

# **INSTRUCTION MANUAL**

# **POLYKEG PRO**



#### **INDEX**



This manual contains information, instructions and warnings for proper handling and use of the PolyKeg PRO one-way keg.

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# **SECTION 1**Warnings

#### Warnings



The PolyKeg PRO one-way keg is intended for professional use only. Please refer to this Instruction Manual and the symbols on the keg before use.

When handling the keg, wear personal protective equipment (goggles, gloves, etc.) and make sure the room where you are working is **ventilated**.

Make sure the keg is **intact** and leave the **warnings** on the keg clearly readable.

If used improperly the PolyKeg PRO keg may be damaged, not ensuring the integrity of the product or causing injury and/or property damage.

The PolyKeg PRO one-way keg cannot be reused, it should be depressurised immediately and disposed of responsibly after use at authorised collection points.



0÷35 °C - 32÷95 °F

Keep away from heat sources. If exposed to temperatures above the permitted limit the keg may be damaged, not ensuring the integrity of the product or causing injury and/or property damage.



**MAX 3.5 BAR - MAX 50 PSI** 

If over-pressurized, the keg may cause injury and/or property damage.



Sufiocation hazard. Use in a well-ventilated environment.



#### **NO CHILDREN**

Keep away from children. When the keg is under pressure it is heavy and can cause injury and/or property damage.



#### **NO DIRECT SUNLIGHT**

Do not expose to direct sunlight. The keg may be damaged, not ensuring the integrity of the product or causing injury and/or property damage.



#### **NO CHEMICALS**

Keep away from unsuitable chemicals or cleaning substances with PH > 9. The keg may be damaged, not ensuring the integrity of the product or causing injury and/or property damage.



#### **DO NOT REMOVE**

Do not remove and/or tamper with the valve. The keg may be damaged, not ensuring the integrity of the product or causing injury and/or property damage.



#### DO NOT ROLL

Do not roll and/or drop. The keg may be damaged causing injury and/or property damage.



#### **DO NOT PIERCE**

Do not pierce and/or cut. The keg may be damaged causing injury and/or property damage.





Packing and keg identification

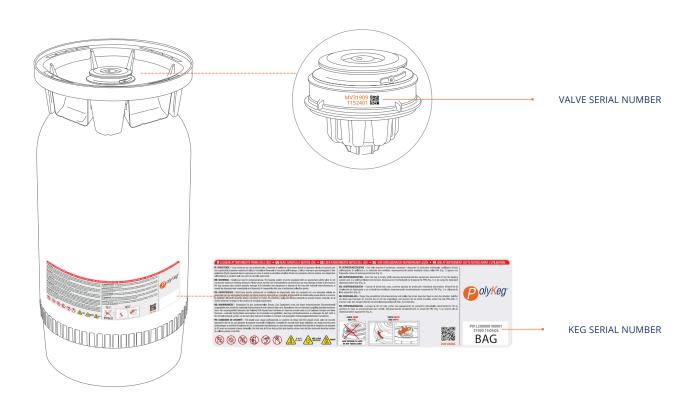
# Packing and keg identification



#### PALLET STANDARD IDENTIFICATION



#### **VALVE AND KEG IDENTIFICATION**







# **SECTION 3**Valves and couplers

# Valves and couplers



ТҮРЕ	VALVE	COUPLER	NOTES
A			Flat
G			
M			
S			European Sankey
D			American Sankey
K			KK





PolyKeg® PRO logistics data sheets

## PolyKeg® PRO logistics data sheets



#### **EMPTY KEGS PALLETIZATION**

#### PALLET 80X120 CM | 31.50"X47.24"



#### PALLET 100X120 CM | 39.37"X47.24"



#### **WARNINGS**

Any stacking of pallets and the maximum number of layers must take into account the mechanical properties of the keg as reported on the technical data sheet, the local regulations, and the means and manner of handling and transport, as well as the conditions of the storage areas. Kegs are supplied on pallets, wrapped with white extensible film for better protection.

<sup>\*</sup>Quantities refer to three layers palletization, compulsory for CTR 20 ft Standard.

# PolyKeg® PRO logistics data sheets



#### **FILLED KEGS PALLETIZATION**

#### PALLET 80X120 CM | 31.50"X47.24"

Palletization					
	12 L 406 oz.	16 L 541 oz.	20 L 676 oz.	24 L 811 oz.	30 L 1014 oz.
Layers	3*	2*	2*	2*	2*
Kegs per layer	15	15	15	12	11
Kegs per pallet	45	30	30	24	22
Height	1307 mm   51,45"	1098 mm   43,22"	1274 mm   50,15"	1268 mm   49,92"	1268 mm   49,92"
Stacking in storage					
Layers	3+3	2+2	2+2	2+2	2+2
Stacking for transport					
Layers	3+2	2+2	2+1	2+1	2+1



Any stacking of pallets and the maximum number of layers must take into account the mechanical properties of the keg as reported on the technical data sheet, the local regulations, and the means and manner of handling and transport, as well as the conditions of the storage areas. When stacking pallets, the load must be evenly distributed by using a rigid interlayer or an overturned pallet between one pallet and another. We recommend wrapping the kegs on pallets with white stretch film for better protection.

# PolyKeg® PRO logistics data sheets



#### **FILLED KEGS PALLETIZATION**

#### PALLET 100X120 CM | 39.37"X47.24"

Palletization					
	12 L 406 oz.	16 L 541 oz.	20 L 676 oz.	24 L 811 oz.	30 L 1014 oz.
Layers	3*	2*	2*	2*	2*
Kegs per layer	20	20	20	16	12
Kegs per pallet	60	40	40	32	24
Height	1307 mm   51,45"	1098 mm   43,22"	1274 mm   50,15"	1268 mm   49,92"	1268 mm   49,92"
Stacking in storage					
Layers	3+3	2+2	2+2	2+2	2+2
Stacking for transport					
Layers	3+2	2+2	2+1	2+1	2+1



#### **WARNINGS\***

Any stacking of pallets and the maximum number of layers must take into account the mechanical properties of the keg as reported on the technical data sheet, the local regulations, and the means and manner of handling and transport, as well as the conditions of the storage areas. When stacking pallets, the load must be evenly distributed by using a rigid interlayer or an overturned pallet between one pallet and another. We recommend wrapping the kegs on pallets with white stretch film for better protection.

# PolyKeg® PRO logistics data sheets



#### LOADING RECOMMENDATIONS

#### PALLET 80X120 CM | 31.50"X47.24"

	pallet	plan view
CTR 20 ft Standard	11	
CTR 40 ft High Cube	24	
CTR 45 ft High Cube	32	
Truck 13,6 mt	32	

#### PALLET 100X120 CM | 39.37"X47.24"

	pallet	plan view
CTR 20 ft Standard	10	
CTR 40 ft High Cube	22	
CTR 45 ft High Cube	26	
Truck 13,6 mt	26	

When transporting filled kegs, it is recommended to use refrigerated containers.

When using refrigerated containers, the number of pallets may vary.

When stacking pallets, the load must be evenly distributed by using a rigid interlayer or an overturned pallet between one pallet and another. In order to prevent damage to the kegs and/or falls, the pallets must be secured with straps and airbags must be inserted in the empty spaces. the maximum number of layers must take into account the mechanical properties of the keg as reported on the technical data sheet, the local regulations, and the means and manner of handling and transport, as well as the conditions of the storage areas.





# **SECTION 5**Sanitizing instructions

#### Sanitizing instructions



#### WHAT NEEDS TO BE SANITIZED

Before starting the filling, sanitize the manual filling kit (tubes, valves, seals, couplers, etc.) or the automatic/semi-automatic fil-ling machine. Before connecting the keg, clean and sanitize all parts likely to come into contact with the product (coupler and external part of the valve). After each filling, clean and sanitize the keg valve. Should it be necessary to temporarily disconnect the keg, clean and sanitize the external part of the valve.

Note do not use any substance not specified in this manual.

#### MANUAL FILLING KIT AND VALVE SANITIZATION

#### Hydroalcoholic solution in demineralized water



70%



Min time

45 SECONDS

#### SANITIZING THE POLYKEG MANUAL FILLING KIT

Soak the disassembled components of the manual filling kit in the sanitizing solution listed above. Please follow the dilution rates and time limits indicated above. Rinse thoroughly and dry with sterile air.

#### SANITIZING OF THE COUPLER AND THE EXTERNAL PART OF THE VALVE

Clean and spray the external surface of the components with the sanitizing solution listed above. Please follow the above dilution rates and time limits.

#### SANITIZING WITH AUTOMATIC AND SEMI-AUTOMATIC MACHINES

#### Hot water



Maximum pressure on the valve

**0.8 BAR** 



Maximum temperature

85°C



Maximum time

**5 SECONDS** 

#### OR Steam



Maximum pressure on the valve

0.8 BAR



Maximum temperature

100°C



Maximum time

3 SECONDS

#### **AUTOMATIC/SEMI-AUTOMATIC MACHINE SANITIZING**

Before starting the filling sanitize the automatic/semi-automatic filler according to the manufacturer's instructions.

#### SANITIZING THE EXTERNAL PART OF THE VALVE

Set the filler to sanitize the external surface of the keg valve with hot water or steam according to the above mentioned pressure, temperature and time limits.





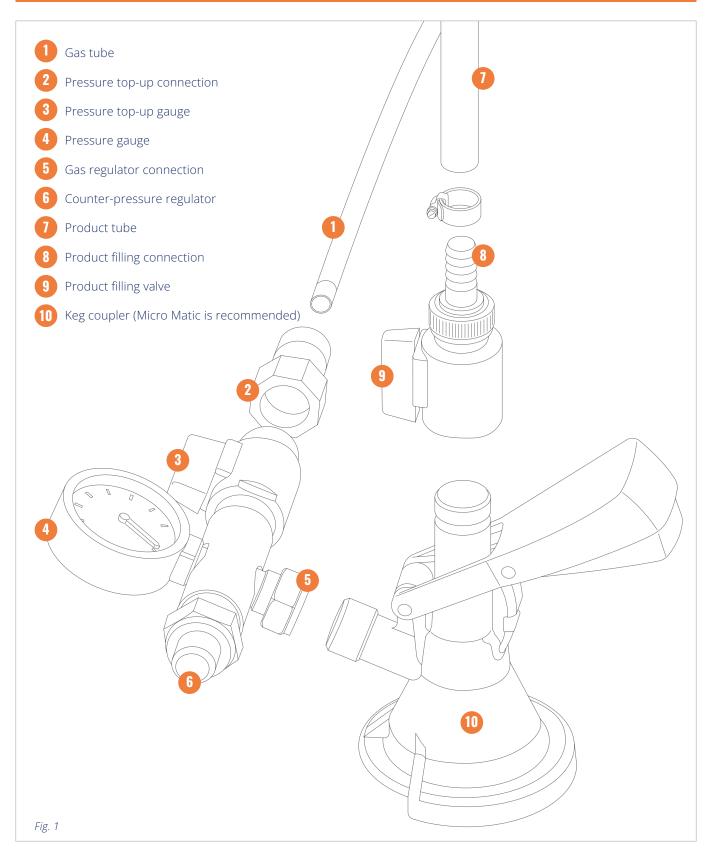
# **SECTION 6 POLYKEG PRO WITH BAG**Filling instructions with PolyKeg® manual kit

#### POLYKEG PRO WITH BAG



# Filling instructions with PolyKeg® manual kit

Before filling, please refer to the warnings in the "Section 1" of the PolyKeg PRO instruction manual and to the keg technical data sheets.



#### POLYKEG PRO WITH BAG

## Filling instructions with PolyKeg® manual kit



#### **PREPARATION**

#### 1. Sanitizing



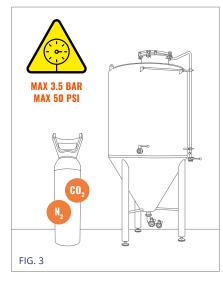
Disassemble the PolyKeg® filling kit and sanitize the components as indicated in the "Sanitizing Instructions"section.

#### 2. Assembly



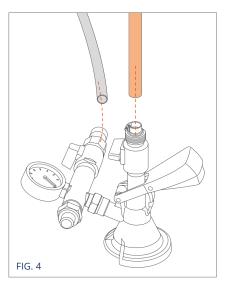
Reassemble the kit properly and close all valves.

#### 3. Gas and product pressure check



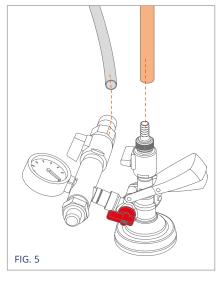
Check that the pressures of the filling system are correctly set and below the maximum value indicated. (3.5 bar/50 psi).

#### 4. Gas and product tube connection



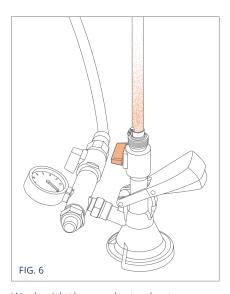
Connect the product and gas tubes to the filling kit.

#### 5. Gas and product tubes connection with K-valve



K-VALVE ONLY Connect the product and gas tubes to the filling kit. Open the red valve.

#### 6. Product tube purging



Work with the product valve to remove any residual gas from the product tube. Close the product valve.

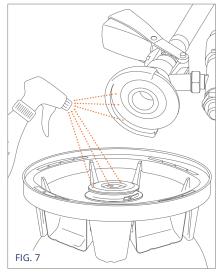
#### POLYKEG PRO WITH BAG

## Filling instructions with PolyKeg® manual kit



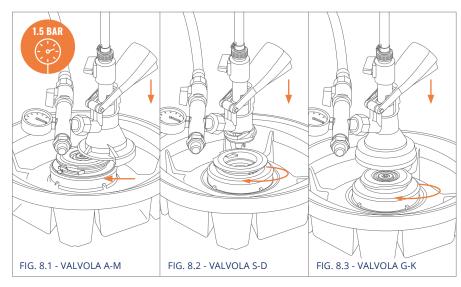
#### **FILLING**

#### 7. Sanitizing



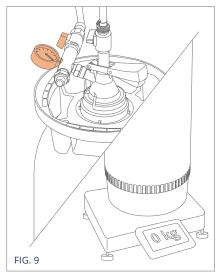
Before filling, sanitize the parts in contact with the product as indicated in the "Sanitizing instructions" section.

#### 8. Connection and Counter-Pressure Check



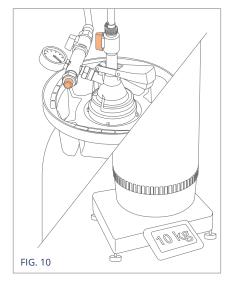
Make sure the filling head is properly connected to the valve, lower the lever and check the internal pressure of the keg.

#### 9. Counter-pressure regulation



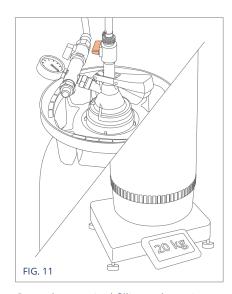
Work with the gas valve until the desired counter pressure is reached (approx. 0.5 bar lower than the product filling pressure).

#### 10. Filling



Open the product valve to start filling and work with the counterpressure regulator to set and/or change the filling speed.

#### 11. End of filling



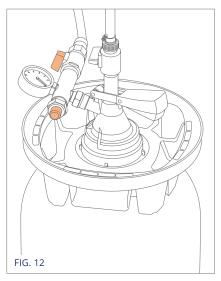
Once the nominal filling volume is reached, close the product valve. Do not exceed the nominal filling volume to prevent the product from leaking out of the bag.

#### POLYKEG PRO WITH BAG

# Filling instructions with PolyKeg® manual kit

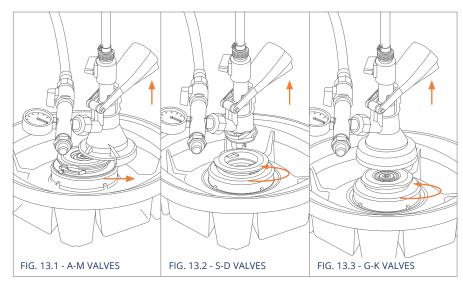


#### 12. Pressure balance



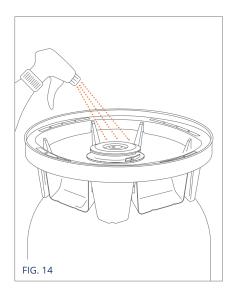
Close the regulator and work on the gas valve to increase the counter-pressure to a value slightly higher than the product filling value.

#### 13. Uncoupling



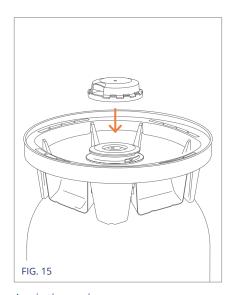
Quickly lift the lever and disconnect the coupler from the keg.

#### 14. Valve sanitizing



Remove any residual product with water, sanitize the external part of the valve as indicated in the "Sanitizing instructions" section and dry same.

#### 15. Seal application



Apply the seal.





# **SECTION 7 POLYKEG PRO WITHOUT BAG**Filling instructions with PolyKeg® manual kit

#### POLYKEG PRO WITHOUT BAG

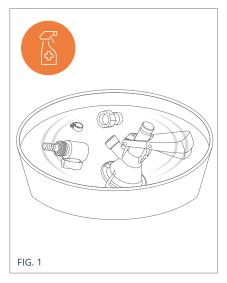
# Filling instructions with PolyKeg® manual kit



Before filling, please refer to the warnings in "Section 1" of the PolyKeg PRO instruction manual and to the keg technical data sheet.

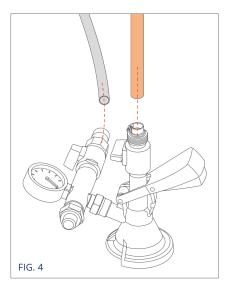
#### **PREPARATION**

#### 1. Sanitizing



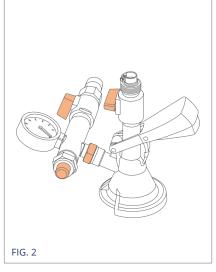
Disassemble the PolyKeg® filling kit and sanitize the components shown in the picture, following the sanitizing instructions found in "Section 5".

#### 4. Gas and product tubes connection



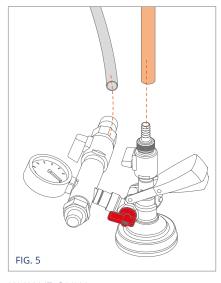
Connect the product and gas tubes to the filling kit.

#### 2. Assembly



Reassemble the kit properly and close all valves.

#### 5. Gas and product tubes connection with K valve



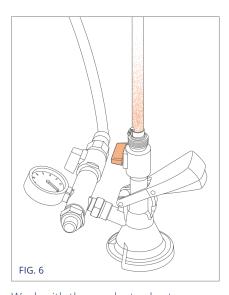
K VALVE ONLY Connect the product and gas tubes to the filling kit. Open the red valve.

#### 3. Gas and product pressure check



Check that both product and gas pressure in the tank does not exceed the maximum nominal working pressure (3.5 bar/ 50 psi).

#### 6. Product tube bleeding



Work with the product valve to remove any residual gas from the product tube. Close the product

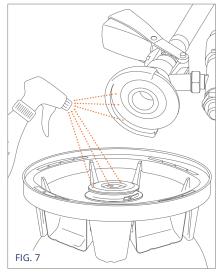
#### POLYKEG PRO WITHOUT BAG

## Filling instructions with PolyKeg® manual kit



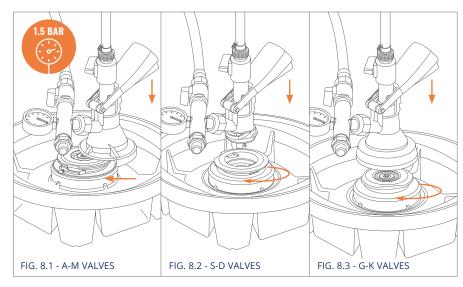
#### **FILLING**

#### 7. Sanitizing



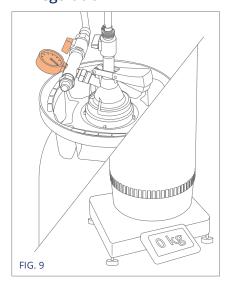
Before filling, sanitize the parts in contact with the product according to the "Sanitizing Instructions" section.

#### 8. Filling head connection and counter-pressure check



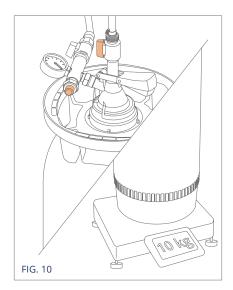
Connect properly the filling head to the valve, lower the lever and check the internal keg pressure.

#### 9. Counter-pressure regulation



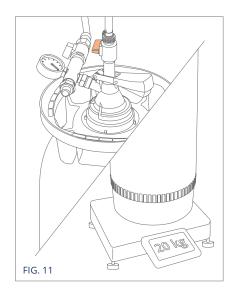
Work with the gas valve until the desidered counter-pressure is reached (approx. 0.5 bar lower than the product filling pressure).

#### 10. Filling



Open the product valve to start filling and work with the counterpressure regulator to set and/or change the filling speed.

#### 11. End of filling



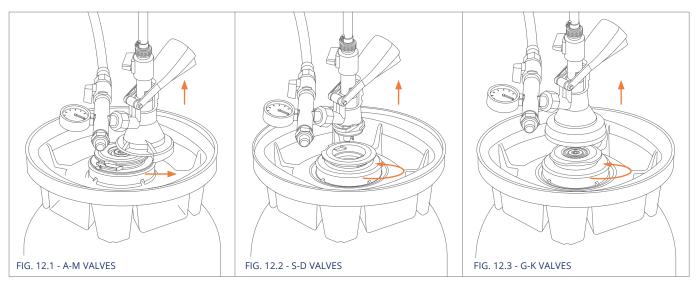
Once the nominal filling volume is reached, close the product valve. Do not exceed the nominal filling volume to prevent the product from leaking.

#### POLYKEG PRO WITHOUT BAG



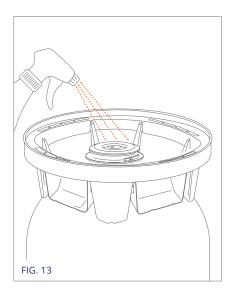
# Filling instructions with PolyKeg® manual kit

#### 12. Uncoupling



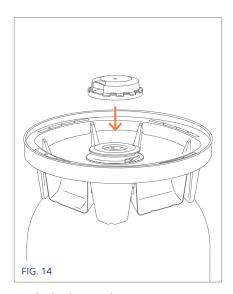
Quickly lift the lever and disconnect the coupler from the keg.

#### 13. Valve sanitizing



Remove any residual product with water, sanitize the external part of the valve as per the "Sanitization instructions" section and dry same.

#### 14. Seal Application



Apply the keg seal.





# SECTION 8 Tapping instructions

## Tapping instructions



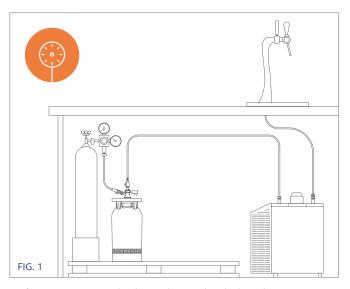
When handling the keg, please wear personal protective equipment (googles, gloves, etc.) and make sure the room where you are working is ventilated, as specified in the "Warnings" section.

The tapping system must be equipped with a pressure regulator and a properly calibrated safety valve.

Always make sure that the setting and working pressures of your tapping system are correctly set and do not exceed the maximum nominal value, as stated in the "Warnings" section.

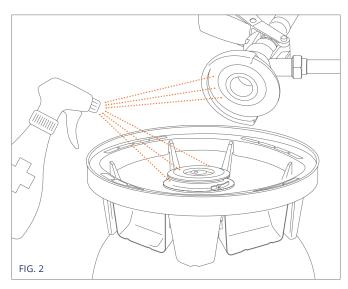
#### **TAPPING PROCEDURE**

#### 1. Pressure check



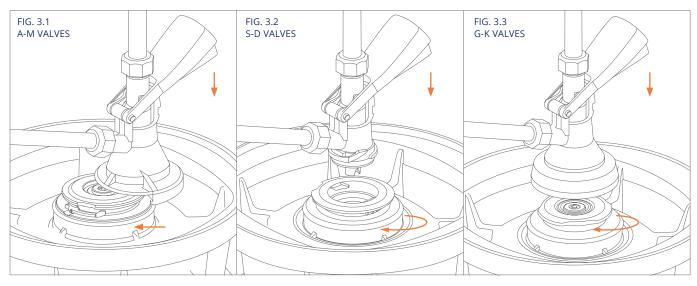
Before connecting the keg, please check that the tapping system is in order, sanitized and that the pressures are set correctly.

#### 2. Sanitizing



Sanitize the coupler surface that is in contact with the product, remove the seal and sanify the external part of the valve, as mentioned in the "Sanitizing instructions" section.

#### 3. Connection

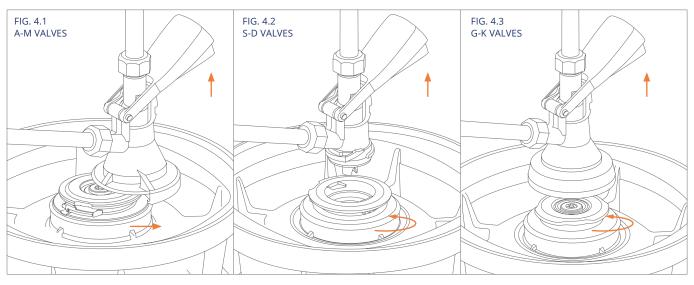


Connect the coupler to the keg valve and start tapping.

## Tapping instructions

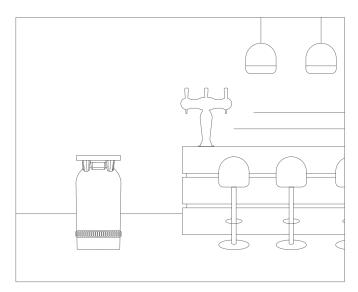


#### 4. Uncoupling



Once empty, disconnect the keg from the tapping system.

#### 5. Empty keg management



Disconnect the empty keg from the tapping system and proceed with its depressurization, as indicated in the "Depressurization Instructions" section.

Should it be necessary to temporarily disconnect the keg, clean and sanitize the valve as shown in the "Sanitizing instructions" section. Handle and store the keg according to the instructions in the "Warnings" section.

To start tapping again, repeat the procedure from step 1.





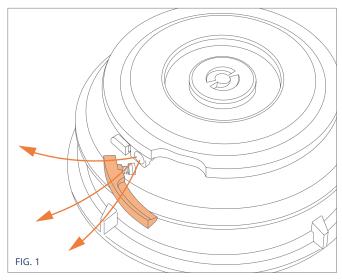
# SCTION 9 Depressurization instructions

## Depressurization instructions



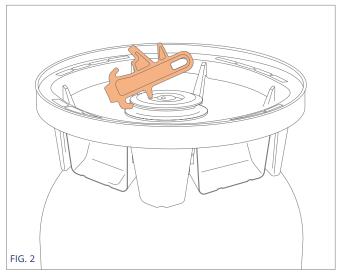
When handling the keg, please wear personal protective equipment (googles, gloves,etc.) and make sure the room where you are working is ventilated, as mentioned in the "Warnings" section.

#### 1. Depressurization procedure with PRV



Once tapped, the empty keg must be depressurized immediately by breaking of the red PRV — pressure relief valve - lever.

#### 2. Depressurization procedure without PRV



If the keg has no PRV, please use the dedicated depressurization key. It is suitable for all types of PolyKeg® valves: A, D, G, K, M, S.

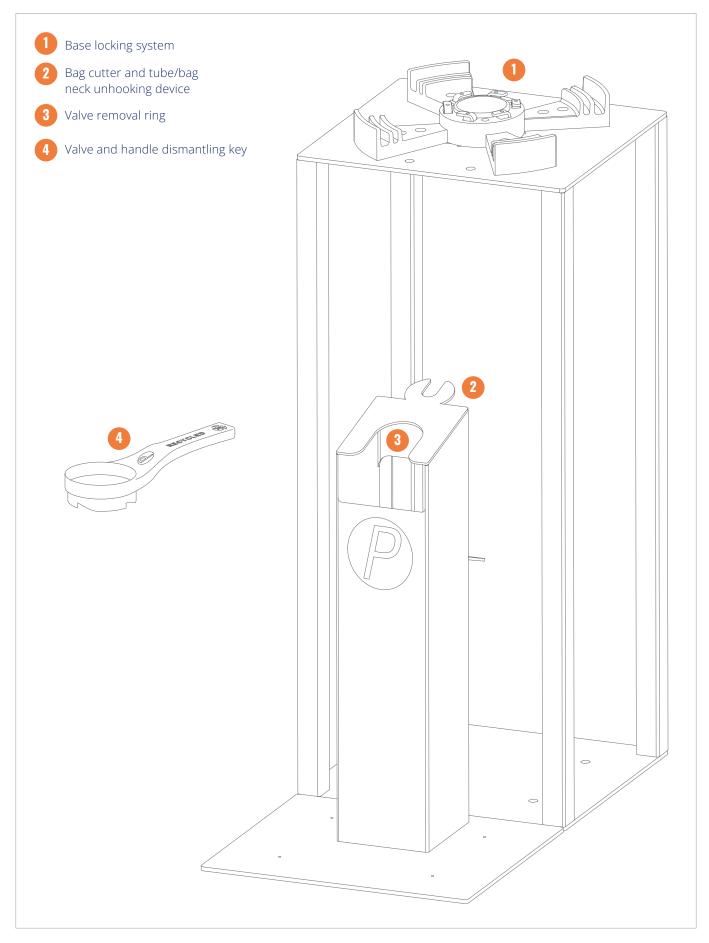




# **SECTION 10**Dismantling instructions

# Dismantling instructions WITH EQUIPMENT





# Dismantling instructions

#### WITH EQUIPMENT

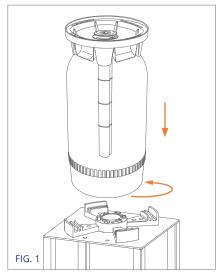


The keg must be depressurized immediately after use and in all cases before being dismantled.

The PolyKeg PRO keg can be easily dismantled as shown below, in order to make the materials recycling easier (please refer to the "Materials sheet").

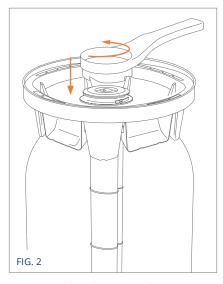
#### **DISMANTLING PROCEDURE**

#### 1. Keg locking



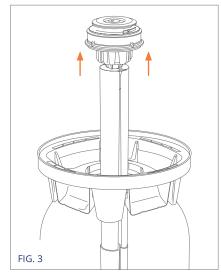
Hook the depressurized keg to the device surface.

#### 2. Valve removal



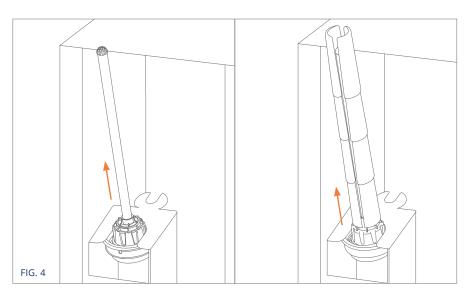
Unscrew the valve using the dedicated dismantling key.

#### 3. Valve extraction with dip tube or bag kit



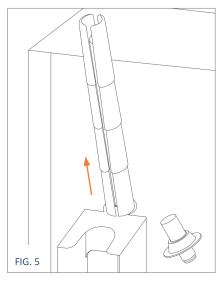
Pull out of the bottle the valve and the dip tube, or the valve and the bag

#### 4. Valve from dip tube or from bag kit separation



Hook the valve to the ring and then detach it from the dip tube or from the bag kit.

#### 5. Dip tube from bag separation

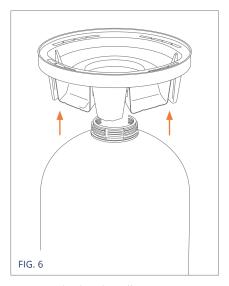


Hook the bag kit to the ring and separate the dip tube and bag from the bag neck.

# Dismantling instructions WITH EQUIPMENT

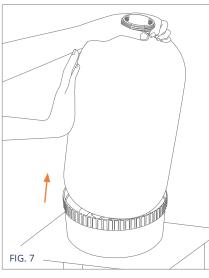


#### 6. Handle removal



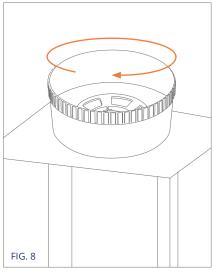
Remove the keg handle.

#### 7. Base removal



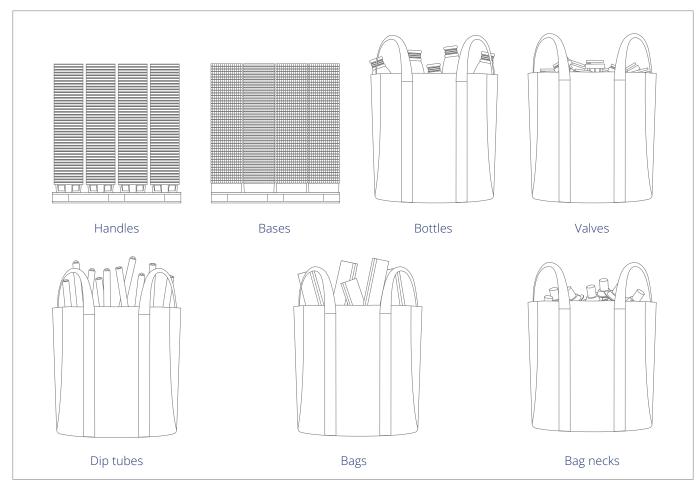
Push the bottle until the base comes

#### 8. Base unlocking



Unhook the base of the keg from the device surface.

#### 10. Sorted keg components



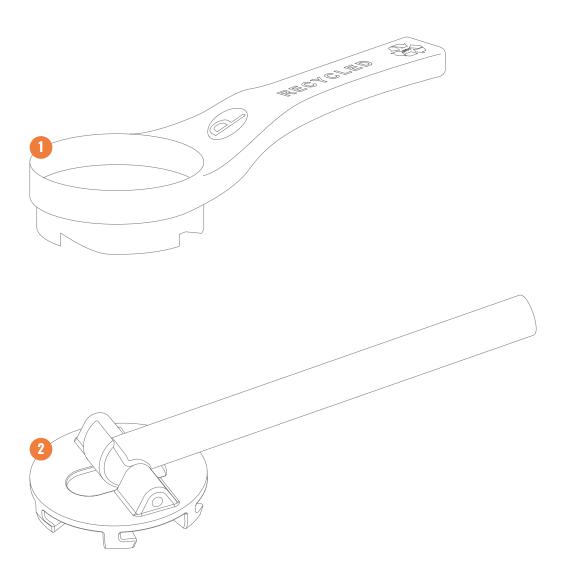
Store the keg components in appropriate boxes at the end of each step.

# Dismantling instructions WITH KEY





- Valve and handle dismantling key
- Base dismantling key



# Dismantling instructions

#### WITH KEY

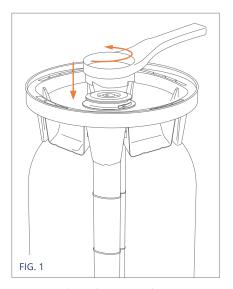


The keg must be depressurized immediately after use and in all cases before being dismantled.

The PolyKeg PRO keg can be easily dismantled as shown below, in order to make the materials recycling easier (please refer to the "Materials sheet").

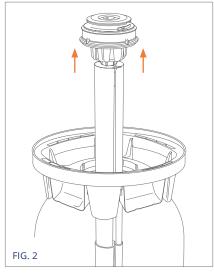
#### **DISMANTLING PROCEDURE**

#### 1. Valve removal



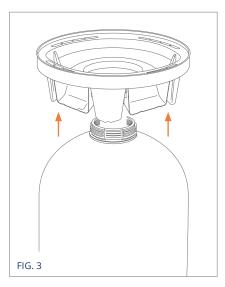
Unscrew the valve using the dedicated dismantling key.

#### 2. Valve extraction with dip tube or bag kit



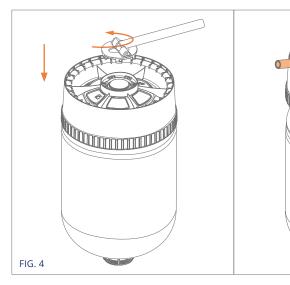
Pull out of the bottle the valve and the dip tube, or the valve and the bag

#### 3. Handle removal



Remove the keg handle.

#### 4. Base - keg detachment



Lock the key on the base of the keg and turn the lever 180° anticlockwise.

#### 5. Valve from dip tube or from bag kit separation



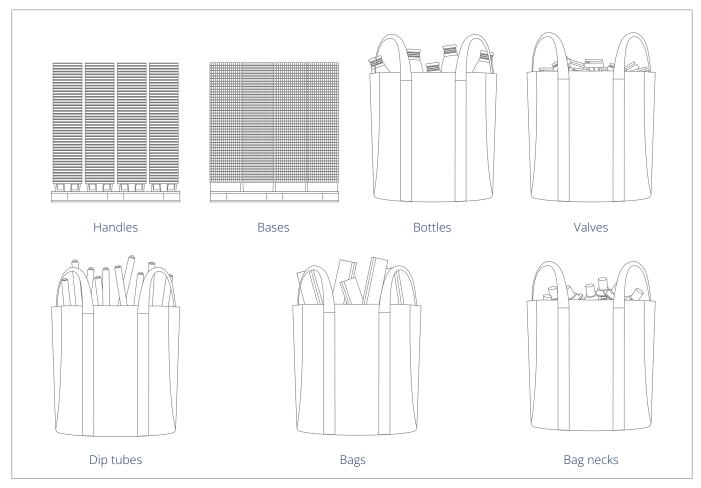
Remove the valve from the tube or bag kit by holding the valve and pulling the tube or bag kit towards you.

# Dismantling instructions





#### 6. Sorted keg components



Store the keg components in appropriate boxes at the end of each step.





Materials and symbols sheet Polykeg PRO

## Materials and symbols sheet



Below you can find the list of materials and related symbols according to the requirements defined by Directive 94/62/EC (art. 8) and based on the European Community Decision 97/129/EC ss.mm.ii..

#### 1. POLYKEG PRO WITH BAG

	Component	Material	Classification 129/97/CE	Symbol	Waste sorting
0	Seal	Polypropylene	PP 5	S <sub>P</sub>	Plastic
2	Valve	Other plastic	Other 7	ART	Plastic
3	Handle	Recycled Polypropylene (R-PP)	PP 5	253 PP	Plastic
4	Bag kit Bag + adapter	Aluminum Polyethylene Nylon	C/LDPE 90	C/LDPE 7	Plastic
	Tube + stopper	Polypropylene	PP 5	<b>\$</b> 7	Plastic
5	Bottle	Polyethylene terephthalate	PET 1	? RET ST	Plastic
6	Label	Polypropylene	PP 5	253 PP	Plastic
0	Base	Recycled Polypropylene (R-PP)	PP 5	25.5 PP	Plastic

<sup>\*</sup>Follow local waste disposal regulations.

#### 2. POLYKEG PRO WITHOUT BAG

	Component	Material	Classification 129/97/CE	Symbol	Waste sorting
0	Seal	Polypropylene	PP 5	£5 PP	Plastic
2	Valve	Other plastic	Other 7	ART ART	Plastic
3	Handle	Recycled Polypropylene (R-PP)	PP 5	253 PP	Plastic
4	Tube	Polypropylene	PP 5	277	Plastic
5	Bottle	Polyethylene terephthalate	PET 1		Plastic
6	Label	Polypropylene	PP 5	253 PP	Plastic
0	Base	Recycled Polypropylene (R-PP)	PP 5	<u>د</u> م ع	Plastic

<sup>\*</sup>Follow local waste disposal regulations.

#### **PACKAGING**

Component	Material	Classification 129/97/CE	Symbol	Waste sorting
Stretch film + Cover pallet + Bags	Polyethylene	PE-LD 4	PE-LD	Plastic
Pallet	Wood	FOR 50	<b>50</b> 5	Wood
Boxes	Corrugated fiberboard	PAP 20	20 PAP	Paper

<sup>\*</sup>Follow local waste disposal regulations.









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#### PolyKeg SRL is certified









