

# VNI-A4VG Intermediate Swivel for Loading Arm

180° swivel for use on outboard end of loading arm, located at the top of the drop hose/spool.

### OPERATION

A single-plane swivel mounted so that the loading coupler swings in & out relative to the tanker API adaptor.

## Key Features

- The swivel bolts on the outboard end of the horizontal spool, above the drop hose/spool.
- This provides a swing action to enhance the movement of the loading coupler to better than that of hose deflection only.



## Dismantle

Remove retainer plug and rotate the swivel with the hole pointing downwards until all ball-bearings have dropped out. The male of the swivel can then be removed complete with the needle bearings and seals.

## Adjustment

- None.
- Grease at three-monthly intervals with recommended grease.
- See Installation and Maintenance Manual for full details.

## Specifications

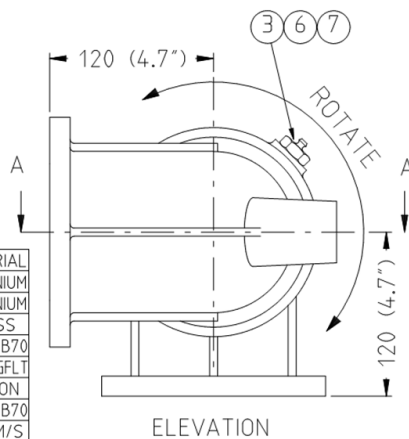
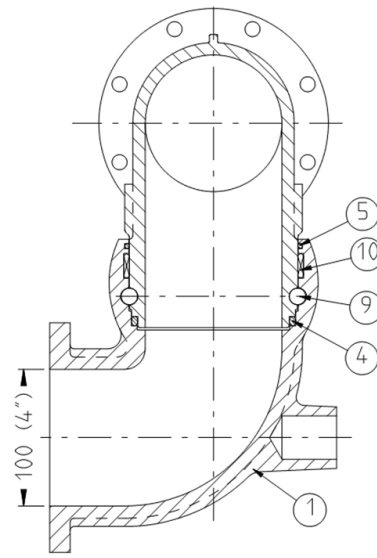
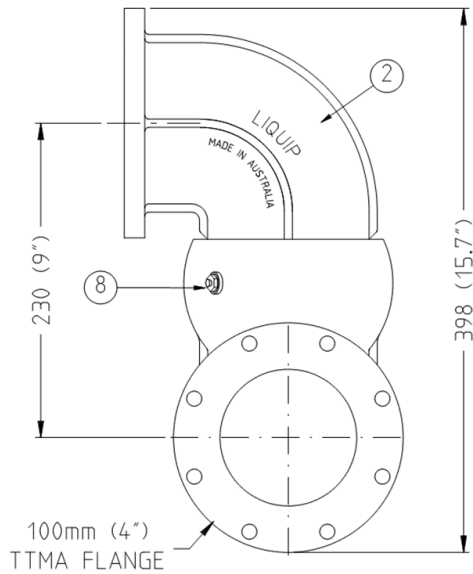
<b>Mounting</b>	Flanges are 100mm (4") TTMA pattern.
<b>Technical Data</b>	<ul style="list-style-type: none"> <li>• All aluminium construction (heat treated).</li> <li>• Ball and needle rolling elements for optimum axial and radial load bearing with minimum friction.</li> <li>• Grease nipple one side with relief valve mounted opposite for efficient removal of old grease and debris.</li> <li>• Dual o-rings for product seal and dust seal respectively.</li> <li>• Viton B70 grade o-rings (* Teflon or other special seals available on request).</li> <li>• Brass ball retainer.</li> </ul>
<b>Working pressure</b>	1,000 kPa (145 PSI)
<b>Test pressure</b>	1,500 kPa (218 PSI)
<b>Weight</b>	5.6 kg (12.3lb)
<b>Operating temperature</b>	-20° to +80°C (-4° to +176°F) for EPDM & Viton B70 grade -40° to +60°C (-40° to +140°F) for Viton GFLT grade
<b>Associated Equipment</b>	See Velvet Touch loading arm systems.

**\* Note:**

The nature of Teflon is that it is unyielding but easily scratched; therefore the slightest damage can lead to weeps particularly where clamping force is provided by a spring which is necessarily limited in force. However the use of Teflon cannot be avoided because of its outstanding chemical resistance. Liquip guarantee the sealing of all new products and test all production prior to dispatch. Following installation of the equipment by the Purchaser it is essential that the valve be kept perfectly clean, any test liquids be perfectly clean and no tools be allowed to touch the Teflon seals. It is not uncommon for valves to exhibit small weeps once in service with commercial-quality liquids.

# LIQUIP

## VNI-A4 INTERMEDIATE SWIVEL



NOTES:  
 1- STANDARD PRODUCT SEAL IS 0126 VITON B70 O-RING.  
 IF REQUIRED IT MAY BE REPLACED WITH  
 0126VG VITON GFLT O-RING OR  
 4641 SPRING LOADED TEFLON SEAL.

SEE  
 NOTE 1

ITEM	PART NO	DESCRIPTION	QTY	MATERIAL
1	LAN400-6	ELBOW FEMALE 90° TO TTMA	1	ALUMINIUM
2	LAN400-7	ELBOW MALE 90° TO TTMA	1	ALUMINIUM
3	LAN400-9	PLUG RETAINER BALL BEARING	1	BRASS
4	0126	O-RING	1	VITON B70
	0126VG	O-RING	-	VITON GFLT
	4641	SEAL SPRING LOADED TEFLON	-	TEFLON
5	6080	O-RING	1	VITON B70
6	0481	NIPPLE GREASE STRAIGHT	1	Z/P M/S
7	0885	WASHER FIBRE	1	FIBRE
8	1525	NIPPLE GREASE RELEASE	1	Z/P M/S
9	2334	BALL BEARING	32	STEEL
10	4531	NEEDLE ROLLER	100	STEEL

X12500

Issue: H

METERS - VALVES - VENTS - MANHOLES - PUMPS - HOSEREELS - OVERFILL PROTECTION - LOADING ARMS - ELECTRONIC DIPSTICKS