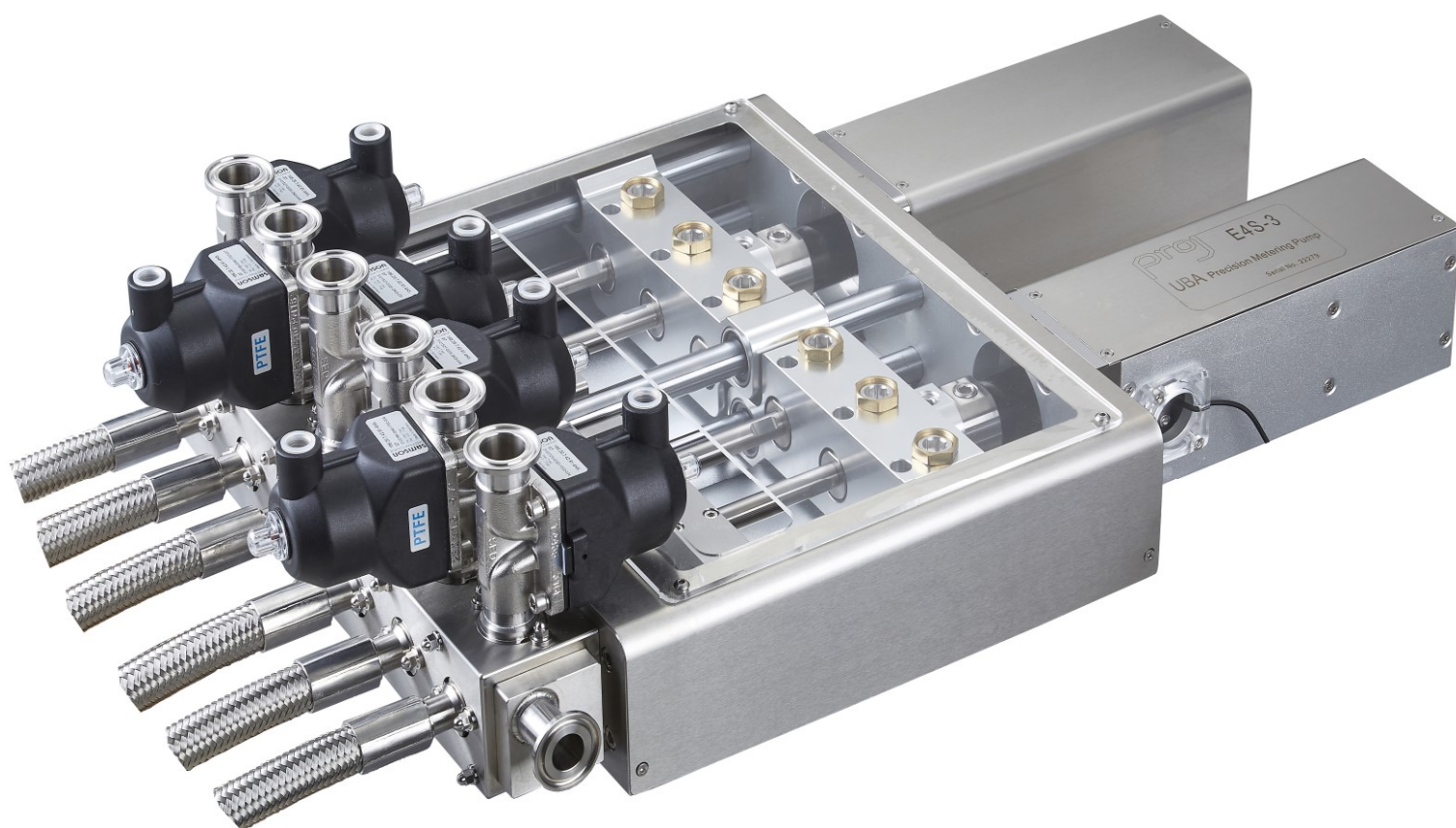


Dispensing Pump with CIP Function

In order to clean all product contact parts and internal passage without disassembling the pump, we supply special CIP function pumps for most series of UBA pump.

CIP function can be applicable to Servo drive pump and pneumatic drive pump; to check valve type pump, rotary valve type pump and diaphragm / bellows valve type pump; to single head pump and multiple head pump.



Features and Performances

- During working mode, the pumps operate as regular metering pumps to fill products with same function and accuracy performance.
- * During CIP mode, cleaning liquid is pressured filled into the inlet port of dispensing pump. All product contact parts, like plunger sleeve, plunger seal and pump head, can be washed and rinsed fully by cleaning liquid. No need to remove any pump part.
- * SIP (Steam Cleaning) can be applicable up to 120 degree Celsius.



AK TRADING COMTECH
5Bis Rue Louis Breguet
49250 Beaufort en Anjou
Tel +33 (0)1 78 05 47 14
contact@aktrading-france.fr

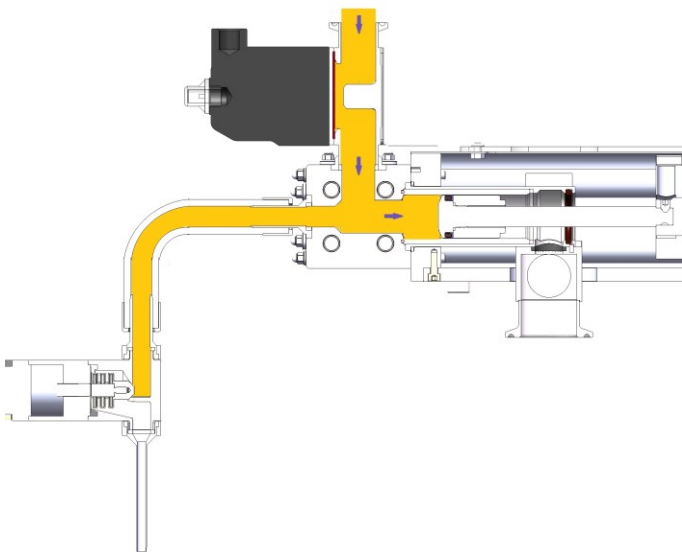
Type of CIP Dispensing Pump

In order to have CIP function, we make plunger stroke $\frac{1}{2}$ " to 1" longer than the working stroke. The front stroke section is for dispensing stroke; the rear stroke section is for CIP stroke.

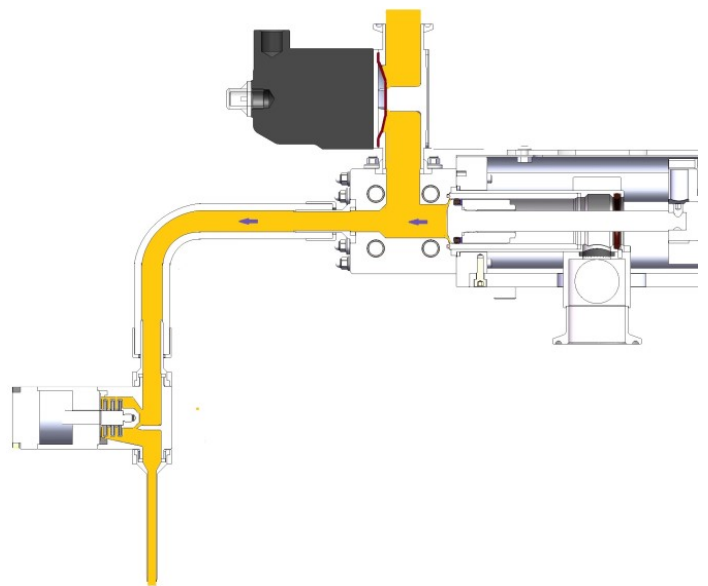
In CIP mode, the plunger is pulled backward until the plunger seal out of the plunger sleeve. Cleaning liquid can rinse the complete plunger seal and flow out from discharge port. See the below working principle of three types of CIP pump.

Diaphragm valve / Bellow Valve Pump

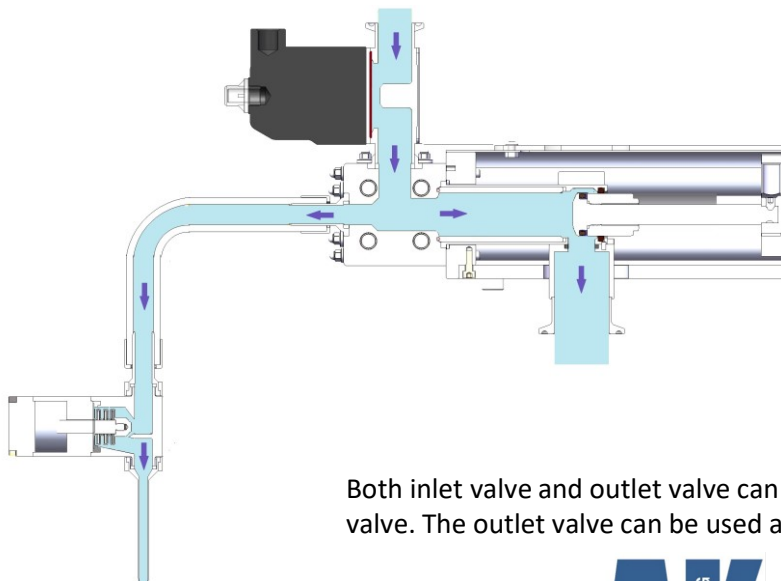
Working Mode: Inlet valve open, outlet valve close, plunger move backward to suck product in.



Working Mode: Inlet valve close, outlet valve open, plunger move forward to push product out.



CIP Mode: Both inlet valve and outlet valve open, plunger move backward to end where the plunger seal is out of plunger sleeve. Cleaning liquid rinse inside the pump and flow out from both outlet port and discharge port.



Both inlet valve and outlet valve can be diaphragm valve or bellow valve. The outlet valve can be used as shut-off nozzle valve .

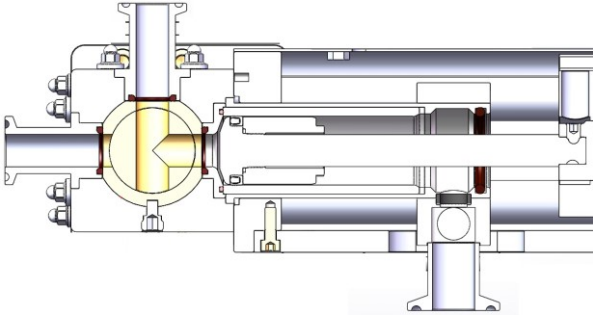


AK TRADING COMTECH
5Bis Rue Louis Breguet
49250 Beaufort en Anjou
Tel +33 (0)1 78 05 47 14
contact@aktrading-france.fr

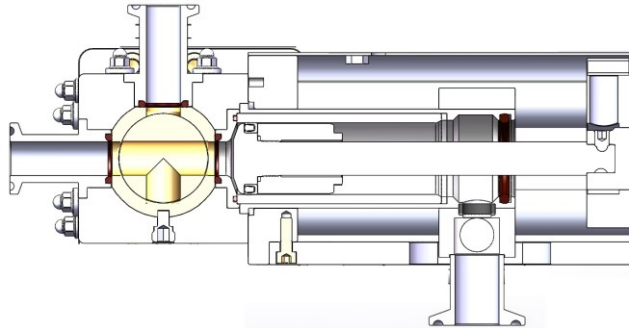
Type of CIP Dispensing Pump

Rotary Valve Pump

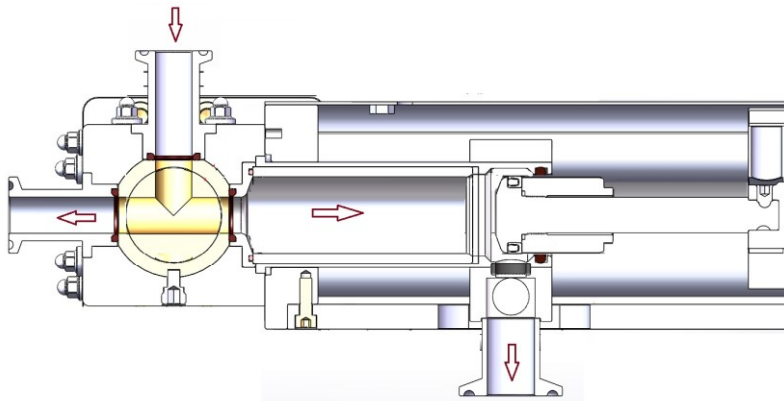
Rotary valve spool can be turned in 90 degree or 180 degree. During working stroke, the valve spool turn 90 degree to either inlet or outlet port. During CIP mode, the valve spool turn 180 degree to open both inlet port and outlet port.



Working Mode: Valve pool turn to inlet position, plunger move backward to suck product in.

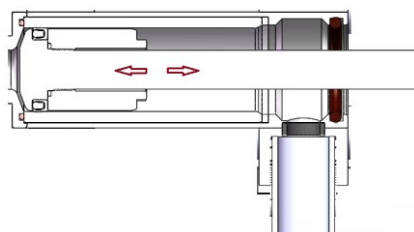
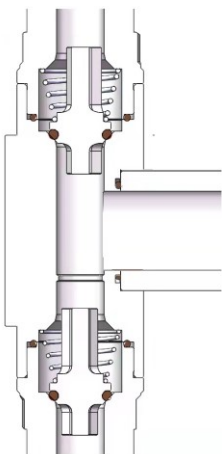


Working Mode: Valve pool turn to outlet position, plunger move forward to push product out.

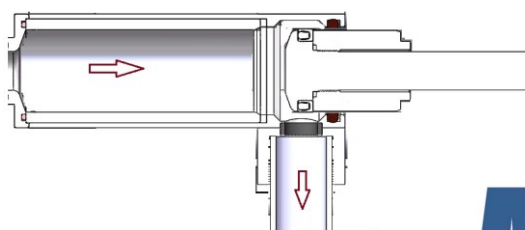


CIP Mode: The valve turn to the position where both inlet port and outlet port are open. The plunger move backward to end position where the plunger seal is out of plunger sleeve. Cleaning liquid rinse inside the pump and flow out from both outlet port and discharge port. Cleaning liquid rinse inside the pump and flow out from both outlet port and discharge port.

Check Valve Pump



Working Mode: Plunger move forward & backward within the working stroke.



CIP Mode: Plunger is pulled backward to end, where the plunger seal is out of plunger sleeve. Cleaning liquid flow into from pump inlet and flow out form pump outlet and discharge port.



AK TRADING COMTECH
5Bis Rue Louis Breguet
49250 Beaufort en Anjou
Tel +33 (0)1 78 05 47 14
contact@aktrading-france.fr

CIP Model and Application

CIP function dispensing pumps are designed for special application case to case. We have provided the above type of CIP pump for different applications, which include milk, cheese, syrup, hair conditioner.

CIP working mode use about $\frac{1}{2}$ " to 1" stroke from the overall stroke of pump, so the actual dispensing volume range is less than the nominal volume of same size of pump. For instant, the dispensing volume of P3-D20 is 0-30ml, but the dispensing volume of P3-D20CIP is 0-20ml.

To switch working mode to CIP mode for Pneumatic model CIP pumps, a manual setting is required to make micrometer volume adjustor in the maximum stroke position. After CIP to switch back to working mode, it need a manual re-set the filling volume.

Servo model CIP pump can be switched between CIP mode and working mode by Servo control.

