

SWIVEL JOINTS

AL 86-D

Description

Swivel joints are used as rotating pipe connection elements and installed in flexible pressurised pipeline systems.

They are the ideal connection element under rough operating conditions and at high pressures. They are suitable for liquid and gaseous media at temperatures from -20 °C to +240 °C.

Swivel joints are suitable for absorbing torsion movements. They allow not only for swivelling movements but also for complete rotations at low speed.

Frequently, Swivel joints are used in a 2- or 3-joint system to absorb larger movements. Large angular or lateral movements are also possible when the joints are arranged accordingly.

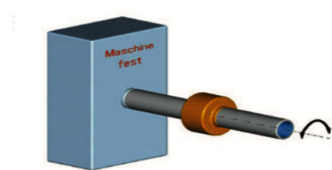
Swivel joints in pipeline systems allow for the media to be conveyed from a fixed point to any required flexible point.



Planes of rotation

Before stipulating the Swivel Joint type, it is important to decide how the movement is to be effected in the pipeline system. The type is selected essentially depending on the routing of the pipeline, required movement, space available and type of pipeline connections.

A differentiation is made between rotating and swivelling movements when positioning the joints in the pipeline system. The joints can be integrated in the line by means of flanges, welded connections or threaded connections.



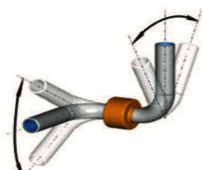
Type IIS

Slow rotary movement with type IIS
(1 fixed point, 1 side flexible)



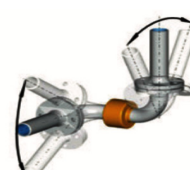
Type IIF

Slow rotary movement with type IIF
(1 fixed point, 1 side flexible)



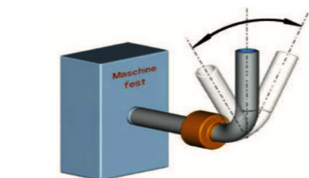
Type I3S

Swivel movement on both sides
with type I3S in angled pipe piece



Type I3F

Swivel movement on both sides
with type I3F in angled pipe piece



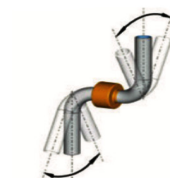
Type I2S

Swivel movement with type I2S
(1 fixed point, 1 side flexible)



Type I2F

Swivel movement with type I2F
(1 fixed point, 1 side flexible)



Type I3S

Swivel movement on both sides
with type I3S in straight pipe piece



Type I3F

Swivel movement on both sides
with type I3F in straight pipe piece

SWIVEL JOINTS

AL 86-D

DG-01

- Stator (outer part) and rotor (inner part) joined by a single-row ball bearing
- For-life lubrication provided in the factory
- Welded connection parts: welding ends, pipe bends or flanges

Material

- Basic unit: I.7225 and I.4571
- Welding end: I.0305 and I.4571
- Flange: I.0460 and I.4571

Dimensions

- Standard: DN 20 - 100
- Flanges: PN 16 to EN 1092
- Others: possible to ANSI (ASA), BS etc.
- Welding end: to ISO recommendations



DK-01

- Stator (outer part) and rotor (inner part) joined by a single-row ball bearing
- For-life lubrication provided in the factory
- Female thread according to ISO 7-1 (DIN 2999)

Material

- Basic unit with threaded connection: I.7225 and I.4571

Dimensions

- DN 8 - 50



DG-02L

- Stator (outer part) and rotor (inner part) joined by a two-row ball bearing
- For-life lubrication provided in the factory
- Welded connection parts: welding ends, pipe bends or flanges

Material

- Basic unit: I.7225 and I.4571
- Welding end: I.0305 and I.4571
- Flange: I.0460 and I.4571

Dimensions

- Standard: DN 125 - 700
- Flanges: PN 10/16 to EN 1092
- Others: possible to ANSI (ASA), BS etc.
- Welding end: to ISO recommendations



DK-02

- Stator (outer part) and rotor (inner part) joined by a two-row ball bearing
- For-life lubrication provided in the factory
- Female thread according to ISO 7-1 (DIN 2999)

Material

- Basic unit with threaded connection: I.7225 and I.4571

Dimensions

- DN 8 - 50



DG-02S

- Stator (outer part) and rotor (inner part) joined by a two-row ball bearing
- For-life lubrication provided in the factory
- Welded connection parts: welding ends, pipe bends or flanges

Material

- Basic unit: I.7225 and I.4571
- Welding end: I.0305 and I.4571
- Flange: I.0460 and I.4571

Dimensions

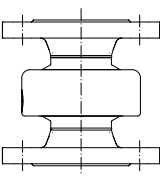
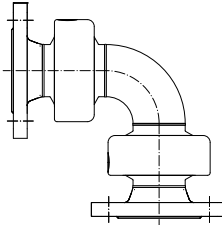
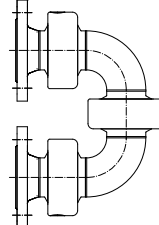
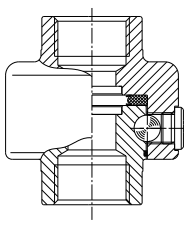
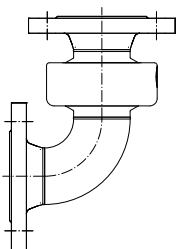
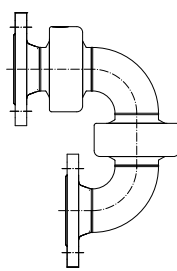
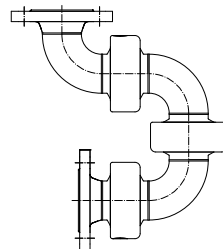
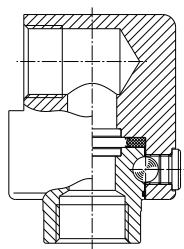
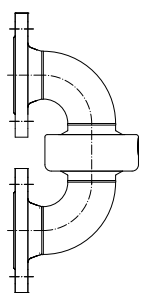
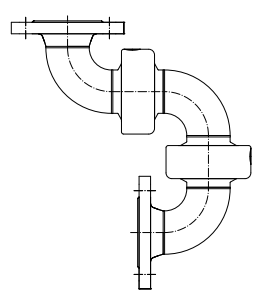
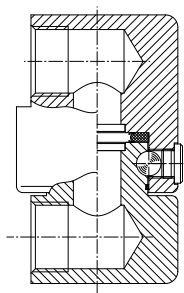
- Standard: DN 20 - 150
- Flanges: PN 16/40 to EN 1092
- Others: possible to ANSI (ASA), BS etc.
- Welding end: to ISO recommendations



SWIVEL JOINTS

AL 86-D

Forms

Swivel Joints			Rotating head joints
DG-01 DG-02L (light-weight design) DG-02S (heavy-duty design)			DK-01 DK-02
DG			DK
one plane of rotation	two plane of rotation	three plane of rotation	one plane of rotation
form 11 	form 24 	form 37 	form 11 
form 12 	form 25 	form 38 	form 12 
form 13 	form 26 		form 13 
DG-01: flange welding end male thread (special design) female thread (special design) DG-02L: flange welding end DG-02S: flange DG-02S: welding end male thread (special design) female thread (special design)			DK-01: female thread DK-02: female thread
Special connections (combinations of different connections) possible.			