

Pearl

Pearl Swivel Joint

— Swivel Joint —

SRK / SSH Series

CATALOG



PEARL SGK JOINT
株式会社 昭和技研工業
SHOWA GIKEN INDUSTRIAL CO., LTD.

SRK Series



SSH Series



Features

By locating the flow passage between the left and right radial ball bearings, thrust load caused by fluid pressure is not applied to the bearings. Thus, it is possible to use the product in a high-pressure range, with small variations in dynamic torque due to pressure changes.



O-rings (with back-up rings) are used as main seals, providing stable seal performance in a range of low to high pressure.

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The contents are subject to change without notice.

Service Conditions

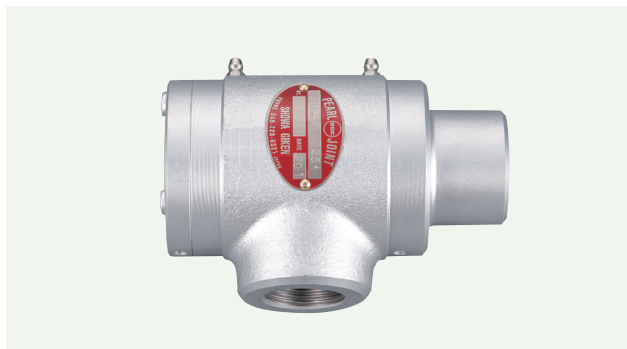
Series	Connection	Material (main parts)	Main Seal	Style	Size	Max.	
						Pressure (MPa)	Temperature (°C)
SRK 	Taper Thread (Rc)	Carbon Steel	O-ring NBR	2, 3	10A~40A	34.3	100
					50A~65A	24.5	
				2	80A	24.5	
SSH 	Taper Thread (Rc)	Stainless Steel	O-ring NBR	2	10A~25A	20.6	100

Note) The main seals for the standard specification of each series are O-rings (NBR).

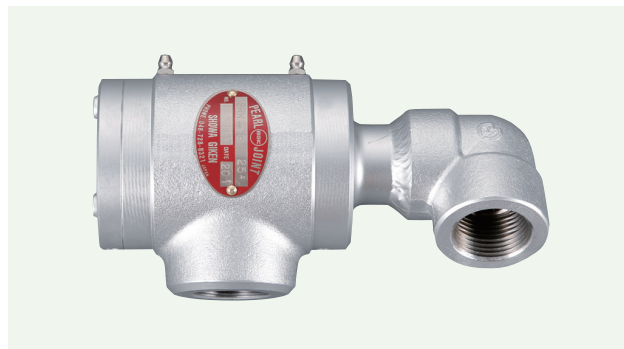
Styles

Depending on shapes, two styles are available.

Style 2

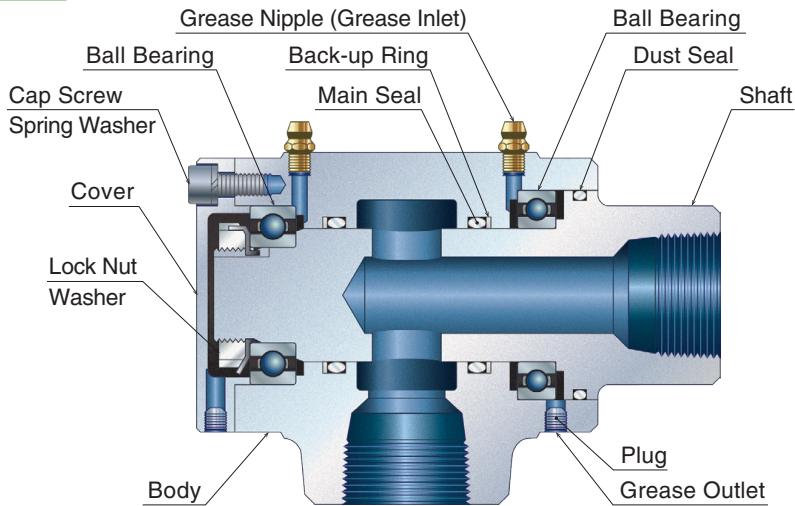


Style 3



Structures and Materials

SRK

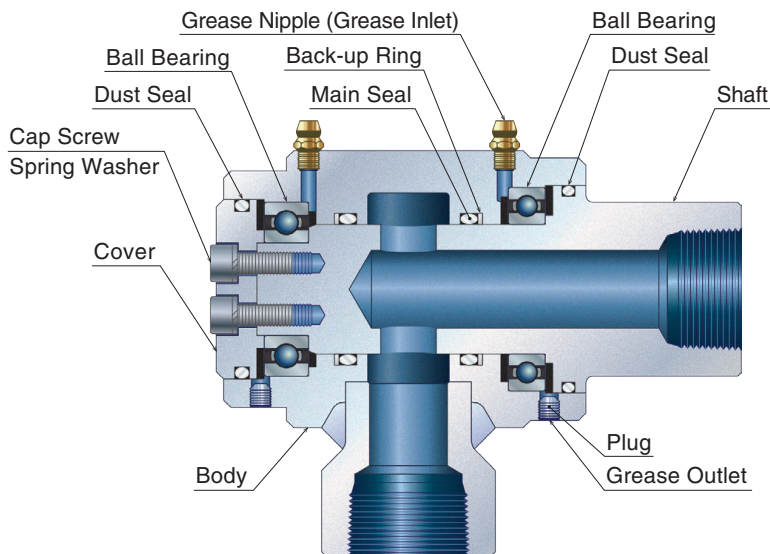


Materials of Main Components (Standard Specification)

Part Name	Material
Shaft	Carbon Steel
Body	
Main Seal	NBR
Back-up Ring	PTFE

Heat-resistant paint is applied to external parts.

SSH



Materials of Main Components (Standard Specification)

Part Name	Material
Shaft	Stainless Steel
Body	
Main Seal	NBR
Back-up Ring	PTFE

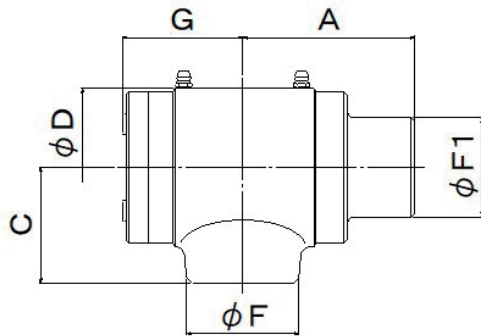
* 10A and 15A are not grease-type products. Ball bearings are grease-sealed type products without a grease nipple and a plug.

Note) Component materials are indicated on product drawings.

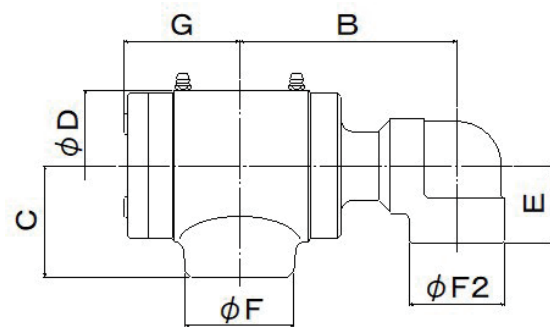
Contact our sales representative for requests for product drawings.

Dimensions (SRK Series / SSH Series)

Style 2



Style 3



SRK Series, Dimension Table

(mm)

Size	Connection	A	B	C	D	E	F	F1	F2	G
10A	Rc3/8	60	85	40	60	26	33	33	27	40
15A	Rc1/2	60	85	40	60	29	33	33	33	40
20A	Rc3/4	82	107	55	75	35	53	38	38	57
25A	Rc1	82	107	55	75	38	53	47	47	57
32A	Rc1¼	115	130	105	95	45	57	57	57	69
40A	Rc1½	120	130	110	95	51	64	64	64	69
50A	Rc2	135	155	130	125	60	77	77	77	88
65A	Rc2½	165	180	155	155	67	95	95	96	94
80A	Rc3	170	-	170	170	-	114	114	-	100

SSH Series, Dimension Table

(mm)

Size	Connection	A	C	D	F	F1	G
10A	Rc3/8	59	50	50	36	38	44
15A	Rc1/2	59	50	50	36	38	44
20A	Rc3/4	90	72	75	47	47	54
25A	Rc1	90	72	75	47	47	54

Masses

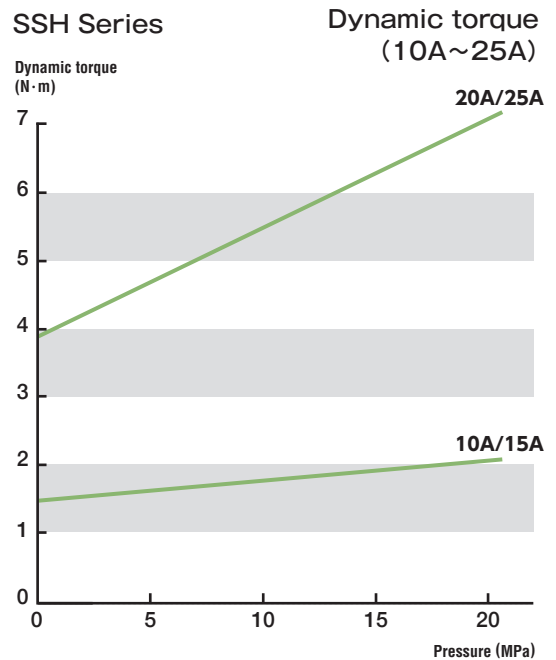
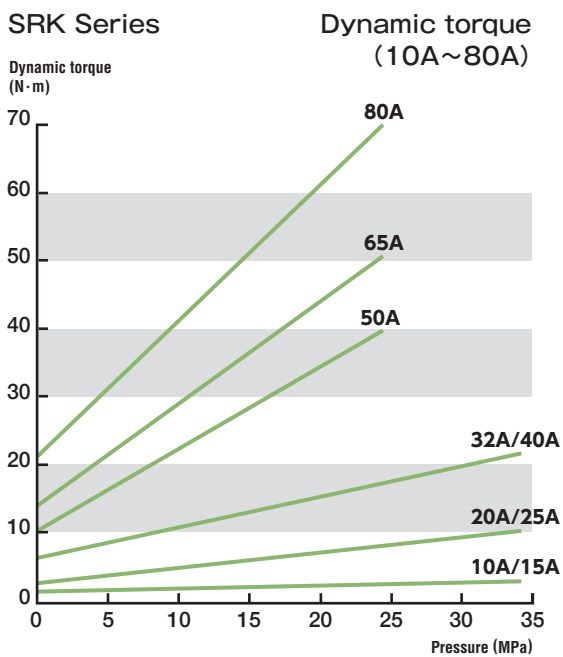
SRK Series (kg)

Size	Style	
	2	3
10A	1.6	1.7
15A	1.6	1.7
20A	3.7	3.9
25A	3.8	4.1
32A	7.0	7.6
40A	7.3	8.0
50A	12.6	13.6
65A	23.0	24.8
80A	28.0	-

SSH Series (kg)

Size	Style
	2
10A	1.4
15A	1.4
20A	3.4
25A	3.4

Dynamic Torque

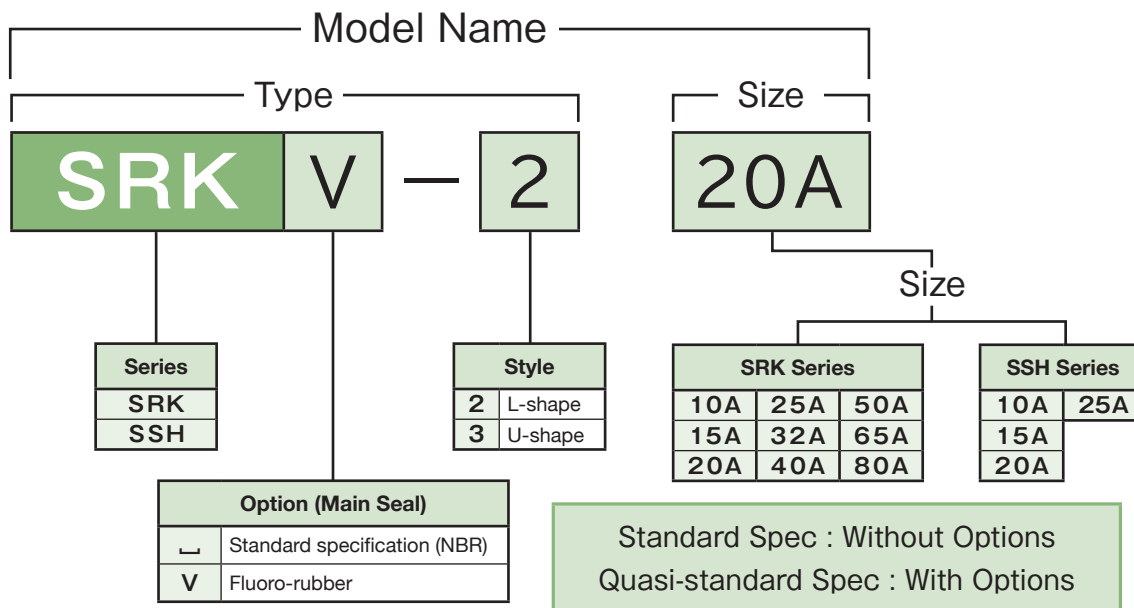


Note 1) Dynamic torque varies depending on product storage conditions, storage period, or fluid types.

2) Starting torque is larger than dynamic torque. Although starting torque is even larger when wringing occurs, it does not indicate any fault.

3) Data are typical values measured based on in-house test standards. They are not guaranteed values.

Model Names and Types



Note) “_” indicates a space. A model name is indicated without spaces.
 If you have any questions, contact our sales representative.

Precautions on Selection

1. Select a product whose operating conditions are within the service conditions (listed in the table on page 2).
2. Two radial ball bearings are incorporated in a product and there is no clearance (play). Shaft movement is restricted in the swivel direction. When introducing a hose for connecting the product or a movable pipeline for using multiple products, carefully consider the motion of the hose and the movable pipeline before selecting a style.
3. Select an option as necessary.
 1) See “Model Names and Types” (page 6) for the types of options.
4. The standard specification main seal (NBR) cannot be used for phosphoric ester-based hydraulic oil, chlorinated hydrocarbon-based hydraulic oil, organic solvents, or acids. Contact us for a substitute seal.
5. The use of the product in a continuous rotation condition is not appropriate. The product lifetime becomes shortened.
6. The product cannot be used for fluid that causes corrosion on it.
7. The product is not designed according to the general design rules for safety and hygiene of food processing machinery (JIS B 9650). Consult with us when considering the use of the product in food-related facilities.
8. Depending on the fluid used, the product may subject to restrictions due to national laws or local regulations.

As for customized products, we can produce products with modifications that are not included in the options, including such products for which a flange, socket welding, or butt welding is used for connection.

If you have any questions or wish to purchase customized products, contact our sales representative.

Maintenance

1) Greasing

The ball bearings and the main seal require periodic greasing (refilling). Perform greasing with reference to the frequency (guideline) shown to the right.

★Use the following brand of grease filled in the product before shipment.

【 Shell Lubricants Japan K.K. Alvania S1 】

Greasing Frequency (Guideline)

Fluid Temperature (°C)	Greasing Frequency
0~60	Yearly
60~100	Every six months

2) Replacement of consumables

You can use the product for an extended period of time by replacing consumables.

Contact us for replacement. We carry it out according to our repair program.

Depending on the products, expenses for purchasing new products may be lower than repair expenses.

Contact us for more information.

Product Order

Please provide the following information.

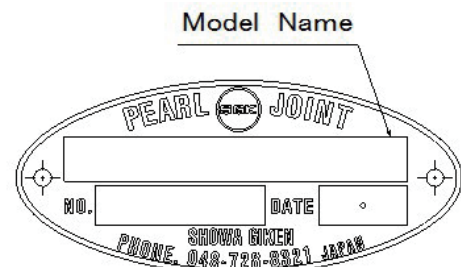
1) When ordering our product you are currently using

- ① Model name (indicated on the product's nameplate)

2) When newly ordering our products

- ① Model name (see page 6.)
- ② Related information
- The name of equipment to which our product is installed
 - The name of the fluid used
 - Fluid pressure and temperature
 - Operation (rotation or swivel) and its frequency
 - Service environment
 - Requests, etc.

If you have any questions, contact our sales representative.



Nameplate

Product Warranty

If a malfunction occurs during the warranty period, contact us or the distributor and send the product to us. Be sure to carefully pack the product for protection before sending it. After receiving the product, we will confirm the malfunction. If the malfunction was clearly caused by the materials of product components or the manufacturing method, we will repair the product in question or replace it with a new one free of charge.

Product Warranty Provision

1. Warranty Period

< New products >

One (1) year and six (6) months after shipment (from the manufacturing date) or one (1) year after installation, whichever comes first.

< Repaired products >

Six (6) months after shipment (from the manufacturing date).

2. We charge a fee for repairs in any of the following cases.

- ① Failure after the warranty period has expired
- ② Failure caused by use of the product deviating from the service conditions
- ③ Failure caused by misuse (improper storage, installation, pipe laying, operation or maintenance, etc.)
- ④ Failure caused by fluid contaminants or foreign objects in the fluid
- ⑤ Failure caused by relocation, transport, or falling of the product after delivery
- ⑥ Failure caused by disassembly, repair, or modification done by personnel other than our service personnel
- ⑦ Failure of the product attributed to using materials or according to standards specified by the customer
- ⑧ Failure of the product attributed to using materials provided by the customer
- ⑨ Failure caused due to unavoidable acts of nature such as fires or other natural disasters

3. Scope of Responsibility

Our responsibility shall be limited to repairs, replacements, or transport expenses covered by this product warranty provision. Expenses or damages caused by said failures above shall not be covered.


4. Applicable Regions

This product warranty provision shall be applicable to products installed in Japan.
Contact our sales representative if you install and use our products outside Japan.

5. Another Agreement

If another product warranty agreement is made separately with us and clearly states that said agreement shall have priority over this product warranty provision, this provision shall not be applicable.

6. This product warranty provision shall not restrict the customer's legal rights.

PEARL  JOINT
株式会社 昭和技研工業
SHOWA GIKEN INDUSTRIAL CO., LTD.

URL <https://www.sgk-p.co.jp>



Export Department Phone : +81-3-3598-1400 Fax. : +81-3-3598-2700
E-mail : sgk-tk@sgk-p.co.jp

Headquarters 7-24, Nishi-Kobari, Ina-Machi, Saitama, 362-0811 Japan
Phone : +81-48-728-9460 Fax. : +81-48-728-9461

Tokyo Sales Office 2-64-11, Akabane, Kita-ku, Tokyo, 115-0045 Japan
Phone : +81-3-3598-1400 Fax. : +81-3-3598-2700

Osaka Sales Office 2-9-7, Toyosaki, Kita-ku, Osaka, 531-0072 Japan
Phone : +81-6-6371-8341 Fax. +81-6-6371-6283

Nagoya Sales Office 41-1, Higashi-Ozone-cho, Higashi-ku, Nagoya, 461-0022 Japan
Phone : +81-52-938-8825 Fax. : +81-52-938-6423