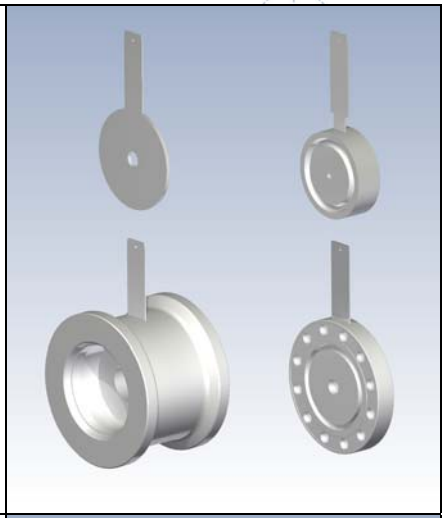
EMCO Restriction Plates, Critical Flow Devices, Depressurizing Units

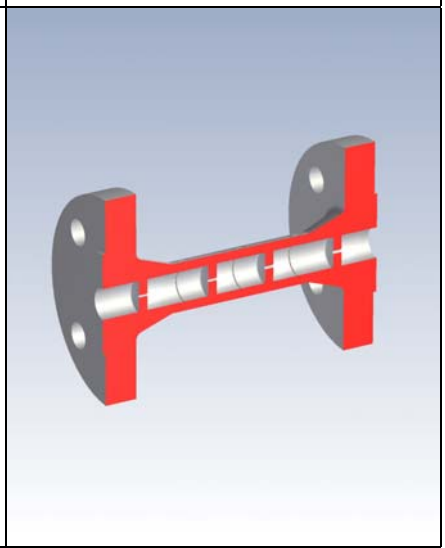
EMCO Restriction plates and Critical flow Devices type IRB/1, IRB/4, IRB/6, ILR

These single hole plates are mounted between flanges according to ANSI B 16.5 with raised face or ring type joint, according to the NORSOK flange standard L-005, or hub connections for high pressure applications
The plates can be supplied in many different material qualities including AISI 316, 22Cr.Duplex, 25Cr Duplex, 6Mo, Hastelloy, Titanium etc. There is virtually no limitation for design pressure or temperature.
A full documentation package is available including calculation of bore, plate thickness, noise level, dimensional drawing, pressure test, PMI test



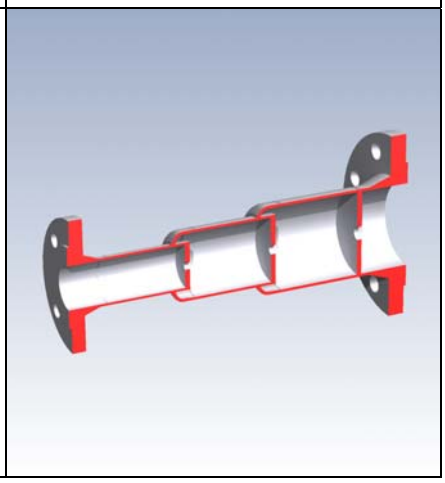
EMCO Single hole/Multi Stage Pressure Reducing Unit For Liquids type SDP-L

EMCO single hole multi stage pressure reducing units are used to prevent critical/high pressure drops in continuous liquid flow pipe lines.
By reducing the pressure in stages the damaging cavitation is avoided. This secures long life time of the equipment.
The calculation is based on ISO 5167, and on a critical flow factor or cavitation factor for determining allowed pressure loss across each stage. Each of the pressure reducing stages are connected and supplied as a unit.
Main applications include boiler feed water by-pass lines. Boiler feed water pump circulation and warm up systems, boiler drum blow down.



EMCO Single Hole/Multi Stage Depressurizing Unit for Gasses type SDP-G

EMCO single hole multi stage depressurizing units are used to reduce the pressure in a number of stages to a desired pressure. The gas passes each stage at sonic or critical velocity. When the pressure is reduced so is the density of the gas or steam.
In order to maintain a constant velocity the cross sectional area is increased after each stage
The calculation is based on R.W. Miller and Ward-Smith.
Each of the pressure reducing stages are connected and supplied as a unit.



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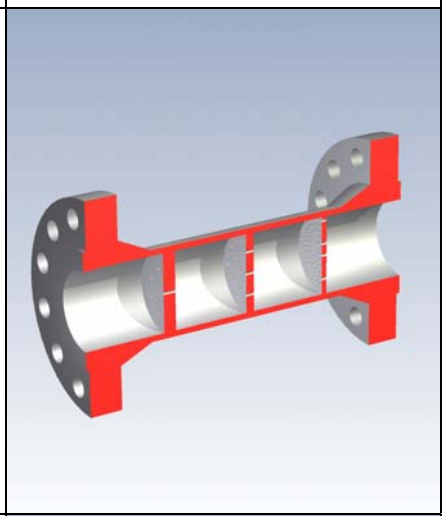
EMCO Multi Hole Restriction Plates and Multi Hole Critical Flow Devices type MRP/1, MRP/4, MILR, MROy

EMCO multi hole restriction plates are used to restrict the flow at high differential pressures and to reduce the sound pressure noise level.

The plates can be calculated according to ISO 5167 as thin restriction orifice plates, or thick plates according to R.W. Miller/Ward-Smith.
Noise level is calculated according to EN 60534-8-3, -8-4.
In applications with high flow rates, standard flat restriction plates do not have sufficient area to accommodate the large number of holes required.
The conical shape of the restriction plate has a larger area compared to the flat plate.
EMCO multi hole restriction plate series MROy can accommodate a larger number of holes.

EMCO Multi Hole/Multi Stage Pressure Reducing Unit for Liquid type MDP-L

EMCO multi hole multi stage pressure reducing units are used to prevent critical/high pressure drops in continuous liquid flow pipe lines.
By reducing the pressure in stages using multi hole plates the damaging cavitation is avoided. Multi hole plates can handle higher pressure drops than single hole plates.
The multi stage design is based on the constant cavitation factor principle.
Main applications are similar to the unit type SDP-L but is capable to handle differential pressures at lower noise levels.



EMCO Multi Hole/Multi Stage Pressure Reducing Unit for Gasses type MDP-G

EMCO multi hole multi stage depressurizing units are used to reduce the pressure in a number of stages to a desired pressure and to secure as low noise development as possible.
The gas passes each stage at sonic or critical velocity or at a lower velocity depending on the requirement. When the pressure is reduced the density of the gas or steam is also reduced. Higher velocity results in higher noise level.
Therefore the design of the unit secures that the velocity through the stages of pressure reduction does not increase.
In order to maintain a constant velocity, the cross sectional area is increased after each stage.