

# Bottom Loading Arm G32F, G33F

## FEATURES AND BENEFITS

OPW supported and unsupported boom type bottom loading arms are designed to provide flexible long range operation. A minimum of five swivel planes of rotation offer complete flexibility for loading or unloading of railcars and tank trucks or ISOTAINERS. These arms can be equipped an API coupler, Dry-disconnect coupler, Threaded or Flanged connection or any other customer-specified end fitting to make connections at the side, at the rear or underneath the vehicle. Intermediate- and End swivel assembly can be orientated upwards or downwards for optimum ease of operation.

To assist self-draining capability optional Low Profile Swivels may be selected in critical gravity unloading applications.

OPW bottom loading arms are available in many different configurations to accommodate specific customer requirements.



- **Easy to handle**, smooth operation
- **Compact** storage when not in use
- **Proven design** OPW loading arms are used by major oil terminals worldwide
- **Flanged construction** for ease of maintenance
- **Swivels** equipped with grease nipple
- **Durable** construction
- **Wide range** of seal material available
- **Sizes** 2" / DN50 , 3" / DN80 , 4" / DN100 or 6" / DN150
- **Alternative materials** of construction Carbon Steel, 316/316L Stainless Steel available
- **Available** with linear spring or torsion spring
- **Pre-balanced** at the factory to minimise installation and commissioning time

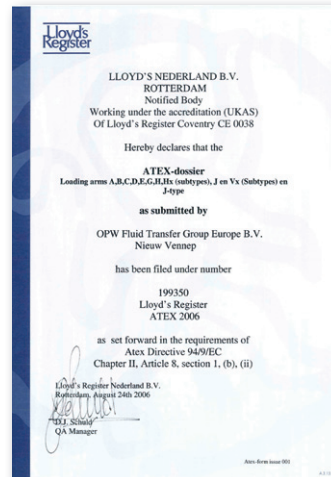
## CERTIFICATES



NEN-EN-ISO 9001:2000



PED 97/23/EC



ATEX 94/9/EC

## PRODUCT SPECIFICATION

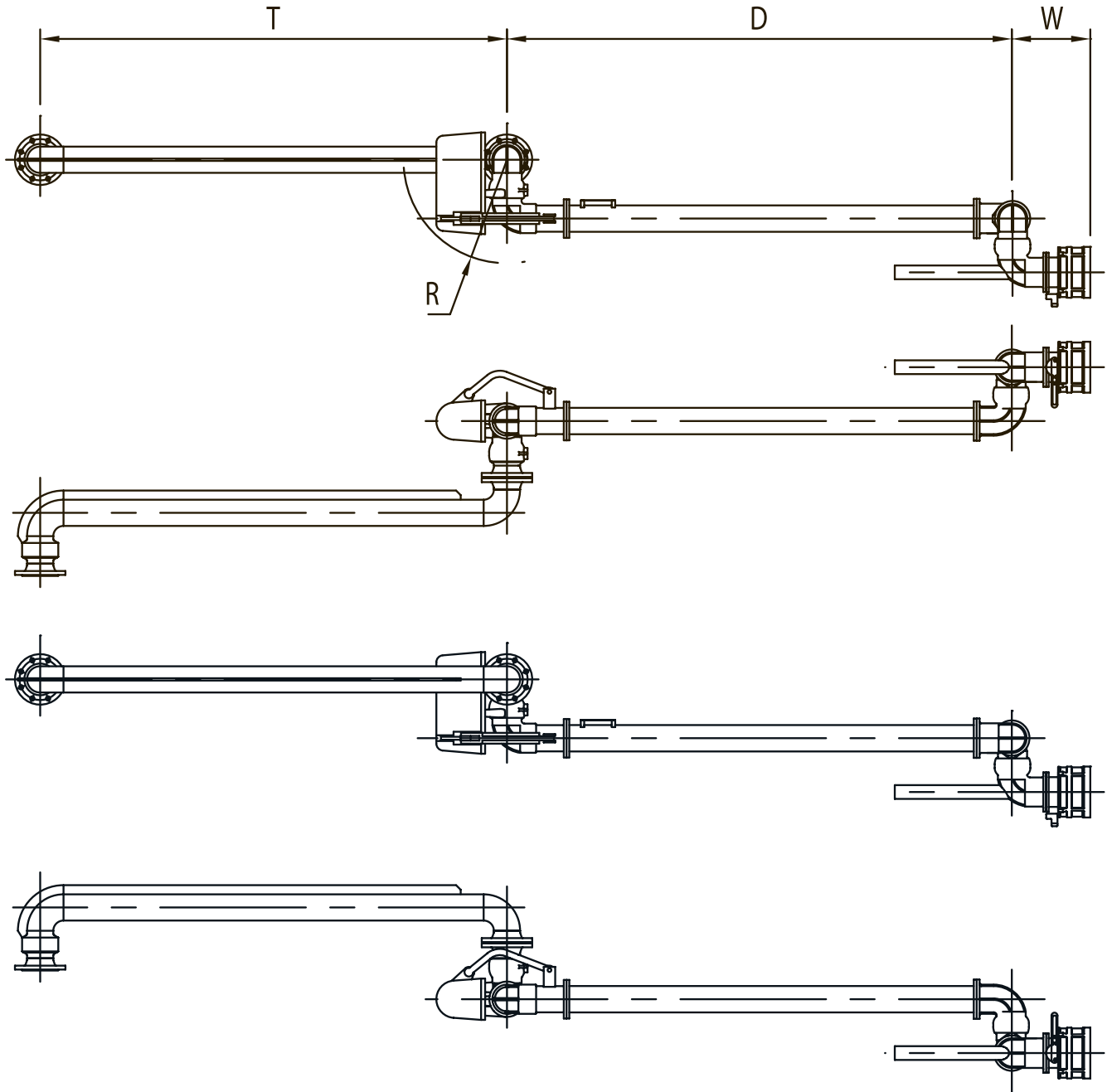
### Materials of construction

Inlet swivel	Carbon Steel
Intermediate swivel	Ductile Iron
End swivel assembly	Aluminium
Swivel seals	Viton® GFLT
Boom arm	Carbon Steel
Primary arm	Aluminium

## DIMENSIONS

Size	Dimensions (in mm)			
	D	R	T	W
2" / dn50	1800	381	1700	350
3" / dn80	1800	406	1700	350
4" / dn100	1800	451	1700	350
6" / dn150	1800	629	1700	350

Other dimensions available on request



## SPARE PARTS

Part number	Description
3002K-20-VG	2"/dn50 swivel seal replacement kit, Viton® GFLT
3002K-30-VG	3"/dn80 swivel seal replacement kit, Viton® GFLT
3002K-40-VG	4"/dn100 swivel seal replacement kit, Viton® GFLT
3002K-60-VG	6"/dn150 swivel seal replacement kit, Viton® GFLT

## ACCESSORIES

Article number	Description
1005E3-0402	API coupler
1004D4-0402	Semi automatic snap-on API coupler
1004DRN-0400	Drain adaptor
1005PA-AL40	Parking adaptor
PARST0007	Parking standpost
11240	Sight glass (11456 for ethanol applications)

Optional available accessories include: Kamvalok®, Drylok, Epsilon Drydisconnect couplers; Stand Post; Position detection; Parking lock, and many more please consult factory for information and availability.



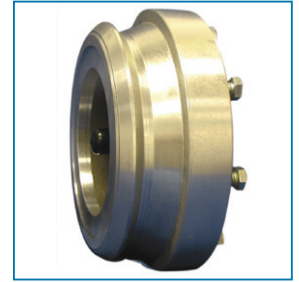
1004D4-0402



1005E3-0402



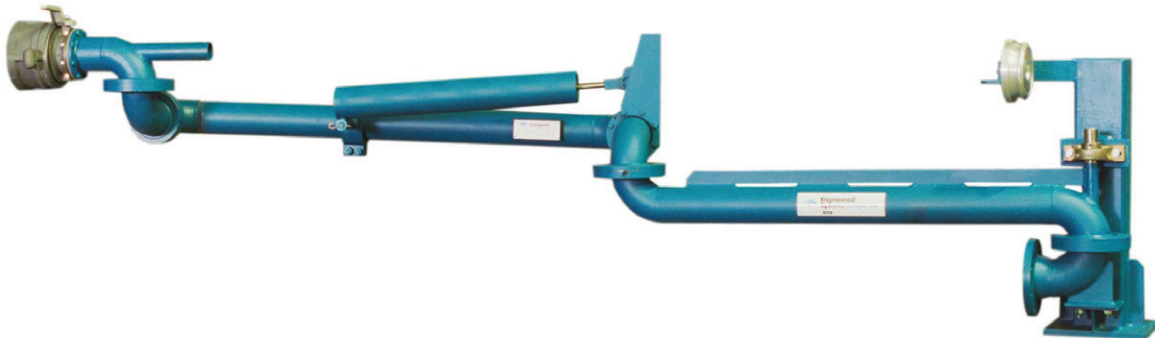
1004DRN-0400



1005PA-AL40

## RELATED PRODUCTS

Article number	Description
8800E	Overfill Prevention and Ground Verification Controller to EN13922



## OPW Fluid Transfer Group: One Company, Five Brands



Dedicated engineered and patented solutions for pipe, tube and hose connections used for extreme applications high/low temperature & pressure and nuclear.

Examples: RapidLOK<sup>™</sup> for flange replacement; save vents and drains; locking quick connect; product recovery systems; cryogenic couplings; autoclave check valves ...

[www.hiltap.com](http://www.hiltap.com)



Mechanical and electronic components and systems for the safe loading, transportation and offloading of hazardous fluids on road tankers. Examples: flat bottom API's; bottom valves; vapour recover valves; overflow prevention system; sealed parcel delivery system; onboard monitoring system; crossover prevention system ...

[www.civacon.com](http://www.civacon.com)



Mechanical and electronic components and systems for the safe storage, transfer and loading of hazardous fluids at chemical plants, refineries and terminals.

Examples: loading arms for fuels, chemicals, bitumen; rack monitoring system; quick disconnects (kamlok<sup>®</sup>, autolok<sup>™</sup>); dry disconnects (epsilon<sup>™</sup>, drylok<sup>™</sup>, kamvalok<sup>®</sup>); floating suction assemblies ...

[www.opw-es.com](http://www.opw-es.com)



Components and systems for the safe loading, transportation and offloading of hazardous fluids and dry bulk on pressure & non-pressure railroad tank cars and dry bulk road tankers.

Examples: pressure & vacuum relief valves; needle valves; top transfer valves; valve actuator systems; overflow prevention systems ...

[www.midlandmfg.net](http://www.midlandmfg.net)



Components for pneumatic tank trailers, rail cars, chemical and pharmaceutical plants, and any application requiring the processing, movement and storage of dry bulk or liquid materials.

Example: butterfly valves; ball valves; sample systems; actuators; aeration systems; swing check valves ...

[www.suresealinc.com](http://www.suresealinc.com)



From the European Head office near Amsterdam The Netherlands, these 5 OPW Fluid Transfer Group brands are supported. In addition Loading Arms, Tank Truck equipment and its related accessories are designed and manufactured here to serve the OPW FTG Europe BV territory.

[www.opw-ftg.nl](http://www.opw-ftg.nl)