

Mixed Phase Distributor-Flash Pipe**Product Coding**
P180101...**Introduction**

Flash pipe distributor is specifically engineered to manage the violent phase transition and momentum release that occurs when a high pressure liquid or mixed phase feed is introduced into a lower pressure tower environment. At the instant of pressure reduction, a portion of the liquid undergoes adiabatic flashing, generating a high velocity two phase mixture consisting of expanding vapor and entrained liquid droplets. If this energy is not properly controlled, it can result in:

- Severe mechanical vibration
- Erosive impingement on trays, packing, or shell
- Liquid maldistribution
- Excessive entrainment
- Foaming and hydraulic instability

The flash pipe functions as a hydrodynamic shock absorber and phase transition stabilizer. It confines the flashing process within a controlled pipe volume, allowing:

- Partial momentum dissipation
- Initial gas/liquid disengagement
- Directional control of both phases
- Protection of sensitive downstream internals

Inside the flash pipe, the rapidly expanding vapor accelerates upward while the heavier liquid phase is forced outward and downward by inertia and gravity. At the pipe outlet, the flow encounters a diffuser zone and impact breaker surfaces, which reduce jet velocity and convert chaotic flashing energy into a low velocity, stabilized mixed phase release.

Features

- Safe handling of flashing two phase feed
- Uniform phase distribution
- Reduced entrainment and splashing
- High mechanical strength
- Protection of downstream internals
- Wide operating range
- Low maintenance design

Applications

- Distillation towers
- Refining
- Petrochemical and chemical processing



Tel.: +98 21 88686942-3
Fax: +98 21 88686168
Sales@euroslot-pars.com



www.euroslot-pars.com
Linkedin.com/company/euroslotpars
Youtube.com/@Euroslot-pars



Office: No. 2, Unit 2, East 32nd
(East Qeysari) St., South Allameh Ave.,
Sa'adat Abad Area, Tehran, Iran