### **Plate Filter**

- ASME Code design
- Automatic filter control
- With venture nozzle and self-medium backwash
- Timer and differential pressure control with indicator for in-line adjustment
- Electric or pneumatic backwash valve
- Filter housing Steel with epoxy coating and stainless steel 304, 316L, etc.
- Element-slotted sieve construction for resisting even high differential pressure. stainless steel 304, 316L, etc.



## Model of operation

The raw water enters the filter through the inlet flange, then passes through the filter element and leaves the filter on the clean water side. Dirt particles coarser than the chosen filter fineness are retained. Due to the water velocity in the filter housing and the titled element the dirt particles are carried to the dirt collecting area in the lowest part of the housing.



#### **Backwash process**

A differential pressure measurement between raw water inlet and clean water outlet determines the degree of pollution on the filter element. At a defined differential pressure the backwash process is activated. Additionally an adjustment time lag relay in the electric control permits the start of the backwash process.

The filter cleaning starts off with opening of the motor driven backwash valve. Due to venturi nozzle design, during backwash process high velocity of flow will be created, the dirt particles in the dirt collecting area are flushed out of filter.

According to the rule of Bernoulli an undepressure develops before the filter element opposite to the filtration direction. Thus dirt particles are flushed from of the filter element through the backwash water outlet.

After 10-20 seconds the backwash process is finished and the backwash closes automatically. During backwashing the filtration process is not interrupted.



#### **Power supply**

110/220 / 380/440 VAC , 50/60 HZ , single or three phase Enclosure class : Standard IP 56 or upon requested Minimum / Maximum pressure : 2 / 10 Barg Temperature range : 0- 50°C or upon requested





# K-Flow Engineering Co., Ltd

Web Site : www.kffilters.com.tw Address : No. 120-1, Niaosong 3rd. Street, Yongkang District, Tainan City 71042, Taiwan, R.O.C. Phone : 06-2423111 E-mail:kflow@seed.net www.kffilters.com.tw