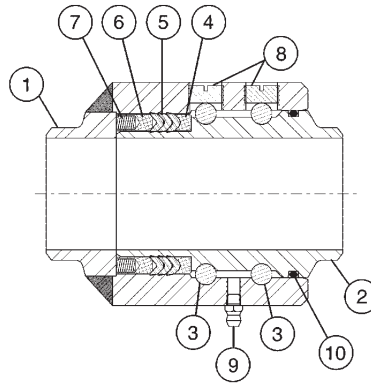


## V-Ring Swivel Joints

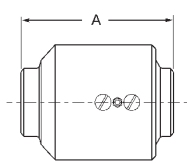
- |                          |                        |
|--------------------------|------------------------|
| 1. body                  | 6. spring retainer     |
| 2. sleeve                | 7. spring              |
| 3. ball bearings         | 8. ball retainer screw |
| 4. seal retainer         | 9. grease fitting      |
| 5.V-Ring (pressure) seal | 10.O-Ring (dust) seal  |



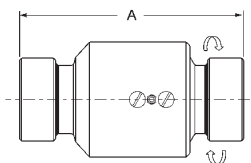
### V-Ring Features

- The spring-loaded triple V-ring sealing system ensures a leak proof seal at either high or low pressure and an extended seal life compared to the conventional single O-ring design.
- The 3" - 8" carbon steel swivels are manufactured from a special grade of carbon steel with flame hardened dual raceways for greater load bearing capacity and longer life.
- The stainless steel swivels are manufactured in 316 grade stainless steel for superior corrosion resistance.
- Available with pressure ratings to 1,000 psi
- Available in carbon steel, stainless steel and aluminum

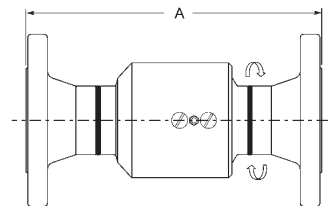
### Single Plane V-Ring Style 20



weld end x weld end  
sizes 2" - 8"

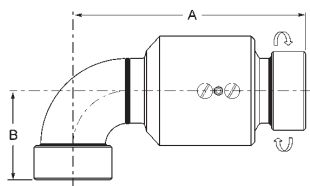


female NPT x female NPT  
sizes 2" - 8"

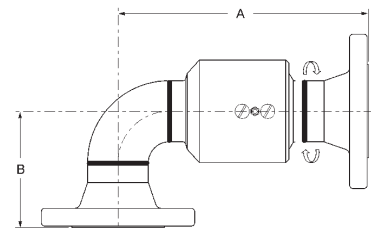


150# ASA flange x 150# ASA flange  
sizes 2" - 8"

### Single Plane V-Ring Style 30

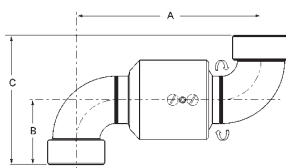


female NPT x female NPT  
sizes 2" - 8"

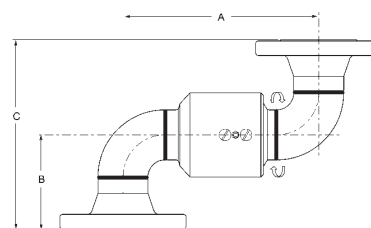


150# ASA flange x 150# ASA flange  
sizes 2" - 8"

### Single Plane V-Ring Style 40

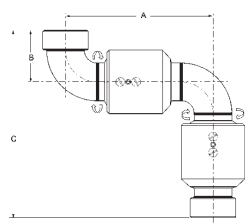


female NPT x female NPT  
sizes 2" - 8"

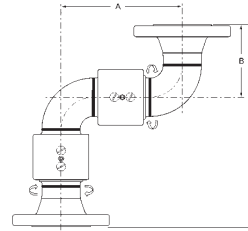


150# ASA flange x 150# ASA flange  
sizes 2" - 8"

**Double Plane V-Ring Style 50**

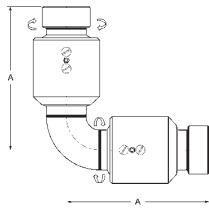


female NPT x female NPT  
sizes 2" - 8"

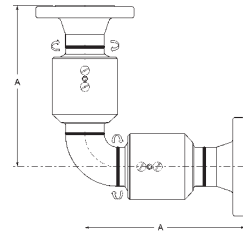


150# ASA flange x 150# ASA flange  
sizes 2" - 8"

**Double Plane V-Ring Style 60**

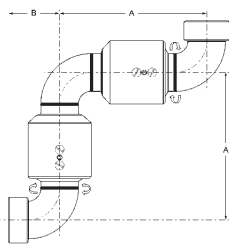


female NPT x female NPT  
sizes 2" - 8"

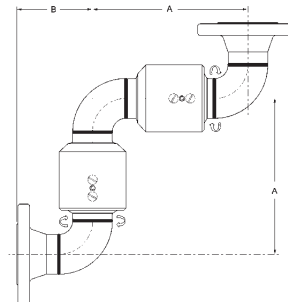


150# ASA flange x 150# ASA flange  
sizes 2" - 8"

**Double Plane V-Ring Style 70**

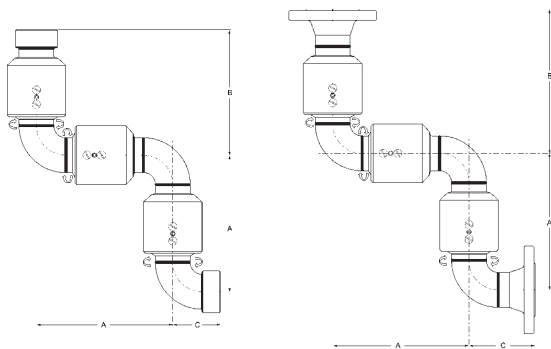


female NPT x female NPT  
sizes 2" - 8"



150# ASA flange x 150# ASA flange  
sizes 2" - 8"

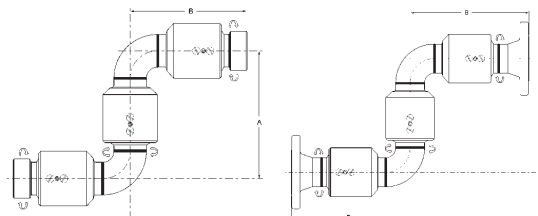
**Triple Plane V-Ring Style 80**



female NPT x female NPT  
sizes 2" - 8"

150# ASA flange x  
150# ASA flange  
sizes 2" - 8"

**Triple Plane V-Ring Style 10**

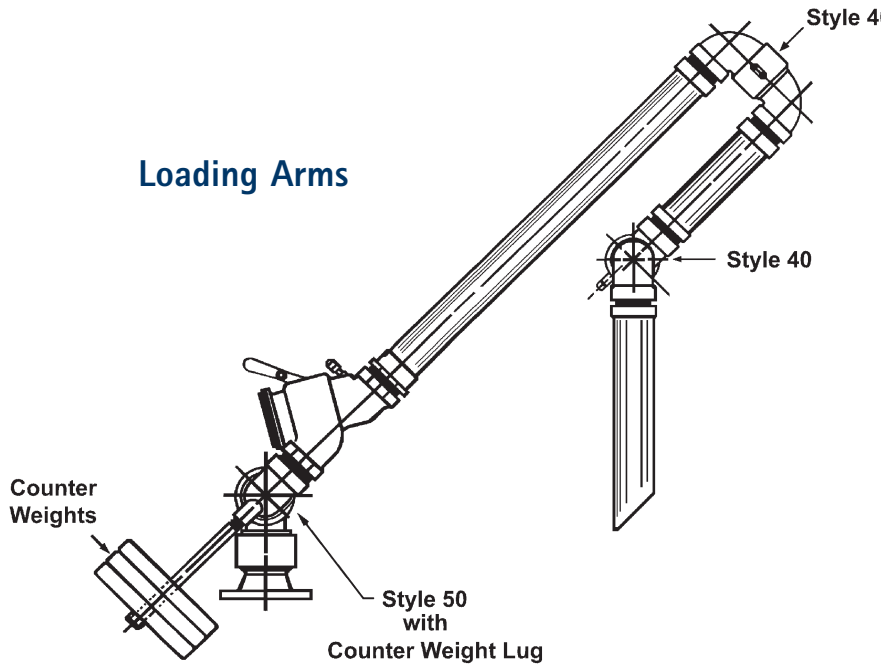


female NPT x female NPT  
sizes 2" - 8"

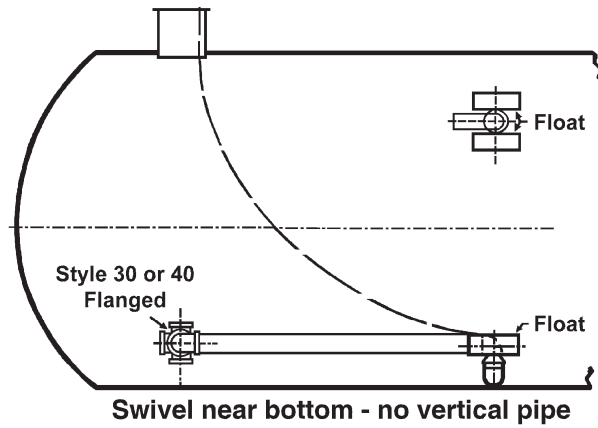
150# ASA flange x  
150# ASA flange  
sizes 2" - 8"

Typical Applications for V-Ring Swivels

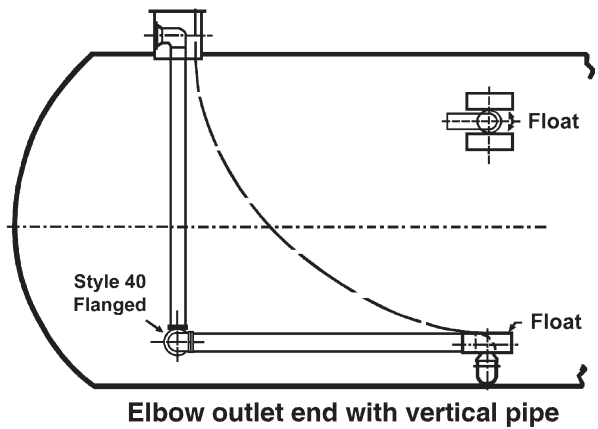
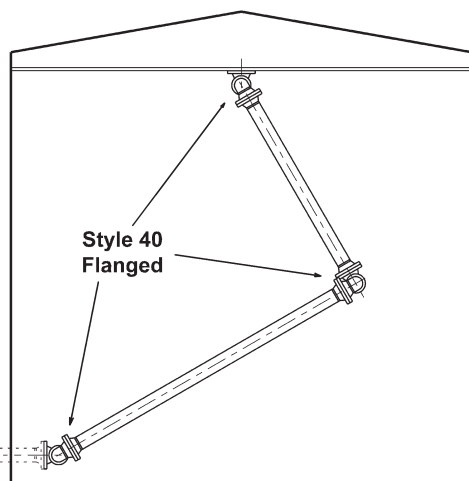
Loading Arms



Floating Suction

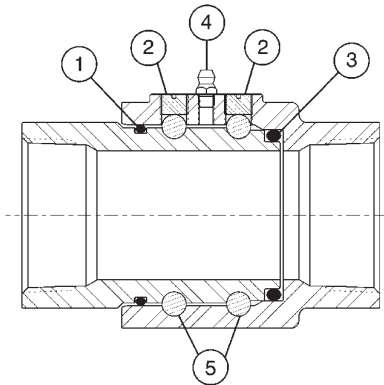


Floating Roof Drains



## O-Ring Swivel Joints

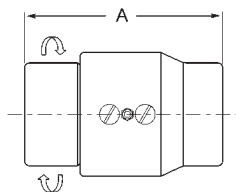
1. O-Ring (dust) seal
2. ball retainer screw
3. O-Ring (pressure) seal
4. grease fitting
5. ball bearings



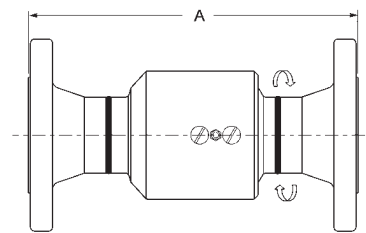
### O-Ring Features

- The O-ring pressure seal ensures a leak-proof seal at either high or low pressure and smoother rotation at lower torque than multiple seal designs
- Spring-loaded Teflon® pressure seals are available up through 3"
- Carbon steel and stainless steel O-ring type swivels provide greater strength and corrosion resistance when needed for lower torque applications
- Available in carbon steel, stainless steel, aluminum, brass and iron

### Single Plane O-Ring Style 20

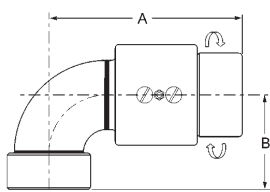


female NPT x female NPT  
sizes 1" - 4"

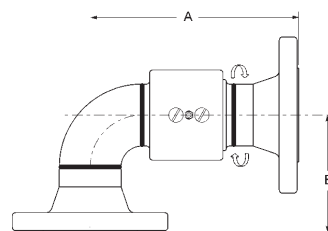


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

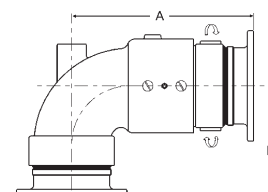
### Single Plane O-Ring Style 30



female NPT x female NPT  
sizes 1" - 4"

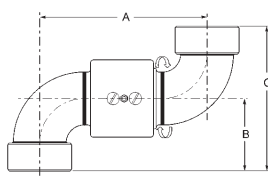


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

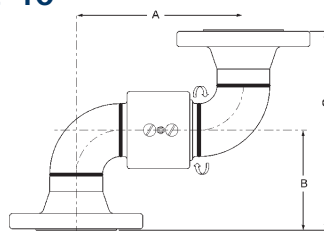


tank truck flange x tank truck  
flange sizes 2" - 4"

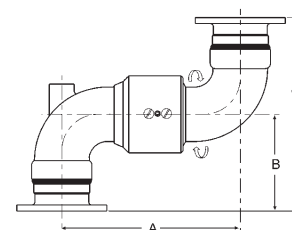
### Single Plane O-Ring Style 40



female NPT x female NPT  
sizes 1" - 4"

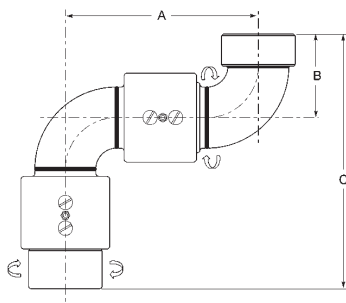


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

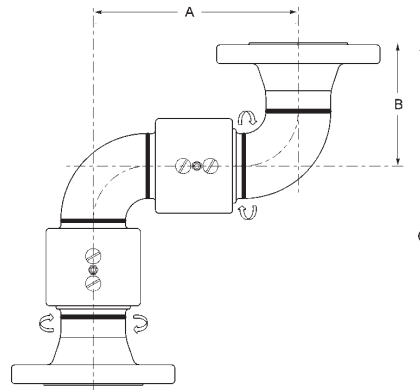


tank truck flange x tank truck  
flange sizes 2" - 4"

## Double Plane O-Ring Style 50

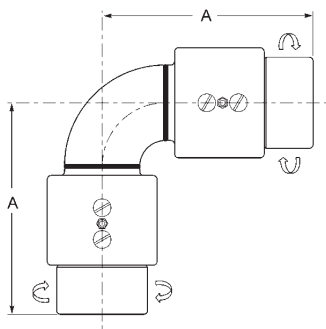


female NPT x female NPT  
sizes 1" - 4"

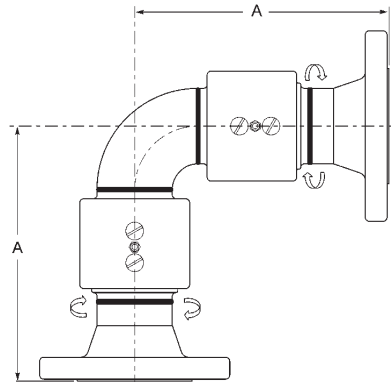


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

## Double Plane O-Ring Style 60

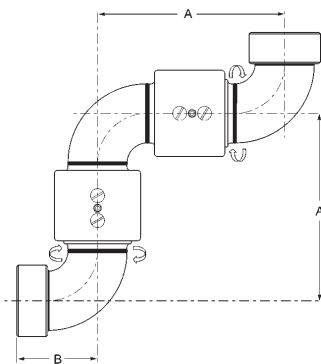


female NPT x female NPT  
sizes 1" - 4"

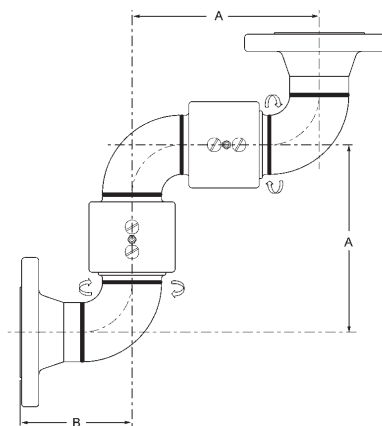


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

## Triple Plane O-Ring Style 70

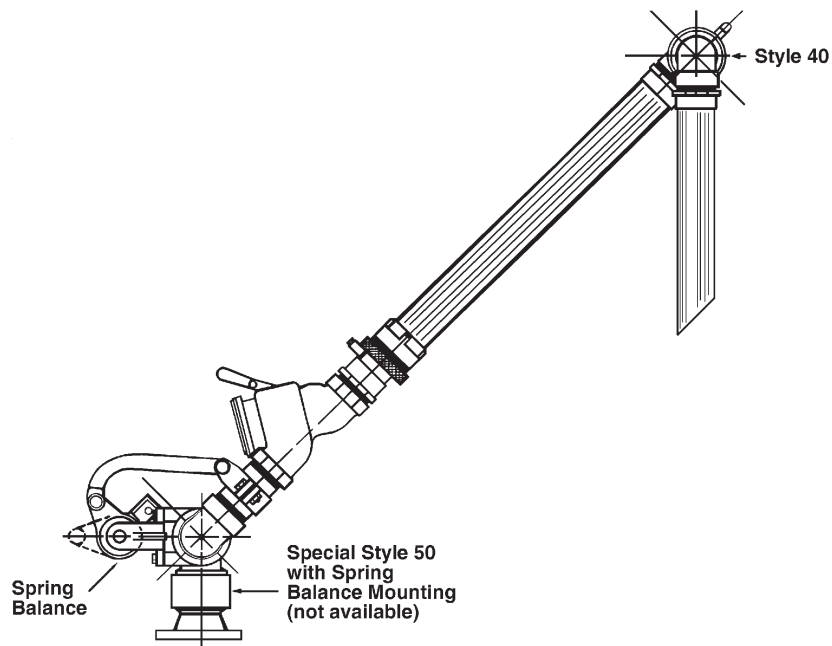


female NPT x female NPT  
sizes 1" - 4"

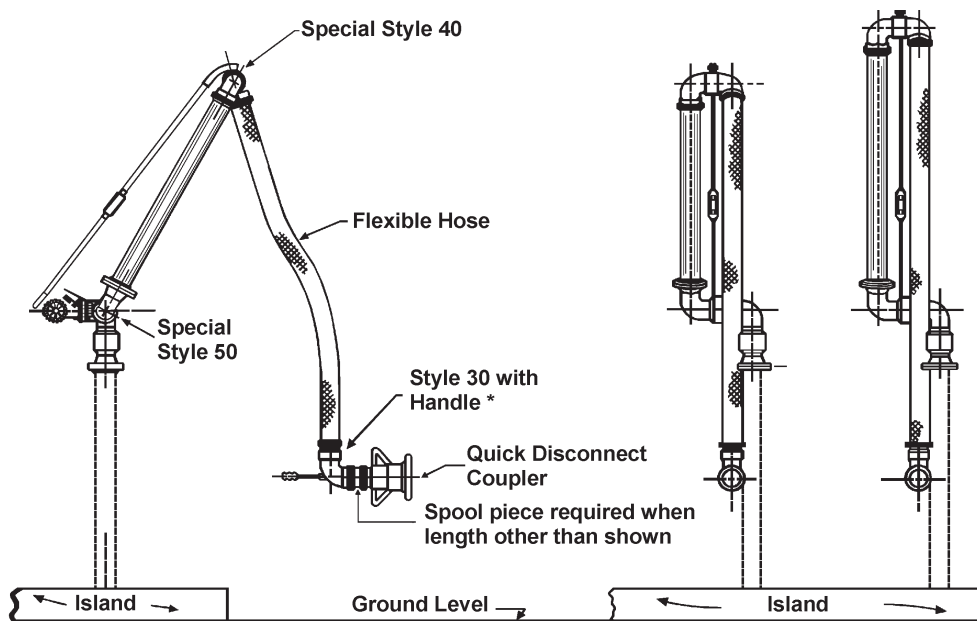


150# ASA flange x 150# ASA flange  
sizes 1" - 4"

Typical Applications for O-Ring Swivels



LOADING ARMS



HOSE LOADERS

\* style 60 may also be found in this application