







## ISO Certificate 9001:2008







## **CONTENTS**

* Overfill prevention equipments	5
* Optic sensors	5
* Cable	11
* Sockets	12
* Dummy	14
* Ground Bolt	15
* Manhole covers	16
* 20" Manhole Covers	16
* 16" Manhole Covers	22
* Collar rings	27
* Gaskets	28
* Dip Stick Tubes	30
* Dip Sticks	31
* Safety Valves	32
* 5 Effect Safety Valve	32
* Internal Safety Valves	34
* External Safety Valves	38





## **CONTENTS**

* Vapor recovery equipments	40
* Vapor recovery valves	40
* Hoses	48
* Support Valves	50
* Vapor recovery adaptors	56
* Bottom loading equipments	65
* API Valves	65
* API Gravity Drop Adaptors	78
* Bottom Valves	87
* 4" Pneumatic Manifold	108
* 3" Ball valves	110
* Pneumatic System	114
* Control Panel	114
* Hose	116
* Emergency Brake Button	117
* Filter Regulator/Lubricator	118
Tiller Negulaton/Eublicator	110
* Product Indicator	119
* Precintank ICC	120





## 2 Wire Optic Overfill Sensor Art. DT2.03



Design for overfill prevention during loading operation of fuel tankers.

Manufactured in compliance with 94/9/CE (ATEX) and European EN13922:2003 regulations regarding overfill prevention systems.

CE test certificate type LOM 04ATEX2117.

IP protection degree 65.

Temperature range: -40°C / +60°C

#### **CHARACTERISTICS**

For tankers of up to 8 compartments.

For tankers of less compartments our electronic simulator of compartments (DUMMY) model SD7.03 is used, which simulates up to 7 compartments.

Optic sensor of immediate response.

Immediate authorization at connection without waiting periods.

Maximum reliability with continuous self-check as required by EN13922 regulation.

Sturdy construction.

Last generation electronics for more reliability and endurance.

Invers polarity protection

Compatible with all the 2 wire thermistor and optic controllers.

Intrinsically safe.

Certified for use in zone zero.

#### **CONSTRUCTION MATERIALS:**

Aluminium alloys.

Borosilicate glass.

Gaskets in fluoroelastomer.





# 2 Wire Optic Overfill Sensor Art. DT2.03

Adjustable height.

## **Detection height**

 $5" \rightarrow 135$  to 180 mm  $7" \rightarrow 180$  to 230 mm

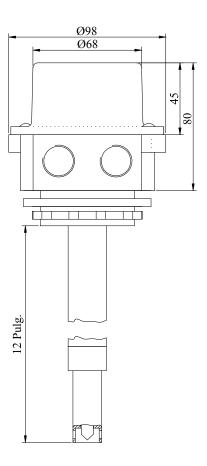
15" → 355 a 400 mm

Other heights under request.

### Wire hole

- \* PG16 european electrical thread
- \* M20 x 1,5 thread
- \* Special fabrication of other types of threads.

Weight: 0,95 kg







## 2 Wire Optic Overfill Sensor Art. DT2.03

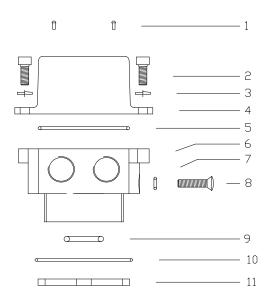
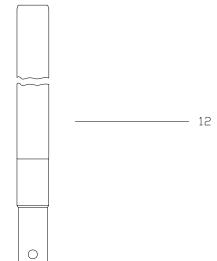


Fig.	Qty.	Description	Art.
1	2	Plate fixing rivet	781211
2	2	Allen screw	781205
3	2	Gloover washer	781206
4	1	Detector cap	781102
5	1	Cap gasket	781204
6	1	Body	781101
7	1	Fixing screw gasket	781212
8	1	Cane fixing screw	781215
9	1	Cane gasket	781203
10	1	Body gasket	781214
11	1	Fixing nut	781122
12	1	DT2 tip with 5" cane	7815042C
	1	Connection accesories	781131C



### **OPTIONS:**

DT2 sensor tip kit and cane lenghts:

Art. 7815042C 5" cane length
Art. 7815043C 15" cane length
Art. 7815044C 7" cane length





## 5 Wire Optic Overfill Sensor Art. DT5.03



Design for overfill prevention during loading operation of fuel tankers.

Manufactured in compliance with 94/9/CE (ATEX) and European EN13922:2008 regulations regarding overfill prevention systems.

CE test certificate type LOM 04ATEX2117. Ip protection degree 65.

Temperature range: -40°C / +60°C

#### **CHARACTERISTICS**

Optic sensor of immediate response. Immediate authorization at connection without waiting periods.

Maximum reliability with continuous auto check as required by EN13922 regulation. Sturdy construction.

Last generation electronics for more reliability and endurance.

Invers polarity protection

Compatible with all the 5 wire controllers.

#### **CONSTRUCTION MATERIALS:**

Aluminium alloys.

Borosilicate glass.

Gaskets in fluoroelastomer.





# 5 Wire Optic Overfill Sensor Art. DT5.03

Adjustable height.

### **Detection height**

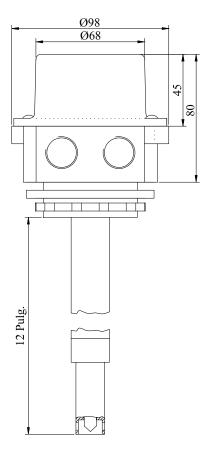
 $5" \rightarrow 135 \text{ to } 180 \text{ mm}$   $7" \rightarrow 180 \text{ to } 230 \text{ mm}$  $15" \rightarrow 355 \text{ to } 400 \text{ mm}$ 

Other heights under request.

### Wire hole

PG16 european electrical thread M20 x 1,5 thread Special fabrication of other types of threads.

Weight: 0,95 kg







# 5 Wire Optic Overfill Sensor Art. DT5.03

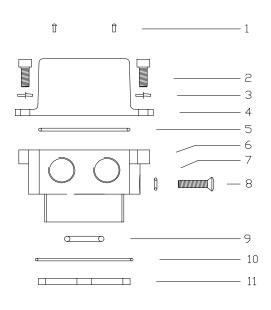
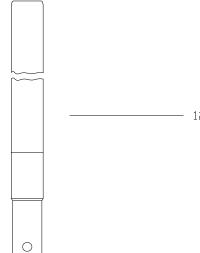


Fig.	Qty.	Description	Art.
1	2	Sheet fixing rivet	781211
2	2	Allen screw	781205
3	2	Gloover washer	781206
4	1	Detector cap	781102
5	1	Cap gasket	781204
6	1	Body	781101
7	1	Fixing screw gasket	781212
8	1	Cane fixing screw	781215
9	1	Cane gasket	781203
10	1	Body gasket	781214
11	1	Fixing nut	781122
12	1	DT5 tip with 5" cane	7815045C
	1	Connection accesories	781131C



### **OPTIONS:**

DT5 sensor tip kit and cane lenghts:

Art. 7815045C 5" cane lenght
Art. 7815046C 15" cane lenght
Art. 7815047C 7" cane lenght





# Overfill sensor cable Art. CDT5L

Characteristics of the overfill sensor cable Art. CDT5L.

PUR > 440P 5 x 1 Approved in compliance with regulation 73/23 EEC (Low Voltage Directive)

Exterior cover (blue > RAL 5015) EQUIPTANK branded

Conductive colors: white, gray, blue, green, yellow

Internal guide in plastic.

Working temperature in flexion: -40°C to +90°



Flame retardant (IEC 60332.1)
Microbe and hidrólisis resistant
Halogen free
Conductives with TPE isolation and
cabled by layers
Tension test 3000V
Tested according to VDE.





## Socket Series BE10/BE11



WEIGHT: 1,3 Kg

Compatible with all existing controler models.

Designed for optimum connection with the truck.

Manufactured in compliance with European regulation EN13922:2003 (interchangeable with API RP-1004).

- 4 hook socket 10 pin female connector.
- 3 hook socket 6 pin female connector.

This element is part of the overfill prevention system which has the LOM 04ATEX2118 certificate.

#### **CHARACTERISTICS:**

For use with 2 wire sensors (optic and thermistor) and 5 wire optic sensors.

The dummy can be lodge inside the case.

As an option it can be supplied with a interlocking pneumatic switch for the vapor recovery hose.

Includes a ground connection pin.

Sturdy construction.

#### **MATERIALS:**

Body in aluminium alloy.
Elastomer plug with fastening cable.
Hard anodize treatment for better
resistance and endurance.

#### **WIREHOLE:**

M20 X 1,5 thread PG16 European electric thread







# Socket Series BE10/BE11

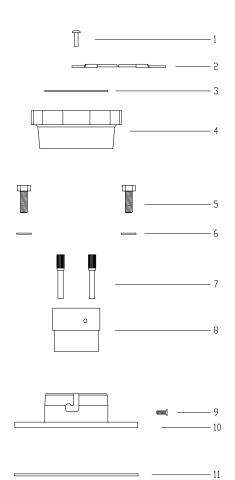
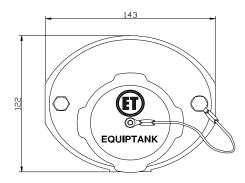


Fig.	Qty	Description	Art.
1	1	Base cap	782209C
2	2	Fixing screw	782301
3	2	Fixing washer	782302
4	10	Connection pins	782208
4	1	socket insulation	782203
5	1	Insulation blocking screw	782307
6	1	Socket base	782202
7	1	Socket base gasket	782210
8	1	PG16 socket casing	782201
	1	Connection accesories	783003C



0	
	12

Art.	Nº Pins	Nº Hooks	Thread type	Pneumat c switch
BE10.03	10	4	PG16	NO
BE10.03M	10	4	M20	NO
BE10.03N	10	4	NPT	NO
BE10.03MS	10	4	M20	YES
BE11.03	6	3	M20	NO
BE11.03MS	6	3	M20	YES





## Simulator (DUMMY) Art. SD7.03



Manufactured in compliace with European regulation EN13922:2003 (interchangeable with API RP-1004) CE test certificate type LOM 04ATEX2118 IP ptotection degree 65

#### **CHARACTERISTICS:**

Simulates up to 7 compartments.

Use of only one Dummy for 1 and 2 compartment tankers.

Maximum reliability.

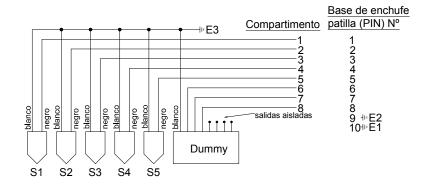
Sturdy construction.

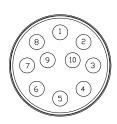
Encapsulated electronic circuit in epoxi resin, in a container box.

Last generation electronics for more reliability and endurance.

Invers polarity protection

Compatible with all the 2 wire thermistor and optic controllers.









# Ground bolt Art. GB2/5



### **CHARACTERISTICS:**

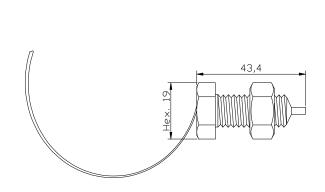
Prevents loading while the ground bolt is not properly connected.

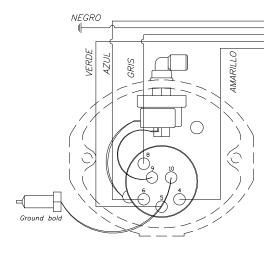
Stops the loading operation automatically if the ground bolt breaks at any momento of said operation.

Of easy installation.

Directly wired to EQUIPTANK's overfill prevention socket series BE11.

Weight: 0,06Kg









# DN500 Bolted Manhole cover for fuel and by-products: Bottom Loading



Equiptank's PAF type DN500 Manhole covers, for fuel and by-product transportation, are design and manufactured in accordance with European, ADR and API RP1004 regulations.

BVQI certified according to UNE-EN 13314 and UNE-EN 13317 regulations.

The manhole cover is fixed to the collar ring by means of 24 steel srews (could be stainless steel).

The DN 10" loading mouth doubles as a safety valve calibrated to an opening pressure of 30kPa, or optionally to 50 kPa (other calibrations under demand). This manhole cover complies with all the requirements for bottom loading and vapour recovery.

As an option, a secondary block for the closing system of the loading mouth can be supplied.

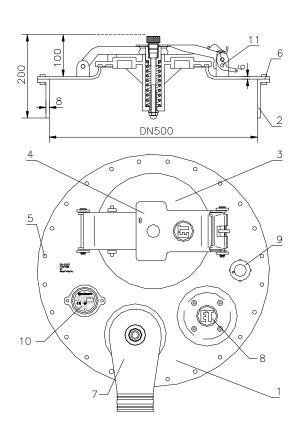
The manhole covers can incorporate the following elements:

- \* 2" external safety valve. Art. VSB50B.
- \* Internal safety valve. Art. VSRI5014.
- \* Sequential vapor recovery valve. Art. 601000S / 602000S
- \* Pressure relieve cap Art. 100100.
- \* Cover bridge lock (closing system).
- \* Overfill prevention optic sensor (Series DT5 / DT2).





# DN500 Bolted Manhole cover for fuel and by-products: Bottom Loading



Nº	DESCRIPTION
1	Manhole cover.
2	Drilled collar ring (24xM8).
3	10" PAF cover Calib 300±35 mbar.
4	Quick closing system.
5	Screws (24).
6	Collar ring gasket.
7	Sequential vapor recovery valve.
8	2" external safety valve.
9	Pressure relieve cap
10	Overfill sensor.
11	Fixing mechanism.

### **Materials:**

A-430-B treated steel, 4 mm / 6 mm thickness AISI-304 stainless steel, 4 mm thickness AW5186 aluminium 6 mm / 8 mm thickness







# DN500 Bolted Manhole cover for fuel and by-products: Top Loading



Equiptank's PAF type DN500 Manhole covers, for fuel and by-product transportation, are design and manufactured in accordance with European, ADR and API RP1004 regulations. BVQI certified according to UNE-EN 13314 and UNE-EN 13317 regulations.

The manhole cover is fixed to the collar ring by means of 24 steel srews (could be stainless steel).

The DN 10" loading mouth doubles as a safety valve calibrated to an opening pressure of 30kPa, or optionally to 50 kPa (other calibrations under demand). This manhole cover complies with all the requirements for bottom loading and vapour recovery.

As an option, a secondary block for the closing system of the loading mouth can be supplied.

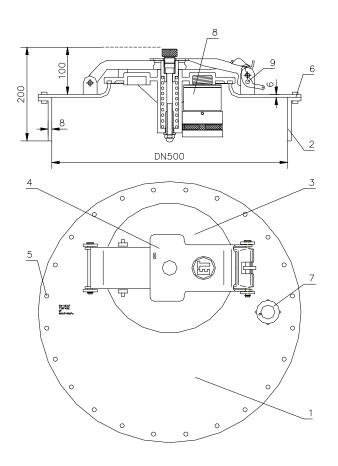
## The Manhole covers can incorporate the following elements:

- \* Internal safety valve Art. VSRI5014. Complies with UNE EN 14595 regulations. BVQI-E certified with certificate N° 5000661-J2-CPI.
- \* Pressure relieve cap Art. 100100.
- \* Cover bridge lock (closing system).





# DN500 Bolted Manhole cover for fuel and by-products: Top Loading



Nº	DESCRIPTION.
1	Manhole cover.
2	Drilled collar ring (24xM8)
3	10" PAF cover Calib: 300±35 mbar
4	Quick closing system.
5	Screws (24).
6	Collar ring gasket.
7	Pressure relieve cap
8	1 1/4" internal safety valve
9	Fixing mechanism

### **Materials:**

A-430-B treated steel, 4 mm / 6 mm thickness
AISI-304 stainless steel, 4 mm thickness
AW5186 aluminium 6 mm / 8 mm thickness







# DN500 Clamped Manhole cover for fuel and by-products



Equiptank's PAF type DN500 Manhole covers, for fuel and by-product transportation, are design and manufactured in accordance with European, ADR and API RP1004 regulations. The cover is fixed to the collar ring by means of a steel clamp.

The DN 10" loading mouth doubles as a safety valve calibrated to an opening pressure of 30kPa, or optionally to 50 kPa (other

calibrations under request)

As an option, a secondary block for the closing system of the loading mouth can be supplied.

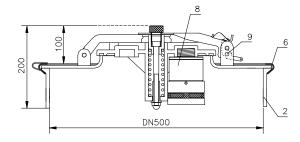
## The Manhole cover can incorporate the following elements:

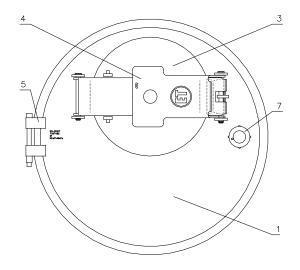
- \* Internal safety valve Art. VSRI5014. Complies with UNE EN 14595 regulations. BVQI-E certified with certificate N° 5000661-J2-CPI.
- \* Pressure relieve cap Art. 100100.
- \* Cover bridge lock (closing system).
- \* 2" External safety valve Art. VSB50B
- \* Vapor recovery valve. Art. 601000S / 602000S
- \* Overfill sensor





# DN500 Clamped Manhole cover for fuel and by-products





Nº	DESCRIPTION.
1	Manhole cover.
2	Collar ring
3	10" PAF Cover Calib: 300±35 mbar
4	Quick closing system.
5	Clamp
6	Collar ring gasket.
7	Pressure relieve cap
8	1 1/4" internal safety valve
9	Fixing mechanism

### **Materials:**

A-430-B treated steel, 4 mm / 6 mm thickness AISI-304 stainless steel, 4 mm thickness (under request) AW5186 aluminium 6 mm / 8 mm thickness (under request)





# DN400 Bolted Manhole cover for fuel and by-products



Equiptank's PAF type DN400 Manhole covers, for fuel and by-product transportation, are design and manufactured following the highest international quality standards. The manhole cover is fixed to the collar ring by means of 12 steel srews (could be

stainless steel).

The DN 10" loading mouth doubles as a safety valve calibrated to an opening pressure of 30kPa, or optionally to 50 kPa (other calibrations under request)

As an option, a secondary block for the closing system of the loading mouth can be supplied.

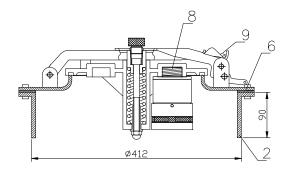
## The Manhole cover can incorporate the following elements:

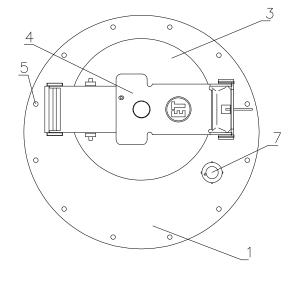
- \* Internal safety valve Art. VSRI5014. Complies with UNE EN 14595 regulations. BVQI-E certified with certificate N° 5000661-J2-CPI.
- \* Pressure relieve cap Art. 100100.
- \* Cover bridge lock (closing system).
- \* Vapor recovery valve Art. 602000S.
- \* Overfill sensor





# DN400 Bolted Manhole cover for fuel and by-products





Nº	DESCRIPTION.
1	Manhole cover.
2	Drilled collar ring (12xM8)
3	10" PAF Cover Calib: 300±35 mbar
4	Quick closing system.
5	Screws (12).
6	Collar ring gasket.
7	Pressure relieve cap
8	1 1/4" internal safety valve
9	Fixing mechanism

### **Materials:**

A-430-B treated steel, 4 mm / 6 mm thickness AISI-304 stainless steel, 4 mm thickness (under request) AW5186 aluminium 6 mm.





# DN400 Clamped Manhole cover for fuel and by-products



Equiptank's PAF type DN400 Manhole covers, for fuel and by-product transportation, are design and manufactured following the highest international quality standards.

The cover is fixed to the collar ring by means of a steel clamp.

The DN 10" loading mouth doubles as a safety valve calibrated to an opening pressure of 30kPa, or optionally to 50 kPa (other calibrations under request)

As an option, a secondary block for the closing system of the loading mouth can be supplied.

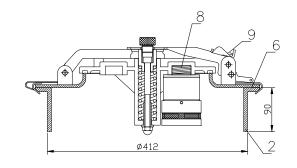
## The Manhole cover can incorporate the following elements:

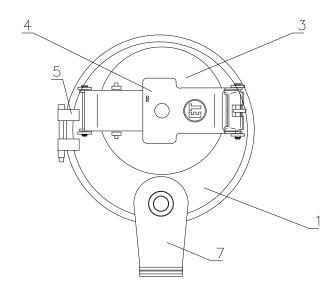
- \* Internal safety valve Art. VSRI5014. Complies with UNE EN 14595 regulations. BVQI-E certified with certificate N° 5000661-J2-CPI.
- \* Pressure relieve cap Art. 100100.
- \* Cover bridge lock (closing system).
- \* Vapor recovery valve Art. 602000S
- \* Overfill sensor





# DN400 Clamped Manhole cover for fuel and by-products





Nº	DESCRIPTION.
1	Manhole cover.
2	Collar ring
3	10" PAF cover Calib: 300±35 mbar
4	Quick closing system.
5	Clamp
6	Collar ring gasket.
7	Vapor recovery valve
8	1 1/4" internal safety valve
9	Fixing mechanism

#### **Materials:**

A-430-B treated steel, 4 mm / 6 mm thickness AISI-304 stainless steel, 4 mm thickness (under request).





# Manhole covers for fuel and by-products

EXAMPLE E 5 A 6 S S 0 E	0	N
PRODUCTO FAMILY  E = Bolted Manhole cover  T = Clamped Manhole cover  DIAMETER  4 = Nominal diameter 400mm (16")  5 = Nominal diameter 500mm (20")  MATERIAL  A = Aluminium  F = Iron  I = Stainless steel  THICKNESS  4 = 4 mm  6 = 6 mm  8 = 8 mm		
OVERFILL SENSOR HOUSING		
S = With overfill sensor housing		
0 = Without overfill sensor housing		
VAPOR RECOVERY VALVE HOUSING ————————————————————————————————————		
S = With vapor recovery valve 601000S housing		
A = With vapor recovery valve 602000S housing		
0 = Without vapor recovery valve housing		
INTERNAL SAFETY VALVE HOUSING		
I = With internal safety valve VSRI5014 housing		
F = With internal safety valve 450000 housing		
0 = Without internal safety valve housing		
EXTERNAL SAFETY VLAVE HOUSING		
E = With external safety valve VSB50B housing		
R = With external safety valve 401100 housing		
L = With external safety valve 460000 housing		
0 = Without external safety valve housing		
PRESSURE RELIEVE CAP		
T = With pressure relieve cap housing		
0 = Without pressure relieve cap housing		
GASKET		
N = Nitrile (NBR)		
V = Fluoroelastomer ("Vitón")		
E = EPDM		

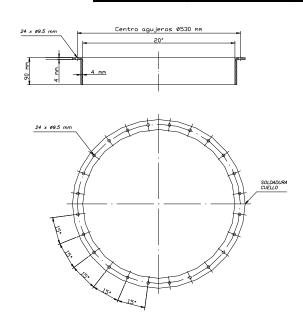


B = Low temperature



# EQUIPTANK's Manhole cover collar rings

Art.	Thickness	Material	Туре	DN
100002	8 mm	Aluminium	Clamped	400
140002	6 mm	Aluminium	Clamped	500
140002H	4 mm	Steel	Bolted	500
1400021	4 mm	Stainles Steel	Bolted	500
160002	8 mm	Aluminium	Bolted	500
160002H	6 mm	Steel	Bolted	500
170002	8 mm	Aluminium	Bolted	400
17005H	4 mm	Steel	Bolted	400
170006H	4 mm	Steel	Clamped	400
180002	8 mm	Aluminium	Bolted	600





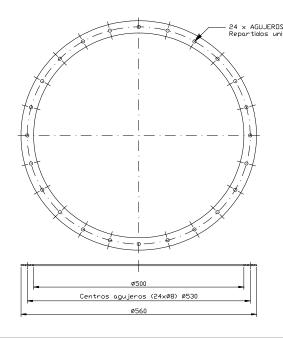
Art. 160002H 6mm steel bolted collar ring Weight: 6 kg





## EQUIPTANK's Manhole cover gaskets

Art.	Material	Туре	DN
100012	NBR	Clamped	500
100012A	EPDM	Clamped	500
160012S3	NBR	Bolted	500
160012S3V	VITON	Bolted	500
170011N	NBR	Clamped	400
170011V	VITON	Clamped	400
170012	NBR	Bolted	400
170012S2V	VITON	Bolted	400
180012	NBR	Bolted	600





Art. 160012S3V

<u>"Vitón" Collar ring gasket</u>

Weight: 0,18 kg





# Bolted collar ring gasket Art. 160012S3

## Assembly instructions for gasket Art. 160012S3:



The bolted collar ring gasket, Article 160012S3 has an assembly position. The conic relief of each hole can clearly be seen in the picture.

The side with the conic relief has to be assembled over the top side of the collar ring, as seen in the picture.



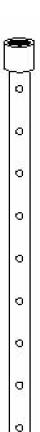


Once the gasket is firmly set on the collar ring, EQUIPTANK's DN500 manhole cover is placed, and the 24 steel bolts tightened in a symetrical way in order to obtain a safe set up of the gasket.





# <u>Dip stick tube</u> Art. 100117 / 100122

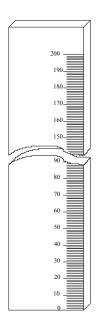


Article	Description	
100117	Aluminium dip stick tube 1700 mm lenght.	
100122	Aluminium dip stick tube 2200 mm length.	
Other lenghts under request.		

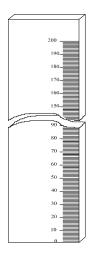




# Graph level dipstick



Article	Description	
C302000	Brass level dipstick calibrated 2000 mm	
C302200	Brass level dipstick calibrated 2200 mm	
Other dimensions under request.		



Article	Description	
C302000I	Stainless steel level dipstick calibrated 2000 mm	
C302200I	Stainless steel level dipstick calibrated 2200 mm	
Other dimensions under request.		





## 5 effect Safety Valve Art. 401100



Complies with specifications of Order number 24340 of October 16th 1996 of the Ministry of Industry and Energy.
Complies with specifications of norm NFM 88-111.

Weight: 2,9 Kg

Aeration: (a) 55-90 mbar (5.5-9 kPa)

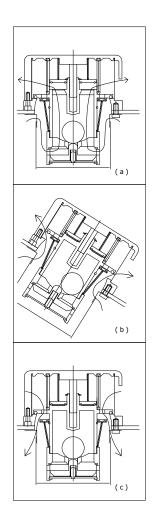
Pressure: (b) 220-275 mbar (22-27.5 kPa)

Overturn angle: (b) 27°-37°

Vacuum: (c) 10-15 mbar (1-1.5 kPa)

Flame arrester mesh in stainless steel

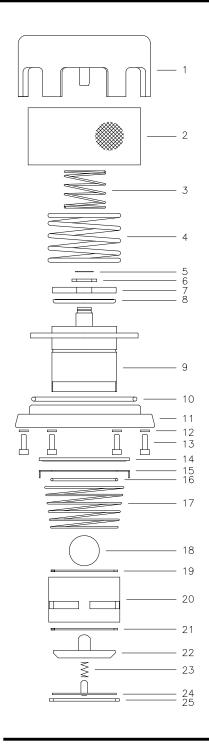








# 5 effect Safety Valve Art. 401100



	1	<u> </u>	
Fig.	Qty.	Description	Art.
1	1	Hood	401002
2	1	Flame arrester	400045
3	1	Low pressure spring	401022
4	1	Long high pressure spring	401024
5	1	Seeger washer	400088
6	1	Washer	400087
7	1	Low pressure disc	400055
8	1	Low pressure gasket	400050
9	1	Body	401001
10	1	High pressure body gasket	400026
11	1	Flange	401105
12	6	Screw head gasket	401181
13	6	Hood fixing screw	400080
14	1	Vacuum gasket	400031
15	1	Vacuum gasket disc	400040V2
16	1	Seal ring	400033
17	1	Vacuum spring	400020
18	1	Ball	400018
19	1	Body gasket	400035
20	1	Overturn body	400004
21	1	Overturn clapper gasket	400030
22	1	Overturn clapper	400010
23	1	Overturn clapper spring	400023
24	1	Lowe lid disc	400015
25	1	Lowe lid seeger disc	400025

## **ACCESSORIES:**

Flange flat gasket Art. 400029
Flange gasket Art. 401129
Blind flange Art. 400092
Anti wave deflector Art. 400090





# 1 1/4" INTERNAL SAFETY VALVE Art. 450000



### **CHARACTERISTICS:**

Complies with specifications of NFM 88-111 regulation.

Internally fitted.

1 1/4 BSP thread.

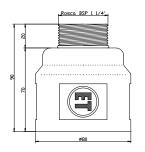
### **MATERIALS**:

Body in treated lightweight aluminium alloy.

Springs and components in stainless steel and treated steel.

Gaskets in fluoroelastomer.

## Weight: 0,55 Kg



# BORES ARE LIVE

### **FUNCTIONS**:

Aeration: 55-90 mbar (5.5-9 kPa) Pressure: 220-275 mbar (22-27.5 kPa)

Overturm angle: 27°-37° Vacuum: 10-15 mbar (1-1.5 kPa)

Flame arrester mesh.

Other pressures under request.







# 1 1/4" Internal Safety Valve Art. 450000

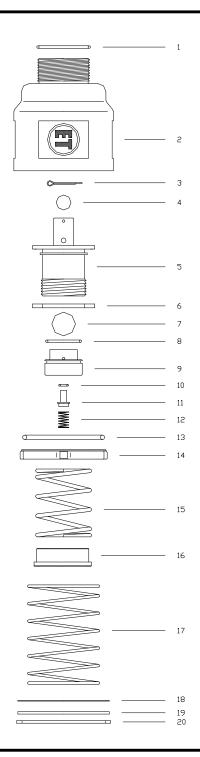


Fig.	Qty.	Description	Art.
1	1	1 1/4' thread gasket	450076
2	1	Body	450001
3	1	Cotter pin	450080
4	1	Low pressure ball	450060
5	1	Internal body	450005
6	1	High pressure gasket	450072
7	1	Overturn ball	450055
8	1	Ball housing gasket	450073
9	1	Ball housing body	450015
10	1	Overtun gasket	450070
11	1	Overturn clapper	450050
12	1	Overturn spring	450065
13	1	Vacuum gasket	450071
14	1	Gasket case	450020
15	1	High pressure spring	450067
16	1	Internal body lid	450010
17	1	Vacuum spring	450071
18	1	Flame arrester	450030
19	1	Valve lid	450025
20	1	Valve lid ring	450085

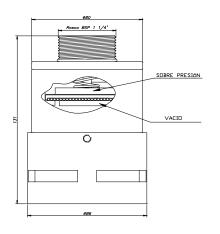




## 1 1/4" Internal Safety Valve Art. VSRI5014



Weight: 1,8 Kg



### **CHARACTERISTICS:**

Complies with UNE EN 14595 regulation. BVQI-E certified with certificate N° 5000661-J2-CPI.

The valve is fitted in the 10" PAF cover (internally).

### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy.

Springs and components in stainless steel and treated steel

Gaskets in fluoroelastomer.

Pre-established pressures.

## **FUNCTIONS:**

Pressure relieve.

Vacuum.

Flame arrester.

Overturn.







### 1 1/4" Internal Safety Valve Art. VSRI5014

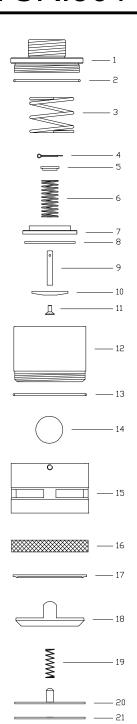


Fig.	Qty.	Description	Art.
1	1	1 1/4" threaded lid	480002
2	1	Threaded lid gasket	480053
3	1	Pressure spring	480020
4	1	Cotter pin	480030
5	1	Vacuum washer	480016
6	1	Vacuum spring	480021
7	1	Closing saucer	480010V2
8	1	Closing gasket	480054
9	1	Saucer axle	470015
10	1	Vacuum saucer	480011
11	1	Disc fixing screw	480031
12	1	Body	480001
13	1	Body gasket	400035
14	1	Ball	400018
15	1	Overturn body	400004
16	1	Flame arrester	480090
17	1	Overturn clapper gasket	400030
18	1	Overturn clapper	400010
19	1	Overturn clapper spring	400023
20	1	Lower lid disc	400015
21	1	Lower lid seeger disc	400025





### 2" External Safety Valve Art. VSB50B



### **CHARACTERISTICS:**

Complies with UNE EN 14595 regulation.

BVQI-E certified with certificate N° 5000661-J1-CPI.

### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy.

Springs and components in stainless steel and treated steel

Gaskets in fluoroelastomer.

Pre-established pressures.

The valve is flanged to the cover.

Weight: 1,85 Kg

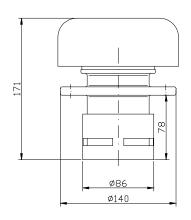
### **FUNCTIONS:**

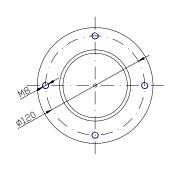
Pressure relieve.

Vacuum.

Flame arrester.

Overturn.











### 2" External Safety Valve Art. VSB50B

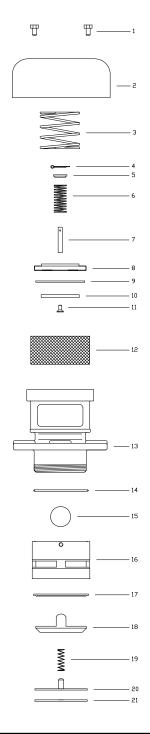


Fig.	Qty.	Description	Art.
1	4	Hood fixing screw	470051
2	1	Hood	650005
3	1	Pressure spring	470020
4	1	Cotter pin	480030
5	1	Vacuum washer	480016
6	1	Vacuum spring	480021
7	1	Closing saucer	470010
8	1	Closing gasket	470030
9	1	Saucer axle	470015
10	1	Vacuum saucer	470011
11	1	Disc fixing screw	480031
12	1	Flame arrester	470040
13	1	Body	470001
14	1	Body gasket	400035
15	1	Ball	400018
16	1	Overturn body	400004
17	1	Overturn clapper gasket	400030
18	1	Overturn clapper	400010
19	1	Overturn clapper spring	400023
20	1	Lower lid disc	400015
21	1	Lower lid seeger disc	400025



### **ACCESSORIES:**

Flat flange gasket Art. 470035





### 3" sequential pneumatic vapor recovery valve" Art. 601000S







Weight: 2,15 Kg

### CHARACTERISTICS:

Complies with EN 13082 regulation. BVQI-E certified with certificate N°

Pneumatically activated

5000661-B-CPI.

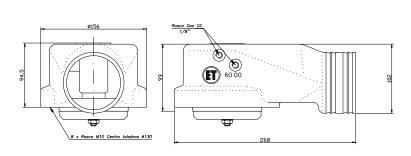
Incorporates a sequential opening and return switch to feed an operative valve in the system.

Body pressure tested at 500 KPa

### **MATERIALS:**

Body and componentes in treated and anodized lightweight aluminium alloys. Internal components in stainless steel.

Gaskets in fluoroelastomer / Nitrile.









### 3" Sequential pneumatic vapor recovery valve Art. 601000S

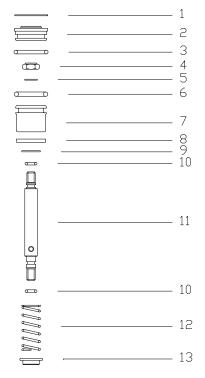
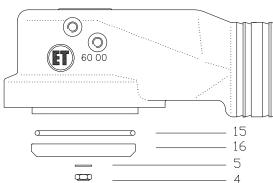


Fig.	Qty.	Description	Art.
1	1	Seeger butt	600051
2	1	Butt	600017
3	1	Butt gasket	600042
4	2	Self locking nut	600055
5	2	Self locking nut washer	600032
6	1	Sequential piston o-ring	600044
7	1	Sequential piston	600047
8	1	Piston flat gasket	600048
9	1	Flat gasket washer	600034
10	2	Axle gasket	600041
11	1	Sequential pisotn axle	600011
12	1	Spring	600025
13	1	Housing guide	600020
14	1	Body	601001
15	1	Closing gasket	600040
16	1	Closing saucer	600005



**ACCESSORIES** 

Flange flat gasket Art. 600043 Flange gasket Art. 601043 Blind flange Art. 600090





14

### 3" Sequential pneumatic vapor recovery valve with mesh Art. 601100S



### **CHARACTERISTICS:**

Complies with EN 13082 regulation.

BVQI-E certified with certificate N° 5000661-B-CPI.

Pneumatically activated

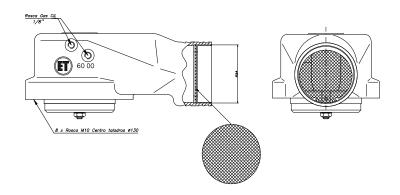
Incorporates a sequential opening and return switch to feed an operative valve in the system.

Body pressure tested at 500 KPa

### **MATERIALS:**

Body and componentes in treated and anodized lightweight aluminium alloys. Internal components in stainless steel. Gaskets in fluoroelastomer / Nitrile.

Weight: 2,15 Kg







### 3" Sequential pneumatic vapor recovery valve with mesh Art. 601100S

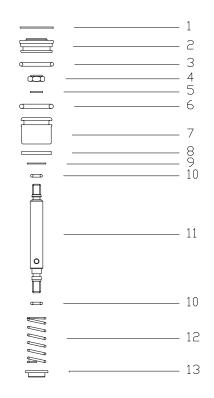
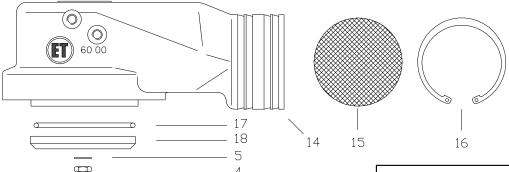


Fig	Qty.	Description	Art.
1	1	Seeger butt	600051
2	1	Butt	600017
3	1	Butt gaket	600042
4	2	Self locking nut	600055
5	2	Self locking nut washer	600032
6	1	Sequntial piston o-ring	600044
7	1	Sequential piston	600047
8	1	Piston flat gasket	600048
9	1	Flat gasket washer	600034
10	2	Axle gasket	600041
11	1	Sequential piston axle	600011
12	1	Spring	600025
13	1	Housing guide	600020
14	1	Body	601001
15	1	Flame arrester	601106
16	1	Seeger flame arrester	601107
17	1	Closing gasket	600040
18	1	Closing saucer	600005



### **ACCESSORIES**

Flange flat gasket Art. 600043 Flange gasket Art. 601043 Blind flange Art. 600090





### 3" Sequential pneumatic vapor recovery valve with decompression Art. 601500S



Weight: 2,20 Kg

### CHARACTERISTICS:

Complies with EN 13082 regulation. BVQI-E certified with certificate N° 5000661-B-CPI.

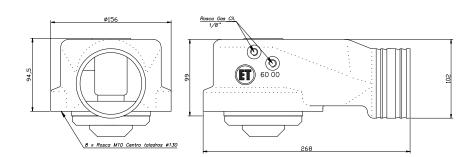
Pneumatically activated

Incorporates a sequential opening and return switch to feed an operative valve in the system.

Body pressure tested at 500 KPa Decompression saucer.

### **MATERIALS:**

Body and componentes in treated and anodized lightweight aluminium alloys. Internal components in stainless steel. Gaskets in fluoroelastomer / Nitrile.







### 3" Sequential pneumatic vapor recovery valve with decompression Art. 601500S

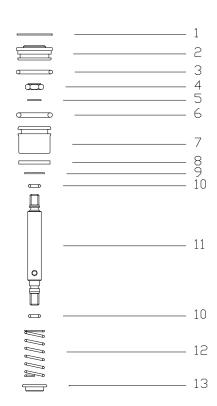
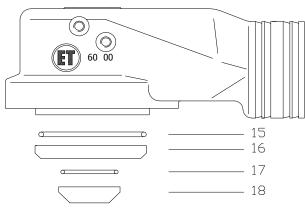


Fig.	Qty.	Description	Art,
1	1	Seeger butt	600051
2	1	Butt	600017
3	1	Butt gasket	600042
4	1	Self locking nut	600055
5	1	Self locking nut washer	600032
6	1	Sequential piston o-ring	600044
7	1	Sequential pisotn	600047
8	1	Piston flat gasket	600048
9	1	Flat gasket washer	600034
10	2	Axle gasket	600041
11	1	Decompression axle	600511
12	1	Spring	600025
13	1	Housing guide	600020
14	1	Body	601001
15	1	Clsing gasket	600040
16	1	Decompression saucer	600505
17	1	Decompression gasket	600570
18	1	Decompression clapper	600506



**ACCESSORIES** 

14

Flange flat gasket Art. 600043 Flange gasket Art. 601043 Blind flange Art. 600090



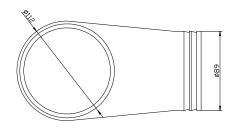


### 3" Sequential pneumatic vapor recovery valve Art. 602000S



Weight: 1,65Kg

## 149,5



### **CHARACTERISTICS:**

Pneumatic command

Incorporates a sequential opening and return switch to feed an operative valve in the system.

Body pressure test at 500 KPa.

Of easy fixing to EQUIPTANK's manhole cover.

### **MATERIALS:**

Body and components in aluminium alloy, treated and anodized.

Internal components in stainless steel.

Gaskets in fluoroelastomer / Nitrile.







### 3" Sequential pneumatic vapor recovery valve Art. 602000S

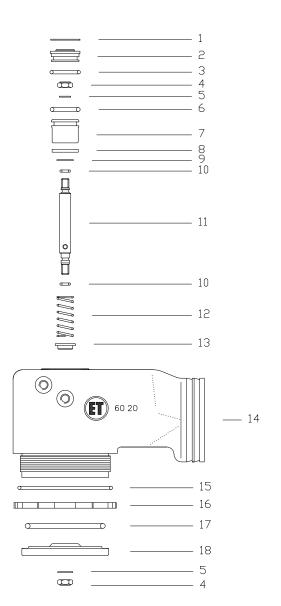


Fig.	Qty.	Description	Art.
1	1	Seeger butt	600051
2	1	Butt	600017
3	1	Butt gasket	600042
4	2	Self locking nut	600055
5	2	Self locking nut washer	600032
6	1	Sequential piston o-ring	600044
7	1	Sequential piston	600047
8	1	Piston flat gasket	600048
9	1	Flat gasket washer	600034
10	2	Axle gasket	600041
11	1	Sequential piston axle	650011
12	1	Spring	600025
13	1	Housing guide	600020
14	1	Body	602001
15	1	Body gasket	602009
16	1	Fixing nut	602008
17	1	Closing gasket	602010
18	1	Closing saucer	602005





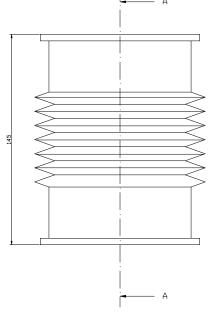
### VAPOR HOSE SLEEVE 90x110x150 NBR Art. 600087N

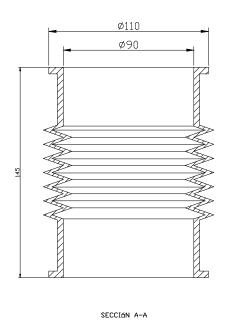


Molded vapor hose, manufactured with high content NBR.

Designed to connect the vapor recovery valves to the vapor pipe (or collector).

ACCESORIES: Art. 600088 Clip









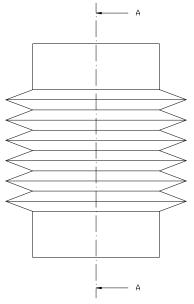
### HOSE SLEEVE Art. HC90X170N

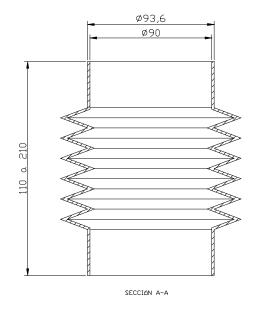


Molded vapor hose, manufactured with high content NBR.

Designed to connect the vapor recovery valves to the vapor pipe (or collector).

ACCESORIES: Art. 600088 Clip









### 3" DN80 Support Valve Art. 651000



Weight: 1,65 Kg

### **CHARACTERISTICS:**

Complies with specification of order number 24340 of October 16th 1996 of the Ministry of Industry and Energy.

Pneumatic command.

Can be mounted vertically or horizontally.

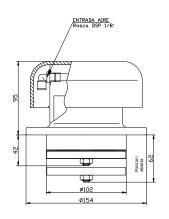
Body pressure tested at 500 KPa.

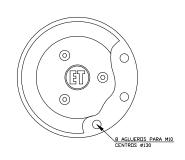
### **MATERIALS:**

Body and components in tretated lightweight aluminium alloy.

Axle and spring in stainless steel.

Gaskets in fluoroelastomer / Nitrile.











### 3" DN80 Support Valve Art. 651000

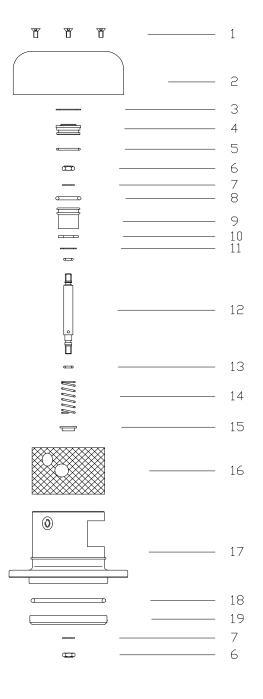


Fig.	Otv	Description	Art.
	Qty.	•	-
1	3	Screw	650008
2	1	Protection hood	650005
3	1	Seeger butt	600051
4	1	Butt	600017
5	1	Butt gasket	600042
6	2	Self locking nut	600055
7	2	Self locking nut washer	600032
8	1	Sequential piston o-ring	600044
9	1	Sequential piston	600047
10	1	Piston flat gasket	600048
11	1	Flat gasket washer	600034
12	2	Axle gasket	600041
13	1	Sequential piston axle	650011
14	1	Spring	600025
15	1	Housing guide	600020
16	1	Flame arrester	650070
17	1	Body	650001
18	1	Junta cierre	600040
19	1	Platillo cierre	600005

### **ACCESSORIES**

Flange gasket Art. 650091 Flange Art. 650090





### 3" DN80 Sequential Support Valve Art. 652000



Weight: 1,65 Kg

### CHARACTERISTICS:

Complies with specification of order number 24340 of October 16th 1996 of the Ministry of Industry and Energy.

Pneumatic command.

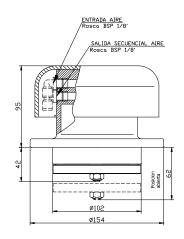
Can be mounted vertically or horizontally. Body pressure tested at 500 KPa.

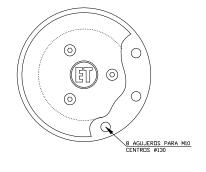
### **MATERIALS:**

Body and components in tretated lightweight aluminium alloy.

Axle and spring in stainless steel.

Gaskets in fluoroelastomer / Nitrile.

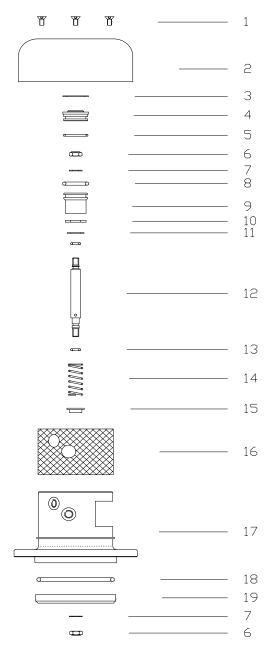








### 3" DN80 Sequential Support Valve Art. 652000



	_		
Fig.	Qty.	Description	Art.
1	3	Screw	650008
2	1	Proteccion hood	650005
3	1	Seeger butt	600051
4	1	Butt	600017
5	1	Butt gasket	600042
6	2	Self locking nut	600055
7	2	Self locking nut washer	600032
8	1	Sequential piston o-ring	600044
9	1	Sequential piston	600047
10	1	Piston flat gasket	600048
11	1	Flat gasket washer	600034
12	2	Axle gasket	600041
13	1	Sequential piston axle	650011
14	1	Spring	600025
15	1	Housing guide	600020
16	1	Flame arrester	650070
17	1	Body	650001
18	1	Closing gasket	600040
19	1	Closing saucer	600005

### **ACCESSORIES**

Flange gasket Art. 650091 Flange Art. 650090





### 3" DN80 Support valve normally open Art. 653000



Weight: 1,65 Kg

### **CHARACTERISTICS**:

Complies with specification of order number 24340 of October 16th 1996 of the Ministry of Industry and Energy.

Sequential pneumatic command.

Can be mounted vertically or horizontally.

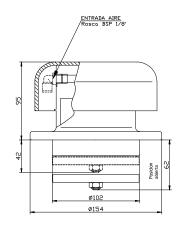
Body pressure tested at 500 KPa.

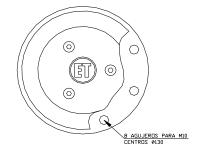
### **MATERIALS:**

Body and components in tretated lightweight aluminium alloy.

Axle and spring in stainless steel.

Gaskets in fluoroelastomer / Nitrile.









### 3" DN80 Support valve normally open Art. 653000

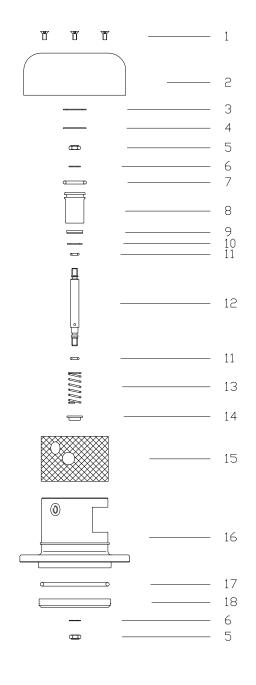


Fig.	Qty.	Description	Art.
1	3	Screw	650008
2	1	Protection hood	650005
3	1	Seeger butt	600051
4	1	Butt	653017
5	2	Self locking nut	600055
6	2	Self locking nut washer	600032
7	1	Sequential piston o-ring	600044
8	1	Long sequential piston	653047
9	1	Seal	653034
10	1	Flat gasket washer	600034
11	2	Axle gasket	600041
12	1	Sequential piston axle	650011
13	1	Spring	600025
14	1	Housing guide	653020
15	1	Flame arrester	650070
16	1	Body	653001
17	1	Closing gasket	600040
18	1	Closing saucer	600005

### **ACCESSORIES**

Flange gasket Art. 650091 Flange Art. 650090





### Vapor recovery Adaptor Art. 660000



### Weight: 2,96 Kg



### **CHARACTERISTICS:**

Complies with EN 13081 regulation.

BVQI-E certified with certificate N° 5000661-H-CPI.

Complies with API RP1004 regulation.

Outlet connector in accordance to MIL-C-27487

Sightglass for product detection in the line.

Purge hole with plug for increase security.

Maximum flow design. Minimum loss of load.

Body pressure tested at 500 KPa.

### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy.

Internal components in lightweight aluminium alloy.

Spring in stainless steel.

Gaskets in fluoroelastomer / Nitrile.





### Vapor recovery Adaptor Art. 660000

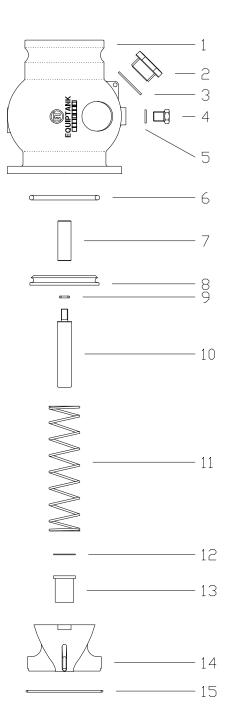


Fig.	Qty.	Description	Art,
1	1	Body	660001
2	1	Sightglass	660085
3	1	Sightglass gasket	660086
4	1	Plug	940036
5	1	Plug gasket	940037
6	1	Shutter gasket	740070
7	1	Top axle	660011
8	1	Shutter saucer	660005
9	1	Bottom axle gasket	940044
10	1	Guide axle	660010
11	1	Spring	660060
12	1	Seeger housing guide	740080
13	1	Housing guide	740065
14	1	Shutter guide body	660015
15	1	Elastic ring	740063



### **ACCESSORIES**

Plug Art. 686000 Interlock Art. 745200





### Long push-button Interlock Art. 745200



### **CHARACTERISTICS:**

3 way mechanical valve activated by means of a push button.

Fitted on the 4" vapor recovery adaptor. Maximum working pressure 1000kPa.

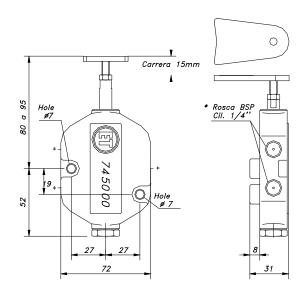
### **MATERIALS:**

Body in treated lightweight aluminium alloy.

Components in brass and steel.

Gaskets in NBR.

Weight: 0,3 Kg







### Long push-button Interlock Art. 745200

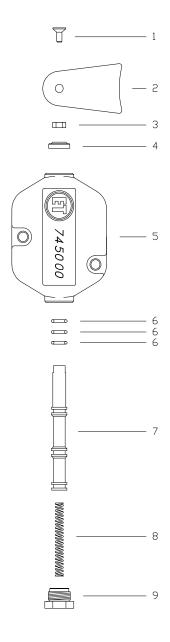
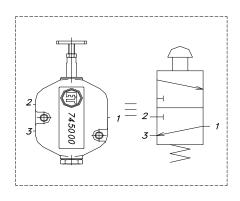


Fig.	Qty.	Description	Art,
1	1	Screw	745049
2	1	Push-button	745012
3	1	Check nut	745052
4	1	Dust cover	745065
5	1	Body	745001
6	3	Distribution gasket	745060
7	1	Distribution axle	745005
8	1	Spring	745015
9	1	Plug	745020







### Vapor recovery Adaptor Art. 680000



Weight: 1,85Kg

### **CHARACTERISTICS**:

Complies with API RP1004 regulation
Connector outlet in accordance with MIL-C27487

4" BSP female thread

### **MATERIALS:**

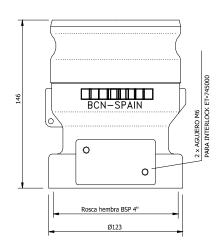
Body in treated and anodized lightweight aluminium alloy.

Components in treated lightweight aluminium alloy.

Spring in stainless steel.

Gaskets in fluoroelastomer / Nitrile / "Maclatan".









### Vapor recovery Adaptor Art. 680000

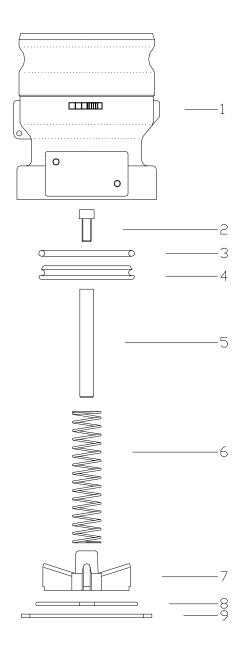


Fig.	Qty.	Description	Art.
1	1	Body	680001
2	1	Closing saucer	680005
3	1	Shutter axle	680010
4	1	Shutter guide	680015
5	1	Shutter spring	680020
6	1	Fixing ring	680025
7	1	Shutter gasket	680030
8	1	4" flat gasket	680035
9	1	Shutter saucer screw	680040

### **ACCESSORIES**

Plug Art. 686000 M4'-H3' Bushing Art. 680090 Interlock Art. 745100

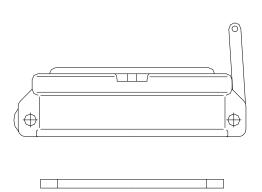




### Vapor recovery Adaptor Cap Art. 686000



Weight: 0,58 Kg



### **CHARACTERISTICS:**

Design in accordance to API-RP1004 regulation.

As an option it can mount two brass cam arms (ref: 686200)

### **MATERIALS:**

Body in lightweight aluminium alloy.

Cam arm in forged brass.

Gasket in Nitrile / "Vitón".

Fastening chain in steel.

### **ACCESSORIES**

Flat gasket Art. 686090





### Long push-button Interlock Art. 745100



Weight: 0,3Kg

### **CHARACTERISTICS:**

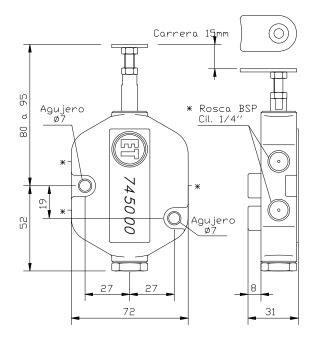
3 way mechanical valve activated by means of a push button.

Fitted on the 4" vapor recovery adaptor. Maximum working pressure 1000kPa.

### **MATERIALS:**

Body in treated lightweight aluminium alloy. Components in brass and steel.

Gaskets in NBR.







### Long push-button Interlock Art. 745100

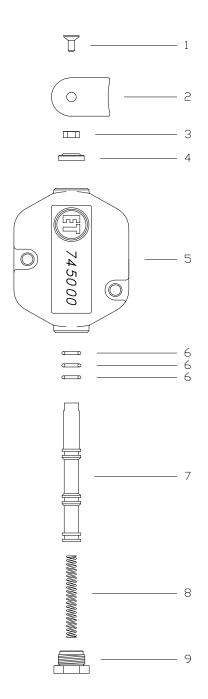
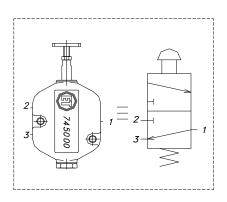


Fig.	Qty.	Description	Art.
1	1	Screw	745049
2	1	Push-button	745011
3	1	Check nut	745052
4	1	Dust cover	745065
5	1	Body	745001
6	3	Distribution gasket	745060
7	1	Distribution axle	745005
8	1	Spring	745015
9	1	Plug	745020



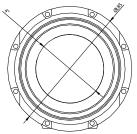


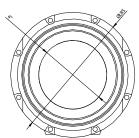


### 4" API loading and unloading valve Art. 741000



Weight: 4,25 Kg





### **ACCESSORIES:**

4" API Flange Art. 740890F 4" API Cap Art. 746100

Gasket

Art. 740078 / 740078V

Interlock Art. 745000





Complies with API RP-1004 regulation and is compatible with API adaptors.

Complies with EN 13083 regulation.

BVQI-E certified with certificate N° 5000661-F-CPI.

4" TTMA fastening flange

Body pressure tested at 500 KPa.

Connection piece with hard anodization treatment for a longer life.

Replaceable

### **MATERIALS:**

Body and components in treated and anodized lightweight aliminium alloy.

Internal components in stainless steel for better endurance and durability.

Gaskets in fluorelastomer / Nitrile.

### 4" API loading and unloading valve Art. 741000

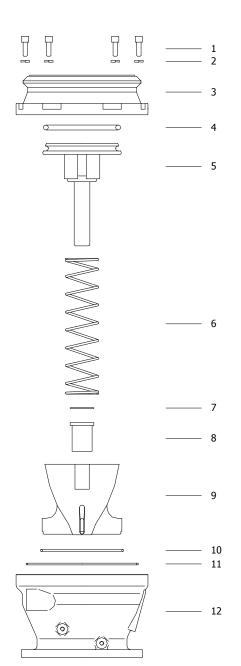


Fig.	Qty.	Description	Art.
1	8	Body-coupling screw	740085
2	8	Body-coupling washer	700085
3	1	Coupling	740005
4	1	Shutter gasket	740070
5	1	Shutter	741010
6	1	Spring	740061
7	1	Seeger housing guide	740080
8	1	Shutter housing guide	740065T
9	1	Shutter body guide	740015
10	1	Elastic body guide ring	740063
11	1	Body-coupling gasket	740074
12	1	Body	740001



### **ACCESSORIES**

Body flange gasket Art. 740078 Interlock Art. 745000





### 4" API loading and unloading valve with sightglass Art. 741500



Weight: 4,3 Kg

### **CHARACTERISTICS:**

Complies with API RP-1004 regulation and is compatible with API adaptors.

Complies with EN 13083 regulation.

BVQI-E certified with certificate N° 5000661-F-CPI. 4" TTMA fastening flange.

Body pressure tested at 500 KPa.

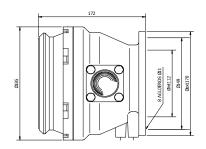
Sightglass allows for product check during loading and unloading

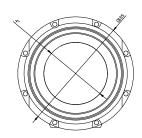
### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy.

Internal components in stainless steel for better endurance and durability.

Gaskets in fluorelastomer / Nitrile.







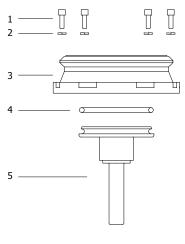
### **ACCESSORIES:**

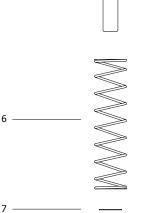
4" API Flange Art. 740890F Gasket Art. 740078 / 740078V 4" API Cap Art. 746100 Interlock Art. 745000





### 4" API loading and unloading valve with sightglass Art. 741500





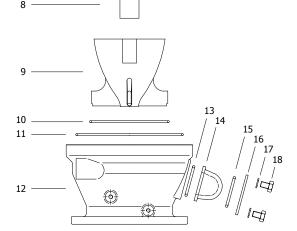


Fig.	Qty.	Description	Art.
1	8	Body-coupling screw	740085
2	8	Body-coupling washer	700085
3	1	Coupling	740005
4	1	Shutter gasket	740070
5	1	Shutter	741010
6	1	Spring	740061
7	1	Seeger housing guide	740080
8	1	Shutter housing guide	740065T
9	1	Shutter body guide	740015
10	1	Elastic body guide ring	740063
11	1	Body-coupling gasket	740074
12	1	Body	740001
13	1	Interior sightglass o-ring	741514
14	1	Sightglass	741505
15	1	Exterior sightglass o-ring	741515
16	1	Sightglass sheet	741510
17	4	Sightglass washer	741525
18	4	Sightglass screw	741520



### **ACCESSORIES**

Body flange gasket Art. 740078 Interlock Art. 745000





### 4" API loading and unloading valve with handle Art. 742000



Weight: 4,6 Kg

# 160 35: 172 Centros agujeros 8 x \$11 \$149

### **ACCESSORIES:**

4" API Flange Art. 740890F 4" API Cap Art. 746100

### **CHARACTERISTICS:**

Complies with API RP-1004 regulation and is compatible with API adaptors.

Complies with EN 13083 regulation.

BVQI-E certified with certificate N° 5000661-F-CPI.

4" TTMA fastening flange.

Body pressure tested at 500 KPa.

Handle in cast-iron aluminium with open and close position.

Handle has two opening positions to regulate the unloading flow volume.

### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy.

Internal components in stainless steel for better endurance and durability.

Gaskets in fluoroelastomer / Nitrile.

### **OPTIONS:**

Standard handle

L= 352 mm

Short handle

L= 295 mm

Gasket Art. 740078 / 740078V

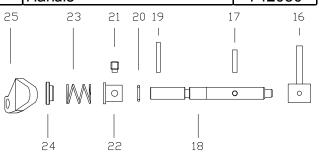
Interlock Art. 745000

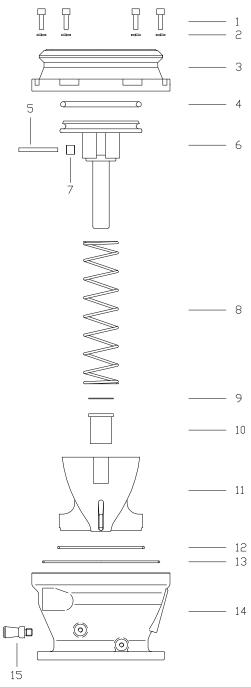




### 4" API loading and unloading valve with handle Art. 742000

Fig.	Qty.	Description	Art.
1	8	Body-coupling screw	740085
2	8	Body-coupling washer	700085
3	1	Coupling	740005
4	1	Shutter gasket	740070
5	1	Handle cotter pin rivet	742014
6	1	Handle shutter	741010
7	1	Handle shutter rivet	742012
8	1	Spring	740061
9	1	Seeger housing guide	740080
10	1	Shutter housing guide	740065T
11	1	Shutter body guide	740015
12	1	Elastic body guide ring	740063
13	1	Body-coupling gasket	740074
14	1	Body	742001
15	1	V2 handle stopper	742056
16	1	V2 cam arm	742027C
17	1	V2 cam arm cotter pin	742028
18	1	v2 handle axle	742019
19	1	Handle cotter pin	742042
20	1	Handle axle gasket	742034
21	1	Handle axle positioner	742060
22	1	V2 handle housing guide	742038
23	1	Handle spring	742043
24	1	Handle spring housing	742041
25	1	Handle	742030









### 4" API loading and unloading valve with handle and sightglass Art. 742500



### **CHARACTERISTICS:**

Complies with API RP-1004 regulation and is compatible with API adaptors.

Complies with EN 13083 regulation.

BVQI-E certified with certificate N° 5000661-F-CPI. 4" TTMA fastening flange.

Body pressure tested at 500 KPa.

Sightglass allows for product check during loading and unloading

Handle in cast-iron aluminium with open and close position.

Handle has two opening positions to regulate the unloading flow volume.

Weight: 4,65 Kg

### **MATERIALS:**

Body and components in treated and anodized lightweight aluminium alloy. Internal components in stainless steel for better endurance and durability.

Gaskets in fluorelastomer / Nitrile.

### **OPTIONS:**

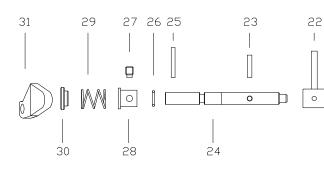
Standard handle L= 352 mm Short handle L= 295 mm

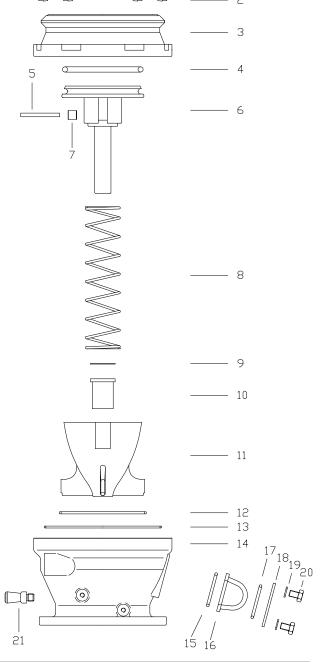




### 4" API loading and unloading valve with handle and sightglass Art. 742500

Fig.	Qty.	Description	Art,
1	8	Body-coupling screw	740085
2	8	Body-coupling washer	700085
3	1	Coupling	740005
4	1	Shutter gasket	740070
5	1	Handle rivet cotter pin	742014
6	1	Handle shutter	741010
7	1	Handle rivet shutter	742012
8	1	Spring	740061
9	1	Seeger housing guide	740080
10	1	Shutter housing guide	740065T
11	1	Shutter body guide	740015
12	1	Elastic body guide ring	740063
13	1	Body-coupling gasket	740074
14	1	Body	742001
15	1	Internal sightglass o-ring	741514
16	1	Sightglass	741505
17	1	External sightglass o-ring	741515
18	1	Sightglass sheet	741510
19	4	Sightglass washer	741525
20	4	Sightglass screw	741520
21	1	V2 handle stopper	742056
22	1	V2 cam arm	742027C
23	1	V2 cam arm cotter pin	742028
24	1	V2 handle axle	742019
25	1	Handle cotter pin	742042
26	1	Handle axle gasket	742034
27	1	Handle axle positioner	742060
28	1	V2 handle housing guide	742038
29	1	Hnadle spring	742043
30	1	Handle sping housing	742041
30	1	Handle	742030









### 4" API Cap Art. 746100



### Weight: 0,85 Kg



### **CHARACTERISTICS:**

Design in compliance with API-RP1004 regulation.

Option of a nylon cam arm to reduce wear of the API valve.

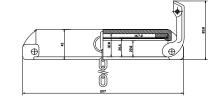
### **MATERIALS:**

Body in lightweight aluminium alloy.

Cam arm in forged brass

Gasket in Nitrile / "Vitón".

Steel fastening chain.



### ACCESSORIES

Flat gasket Art. 746030 Nylon Cam arm Art. 746020A





### Interlock Art. 745000



Weight: 0,3 Kg

### **CHARACTERISTICS:**

3 way mechanical valve activated by means of a push button.

Fitted on the API loading/unloading valve

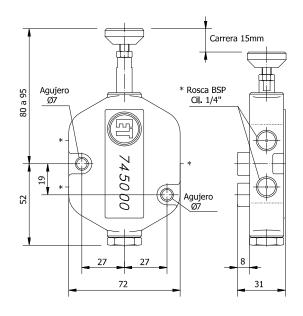
Maximum working pressure1000kPa.

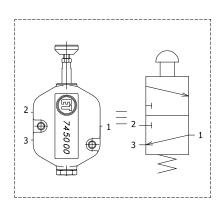
### **MATERIALS:**

Body in treated lightweight aluminium alloy.

Components in brass and steel.

Gaskets in NBR.









### Interlock Art. 745000

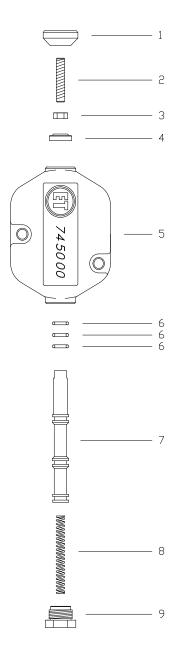


Fig.	Qty.	Description	Art.
1	1	Push-button	745010
2	1	Allen stud	745050
3	1	Check nut	745052
4	1	Dust cover	745065
5	1	Body	745001
6	3	Distribution gasket	745060
7	1	Distribution axle	745005
8	1	Spring	745015
9	1	Plug	745020





### 4" See-through Spyhole

Art: 740893



Gives a clear vision of the flow of product.

Of easy installation.

Fitted in between the 4" API loading/unloading valve and the 4" API TTMA flange.

Manufactured in transparent tempered acrylic.

Fastened by means of 8 screws.

Weight: 0,8 kg

**GENERAL DIMENSIONS:** 

Thickness: 44,5mm

External diameter: 174mm Internal diameter: 102mm

Diameter between centers: 149mm







### 4" API TTMA Flange

Art: 740890F / 740890H



Weight: 1,68 Kg

### **Available Materials:**

Aluminium alloy Steel

Art: 740078N / 740078V

NBR body flange gasket (N). "Vitón" body flange gasket (V).

General dimensions:

Int Ø: 112mm Ext Ø: 170mm

Ø between holes: 149mm

### 4" TTMA API flange.

Welded to the tanker's unloading manifold and allows for the adjustment of the 4" API loading/unloading valve, the 4" vapor recovery adaptor and the 4" see-through spyhole.

**GENERAL DIMENSIONS:** 

Thickness: 12 mm.

External diameter: 173 mm. Internal diameter: 101 mm.

Diameter between centers: 150mm



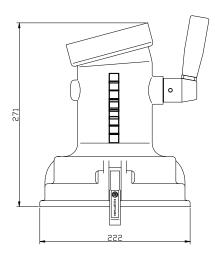




### 4" API Gravity Drop Adaptor with handle Art. 764000



Weight: 3,29 Kg



#### **CHARACTERISTICS:**

Complies with API RP-1004 regulation.

Complies with EN 13315 regulation.

BVQI-E certified with certificate number 5000661-G-CPI.

4" Female BSP thread

Special mouth design that allows to act directly on the interlock at any position.

Body pressure tested at 500 kPa.

### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.

Axle and handle in stainless steel and reinforced plastic.

Cam arms in forged brass.

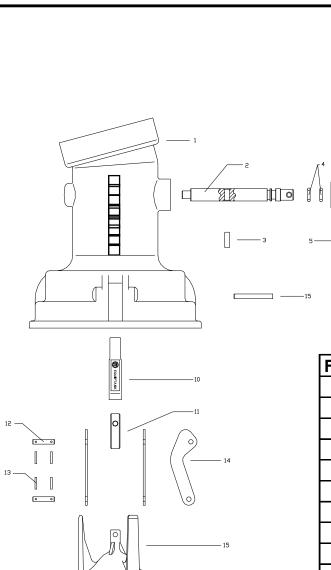
Gaskets in fluoroelastomer.







## 4" API Gravity Drop Adaptor with handle Art. 764000



### **ACCESSORIES:**

M4" – M3" Bushing Art. 764090 Bushing gasket Art. 764091 Flat gasket Art. 746030

Fig.	Qty.	Description	Art.
1	1	Body	764001
2	1	Handle axle	764010
3	1	Handle cotter pin	764037
4	2	Handle axle gasket	764035
5	1	Cotter pin	764037
6	1	Handle base	764024
7	1	Handle check nut	764022
8	1	Handle	764020
9	1	Handle screw	764021
10	2	Cam rivet	746025
11	2	Cam	746021
12	1	Cranck	764012
13	4	Plunger cotter pin rivet	764032
14	2	Plunger rivet	764030
15	2	Piston rod	764015
16	1	Plunger	764005
17	1	Gasket	746030





# 4" API Gravity Drop Adaptor with handle and sightglass Art. 764500



Weight: 5,04 Kg

### **CHARACTERISTICS:**

Complies with API RP-1004 regulation. Complies with EN 13315 regulation.

BVQI-E certified with certificate number 5000661-G-CPI.

3" BSP male thread.

Special mouth design that allows to act directly on the interlock at any position. Body pressure tested at 500 kPa.

### **MATERIALS:**

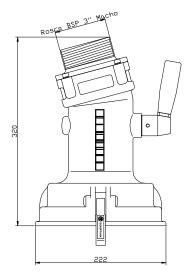
Body and components in treated lightweight aluminium alloy. Axles and handle in stainless steel and reinforced plastic.

Cams arms in forged brass.

Sightglass in PYREX crystal.

Gaskets in fluoroelastomer.









# 4" API Gravity Drop Adaptor with handle and sightglass Art. 764500

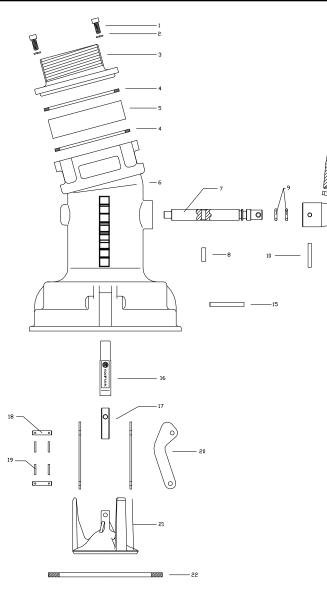


Fig.	Qty.	Description	Art.
1	4	Bushing screw	764516
3	4	Bushing washer	764517
3	1	Bushing	764591
4	2	Sightglass gasket	764514
5	1	Sightglass	764505
6	1	Body	764001
7	1	Handle axle	764010
8	1	Crank cotter pin	764037
9	2	Handle axle gasket	764035
10	1	Handle cotter pin	764037
11	1	Handle base	764024
12	1	Handle check nut	764022
13	1	Handle	764020
14	1	Handle screw	764021
15	2	Cam rivet	746025
16	1	Cam	746021
17	1	Crank	764012
18	4	Plunger cotter pin rivet	764032
19	2	Pluger rivet	764030
20	2	Piston rod	764015
21	1	Plunger	764005
22	1	Gaket	746030

### **ACCESSORIES:**

Flat gasket Art. 746030

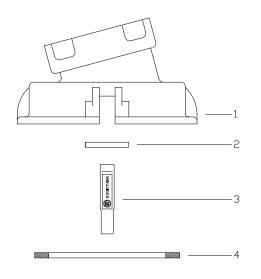




### 4" API Short Gravity Drop Adaptor Art. 765000



Weight: 1,5 Kg



#### Fig. Qty. Description Art, 765001 1 1 Body 2 Cam arm rivet 746025 Closing cam arm 2 746021 4 Gasket 746030

#### **CHARACTERISTICS:**

Complies with API RP-1004 regulation.

Complies with EN 13315 regulation.

BVQI-E certified with certificate N° 5000661-G-CPI.

4" Female BSP thread.

Body pressure tested at 500 kPa.

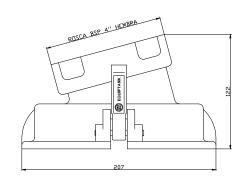
### **MATERIALS:**

Body in treated lightweight aluminium alloy.

Components in stainless steel.

Cam arms in forged brass.

Gaskets in fluoroelastomer



### **ACCESSORIES:**

M4" – M3" Bushing Art. 764090 Bushing gasket Art. 764091 Flat gasket Art. 746030





# 4" API Short Gravity Drop Adaptor with sightglass Art. 765500



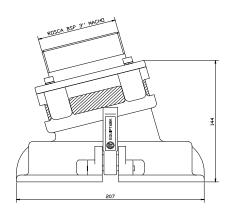
Weight: 2,25Kg

### **CHARACTERISTICS:**

Complies with API RP-1004 regulation.
Complies with EN 13315 regulation.
BVQI-E certified with certificate N°
5000661-G-CPI.
3" Male BSP thread.
Body pressure tested at 500 kPa.

### **MATERIALS:**

Body in treated lightweight aluminium alloy.
Components in stainless steel.
Cam arms in forged brass.
Sightglass in PYREX crystal.
Gaskets in fluoroelastomer







# 4" API Short Gravity Drop Adaptor with sightglass Art. 765500

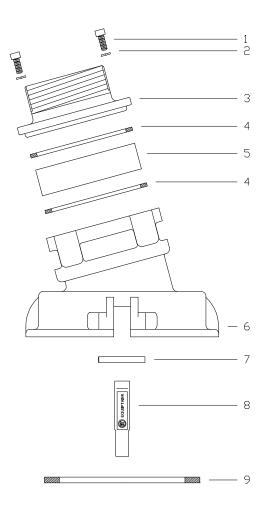


Fig.	Qty.	Description	Art.
1	4	Bushing screw	764516
2	4	Bushing washer	464517
3	1	Bushing	764591
4	2	Sightglass gasket	764514
5	1	Sightglass	764505
6	1	Body	765501
7	2	Cam arm rivet	746025
8	2	Closing cam arm	746021
9	1	Gasket	746030



### **ACCESSORIES:**

Flat gasket Art. 746030

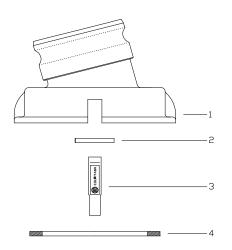




### 4" API Short Gravity Drop Adaptor with 4" kamlock outlet Art. 765600



### Weight: 2,3 Kg



**CHARACTERISTICS:** 

Complies with API RP-1004 regulation.

Complies with EN 13315 regulation.

BVQI-E certified with certificate No 5000661-G-CPI.

4" kamlock outlet

Body pressure tested at 500 kPa.

### **MATERIALS:**

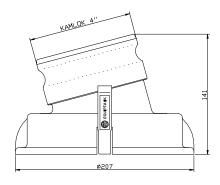
Body in treated lightweight aliminium alloy.

Components in stainless steel.

Cam arms in forged brass.

Gaskets in fluoroelastomer

Fig.	Qty.	Description	Art.
1	1	Body	765601
2	2	Cam arm rivet	746025
3	2	Closing cam arm	746021
4	1	Gasket	746030







# 4" API Short Gravity Drop Adaptor with 3" kamlock outlet Art. 765700



Weight: 2,2 Kg

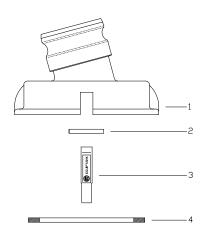


Fig.	Cant.	Denominación	Art.
1	1	Body	765701
2	2	Cam arm rivet	746025
3	2	Closing cam arm	746021
4	1	Gasket	746030

### **CHARACTERISTICS:**

Complies with API RP-1004 regulation.

Complies with EN 13315 regulation.

BVQI-E certified with certificate N° 5000661-G-CPI.

3" kamlock outlet

Body pressure tested at 500 kPa.

#### **MATERIALS:**

Body in treated lightweight aliminium alloy. Components in stainless steel. Cam arms in forged brass. Gaskets in fluoroelastomer

KAMLOCK 3"	137,5
207	-





## 3" Pneumatic Bottom Valve Art. 93 00 00



Weight: 3,4 Kg

### **CHARACTERISTICS:**

Pneumatic command.

Emergency manual command.

Body pressure tested at 750 kPa.

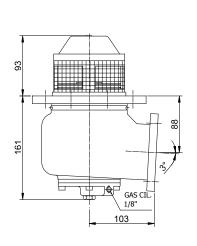
Air feed pressure 400 to 800 kPa.

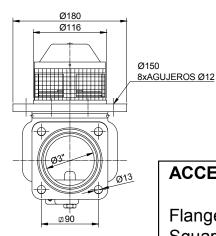
### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.

Axles and springs in stainless steel.

Gaskets in fluoroelastomer.





### **ACCESSORIES:**

Flange gasket Art. 930050N Square flange gasket Art. 930051N 3" flange Art. 930890 3" square flange Art. 930891





# 3" Pneumatic Bottom Valve Art. 93 00 00

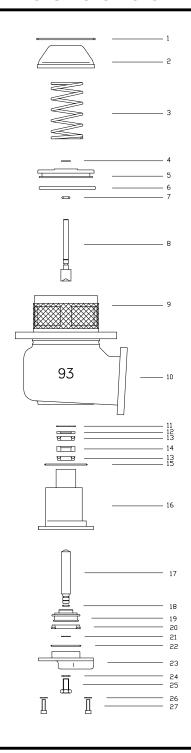


Fig.	Cant.	Denominación	Art.
1	1	Hood fixing ring	930034
2	1	Hood	930003
3	1	Closing saucer spring	930028
4	1	Closing saucer axle Seeger	940071
5	1	Closing saucer	930010V2
6	1	Saucer gasket	930047
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	930020
9	1	Filter mesh	930090
10	1	Body	930001
11	1	Cylinder body Seeger	940070
12	1	Retention ring	940082
13	2	Piston axle retainer	940061
14	1	Separator retainer housing	940080
15	1	Cylinder body gasket	940042
16	1	Cylinder body	940005
17	1	Piston axle	940015
18	1	Piston axle gasket	940048
19	1	Piston	940025
20	1	Piston retainer	940060
21	1	Piston axle gasket	940048
22	1	Butt gasket	940040
23	1	Butt	940006
24	1	Butt gasket washer	940037
25	1	Emergency plug	940036
26	4	Butt washer	940039
27	4	Butt screw	942038





## 3" Sequential Pneumatic Bottom Valve Art. 93 20 00



Weight: 3,4 Kg

### **CHARACTERÍSTICS:**

Pneumatic command.

Emergency manual command.

Sequential pneumatic outlet for other device or opening sightglass.

Sequentiality acts once the shutter saucer is 75% open.

Body pressure tested at 750 kPa.

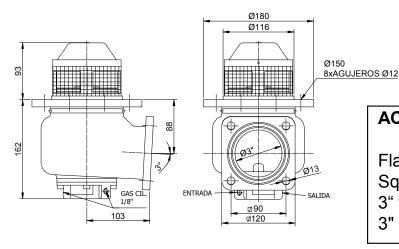
Air feed pressure 400 to 800 kPa.

### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.

Axles and spring in stainless steel.

Gaskets in fluoroelastomer.



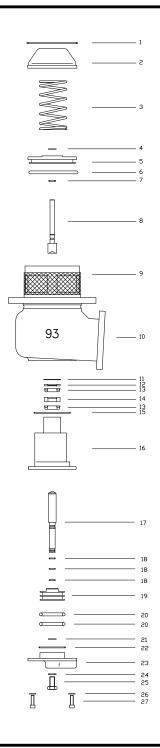
### **ACCESSORIES:**

Flange gasket Art. 93 00 50N Square flange gasket Art. 93 00 51N 3" flange Art. 93 08 90 3" square flange Art. 93 08 91





# 3" Sequential Pneumatic Bottom Valve Art. 93 20 00



Г <u>_</u> _	I		T
Fig.	Cant.	Denominación	Art.
1	1	Hood fixing ring	930034
2	1	Hood	930003
3	1	Closing saucer spring	930028
4	1	Closing saucer axle Seeger	940071
5	1	Closing saucer	930010V2
6	1	Saucer gasket	930047
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	930020
9	1	Filter mesh	930090
10	1	Body	930001
11	1	Cylinder body Seeger	940070
12	1	Retention ring	940082
13	2	Piston axle retainer	940061
14	1	Separator retainer housing	940080
15	1	Cylinder body gasket	940042
16	1	Sequential cylinder body	942005
17	1	Piston axle	940015
18	1	Piston axle gasket	940048
19	1	Piston	940025
20	1	Piston retainer	940060
21	1	Piston axle gasket	940048
22	1	Butt gasket	940040
23	1	Butt	940006
24	1	Butt gasket washer	940037
25	1	Emergency plug	940036
26	4	Butt washer	940039
27	4	Butt screw	942038



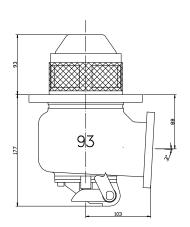


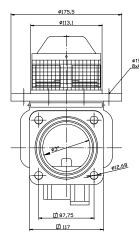
### 3" Mechanical Bottom Valve Art. 93 40 00



### Weight: 3,5 Kg







### **CHARACTERISTICS:**

Mechanical command. Body pressure tested at 750 kPa.

#### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.

Axles and spring in stainless steel.

Gaskets in fluoroelastomer.



### **ACCESSORIES:**

Flange gasket Art. 930050N Square flange gasket Art. 930051N 3" flange Art. 930890 3" square flange Art. 930891





# 3" Mechanical Bottom Valve Art. 93 40 00

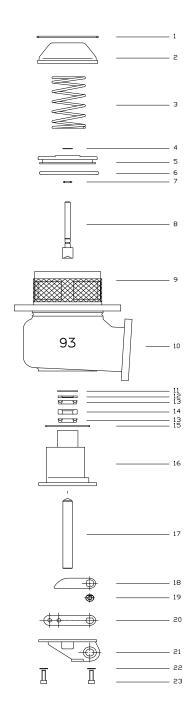


Fig.	Qty.	Description	Art.
1	1	Hood fixing ring	930034
2	1	Hood	930003
3	1	Closing saucer spring	930030
4	1	Closing saucer seeger axle	940071
5	1	Closing saucer	930010V2
6	1	Saucer gasket	930047
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	930020
9	1	Filter mesh	930090
10	1	Body	930001
11	1	Seeger cylinder body	940070
12	1	Seal ring	940082
13	2	Piston axle seal	940061
14	1	Seal separator housing	940080
15	1	Cylinder body gasket	940042
16	1	Cylinder body	934005
17	1	Intermediate axle	934015
18	1	Cam arm axle screw	934060
19	1	Cam arm axle washer	934062
20	1	Cam arm	934025
21	1	Cam arm axle	934020
22	1	Handle	934030
23	1	Butt	934006
24	3	Butt washer	940039
25	3	Butt screw	942038





### 4" DN100 Pneumatic Bottom Valve Art. VF9402



#### **CHARACTERISTICS:**

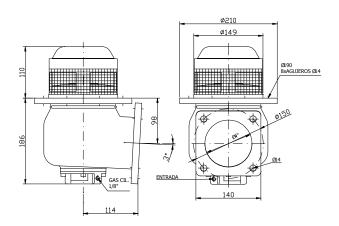
Complies with A.D.R. regulations
Complies with UNE EN 13308 regulations.
BVQI-E certified with certificate N°5000661-C-CPI
Body presswure tested at 750 kPa.
Has an easy to use emergency manual system
for opening the valve in case of failure, due to
lack of air in the circuit.

Weight: 5,05Kg

### **MATERIALS:**

One piece body in treated lightweight aluminium alloy for long lasting and high performance. Internal components in stainless steel designed to offer better durability and performance.

Steel mesh that prevents dirt from getting into the tank's interior.





#### **ACCESSORIES:**

Flange Art. 940890EM Flange gasket Art. 940052N / 940052V Square flange Art. 940891E Square flange gasket Art. 940053N / 940053V





# 4" DN100 Pneumatic Bottom Valve Art. VF9402

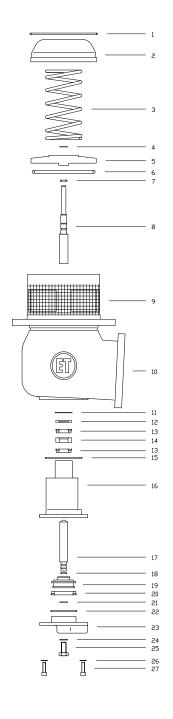


Fig.	Qty.	Description	Art.
1	1	Hood fixing ring	940034
2	1	Hood	940003
3	1	Closing saucer spring	940030
4	1	Closing saucer seeger axle	940071
5	1	Closing saucer	940012
6	1	Saucer gasket	940048
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	940023
9	1	Mesh	940090
10	1	Body	940001
11	1	Seeger cylinder body	940070
12	1	Seal ring	940082
13	2	Piston axle seal	940061
14	1	Seal separator housing	940080
15	1	Cylinder body gasket	940042
16	1	Cylinder body	940005
17	1	Piston axle	940016
18	1	Piston axle gasket	940048
19	1	Piston	940025
20	1	Piston seal	940060
21	1	Seeger piston axle	940071
22	1	Butt gasket	940040
23	1	Butt	940006
24	1	Butt gasket washer	940037
25	1	Emergency plug	940036
26	4	Butt washer	940039
27	4	Butt screw	942038

### **ACCESSORIES:**

Emergency key Art. 940095





## 4" DN100 Sequential Pneumatic Bottom Valve Art. VF9422



#### **CHARACTERISTICS:**

Complies with A.D.R. regulations

Complies with EN 13308 regulations.

BVQI-E certified with certificate N°5000661-C-CPI.

Pneumatic command

Emergency manual operation.

Sequential pneumatic outlet for other device or opening sightglass.

Sequentiality acts once the shutter saucer is 75% open.

Body pressure tested at 750 kPa.

Air feed pressure 400 to 800 kPa.

Weight: 5,05Kg

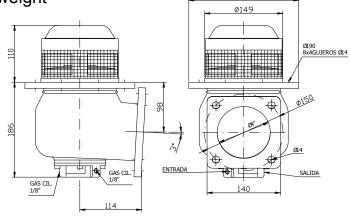
### **MATERIALS:**

Body and components in treated lightweight

aluminium alloy.

Axles and spring in stainless steel.

Gaskets in fluoroelastomer



### **ACCESSORIES:**

Flange Art. 940890EM Flange gasket Art. 940052N / 940052V Square flange Art. 940891E Square flange gasket Art. 940053N / 940053V





# 4"DN100 Sequential Pneumatic Bottom valve Art. VF9422

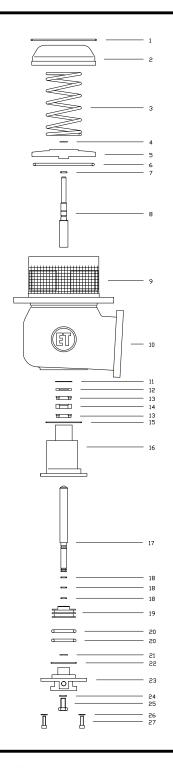


Fig.	Qty.	Description	Art.
1	1	Hood fixing screw	940034
2	1	Hood	940003
3	1	Closing saucer spring	940030
4	1	Closing saucer seeger axle	940071
5	1	Closing saucer	940012
6	1	Saucer gasket	940048
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	940023
9	1	Filter mesh	940090
10	1	Body	940001
11	1	Seeger cylinder body	940070
12	1	Seal ring	940082
13	2	Piston axle seal	940061
14	1	Seal separator housing	940080
15	1	Cylinder body gasket	940042
16	1	Sequential cylinder body	942005
17	1	Sequential piston axle	942016
18	3	Piston axle gasket	940048
19	1	Sequential piston	942025
20	2	Piston gasket	942060
21	1	Sequential piston seeger axle	940071
22	1	Butt gasket	940040
23	1	Sequential butt	942006
24	1	Butt gasket washer	940037
25	1	Emergency plug	940036
26	4	Butt washer	940039
27	4	Butt screw	942038

### **ACCESSORIES:**

Emergency key Art. 940095





## 4" DN100 Mechanical Bottom Valve Art. VF9440



Weight: 5,1 Kg

### **CHARACTERISTICS:**

Complies with A.D.R. regulations.
Complies with EN 13308 regulations.
Manual operation.

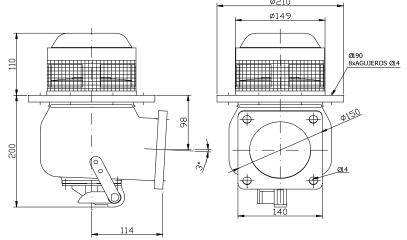
Body pressure tested at 750 kPa.

### **MATERIALS:**

Body and components in treated lightweigth aluminium alloy.

Axles and spring in stainless steel.

Gaskets in fluoroelastomer.



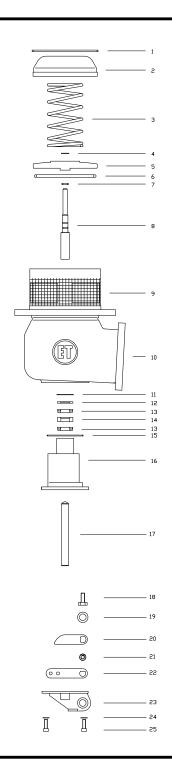
### **ACCESSORIES:**

Flange Art. 940890EM Flange gasket Art. 940052N / 940052V Square flange Art. 940891E Square flange gasket Art. 940053N / 940053V





## 4" DN100 Mechanical Bottom Valve Art. VF9440



		T	I
Fig.	Qty.	Description	Art.
1	1	Hood fixing ring	940034
2	1	Hood	940003
3	1	Closing saucer spring	940030
4	1	Closing saucer seeger axle	940071
5	1	Closing saucer	940012
6	1	Saucer gasket	940048
7	1	Saucer axle gasket	940044
8	1	Closing saucer axle	940023
9	1	Filter mesh	940090
10	1	Body	940001
11	1	Seeger cylinder body	940070
12	1	Seal ring	940082
13	2	Piston axle seal	940061
14	1	Seal separator housing	940080
15	1	Cylinder body gasket	940042
16	1	Cylinder body	934005
17	1	Intermediate axle	944016
18	1	Cam arm axle screw	934060
19	1	Cam arm axle washer	934062
20	1	Cam arm	934025
21	1	Cam arm axle	934020
22	1	Handle	934030
23	1	Butt	934006
24	3	Butt washer	940039
25	3	Butt screw	942038

### **ACCESSORIES:**

Emergency key Art. 940095





## 4" Low Profile Sequential Pneumatic Bottom Valve Art. VF9422MP



Weight: 4,8Kg

#### **CHARACTERISTICS:**

Complies with A.D.R. regulations.

Complies with EN 13308 regulations.

Pneumatic command.

Emergency manual operation.

Sequential pneumatic outlet for other device or opening sightglass.

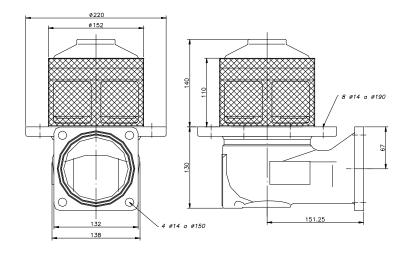
Body pressure tested at 750 kPa.

#### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.

Axles and spring in stainless steel.

Gaskets in fluoroelastomer "vitón".



#### **ACCESSORIES:**

TTMA Sump flange Art. 940887 Flange Art. 940890EM Square flange Art. 940891E EN Sump flange Art. 940888 Flange gasket Art. 940052N / 940052V Square flange gasket Art. 940053N / 940053V





# 4" Low Profile Sequential Pneumatic Bottom Valve Art. VF9422MP

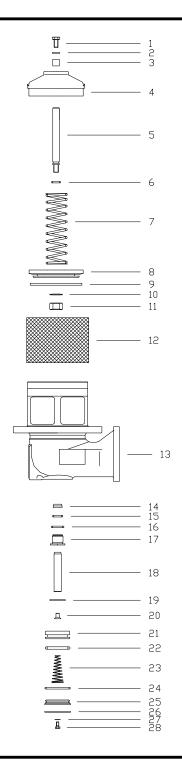


Fig.	Qty.	Description	Art.
1	1	Hex screw	94LP042
2	1	Washer	94LP043
3	2	Saucer axle housing guide	94LP038
4	1	Hood	94LP003
5	1	Hood axle	94MP009
6	1	Saucer axle gasket	94LP010
7	1	Closing spring	94LP030
8	1	Closing saucer	94MP012
9	1	Closing gasket	94LP036
10	1	Saucer nut washer	94MP045
11	1	Saucer nut	94MP044
12	1	Filter mesh	94LP037
13	1	Body	94MP001
14	1	Piston axle scratcher	94LP013
15	1	Piston axle gasket	94LP014
16	1	Housig gasket	94LP019
17	1	Piston axle housing guide	94MP017
18	1	Piston axle	94MP015
19	1	Butt saucer	94LP016
20	1	Saucer fixing screw	94LP020
21	1	Piston	94LP025
22	1	Piston gasket	94LP011
23	1	Sequential piston spring	94LP034
24	1	Butt gasket	94LP018
25	1	Butt	94MP006
26	1	Seeger butt	94LP039
27	1	Metal rubber gasket	94LP041
28	1	Butt plug	94LP040

### **ACCESSORIES:**

Emergency key Art. 94MP095





### 4" Sequential Emergency Valve Art. VF94MP



### Weight: 4,8Kg

#### **CHARACTERISTICS:**

Complies with EN 13308 regulations.

Pneumatic command.

BVQI-E certified with certificate No 5000661-C1-CPI.

Sequential pneumatic outlet for other device or opening sightglass.

Has an easy to use emergency manual system for opening the valve

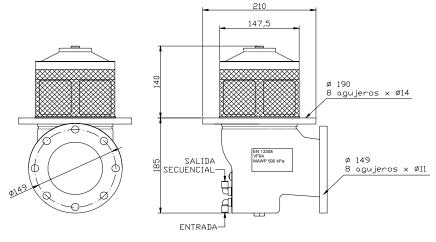
Body pressure tested at 750 kPa.

#### **MATERIALS:**

Body and components in treated light aluminium alloy. Axles and springs in stainless steel.

Steel mesh that prevents dirt from getting into the tank's interior.

Gaskets in fluoroelastomer.



### **ACCESSORIES:**

TTMA Sump flange Art. 940887 TTMA Flange Art. 740890 Flange gasket Art. 94SP0890 TTMA flange gasket Art. 740078





## 4" Sequential Emergency Valve Art. VF94MP

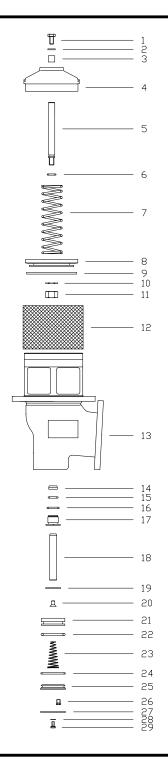


Fig.	Qty.	Description	Art.
1	1	Hex screw	94LP042
2	1	Washer	94LP043
3	2	Saucer axle housing guide	94LP038
4	1	Hood	94LP003
5	1	Hood axle	94MP009
6	1	Saucer axle gasket	94LP010
7	1	Closing spring	94LP030
8	1	Closing saucer	94MP012
9	1	Closing gasket	94LP036
10	1	Saucer nut washer	94MP045
11	1	Saucer nut	94MP044
12	1	Filter mesh	94LP037
13	1	Body	94SP001
14	1	Piston axle sratcher	94LP013
15	1	Piston axle gasket	94LP014
16	1	Housing gasket	94LP019
17	1	Piston axle housing guide	94MP017
18	1	Piston axle	94SP015
19	1	Butt saucer	94LP016
20	1	Saucer fixing screw	94LP020
21	1	Piston	94LP025
22	1	Piston gasket	94LP011
23	1	Seeger butt	94LP034
24	1	Butt gasket	94LP018
25	1	Butt	94SP006
26	1	Temperature fuse	94SP050
27	1	Seeger butt	94LP039
28	1	Metal rubber gasket	94LP041
29	1	Butt plug	94LP040

### **ACCESSORIES:**

Emergency key Art. 94SP095

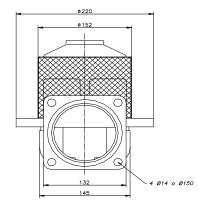




## 4" Extra Low Profile Sequential Pneumatic Bottom Valve Art. VF9422LP



Weight: 5,15Kg

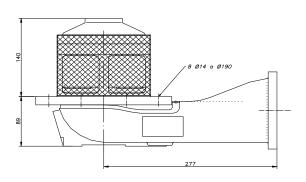


### CHARACTERISTICS:

Complies with A.D.R. regulations
Complies with EN 13308 regulations.
Pneumatic command.
Emergency manual operation.
Sequential pneumatic outlet for other device or opening sightglass.
Body pressure tested at 750 kPa..

### **MATERIALS:**

Body and components in treated lightweight aluminium alloy.
Axles and spring in stainless steel.
Gaskets in fluoroelastomer "vitón".



#### **ACCESSORIES:**

TTMA Sump flange Art: 940887 Flange Art: 940890EM

Square flange Art: 940891E

EN Sump flange Art: 940888

Flange gasket Art: 940052N / 940052V Square flange gasket Art: 940053N / 940053V





# 4" Extra Low Profile Sequential Pneumatic Bottom Valve Art. VF94LP

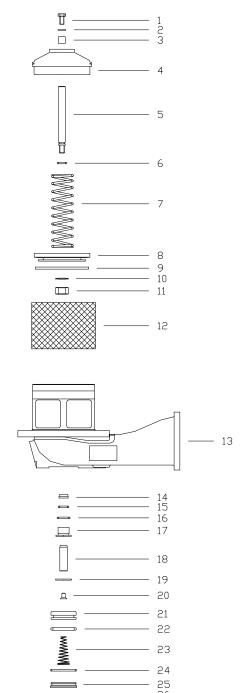


Fig.	Qty.	Description	Art,
1	1	Hex screw	94LP042
2	1	Washer	94LP043
3	2	Saucer axle housing guide	94LP038
4	1	Hood	94LP003
5	1	Saucer axle	94LP009
6	1	Saucer axle gasket	94LP010
7	1	Closing spring	94LP030
8	1	Closing saucer	94LP012
9	1	Closing gasket	94LP036
10	1	Saucer nut washer	94MP045
11	1	Saucer nut	94MP044
12	1	Filter mesh	94LP037
13	1	Body	94LP001
14	1	Piston axle scratcher	94LP013
15	1	piston axle gasket	94LP014
16	1	Housing gasket	94LP019
17	1	Piston axle housing guide	94LP017
18	1	piston axle	94LP015
19	1	Butt saucer	94LP016
20	1	Saucer fixing screw	94LP020
21	1	Piston	94LP025
22	1	Piston gasket	94LP011
23	1	Sequential piston spring	94LP034
24	1	Butt gasket	94LP018
25	1	Butt	94LP006
26	1	Seeger butt	94LP039
27	1	Metal rubber gasket	94LP041
28	1	Butt plug	94LP040

### **ACCESSORIES:**

■ Emergencia key Art. 94MP095





## Sump flange for bottom valve Art. 940887 / 940888



Weight: 1,69 Kg

Manufactured in carbon steel.

4" diameter TW (EN).

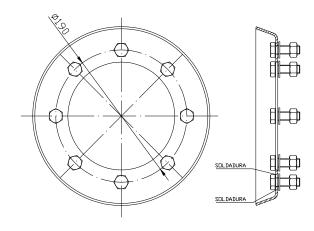
EQUIPTANK logo.

Diameter between centers 7,25" Art: 940887 Diameter between centers 190 mm Art: 940888

Welded to the bottom part of the tanker.

Compatible with EQUIPTANK's VF94 series.

The sump flange is branded with the art.
number 940887 / 940888 and with the



### APPROVALS: According to TTMA According to EN





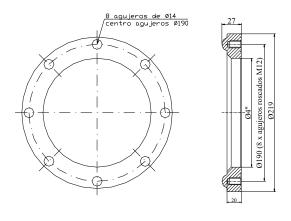
### Tank flanges / gaskets



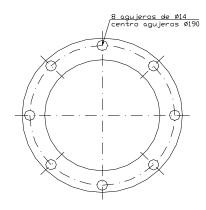




Steel tank flange Art: 940890FE
Aluminium tank flange Art: 940890EM



NBR tank flange gasket Art: 940052N



"Vitón" tank flange gasket Art: 940052V





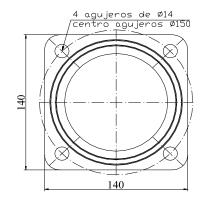
### Square flanges / gaskets



Steel square flange

Art: 940891H

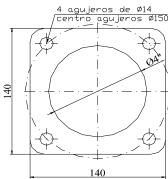
Cast aluminium square flange Art: 940891E

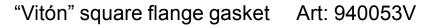






NBR square flange gasket Art: 940053N











## 4" Pneumatic Manifold Art. VC4N



### CHARACTERISTICS:

Designed for bottom loading according to API RP-1004.

Body constructed of aluminum alloy to reduce total weight.

Gravity discharge through the API valves and discharge of any compartment using pump and/or metering system, through the manifold.

Of easy installation.

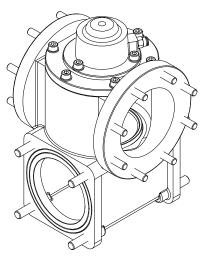


#### **MATERIALS:**

Body and components of aluminium alloy, treated and anodized.

Internal components made of stainless steel.

Gaskets made of fluoroelastomer.



#### **GENERAL DIMENSIONS:**

Total height: 630mm

Distance between round flanges: 360mm
Distance between square flanges: 340mm

Ø centers round flange: 150mm Ø centers square flange: 150mm



Weight: 8,25 Kg





## 4" Pneumatic Manifold

## Art. VC4N

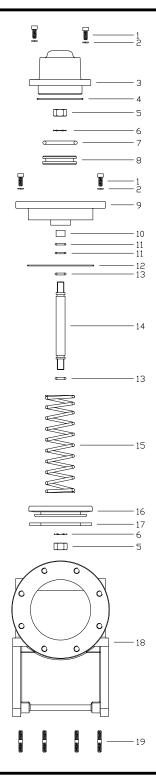


Fig.	Qty.	Description	Art.	
1	9	M8 allen screw	VC4N4012	
2	9	M8 glower washer	VC4N011	
3	1	Cylinder cover	VC4N005	
4	1	Cylinder cover o-ring	VC4N018	
5	2	M12 autolocking washer	VC4N014	
6	2	M12 toothed washer	VC4N013	
7	1	Piston o-ring	VC4N015	
8	1	Piston	VC4N003	
9	1	Butt	VC4N002	
10	1	Piston axle bushing	VC4N009	
11	2	Butt axle gasket	VC4N019	
12	1	Butt gasket	VC4N017	
13	2	Piston axle gasket	VC4N016	
14	1	Piston axle	VC4N004	
15	1	Closing spring	94LP030	
16	1	Closing saucer	VC4N006	
17	1	Closing saucer gasket	VC4N007	
18	1	Manifold body	VC4N001	
19	16	Threaded stud	VC4N010	





Flange gasket NBR

Art. 740078N

Square flange gasket NBR Art. 940053N





## 3" Ball Valve flange / flange Art. VB23BB



Weight: 3,85 Kg

#### **CHARACTERISTICS:**

Body pressure tested at 600 KPa. Square flange outlet 140x140 m/m.

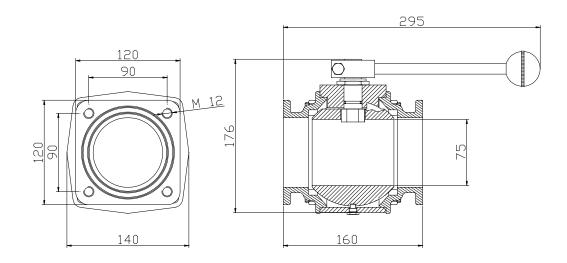
#### **MATERIALS:**

Body in extruded aluminium.

Components in treated lightweight aluminium alloy.

Axles and components in stainless steel.

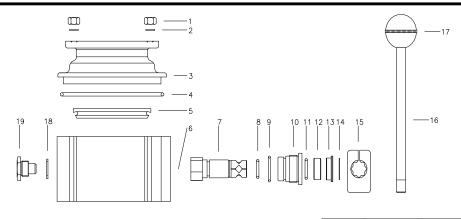
Internal axles and components in brass. Gaskets in NBR / "Viton".

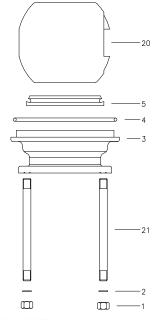






# 3" Ball Valve flange / flange Art. VB23BB







Square flange gasket NBR

Art: 930053N

Fig.	Qty.	Description	Art.
1	8	M10 Nut	230056
2	8	M10 Washer	230057
3	1	3" flange outlet	230005
4	2	Body gasket	230050
5	2	3" ball gasket	230040
6	1	Body	230001
7	1	Handle axle	230020
8	1	Internal axle gasket	230045
9	1	Axle body gasket	230047
10	1	Axle body	230021
11	1	External axle gasket	230046
12	1	Separator housing	230022
13	1	Seal housing	230023
14	1	Seeger ring	230024
15	1	Handle base	230025
16	1	Handle shank	230030
17	1	Handle knob	230035
18	1	Centering washer	230017
19	1	Ball centering	230015
20	1	3" Ball	230010
21	4	Flange stud	230055





## 3" Ball Valve flange / thread Art. VB23BR



Weight: 3,85 Kg

#### **CHARACTERISTICS:**

Body pressure tested at 600 KPa. 3" BSP threaded flange outlet.

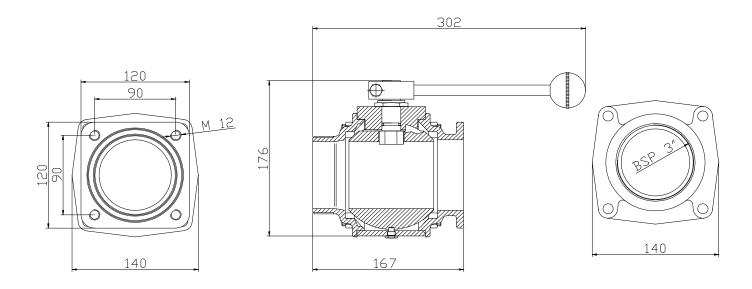
#### **MATERIALS:**

Body in extruded aluminium.

Components in treated lightweight aluminium alloy.

Axles and components in stainless steel.

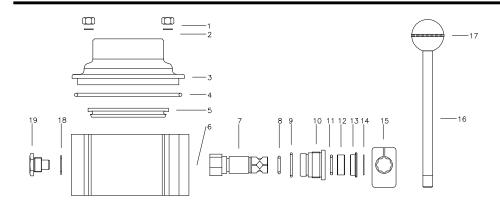
Axle and internal components in brass. Gaskets in NBR / "Viton".

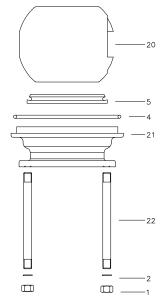






# 3" Ball Valve flange / thread Art. VB23BR







Square flange gasket NBR

Art: 930053N

Fig.	Qty.	Description	Art.		
1	8	M10 Nut	230056		
2	8	M10 Washer	230057		
3	1	3" threaded outlet	230008		
4	2	Body gasket	230050		
5	2	3" Ball gasket	230040		
6	1	Body	230001		
7	1	Handle axle	230020		
8	1	Internal axle gasket	230045		
9	1	Axle body gasket	230047		
10	1	Axle body	230021		
11	1	External axle gasket	230046		
12	1	Separator housing	230022		
13	1	Seal housing	230023		
14	1	Seeger ring	230024		
15	1	Hanlde base	230025		
16	1	Handle shank	230030		
17	1	Handle knob	230035		
18	1	Centering washer	230017		
19	1	Ball centering	230015		
20	1	3" Ball	230010		
21	1	3" Flange	230005		
21	4	Flange stud	230055		





### Pneumatic Control System

The VFC pneumatic control system units are modular in design.

Their function is to open and close the safety and vapor vent valves.

The emergency brake allows fast closing of said valves.

## EQUIPTANK's pneumatic control system is made up of the following elements:

Stainless steel control panel.

Pressure gauge: indicates existing pressure in the panel.

Manually operated pneumatic valve that ensures the opening of the safety and vent valves.

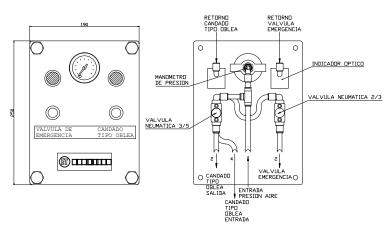
Quick escape valve: executes a quick discharge of the valve's supply circuit.

The optic indicator shows the status of the bottom valve.

Green inicator means the valve is open.

Black indicator means the valve is closed.

Flexible tubes for the air system, in various colors, for easy recognition and differentiation of the circuits.



1 compartment panel example



Art. VFC10STM





## Pneumatic Control System

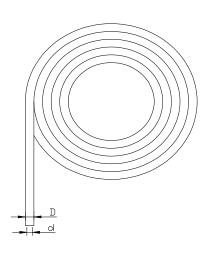
EXAMPLE	VFC	1	0	S	Т	M
PRODUCT FAMILY VFC = Pneumatic control system						
COMPARTMENT NUMB  1 = 1 compartment  2 = 2 compartment  X = N° compartment	ER					
EMERGENCY STOP E = With emergency stop 0 = Without emergency s						
SEQUENTIAL S = Sequential 0 = Non sequential						
WAFER SYSTEM  T = With wafer system  0 = Without wafer system	1					
GAUGE  M = With gauge						



0 = Without gauge



## <u>Air system installation</u> Art. CTN6 / CTN7 / CTN8 / CTN9





#### **CHARACTERISTICS:**

These type of polyurethane pipes are suitable for pneumatic, robotic and industrial machinery piping, especially when great flexibility is required.

Characteristics:

Working pressure: 26 bar, -40°C / +70°C

Test pressure: 90 bar

Breaking radius: 30 mm.

Supplied in different colors for ease of installation.





# Emergency brake button Art. VFC327

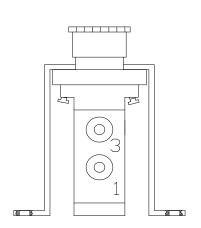
#### **CHARACTERISTICS:**

Emergency brake: closes the pneumatic system in case of emergency.

The system can be restarted, once the danger is over, from the pneumatic control panel.

Air connections for Ø6 mm pipes.

Can be fitted in different parts of the truck for ease of access.









# Filter Regulator/Lubricator Art. VFC035V2

- · Regulator and lubricator filter in one unit.
- High flow and efficency in retention of dirt particles.
- Good regulation characteristics with low hysteresis..
- Lockable head to ensure the set values.
- Rotary knob with integrated lock.
- With semi-automatic condensation drain with pressure gauge.

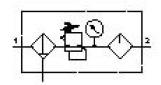
#### **Technical Data:**

- Pneumatic connection G ¼
- Fixing type: With accesories / in-line mounting.
- Pressure regulation range: 0,5...7 bar / 0,5...12 bar
- Maximum condensation: 22 cm3

#### **Materials:**

- Body: Die-cast zinc.
- Mother board: Die-cast zinc / aluminium
- Deposit: Polycarbonate.
- Seals: Nitrile





#### **Options:**

Art. VFC0352V2 Fixing bracket Art. VFC0355V2 Fixing nut





# Product Indicator Art: CGI4012



#### **MATERIALS:**

Body of treated light aluminium alloy. Spring and components of stainless steel and treated steel.

Plastic knob.

Methacrylate sightglass.

#### **GENERAL DIMENSIONS:**

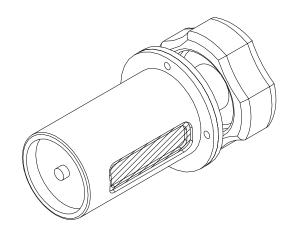
Total lenght 153 mm.

Maximum diameter 79 mm.

Minimum diameter 58 mm.

#### **OPTIONS:**

Customized labels. 8 or 10 positions (products).







### PRECINTANK ICC

PRECINTANK is a loading and unloading monitoring unit, that allows for load control during the complete process of transport and delivery of petroleum products.

The systems works separately from the normal operation of the tank truck, thus never interfering with it, and can be installed in tankers of one to ten compartments.

The system has been design to offer maximum security and adaptability in its working environment.

It represents a complete solution for all the sector's needs providing information of the distribution, loading, unloading, important events and productivity control.



#### Safety Features:

Cargo control during transportation, quantity and quality wise.

Work Safety: avoids worker from having to climb to the top part of the tanker to verify existing fuel level.

VOC emissions: avoids emissions of environmentally hazardous particles to the atmosphere due to unauthorized openings.

Detection of retained product in the pipes and compartments (optional).





### PRECINTANK ICC.

#### Cargo Control:

Avoids theft and manipulation of the product transported by monitoring the sensors placed at all the possible openings of the tanker.

All sensors used are namur type (which allows to see if the sensor is open, closed or shortcircuited), Sick or Turck brands, with Ex II2(1)G Ex ia (ib) IIC T6 certification.



API valve sensor: The movement sensor detects opening and closing of the valve. Sensitivity is adjustable.

The wet sensor detects the existence of product inside the pipes and / or inside the compartments.







### PRECINTANK ICC.

#### Cargo Control:

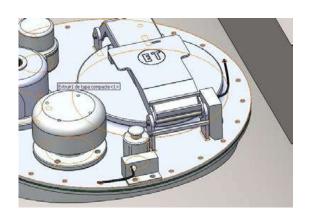


Bottom valve sensor: internally fitted to avoid tampering.

Sensor detects opening and closing of the valve (optional).

Manhole cover sensor: detects opening and closing.





Pressure relieve cap sensor: detects opening (optional).





### PRECINTANK ICC.

#### Characteristics:

Bluetooth wireless module for data unloading.

Rechargable Lithium Ion battery. 72 H battery life.

Internal power source to feed the whole system in intrinsic security and to safely recharge the battery. Ex II2(1)G e mb Ex ib(ia) IIA T4 Certification.

Graphic LCD screen with back light. Display can be configured to suit the client's requirements.

2 GB to 4GB internal memory for registration and storage of events.

Precitank software for HP iPAQ Pocket PC type.

GPS location module (optional).

System developed in accordance with the directives of european regulation EN 15208:2009 for electronic seals.









#### Equiptank Engineering, S.L.

Pol. Ind. La Serra Parcelas 11 a 14 25320 Anglesola (Lérida, Spain) Telf. +34.973.30.80.41 Fax +34.973.30.81.06

#### Comercial Gasso, S.A.

Pol. Ind. Can Calderón, C/ Murcia, 35 N-C. 08830 St.Boi del LL. (Barcelona, Spain) Telf. +34.936.52.98.00 Fax +34.936.52.98.04

### Equiptank Engineering, S.L. is member of GASSO Group

The specifications in this catalog are for reference only and may contain typographical errors. The company reserves the right to alter product specifications without notice



