel that is superior in corrosion resistance. However, other special materials can be provided for them.

- Stainless steel SUS316L
- Hastelloy C-276, HC-22
- Titanium, Inconel

REFERENCE DATA OF VISCOSITY	
	High (cp)
Water glass	240,000cp
High polymer	100,000
Chocolate topping	38,000
Cosmetic cream	18,000
Mayonnalse	8,000
Strawberry jam	6,000
Condensed milk	2,000
Tomato ketchup	1,800
Honey	1,300
Dynamo oil	100
Salad oil	65
Paraffin	10
Nitrobenzene	2
Water	1cp
Benzene	0.65
Ethyl acetate	0.45
Acetone	0.32
	Low (cp)

* Temperature : at approx.20°C

MAGNETIC DRIVE, SCREW TYPE

Suzuki-Rika magnetic drive employs a rotary magnetic force induction system which is suitable for rotary agitation under high pressure.

Although corrosion-resistant materials (SUS316) are used for contact gases and liquids, the manufacture of corrosion-resistant metals such as Hastelloy, and Titanium, etc. is available.

STANDARD SPECIFICATIONS

Material: SUS316

Model No. • Standard type • High pressure type	SM-0.3 SMH-0.3	SM-0.6 SMH-0.6	SM-1.0 SMH1.0	SM-1.6 SMH-1.6	SM-2.5 SMH2.5
Max. working limit • Standard type • High pressure type	5MPa/300°C 30MPa/300°C				
Magnetic torque	0.3N·m	0.6N·m	1.0N·m	1.6N·m	2.5N·m
Max. RPM	1,000rpm				
Drive shaft Dia. × length	φ 8 × 200mm	φ 10 × 300mm	φ 12 × 400mm		φ 16 × 500mm
Threaded screw	M24P1.5	M26P1.5	M30P1.5	M36P2.0	

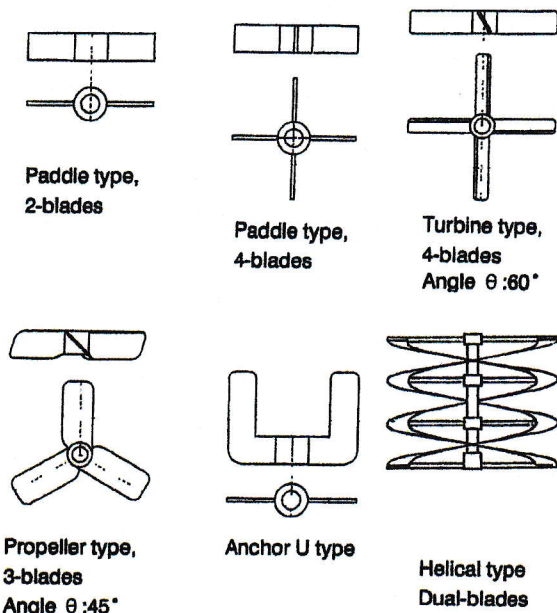
Remarks 1) We can provide digital RPM sensor as option.

■ REQUIREMENT SHEET

- Vessel size: ___mm(ID) × ___mm(Depth)
- RPM: ___rpm
- Viscosity of fluid: ___cps
- Stirring blade: Type: ___
Size: ___mm(W) × ___mm(H)

When custom-made products besides the above are desired, the following conditions for use are required. When the viscosity of contents is obscure, please refer to REFERENCE DATA OF VISCOSITY on the figure.

STIRRING BLADE

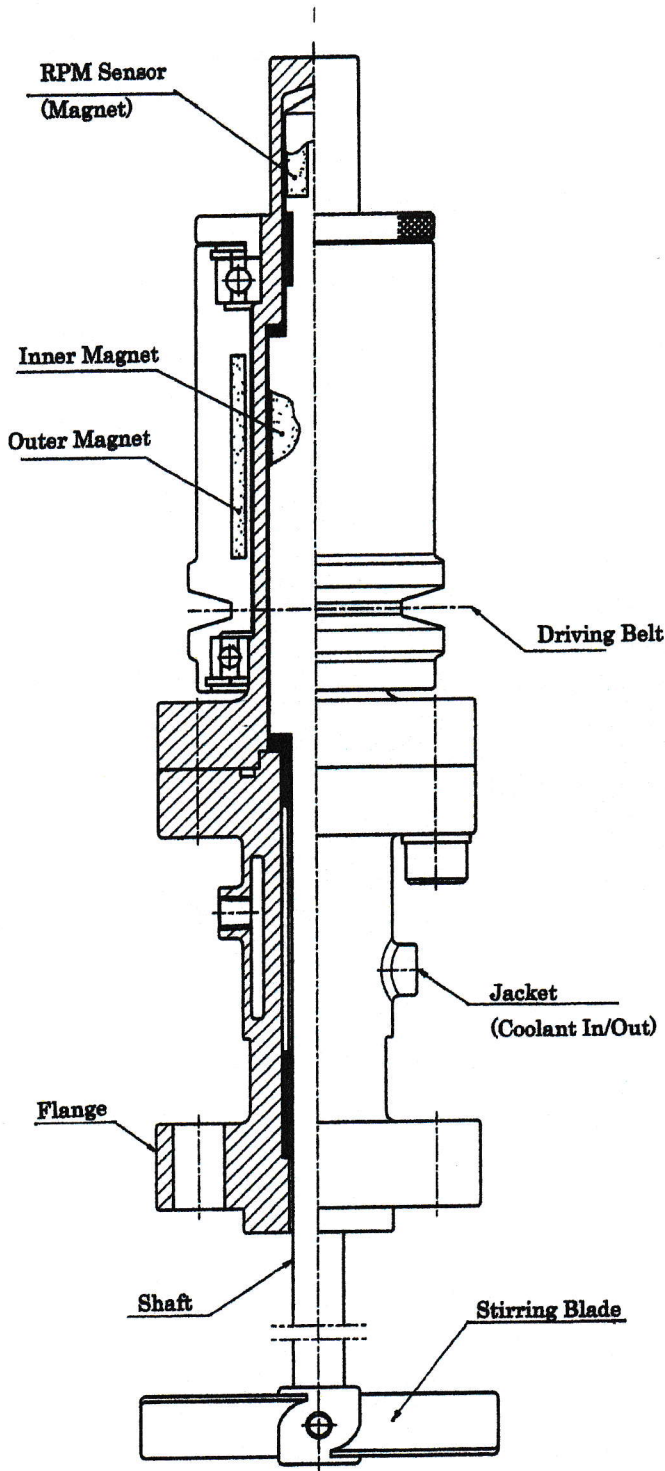


Selection of stirring blade is determined by various conditions such as a capacity of reaction vessel, viscosity of contents (fluid), the number of revolutions (rpm), etc.

Paddle, turbine, and propeller types are employed mainly for low viscosity and high-speed stirring, and anchor, helical type is employed for high viscosity and low-speed stirring.

The material of SUS316 is used, and also, we can provide other material (SUS316L, Hastelloy).

BASIC STRUCTURE OF FLANGE TYPE



MAGNETIC DRIVE, FLANGE TYPE

It is necessary a flange type magnetic drive with a high powered torque when using a large capacity pressure vessel and high viscosity contents (fluid). This is the most suitable series for a pilot plant.

It is fixed on the lid of vessel by bolts, so installation is stable.

Suzuki-Rika has been achieved the production up to magnetic torque 300N·m. (Refer to the photo on the cover)

REFERENCE SPECIFICATIONS

Material: SUS316

Model No.	SMF-10	SMF-30
Max. working limit	5MPa/180°C	
Magnetic torque	10N·m	30N·m
Drive shaft Dia. × length	φ 20 × 600mmL ~ φ 25 × 700mmL	φ 30 × 700mmL ~ φ 35 × 800mmL
Installation method	Flange type	
Applied vessel capacity	30L~60L	100~200L

The specification above-mentioned is reference. Selection of magnetic drive is determined by various conditions (viscosity of contents, etc). When inquiring, please be free to contact us after the checking of REQUIREMENT SHEET.

SUZUKI-RIKA CO., LTD.

2-9-11 Kita-koujiya, Ota-Ku, Tokyo 144-0032 Japan.

Tel 03-5736-3640 Fax 03-5736-3656

E-mail Suzuki-r@f6.dion.ne.jp

URL <http://www.suzukirika.co.jp>

Contact to

S.T.CORPORATION.

Toshinao Ishizu

6-76-9 Hirai, Edogawa-Ku,

Tokyo 132-0035, Japan.

Tel 03-6657-5878 Fax 03-6657-5829

E-mail ishizu@hb.tp1.jp