

Tank Truck Equipment

WORLD-CLASS TECHNOLOGY, SERVICE AND SUPPORT



Introduction

Welcome to the OPW Fluid Transfer Group

For over 50 years OPW Fluid Transfer Group Europe is dedicated to provide expert solutions for the safe handling, processing, monitoring and transportation of hazardous bulk products. A motivated team of professionals understand customer needs as well as applicable legislation and local requirements. Engineering skills and a sophisticated production facility in combination with modern logistics offer our clients the flexibility and innovation required to keep and enhance their marketplace. This together with our long expertise and customer focus makes OPW Fluid Transfer Group what it is today, one of the global leaders in the market.

Our focus is primarily on Hydrocarbon and Chemical products. Our expertise concentrates on road tankers and railcar transport; loading-, unloading- and transloading facilities and the safe quick and dry-disconnect coupling systems.

Nowadays safeguarding the environment, equipment and people is key, OPW Fluid Transfer Group line of products offer worldclass solutions for your Transportation needs as well as your Loading Terminal facilities.

Zero Harm, Total Integrity is our motto.

Sincerely yours,
OPW Fluid Transfer Group Europe BV

H. Gilde
Managing director

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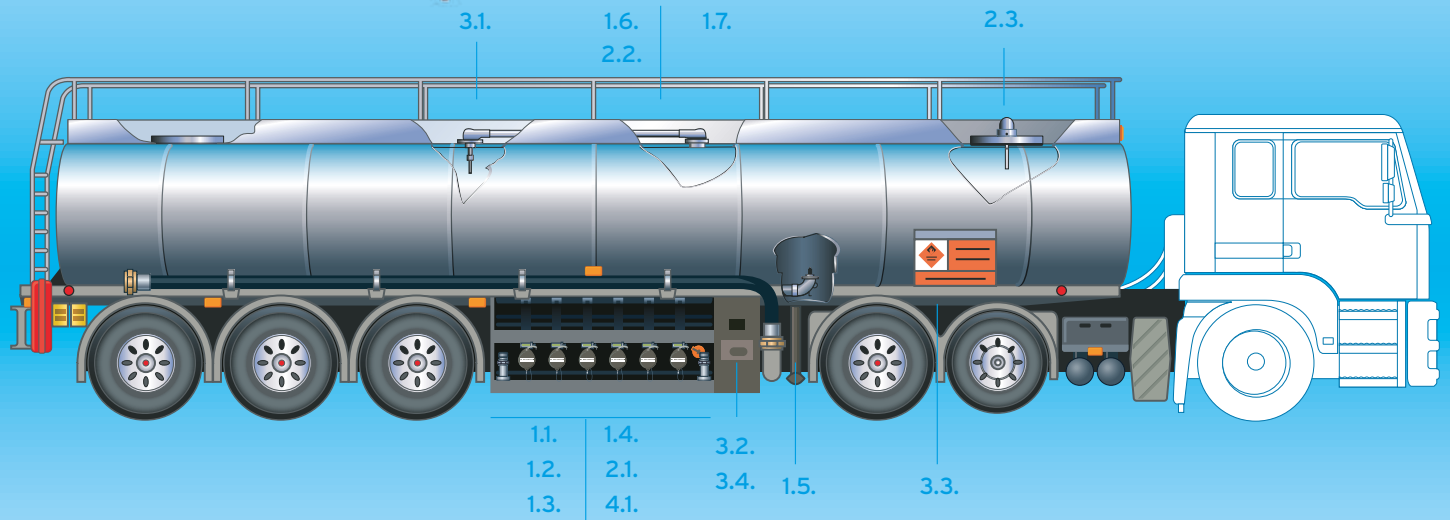
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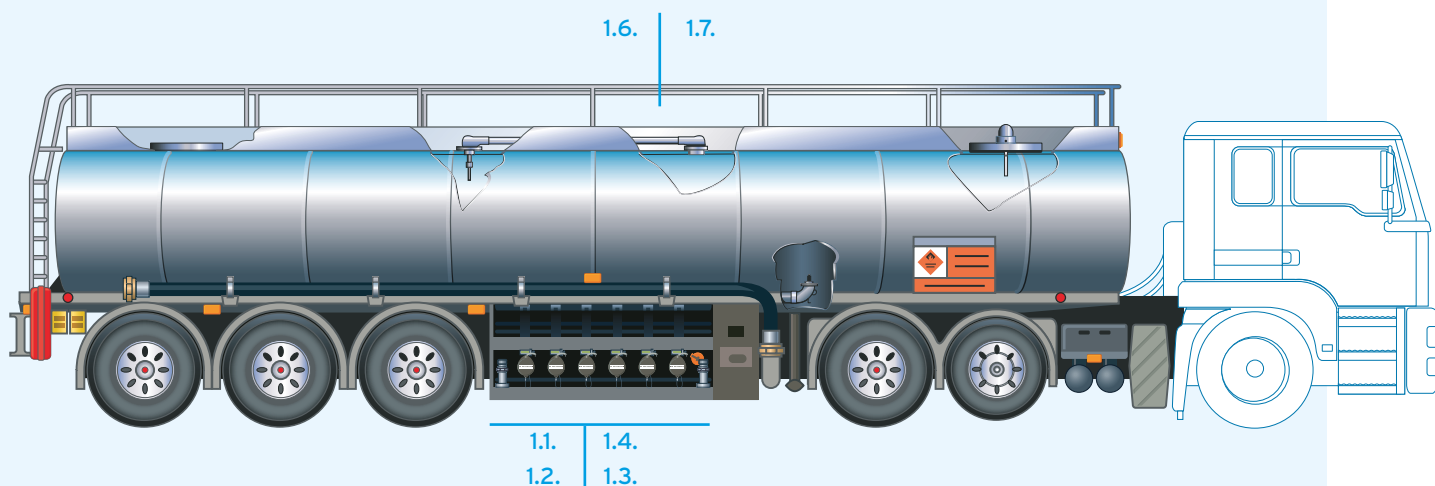


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API Tank Truck Adaptor

CIVACON's API bottom loading adaptors are precisely engineered to match standard loading couplers and increase service performance.



891BA, API Adaptor



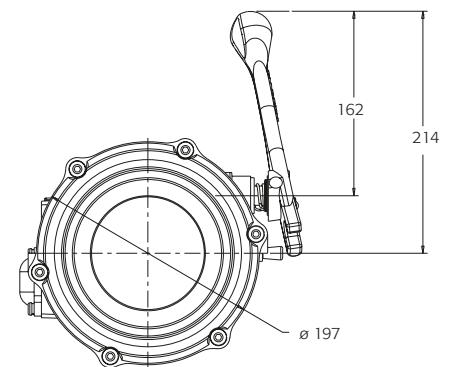
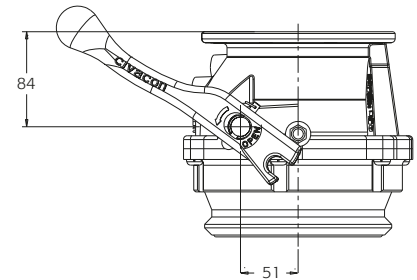
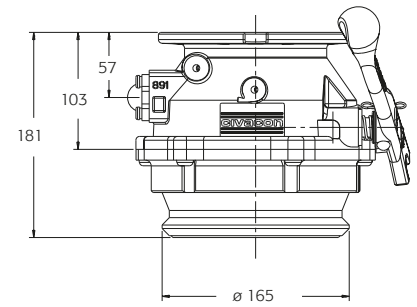
891NB, API Adaptor

Features and Benefits

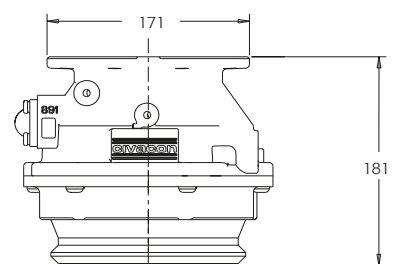
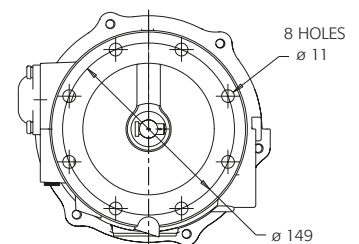
- **Designed in accordance** with API RP 1004 and EN13083
- **Two piece** lightweight aluminium construction for maximum strength and weight reduction
- **4" TTMA** mounting flange
- **Nominal size** 4" or DIN100
- **Rotatable** hard-coated nose piece for maximum service life
- **Flat bottom** ensures complete drainage
- **Minimum number of internals** to minimize pressure drop and improve flow rate
- **Bushed running surfaces** for efficient operation
- **Stainless Steel** internals for maximum service life
- **Viton GFLT** seals
- **Compatible** with diesel, bio diesel, gasoline, ethanol and methanol
- **Heavy duty** poppet with an acetal resin bearing for smoother opening characteristics
- **Easy-grip** aluminium lever
- **Mounting plugs** for model 300/301 air interlock valve
- **Grease nipple** on handle for easy maintenance

Specifications

891BA API ADAPTER OPENABLE



891NB API ADAPTER NON-OPENABLE



All dimensions are in mm

Spare parts

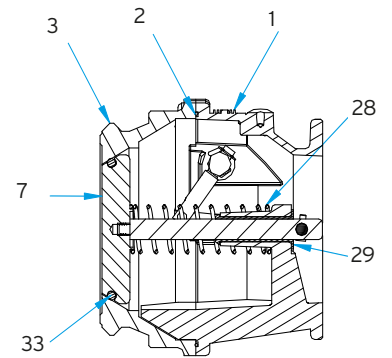
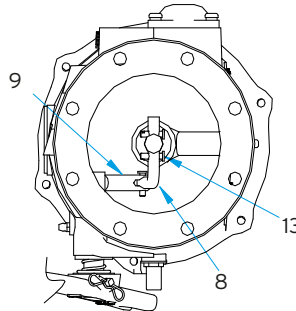
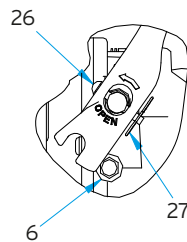
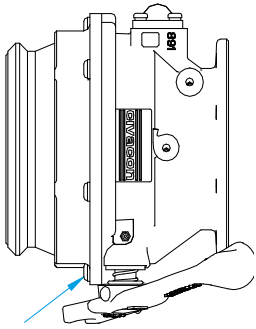
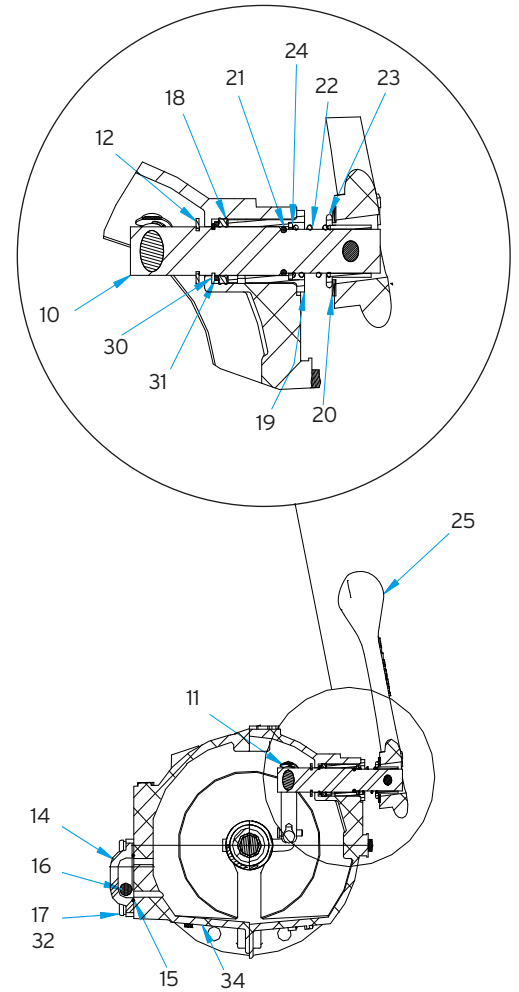
Repair kit

891HRK	Handle repair kit
891ORK	O-Ring Repair Kit
891SRK	Shaft Repair Kit
891BRK	Sight glass repair kit for 891-897-861

Spare part only supplies as complete kit

Item	Part Nr	Description	QTY	Item	Part Nr	Description	QTY
1	11548	BODY, MACHINED	1	19	11536	BEARING ¹⁴	1
2	11905	O-RING ²	1	20	10840	NYLON WASHER ¹⁴	1
3	11550	ADAPTOR FACE	1	21	H06924M	O-RING ^{12,4}	1
4	10806M	LOCK WASHER	6	22	H20182M	SPRING ¹⁴	1
5	11534	SCREW	6	23	11490	HUB ¹⁴	1
6	H20051M	STOP PIN	1	24	H20199M	NYLON WASHER ¹⁴	1
7	11850	POPPET	1	25	11460	HANDLE ¹	1
8	11545	LINK, POPPET/HANDLE	1	26	H08901M	FULCRUM PIN ¹⁴	1
9	11544	LINK, SHAFT	1	27	11623	BOWTIE CLIP ¹⁴	1
10	11543	SHAFT ¹⁴	1	28	11664	SPRING	1
11	11661	E-CLIP	1	29	11665	BEARING	1
12	11662	E-CLIP	1	30	11703	RETAINING RING	1
13	11618	CLEVIS PIN	3	31	11704	WASHER ¹⁴	1
14	11365M	SIGHT GLASS ³	1	32	H20057M	LOCK WASHER ³	4
15	H51437M	O-RING ³	1	33	H20058M	O-RING ²	1
16	H51384M	FLOAT BALL ³	1	34	12080	PLUG, 3/8" NPT	1
17	11366M	SCREW ³	4				
18	11705	QUAD RING ^{12,4}	1				

1-Included in 891HRK, 2-Included in 891ORK, 3-Included in 891BRK, 4-Included in 891SRK



General specifications

■ Nominal size	4" or DIN100
■ Maximum flow rate	2.500 litre/minute
■ Seal	Viton GFLT
■ Working temp.	-40°C to +70°C other temp. on request
■ Weight	891BA 5,1 Kg 891NB 4,2 Kg

Ordering specifications

Art. number	Description
891	API Adaptor with Handle
891BA	4" API bottom loading adaptor with aluminium handle and sight glass
891NB	4" API non-openable bottom loading adaptor with sight glass

Related products

Art. number	Description
300/301	Air interlock valve
875-AL40	API dust cap
11240	4" TTMA sight glass
11293M	Guard bar interlock
GASK0052	4" TTMA gasket
FAL0009	4" TTMA flange aluminium
FST0025	4" TTMA flange steel

API Tank Truck Adaptor

The new API Lock Assembly is designed to restrict unauthorized personnel from unloading valuable products from your trailer compartments. The addition of the air operated lock to the Civacon 891 API adaptor will ensure protection from fuel theft.



891BA-LKE



891NB-LKE

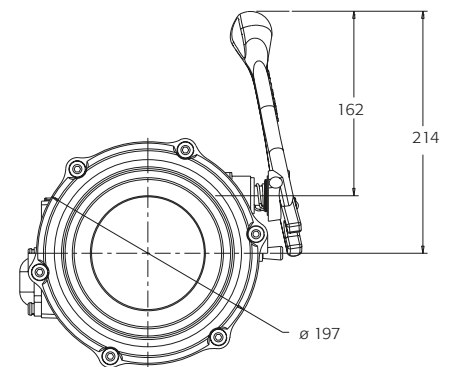
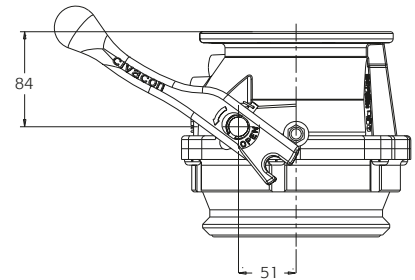
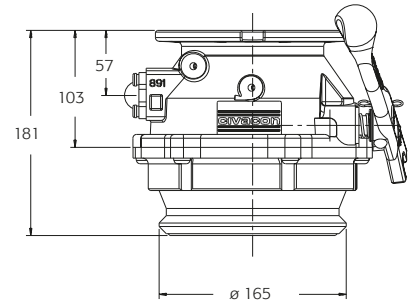
Features and Benefits

- **Air operated** lock feature on the 891 API adaptor
- **Remotely air** operated lock will ensure fuel is not unloaded by unauthorized individuals
- **Manual bypass** will unlock the API if air operation becomes unavailable
- **High Flow Adaptor** with reduced retention
- **Stainless Steel** Internals for strength and durability
- **Precision manufacturing** for long lasting dependable operation
- **Conforms** to API 1004 and EN13083
- **Compatible with** diesel, biodiesel, gasoline, ethanol and methanol

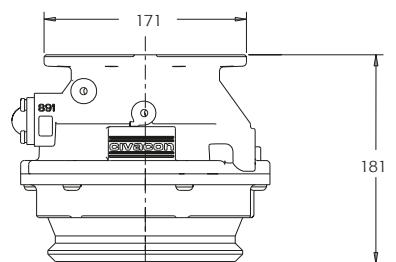
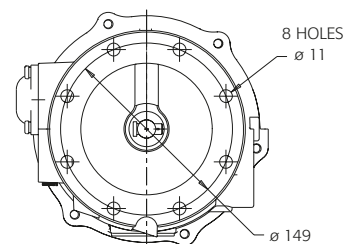


Specifications

891BA-LKE API ADAPTER OPENABLE



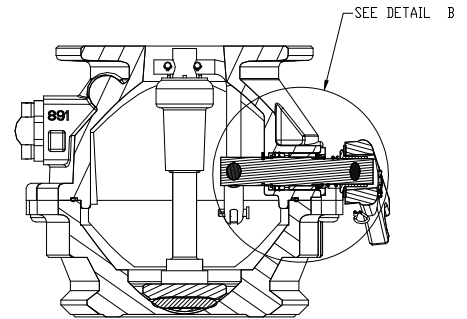
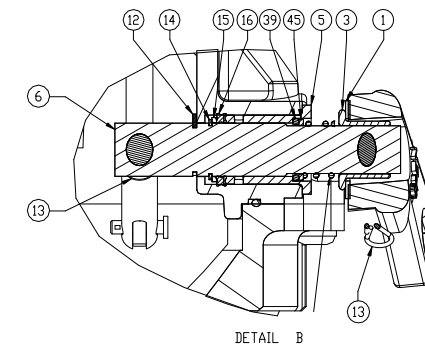
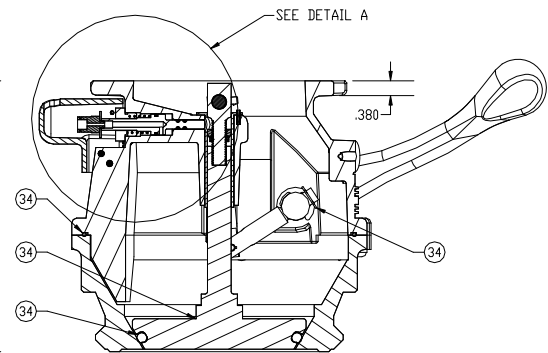
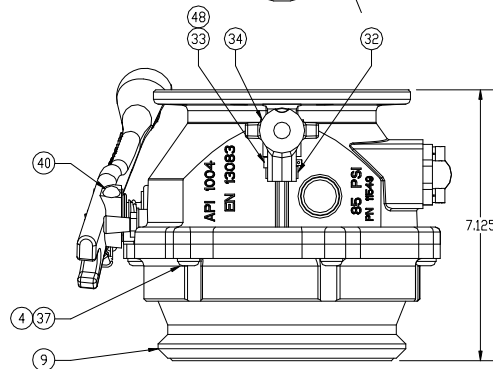
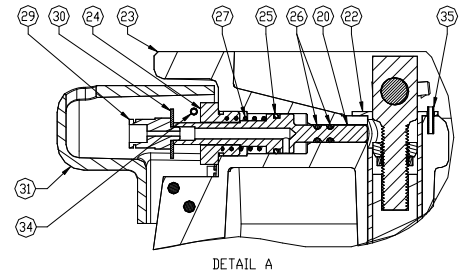
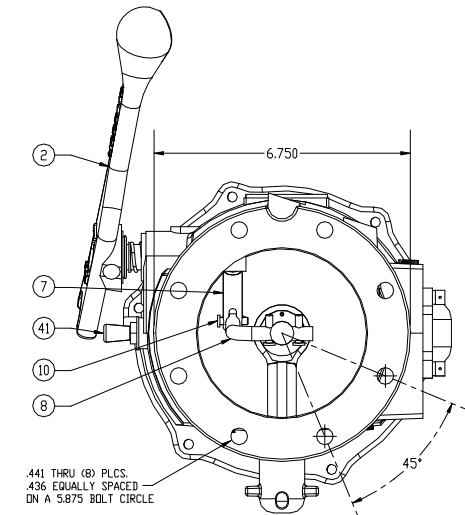
891NB-LKE API ADAPTER NON-OPENABLE



All dimensions are in mm

Spare parts

Item	Part Nr	Description	QTY
1	10840	NYLON WASHER	1
2	11460	HANDLE	1
3	11490	HUB	1
4	11534	SCREW	6
5	11536	BEARING	1
6	11543	SHAFT	1
7	11544	LINK, SHAFT	1
8	11545	LINK, POPPET	1
9	11550	ADAPTOR FACE	1
10	11618	CLEVIS PIN	3
11	11623	BOWTIE CLIP	1
12	11661	E-CLIP	1
13	11662	E-CLIP	1
14	11703	RETAINING RING	1
15	11704	WASHER	1
16	11705	QUAD RING	1
17	11905	O-RING	1
18	12266	ROD END	1
19	12267	ADJ. NUT	1
20	12268	LOCKING PIN	1
21	12271	POPPET	1
22	12272	BEARING	1
23	12273	BODY	1
24	12274	CYLINDER PLUG	1
25	12276	O-RING	1
26	12277	O-RING	2
27	12278	SPRING	1
28	12279	JAM NUT	1
29	12431	AIR FITTING, MET	1
30	12281	WASHER	1
31	12282	BYPASS GUARD	1
32	12283	RIVET	1
33	12284	CLEVIS PIN	1
34	12285	ROLL PIN	1
35	12289	ROLL PIN	1
36	12291	SCREW	4
37	10806M	LOCK WASHER	6
38	11365M	SIGHT GLASS	1
39	H06924M	O-RING	1
40	H08901M	PIN	1
41	H20051M	STOP PIN	1
42	H20057M	LOCK WASHER	4
43	H20058M	O-RING	1
44	H20182M	SPRING	1
45	H20199M	WASHER	1
46	H51384M	BALL FLOAT	1
47	H51437M	O-RING	1
48	H53043M	TAMPER CABLE	1



General specifications

■ Nominal size	4" or DIN100
■ Maximum flow rate	2.500 litre/minute
■ Seal	Viton GFLT
■ Working temp.	-40°C to +70°C other temp. on request
■ Weight	891BA 5,1 Kg 891NB 4,2 Kg

Ordering specifications

Art. number	Description
891BA-LKE	Lockable API

Related products

Art. number	Description
300/301	Air interlock valve
875-AL40	API dust cap
11240	4" TTMA sight glass
11293M	Guard bar interlock
GASK0052	4" TTMA gasket
FAL0009	4" TTMA flange aluminium
FST0025	4" TTMA flange steel

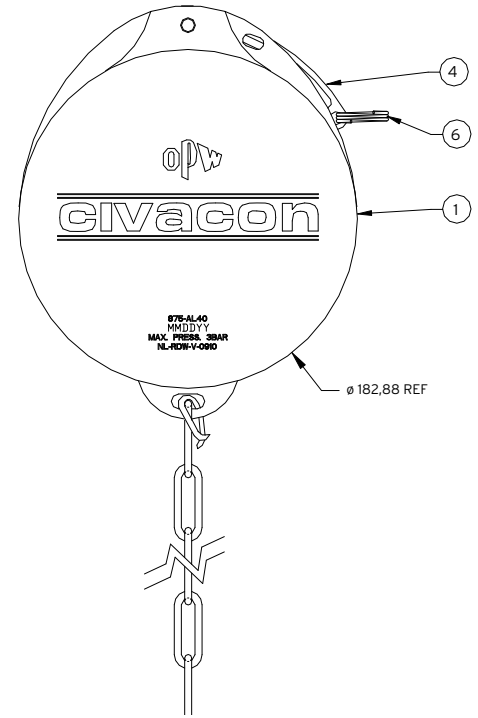
875 AL40 Dust Cap

CIVACON's 875 API Dust Cap is lightweight, corrosion resistant and designed for the protection of API RP 1004 tank-truck adaptors complying to ADR.



Specifications

875 AL40 DUST CAP



All dimensions are in mm

Features and Benefits

- **Certified** per ADR 4.3.4.1.1 up to 3 bar
- **Lightweight pressure** die-cast aluminium construction for maximum strength and weight reduction
- **Easy use** due to radial cam and lug design
- **Buna-N seal**
- **Glass-filled nylon** cams to reduce wear
- **Locking hole** for wire security seal
- **Private branding** on API Dust Cap is optional

General specifications

- Maximum working pressure 3 bar
- Working temp. -40°C to +70°C other temp. on request
- Weight 1 Kg

Related products

Art. number	Description
891-series	4" API Bottom Loading Adaptors

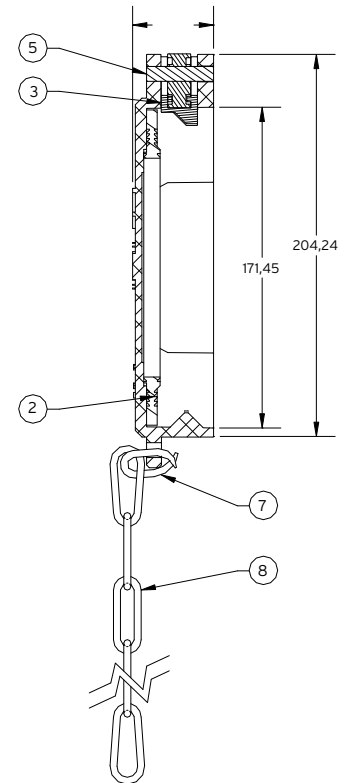
Ordering specifications

Art. number	Description
875-AL40	API Dust Cap
875-AL40-NOLABEL	API Dust Cap without inscription
875-AL40-(private label)	API Dust Cap with private branding

Spare parts

Item	Part number	Description	QTY
1	H71131	Cap	1
2	H71271	Gasket	1
3	H71132 ¹	Locking Block	1
4	H71133 ¹	Cam Lever	1
5	H71149 ¹	Cam Pin	1
6	H20550M ¹	Finger Ring	1
10919	Kit Chain:		
7	H08328M	Connector Ring	1
8	H20325M	Chain, Zinc Plated	1

1-Included in Cam Lever Repair Kit 11474



All dimensions are in mm

Gravity Coupler

The 876 Gravity Coupler optimizes the connection between 4" API Adaptors and 3" or 4" hose connections, ensuring safe and fast unloading. The 876 has been designed with an over centre CAM for easy connection.



Features and Benefits

- **Designed in accordance** with API RP 1004, ADR and EN13083
- **Pressure die-cast** lightweight aluminium construction for maximum strength and weight reduction
- **Innovative design** for:
 - improved high-flow rates
 - minimum pressure drop
 - complete draining capacities to prevent contamination
- **Compatible with** diesel, bio diesel, gasoline, ethanol and methanol
- **Viton GFLT** seal
- **Over Centre CAM** - holds on adaptor top & bottom
- **No wear** of API adaptor surface
- **15° angle** for improved unloading
- **Single piece** 3" and 4" CAM and Groove
- **One hand** operation, simple robust mechanism

Related products

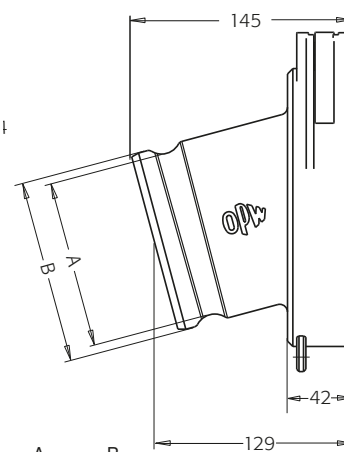
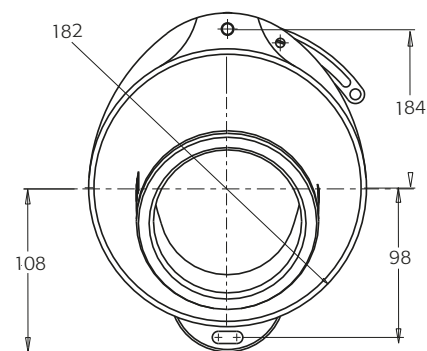
Art. number	Description
891-series	4" API Bottom Loading Adaptor

Ordering specifications

Art. number	Description
876C-AL40	4" Gravity Drop Adaptor with 4" male kamlok outlet
876C-AL4030	4" Gravity Drop Adaptor with 3" male kamlok outlet

Specifications

876-SERIES



	A	B
3"	72,1	91,4
4"	109,2	119,6

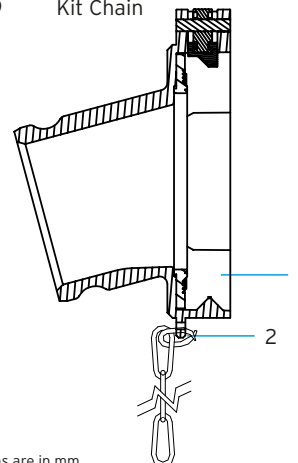
General specifications

- Nominal size 4" or DIN100
- Working temp. -40°C to +70°C
other temperatures on request
- Weight 3" kamlok outlet 1,4 Kg
4" kamlok outlet 1,8 Kg

Spare parts

Repair kit

- 1 H71271 Buna-N seal
- 2 10919 Kit Chain



All dimensions are in mm

300 / 301 Air Interlock Valve

Civacon's New Model 300 Series Air Interlock Valve is the perfect solution for all your petroleum transport interlock needs. From drive-off protection on APIs and Vapour Adaptors, to interlocking guard bars and cabinet doors, our Model 300 Air Interlock Valve fits right in. The Model 300 valve is a drop-in replacement for our earlier models and for competitive brands. The fit and function remain identical to previous models. Their new durable yet lightweight hard-coat anodized aluminum body, stainless steel internals and hardware deliver extreme durability, extended life and provide superior protection from chemicals and the elements. This completely new design uses industry standard Parker Brand™, premium AS568B standard O-rings. Our valve features a unique and innovative "closed loop breather" design that requires no vent hole in the rear end cap. This provides a completely sealed design that won't "breath in" moisture or contamination while in use. Maintenance requirements have been minimized for long, trouble-free operation.

300, Air Interlock front



300, Air Interlock back

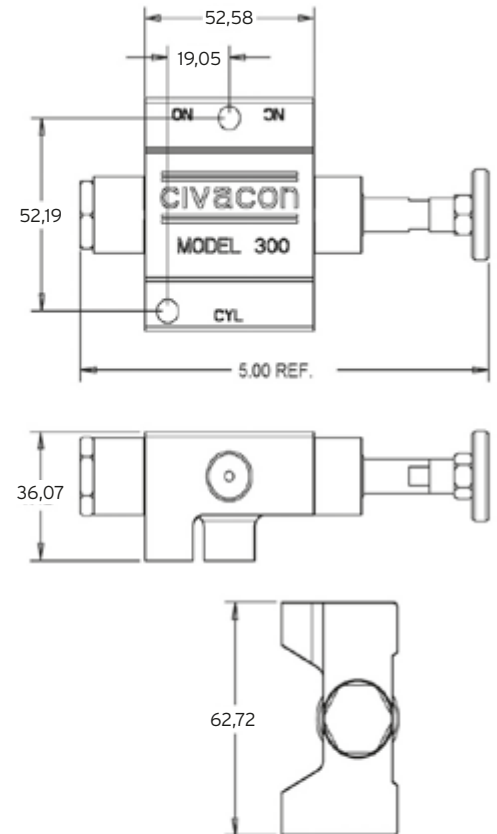


Features and Benefits

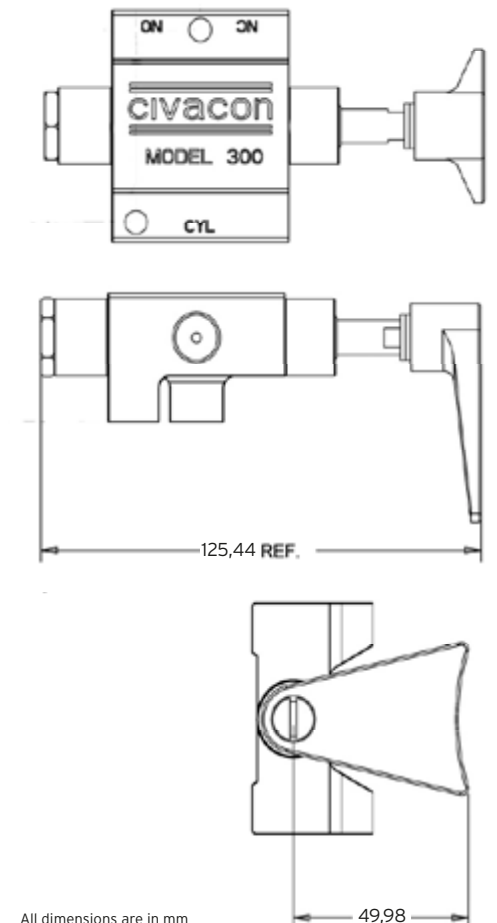
- **Corrosion resistant** nickel-plated aluminium body
- **Main shaft** wiper seal will prevent contaminations from entering seal area
- **Universal mounting** fits all civacon API bottom loading adaptors and vapour recovery adaptors
- **Stainless steel** operating shaft and spring eliminating corrosion
- **Lightweight** aluminium end cap
- **Different end cap** designs possible to meet specific requirements
- **Electrically** continuous

Specifications

MODEL 300

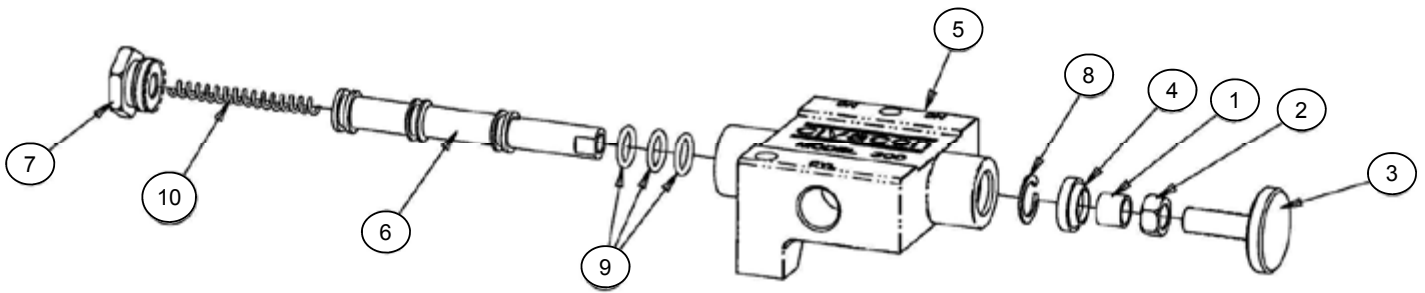


MODEL 301



All dimensions are in mm

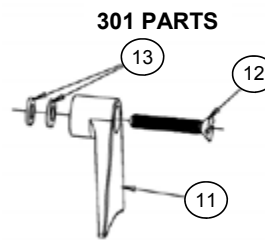
Spare parts



Item	Part Nr	Description	QTY
1	200 - 5 ¹	Brass Spacer Sleeve	1
2	200 - 6 ¹	Hex Nut , 1/4 x 20 SS	1
3	200 - 7	Round Push Button	1
4	12159	Wiper Seal	1
5	12165	Body	1
6	12167 ²	Stainless Steel Shaft	1
7	12168	Rear End Cap / Spring Retainer	1
8	12199	Spiral Retaining Ring	1
9	H20506M ²	O - Ring Size 2-012 Buna N (Parker)	3
10	H20507M ²	Spring	1

Model 301 Parts

11	11393	Push Plate	1
12	12013	Screw FLHD 1/4 x 20 x 1 1/2 LG 18- 8 SS	1
13	H20312M	Flat Washer	2



¹- included in 200 RK

²- included in 300 RK

General specifications

300 / 301 Air Interlock Valve

■ Valve type	3-way
■ Air connection	1/8"
■ Air hose	6 mm
■ Weight	model 300 250 g model 301 265 g

Related products

Art. number	Description
633LVB	4" High flow vapour recovery adaptor equipped with sight glass
891-series	4" API bottom loading adaptor

Ordering specifications

Art. number	Description
300	Air Interlock Valve with push button, 3-way, for 4" 891-series API bottom loading adaptor
301	Air Interlock Valve with elongated push button, 3-way, for 4" 633LVB high flow vapour recovery adaptor

EURO-Line Bottom Valves

CIVACON's EURO100-Line Bottom Valves are designed for increased safety, durability and service performance. The EURO100-Line high flow bottom valves are available as Compact 100-1 series, Super Compact 100-2 series, 4" TTMA or TW 100-3 series and T-Shape 100-4 series.



EURO100-1 series

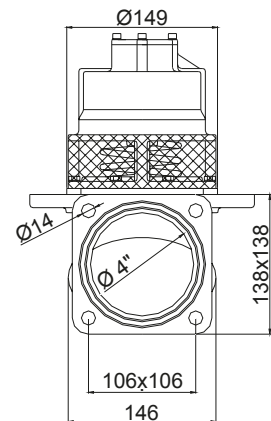
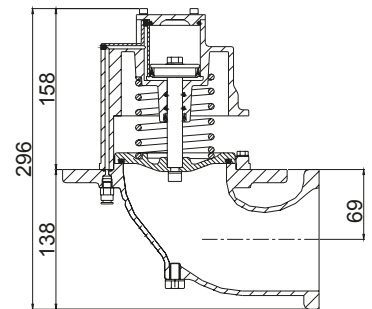
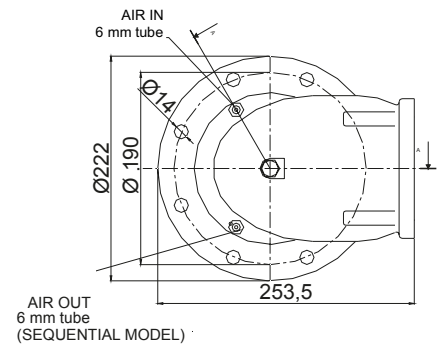
Features and Benefits

- **All EURO100-Line Bottom Valves** in accordance with EN13308 (Non Pressure Balanced), EN13316 (Pressure Balanced), ADR and API RP 1004
- **Available models:** Compact, Super Compact, 4" TTMA or TW outlet and T-Shape
- **Pressure balanced** or non pressure balanced operation
- **Sequenced** or non-sequenced operation
- **4" or DN100** connection
- **Lightweight pressure** die-cast for improved strength and reduced weight
- **Hard anodized** and stainless steel internals
- **Stainless steel** filter/strainer
- **Shear Groove** to prevent spillage in case of an accident
- **Superior flow rate:**
 - up to 2.500 litres/minute
 - no moving parts in the flow path
- **Viton GLFT seals**
- **Valve service** inside of the compartment
- **Manually openable** in case of emergency

Specifications

1.5.

EURO100-1 SERIES



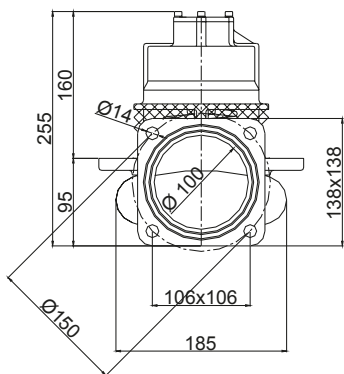
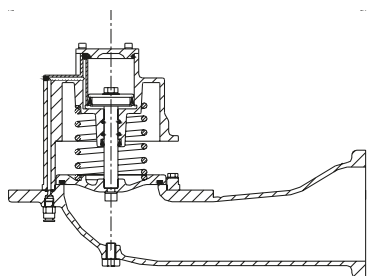
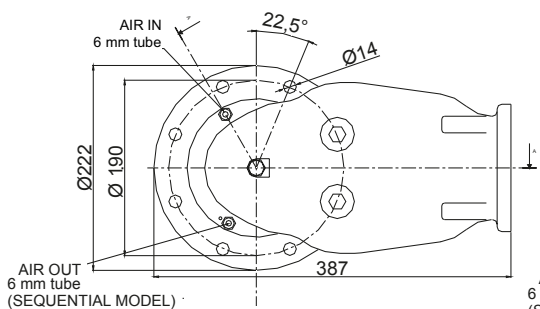
General specifications

- Nominal size 4" or DN 100
- Working pressure 5 bar (500 kPa)
- Operating air pressure 4 bar
- Maximum flow rating 2.500 litre/minute
- Seals Viton GFLT
- Working temperature -20 °C to 70 °C
other temperatures on request
- Weight

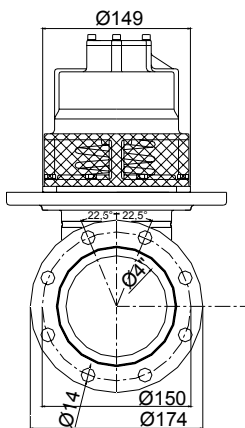
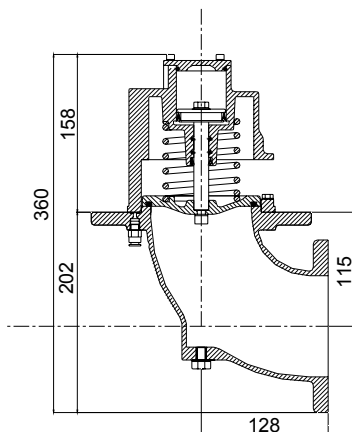
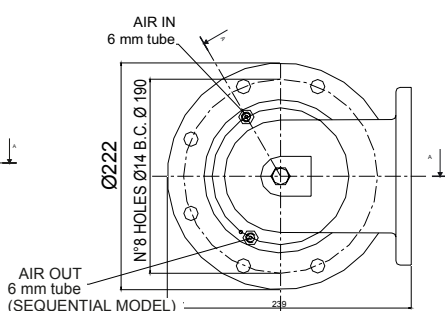
EURO100-1	4,6 kg
EURO100-2	5,5 kg
EURO100-3	4,7 kg
EURO100-4	5,8 kg

Specifications

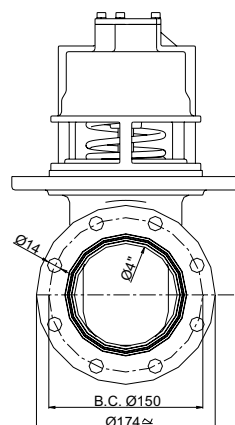
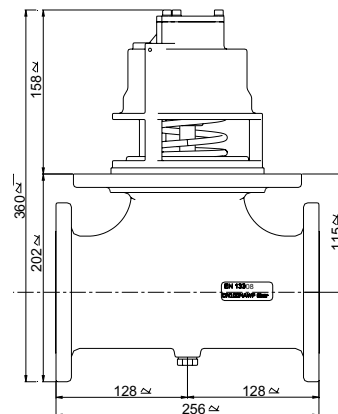
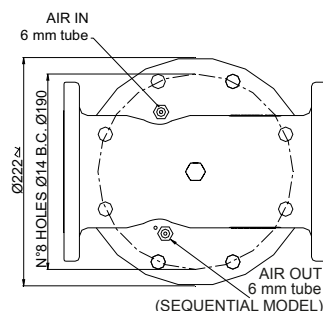
EURO100-2 SERIES



EURO100-3 SERIES



EURO100-4 SERIES



EURO-Line Bottom Valves

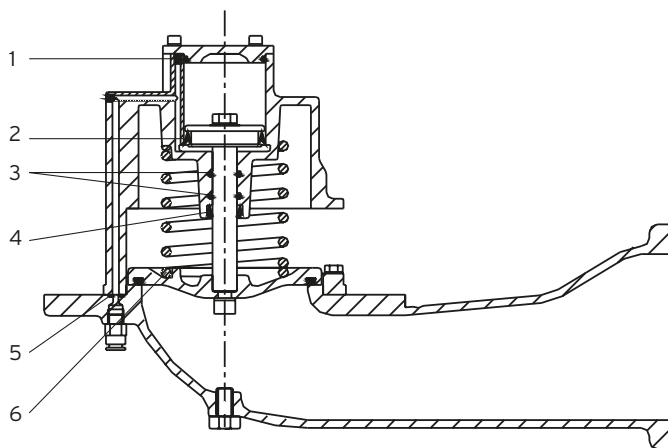
Spare parts

Repair kit

EURO100RK Seal kit for EURO100-series
Bottom Valve

Contents EURO100RK Repair kit

Item	Part number	Description
1	89-60-75/V	O-ring (Viton)
2	26-60-27	Gasket (Viton)
3	26-60-26	O-ring (Viton)
4	82-30-53	Gasket (Viton)
5	89-60-76/V	O-ring (Viton)
6	92-60-70	O-ring (Viton)



Related products

Art. number	Description
SF-100-ST40	Steel sump flange
10-02-43	Aluminium sump flange
10-01-74/EU	Aluminium square outlet flange
10-01-84	Gasket for square outlet flange

Ordering specifications

Compact Model: EURO100-1 series

EURO100-1-AL40	4" non-pressure balanced, non sequenced
EURO100-1S-AL40	4" non-pressure balanced, sequenced
EURO100-1B-AL40	4" pressure balanced, non sequenced
EURO100-1BS-AL40	4" pressure balanced, sequenced

Super Compact Model: EURO100-2 series

EURO100-2-AL40	4" non-pressure balanced, non sequenced
EURO100-2S-AL40	4" non-pressure balanced, sequenced
EURO100-2B-AL40	4" pressure balanced, non sequenced
EURO100-2BS-AL40	4" pressure balanced, sequenced

4" TTMA Outlet Model: EURO100-3 series

EURO100-3-AL40	4" non-pressure balanced, non sequenced
EURO100-3S-AL40	4" non-pressure balanced, sequenced
EURO100-3B-AL40	4" pressure balanced, non sequenced
EURO100-3BS-AL40	4" pressure balanced, sequenced

4" T-Shape Model: EURO100-4 series

EURO100-4-AL40	4" non-pressure balanced, non sequenced
EURO100-4S-AL40	4" non-pressure balanced, sequenced
EURO100-4B-AL40	4" pressure balanced, non sequenced
EURO100-4BS-AL40	4" pressure balanced, sequenced



Pressure Vacuum Vent

CIVACON's NV3000E high-flow pressure vacuum vent is designed for durability, safety and service performance.



NV3000E, Pressure Vacuum Vent

Features and Benefits

- **In accordance** with EN14595
- **Pressure Die-Cast** aluminium design, stainless steel and acetal components for durability and longer life time
- **Automatic sealing** in case of a tanker rollover
- **Pressure Flow capacity** of 41 m³/h at 200 mbar
- **Vacuum Flow capacity** of 155 m³/h at 70 mbar
- **Lightweight** durable design (400 gram)
- **Removable filter** for easy serviceability
- **Viton GFLT** seals
- **Quick-Strip-In-place** design, no tools required
- **Suitable for** all Civacon 10" pressure activated fill-covers (PAF)
- **Double** dovetail grooves for poppet O-rings for a more secure and longer-lasting seal
- **1 1/4 BSPP** connection

Related products

Art. number	Description
T400-series	Manhole cover assembly

Spare parts

Article Nr.	Description
NV3000RK	Repair Kit NV3000E

Spare part only supplied as complete kit

Contents Repair Kit NV3000RK

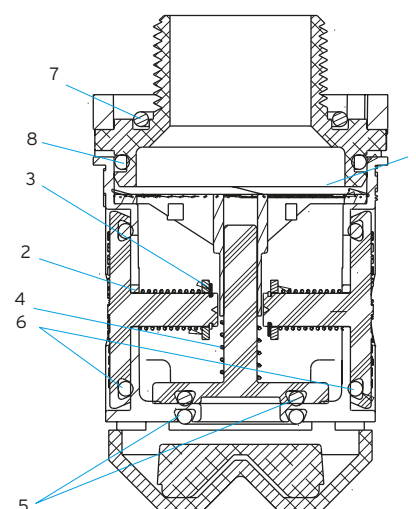
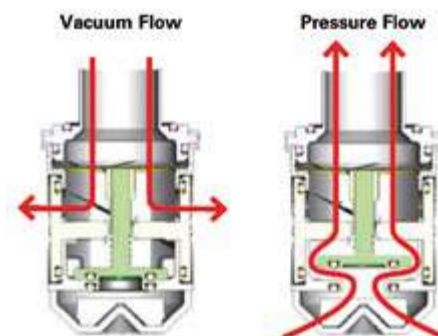
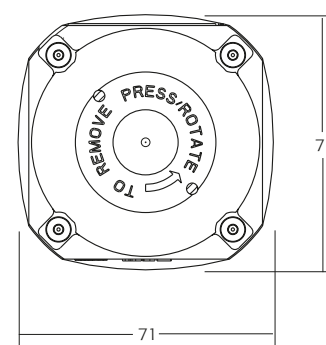
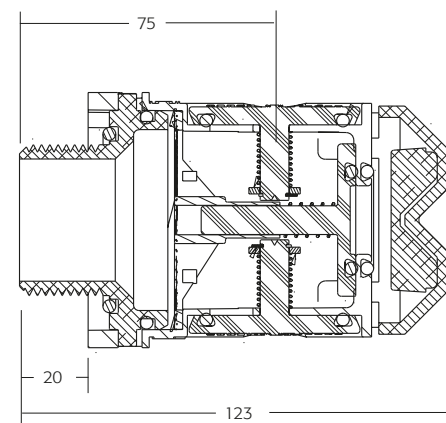
Item	Article Nr.	Description	Qty.
1	11745	Wave Spring	1
2	H71328	Vacuum Spring	2
3	H71329	Retaining Clip	2
4	H71330	Pressure Spring	2
5	9428	O-Ring 2-213 Viton A	1
6	11943	O-Ring 2-220 Viton A	2
7	6479	O-Ring 2-224 Buna-N	1
8	H71335	O-Ring 2-227 Viton A	1

Ordering specifications

Art. number	Description
NV3000E	Pressure vacuum vent assembly (EN14595)

Specifications

NV3000E, PRESSURE VACUUM VENT



Manhole Cover T400-series

CIVACON T400 manhole-cover is designed to achieve optional customer flexibility for manhole-cover applications.

The T400 is composed from a Pressure-activated Fill-cover for additional tanker security and separate base-cover to meet specific requirements.



H71521, Base Plate model



T400-PFC01A, Pressure Activated Fill-cover



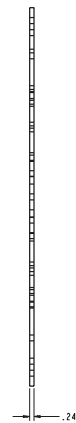
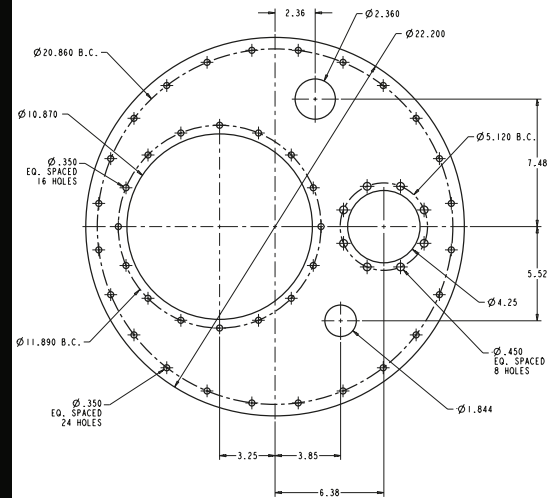
K1-T400-240217GJ

Features and Benefits

- **Complies** with EN13314 (fill-cover) and EN13317 (base-cover)
- **Pressure and vacuum vent** fitted as standard for tank breathing
Various ratings available to suit operational requirements
Two vents may be fitted if required
- **Spring-loaded Pressure-activated fill cap** provides emergency fire engulfment and venting
- **Emergency venting** capacity 7000m³/h air at 350mb
- **Automatic sealing of the P/V vent** in a roll over situation
- **20" base-plate** for access compliance with ADR
- **Two-stage opening** allows safe release of residual compartment pressure before fully opening fill cap
- **Lockable** - available with key lock
- **Secure 24-bolt fixing** as required by ADR
- **Lightweight pressed aluminium base-plate** material complies with EN13094
- **Security facility** for padlock, wire or plastic seal

Specifications

BASE PLATE EXAMPLES



General specifications

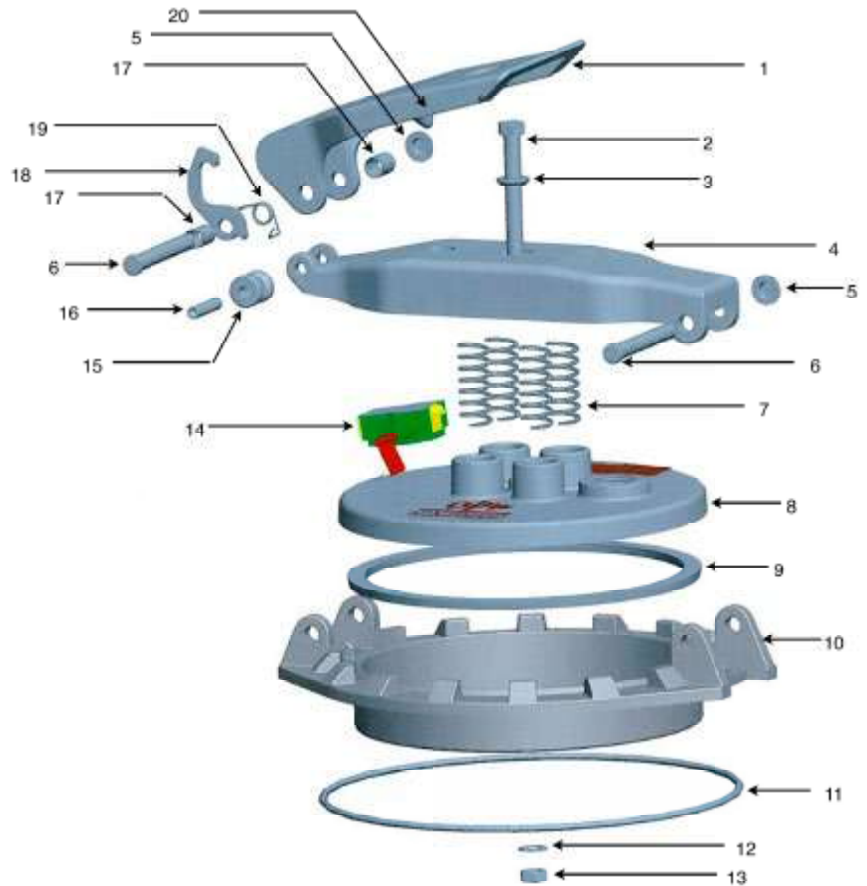
- Base plate - Standard 20"
- Customer specified (material, hole pattern, dimension)
- Weight 20" base plate Aluminium 2,8 Kg
Carbon steel 7,8 Kg
Stainless Steel 7,9 Kg
- Weight PAF 6,7 Kg

All dimensions are in inches

Manhole Cover T400-series

Spare parts

Item	Part number	Description
1	11733	Latch
2	11735	Screw
3	11737	Swivel Plug
4	11731	Strong Back
5	1020	Pal Nut
6	4679	Hinge Pin
7	11728	Spring
8	11682	Fill Lid
9	12022	Cover Seal
10	11680	Frame
11	11740	O-Ring
12	9874	Seal Washer
13	1926	Nut
14	11979	Lock Assembly (Optional)
15	11730	Latch Roller
16	11732	Roller Pin
17	11743	Latch Bushing
18	11736	Latch Hook
19	11729	Latch Spring
20	11952	Lock Pin (Optional)



Related products

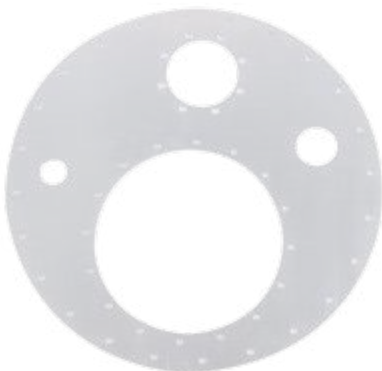
Art. number	Description
K1-1112-series	5-Wire optic overfill sensor
K1-5300E	5-Wire optic overfill sensor
1551-series	2-Wire optic overfill sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
NV3000E	Internal pressure/vacuum vent
T195-series	3" Vapour recovery valve
LC01013	Dip tube assembly, L= 2 m

Ordering specifications

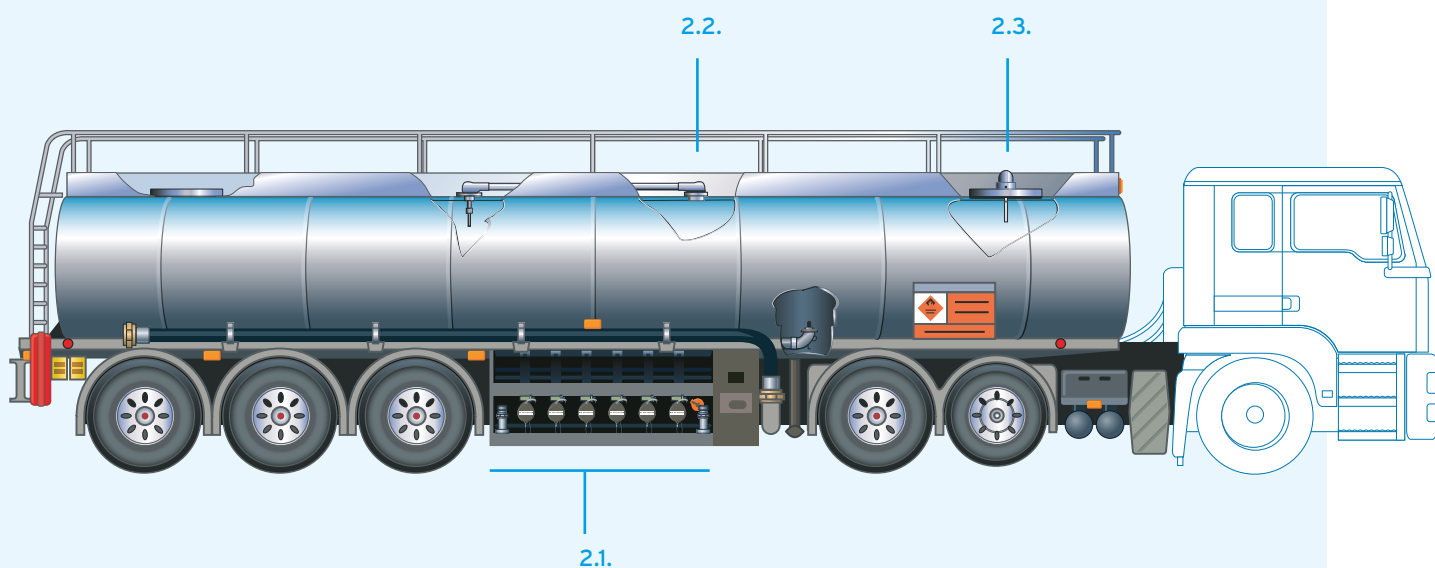
Art. number	Description
T400-PFC01A	Pressure activated fill-cover (PAF) with lock

Examples of manhole covers:

K1-T400-240217GJ	20" Bolted self latching aluminium manhole cover with PAF, lock and mounting holes for overfill sensor, vapour recovery valve & dip tube
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2.1.	Vapour Recovery Adaptor <i>633LVB</i>	24
2.2.	Vapour Recovery Vent <i>T195-series</i>	26
2.3.	Vapour Line Valve <i>1995TWD</i>	28



Vapour Recovery Adaptor

CIVACON's 4" Vapour Recovery Adaptor is designed to maximize efficiency and service performance of vapour recovery with a minimum pressure drop.



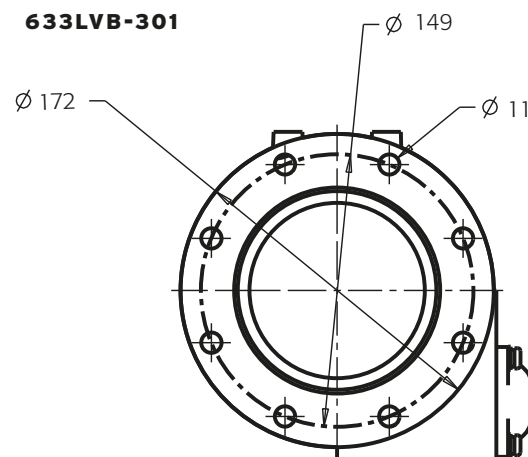
633LVB, Vapour Recovery Adaptor with 301 Air Interlock

Features and Benefits

- **In accordance** with API RP 1004, ADR and EN13081
- **Lightweight** pressure die-cast construction for maximum strength and weight reduction
- **4" TTMA** mounting flange
- **Nominal size** 4" or DIN100
- **Minimum number of internals** to minimize pressure drop and improve flow rate
- **Bushed running surfaces** for efficient operation
- **Stainless Steel** internals for maximum service life
- **Viton GFLT** seals
- **Compatible** with diesel, bio diesel, gasoline, ethanol and methanol
- **Heavy duty** poppet for smoother opening characteristics
- **Mounting plugs** for model 300/301 air interlock valve
- **Standard equipped** with sight glass and drain plug

Specifications

633LVB-301



General specifications

- Nominal size 4" or DIN100
- Flange 4" TTMA
- Working temp. -40°C to +70°C other temperatures on request
- Weight 3,5 Kg

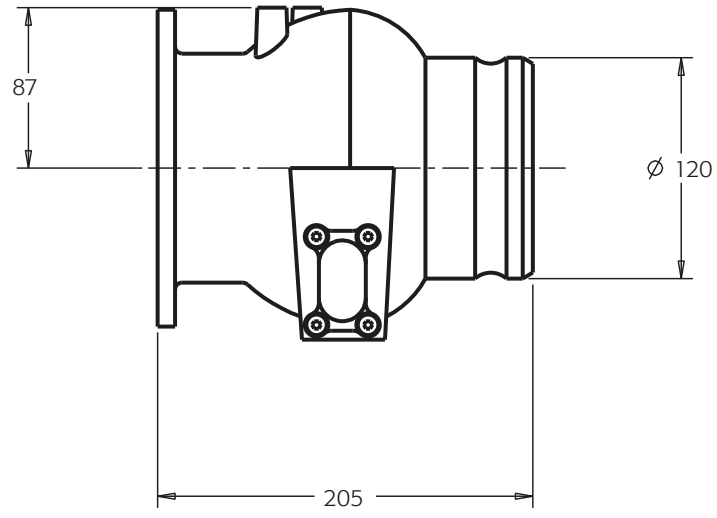
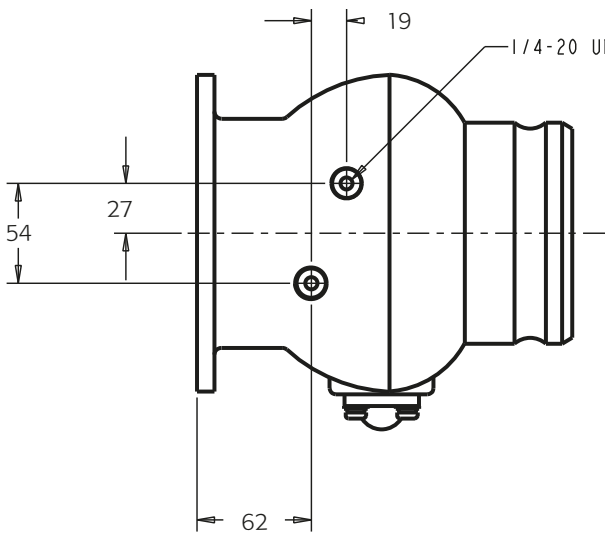
Related products

Art. number	Description
1711T-CA-PL	Duratuff cap with cable
300/301	Air interlock valve (3-way)
T195-series	High flow vapour recovery valve
1995TWD-2B	Vapour line valve
NV3000E	Pressure vacuum vent

Ordering specifications

Art. number	Description
633LVB	4" High flow vapour recovery adaptor equipped with sight glass
633LVB-301	4" High flow vapour recovery adaptor equipped with sight glass and model 300/301 interlock valve





Spare parts

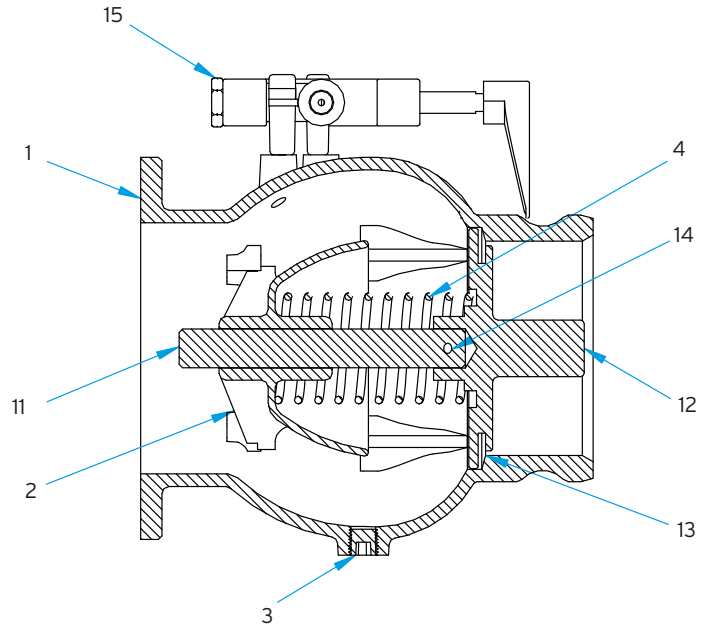
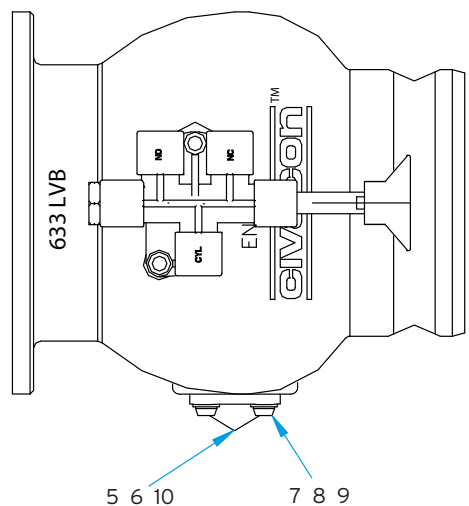
Repair kit

- H20009 Poppet Assembly
- 891BRK Sight Glass Repair Kit

Spare part only supplies as complete kit

Item	Part Nr	Description	QTY
1	11666	Body Vapour Valve Machined	1
2	C02779M	Bellows Ribbed Support 861/866	1
3	10068	Plug, Pipe, 1/4npt Brass Flush-Seating Tank Truck	1
4	H20007M	Spring, Straight Compression,633lvh Series	1
5	11365M ¹	Sight Glass	1
6	H51384M ¹	Ball, Float Green 10mm Hollow Hdpp	1
7	11366M ¹	Scrw Btnhd Hex 1/4-20 X 5/8" Ss	4
8	H20009	Poppet Sub Assy For 633lvh-AI40	1
9	C51410A	Poppet, Machined	1
10	H08841RA	Shaft	1
11	H09193M	Cotter Pin	1
12	H20750M	Viton Gasket	1
13	H05608M	Carton, 7-1/2 X 7-1/2 X 7-1/2	1
14	H51437M ¹	O-Ring -023 Buna N	1
15	H20057M ¹	Lock Washer S.S.	4
16	H20312M	Washer	4
17	300/301	Assy, Air Interlock Valve (3 Way) Alum 633lvh/Lvb	1

1-Included in 891BRK



Vapour Recovery Vent

The Civacon T195SV Vapour Recovery Vent is designed and tested for temperature range rated at -40°C to 71°C. A newcap design threads into the top of the vent allows for a better seal and corrosion free design. The new design retrofits the current 1985SV and 1986SV. The presence of a locking ring prevents additional leak paths that were created by the bolt on feature of the previous 1985SV.

The locking ring allows more freedom for mounting the vent to the normal TTMA bolt pattern. Seals have been improved to be more compatible with chemicals that could potentially come into contact with them.



T195SVE, Vapour Recovery Vent

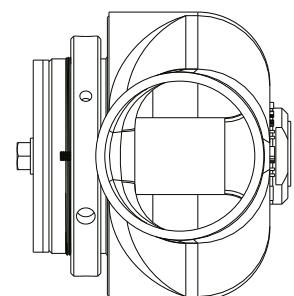
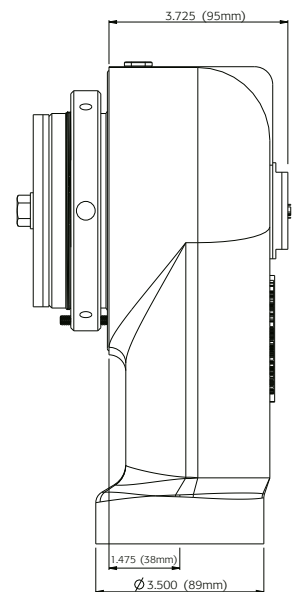
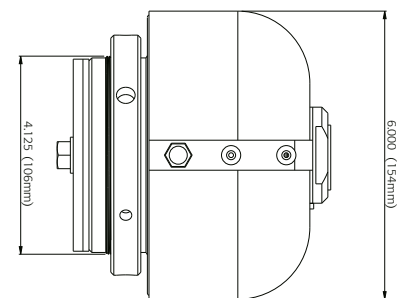
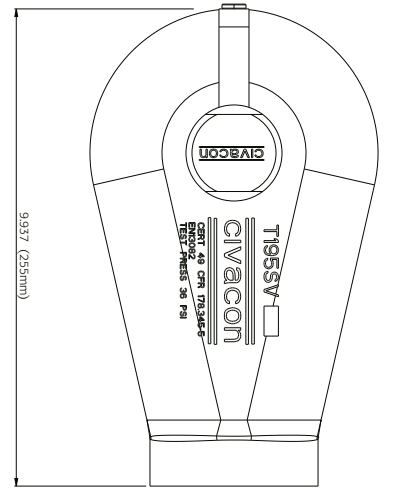


Features and Benefits

- **Lightweight** aluminum body
- **Valve stroke increased** by 50% (1-1/2" total seat opening)
- **Increased** Spring Tension for a quick, tight closure
- **Dual fluorosilicon piston** o-ring seals and a new lower shaft seal and wiper protects the air system
- **New added external** exhaust port for quicker opening and closing of vent's poppet
- **Viton GF** Gaskets and Seals
- **Thread-in** Cap Design eliminates snap ring
- **Improved** flow rating and less pressure drop
- **New rotatable mounting** design eases retrofits
- **Will fit in place of** all TTMA flange mounted vents
- **Single o-ring seal** to manhole plate minimizes potential mounting leak paths of bolted designs

Specifications

VAPOUR RECOVERY VENT T195SVE



General specifications

T195SVE

- Pressure Drop 0,5 mbar at 2,400 lpm
- Connections 1/8" BSP
- Weight 2,5 kg

Spare parts

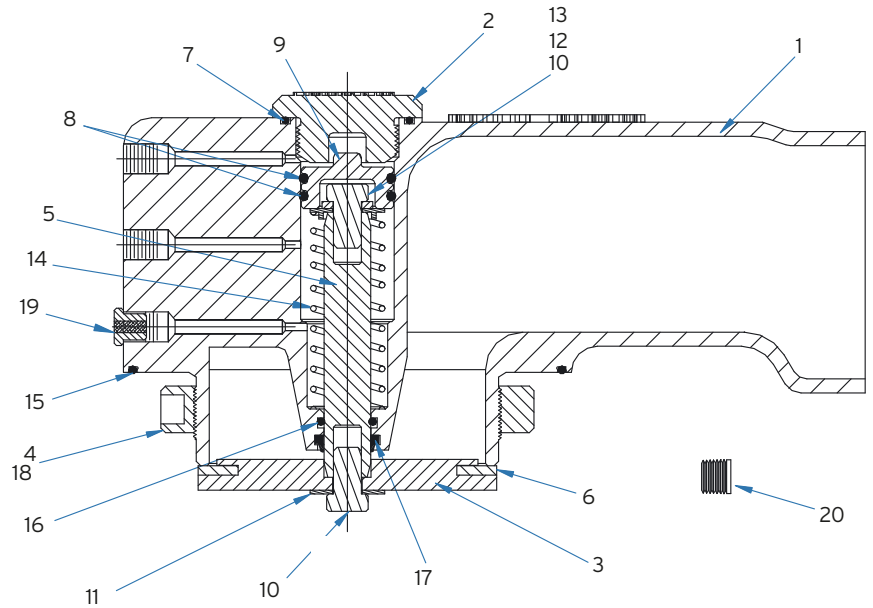
Repair kit

T195SVRK

Item	Part Nr	Description	QTY.
1	11669	BODY	1
2	11672	CAP	1
3	11677	POPPET	1
4	11678	LOCKING RING	1
5	11673	SHAFT	1
6	11699	GASKET, VITON GF ¹	1
7	11692	O-RING, VITON GF ¹	1
8	11776	O-RING, FLUOROSILICON ¹	2
9	11772	PISTON ¹	1
10	H20518M	SCREW	2
11	11774	SEAL WASHER	1
12	1760	LOCK WASHER	1
13	11990	SPRING GUIDE	1
14	11694	SPRING	1
15	11695	O-RING, VITON GF ¹	1
16	10681M	O-RING, VITON GF ¹	1
17	116961	WIPER	1
18	11697	SET SCREW	1
19*	11775	EXHAUST FITTING	1
20	H70319	PLUG, 1/8" NPT	1

¹-Included in repair kit

* Included only in T195SVE-X001



Related products

Art. number	Description
K1-1112-series	5-Wire optic overfill sensor
K1-5300E	5-Wire optic overfill sensor
1551-series	2-Wire optic overfill sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
T400-series	Manhole cover assembly
NV3000E	Internal pressure/vacuum vent

Ordering specifications

Art. number	Description
T195SVE	Vapour Recovery Vent, 20" Manhole

Vapour Line Valve

CIVACON's vapour line valve provides additional safety and security when carrying hazardous liquids. Pressure is vented into the atmosphere when it is not sealed for vapour transfer. In case of vapour transfer, vapour line valve is closed.



1995TWD-2, Vapour Line Valve

Features and Benefits

- In accordance with API RP 1004 and EN13082
- **Stainless Steel** flame arrestor covering inlet/outlet port
- **Mounting flange** 3" TW
- **Compact design** in 3" (±80 mm)
- **Constructed of Aluminum** with corrosion-resistant trim
- **Operates** in temperature range of -20°C to +70°C
- **Self-opening at vacuum** of 6 kPa (60 mbar)
- **VITON® GFLT seals** compatible with all fuel grades and additives

Ordering specifications

Art. number	Description
1995TWD-2B	3" Sequenced vapour line valve with TW-flange
1995TWD-SV	3" Sequenced smart vent vapour line valve with TW-flange

General specifications

1995 TWD-2 Vapour Line Valve

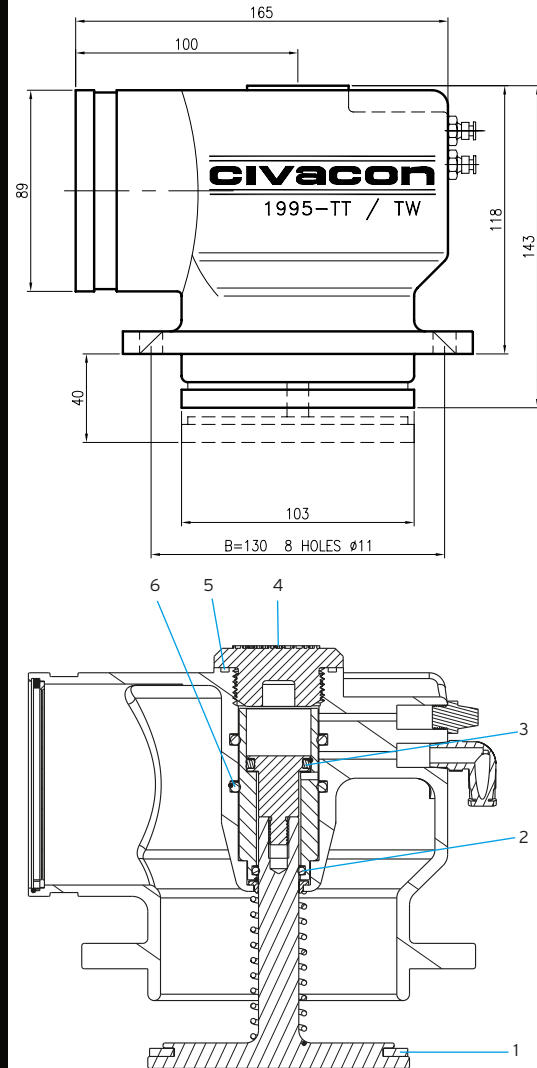
- Nominal size 3"
- Working pressure 5 bar (500 kPa)
- Working temperature -20°C to +70°C
- Mounting flange 3" TW
- Seals Viton GFLT
- Weight 2,2 Kg

Related products

Art. number	Description
T195-series	Vapour recovery valve
633LVB	Vapour recovery adaptor

Specifications

1995TWD



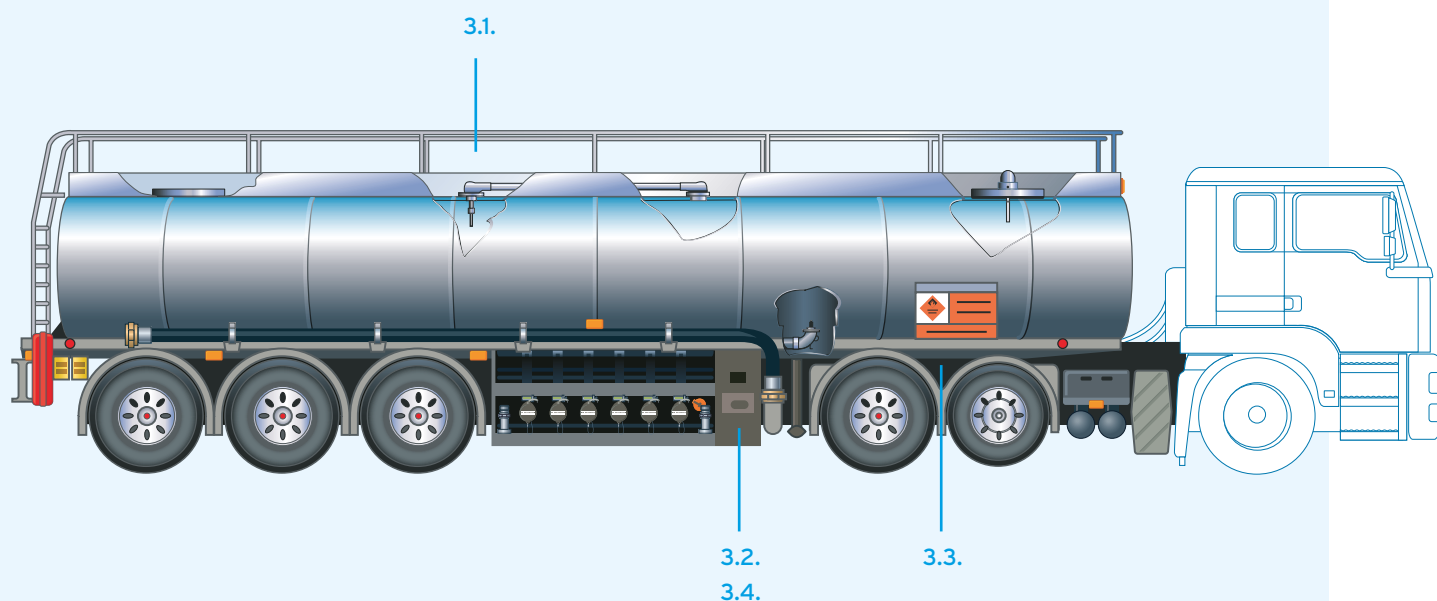
Spare parts

Repair kit 1995TWD-2BRK

Item	Part Nr	Description
1	H20069M	Disc viton
2	H70312	O-ring
3	H70311	Quad-ring
4	11672	Cap
5	11692	O-ring viton
6	H70216	O-ring

Spare part only supplies as complete kit

3.1.	Overfill Prevention Sensor <i>K1-1112-0018EB 5-Wire optic sensor</i> <i>5300E 5-Wire optic sensor</i> <i>1551-series, 2-wire Optic</i> <i>5350E 2-Wire optic sensor (replaces 1551-0018B)</i> <i>5650E 2-Wire optic sensor (replaces 1051-0018B)</i>	30
3.2.	Socket <i>4103-series</i> <i>4403-series</i>	34
3.3.	Retain Overfill Monitoring <i>3205E</i>	36
3.4.	Tester <i>1397E</i> <i>1398E</i>	37
3.5.	Retain Sensor <i>1000RB</i> <i>5000E</i> <i>5030E</i>	38

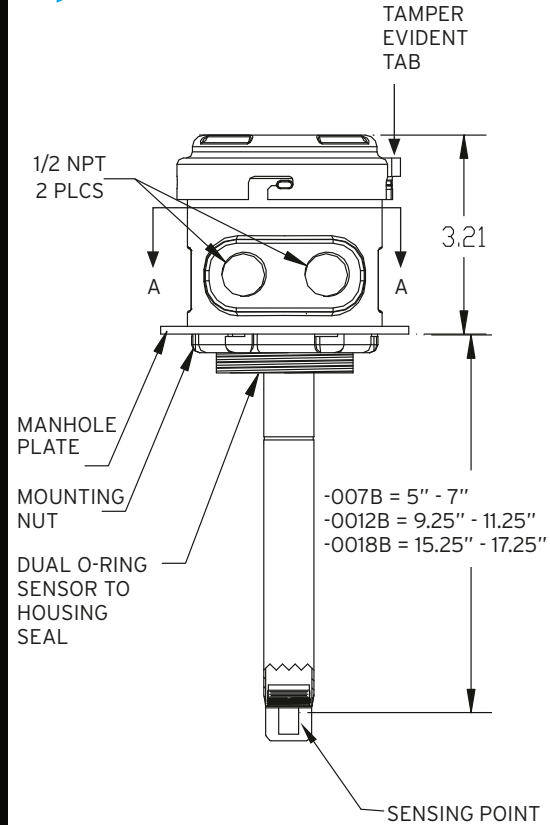


2 & 5-Wire Overfill Sensors

Optic overfill sensors detect the presence of liquid at a preset level. The new Civacon Universal 2 & 5-Wire Sensor is fully compatible with all our current Sensors and Monitors, as well as all industry standard signal formats. These Universal Sensors feature an exclusive, digital electronic circuitry design that will work directly with 2 & 5-wire loading racks when wired directly to a blue "optic" socket, as well as with all Onboard Monitors like our Liberty™. All of the features & benefits of these sensors are also available in our new 2-wire sensor version as well (see separate data sheet).



Specifications



Features and Benefits

- **Product Number Materials**
- **1551 & 1112E-XXXX Sensor Cap** - Glass Filled Nylon
- **Cap O-ring seals** - Silicone
- **Sensing Length Adjustability**
Sensor Housing - Aluminum
- **Locking Nut** - Plated Steel
- **Product Range** Sensor Shaft - Aluminum
- **Viscosity** of less that 1000 SSU Prism
- **Snap Ring** - Stainless
- **Weight** 0.521 kg
- **Operating Temperature** -40° C to 70° C
- **Storage Temperature** -56.6°C to 137.7° C
- ****Special length sensors** are available upon request
- **In accordance** with EN13922
- **Intrinsically safe operation**
- **Approvals** ATEX + IECeX & FM
- **Continuously** self checking

General specifications

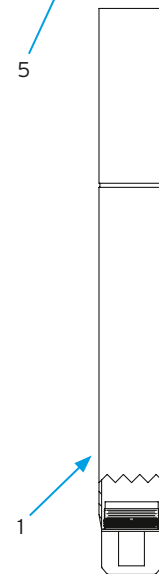
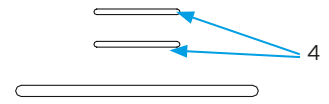
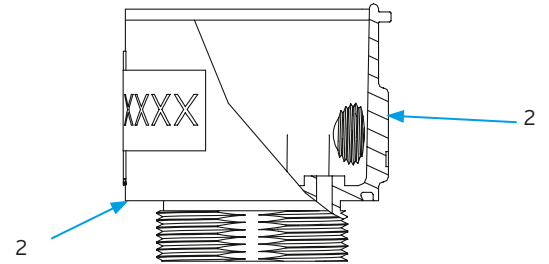
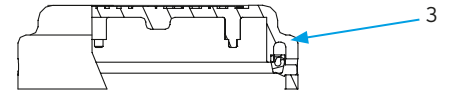
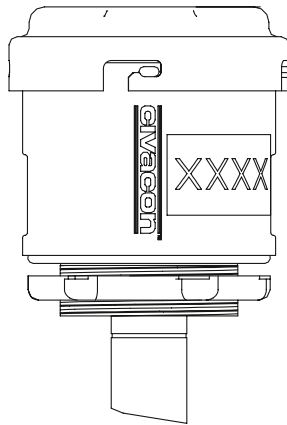
- **Zone specification** Zone 0
- **Working Temperature** -40°C to +70°C
- **Signals** Intrinsically safe
- **Weight** 0,521 kg

Spare parts

Repair kit

12435 Probe Housing & Cap

Item	Part Nr	Description	QTY
1	1301-0018GEB	Replacement optic overfill sensor no housing 18" probe	1
2	H52840	Housing machined	1
3	H52936M	Cap probe housing with u-cup	1
4	H52842M	O-ring 2-021 buna	2
5	H52477M	Lock ring	1
6	H52898M	Screw	1



Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical/Thermistor Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable Gland blue
EL00001	Ground Bolt
1551-series	2-Wire Optic Quick Start Sensors
1000RB	2-Wire Optic Bottom Retain Sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	On-board Monitoring System

Ordering specifications

Art. number	Description
K1-1112-007EB	Adjustable 5-wire optic sensor with 2-inch BSP housing 7-inch shaft length
K1-1112-0018EB	Adjustable 5-wire optic sensor with 2-inch BSP housing 18-inch shaft length
1551-0018JB	Adjustable 2-wire optic sensor with 2-inch BSP housing 18-inch shaft length

2 & 5-Wire Overfill Sensors

Optic overfill sensors detect the presence of liquid at a preset level. The new Civacon Universal 2 & 5-Wire Sensor is fully compatible with all our current Sensors and Monitors, as well as all industry standard signal formats. These new Universal Sensors feature an exclusive, digital electronic circuitry design that will work directly with 2 & 5-wire loading racks when wired directly to a blue "optic" socket, as well as with all Onboard Monitors like our Liberty™. The new Civacon Universal 2 & 5-Wire Sensors are a direct replacement for our existing Liberty™ optic sensors. With their universal industry compatible signal format, they are a perfect choice for all of your overfill detection sensor applications. All of the features & benefits of these new sensors are also available in our new 2-wire sensor version as well (see separate data sheet).



Features and Benefits

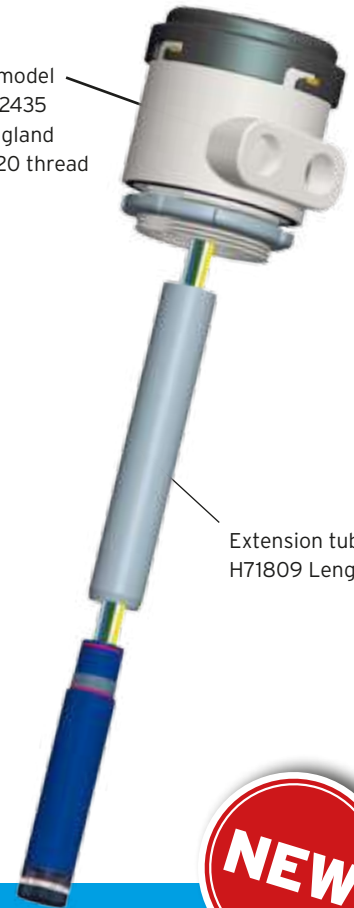
- **5300E 5-Wire optic sensor**
- **5350E 2-Wire optic sensor**
- **Sensor Cap** - Glass Filled Nylon
- **Cap O-ring seals** - Silicone
- **Sensing Length Adjustability**
Sensor Housing - Aluminum
- **Locking Nut** - Plated Steel
- **Product Range** Sensor Shaft - Aluminum
- **Viscosity** of less than 1000 SSU Prism
- **Snap Ring** - Stainless
- **Weight** 0.521 kg
- **Operating Temperature** -40° C to 70° C
- **Storage Temperature** -56.6° to 137.7° C
- ****Special length sensors** are available upon request
- **In accordance** with EN13922
- **Intrinsically safe operation**
- **Approvals** ATEX + IECeX & FM
- **Continuously** self checking

Specifications

3.1.

5300E

Housing model number 12435 for cable gland Metric M20 thread



Extension tube H71809 Length



- New patented design
- Easier installation
- Diagnostic by means of LED
- Automated production and Automated testing
- Design, certification and production in our European facility
- 5 years Warranty

General specifications

- Zone specification Zone 0
- Working Temperature -40°C to +70°C
- Signals Intrinsically safe
- Weight 0,521 kg

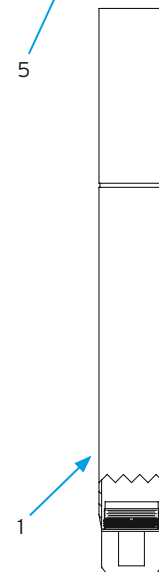
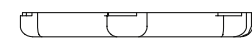
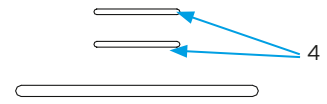
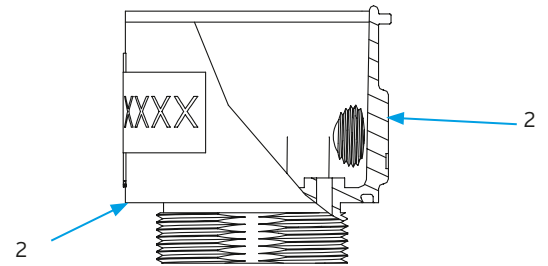
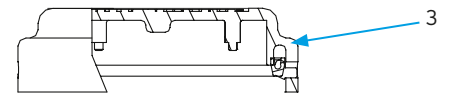
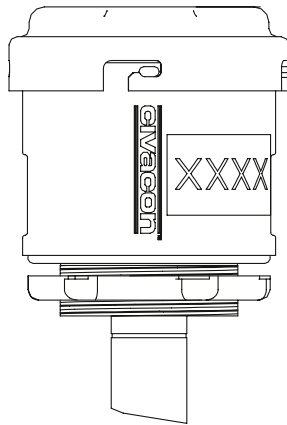


Spare parts

Repair kit

12435 Probe Housing & Cap

Item	Part Nr	Description	QTY
1	5300E	Replacement optic overfill sensor no housing 18" probe	1
2	H52840	Housing machined	1
3	H52936M	Cap probe housing with u-cup	1
4	H52842M	O-ring 2-021 buna	2
5	H52477M	Lock ring	1
6	H52898M	Screw	1



Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical/Thermistor Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable Gland blue
EL00001	Ground Bolt
1551-series	2-Wire Optic Quick Start Sensors
1000RB	2-Wire Optic Bottom Retain Sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	On-board Monitoring System

Ordering specifications

Art. number	Description
K1-5100E	Adjustable 5-wire optic sensor with 2-inch BSP housing 14-inch shaft length
K1-5600E	Adjustable 2-wire optic sensor with 2-inch BSP housing 14-inch shaft length

Sockets

CIVACON's Sockets are designed for optimal communication between tank-truck and EN13922 rack systems.

4403E Socket



4103E Socket

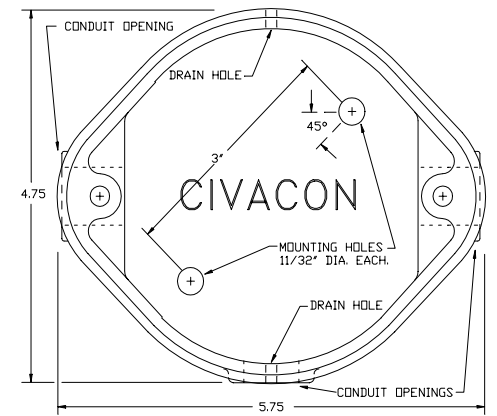


Features and Benefits

- In accordance with API standards
- 4403B-model in accordance with EN13922
- Pressure switch standard on 4103PS and 4403B in accordance to VOC requirements
- Simple and durable connection using 3 J-slots (4103-model) or 4 J-slots (4403-model)
- Colour coded labels and caps for easy identification
- Brake interlock switch on 4403SQS
- Grounding pin incorporated in all models
- Connecting up to
 - 8 thermistor sensors
 - 8 2-wire optic sensors
 - 12 5-wire optic sensors

Specifications

4103/4403



4403B Socket



General specifications

■ Weight	4103E-EURO	1,1 Kg
	4103PS	1,3 Kg
	4403B & 4403E	1,2 Kg

Spare parts

4150-4150 Repairkit for 4103E:

1	H50025M	Dust Cap, Blue
2	H50288M	Cable

4450-4450 Repairkit for 4403E:

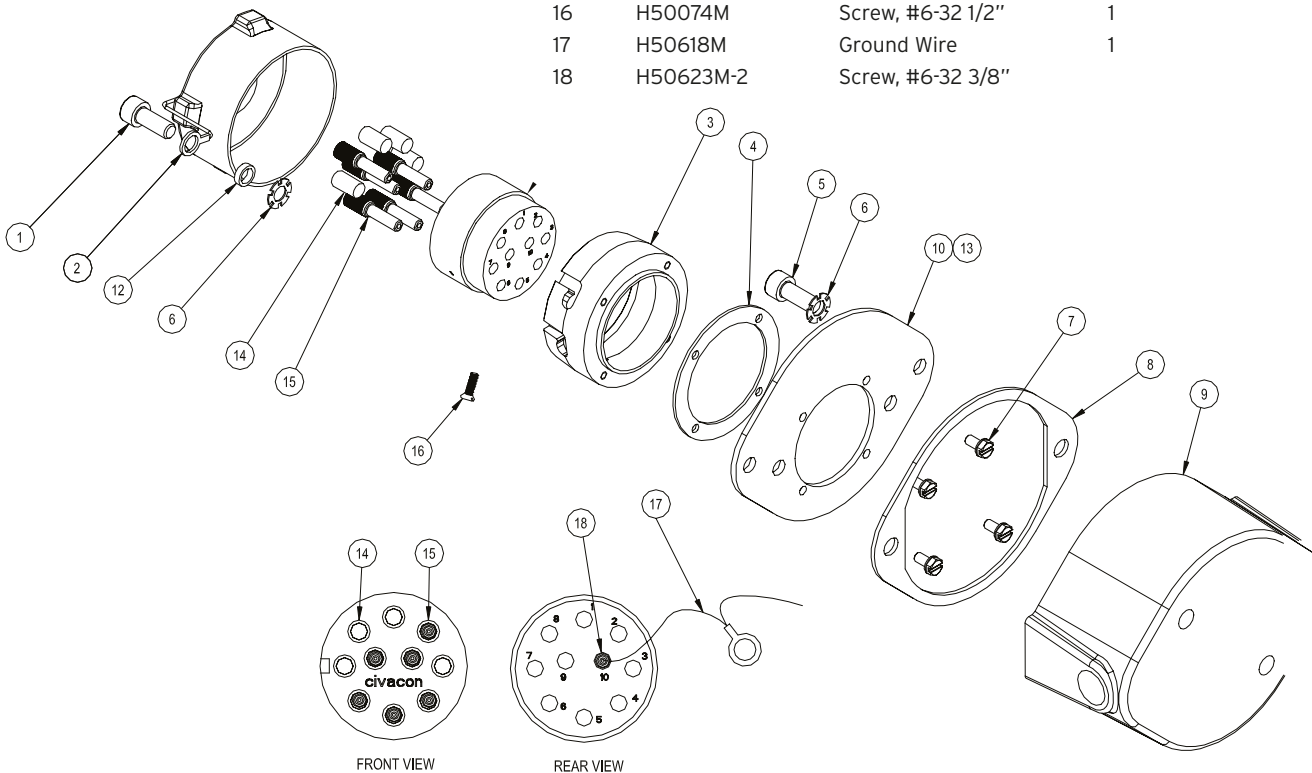
1	H50065M	Dust Cap, Green
2	H50288M	Cable

4450B Repairkit for 4403B:

1	H52535M	Dust Cap, Black
2	H50288M	Cable

Spare part only supplies as complete kit

Item	Part Nr	Description	QTY
1	H52538M	Screw, M8 X 1.25 X 20Mm	2
2	H50288M1	Cable	1
3	C40151A-3	"J" Slot Socket - 3	1
4	H52479M	Gasket, Neoprene	1
5	H52538M	Screw, M8 X 1.25 X 20Mm	2
6	H50250M	Washer, 5/16 Ss	2
7	H53048M	Screw, #8-32 3/8"	4
8	H50064M	Gasket, Neoprene	1
9	D52537A	Body	1
10	H52962M	Plate	1
11	H50288M1	Cable	1
12	H50291M	Spacer	1
13	H53038M-4103E	Label	1
14	H50617M	Insert	4
15	H50616M	Contact, Button	6
16	H50074M	Screw, #6-32 1/2"	1
17	H50618M	Ground Wire	1
18	H50623M-2	Screw, #6-32 3/8"	1



Related products

Art. number	Description
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill sensor
K1-5300E	5-Wire optic overfill sensor
1551-series	2-Wire optic overfill sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
3205E	Onboard monitoring system

Ordering specifications

Art. number	Description
4103E	6- pin Socket for optic sensors, BASEEFA
4103PS	4103E with pressure switch conform 94/63EC (VOC)
4403B	10- pin Socket with pressure switch for optical and /thermistor sensors, black label and cap, in accordance to EN13922 and VOC
4403E	10-pin Socket for thermistor sensors with green label and cap

Retain Overfill Monitoring 3205E

OPW Model 3205E ROM (Retain Overfill Monitoring) monitor secondary overfill prevention system incorporating retained product monitoring used in tank truck loading operations. ROM indicates Wet/dry conditions, wire short cuts, grounding conditions and shorted sensors by means of advanced diagnostics by means of LED and separate display.



Features and Benefits

- **In accordance with** ATEX
- **Compartment empty and overfill detection** in one unit
- **Compatible** with all industry standard sensors and rack monitors
- **After system alerts**, loading cannot proceed without activation of the reset circuit
- **Reset circuit** for bottom sensors only
- **Bottom retain sensor** override timer cancels override timing when plug is removed from socket
- **ROMII Plus monitor automatically** closes bottom valves for additional security if connected.
- **Support for** up to 8 compartment tankers using 2-wire optic overfill and bottom sensors
- **Support for** up to 12 compartments using 5-wire optic overfill sensors
- **Number of installed sensors** automatically configured at installation
- **Timer with progress indicator** Infrared function key
- **Individual LED indication** per auxiliary input device
- **LED indication per compartment and status** symbols on display
- **Rack monitor connection** status for proper connection assurance
- **Working temperature** from -40°C to +70°C
- **Graphic display** showing error codes
- **Infrared** bypass key

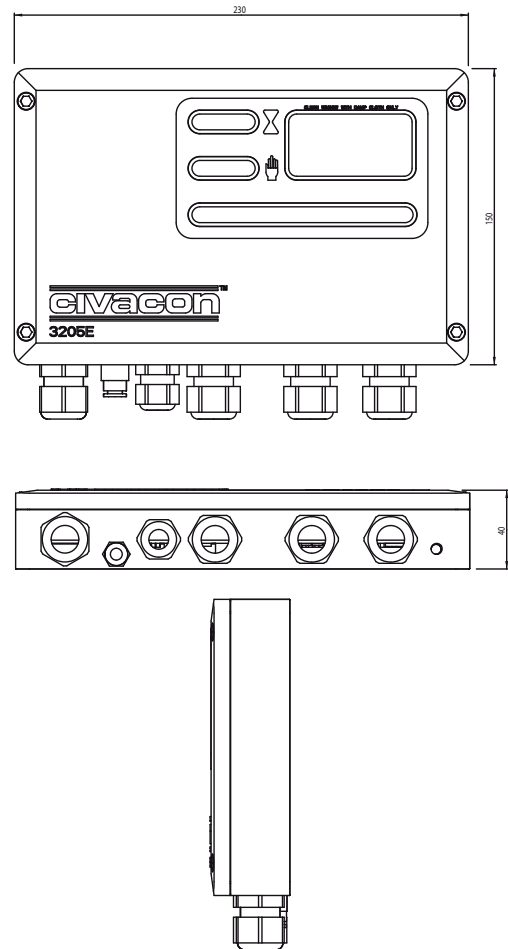
General specifications

ROMII Plus Onboard Monitoring System

- Power 24 VDC
- Working temperature -40°C to +70°C
- Weight 2,2 Kg

Specifications

3205E ROM



Related products

Art. number	Description
4103-series	6-pin Socket for optic sensors
4403-series	10-pin Socket for optic and thermistor sensors
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
3205E	ROM onboard monitoring system

TESTER TYPE 1397E-1398E

The 1397E and 1398E tester is a new simple handheld tester for tank trucks equipped with 5-wire overfill sensors.

The 1397E and 1398E tester give users, the possibility to do a quick diagnosis from the grounding and the overfill sensors.



LED indicator explanation

The tester is equipped with two LEDs on the back of the plug

One white led (with the text GND)

One bi-color LED (with the text dry/wet)

The white LED informs the user over the grounding status.

LED off: Bad or no grounding

LED flashing: grounding OK

The bi-color LED indicator flashes green when the sensors are permissive.

The bi-color LED indicator flashes red when the sensors are non-permissive.

The flash pattern of the LED indicator depends upon the number of compartments; LED indicator flashes every 5-seconds Number/times of flashes indicates number of sensors
A long flash of 1-second represents 5-compartments
A short flash of 250 ms represent 1-compartments
Example; 7-compartments is indicated by one long and two short flashes.

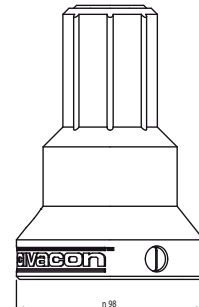
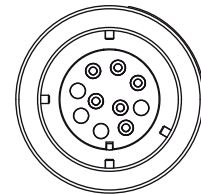
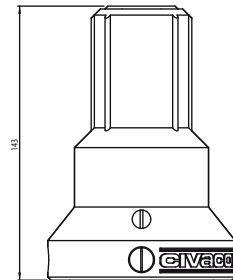
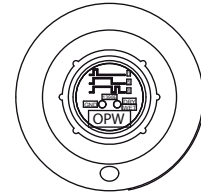
Features and Benefits

- **No operating** action required
- **Led indicator** for amount of compartments
- **Separate Led indicator** for ground verification
- **Test ground** loop and ground bolt
- **Fitted** ATEX emergizer
- **Available** for 3-J and 4-J slots
- **Extra diagnostic** information available
- **Small housing**, can be located in truck cabin
- **Auto switch off** when removed from socket



Specifications

1397E
1398E



Related products

Art. number	Description
2100E-L30	30m 5-Wire straight cable conform EN13922
EL05116	Cable gland HSK-K -EX; M20x1,5; 6-12mm blue
EL00001	Ground bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
1000RB	2-Wire optic bottom retain sensor
1398E	Truck tester, 4-J-slotted, black plug
1397E	Truck tester, 3-J-slotted, blue plug
ROMII-Plus	Onboard monitoring system
SCS-300	Sealed parcel delivery system

Ordering specifications

Art. number	Description
1397E	Truck tester for 3J socket
1398E	Truck tester for 4J socket

2-Wire Optic Bottom Sensors

The CIVACON'S 2-Wire Optic Bottom Sensors are designed for compartment empty detection of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our Rack Monitors, but they are also compatible with all other brands of Rack Monitors



Features and Benefits

- **In accordance with:**
 - ATEX
 - API RP 1004
- **Certified** for use in zone 0
- **Intrinsically safe** signals
- Instant permissive signal (no warm up time)
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Temperature** range -40°C to +70°C
- **Immediate system shutdown** (250 ms) in case of compartment 'wet' detections
- **Immediate re-permit** in case of compartment 'dry' detection
- **Approvals** ATEX + IECeX & FM

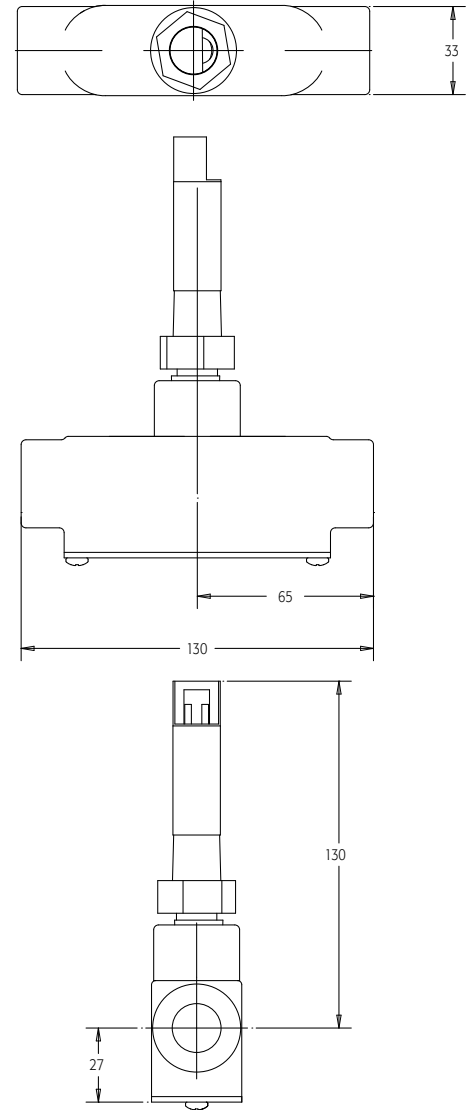
General specifications

Bottom Sensor

- Zone specification Zone 0
- Working Temp. -40°C to +70°C
- Signals Intrinsically safe
- Weight 320 g

Specifications

1000RB



Related products

Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL00001	Ground Bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
3205E	On-board Monitoring System
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
1000RB	Optic sensor, rom retain sensor with bottom inline housing

2-Wire Optic Bottom Sensors

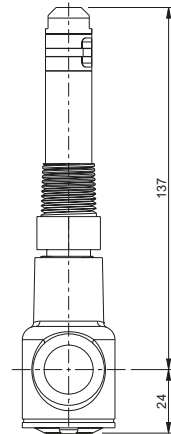
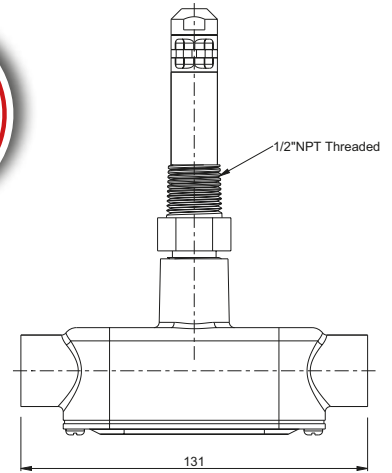
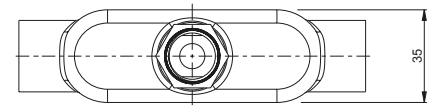
The CIVACON'S 2-Wire Optic Bottom Sensors are designed for compartment empty detection of liquid petroleum products. Not only are they instantly permissive and specially designed for optimal communication with our Rack Monitors (conforming to EN13922), but they are also compatible with all other brands of Rack Monitors which conforms to EN13922 standards.



Specifications

5000E

5030E



Features and Benefits

- **In accordance with:**
 - ATEX
 - API RP 1004
- **Certified** for use in zone 0
- **Intrinsically** safe signals
- Instant permissive signal (no warm up time)
- **Continuously checking** of system operation such as wiring, sockets and sensor itself
- **Temperature** range 40C° to +70°C
- **Immediate system shutdown** (250 ms) in case of compartment 'wet' detections
- **Immediate re-permit** in case of compartment 'dry' detection
- **Approvals** ATEX + IECeX & FM

General specifications

Bottom Sensor

- Zone specification Zone 0
- Working Temp. -40°C to +70°C
- Signals Intrinsically safe
- Weight 320 g

Related products

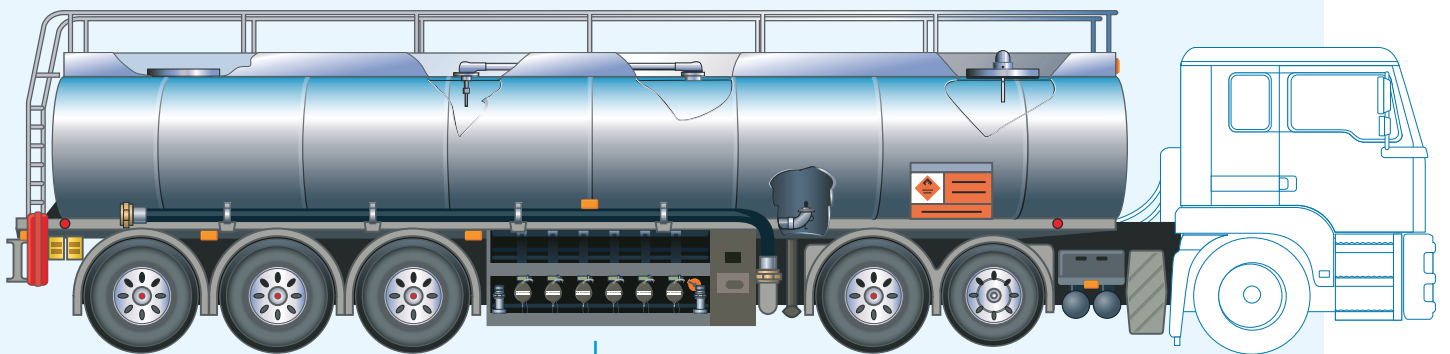
Art. number	Description
4103-series	6-Pin Optical Socket
4403-series	10-Pin Optical Socket
2100E-L30	30m 5-Wire straight cable conform EN13922
EL00001	Ground Bolt
K1-1112-series	5-Wire optic overfill prevention sensor
1551-series	2-Wire optic quick start overfill prevention sensor
5350E	2-Wire optic overfill sensor (replaces 1551-0018B)
5650E	2-Wire optic overfill sensor (replaces 1051-0018B)
3205E	On-board Monitoring System
7215-7215	30m 10-Wire straight cable, 45 meter (150 FT)

Ordering specifications

Art. number	Description
1000RB	Optic sensor, rom retain sensor with bottom inline housing

4.1. CIVAFLO Manifolds

42



4.1.

Civaflo Manifold

The CIVAFL0 Single and double Manifold by CIVACON helps improve the quality and performance of your delivery service.



Optional Product Return Spout

Designed to facilitate quick line changes, the product return spout is centrally located and angled to provide for easy connection. A sight glass on the spout allows the driver to see the return product flow to help facilitate accurate product changes.

Guard Bar Assembly

An air interlock switch is activated from the system control panel to provide access to manifold connections. This feature prevents unauthorized access to fuel compartments and restricts access to the manifold/API couplers unless the PGI and Operator Interface Unit are coordinated during the offloading process to ensure that the appropriate fuel connections are made.

Manifold Sight glass

No more guess work - Having made the compartment selection, the full width product site glass allows the driver to confirm his selection is correct.



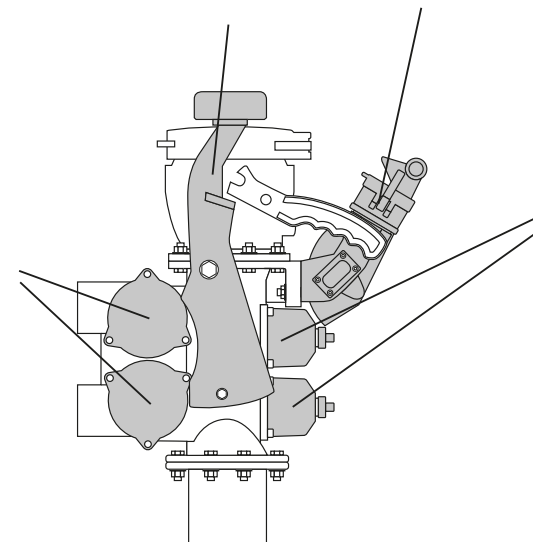
Manifold Valve

The air activated manifold chamber is a double-acting cylinder assembly that guarantees valve opening/closing every time. Its closed loop pneumatic system keeps debris from entering the valve.

The manifold chamber open/close status is clearly indicated by a "red" indicator visible through the transparent lens located on the top of each manifold valve.

Interlocked/Independent Manifold Galleries

Two different fuel types can be dispensed from the same vehicle. By simply selecting between the two independent manifold galleries. The air activation system only allows one manifold to be opened at any time. The manifold galleries are specific to either the gasoline or the diesel PTO and pump, this means that the manifold chambers are discriminate depending on the fuel selected to ensure that cross contamination is never a problem.

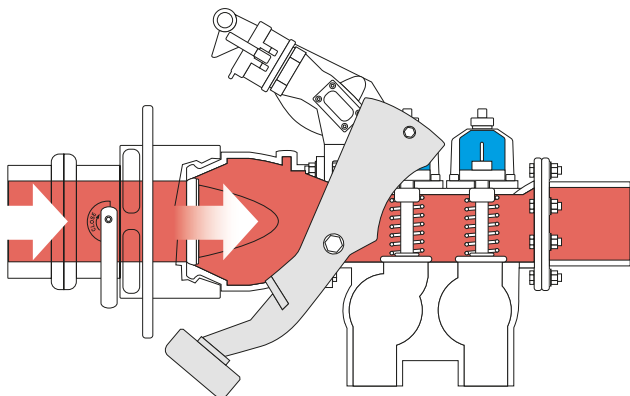




11530M-X001

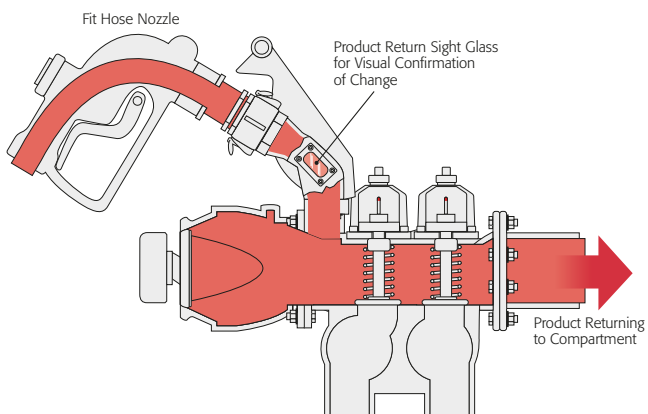


Return Spout Blocking Valve



Bottom Loading

The guard bar is released to provide access to the API coupler. Both manifold valves remain closed providing for high, unobstructed flow rates.



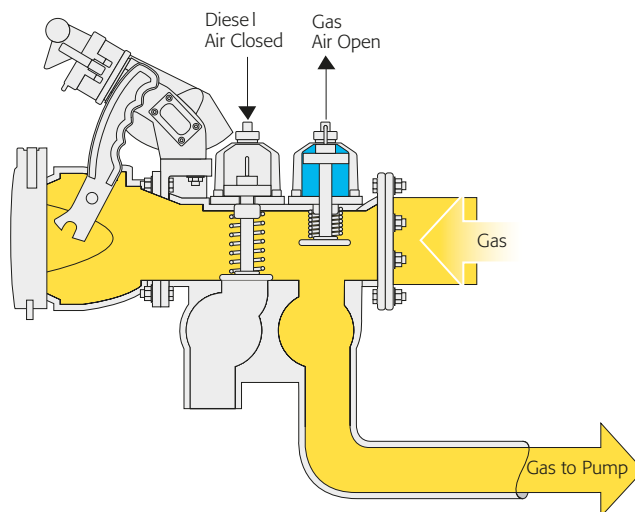
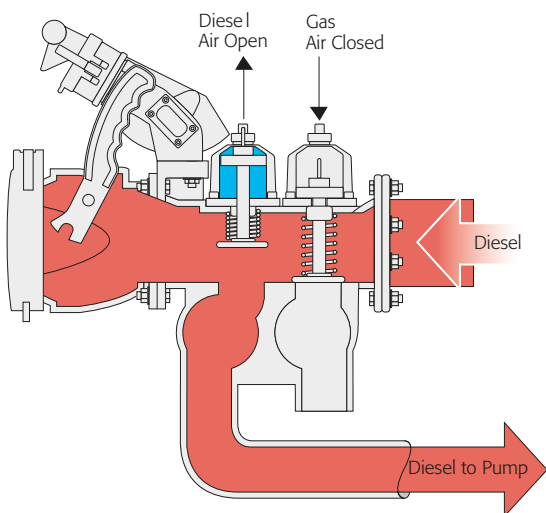
Product Return

An interlock switch that receives a signal from the operator interface unit and main control unit releases the guard bar. A tight-fill nozzle is connected to the return spout to allow for the return of fuel left in the hose to the appropriate fuel compartment.

A sight glass on the spout allows the driver to see the return product flow to help facilitate accurate product changes.

Pump Unloading - Manifold and Valve Operation

During pump unloading, the appropriate manifold and valve is selected to allow the flow of fuel into the collection tubes, through the pump and then dispensed through the meter and hose.



MANIFOLD ORDER SPECIFICATION

Manifold order specification

1	On which site of the tank needs the manifold be mounted?		<input type="checkbox"/> Left <input type="checkbox"/> Right															
	Manifold type:	No. of Compartments	Center to Center	Line Outlet	Seals	Sight	Return Spout	Return Spout Guard Bar	Return Spout Valve	API Guard Bar	End Connection Left	End Connection Right						
MF-	<input type="checkbox"/> 1=Single <input type="checkbox"/> 2=Double	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6	<input type="checkbox"/> 1= 280 mm <input type="checkbox"/> 2= 305mm <input type="checkbox"/> 3= 250mm <input type="checkbox"/> 4= 355mm	<input type="checkbox"/> 0= Not applicable <input type="checkbox"/> 1= Open Tee <input type="checkbox"/> 2= TTMA Flanged <input type="checkbox"/> 3= 3"TW Flanged <input type="checkbox"/> 4= 4"TTMA/TW Flanged 90° Where ?	<input type="checkbox"/> 1= Buna <input type="checkbox"/> 2= Viton	<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1= 8ight Class	<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1= BSPP Return Spout <input type="checkbox"/> 2= Return Spout w/ Couplings on all compartments <input type="checkbox"/> S= Special, return spout on compartments specified Where ?	<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1= Guard Bar	<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1= pneumatic non-pneumatic	<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1= Guard Bar	<input type="checkbox"/> 1= End Cap <input type="checkbox"/> 2= 4"TW/TTMA Flanged	<input type="checkbox"/> 1= End Cap <input type="checkbox"/> 2= 4"TW/TTMA Flanged						
							<input type="checkbox"/> 0= N.A. <input type="checkbox"/> 1 or S: <input type="checkbox"/> at compartment....											
							<input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> In the middle											



EXAMPLE MF - 151010 - 2010 - 11

How to order - Use this example as your guide to determine the partnumber for the Manifold you require.

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™ for flange replacement; save vents and drains; locking quick connect; product recovery systems; cryogenic couplings; autoclave check valves ...

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; overfill prevention system; sealed parcel delivery system; onboard monitoring system; crossover prevention system ...

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®, autolok™); dry disconnects (epsilon™, drylok™, kamvalok®); floating suction assemblies ...

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; overfill prevention systems ...

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



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

