

Cyclone Separator (Plan31)

DESCRIPTION

Cyclone separator is a device used to supply a clean fluid to the seal in services where the process fluid contains solid particles. It is mainly used in water-based services (e.g. wastewater circulation systems, seawater applications, etc.). A small part of the flow from the pump discharge is directed to the cyclone separator and then splitted into two flows: clean one, which is directed towards the stuffing box, and a "dirty" one, which is directed to pump suction.

The highest filtration efficiency is obtained when the specific gravity of solid particles is at least double than the one of the process fluid and the differential pressure between the discharge and the stuffing box is high, but still within the recommended range.



CONSTRUCTION FEATURES

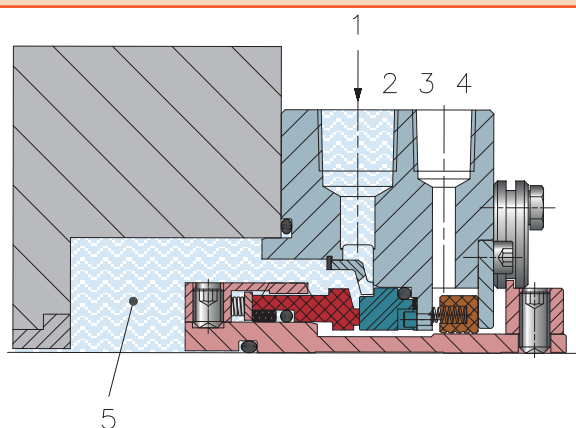
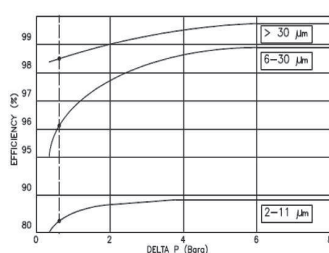
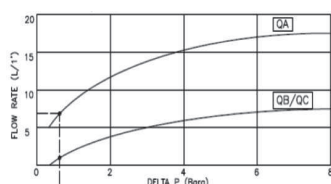
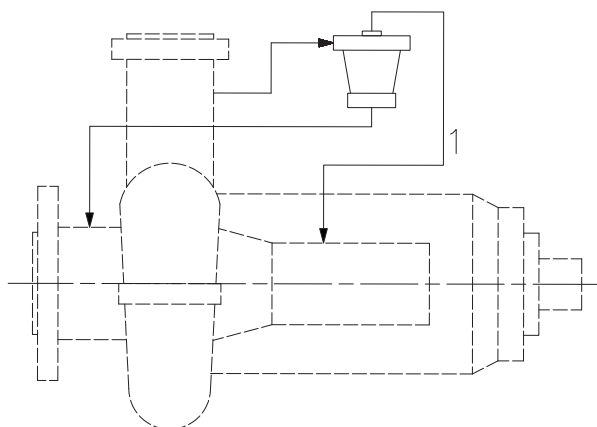
- Different materials available:
- 316
- Duplex
- Super Duplex
- Available in NPT or flanged version

MAIN FUNCTIONS

- Maintaining stuffing box cleanliness, while removing an important amount of heat generated by the seal.
- It can be used for stuffing box venting purposes, thus reducing the possibility of seal faces dry running (horizontal pumps).
- It can help to maintain the correct stuffing box pressurization level, reducing the chances of process fluid vaporization between the seal faces.

CAUTION!

Solid particles specific gravity must be at least two times than the one of the process fluid.
Minimum differential pressure between the discharge and the stuffing box: 1,7 barg.
Stuffing box and suction pressure must be close.



- 1) From the clean product delivery of the separator cyclone
- 2) Flushing (F)
- 3) Washing (Q)
- 4) Drainage (D)
- 5) Stuffing box

QA: Flow from pump discharge

QB: Clean product towards the stuffing box

QC: Dirty product directed towards the suction