

## Product Overview:

The OILCO 90 Series swivel joint is designed with a three "V" ring seal configuration that is spring loaded and self-adjusting for normal wear. The incorporation of these "V" rings maintains a constant optimal pressure, securing a reliable seal long after conventional single rings or compression seals may be compromised.

The 90 Series is available in carbon steel, stainless steel T-316, and aluminum. Sizes range from 1 1/2" to 16" in all materials. All styles are available in flanged, threaded, butt-weld ends, or even socket ends. Packing seal material is Buna-N (standard) but Viton, Teflon®, Nitrile, Kalrez®, Chemrez®, EPDM and EPR are available.

The versatility of the 90 Series has allowed OILCO to address most commercial concerns for the last three decades. Secondary application advancements, as utilized in the "LT" (Low Torque) version of the unit, has reduced the amount of overall torquing friction up to 65% as compared with standard swivel joints – all while maintaining established internal and external dimensions. Acknowledging the increase in critical operations (e.g. connection hose life expectancy), OILCO has incorporated this secondary process into the production line as a standard on all larger diameter swivels.

Further research and development has given rise to a new variant of the 90 Series, the "HP", High Pressure Series. With increased overall diameters, inflated mechanical and sealing chambers, the HP Series can service projects requiring testing pressure over 3000 psi.

The flexibility of the 90 Series line is a performance platform unmatched in the industry.

## Design Notes:

- (1) All surfaces are to be machine finished before final testing and assembly
- (2) Operational and testing pressures determined by ASTM pipe ratings
- (3) Triple v-ring packing seals, spring energized and self-adjusting for normal wear
- (4) Swivel joints are offered with Buna-N packing seals standard
- (4) High pressure variant available (schedule 80 & 160)

## Manufacturer Specifications:

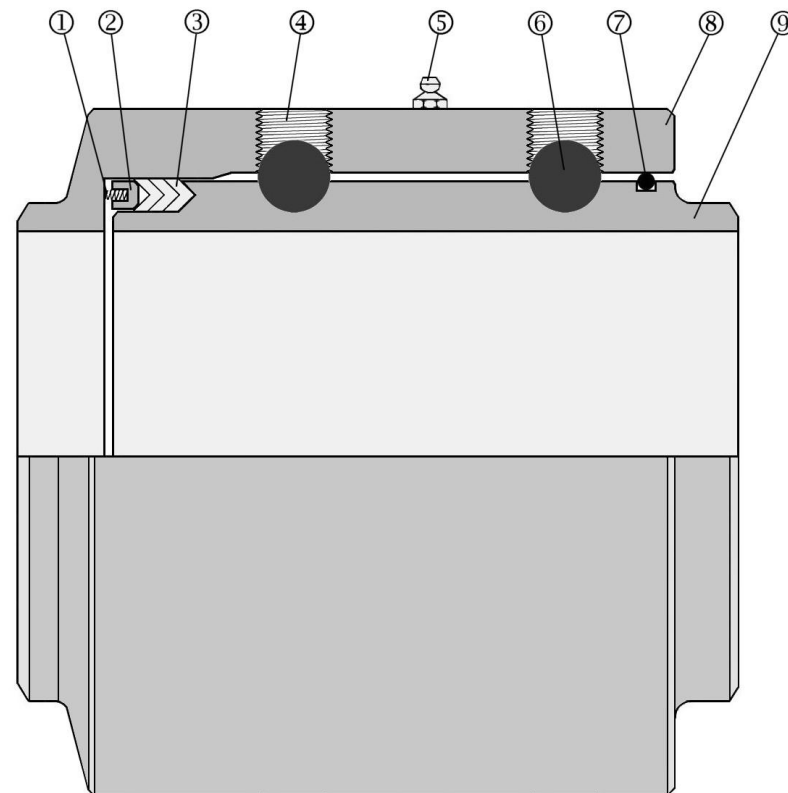
Seal Packing:	Triple V-Ring Type
End Connection:	Schedule 40 standard 37 1/2° bevel for weld

## Material of Construction:

Carbon Steel, ASTM A-106 Grade B  
Stainless Steel, T-316  
Aluminum

## Swivel Joint Component List:

- 1 Spring Adapter Compression Springs
- 2 Teflon Spring Adapter
- 3 Chevron Packing Seals, Buna-N
- 4 Ball Retainer Cap Screws
- 5 Grease Fitting
- 6 Radial Ball Bearings
- 7 Environmental Dust Seal
- 8 Swivel Joint Body Housing  
(1 piece 2"-4", 2 piece 6" – 16")
- 9 Swivel Joint Inner Sleeve



### Caution:

Weld end swivel joints should be completely disassembled prior to welding so as to not damage the seals. Care should be taken to avoid distortion of seal and ball race diameters.



### Information:

Consult factory for all post-manufacturing recommendations, lubrication data and scheduling and all general maintenance and safety.



## 90 Series V-Ring Swivel Joints Product and Design General Overview

Date:  
11-1-2012

Drawing #:  
SK-5705