

Large Bore & Engineered Swivel Joints

We offer a vast range of Swivel Joints for use in special applications where pipework rotation is required under extreme conditions, such as –

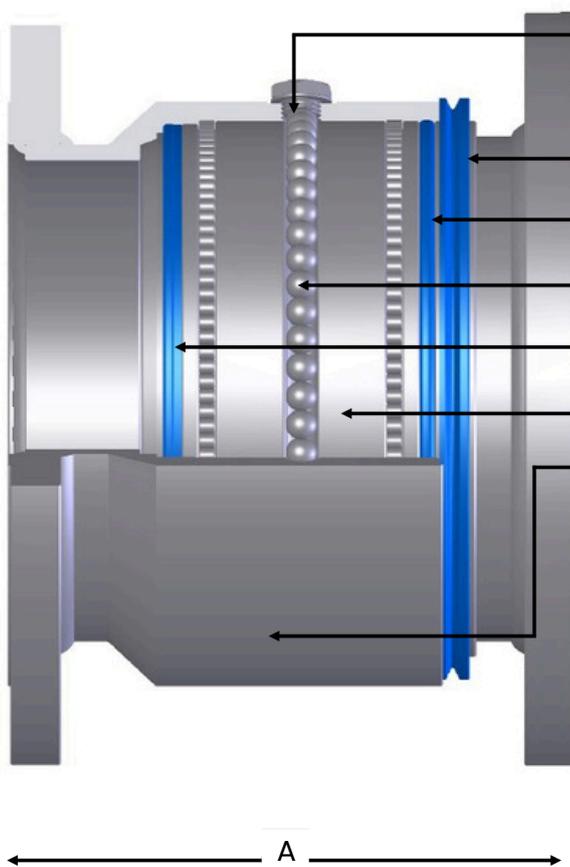
**LARGE BORE – HIGH LOAD – HIGH TEMPERATURE – HIGH PRESSURE – LOW TEMPERATURE
SUBSEA – AGGRESSIVE CHEMICALS – ABRASIVE PARTICLES**

Swivel technical information is detailed on the following pages. Where the requirements are greater than those detailed we are able to offer suitable Swivel designs based on specific operating requirements. Enquiry sheet available.

- Sizes up to 72" bore.
- Materials include Stainless Steel, Carbon Steel, Duplex and a wide range of exotic materials.
- Combination bearing designs with multiple tracks of roller bearings and ball bearings or spherical taper roller bearings for high axial and radial loads.
- Manufactured in pipe schedule sizes up to schedule XXS.
- Supplied as individual swivels with butt weld ends or complete with end fittings.
- Assembled in Styles 20, 30, 40, 50, 60, 70 , 80, 10 or other configurations on request.
- Swivel options include Steam Jacket, Leak Detection Ports, PTFE Lined and Plated Bore.
- Return to factory refurbishment service.
- NDE requirements (X-Ray, MPI, DPT etc)
- Third Party Inspection (ABS, DNV, TUV etc)



Engineered Swivel Joints For Special Applications - 3/4" to 6"



Ball Plug
ANSI Flanges standard, other end fittings available
Dust / Lubricant Seal
Optional - Submerged Duty Seal
Roller bearings for high radial and bending loads
Product line seal PTFE standard, other available
Body - carbon steel / stainless steel / other
Sleeve - carbon steel / stainless steel / other
Grease Nipple - not shown

Typical Swivel Designs

- High Load ● High Pressure ● High Temperature
- Low Temperature ● Aggressive Chemicals
- Abrasive Particles ● Submerged

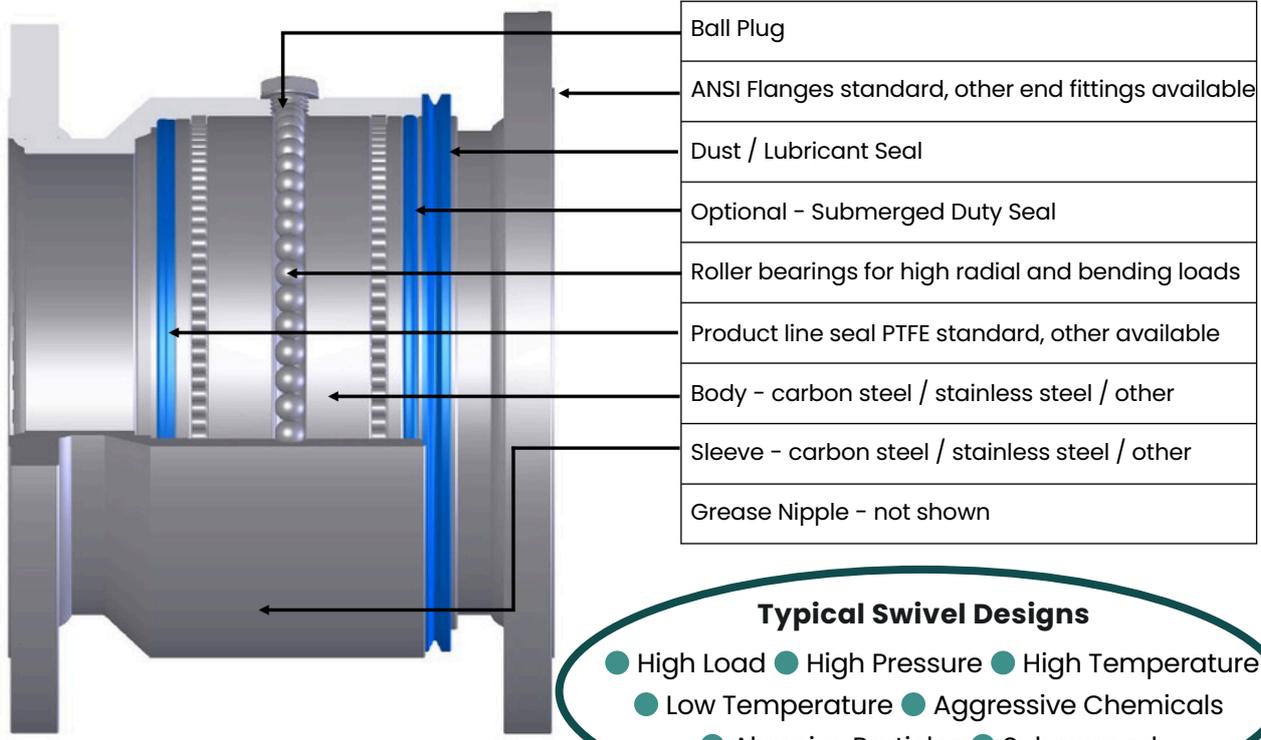
Standard Nominal Sizes	Bore (Sch xs)	Swivel O/D (+ 25mm for grease nipple)	Flange Diameter based on ANSI 150	Radial Load (Max)	Axial Load (Max) Per ball track	Bending Moment (Max)	Static Test Pressure Per track	Pressure per track (Max) Slow rotating	Length Dimn A Based on SO.RF	Flanged Swivel Weight Based on ANSI 150 SO.RF
Inches	MM	MM	MM	kN	kN	Nm	Bar (PSI)	Bar (PSI)	MM	Kg
3/4"	19	68	98	7	9	105	101 (1460)	58 (834)	149	4
1"	24	68	108	7	9	105	101 (1460)	58 (834)	149	4
1.5"	38	79	127	7	9	105	101 (1460)	58 (834)	159	6
2"	49	94	152	12	15	278	69 (1000)	39 (571)	168	9
3"	73	121	191	41	21	518	53 (739)	30 (439)	204	16
4"	97	157	229	54	37	675	51 (745)	29 (426)	234	24
6"	146	216	279	79	51	1364	36 (518)	20 (296)	216	36

Swivel Joints dimensions on request for non-standard sizes and extra large bore up to 72"

The Standard Swivel has one ball race but can accommodate up to 3 races, to find axial load and pressures multiply the value from the table by the number of races. For higher loads or different materials please enquire for a special design advising actual load details as combined loads including pressure.

Note: Maximum loads cannot be applied together, either load can be applied at the same time as the axial or pressure loads. The ball bearings are for the axial and pressure loads independently of the radial and bending loads which are by the roller bearings.

Engineered Swivel Joints For Special Applications – 8" to 72"



Standard Nominal Sizes	Bore (Sch xs)	Swivel O/D (+ 25mm for grease nipple)	Flange Diameter based on ANSI 150	Radial Load (Max)	Axial Load (Max) Per ball track	Bending Moment (Max)	Static Test Pressure Per track	Pressure per track (Max) Slow rotating	Length Dimn A Based on SO.RF	Flanged Swivel Weight Based on ANSI 150 SO.RF
Inches	MM	MM	MM	kN	kN	Nm	Bar (PSI)	Bar (PSI)	MM	Kg
8"	193	283	343	77	103	4	42 (611)	24 (349)	340	85
10"	247	337	406	97	126	5	34 (490)	19 (280)	340	112
12"	298	388	483	115	145	6	28 (407)	16 (280)	340	146
14"	330	420	533	126	158	7	26 (370)	15 (212)	340	177
16"	380	470	597	144	178	8	22 (326)	13 (186)	340	212
18	431	521	635	162	199	9	20 (289)	11 (165)	340	235
20"	482	572	699	180	219	10	18 (259)	10 (148)	340	278
24"	584	674	813	216	259	12	15 (215)	8 (123)	340	358
30"	736	826	984	270	322	15	12 (173)	7 (99)	340	450

Swivel Joints dimensions on request for non-standard sizes and extra large bore up to 72"

The Standard Swivel has one ball race but can accommodate up to 3 races, to find axial load and pressures multiply the value from the table by the number of races. For higher loads or different materials please enquire for a special design advising actual load details as combined loads including pressure.

Note: Maximum loads cannot be applied together, either load can be applied at the same time as the axial or pressure loads. The ball bearings are for the axial and pressure loads independently of the radial and bending loads which are by the roller bearings.