Pearl Swivel Joint Instruction Manual (Common)

This instruction manual applies to products with type designations that begin with the following characters:
A B C OK OP PK PM SA SD SF SH SJ SK SRA SRD SRF SRH SRK SSH (This manual does not apply to movable pipelines or products with type designations that begin with AC or BE.)

1. For Safety

(1) Be sure to read this manual before use. Store this manual carefully so that it can be referred to at any time.
(2) Transport, storage, installation, piping, operation, or maintenance of this product should be carried out by an experienced expert.
(3) In order to prevent product malfunction resulting in bodily accidents or damage to peripheral equipment, be sure to follow the warnings, cautions, and instructions described in this manual.
(4) Never disassemble or modify this product because doing so is dangerous.
(5) Instruction manuals for respective series are available on our website. See them while reading this manual. If the instruction manual for your series is not available on our website, contact our sales representative for assistance.

2. Precautions on Transport and Storage

In order to prevent injury to workers, product damage, or fluid leakage, follow the following instructions:
(1) To transport a product that weighs over 25kg, use appropriate lifting equipment.
(2) Do not drop or subject the product to undue impact while it is being transported.
(3) Wrap the product before storing it to prevent the entry of foreign objects.
(4) Store this product in a dry environment at 10°C to 40°C.
(5) The storage period should be within a maximum of two years.

3. Precautions on Installation and Pipe Laying

Product adjustment is not required before installation.

In order to prevent injury to workers, product damage, or fluid leakage, follow the following instructions:
(1) Take the product weight into consideration before installing the product. Use equipment such as a crane as necessary. This work should be performed by two or more persons.
(2) Thoroughly flush flow passages before product installation. If the fluid contains foreign objects, install a strainer at the flow passages.
(3) Avoid pipe laying where excessive moment load is applied to the product.

4. Precautions on Welding

Observe the following precautions before welding pipes to products whose shafts or bodies have grooves, sockets or butt joints.
(1) In order to prevent thermal effects on the main seal and dust seal or grease deterioration, disassembly is required before welding. Contact our sales representative for the disassembly method.
(2) In order to prevent changes in dimensions of the ball race section or ball bearing installation section, wrap a cloth moistened with water to keep the temperature of the above parts at 100°C or less during welding.
(3) During welding, be careful so that machine-finished surfaces are not damaged. Place a cover on finished surfaces to prevent the adherence of welding spatter.
(4) After welding, clean the shaft and body before assembly.

(Attention)
We shall assume no responsibility for any product malfunctions due to welding work, equipment malfunctions or accidents resulting from such product, or the results thereof. Also, the product shall not be covered by the product warranty even if the warranty period is still valid.

5. Precautions for Use

| WARNING | If flammable fluids leak and ignite, bodily accidents including serious or even fatal injury, or accidents that damage peripheral equipment may occur due to explosion or fire. Depending on the type of fluid, this product may subject to restrictions due to national laws or local regulations. |

(1) During rotation or high-temperature/pressure fluid flow, keep well away from the product to prevent injuries or burns. Do not directly touch rotating or hot parts during operation.
(2) Perform operation within the service conditions.
(3) Use a product that includes a seal material suitable for fluid.
(4) The use of the product in a continuous rotation condition is not appropriate.

<Pearl is a trade name of Showa Giken Industrial Co., Ltd.> Be sure to read the reverse side.
6. Inspection and Maintenance

- Daily inspection
  Visually check connections and the product for fluid leakage. If fluid leakage is detected, stop operation and immediately repair the product or replace it with a new one.

| 1. If operation is continued with fluid leakage not being repaired, bodily accidents or damage to peripheral equipment may result.  
2. In order to prevent bodily accidents due to residual fluid in the product or pipes, remove the product after fluid has been completely drained from the product or pipes and temperature has dropped to room temperature. |

| WARNING |

- Greasing
  1) Periodic greasing is required for grease-type products with grease nipples. Be sure to remove the grease outlet plug before greasing. Then fill the grease through the grease nipple. Continue to fill until grease comes out from the grease outlet.  
2) See our catalog or website for the greasing frequency.  
3) Use the same brand of grease as the one filled in the product before shipment from our company.

- Repair and replacement of consumables
  Contact our sales representative to request consumable repair or replacement.

7. 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.

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.