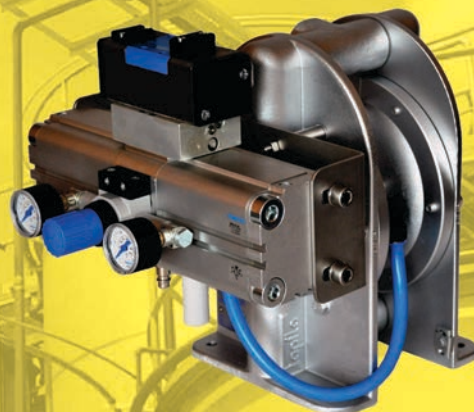


# TECHNICAL UPDATES & INFORMATION LETTERS H2 2015

edition 2015 rev 1

## Tapflo Product Department



## New standard of TF pumps



Tapflo is proud to announce that a series of changes have been implemented in the TF pump range in order to assure better pump operation and handling.

Main changes include new standard of reinforcement plates, booster holders and booster supplier. Currently Festo has become Tapflo's standard supplier what ensures high quality, a perfectly matched booster but in the same time lower price!

The change applies to all pump sizes in plastic and metal range. Change schedule for all pump models is presented below.

### Key features:

#### Material and finishing

From now on standard material of reinforcement plates will be glass blasted AISI 304L. Tapflo logo is also cut into the plates.

Old material execution – AISI 316L is still available under pump code "**-11FS**".



#### New standard booster

Tapflo has introduced **Festo** booster as its standard solution.

Nevertheless SMC and Metal Work will still be available upon request. If you wish to receive your pump with an alternative booster just add "**SMC**" or "**MW**" at the end of the pump code. Please note that price may differ from pump with Festo booster.

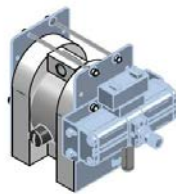


**Plate lengths and booster positioning**

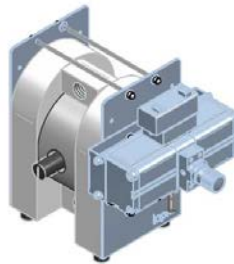
To improve pump stability, the booster is now located in the middle of the pump height in contrary to the previous positioning over the pump. Due to this fact as a standard, plastic pumps have two short reinforcement plates, and not one long and one short as before. Two additional pin screws are left on the top of the pump to provide stability on the discharge side. The only exception is TF50 which facilitates one short and one long plate which is universal for all boosters. In metal series TF pumps positioning of the booster remains unchanged.



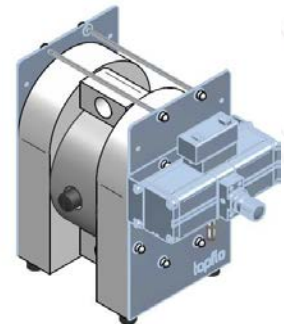
TF50



TF100



TF200



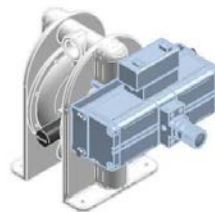
TF400



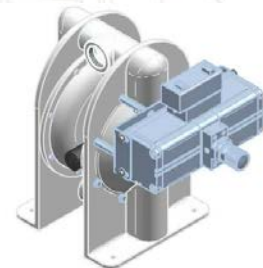
TF70 A



TF120 A



TF220 A



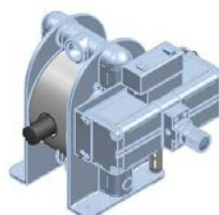
TF420 A



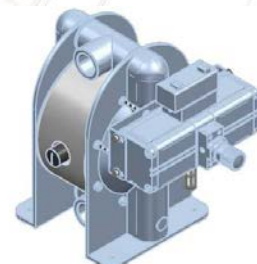
TF70 S



TF120 S



TF220 S



TF420 S

**Booster holder**

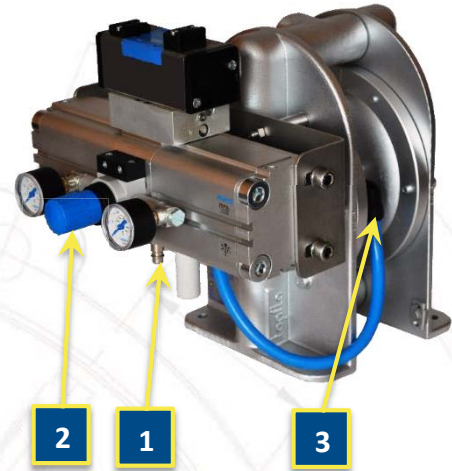
To mount the booster to the pump an additional holder is used (pos. 990). One, universal FESTO booster holder is used for one size of the pump (i.e. the same holder for TF100 P/ TF120 S/ TF120 A).



**DID YOU KNOW?**

**WORKING PRINCIPLE**

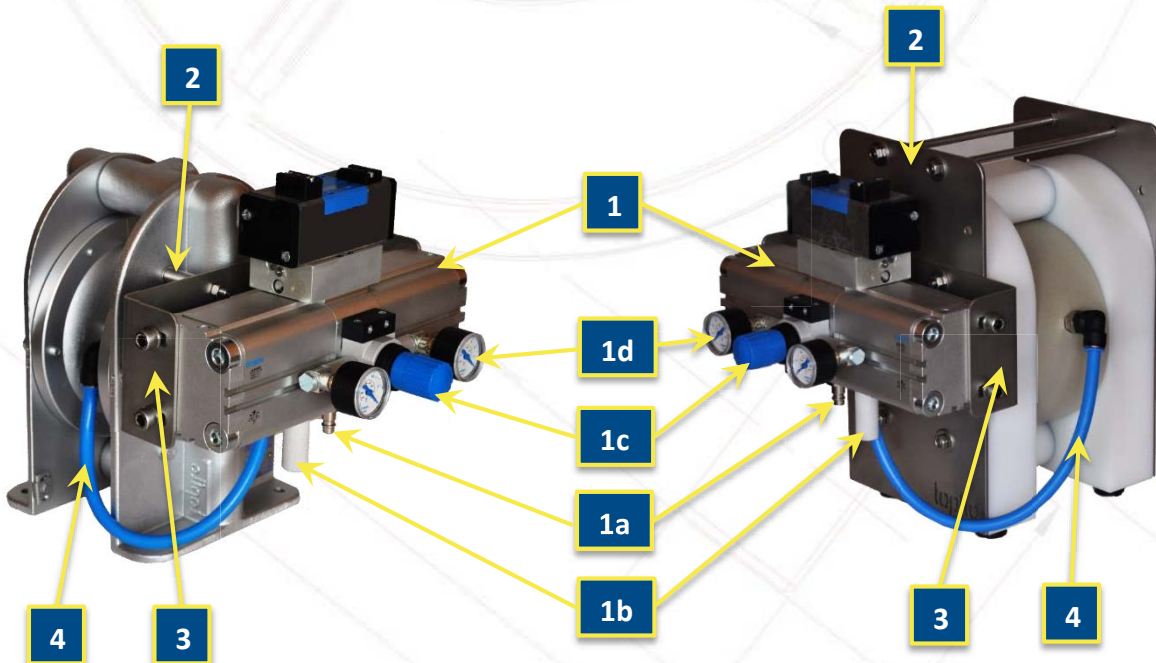
For the TF pump series, standard Tapflo pumps are used so they operate in the same way. The pump is driven by compressed air. The two diaphragms are connected by a diaphragm shaft and pushed back and forth by alternately pressurizing the air chambers behind the diaphragms using an automatically cycling air valve system. The only difference is that we do not supply the pump with air directly but through a pressure booster. The air supply is connected to the booster air inlet (1). Using the regulation knob (2) we can adjust the amplification level up to 2:1 of input pressure. The manometers show the current settings. The pressure builds up inside the booster and when it reaches the desired output pressure it is released to the pump air inlet (3).



**Delivery scope:**

As a standard the pump is supplied with the following items:

1. Complete pressure booster:
  - a. Quick air connection for air supply
  - b. Muffler
  - c. Pressure regulator
  - d. Two manometers – input and output pressure
2. Reinforcement plates (plastic pumps) / Special pin screws (metal pumps)
3. Mounting plate with screws
4. Air connection between the pump and the booster



### Pump ordering:

- **Standard:** As a standard Tapflo TF pump is equipped with a hybrid air valve, Festo pressure booster equipped in two manometers and a pressure regulator. By using the knob we can regulate the output pressure. Maximum pressure increase is 2:1. Differential pressure must be at least 2 bar; e.g. **TF200 PTT**.
- **SMC booster:** If the client should require we offer also SMC boosters as alternative. SMC offers also ATEX marked boosters which can be used in zone 2: **ATEX II 3 GD c T6** If you wish to order TF pump with SMC booster please use "**19S**" at the end of the pump code, e.g. **TF120 STT-19S**.
- **Booster without manometers and regulator:** If a client's air supply line is already equipped with air treatment system (filter-regulator, manometers etc.) it is possible to order the pump with "plain" booster without additional equipment. In such case, the output pressure is always doubled in comparison to input pressure. For this option, please use "**19D**" in pump code, e.g. **TF100 PTT-19D**.
- **Air treatment system:** If one decides to order booster without additional equipment, we can offer air treatment systems as alternative:

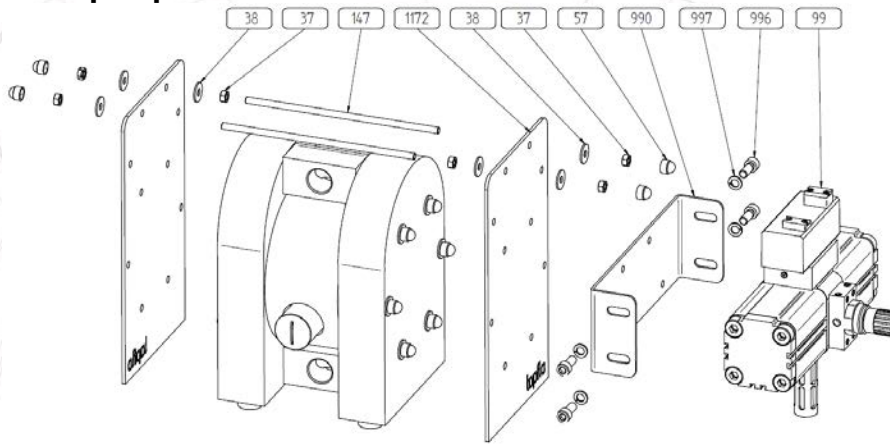
Article no	Suitable for pumps	Description
6-050-001	TF50, TF70	Filter-regulator + manometer + mounting bracket
6-200-001	TF100, TF200, TF120, TF220	Filter-regulator + manometer + mounting bracket
6-400-001	TF400, TF420	Filter-regulator + manometer + mounting bracket
6-050-0	TF50, TF70	Needle valve
6-200-0	TF100, TF200, TF120, TF220	Needle valve
6-400-0	TF400, TF420	Needle valve
6-050-002	TF50, TF70	Filter-regulator + manometer + water separator + mounting bracket
6-200-002	TF100, TF200, TF120, TF220	Filter-regulator + manometer + water separator + mounting bracket
6-400-002	TF400, TF420	Filter-regulator + manometer + water separator + mounting bracket

- **Pump prepared for booster assembly:** Tapflo pumps can be fitted only with reinforcement plates prepared for booster assembly but without the booster itself. The pump will also have assembled the hybrid air valve with PET piston. This way the pump is prepared for high pressure applications and the end user can install the booster on the pump by himself. For this option, please use "**7HN11F**" in pump code, e.g. **T100 PTT-7HN11F**.

- **Pump with aluminium centre body:** To increase pump lifetime for high applications we recommend to use pumps with aluminium centre body. This material is more resistant to high pressure than our standard PP.  
For this option, please use "**6A**" in pump code, e.g. **T100 PTT-6A**.

**Ordering spare parts:**

- **Plastic pumps**

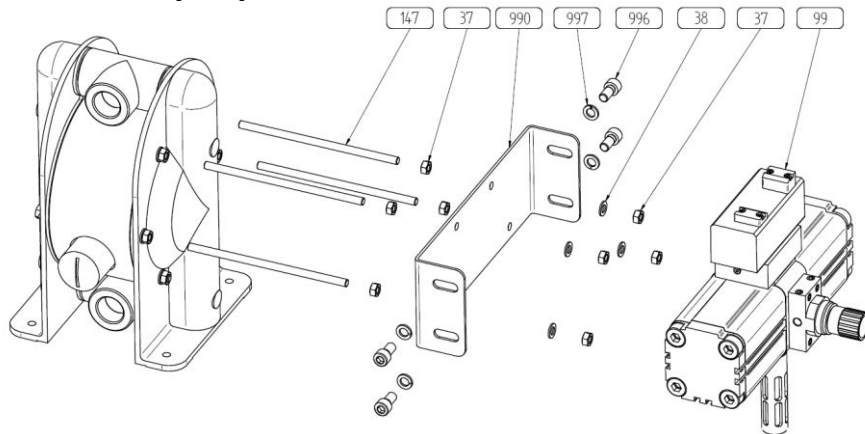


- **Plastic pumps – Additional / other spare parts list**

Pos.	Q-ty	Description	Material
99	1	Booster	-
990	1	Booster mounting plate	AISI 304
996	4	Booster mounting screw	A4-70
997	4	Booster mounting washer	A4-80
1172	2	Reinforcement plate	AISI 304
37	6	Additional nuts	AISI 304
38	6	Additional washers	AISI 304
57	4	Additional end caps	PP
147	2	Additional pin screws	A4-80



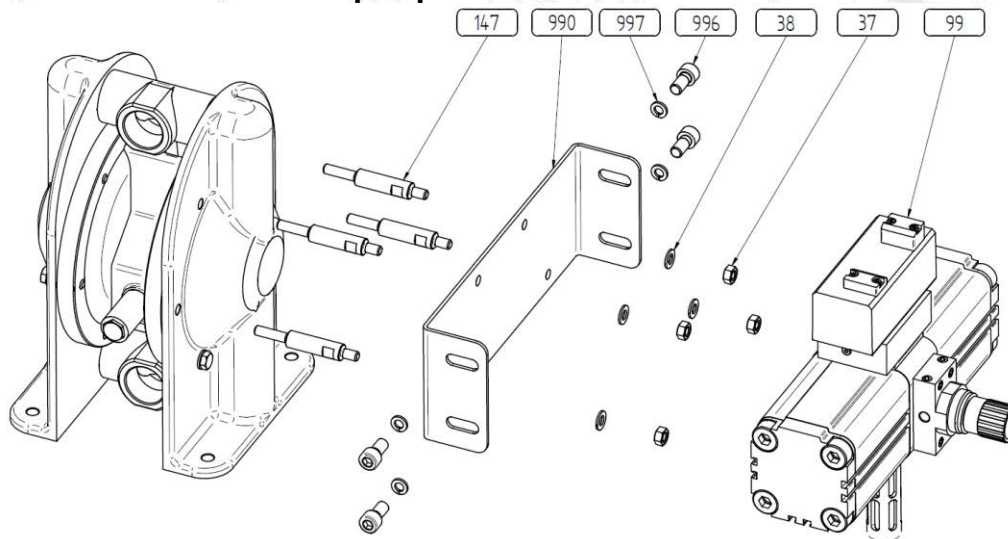
➤ **Stainless steel pumps**



➤ **Stainless steel pumps – Spare parts list**

Pos.	Q-ty	Description	Material
99	1	Booster	-
990	1	Booster mounting plate	AISI 304
996	4	Booster mounting screw	A4-70
997	4	Booster mounting washer	A4-80
37	8	Additional nuts	AISI 304
38	4	Additional washers	AISI 304
147	4	Pin screws with long thread	A4-80

➤ **Aluminium / cast iron pumps**



➤ **Aluminium / cast iron pumps – Spare parts list**

Pos.	Q-ty	Description	Material
99	1	Booster	-
990	1	Booster mounting plate	AISI 304
996	4	Booster mounting screw	A4-70
997	4	Booster mounting washer	A4-80
37	4	Additional nuts	AISI 304
38	4	Additional washers	AISI 304
147	4	Special pin screw	AISI 316L

**NOTE!**



As a standard, a TF pump with a built-on pressure booster is not ATEX compliant. For use in explosion hazardous environment a special booster is required. Please contact Tapflo for more details. As a general rule it is recommended to install the booster outside of the hazardous area.





## Updated factory test limits – June 2015

Tapflo is proud to announce that a change of factory test limits has been implemented. This change was made due to the fact that year by year we pursue the goal of making our pumps better in quality and performance.

All pumps are now tested and results recorded based on the below acceptance values. This is a step in our strive to provide you competitive, high quality products. The new limits were implemented on the 1<sup>st</sup> of June 2015.

Pump size	Max.start pressure [bar]	Max.stop pressure [bar]	Min.suction lift dry [mWC]*, **	Min.suction lift wet [mWC]
TR9	2,2	2	1,6	7
TR20	2,2	2	2,4	8
T20	2,2	2	1	8
T50	2	1,8	2,4 / 4 (SS valves)	8,2 / 9 (SS valves)
TY50	2	1,8	4	9
T100	2	1,8	3,5	9
TY100	2	1,8	4,4	9
T200	2	1,8	3,8	9
T400	2,2	2	4	9
T800	3	2,6	4	9
T25 A/C	2,2	2	1,2	8
T70 A/C	2	1,8	2,2 / 4 (SS valves) C. Iron 1,6 / 2 (SS valves)	8
TY70	2	1,8	3	9
T70 S	2	1,8	1,6	8
T120 A / C	2	1,8	3,4 / C. Iron 3	9
T120 S	2	1,8	2	9
T220 A/C	2	1,8	3,6 / C. Iron 3	9
T420 A/ C	2,2	2	4 / C. Iron 3	9
T820	3	2,6	3,4	9
TAP-S1	2,2	2	1 / 1,4 (SS valves)	8 / 7 (SS valves)
TAP-S2	2	1,8	2,8	8
TAP-S3	2	1,8	3,2	8
T30	2,2	2	0,5 / 2 (SS valves)	7
T80	2	1,8	1,6 / 2,4 (SS valves)	8
T125	2	1,8	3	9
T225	2	2	3,4	9
T425	2,2	2	4	9

Air valve	Max.start pressure [bar]	Max.stop pressure [bar]	Air tightness
6-020-61 LP	0,8	1	Tight at 4bar
6-050-61 LP	1	0,8	Tight at 4bar
6-400-61 LP	1,4	1,2	Tight at 6 bar
6-020-61 HP	2,8	2,6	Tight at 12 bar
6-050-61 HP	2,8	2,6	Tight at 12 bar
6-400-61 HP	2,8	2,6	Tight at 12 bar

\* = This is a minimum value that all type of pumps shall reach. With certain valve and diaphragm configurations much higher values can be reached, please consult us in this matter.

\*\*= For TB pumps minimum suction lift value is reduced by 30%.

## New flap valves for sanitary pumps



Tapflo is proud to announce that a new standard for sanitary pumps with flap valves has been introduced. From the beginning of 2016 all pumps ordered with flap valves will be equipped with new design of flap valves.

### Benefits:

Flap valves are used when pumping liquids containing big solids without damage. With the new design we are able to pump solids up to 50 mm in both T225 and T425 pump sizes and reach dry suction lift 4,5 meters. The new flap valves are more durable, have less spare parts and are more hygienic thus easier to clean.

### NEW ITEM !

### FLAP VALVES IN T825

Along with this update the flap valves have also been introduced to the biggest sanitary pump size – T825. This allows to pump liquids with even bigger solids – up to an impressive 100 mm.

### Changes:

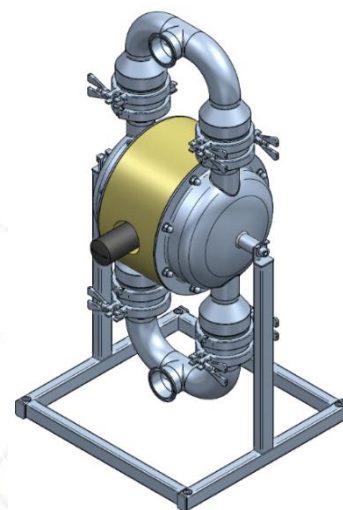
The new design consists of less parts thus making the solution more reliable and robust. The flap is now securely clamped between the valve cup and the manifold.



**Pump codification and pricing:**

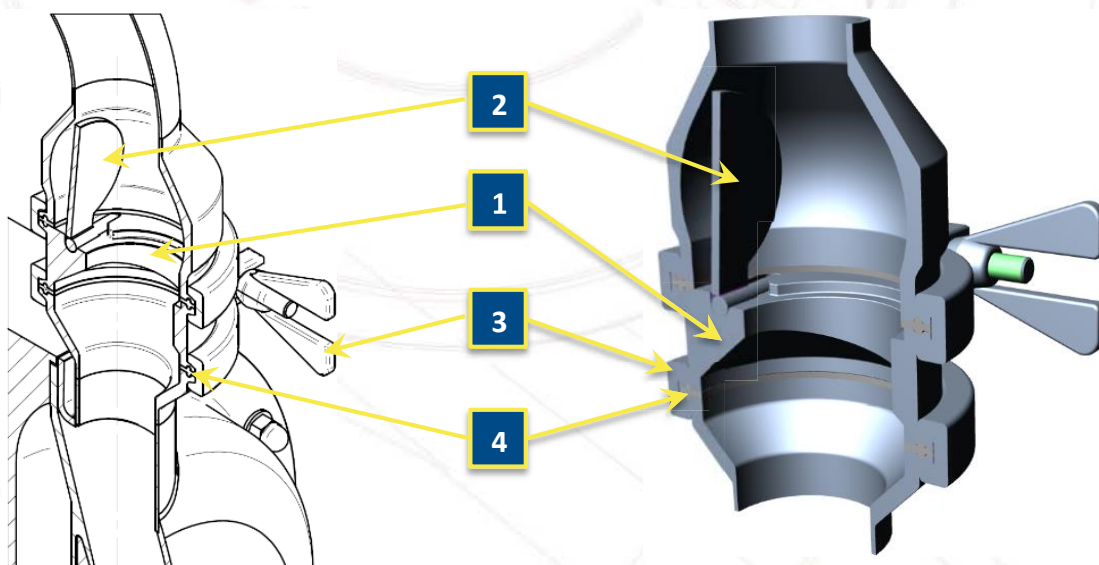
Until the end of 2015 the pump code for new flap valves is “-5SF” e.g. **T225 ST-5SF**. From the beginning of 2016 the new flap valves will become a standard solution therefore no code adder will be required i.e. **T425 ST**.

While the new design delivers a range of advantages it comes with **no price adder** whatsoever. This means that the pump price with flap valves will remain unchanged.



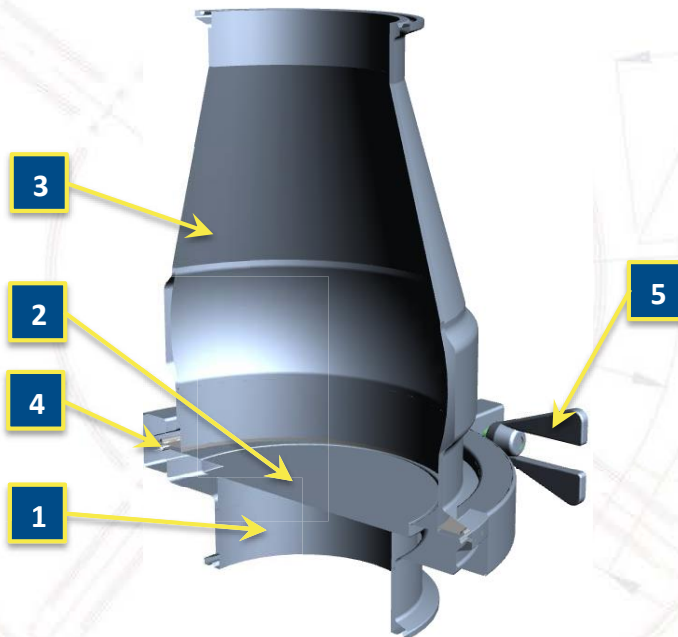
When ordering spare parts for T225 and T425 please use the following codes:

No	Part code	Description	Q-ty
-	6-xxx-24H	Complete flap valve (241H+242H)	4
1	6-xxx-241H	Flap valve seat	4
2	6-xxx-242H	Flap	4
3	6-xxx-18H	Gasket	8
4	6-xxx-138	Tri-clamp	8
-	6-xxx-11H	Housing	2
-	6-xxx-131H	Inlet manifold	1
-	6-xxx-132H	Outlet manifold	1



When ordering spare parts for T825 please use the following codes:

No	Part code	Description	Q-ty
-	6-825-24H	Complete flap valve (241H+242H+243H+18H+138H)	4
1	6-825-241H	Flap valve seat	4
2	6-825-242H	Flap	4
3	6-825-243H	Flap valve housing	4
4	6-825-18H	Gasket	4
5	6-825-138H	Tri-clamp	4
-	6-825-11H	Housing	2
-	6-825-13	Manifold	2



## New tri-clamp connection standard in sanitary AODD pumps

Starting from November 23<sup>rd</sup> 2015 Tapflo introduces new standard of tri-clamp connections in sanitary pumps range. Old, ISO 2852 connections, are replaced by SMS 3017 in T30, T80, T125 and T225 pumps. For size T425 - ISO 2037 will be used. There will be no change in pump codes when ordering pumps with standard connection sizes.

### Benefits:

Standardization of pump connections due to the fact that current ones were according to an outdated norm. At the same time the new standard is compatible with the old one therefore connection sizes remain unchanged. For dimensions details see the table below:

Pump size	Standard	DN	A	B	C	D
T30	SMS 3017	25	50,5	22,6	25,6	21,5
T80	SMS 3017	25	50,5	22,6	25,6	21,5
T125	SMS 3017	38	50,5	35,6	38,6	21,5
T225	SMS 3017	51	64	48,6	51,6	21,5
T425	ISO 2037	70	91	66,8	70	21,5

### Ordering pumps:

New tri-clamp connection becomes a standard for all sanitary AODD pump series since the above mentioned date, therefore no change in pump code will be applied.

### Ordering spare parts:

No other spare part beside pump manifolds will be changed. Code for new type of manifold will be indicated by "/A" added to part code.

Pump size	Part	Standard applied	Connection size	New code	Old code
T30 S	Outlet manifold T30 S	SMS 3017	DN25	6-030-132/A	6-030-132
	Inlet manifold T30 S	SMS 3017	DN25	6-030-131/A	6-030-131
T80 S	Outlet manifold T80 S	SMS 3017	DN25	6-080-132/A	6-080-132
	Inlet manifold T80 S	SMS 3017	DN25	6-080-131/A	6-080-131
T125 S	Outlet manifold T125 S	SMS 3017	DN38	6-125-132/A	6-125-132
	Inlet manifold T125 S	SMS 3017	DN38	6-125-131/A	6-125-131
T225 S	Outlet manifold T225 S	SMS 3017	DN51	6-225-132/A	6-225-132
	Inlet manifold T225 S	SMS 3017	DN51	6-225-131/A	6-225-131
T425 S	Outlet manifold T425 S	ISO 2037	DN70	6-425-132/A	6-425-132
	Inlet manifold T425 S	ISO 2037	DN70	6-425-131/A	6-425-131



## Magnetic ball lifters for Sanitary and EHEDG series AODD pump



Tapflo Group is proud to announce that new magnetic ball lifters have been implemented in AODD pumps - **Sanitary series (T125 -T425)** and **Aseptic EHEDG series (TX144-TX244)**. New magnetic ball lifters are implemented to enable pump emptying when no other draining option is available. Rotating the pump is no longer needed.

Tapflo knows how important is to drain content of the pump. That's why Tapflo designed ball lifting system which could not have been easier. The balls are lifted by simply attaching the magnets to the pumps manifold.

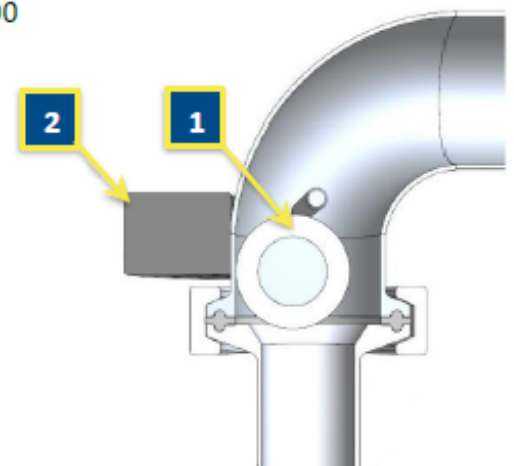
### Materials:

- Valve balls are available in material options AISI 420 and PTFE with steel core
- Magnet casing is made of durable and antistatic PE 1000

#### DID YOU KNOW?

#### WORKING PRINCIPLE

Valve ball (1), either made of AISI 420 or PTFE with steel core, are lifted by magnet lifter (2) attached onto the manifolds.



**Pump and spare parts code:**

- **Pump special execution:** If you decide to order a pump with **Magnetic ball lifters and holder** please use **5ML** at the end of the pump code, also remember to choose the material of valve balls:

**A** - AISI420

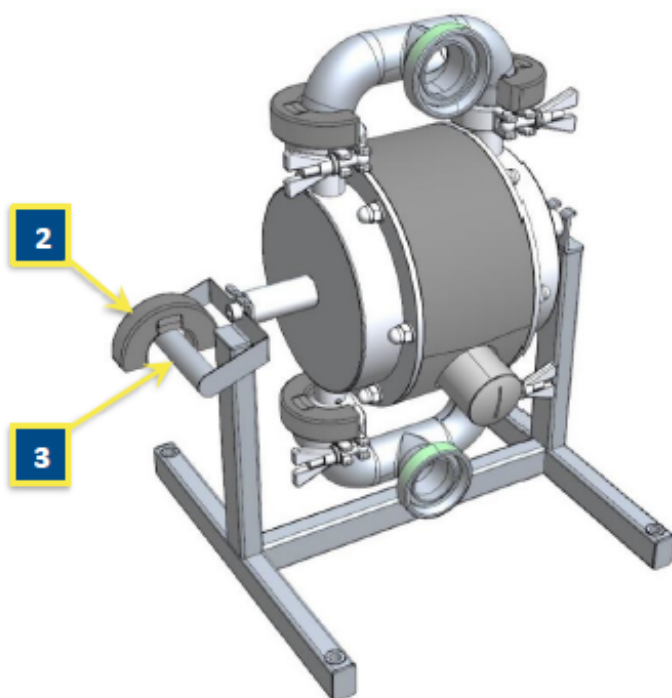
**X** - PTFE with steel core

e.g. **T125 STX-5ML**

- **Spare parts:** If you already have the pump, yet you decide to acquire Magnetic ball lifting feature:

No	Part code	Suitable for pumps	Description	Material	Q-ty
1	6-xxx-23-15	TX144, TX244 T125, T225, T425	Valve ball	PTFE/SS core	4
1	6-xxx-23-59		Valve ball	AISI420	4
2	6-xxx-95M		Magnetic ball lifter	PE 1000 - cover	4
3	6-xxx-170		Holder	Compatible with pumps	1

- **Magnetic ball lifters SET:** You can also order above parts as a set. For this option use code **ML SET** then type pump size, at the end specify valve ball material e.g. **ML SET T225-15**

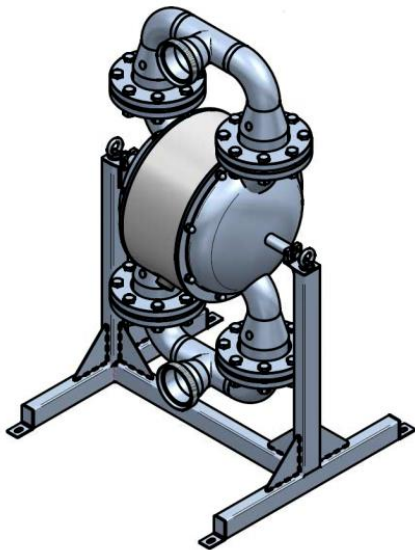


**DID YOU KNOW?**

**AISI 420**

AISI 420 is high grade martensitic stainless steel with good magnetic properties. In addition, balls made of AISI 420 characterized by notably high resistance to corrosion from fresh water, steam, ammonia, petroleum products, blood, perspiration, alcohol and food.

## T825 S – 3” pump now available also in hygienic range



Tapflo is proud to announce that biggest size of AODD pump is also available in Sanitary pump series. T825 Stainless steel pump design is based on well-known T820 S pump, that found already many applications where bigger capacities are required or viscous liquids are pumped. Pump is reaching maximum flow of 820 l/min, and it is available with various hygienic connections. Mounted on the stand allows easy drainage of the pump.

As pump is intended for hygienic applications it is available with all required certificates:



### **FDA §21 CFR 177 materials**

FDA (U.S. Food and Drug Administration) §21 CFR 177 lists polymers, e.g. rubber and plastic materials approved for equipment in contact with food products.

### **EN 10204**

#### **EN 10204 material traceability**

The EN 10204 norm gives you a checklist and traceability of materials used in the equipment. 2.1 is a general statement of compliance with material specifications, while 3.1 provides specific track records all the way to the steel mill batch (normally only on metals in contact with the product).



#### **EC 1935/2004 regulation**

This EU regulation applies to all food contact materials, e.g. metals, plastics and rubber materials. It requires that these materials are safe, are labeled with the glass-and-fork symbol, are traceable throughout the production chain (according to above EN 10204) and that they are produced according to good manufacturing practice (GMP).



#### **CE conformance**

A product classified as machinery that carries the CE mark fulfill the essential health and safety requirements of the EC Machinery Directive 2006/42/EEC.



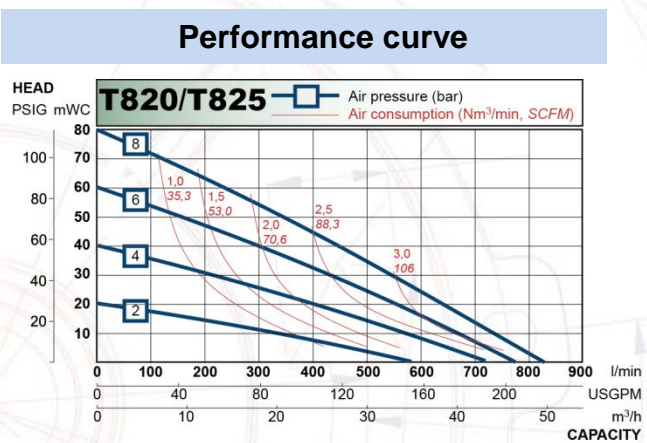
**Features & benefits:**

- Easy cleaning and draining - designed for CIP and SIP cleaning
- Gentle pumping - no damage of sensitive products
- Hygienic surfaces - housings made from glass blasted stainless steel AISI 316L, Ra>1,6 (standard) or Ra 0.8 on request
- Wide range of connection types available: TriClamp, sanitary threads (DIN, SMS) etc.

**Typical applications**

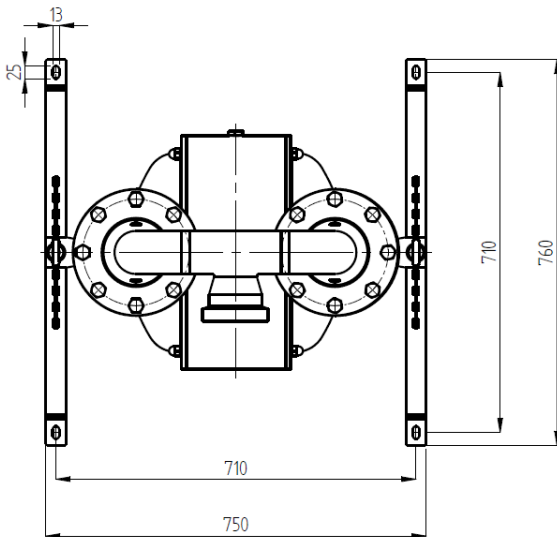
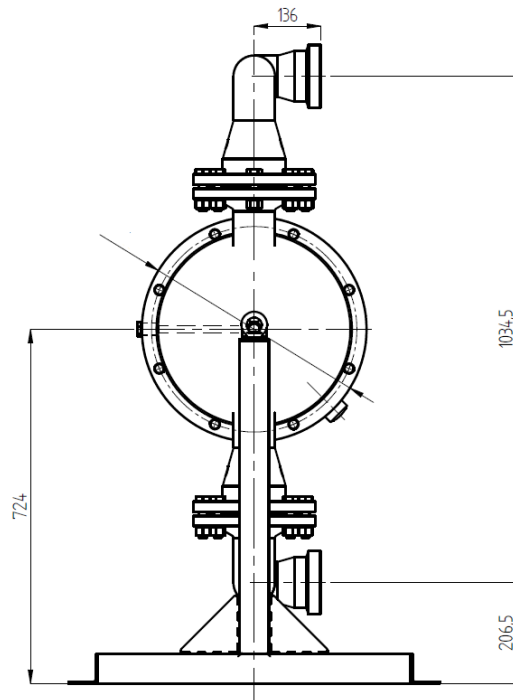
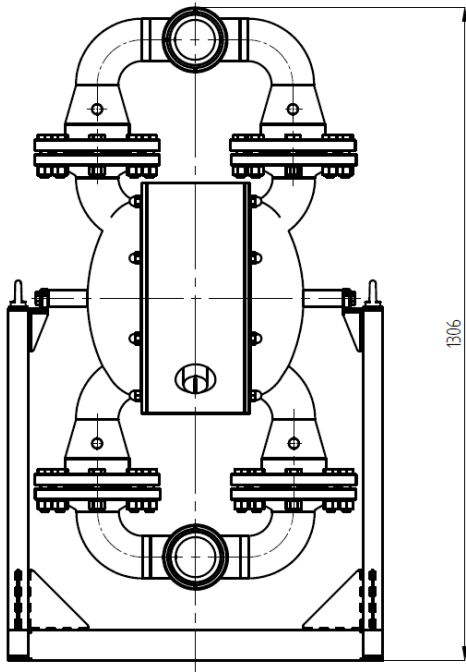
- **Food & dairy:** Soup, cream, syrup, dairy products, flavoring, alcohol, chocolate, paste
- **Pharmaceutics & cosmetics:** Cream, paste, alcohol and filtration gel

Data	
<b>Model</b>	T825 S
<b>Max flow</b>	820 l/min
<b>Max pressure</b>	8 bar
<b>Max air pressure</b>	8 bar
<b>Dry suction lift</b>	4 m
<b>Max solid size</b>	mm, bigger if soft
<b>Temperature</b>	-20° .... +110°C (temporary higher)
<b>Weight</b>	133 kg
<b>Connections</b>	Triclamp (standard), SMS, DIN



Materials and options	
Housing, Manifolds	AISI 316L, Ra<1,6; Ra 0,8 on request
Diaphragms	PTFE (FDA) EPDM (FDA)
Valves (ball type)	PTFE (FDA) EPDM (FDA on request)
Gaskets	PTFE (FDA)

Overall dimensions:



## New options of SiC/SiC mechanical seal – – no bonding effect!



Tapflo Group is proud to announce that new solutions of mechanical sealing have been implemented in **CT pumps**. New mechanical seal options are applied to prevent bonding effect causing increased wear or even cracking.

Tapflo meets the expectation of the market, therefore offer you three new options providing varying degrees of protection of mechanical seals.

### DID YOU KNOW?

#### Adhesion

Did you know that well known issue – bonding is caused due to adhesion effect ?

Adhesion - The molecular force of attraction in the area of contact between unlike bodies that acts to hold them together. The measure of adhesion is work per unit area that shall be followed to disconnect surfaces.

**Bonding effect is caused by:**

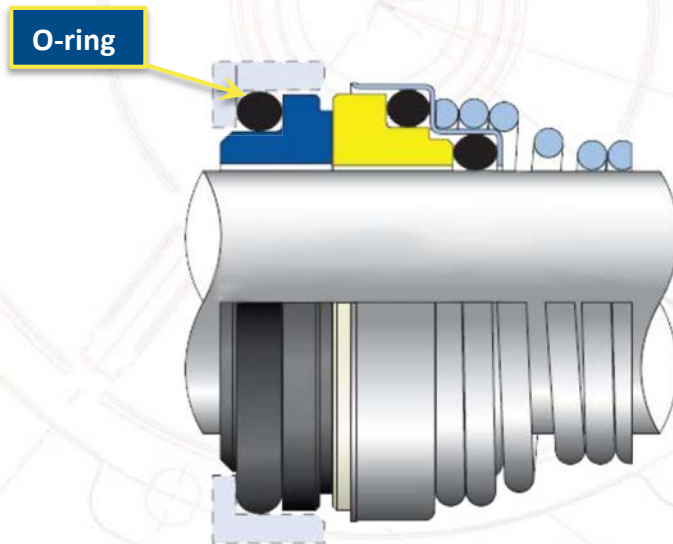
- Same hardness materials,
- dry running,
- periodical pump operation,
- crystalizing or adhesive medium,
- greasy surfaces – during assembly.

**Features:**

- New options allow to keep chemical resistance of silicon carbide,
- slightly different assembly,
- new mechanical seals are fully interchangeable.

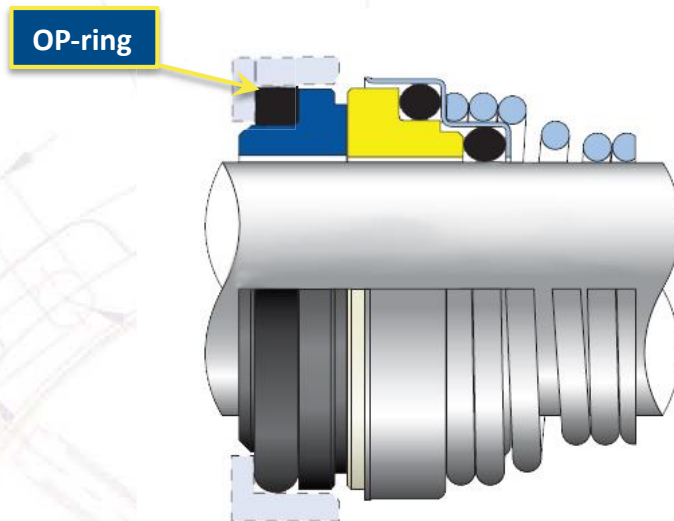
**4 available options:**

- Standard SiC/SiC seal with O-ring

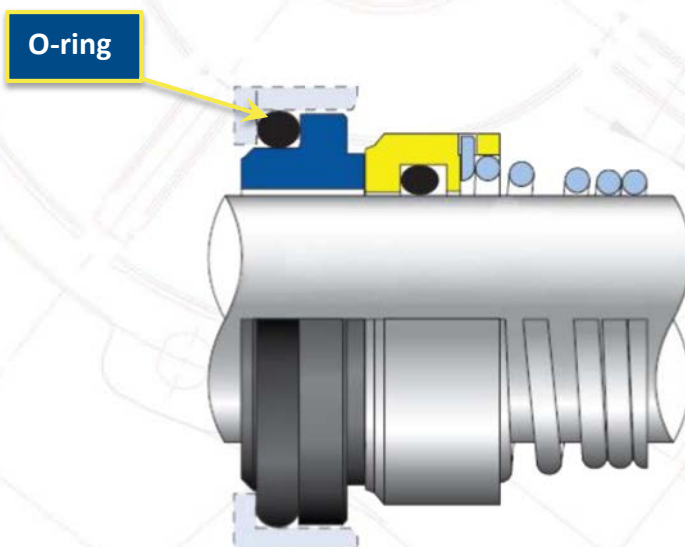




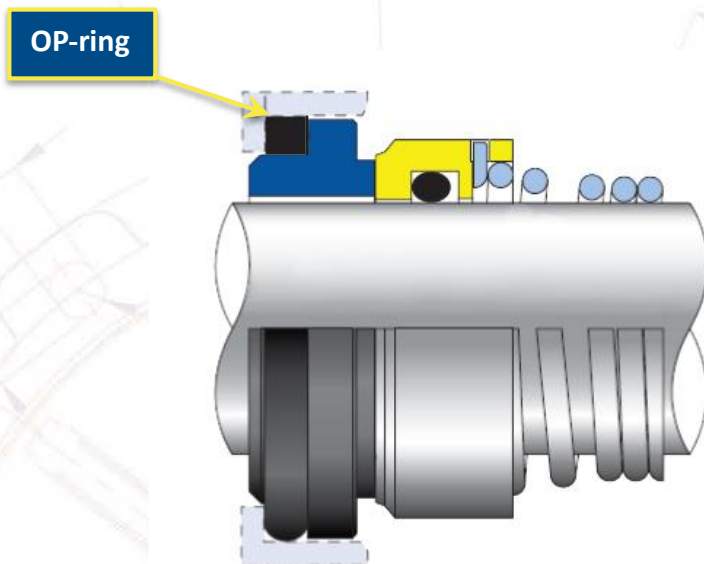
- SiC/SiC seal with OP-ring increasing friction surface between static part and back casing, therefore causing adhesion counteraction force big enough to prevent bonding.



- SiC/SiC with different hardness of static and dynamic part J/D – Different hardness reduces adhesion between static and dynamic part



- SIC/SIC J/D with different hardness of static and dynamic part OP-ring – This option is for most demanding customers. Different hardness together with OP-ring provides greatest reliability.



**Pump and spare parts code:**

**Pump special execution:** If you decide to order a pump with special mechanical seal execution please use 2P, 2J, 2K in the pump code, e.g. **CT CC 1SSV2K-22**. Codification:

- No sign – standard mechanical seal with O-ring
- 2P – standard mechanical seal with OP-ring elements
- 2J - different hardness of static and dynamic seal parts – J/D with O-ring (SiC/SiC only)
- 2K - different hardness of static and dynamic seal parts – J/D with OP-ring (SiC/SiC only)

**Spare parts:** If you already have the pump, yet you decide to acquire special execution of mechanical seal or the seal in your pump got worn, when ordering use below Tapflo codes:

*Example – SiC/SiC/FKM mechanical seal = **5-340-153***

- **5-340-153P** – mechanical seal with OP-ring
- **5-340-153J** – mechanical seal – J/D with O-ring
- **5-340-153K** – mechanical seal – J/D with OP-ring

**Materials:**

- **151** – SiC/SiC/NBR
- **153** – SiC/SiC/Viton
- **154** – SiC/SiC/EPDM
- **158** – SiC/SiC/(FEP/silicone)

All materials available with FDA certificate

## New CAMLOCK connections for Metal series AODD pumps



As an option for Metal series diaphragm pumps you can order them with CAMLOCK connections. Their simple structure and easy operation make them very popular. CAMLOCK connections are made in compliance with MIL-C-27487 (A-A-59326) specification.

The coupling is connected by simply opening the coupler arms and inserting the adaptor into the coupler. The camlock arms are then closed under normal hand pressure to complete the joint.

### Materials:

- The couplings can be made of: aluminium and stainless steel AISI 316.
- Handles are made of stainless steel AISI 304 as a standard for all couplings made of stainless steel. Aluminium couplings are available with stainless steel handles in sizes 1/2", 3/4", 1" and brass handles in sizes 1.1/2" and 2".
- The standard coupling is supplied with a nitrile rubber or PTFE/nitrile rubber seal placed in the groove of a coupler.

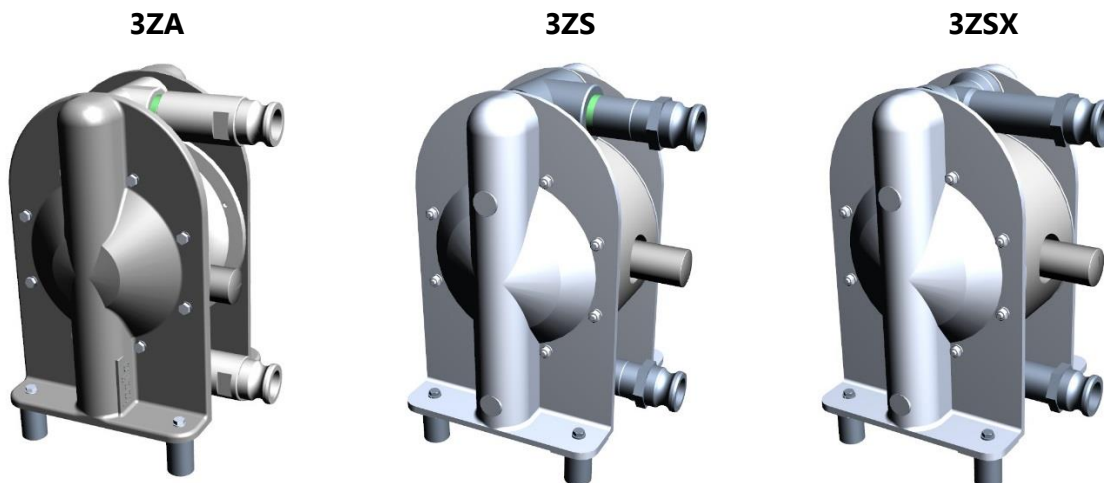


**Ordering:**

**1. Pump special execution:** If you decide to order a pump with **CAMLOCK** please use **3ZA, 3ZS** or **3ZSX** at the end of the pump code, e.g. **T120 STT-3ZS**.

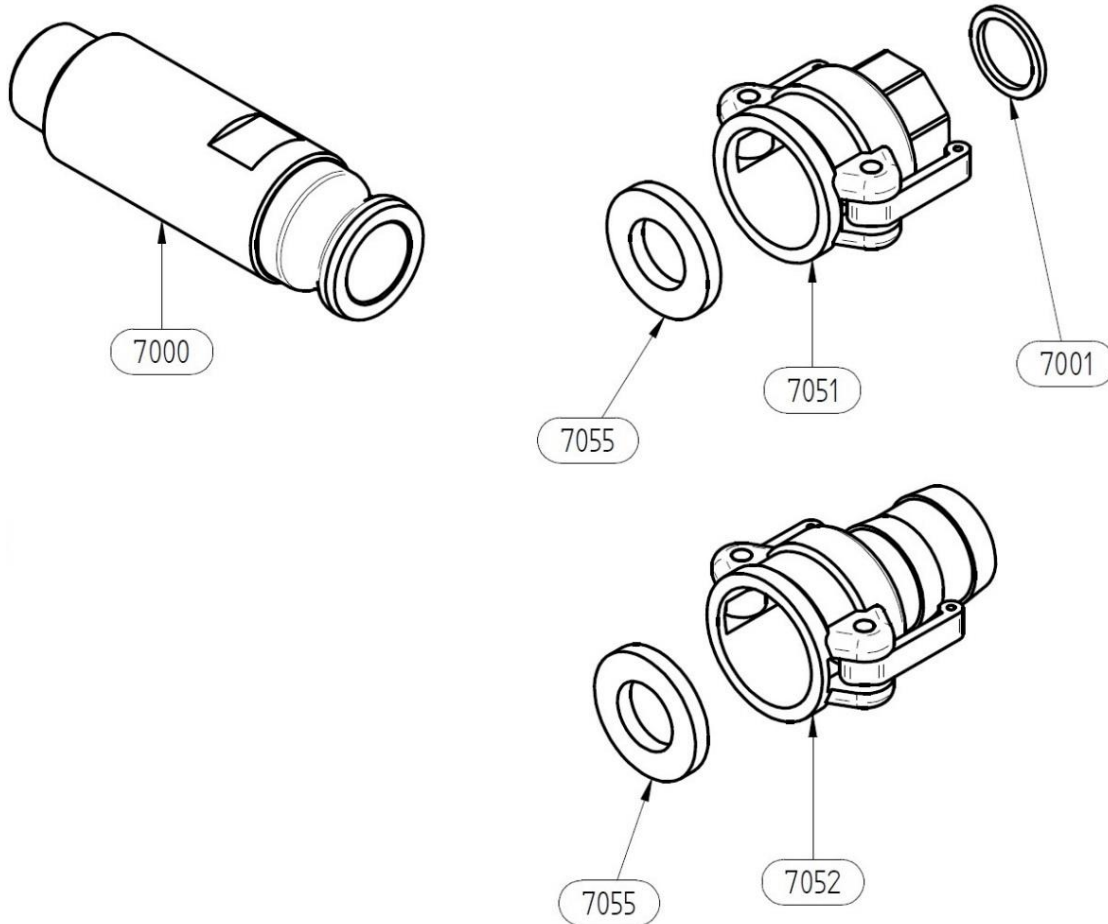
- **3ZA – CAMLOCK connection made of aluminium.** This execution features male part of coupler screwed in pumps manifold.
- **3ZS – CAMLOCK connection made of stainless steel.** This execution features male part of coupler screwed in pumps manifold.
- **3ZSX – Manifolds integrated with CAMLOCK connection made of stainless steel.** This execution features male CAMLOCK coupling as a one piece with manifold (welded).

**NOTE!** As a standard Tapflo pumps with this special execution do not have counter connections. You can also order them by Tapflo. The counter connections are available with hose and thread connection for aluminum camlocks and hose, thread and plain weld end for stainless steel camlocks.



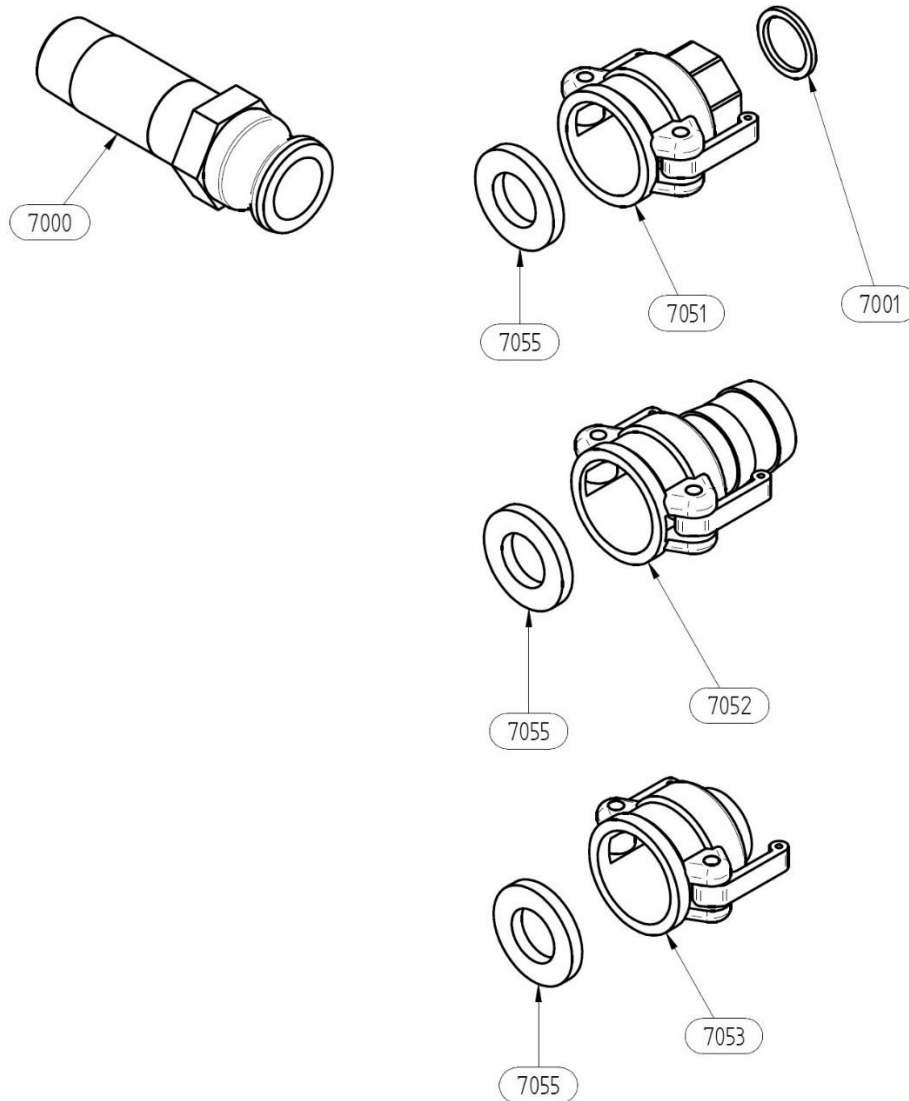
**2. CAMLOCK connections without pump:** If you already have the pump, yet you decide to change the connections, when ordering use below **Tapflo codes:**

➤ **Aluminium AODD – Screwed male CAMLOCK**



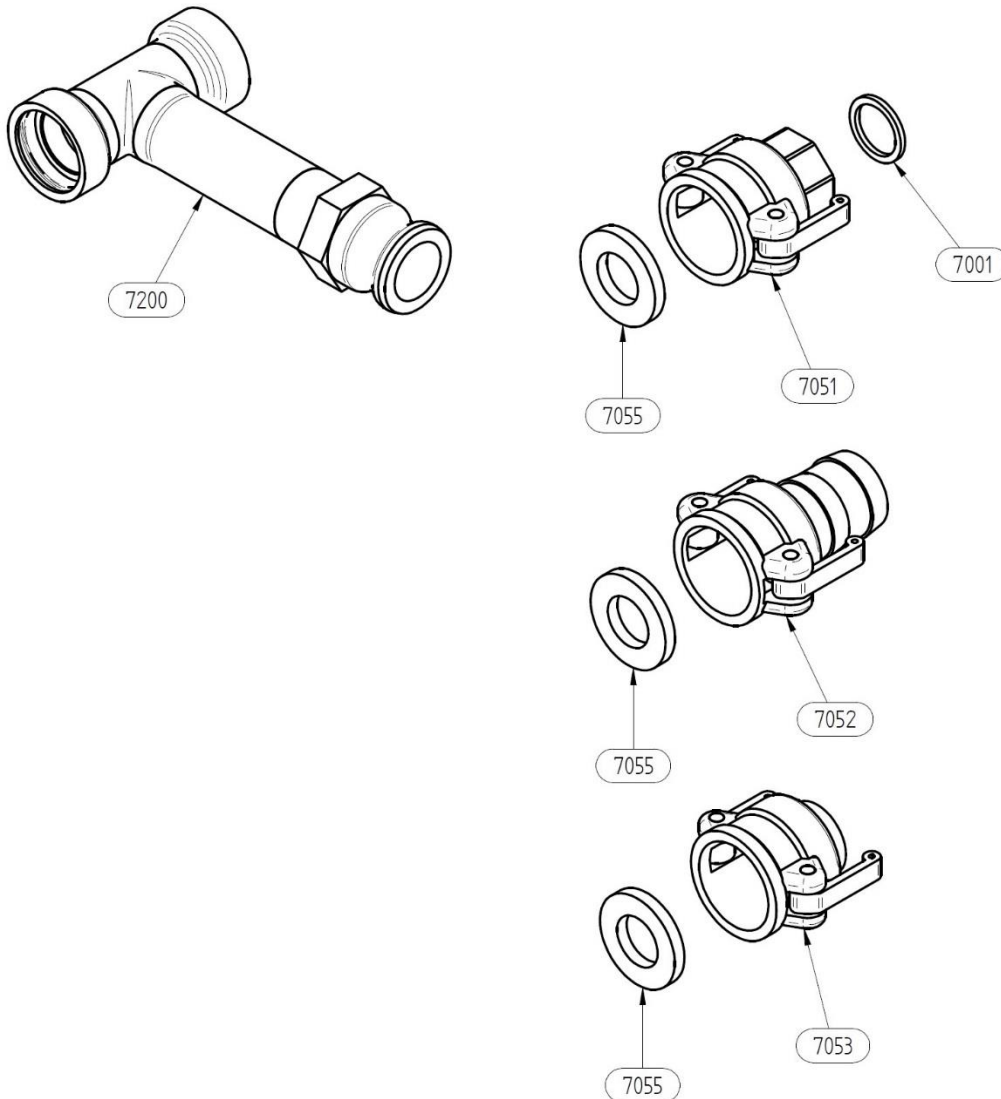
Pump type	Coupling BSP Thread	Material	Tapflo code for CAMLOCK (screwed in pump)	Tapflo code for counter connection	Connection type of counter connection
<b>T25 A</b>	1/2"	ALU	<b>6-025-7000</b>	<b>6-070-7051</b>	Screwed
				<b>6-070-7052</b>	Hose
<b>T70 A</b>	3/4"	ALU	<b>6-070-7000</b>	<b>6-070-7051</b>	Screwed
				<b>6-070-7052</b>	Hose
<b>T120 A</b>	1"	ALU	<b>6-120-7000</b>	<b>6-120-7051</b>	Screwed
				<b>6-120-7052</b>	Hose
<b>T220 A</b>	1 1/2"	ALU	<b>6-220-7000</b>	<b>6-220-7051</b>	Screwed
				<b>6-220-7052</b>	Hose
<b>T420 A</b>	2"	ALU	<b>6-420-7000</b>	<b>6-420-7051</b>	Screwed
				<b>6-420-7052</b>	Hose

➤ **Stainless steel AODD – screwed male CAMLOCK**



Pump type	Coupling BSP Thread	Material	Tapflo code for CAMLOCK (screwed in pump)	Tapflo code for counter connection	Connection type of counter connection
<b>T70 S</b>	3/4"	AISI 316L	<b>6-072-7000</b>	<b>6-072-7051</b>	Screwed
				<b>6-072-7053</b>	Welded
				<b>6-072-7052</b>	Hose
<b>T120 S</b>	1"	AISI 316L	<b>6-122-7000</b>	<b>6-122-7051</b>	Screwed
				<b>6-122-7053</b>	Welded
				<b>6-122-7052</b>	Hose
<b>T220 S</b>	1 1/2"	AISI 316L	<b>6-222-7000</b>	<b>6-222-7051</b>	Screwed
				<b>6-222-7053</b>	Welded
				<b>6-222-7052</b>	Hose
<b>T420 S</b>	2"	AISI 316L	<b>6-422-7000</b>	<b>6-422-7051</b>	Screwed
				<b>6-422-7053</b>	Welded
				<b>6-422-7052</b>	Hose

➤ **Stainless steel AODD – male CAMOLOCK integrated with manifold**



Pump type	Coupling BSP Thread	Material	Tapflo code for manifold integrated with CAMLOCK	Tapflo code for counter connection	Connection type of counter connection
<b>T70 S</b>	3/4"	AISI 316L	<b>6-72-7200</b>	<b>6-072-7051</b>	Screwed
				<b>6-072-7053</b>	Welded
				<b>6-072-7052</b>	Hose
<b>T120 S</b>	1"	AISI 316L	<b>6-122-7200</b>	<b>6-122-7051</b>	Screwed
				<b>6-122-7053</b>	Welded
				<b>6-122-7052</b>	Hose
<b>T220 S</b>	1 1/2"	AISI 316L	<b>6-222-7200</b>	<b>6-222-7051</b>	Screwed
				<b>6-222-7053</b>	Welded
				<b>6-222-7052</b>	Hose
<b>T420 S</b>	2"	AISI 316L	<b>6-422-7200</b>	<b>6-422-7051</b>	Screwed
				<b>6-422-7053</b>	Welded
				<b>6-422-7052</b>	Hose



**3. Gaskets:** If gaskets are worn when ordering use Tapflo codes below:

**Gasket between coupling**

Pumps	Size	Material	Tapflo code	Material	Tapflo code
<b>T25 A</b>	3/4"	PTFE/NBR	6-025-7055-1-3	NBR	6-025-7055-3
<b>T70 A/S</b>	3/4"		6-070-7055-1-3		6-070-7055-3
<b>T120 A/S</b>	1"		6-120-7055-1-3		6-120-7055-3
<b>T220 A/S</b>	1 1/2"		6-220-7055-1-3		6-220-7055-3
<b>T420 A/S</b>	2"		6-420-7055-1-3		6-420-7055-3

**Thread gasket**

Pump	Size	Material	Commercial code
<b>T25 A</b>	3/4"	PTFE	6-025-7001-1
<b>T70 A</b>	3/4"		6-070-7001-1
<b>T120 A</b>	1"		6-120-7001-1
<b>T220 A</b>	1 1/2"		6-220-7001-1
<b>T420 A</b>	2"		6-420-7001-1

## New pump carrying handles

We have a pleasure to announce that AOOD pumps are available with new ergonomic design carrying handles . Now it's much easier to carry the pumps by simply screwing the handles to the pump.

The new feature applies to PE & PTFE and Metal series pumps sizes from T50 to T220.

### Materials and finishing

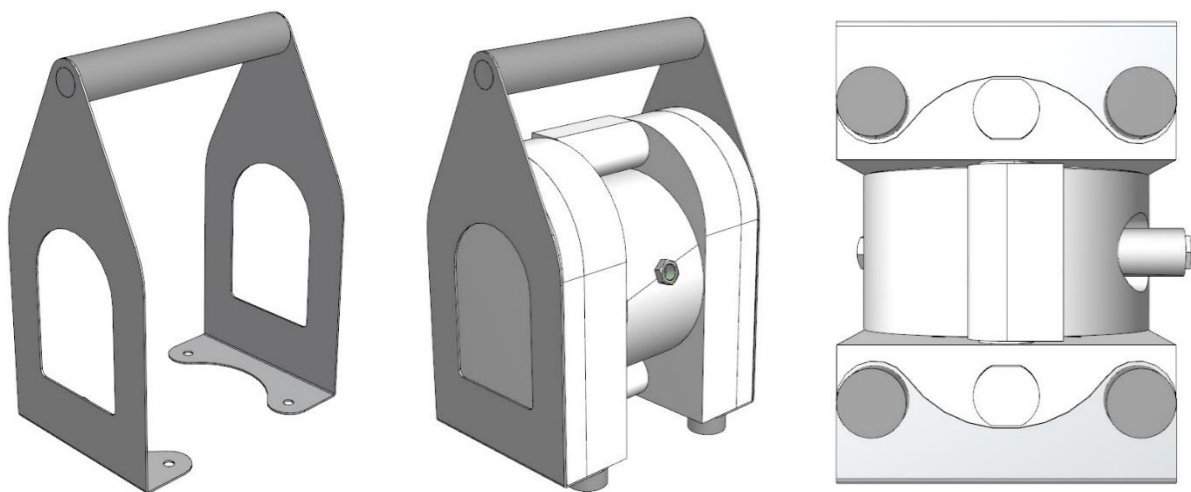
Handles for metal AOOD pumps are made of AISI 304L with Ra 1,6 finish. Pumps with cover come with handles made of PTFE coated stainless steel (AISI 304L).

### Ordering:

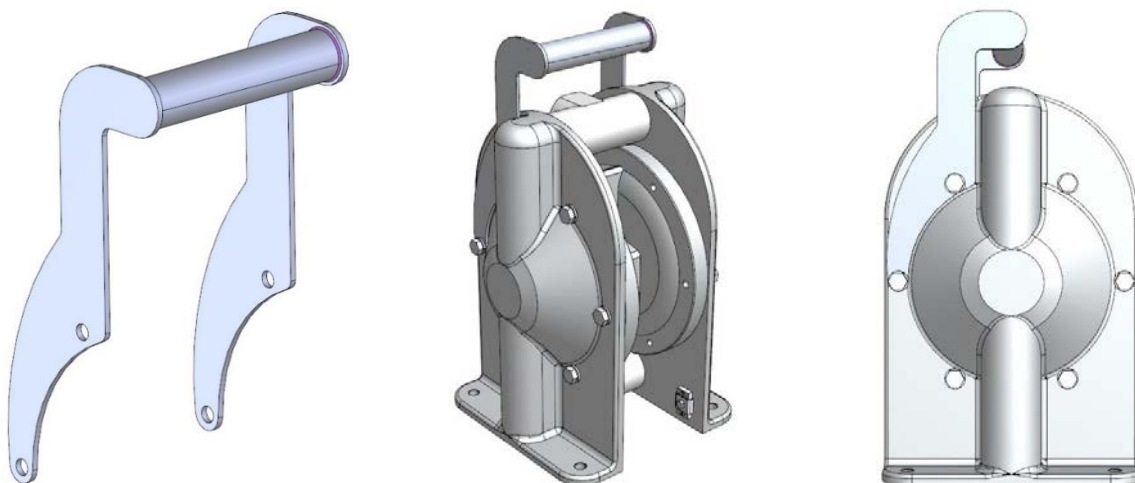
- 1. Pump special execution:** If you decide to order a pump with **Handles** please use **5HA** at the end of the pump code, e.g. **T120 STT-5HA**.

**NOTE!** Although the code for special execution for each series is the same, handles differs by unique design.

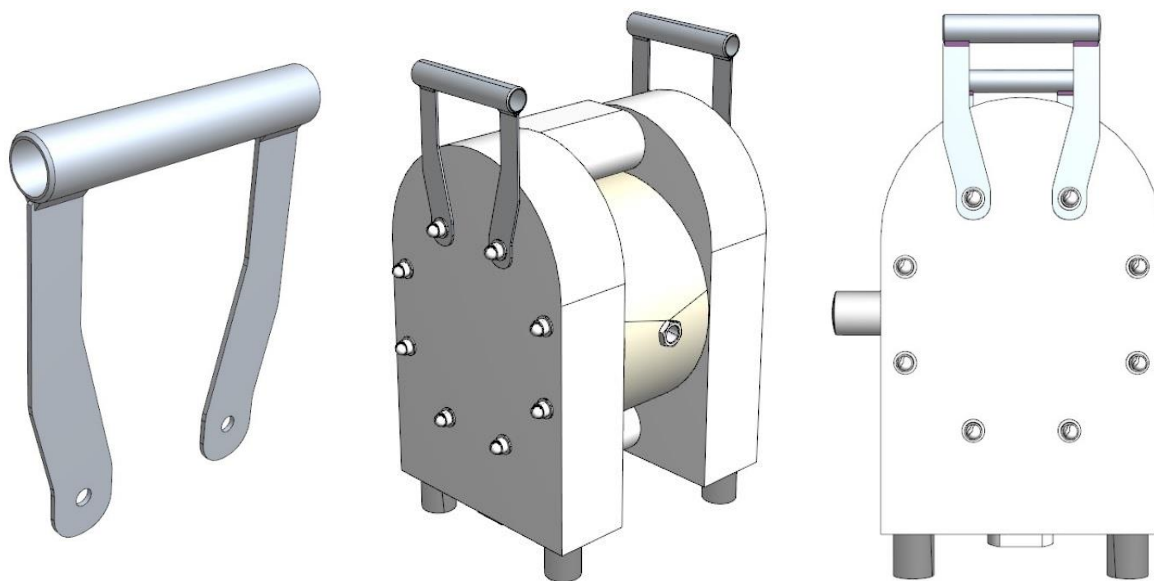
**PTFE pumps (T50-T200); PE pumps with „11SP“ execution (T50-T200)**



**PE & PTFE & Metal pumps (T50, T70, T100, T120)**



**PE & PTFE & Metal pumps (T200, T220)**



## Full range of counter-connections to Sanitary AODD pump range

In order to ease the pump connection with installation Tapflo has added a full range of counter-connections to sanitary pumps. They fit pumps with standard tri-clamp connection as well as optional DIN11851 and SMS connections. On the installation side You can choose plain weld end or hose connection to increase flexibility even more!

The sets are complete and consist of a counter-connection, gasket and nut/clamp.

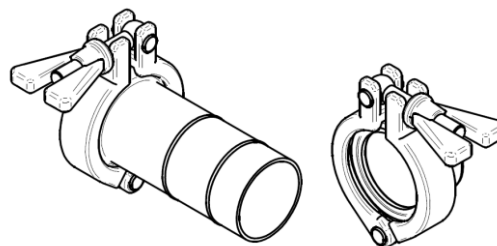
### Materials:

- Connections are made of AISI 316L stainless steel, polished to  $Ra < 1,6$
- Gaskets in PTFE as standard
- Clamps and nuts in AISI 304 stainless steel

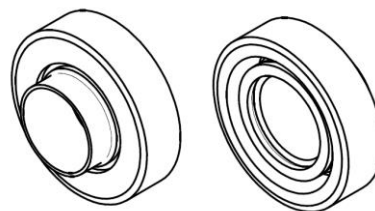
### Types:

There are three basic types of counter connection sets – according to connection standard. Each of them then divides into two depending on the counter connection type – prepared for welding or hose connection.

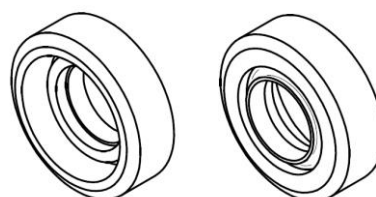
Tri-clamp  
SMS 3017 / ISO 2037



DIN 11851



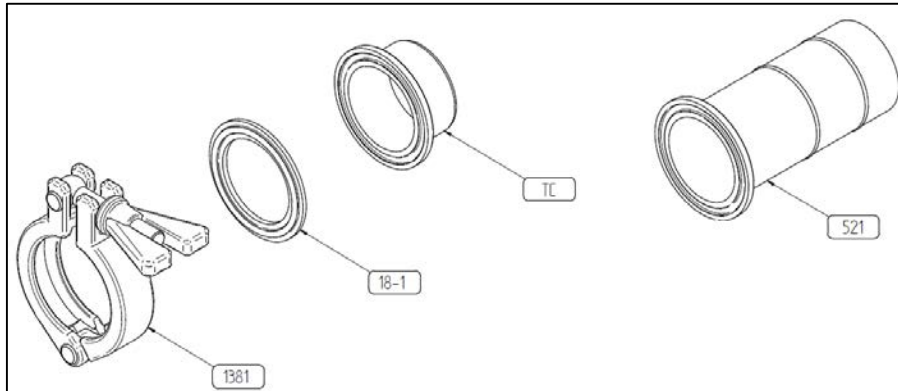
SMS 1145





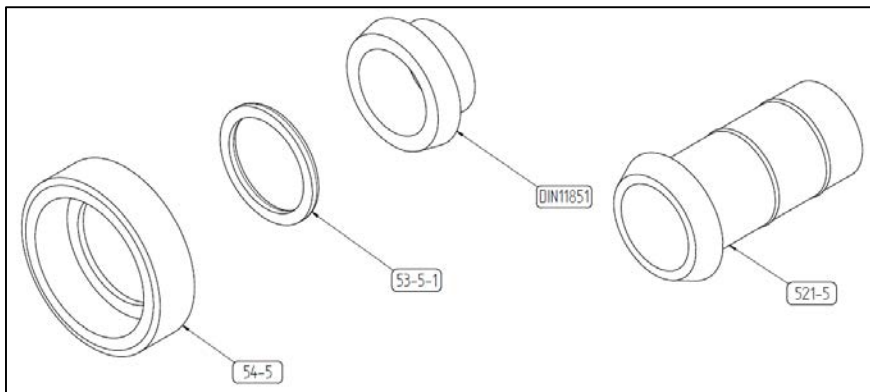
Ordering:

1. Tri-clamp SMS 3017 / IOS 2037



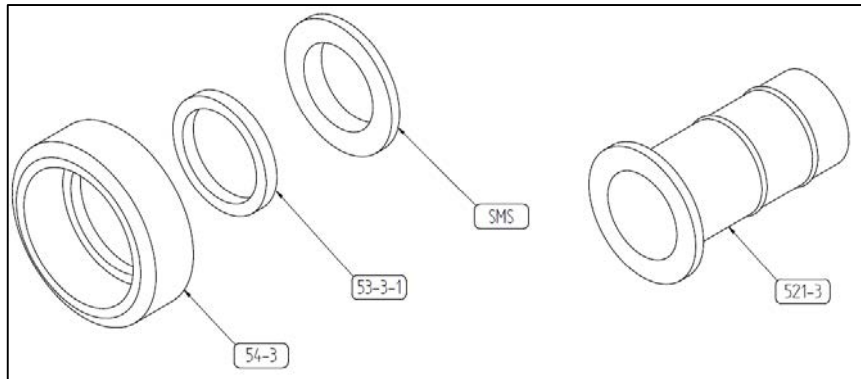
Pump type	Norm	Size	Clamp	Gasket	Counter-connection	SET	Connection type
T30 / T80	SMS 3017	DN25	6-080-1381	6-080-18-1	6-080-511	<b>6-080-51</b>	Weld
					6-080-521	<b>6-080-52</b>	Hose
T125	SMS 3017	DN38	6-125-1381	6-125-18-1	6-125-511	<b>6-125-51</b>	Weld
					6-125-521	<b>6-125-52</b>	Hose
T225	SMS 3017	DN51	6-225-1381	6-225-18-1	6-225-511	<b>6-225-51</b>	Weld
					6-225-521	<b>6-225-52</b>	Hose
T425	ISO 2037	DN70	6-425-1381	6-425-18-1	6-425-511	<b>6-425-51</b>	Weld
					6-425-521	<b>6-425-52</b>	Hose

2. Thread DIN 11851



Pump type	Norm	Size	Nut	Gasket	Counter-connection	SET	Connection type
T30 / T80	DIN 11851	DN25	6-080-54-5	6-080-53-5-1	6-080-511-5	<b>6-080-51-5</b>	Weld
					6-080-521-5	<b>6-080-52-5</b>	Hose
T125	DIN 11851	DN40	6-125-54-5	6-125-53-5-1	6-125-511-5	<b>6-125-51-5</b>	Weld
					6-125-521-5	<b>6-125-52-5</b>	Hose
T225	DIN 11851	DN50	6-225-54-5	6-225-53-5-1	6-225-511-5	<b>6-225-51-5</b>	Weld
					6-225-521-5	<b>6-225-52-5</b>	Hose
T425	DIN 11851	DN65	6-425-54-5	6-425-53-5-1	6-425-511-5	<b>6-425-51-5</b>	Weld
					6-425-521-5	<b>6-425-52-5</b>	Hose

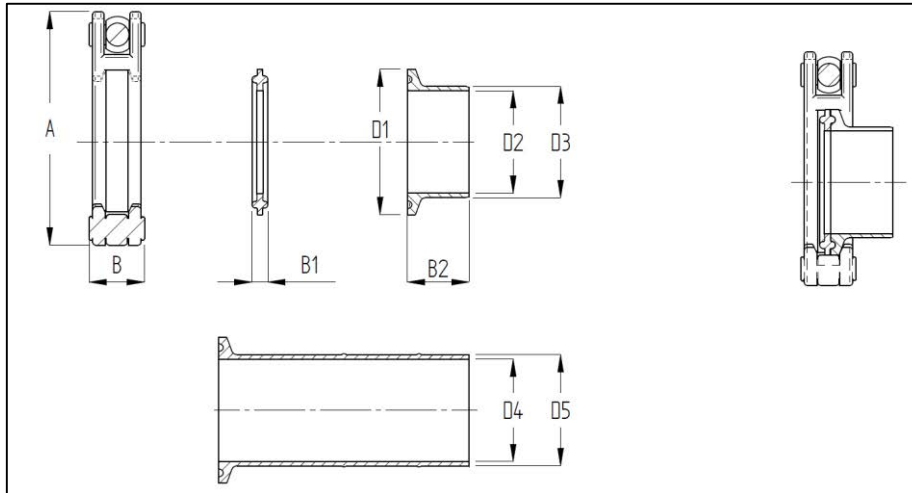
3. Thread SMS 1145



Pump type	Norm	Size	Nut	Gasket	Counter-connection	SET	Connection type
T30 / T80	SMS 1145	1"	6-080-54-3	6-080-53-3-1	6-080-511-3	<b>6-080-51-3</b>	Weld
					6-080-521-3	<b>6-080-52-3</b>	Hose
T125	SMS 1145	1.1/2"	6-125-54-3	6-125-53-3-1	6-125-511-3	<b>6-125-51-3</b>	Weld
					6-125-521-3	<b>6-125-52-3</b>	Hose
T225	SMS 1145	2"	6-225-54-3	6-225-53-3-1	6-225-511-3	<b>6-225-51-3</b>	Weld
					6-225-521-3	<b>6-225-52-3</b>	Hose
T425	SMS 1145	2.1/2"	6-425-54-3	6-425-53-3-1	6-425-511-3	<b>6-425-51-3</b>	Weld
					6-425-521-3	<b>6-425-52-3</b>	Hose

Dimensions:

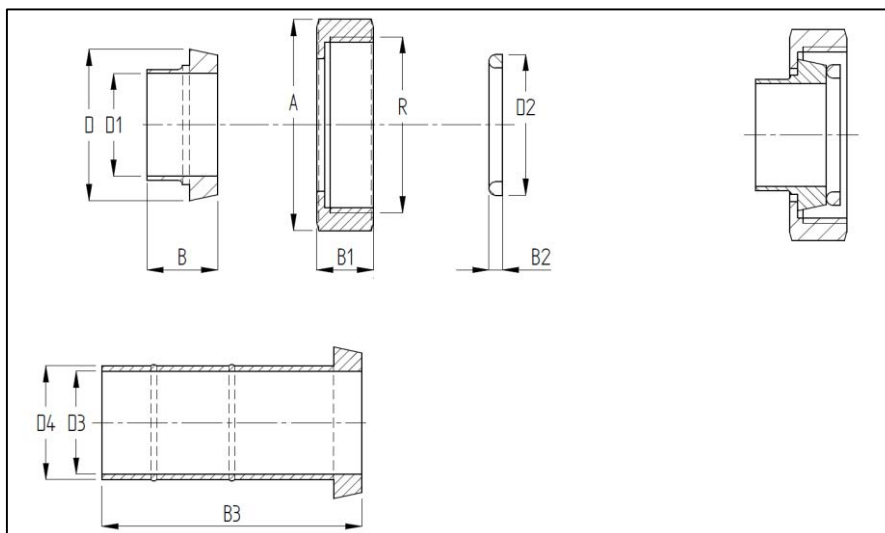
1. Tri-clamp SMS 3017 / IOS 2037



Pump type	A	B	B1	B2	D1	D2	D3	D4	D5
T30 / T80	81	19	5.5	21.5	50.5	22.6	25.6	22.6	25.6
T125	81	19	5.5	21.5	50.5	35.6	38.6	35.6	38.6
T225	94	19	5.5	21.5	64	48.6	51.6	48.6	51.6
T425	121	19	5.5	21.5	91	66.8	70	66.8	70

All dimensions in mm, if not indicated otherwise.

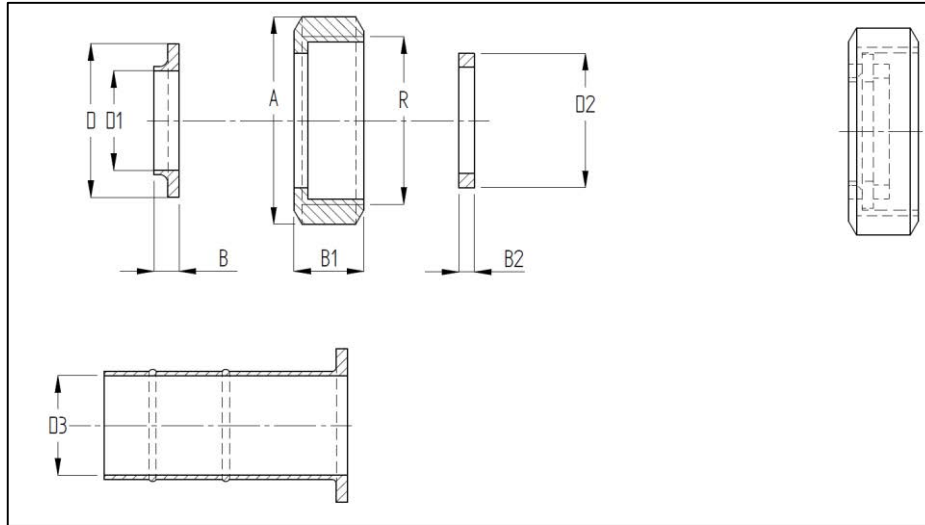
2. Thread DIN 11851



Pump type	A	B	B1	B2	B3	D	D1	D2	D3	D4	R
T30 / T80	63	22	21	5	87	44	26	40	26	29.5	Rd52x1/6"
T125	78	26	21	5	96	56	38	52	38	42	Rd65x1/6"
T225	92	28	22	5	101	68.5	50	64	50	54	Rd78x1/6"
T425	112	32	25	5	137	86	66	81	66	72	Rd95x1/6"

All dimensions in mm, if not indicated otherwise.

3. Thread SMS 1145



Pump type	A	B	B1	B2	D	D1	D2	D3	R
T30 / T80	51	7.5	20	5.5	35.5	22.6	32	22.6	40x1/6"
T125	74	9	25	5.5	55	65.6	48	35.6	60x1/6"
T225	84	9	26	5.5	65	48.6	61	48.6	70x1/6"
T425	100	9	30	5.5	80	60.3	73.5	60.3	85x1/6"

All dimensions in mm, if not indicated otherwise.